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Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

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The following report contains a description of the request, request specifications, and results from the modular program run(s).

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Overview for Request: cder_mpl1p_wp040

Request ID: cder_mpl1p_wp040_nsdv_v01

Request Description: In this report we examined the number of individuals with reduced ejection fraction heart failure (HFrEF) or preserved ejection fraction heart failure (HFpEF) in the Sentinel Distributed Database (SDD) and described the utilization of spironolactone among these individuals.

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 9.0.1, with ad hoc programming.

Data Source: We distributed this request to 16 Sentinel Data Partners on February 13, 2020. The query period included data from July 1, 2010 - September 30, 2018. See Appendix A for a list of the latest dates of available data for each Data Partner.

Study Design: We conducted a retrospective cohort study describing the utilization of spironolactone following a diagnosis of HFrEF or HFpEF. We identified individuals with a diagnosis of HFrEF or HFpEF during three time periods of interest: 1) July 1, 2010 - September 30, 2015; 2) April 1, 2016 - September 30, 2018; and 3) July 1, 2010 - September 30, 2018. We calculated the proportion of individuals with a diagnosis of HFrEF or HFpEF initiating treatment with spironolactone during available follow-up. We described the duration and the average daily dose of the first continuous spironolactone treatment episode following diagnosis. We reported results overall and by age group, sex, year of diagnosis, and month-year of diagnosis. This is a Type 2 analysis with ad hoc programming in the Query Request Package (QRP) documentation.

Cohort Eligibility Criteria: We created separate cohorts of individuals with a diagnosis of HFrEF or HFpEF based on a previously validated algorithm.¹ The date of the diagnosis was defined as the index date. Only the first qualifying diagnosis for HFrEF or HFpEF was assessed; cohort re-entry was not allowed.

HFrEF Cohort: Individuals entered the HFrEF cohort on their first valid diagnosis of left or systolic heart failure.

--1) Individuals with left heart failure were required to have no evidence of a co-occurring diagnosis of systolic, diastolic, or combined systolic/diastolic heart failure on the index date.

--2) Individuals with systolic heart failure were required to have no evidence of a co-occurring diagnosis of left, diastolic, or combined systolic/diastolic heart failure on the index date.

Further, those with a diagnosis of left or systolic heart failure were required to have evidence of an implantable cardioverter defibrillator, cardiomyopathy, or myocardial infarction in the 183 days prior to the index date.

HFpEF Cohort: Individuals entered the HFpEF cohort on their first valid diagnosis of diastolic or unspecified heart failure. In this study, we defined unspecified heart failure as rheumatic heart failure, hypertensive heart disease, or hypertensive heart disease with kidney disease.

--1) Individuals with diastolic heart failure diagnosed in the ambulatory visit (AV), other ambulatory visit (OA), or emergency department encounter (ED) care settings were required to have no evidence of a co-occurring diagnosis of left, systolic, or combined systolic/diastolic heart failure on the index date.

--2) Individuals with diastolic heart failure diagnosed (in any position) in the inpatient hospital stay (IP) or non-acute institutional stay (IS) care settings were required to have no evidence of a co-occurring diagnosis of left, systolic, or combined systolic/diastolic heart failure on the index date; and no evidence of an inpatient hospital stay primary (IPP) or non-acute institutional stay primary (ISP) diagnosis for chronic heart failure (CHF) in the 183 days prior to the index date.

--3) Individuals with unspecified heart failure diagnosed in the AV, OA, or ED care settings were required to have no evidence of a co-occurring diagnosis of left, systolic, or combined systolic/diastolic heart failure on the index date.

--4) Individuals with unspecified heart failure diagnosed (in any position) in the IP or IS care settings were required to have no evidence of a co-occurring diagnosis of left, systolic, or combined systolic/diastolic heart failure on the index date; and no evidence of an IPP or ISP diagnosis for CHF in the 183 days prior to the index date.

Further, those with a diagnosis of diastolic or unspecified heart failure who had evidence of an implantable cardioverter defibrillator, cardiomyopathy, or myocardial infarction in the 183 days prior to the index date were excluded from the HFpEF cohort.

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We required members in HFrEF and HFpEF cohorts to be enrolled in health plans with medical and drug coverage for at least 183 days prior to the index-defining diagnosis date; gaps in coverage of up to 45 days were allowed and bridged as continuous enrollment. We included individuals using the following age groups: <18, 18-44, 45-64, 65+ years.

See Appendix B for a list of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes used to define cohort entry criteria. See Appendix C for a list of ICD-9-CM, ICD-10-CM, and International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) diagnosis and procedure codes used to define inclusion or exclusion criteria.

Follow-Up Time: Follow-up began on the day of index diagnosis and continued until a spironolactone dispensing occurred or at the first occurrence of any of the following censoring criteria: 1) disenrollment; 2) Data Partner end date; or 3) death. We described the time to censoring due to spironolactone dispensing using the following categories: <1 month, 1 - <3 months, 3 - <6 months, 6 months - <1 year, 1 - <2 years, 2 - <3 years, 3 - <5 years, 5+ years. See Appendix D for a list of generic and brand names for medical products used to define spironolactone.

Duration of the First Continuous Spironolactone Treatment Episode: We assessed the duration of the first continuous spironolactone treatment episode following a diagnosis of HFrEF or HFpEF. Adjacent dispensings of spironolactone with gaps ≤ 30 days were bridged into one continuous treatment episode. For same-day dispensings, we summed the amount supplied values and took the maximum value of the days supply. We described the duration of the first continuous spironolactone treatment episode using the following categories: <1 month, 1 - <3 months, 3 - <6 months, 6 months - <1 year, 1+ year(s).

Average Daily Dose in the First Continuous Spironolactone Treatment Episode: We calculated the average daily dose (DD) in the first continuous spironolactone treatment episode following a diagnosis of HFrEF or HFpEF. The average DD was calculated using values of amount supplied and product strength in each dispensing and the duration of the first continuous treatment episode. Of note, gaps of ≤ 30 days between adjacent dispensings that were bridged for the purpose of building a continuous treatment episode were removed from the episode duration used in the calculation of average DD.

Daily Dose (DD) = (Amount Supplied * Product Strength) / Days Supply

Average DD = (DD1 + DD2 + ... + DDN) / N days of treatment duration

To account for any extreme values in the average DD owing to the secondary nature of our data source, we required the ratio of amount to days supplied to be ≥ 0.25 and ≤ 8 in each dispensing contributing to the first continuous treatment episode. If an episode contained at least one dispensing with a value for amount to days supplied outside the permitted range, we did not calculate the average DD for the entire episode. We described the average DD of spironolactone using the following categories: <15 mg/day, 15 - <30 mg/day, 30 - <45 mg/day, 45 - <75 mg/day, 75 - <100 mg/day, 100+ mg/day.

Baseline Characteristics: We identified demographic characteristics including age, sex, and race on the day of index diagnosis. We also identified clinical characteristics relevant to heart failure in the 183 days prior to the day before the index diagnosis. Heart failure related medication use included the following: angiotensin-converting enzyme inhibitors, angiotensin II receptor blockers, antiarrhythmics, beta blockers, digoxin, hydralazine, loop diuretics, mineralocorticoid receptor antagonists (eplerenone), nitrates, potassium-sparing diuretics, and thiazide diuretics. Heart failure related comorbidities included the following: anemia, atrial fibrillation or flutter, cardiomyopathy, chronic obstructive pulmonary disease, coronary artery bypass graft, depression, diabetes mellitus, endocarditis, heart transplant, human immunodeficiency virus, hyperkalemia, hyperlipidemia, hypertension, hypertensive nephropathy, hypotension, implantable cardioverter defibrillator, ischemic stroke or transient ischemic attack, myocardial infarction, nephropathy, obesity, other dysrhythmias, psychosis, pulmonary hypertension, renal disorders, rheumatic heart disease, sleep apnea, smoking, stable angina, unstable angina, and valve disorders. See Appendix E for a list of generic and brand names for medical products used to define heart failure related medication use and comorbidities. See Appendix F for a list of ICD-9-CM, ICD-10-CM, ICD-10-PCS, Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) diagnosis and procedure codes used to define heart failure related comorbidities.

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Sensitivity Analyses: We performed two sensitivity analyses altering our cohort selection criteria.

Cohort Eligibility Criteria, Incidence Sensitivity Analysis: In this sensitivity analysis, we required individuals to be incident with respect to spironolactone in the 183 days prior to index diagnosis.

HFpEF Cohort, Exclusion Criteria Sensitivity Analysis: In this sensitivity analysis, we did not exclude HFpEF individuals with a history of myocardial infarction in the prior 183 days. That is, in the resulting HFpEF cohort, we only excluded individuals with implantable cardioverter defibrillator or cardiomyopathy in the 183 days prior to index diagnosis.

Limitations: Several limitations must be considered when interpreting data presented in this report. First, we classified individuals as having HFrEF or HFpEF based on diagnosis and procedure codes that were most predictive of ejection fraction class in a previously validated algorithm.¹ Next, we were unable to review any recorded ejection fraction values in the Sentinel Common Data Model (SCDM).² As a result, there could be misclassification in our cohorts. Lastly, we may not have been able to observe the initiation of spironolactone following diagnosis of heart failure at some Data Partner sites due to end of data availability. See Appendix A for dates of available data.

Please see Appendices G and H for the specifications of parameters used in the analyses for this request.

Please see Appendix I for a diagram detailing the design of this request.

Notes: Please contact the Sentinel Operations Center (info@sentinel-system.org) for questions and to provide comments/suggestions for future enhancements to the documentation (<https://dev.sentinel-system.org/projects/SENTINEL/repos/sentinel-routine-querying-tool-documentation/browse>)

¹Desai RJ, Lin KJ, Paterno E, et al. Development and Preliminary Validation of a Medicare Claims-Based Model to Predict Left Ventricular Ejection Fraction Class in Patients With Heart Failure. *Circ Cardiovasc Qual Outcomes*. 2018;11(12):e004700.

²Sentinel Common Data Model | Sentinel Initiative. <https://www.sentinelinitiative.org/sentinel/data/distributed-database-common-data-model>. Accessed January 31, 2020.

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**Glossary of Terms for Analyses Using
Cohort Identification and Descriptive Analysis (CIDA) Module***

Amount Supplied - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing.

Blackout Period - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

Care Setting - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or Missing (U). The Care Setting, along with the Principal Diagnosis Indicator (PDX), forms the Care Setting/PDX parameter.

Ambulatory Visit (AV) - includes visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.

Emergency Department (ED) - includes ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.

Inpatient Hospital Stay (IP) - includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.

Non-Acute Institutional Stay (IS) - includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

Other Ambulatory Visit (OA) - includes other non overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone and email consultations.

Charlson/Elixhauser Combined Comorbidity Score - calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (e.g., in the 183 days prior to index).

Code Days - the minimum number of times the diagnosis must be found during the evaluation period in order to fulfill the algorithm to identify the corresponding patient characteristic.

Cohort Definition (drug/exposure) - indicates how the cohort will be defined: 01: Cohort includes only the first valid treatment episode during the query period; 02: Cohort includes all valid treatment episodes during the query period; 03: Cohort includes all valid treatment episodes during the query period until an event occurs.

Computed Start Marketing Date - represents the first observed dispensing date among all valid users within a GROUP (scenario) within each Data Partner site.

Days Supply - number of days supplied for all dispensings in qualifying treatment episodes.

Eligible Members - number of members eligible for an incident treatment episode (defined by the drug/exposure and event washout periods) with drug and medical coverage during the query period.

Enrollment Gap - number of days allowed between two consecutive enrollment periods without breaking a "continuously enrolled" sequence.

Episodes - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.

Episode Gap - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same treatment episode.

Event Deduplication - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).

Exposure Episode Length - number of days after exposure initiation that is considered "exposed time."

Exposure Extension Period - number of days post treatment period in which the outcomes/events are counted for a treatment episode. Extensions are added after any episode gaps have been bridged.

Lookback Period - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug dispensing).

Maximum Episode Duration - truncates exposure episodes after a requester-specified number of exposed days. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Member-Years - sum of all days of enrollment with medical and drug coverage in the query period preceded by an exposure washout period all divided by 365.25.

Minimum Days Supplied - specifies a minimum number of days in length of the days supplied for the episode to be considered.

Minimum Episode Duration - specifies a minimum number of days in length of the episode for it to be considered. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Monitoring Period - used to define time periods of interest for both sequential analysis and simple cohort characterization requests.

Principal Diagnosis (PDX) - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the Caresetting/PDX parameter.

Query Period - period in which the modular program looks for exposures and outcomes of interest.

Switch Evaluation Step Value - value used to differentiate evaluation step. Each switch pattern can support up to 2 evaluation steps (0 = switch pattern evaluation start; 1 = first evaluation; 2 = second evaluation).

Switch Gap Inclusion Indicator - indicator for whether gaps in treatment episodes that are included in a switch episode will be counted as part of the switch episode duration.

Switch Pattern Cohort Inclusion Date - indicates which date to use for inclusion into the switch pattern cohort of interest as well as optionally as the index date of the treatment episode initiating the switch pattern. Valid options are the product approval date, product marketing date, other requester defined date, or computed start marketing date.

Switch Pattern Cohort Inclusion Strategy - indicates how the switch pattern cohort inclusion date will be used: 01: used only as a switch cohort entry date. First treatment episode dispensing date is used as index for computing time to first switch; 02: used as switch cohort entry date and as initial switch step index date for computing time to first switch.

Treatment Episode Truncation Indicator - indicates whether the exposure episode will be truncated at the occurrence of a requester-specified code.

Washout Period (drug/exposure) - number of days a user is required to have no evidence of prior exposure (drug dispensing/procedure) and continuous drug and medical coverage prior to an incident treatment episode.

Washout Period (event/outcome) - number of days a user is required to have no evidence of a prior event (procedure/diagnosis) and continuous drug and medical coverage prior to an incident treatment episode.

Years at Risk - number of days supplied plus any episode gaps and exposure extension periods all divided by 365.25.

*all terms may not be used in this report

Table 1a. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2015

Characteristic ¹	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
	Number		Number		Number	
Number of episodes	1,157,558		5,693,622		5,569,822	
Number of unique patients	1,157,558		5,693,622		5,569,822	
Demographics	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Mean Age (Years)	73.8	12.3	72.8	12.2	72.8	12.2
	Number	Percent	Number	Percent	Number	Percent
Age (Years)						
0-17	292	0.0%	2,828	0.0%	2,827	0.1%
18-44	28,752	2.5%	185,031	3.2%	182,922	3.3%
45-64	205,776	17.8%	1,062,902	18.70%	1,041,920	18.7%
65+	922,738	79.7%	4,442,861	78.0%	4,342,153	78.0%
Sex						
Female	493,001	42.6%	3,347,565	58.8%	3,280,516	58.9%
Male	664,557	57.4%	2,346,057	41.2%	2,289,306	41.1%
Race						
American Indian or Alaska Native	5,547	0.5%	18,998	0.3%	18,414	0.3%
Asian	17,072	1.5%	144,115	2.5%	141,576	2.5%
Black or African American	162,165	14.0%	744,739	13.1%	729,654	13.1%
Native Hawaiian or Other Pacific Islander	1,237	0.1%	6,563	0.1%	6,414	0.1%
Unknown ²	142,290	12.3%	1,061,685	18.6%	1,045,558	18.8%
White	829,247	71.6%	3,717,522	65.3%	3,628,206	65.1%
Hispanic Origin	27,482	2.4%	185,665	3.3%	182,161	3.3%
Year						
2010	156,572	13.5%	1,093,353	19.2%	1,067,494	19.2%
2011	211,740	18.3%	1,147,676	20.2%	1,124,369	20.2%
2012	194,504	16.8%	943,552	16.6%	924,020	16.6%
2013	207,589	17.9%	954,910	16.8%	933,986	16.8%
2014	216,205	18.7%	898,560	15.8%	879,532	15.8%
2015	170,948	14.8%	655,571	11.5%	640,421	11.5%

Table 1a. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2015

	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
Recorded on heart failure index diagnosis:	Number	Percent	Number	Percent	Number	Percent
Diastolic heart failure	0	0.0%	1,766,911	31.0%	1,704,212	30.6%
Left heart failure	192,891	16.7%	0	0.0%	0	0.0%
Systolic heart failure	964,667	83.3%	0	0.0%	0	0.0%
Unspecified heart failure	53,006	4.6%	4,035,232	70.9%	3,971,248	71.3%
History of heart failure related medication use in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Angiotensin-converting enzyme inhibitors	529,543	45.7%	1,990,215	35.0%	1,934,608	34.7%
Angiotensin II receptor blockers	225,391	19.5%	1,322,848	23.2%	1,296,682	23.3%
Antiarrhythmics	154,945	13.4%	270,442	4.7%	260,903	4.7%
Beta blockers	833,090	72.0%	2,718,708	47.8%	2,635,528	47.3%
Digoxin	172,346	14.9%	260,778	4.6%	253,324	4.5%
Hydralazine	86,634	7.5%	219,388	3.9%	210,948	3.8%
Loop diuretics	648,678	56.0%	1,533,683	26.9%	1,489,289	26.7%
Mineralocorticoid receptor antagonists (eplerenone)	9,689	0.8%	6,738	0.1%	6,565	0.1%
Nitrates	265,070	22.9%	586,348	10.3%	547,591	9.8%
Potassium-sparing diuretics	115,012	9.9%	282,235	5.0%	274,162	4.9%
Thiazide diuretics	196,087	16.9%	1,536,140	27.0%	1,505,790	27.0%
History of heart failure related comorbidities in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Anemia	538,422	46.5%	1,737,484	30.5%	1,665,844	29.9%
Atrial fibrillation or flutter	537,746	46.5%	1,106,771	19.4%	1,060,969	19.0%
Cardiomyopathy	788,911	68.2%	0	0.0%	0	0.0%
Chronic obstructive pulmonary disease	429,573	37.1%	1,197,524	21.0%	1,147,716	20.6%
Coronary artery bypass graft	30,928	2.7%	26,964	0.5%	16,204	0.3%

Table 1a. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2015

	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
	Number	Percent	Number	Percent	Number	Percent
Depression	226,643	19.6%	875,200	15.4%	842,103	15.1%
Diabetes mellitus	582,939	50.4%	2,290,689	40.2%	2,224,161	39.9%
Endocarditis	22,069	1.9%	35,019	0.6%	32,632	0.6%
Heart transplant	16,593	1.4%	21,811	0.4%	20,665	0.4%
Human immunodeficiency virus	6,264	0.5%	21,590	0.4%	20,919	0.4%
Hyperkalemia	134,682	11.6%	239,819	4.2%	222,261	4.0%
Hyperlipidemia	834,392	72.1%	3,502,566	61.5%	3,402,176	61.1%
Hypertension	1,024,432	88.5%	4,617,336	81.1%	4,497,508	80.7%
Hypertensive nephropathy	357,801	30.9%	698,368	12.3%	655,113	11.8%
Hypotension	206,379	17.8%	312,443	5.5%	282,383	5.1%
Implantable cardioverter defibrillator	262,210	22.7%	0	0.0%	0	0.0%
Ischemic stroke or transient ischemic attack	277,646	24.0%	907,423	15.9%	863,127	15.5%
Myocardial infarction	379,664	32.8%	182,696	3.2%	0	0.0%
Nephropathy	595,502	51.4%	1,457,342	25.6%	1,386,827	24.9%
Obesity	193,359	16.7%	689,602	12.1%	662,633	11.9%
Other dysrhythmias	564,978	48.8%	1,052,287	18.5%	986,218	17.7%
Psychosis	70,001	6.0%	253,298	4.4%	240,661	4.3%
Pulmonary hypertension	198,016	17.1%	279,719	4.9%	260,947	4.7%
Renal disorders	457,413	39.5%	1,097,036	19.3%	1,047,282	18.8%
Rheumatic heart disease	184,238	15.9%	266,683	4.7%	247,314	4.4%
Sleep apnea	156,172	13.5%	480,158	8.4%	465,039	8.3%
Smoking	161,599	14.0%	399,696	7.0%	375,571	6.7%
Stable angina	112,439	9.7%	281,683	4.9%	259,758	4.7%
Unstable angina	189,962	16.4%	373,165	6.6%	327,243	5.9%
Valve disorders	231,917	20.0%	419,918	7.4%	397,152	7.1%

¹All metrics are based on total number of episodes per group, except for sex and race which are based on total number of unique patients.

²Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

Table 1b. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between April 1, 2016 and September 30, 2018

Characteristic ¹	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
	Number		Number		Number	
Number of episodes	998,619		4,773,384		4,646,229	
Number of unique patients	998,619		4,773,384		4,646,229	
Demographics	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Mean Age (Years)	73.8	11.9	74.5	11.7	74.5	11.7
	Number	Percent	Number	Percent	Number	Percent
Age (Years)						
0-17	249	0.0%	1,292	0.0%	1,290	0.0%
18-44	22,495	2.3%	95,556	2.0%	93,760	2.0%
45-64	174,369	17.5%	747,662	15.7%	727,088	15.6%
65+	801,506	80.3%	3,928,874	82.3%	3,824,091	82.3%
Sex						
Female	400,178	40.1%	2,697,725	56.5%	2,634,846	56.7%
Male	598,441	59.9%	2,075,659	43.5%	2,011,383	43.3%
Race						
American Indian or Alaska Native	4,827	0.5%	18,989	0.4%	18,311	0.4%
Asian	14,424	1.4%	104,355	2.2%	101,847	2.2%
Black or African American	135,791	13.6%	598,747	12.5%	584,463	12.6%
Native Hawaiian or Other Pacific Islander	1,677	0.2%	8,486	0.2%	8,285	0.2%
Unknown ²	124,695	12.5%	691,433	14.5%	676,078	14.6%
White	717,205	71.8%	3,351,374	70.2%	3,257,245	70.1%
Hispanic Origin	21,198	2.1%	124,812	2.6%	121,853	2.6%
Year						
2016	421,975	42.3%	1,959,116	41.0%	1,901,666	40.9%
2017	344,537	34.5%	1,723,397	36.1%	1,680,403	36.2%
2018	232,107	23.2%	1,090,871	22.9%	1,064,160	22.9%

Table 1b. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between April 1, 2016 and September 30, 2018

Recorded on heart failure index diagnosis:	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
	Number	Percent	Number	Percent	Number	Percent
Diastolic heart failure	0	0.0%	1,797,020	37.6%	1,737,474	37.4%
Left heart failure	56,716	5.7%	0	0.0%	0	0.0%
Systolic heart failure	941,903	94.3%	0	0.0%	0	0.0%
Unspecified heart failure	203,161	20.3%	3,503,929	73.4%	3,420,864	73.6%
History of heart failure related medication use in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Angiotensin-converting enzyme inhibitors	399,321	40.0%	1,483,227	31.1%	1,433,063	30.8%
Angiotensin II receptor blockers	238,938	23.9%	1,230,191	25.8%	1,199,533	25.8%
Antiarrhythmics	140,263	14.0%	278,391	5.8%	268,145	5.8%
Beta blockers	740,042	74.1%	2,536,307	53.1%	2,448,472	52.7%
Digoxin	97,637	9.8%	164,002	3.4%	159,614	3.4%
Hydralazine	81,186	8.1%	271,168	5.7%	260,245	5.6%
Loop diuretics	550,887	55.2%	1,560,783	32.7%	1,515,499	32.6%
Mineralocorticoid receptor antagonists (eplerenone)	10,919	1.1%	8,623	0.2%	8,380	0.2%
Nitrates	193,250	19.4%	514,926	10.8%	478,163	10.3%
Potassium-sparing diuretics	103,247	10.3%	213,959	4.5%	205,844	4.4%
Thiazide diuretics	144,431	14.5%	1,098,544	23.0%	1,071,148	23.1%
History of heart failure related comorbidities in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Anemia	440,254	44.1%	1,520,401	31.9%	1,450,803	31.2%
Atrial fibrillation or flutter	491,520	49.2%	1,214,026	25.4%	1,165,129	25.1%
Cardiomyopathy	662,307	66.3%	0	0.0%	0	0.0%
Chronic obstructive pulmonary disease	346,254	34.7%	1,127,414	23.6%	1,079,387	23.2%
Coronary artery bypass graft	22,535	2.3%	23,206	0.5%	13,064	0.3%
Depression	212,444	21.3%	890,052	18.6%	853,923	18.4%
Diabetes mellitus	495,546	49.6%	2,062,720	43.2%	1,993,806	42.9%
Endocarditis	21,174	2.1%	41,700	0.9%	38,971	0.8%

Table 1b. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between April 1, 2016 and September 30, 2018

History of heart failure related comorbidities in the prior 183 days:	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
	Number	Percent	Number	Percent	Number	Percent
Heart transplant	1,455	0.1%	1,652	0.0%	1,612	0.0%
Human immunodeficiency virus	5,522	0.6%	16,591	0.3%	15,947	0.3%
Hyperkalemia	121,298	12.1%	252,063	5.3%	232,699	5.0%
Hyperlipidemia	725,436	72.6%	2,956,743	61.9%	2,849,329	61.3%
Hypertension	883,968	88.5%	4,020,675	84.2%	3,897,331	83.9%
Hypertensive nephropathy	349,589	35.00%	858,931	18.0%	808,435	17.4%
Hypotension	178,358	17.9%	308,977	6.5%	278,212	6.0%
Implantable cardioverter defibrillator	269,278	27.0%	0	0.0%	0	0.0%
Ischemic stroke or transient ischemic attack	220,757	22.1%	776,326	16.3%	734,166	15.8%
Myocardial infarction	314,447	31.5%	185,577	3.9%	0	0.0%
Nephropathy	586,495	58.7%	1,881,489	39.4%	1,796,835	38.7%
Obesity	248,166	24.9%	1,053,180	22.1%	1,015,086	21.8%
Other dysrhythmias	472,935	47.4%	952,812	20.0%	885,680	19.1%
Psychosis	108,307	10.8%	454,761	9.5%	433,711	9.3%
Pulmonary hypertension	175,282	17.6%	318,614	6.7%	298,335	6.4%
Renal disorders	429,874	43.0%	1,303,297	27.3%	1,246,207	26.8%
Rheumatic heart disease	160,075	16.0%	250,730	5.3%	230,089	5.0%
Sleep apnea	181,480	18.2%	637,069	13.3%	615,594	13.2%
Smoking	160,875	16.1%	454,306	9.5%	426,779	9.2%
Stable angina	149,167	14.9%	351,427	7.4%	315,679	6.8%
Unstable angina	192,377	19.3%	417,581	8.7%	367,070	7.9%
Valve disorders	208,349	20.9%	417,889	8.8%	393,082	8.5%

¹All metrics are based on total number of episodes per group, except for sex and race which are based on total number of unique patients.

²Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

Table 1c. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018

Characteristic ¹	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
	Number		Number		Number	
Number of episodes	2,009,529		9,257,514		9,047,723	
Number of unique patients	2,009,529		9,257,514		9,047,723	
Demographics	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Mean Age (Years)	73.8	12.1	73	12.1	73	12.1
	Number	Percent	Number	Percent	Number	Percent
Age (Years)						
0-17	543	0.0%	4,209	0.0%	4,207	0.0%
18-44	48,440	2.4%	273,697	3.0%	270,169	3.0%
45-64	355,155	17.7%	1,683,512	18.2%	1,647,256	18.2%
65+	1,605,391	79.9%	7,296,096	78.8%	7,126,091	78.8%
Sex						
Female	847,349	42.2%	5,302,625	57.3%	5,195,943	57.4%
Male	1,162,180	57.8%	3,954,889	42.7%	3,851,780	42.6%
Race						
American Indian or Alaska Native	9,804	0.5%	34,151	0.4%	33,066	0.4%
Asian	29,905	1.5%	211,882	2.3%	207,851	2.3%
Black or African American	271,835	13.5%	1,158,084	12.5%	1,134,705	12.5%
Native Hawaiian or Other Pacific Islander	2,727	0.1%	13,312	0.1%	13,011	0.1%
Unknown ²	253,868	12.6%	1,621,327	17.5%	1,593,659	17.6%
White	1,441,390	71.7%	6,218,758	67.2%	6,065,431	67.0%
Hispanic Origin	45,526	2.3%	269,549	2.9%	264,369	2.9%
Year						
2010	156,572	7.8%	1,093,353	11.8%	1,067,494	11.8%
2011	211,740	10.5%	1,147,676	12.4%	1,124,369	12.4%
2012	194,504	9.7%	943,552	10.2%	924,020	10.2%
2013	207,589	10.3%	954,910	10.3%	933,986	10.3%

Table 1c. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018

	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
	Number	Percent	Number	Percent	Number	Percent
2014	216,205	10.8%	898,560	9.7%	879,532	9.7%
2015	253,654	12.6%	958,591	10.4%	936,453	10.4%
2016	283,944	14.1%	1,074,452	11.6%	1,048,387	11.6%
2017	279,167	13.9%	1,274,375	13.8%	1,243,136	13.7%
2018	206,154	10.3%	912,045	9.9%	890,346	9.8%
Recorded on heart failure index diagnosis:	Number	Percent	Number	Percent	Number	Percent
Diastolic heart failure	0	0.0%	3,122,869	33.7%	3,020,689	33.4%
Left heart failure	245,198	12.2%	0	0.0%	0	0.0%
Systolic heart failure	1,764,331	87.8%	0	0.0%	0	0.0%
Unspecified heart failure	221,186	11.0%	6,628,775	71.6%	6,507,727	71.9%
History of heart failure related medication use in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Angiotensin-converting enzyme inhibitors	864,089	43.0%	3,118,633	33.7%	3,026,928	33.5%
Angiotensin II receptor blockers	424,948	21.1%	2,184,282	23.6%	2,138,112	23.6%
Antiarrhythmics	256,784	12.8%	456,940	4.9%	441,154	4.9%
Beta blockers	1,432,800	71.3%	4,514,378	48.8%	4,374,953	48.4%
Digoxin	240,849	12.0%	368,316	4.0%	358,517	4.0%
Hydralazine	150,899	7.5%	393,309	4.2%	379,162	4.2%
Loop diuretics	1,083,435	53.9%	2,585,833	27.9%	2,517,477	27.8%
Mineralocorticoid receptor antagonists (eplerenone)	16,093	0.8%	12,332	0.1%	12,001	0.1%
Nitrates	420,102	20.9%	928,369	10.0%	865,991	9.6%
Potassium-sparing diuretics	193,976	9.7%	440,935	4.8%	427,377	4.7%
Thiazide diuretics	329,810	16.4%	2,367,291	25.6%	2,316,228	25.6%

Table 1c. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018

History of heart failure related comorbidities in the prior 183 days:	HFrEF		HFpEF not excluding Myocardial Infarction at baseline		HFpEF excluding Myocardial Infarction at baseline	
	Number	Percent	Number	Percent	Number	Percent
Anemia	921,806	45.9%	2,814,030	30.4%	2,695,705	29.8%
Atrial fibrillation or flutter	943,693	47.0%	1,939,004	20.9%	1,861,255	20.6%
Cardiomyopathy	1,339,357	66.7%	0	0.0%	0	0.0%
Chronic obstructive pulmonary disease	724,798	36.1%	1,996,881	21.6%	1,915,779	21.2%
Coronary artery bypass graft	55,257	2.7%	48,298	0.5%	28,043	0.3%
Depression	411,889	20.5%	1,539,938	16.6%	1,482,473	16.4%
Diabetes mellitus	1,002,855	49.9%	3,765,645	40.7%	3,654,455	40.4%
Endocarditis	40,468	2.0%	64,514	0.7%	60,347	0.7%
Heart transplant	18,564	0.9%	24,502	0.3%	23,289	0.3%
Human immunodeficiency virus	10,824	0.5%	34,307	0.4%	33,200	0.4%
Hyperkalemia	240,153	12.0%	418,724	4.5%	388,133	4.3%
Hyperlipidemia	1,457,973	72.6%	5,699,298	61.6%	5,523,989	61.1%
Hypertension	1,782,740	88.7%	7,574,534	81.8%	7,370,475	81.5%
Hypertensive nephropathy	652,449	32.5%	1,271,481	13.7%	1,195,631	13.2%
Hypotension	363,017	18.1%	544,441	5.9%	491,311	5.4%
Implantable cardioverter defibrillator	415,648	20.7%	0	0.0%	0	0.0%
Ischemic stroke or transient ischemic attack	473,986	23.6%	1,470,737	15.9%	1,396,887	15.4%
Myocardial infarction	696,410	34.7%	331,439	3.6%	0	0.0%
Nephropathy	1,093,274	54.4%	2,773,729	30.0%	2,646,236	29.2%
Obesity	410,989	20.5%	1,473,613	15.9%	1,419,686	15.7%
Other dysrhythmias	973,134	48.4%	1,758,302	19.0%	1,641,750	18.1%
Psychosis	166,273	8.3%	576,740	6.2%	550,623	6.1%
Pulmonary hypertension	353,471	17.6%	493,372	5.3%	461,063	5.1%
Renal disorders	812,042	40.4%	1,984,800	21.4%	1,899,387	21.0%
Rheumatic heart disease	329,814	16.4%	454,097	4.9%	419,552	4.6%
Sleep apnea	306,208	15.2%	940,591	10.2%	911,455	10.1%
Smoking	307,142	15.3%	770,989	8.3%	725,041	8.0%
Stable angina	242,049	12.0%	527,396	5.7%	479,743	5.3%
Unstable angina	361,769	18.0%	669,779	7.2%	585,616	6.5%
Valve disorders	415,479	20.7%	718,965	7.8%	678,890	7.5%

¹All metrics are based on total number of episodes per group, except for sex and race which are based on total number of unique patients.

²Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

Table 1d. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2015

Characteristic ¹	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
	Number		Number		Number	
Number of episodes	1,086,132		5,617,096		5,496,254	
Number of unique patients	1,086,132		5,617,096		5,496,254	
Demographics	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Mean Age (Years)	74	12.2	72.8	12.2	72.8	12.2
	Number	Percent	Number	Percent	Number	Percent
Age (Years)						
0-17	267	0.0%	2,799	0.0%	2,798	0.1%
18-44	25,855	2.4%	183,313	3.3%	181,237	3.3%
45-64	189,641	17.5%	1,048,673	18.7%	1,028,118	18.7%
65+	870,369	80.1%	4,382,311	78.0%	4,284,101	77.9%
Sex						
Female	462,489	42.6%	3,298,218	58.7%	3,232,956	58.8%
Male	623,643	57.4%	2,318,878	41.3%	2,263,298	41.2%
Race						
American Indian or Alaska Native	5,210	0.5%	18,622	0.3%	18,059	0.3%
Asian	16,299	1.5%	143,162	2.5%	140,654	2.6%
Black or African American	149,834	13.8%	733,773	13.1%	718,974	13.1%
Native Hawaiian or Other Pacific Islander	1,168	0.1%	6,518	0.1%	6,374	0.1%
Unknown ²	132,860	12.2%	1,052,302	18.7%	1,036,498	18.9%
White	780,761	71.9%	3,662,719	65.2%	3,575,695	65.1%
Hispanic Origin	25,928	2.4%	183,972	3.3%	180,537	3.3%
Year						
2010	143,253	13.2%	1,077,708	19.2%	1,052,640	19.2%
2011	197,871	18.2%	1,132,029	20.2%	1,109,250	20.2%
2012	183,299	16.9%	931,436	16.6%	912,326	16.6%
2013	195,717	18.0%	942,307	16.8%	921,895	16.8%
2014	204,377	18.8%	886,715	15.8%	868,100	15.8%
2015	161,615	14.9%	646,901	11.5%	632,043	11.5%

Table 1d. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2015

	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
Recorded on heart failure index diagnosis:	Number	Percent	Number	Percent	Number	Percent
Diastolic heart failure	0	0.0%	1,725,876	30.7%	1,665,086	30.3%
Left heart failure	182,342	16.8%	0	0.0%	0	0.0%
Systolic heart failure	903,790	83.2%	0	0.0%	0	0.0%
Unspecified heart failure	49,492	4.6%	3,997,394	71.2%	3,934,568	71.6%
History of heart failure related medication use in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Angiotensin-converting enzyme inhibitors	489,242	45.0%	1,962,318	34.9%	1,908,194	34.7%
Angiotensin II receptor blockers	209,138	19.3%	1,304,444	23.2%	1,278,988	23.3%
Antiarrhythmics	140,520	12.9%	263,669	4.7%	254,509	4.6%
Beta blockers	770,689	71.0%	2,667,922	47.5%	2,587,162	47.1%
Digoxin	150,770	13.9%	251,496	4.5%	244,462	4.4%
Hydralazine	79,515	7.3%	213,773	3.8%	205,610	3.7%
Loop diuretics	588,723	54.2%	1,480,952	26.4%	1,438,899	26.2%
Mineralocorticoid receptor antagonists (eplerenone)	9,269	0.9%	6,445	0.1%	6,277	0.1%
Nitrates	244,747	22.5%	572,731	10.2%	535,174	9.7%
Potassium-sparing diuretics	26,443	2.4%	185,692	3.3%	182,113	3.3%
Thiazide diuretics	181,414	16.7%	1,513,463	26.9%	1,483,994	27.0%
History of heart failure related comorbidities in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Anemia	503,034	46.3%	1,700,754	30.3%	1,631,330	29.7%
Atrial fibrillation or flutter	498,740	45.9%	1,077,740	19.2%	1,033,544	18.8%
Cardiomyopathy	731,655	67.4%	0	0.0%	0	0.0%
Chronic obstructive pulmonary disease	399,232	36.8%	1,169,162	20.8%	1,120,944	20.4%
Coronary artery bypass graft	29,178	2.7%	26,188	0.5%	15,685	0.3%
Depression	210,770	19.4%	857,445	15.3%	825,307	15.0%
Diabetes mellitus	543,620	50.1%	2,249,742	40.1%	2,185,110	39.8%

Table 1d. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2015

	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
	Number	Percent	Number	Percent	Number	Percent
Endocarditis	20,004	1.8%	33,842	0.6%	31,557	0.6%
Heart transplant	14,996	1.4%	20,988	0.4%	19,913	0.4%
Human immunodeficiency virus	5,957	0.5%	21,313	0.4%	20,651	0.4%
Hyperkalemia	118,233	10.9%	224,584	4.0%	208,094	3.8%
Hyperlipidemia	781,085	71.9%	3,452,293	61.5%	3,354,386	61.0%
Hypertension	959,570	88.3%	4,547,856	81.0%	4,430,985	80.6%
Hypertensive nephropathy	331,677	30.5%	676,921	12.1%	635,240	11.6%
Hypotension	185,986	17.1%	299,930	5.3%	271,076	4.9%
Implantable cardioverter defibrillator	237,104	21.8%	0	0.0%	0	0.0%
Ischemic stroke or transient ischemic attack	260,253	24.0%	891,495	15.9%	848,358	15.4%
Myocardial infarction	362,492	33.4%	177,558	3.2%	0	0.0%
Nephropathy	551,343	50.8%	1,417,633	25.2%	1,349,521	24.6%
Obesity	177,188	16.3%	670,964	11.9%	644,915	11.7%
Other dysrhythmias	524,541	48.3%	1,027,434	18.3%	963,410	17.5%
Psychosis	65,355	6.0%	247,632	4.4%	235,382	4.3%
Pulmonary hypertension	179,910	16.6%	267,180	4.8%	249,335	4.5%
Renal disorders	423,701	39.0%	1,067,122	19.0%	1,019,162	18.5%
Rheumatic heart disease	169,607	15.6%	258,402	4.6%	239,719	4.4%
Sleep apnea	142,146	13.1%	466,529	8.3%	451,992	8.2%
Smoking	150,826	13.9%	392,036	7.0%	368,494	6.7%
Stable angina	104,689	9.6%	276,112	4.9%	254,837	4.6%
Unstable angina	177,808	16.4%	365,525	6.5%	320,881	5.8%
Valve disorders	213,838	19.7%	408,662	7.3%	386,717	7.0%

¹All metrics are based on total number of episodes per group, except for sex and race which are based on total number of unique patients.

²Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

Table 1e. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between April 1, 2016 and September 30, 2018

Characteristic ¹	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
	Number	Standard Deviation	Number	Standard Deviation	Number	Standard Deviation
Number of episodes	931,291		4,688,831		4,565,041	
Number of unique patients	931,291		4,688,831		4,565,041	
Demographics	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Mean Age (Years)	74	11.8	74.6	11.6	74.5	11.7
	Number	Percent	Number	Percent	Number	Percent
Age (Years)						
0-17	227	0.0%	1,266	0.0%	1,264	0.0%
18-44	19,996	2.1%	94,019	2.0%	92,262	2.0%
45-64	158,702	17.0%	732,946	15.6%	712,862	15.6%
65+	752,366	80.8%	3,860,600	82.3%	3,758,653	82.3%
Sex						
Female	372,923	40.0%	2,645,734	56.4%	2,584,749	56.6%
Male	558,368	60.0%	2,043,097	43.6%	1,980,292	43.4%
Race						
American Indian or Alaska Native	4,498	0.5%	18,535	0.4%	17,867	0.4%
Asian	13,714	1.5%	103,430	2.2%	100,980	2.2%
Black or African American	124,039	13.3%	586,816	12.5%	572,856	12.5%
Native Hawaiian or Other Pacific Islander	1,564	0.2%	8,391	0.2%	8,194	0.2%
Unknown ²	115,576	12.4%	682,003	14.5%	666,966	14.6%
White	671,900	72.1%	3,289,656	70.2%	3,198,178	70.1%
Hispanic Origin	19,772	2.1%	123,238	2.6%	120,332	2.6%
Year						
2016	387,207	41.6%	1,920,704	41.0%	1,865,097	40.9%
2017	324,575	34.9%	1,694,034	36.1%	1,651,983	36.2%
2018	219,509	23.6%	1,074,093	22.9%	1,047,961	23.0%

Table 1e. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between April 1, 2016 and September 30, 2018

	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
Recorded on heart failure index diagnosis:	Number	Percent	Number	Percent	Number	Percent
Diastolic heart failure	0	0.0%	1,751,757	37.4%	1,694,119	37.1%
Left heart failure	53,856	5.8%	0	0.0%	0	0.0%
Systolic heart failure	877,435	94.2%	0	0.0%	0	0.0%
Unspecified heart failure	191,487	20.6%	3,453,514	73.7%	3,372,301	73.9%
History of heart failure related medication use in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Angiotensin-converting enzyme inhibitors	366,213	39.3%	1,457,720	31.1%	1,409,046	30.9%
Angiotensin II receptor blockers	218,315	23.4%	1,206,974	25.7%	1,177,349	25.8%
Antiarrhythmics	126,518	13.6%	270,452	5.8%	260,609	5.7%
Beta blockers	680,221	73.0%	2,477,677	52.8%	2,392,701	52.4%
Digoxin	84,451	9.1%	157,245	3.4%	153,206	3.4%
Hydralazine	74,372	8.0%	263,215	5.6%	252,751	5.5%
Loop diuretics	496,069	53.3%	1,501,839	32.0%	1,459,113	32.0%
Mineralocorticoid receptor antagonists (eplerenone)	10,442	1.1%	8,236	0.2%	7,988	0.2%
Nitrates	177,137	19.0%	501,017	10.7%	465,508	10.2%
Potassium-sparing diuretics	20,999	2.3%	111,750	2.4%	108,933	2.4%
Thiazide diuretics	133,253	14.3%	1,077,844	23.0%	1,051,386	23.0%
History of heart failure related comorbidities in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Anemia	408,943	43.9%	1,481,051	31.6%	1,413,796	31.0%
Atrial fibrillation or flutter	454,395	48.8%	1,178,420	25.1%	1,131,277	24.8%
Cardiomyopathy	610,802	65.6%	0	0.0%	0	0.0%
Chronic obstructive pulmonary disease	319,715	34.3%	1,096,277	23.4%	1,049,893	23.0%
Coronary artery bypass graft	21,179	2.3%	22,464	0.5%	12,598	0.3%

Table 1e. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between April 1, 2016 and September 30, 2018

	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
	Number	Percent	Number	Percent	Number	Percent
Depression	195,882	21.0%	867,630	18.5%	832,679	18.2%
Diabetes mellitus	458,998	49.3%	2,017,518	43.0%	1,950,668	42.7%
Endocarditis	19,134	2.1%	39,951	0.9%	37,363	0.8%
Heart transplant	1,274	0.1%	1,609	0.0%	1,569	0.0%
Human immunodeficiency virus	5,205	0.6%	16,317	0.3%	15,694	0.3%
Hyperkalemia	106,333	11.4%	235,497	5.0%	217,276	4.8%
Hyperlipidemia	674,840	72.5%	2,899,888	61.8%	2,795,444	61.2%
Hypertension	822,575	88.3%	3,943,388	84.1%	3,823,416	83.8%
Hypertensive nephropathy	322,034	34.6%	830,359	17.7%	781,825	17.1%
Hypotension	159,291	17.1%	295,045	6.3%	265,610	5.8%
Implantable cardioverter defibrillator	241,160	25.9%	0	0.0%	0	0.0%
Ischemic stroke or transient ischemic attack	205,745	22.1%	759,879	16.2%	718,959	15.7%
Myocardial infarction	298,705	32.1%	179,718	3.8%	0	0.0%
Nephropathy	541,200	58.1%	1,829,376	39.0%	1,747,656	38.3%
Obesity	226,347	24.3%	1,023,082	21.8%	986,442	21.6%
Other dysrhythmias	436,789	46.9%	926,155	19.8%	861,417	18.9%
Psychosis	101,606	10.9%	445,029	9.5%	424,612	9.3%
Pulmonary hypertension	158,374	17.0%	303,377	6.5%	284,064	6.2%
Renal disorders	396,527	42.6%	1,265,287	27.0%	1,210,351	26.5%
Rheumatic heart disease	145,897	15.7%	240,938	5.1%	221,216	4.8%
Sleep apnea	164,448	17.7%	616,696	13.2%	596,145	13.1%
Smoking	148,958	16.0%	443,944	9.5%	417,175	9.1%
Stable angina	138,124	14.8%	342,889	7.3%	308,209	6.8%
Unstable angina	178,573	19.2%	407,426	8.7%	358,367	7.9%
Valve disorders	190,668	20.5%	404,156	8.6%	380,427	8.3%

¹All metrics are based on total number of episodes per group, except for sex and race which are based on total number of unique patients.

²Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

Table 1f. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018

Characteristic ¹	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
	Number		Number		Number	
Number of episodes	1,895,187		9,131,142		8,925,956	
Number of unique patients	1,895,187		9,131,142		8,925,956	
Demographics	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Mean Age (Years)	73.9	12.1	73	12.1	73	12.1
	Number	Percent	Number	Percent	Number	Percent
Age (Years)						
0-17	496	0.0%	4,159	0.0%	4,157	0.0%
18-44	43,917	2.3%	270,754	3.0%	267,282	3.0%
45-64	328,968	17.4%	1,659,061	18.2%	1,623,522	18.2%
65+	1,521,806	80.3%	7,197,168	78.8%	7,030,995	78.8%
Sex						
Female	798,900	42.2%	5,224,556	57.2%	5,120,532	57.4%
Male	1,096,287	57.8%	3,906,586	42.8%	3,805,424	42.6%
Race						
American Indian or Alaska Native	9,245	0.5%	33,492	0.4%	32,435	0.4%
Asian	28,654	1.5%	210,509	2.3%	206,536	2.3%
Black or African American	252,982	13.3%	1,140,659	12.5%	1,117,708	12.5%
Native Hawaiian or Other Pacific Islander	2,571	0.1%	13,194	0.1%	12,899	0.1%
Unknown ²	237,875	12.6%	1,605,600	17.6%	1,578,433	17.7%
White	1,363,860	72.0%	6,127,688	67.1%	5,977,945	67.0%
Hispanic Origin	43,107	2.3%	266,988	2.9%	261,909	2.9%
Year						
2010	143,253	7.6%	1,077,708	11.8%	1,052,640	11.8%
2011	197,871	10.4%	1,132,029	12.4%	1,109,250	12.4%
2012	183,299	9.7%	931,436	10.2%	912,326	10.2%
2013	195,717	10.3%	942,307	10.3%	921,895	10.3%
2014	204,377	10.8%	886,715	9.7%	868,100	9.7%
2015	239,838	12.7%	945,964	10.4%	924,245	10.4%

Table 1f. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018

	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
	Number	Percent	Number	Percent	Number	Percent
2016	269,244	14.2%	1,059,498	11.6%	1,033,921	11.6%
2017	265,553	14.0%	1,256,060	13.8%	1,225,421	13.7%
2018	196,035	10.3%	899,425	9.9%	878,158	9.8%
Recorded on heart failure index diagnosis:	Number	Percent	Number	Percent	Number	Percent
Diastolic heart failure	0	0.0%	3,056,331	33.5%	2,956,846	33.1%
Left heart failure	232,689	12.3%	0	0.0%	0	0.0%
Systolic heart failure	1,662,498	87.7%	0	0.0%	0	0.0%
Unspecified heart failure	209,829	11.1%	6,560,157	71.8%	6,441,346	72.2%
History of heart failure related medication use in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Angiotensin-converting enzyme inhibitors	801,694	42.3%	3,073,992	33.7%	2,984,639	33.4%
Angiotensin II receptor blockers	395,075	20.8%	2,152,476	23.6%	2,107,535	23.6%
Antiarrhythmics	234,728	12.4%	445,783	4.9%	430,583	4.8%
Beta blockers	1,332,233	70.3%	4,429,167	48.5%	4,293,607	48.1%
Digoxin	211,515	11.2%	355,206	3.9%	345,997	3.9%
Hydralazine	139,932	7.4%	383,781	4.2%	370,113	4.1%
Loop diuretics	988,370	52.2%	2,498,812	27.4%	2,434,056	27.3%
Mineralocorticoid receptor antagonists (epleren	15,598	0.8%	11,817	0.1%	11,477	0.1%
Nitrates	389,832	20.6%	907,579	9.9%	847,031	9.5%
Potassium-sparing diuretics	43,718	2.3%	272,408	3.0%	266,574	3.0%
Thiazide diuretics	307,253	16.2%	2,331,654	25.5%	2,281,979	25.6%
History of heart failure related comorbidities in the prior 183 days:	Number	Percent	Number	Percent	Number	Percent
Anemia	865,868	45.7%	2,754,643	30.2%	2,639,755	29.6%
Atrial fibrillation or flutter	881,853	46.5%	1,890,935	20.7%	1,815,607	20.3%
Cardiomyopathy	1,249,390	65.9%	0	0.0%	0	0.0%
Chronic obstructive pulmonary disease	677,765	35.8%	1,951,377	21.4%	1,872,655	21.0%

Table 1f. Aggregated Baseline Table for Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) with 183-Day Spironolactone Incidence Washout in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018

	HFrEF; 183-day Spironolactone incidence washout		HFpEF not excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout		HFpEF excluding Myocardial Infarction at baseline; 183-day Spironolactone incidence washout	
	Number	Percent	Number	Percent	Number	Percent
Coronary artery bypass graft	52,224	2.8%	46,909	0.5%	27,124	0.3%
Depression	385,248	20.3%	1,509,096	16.5%	1,453,184	16.3%
Diabetes mellitus	940,628	49.6%	3,699,084	40.5%	3,590,812	40.2%
Endocarditis	37,027	2.0%	62,287	0.7%	58,289	0.7%
Heart transplant	16,871	0.9%	23,605	0.3%	22,466	0.3%
Human immunodeficiency virus	10,313	0.5%	33,853	0.4%	32,765	0.4%
Hyperkalemia	212,965	11.2%	392,919	4.3%	364,041	4.1%
Hyperlipidemia	1,371,822	72.4%	5,615,475	61.5%	5,444,255	61.0%
Hypertension	1,678,415	88.6%	7,459,824	81.7%	7,260,417	81.3%
Hypertensive nephropathy	608,962	32.1%	1,234,228	13.5%	1,160,918	13.0%
Hypotension	329,464	17.4%	522,859	5.7%	471,791	5.3%
Implantable cardioverter defibrillator	377,994	19.9%	0	0.0%	0	0.0%
Ischemic stroke or transient ischemic attack	446,505	23.6%	1,445,276	15.8%	1,373,193	15.4%
Myocardial infarction	667,017	35.2%	322,449	3.5%	0	0.0%
Nephropathy	1,020,352	53.8%	2,704,240	29.6%	2,580,664	28.9%
Obesity	379,795	20.0%	1,436,860	15.7%	1,384,604	15.5%
Other dysrhythmias	908,978	48.0%	1,717,118	18.8%	1,604,113	18.0%
Psychosis	157,381	8.3%	565,687	6.2%	540,274	6.1%
Pulmonary hypertension	323,645	17.1%	472,356	5.2%	441,504	4.9%
Renal disorders	757,870	40.0%	1,934,111	21.2%	1,851,489	20.7%
Rheumatic heart disease	305,097	16.1%	439,736	4.8%	406,379	4.6%
Sleep apnea	281,283	14.8%	915,659	10.0%	887,570	9.9%
Smoking	288,220	15.2%	756,056	8.3%	711,166	8.0%
Stable angina	226,926	12.0%	516,997	5.7%	470,601	5.3%
Unstable angina	340,194	18.0%	656,336	7.2%	574,344	6.4%
Valve disorders	385,368	20.3%	699,651	7.7%	660,952	7.4%

¹All metrics are based on total number of episodes per group, except for sex and race which are based on total number of unique patients.

²Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

Table 2a. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, Overall

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015			
No Spironolactone Incidence Washout			
HFrEF	1,157,558	263,313	2,274.73
HFpEF not excluding Myocardial Infarction at baseline	5,693,622	484,655	851.22
HFpEF excluding Myocardial Infarction at baseline	5,569,822	471,514	846.55
Spironolactone 183-Day Incidence Washout			
HFrEF	1,086,132	222,765	2,050.99
HFpEF not excluding Myocardial Infarction at baseline	5,617,096	438,720	781.04
HFpEF excluding Myocardial Infarction at baseline	5,496,254	426,868	776.65
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018			
No Spironolactone Incidence Washout			
HFrEF	998,619	180,036	1,802.85
HFpEF not excluding Myocardial Infarction at baseline	4,773,384	299,387	627.20
HFpEF excluding Myocardial Infarction at baseline	4,646,229	288,239	620.37
Spironolactone 183-Day Incidence Washout			
HFrEF	931,291	141,468	1,519.05
HFpEF not excluding Myocardial Infarction at baseline	4,688,831	250,636	534.54
HFpEF excluding Myocardial Infarction at baseline	4,565,041	241,062	528.06
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018			
No Spironolactone Incidence Washout			
HFrEF	2,009,529	416,348	2,071.87
HFpEF not excluding Myocardial Infarction at baseline	9,257,514	706,163	762.80
HFpEF excluding Myocardial Infarction at baseline	9,047,723	685,476	757.62
Spironolactone 183-Day Incidence Washout			
HFrEF	1,895,187	349,803	1,845.74
HFpEF not excluding Myocardial Infarction at baseline	9,131,142	627,955	687.71
HFpEF excluding Myocardial Infarction at baseline	8,925,956	609,364	682.69

Table 2b. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
2010	156,572	38,225	2,441.37
2011	211,740	49,601	2,342.54
2012	194,504	44,696	2,297.95
2013	207,589	46,637	2,246.60
2014	216,205	47,455	2,194.91
2015	170,948	36,699	2,146.79
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
2010	1,093,353	96,892	886.19
2011	1,147,676	103,621	902.88
2012	943,552	82,401	873.31
2013	954,910	78,991	827.21
2014	898,560	71,716	798.12
2015	655,571	51,034	778.47
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
2010	1,067,494	94,125	881.74
2011	1,124,369	101,040	898.64
2012	924,020	80,347	869.54
2013	933,986	76,757	821.82
2014	879,532	69,728	792.79
2015	640,421	49,517	773.19
Spironolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
2010	143,253	31,185	2,176.92
2011	197,871	41,727	2,108.80
2012	183,299	38,264	2,087.52
2013	195,717	39,880	2,037.64
2014	204,377	40,537	1,983.44
2015	161,615	31,172	1,928.78
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
2010	1,077,708	88,646	822.54
2011	1,132,029	94,383	833.75
2012	931,436	74,824	803.32
2013	942,307	71,286	756.51
2014	886,715	64,122	723.14
2015	646,901	45,459	702.72

Table 2b. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
2010	1,052,640	86,180	818.70
2011	1,109,250	92,057	829.90
2012	912,326	72,962	799.74
2013	921,895	69,293	751.64
2014	868,100	62,340	718.12
2015	632,043	44,036	696.72
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
2016	421,975	82,386	1,952.39
2017	344,537	61,495	1,784.86
2018	232,107	36,155	1,557.69
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
2016	1,959,116	135,450	691.38
2017	1,723,397	109,120	633.17
2018	1,090,871	54,817	502.51
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
2016	1,901,666	130,185	684.58
2017	1,680,403	105,341	626.88
2018	1,064,160	52,713	495.35
Spironolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
2016	387,207	63,608	1,642.74
2017	324,575	49,259	1,517.65
2018	219,509	28,601	1,302.95
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
2016	1,920,704	115,692	602.34
2017	1,694,034	90,991	537.13
2018	1,074,093	43,953	409.21
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
2016	1,865,097	111,218	596.31
2017	1,651,983	87,719	530.99
2018	1,047,961	42,125	401.97

Table 2b. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
2010	156,572	38,225	2,441.37
2011	211,740	49,601	2,342.54
2012	194,504	44,696	2,297.95
2013	207,589	46,637	2,246.60
2014	216,205	47,455	2,194.91
2015	253,654	52,985	2,088.87
2016	283,944	55,439	1,952.46
2017	279,167	49,254	1,764.32
2018	206,154	32,056	1,554.95
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
2010	1,093,353	96,892	886.19
2011	1,147,676	103,621	902.88
2012	943,552	82,401	873.31
2013	954,910	78,991	827.21
2014	898,560	71,716	798.12
2015	958,591	72,447	755.77
2016	1,074,452	75,846	705.90
2017	1,274,375	79,178	621.31
2018	912,045	45,071	494.18
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
2010	1,067,494	94,125	881.74
2011	1,124,369	101,040	898.64
2012	924,020	80,347	869.54
2013	933,986	76,757	821.82
2014	879,532	69,728	792.79
2015	936,453	70,266	750.34
2016	1,048,387	73,474	700.83
2017	1,243,136	76,364	614.29
2018	890,346	43,375	487.17

Table 2b. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Spironolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
2010	143,253	31,185	2,176.92
2011	197,871	41,727	2,108.80
2012	183,299	38,264	2,087.52
2013	195,717	39,880	2,037.64
2014	204,377	40,537	1,983.44
2015	239,838	44,805	1,868.14
2016	269,244	46,311	1,720.04
2017	265,553	41,001	1,543.99
2018	196,035	26,093	1,331.04
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
2010	1,077,708	88,646	822.54
2011	1,132,029	94,383	833.75
2012	931,436	74,824	803.32
2013	942,307	71,286	756.51
2014	886,715	64,122	723.14
2015	945,964	64,410	680.89
2016	1,059,498	66,126	624.13
2017	1,256,060	67,332	536.06
2018	899,425	36,826	409.44
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
2010	1,052,640	86,180	818.70
2011	1,109,250	92,057	829.90
2012	912,326	72,962	799.74
2013	921,895	69,293	751.64
2014	868,100	62,340	718.12
2015	924,245	62,374	674.86
2016	1,033,921	64,000	619.00
2017	1,225,421	64,847	529.18
2018	878,158	35,311	402.10

*Calendar year during which the diagnosis for index heart failure occurred.

Table 2c. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Sex

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
Female	493,001	108,107	2,192.84
Male	664,557	155,206	2,335.48
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
Female	3,347,565	303,556	906.80
Male	2,346,057	181,099	771.93
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
Female	3,280,516	296,149	902.75
Male	2,289,306	175,365	766.02
Spironolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
Female	462,489	91,259	1,973.21
Male	623,643	131,506	2,108.67
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
Female	3,298,218	273,274	828.55
Male	2,318,878	165,446	713.47
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
Female	3,232,956	266,667	824.84
Male	2,263,298	160,201	707.82
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
Female	400,178	71,636	1,790.10
Male	598,441	108,400	1,811.37
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
Female	2,697,725	179,126	663.99
Male	2,075,659	120,261	579.39
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
Female	2,634,846	173,309	657.76
Male	2,011,383	114,930	571.40
Spironolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
Female	372,923	56,113	1,504.68
Male	558,368	85,355	1,528.65
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
Female	2,645,734	148,411	560.94
Male	2,043,097	102,225	500.34

Table 2c. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Sex

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
Female	2,584,749	143,506	555.20
Male	1,980,292	97,556	492.63
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
Female	847,349	170,917	2,017.08
Male	1,162,180	245,431	2,111.82
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
Female	5,302,625	431,014	812.83
Male	3,954,889	275,149	695.72
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
Female	5,195,943	419,936	808.20
Male	3,851,780	265,540	689.40
Spironolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
Female	798,900	143,473	1,795.88
Male	1,096,287	206,330	1,882.08
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
Female	5,224,556	381,224	729.68
Male	3,906,586	246,731	631.58
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
Female	5,120,532	371,416	725.35
Male	3,805,424	237,948	625.29

Table 2d. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Age Group (Years)

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
0-17	292	60	2,054.79
18-44	28,752	8,749	3,042.92
45-64	205,776	56,896	2,764.95
65+	922,738	197,608	2,141.54
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
0-17	2,828	110	388.97
18-44	185,031	9,710	524.78
45-64	1,062,902	78,411	737.71
65+	4,442,861	396,424	892.27
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
0-17	2,827	110	389.11
18-44	182,922	9,528	520.88
45-64	1,041,920	76,241	731.74
65+	4,342,153	385,635	888.12
Spironolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
0-17	267	46	1,722.85
18-44	25,855	6,629	2,563.91
45-64	189,641	46,015	2,426.43
65+	870,369	170,075	1,954.06
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
0-17	2,799	93	332.26
18-44	183,313	8,571	467.56
45-64	1,048,673	69,143	659.34
65+	4,382,311	360,913	823.57
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
0-17	2,798	93	332.38
18-44	181,237	8,412	464.14
45-64	1,028,118	67,213	653.75
65+	4,284,101	351,150	819.66

Table 2d. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Age Group (Years)

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
0-17	249	45	1,807.23
18-44	22,495	5,729	2,546.79
45-64	174,369	38,907	2,231.30
65+	801,506	135,355	1,688.76
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
0-17	1,292	52	402.48
18-44	95,556	4,842	506.72
45-64	747,662	46,577	622.97
65+	3,928,874	247,916	631.01
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
0-17	1,290	52	403.10
18-44	93,760	4,718	503.20
45-64	727,088	44,759	615.59
65+	3,824,091	238,710	624.23
Spironolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
0-17	227	36	1,585.90
18-44	19,996	3,922	1,961.39
45-64	158,702	28,529	1,797.65
65+	752,366	108,981	1,448.51
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
0-17	1,266	38	300.16
18-44	94,019	3,898	414.60
45-64	732,946	37,463	511.13
65+	3,860,600	209,237	541.98
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
0-17	1,264	38	300.63
18-44	92,262	3,793	411.11
45-64	712,862	35,921	503.90
65+	3,758,653	201,310	535.59
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018			
No Spironolactone Incidence Washout			
<i>HFrEF</i>			
0-17	543	104	1,915.29
18-44	48,440	13,700	2,828.24
45-64	355,155	89,708	2,525.88
65+	1,605,391	312,836	1,948.66

Table 2d. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Age Group (Years)

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
0-17	4,209	162	384.89
18-44	273,697	14,178	518.02
45-64	1,683,512	116,978	694.85
65+	7,296,096	574,845	787.88
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
0-17	4,207	162	385.07
18-44	270,169	13,907	514.75
45-64	1,647,256	113,466	688.82
65+	7,126,091	557,941	782.96
Spirolactone 183-Day Incidence Washout			
<i>HFrEF</i>			
0-17	496	82	1,653.23
18-44	43,917	10,363	2,359.68
45-64	328,968	71,712	2,179.91
65+	1,521,806	267,646	1,758.74
<i>HFpEF not excluding Myocardial Infarction at baseline</i>			
0-17	4,159	135	324.60
18-44	270,754	12,271	453.22
45-64	1,659,061	100,851	607.88
65+	7,197,168	514,698	715.14
<i>HFpEF excluding Myocardial Infarction at baseline</i>			
0-17	4,157	135	324.75
18-44	267,282	12,033	450.20
45-64	1,623,522	97,734	601.99
65+	7,030,995	499,462	710.37

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015			
No Spironolactone Incidence Washout			
HFrEF			
<i>2010</i>			
July	37,407	9,354	2,500.60
August	29,453	7,292	2,475.81
September	25,419	6,140	2,415.52
October	22,728	5,523	2,430.04
November	21,166	5,052	2,386.85
December	20,399	4,864	2,384.43
<i>2011</i>			
January	20,676	4,981	2,409.07
February	18,399	4,520	2,456.66
March	20,257	4,794	2,366.59
April	17,923	4,275	2,385.20
May	17,649	4,183	2,370.11
June	16,550	3,883	2,346.22
July	17,087	4,007	2,345.06
August	17,377	4,030	2,319.16
September	16,368	3,759	2,296.55
October	16,660	3,714	2,229.29
November	16,248	3,642	2,241.51
December	16,546	3,813	2,304.48
<i>2012</i>			
January	17,216	4,025	2,337.94
February	15,916	3,630	2,280.72
March	16,607	3,873	2,332.15
April	15,621	3,642	2,331.48
May	15,850	3,696	2,331.86
June	14,431	3,301	2,287.44
July	17,263	3,961	2,294.50
August	16,901	3,799	2,247.80
September	15,697	3,634	2,315.09
October	16,720	3,915	2,341.51
November	15,926	3,582	2,249.15
December	16,356	3,638	2,224.26

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	17,872	4,144	2,318.71
February	15,216	3,428	2,252.89
March	16,640	3,752	2,254.81
April	16,417	3,727	2,270.21
May	15,751	3,532	2,242.40
June	14,158	3,250	2,295.52
July	20,704	4,776	2,306.80
August	19,177	4,299	2,241.75
September	17,659	3,905	2,211.34
October	19,054	4,231	2,220.53
November	16,894	3,745	2,216.76
December	18,047	3,848	2,132.21
<i>2014</i>			
January	18,624	4,240	2,276.63
February	16,507	3,735	2,262.68
March	18,247	4,047	2,217.90
April	18,259	4,108	2,249.85
May	17,575	3,919	2,229.87
June	16,230	3,541	2,181.76
July	19,449	4,245	2,182.63
August	18,005	3,881	2,155.51
September	17,981	3,919	2,179.52
October	18,898	3,962	2,096.52
November	16,866	3,658	2,168.86
December	19,564	4,200	2,146.80
<i>2015</i>			
January	19,472	4,074	2,092.24
February	17,466	3,835	2,195.69
March	19,224	4,212	2,191.01
April	18,882	4,180	2,213.75
May	18,114	3,900	2,153.03
June	17,991	3,879	2,156.08
July	20,519	4,404	2,146.30
August	19,369	4,050	2,090.97
September	19,911	4,165	2,091.81

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF not excluding Myocardial Infarction at baseline			
<i>2010</i>			
July	262,068	23,460	895.19
August	218,907	19,417	887.00
September	186,657	16,414	879.37
October	162,080	14,246	878.95
November	139,446	12,348	885.50
December	124,195	11,007	886.27
<i>2011</i>			
January	118,011	11,062	937.37
February	103,074	9,612	932.53
March	115,284	10,606	919.99
April	97,867	8,982	917.78
May	96,333	8,710	904.16
June	92,275	8,278	897.10
July	90,773	8,225	906.11
August	94,652	8,392	886.62
September	88,145	7,761	880.48
October	87,758	7,731	880.95
November	83,361	7,280	873.31
December	80,143	6,982	871.19
<i>2012</i>			
January	85,312	7,870	922.50
February	79,859	7,088	887.56
March	82,363	7,518	912.79
April	75,849	6,715	885.31
May	76,483	6,842	894.58
June	70,000	6,117	873.86
July	85,431	7,283	852.50
August	84,289	7,105	842.93
September	75,286	6,373	846.51
October	82,941	6,925	834.93
November	74,988	6,349	846.67
December	70,751	6,216	878.57

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HF_rEF) or Preserved Ejection Fraction Heart Failure (HF_pEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	79,397	6,879	866.41
February	67,930	5,853	861.62
March	71,069	6,242	878.30
April	72,382	6,285	868.31
May	68,998	6,108	885.24
June	61,992	5,377	867.37
July	100,222	8,212	819.38
August	94,204	7,488	794.87
September	87,291	6,840	783.59
October	93,856	7,259	773.42
November	79,447	6,195	779.77
December	78,122	6,253	800.41
<i>2014</i>			
January	79,481	6,624	833.41
February	69,985	5,830	833.04
March	75,543	6,353	840.98
April	75,574	6,284	831.50
May	71,313	5,843	819.35
June	67,821	5,511	812.58
July	82,279	6,379	775.29
August	76,402	5,797	758.75
September	76,785	5,946	774.37
October	79,880	6,071	760.02
November	68,306	5,237	766.70
December	75,191	5,841	776.82
<i>2015</i>			
January	73,499	5,905	803.41
February	65,975	5,349	810.76
March	74,504	5,924	795.13
April	73,984	5,771	780.03
May	67,920	5,438	800.65
June	69,684	5,319	763.30
July	78,877	5,924	751.04
August	74,880	5,600	747.86
September	76,248	5,804	761.20

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF excluding Myocardial Infarction at baseline			
<i>2010</i>			
July	254,644	22,676	890.50
August	213,404	18,813	881.57
September	182,534	15,986	875.78
October	158,765	13,906	875.89
November	136,540	12,007	879.38
December	121,607	10,737	882.93
<i>2011</i>			
January	115,513	10,785	933.66
February	101,048	9,378	928.07
March	113,086	10,353	915.50
April	95,846	8,740	911.88
May	94,326	8,496	900.71
June	90,483	8,083	893.32
July	88,816	8,010	901.86
August	92,816	8,202	883.68
September	86,346	7,566	876.24
October	85,974	7,527	875.50
November	81,652	7,096	869.05
December	78,463	6,804	867.16
<i>2012</i>			
January	83,603	7,661	916.35
February	78,333	6,912	882.39
March	80,618	7,310	906.75
April	74,269	6,553	882.33
May	74,932	6,689	892.68
June	68,554	5,955	868.66
July	83,636	7,119	851.19
August	82,500	6,939	841.09
September	73,758	6,217	842.89
October	81,294	6,729	827.74
November	73,464	6,204	844.50
December	69,059	6,059	877.37

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	77,421	6,656	859.72
February	66,359	5,701	859.11
March	69,434	6,082	875.94
April	70,891	6,118	863.02
May	67,518	5,933	878.73
June	60,718	5,229	861.19
July	97,812	7,942	811.97
August	92,106	7,257	787.90
September	85,556	6,656	777.97
October	92,035	7,078	769.06
November	77,877	6,038	775.33
December	76,259	6,067	795.58
<i>2014</i>			
January	77,834	6,465	830.61
February	68,457	5,659	826.65
March	73,945	6,158	832.78
April	74,012	6,138	829.32
May	69,726	5,687	815.62
June	66,403	5,368	808.40
July	80,421	6,200	770.94
August	74,842	5,643	753.99
September	75,178	5,756	765.65
October	78,317	5,891	752.20
November	66,930	5,094	761.09
December	73,467	5,669	771.64
<i>2015</i>			
January	71,760	5,716	796.54
February	64,424	5,186	804.98
March	72,771	5,738	788.50
April	72,429	5,615	775.24
May	66,362	5,305	799.40
June	68,190	5,157	756.27
July	76,903	5,734	745.61
August	73,107	5,437	743.70
September	74,475	5,629	755.82

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Spironolactone 183-Day Incidence Washout			
HFrEF			
<i>2010</i>			
July	33,824	7,555	2,233.62
August	26,742	5,858	2,190.56
September	23,193	4,997	2,154.53
October	20,915	4,521	2,161.61
November	19,580	4,186	2,137.90
December	18,999	4,068	2,141.17
<i>2011</i>			
January	19,207	4,164	2,167.96
February	17,178	3,773	2,196.41
March	19,023	4,079	2,144.25
April	16,780	3,629	2,162.69
May	16,447	3,479	2,115.28
June	15,508	3,259	2,101.50
July	15,923	3,351	2,104.50
August	16,252	3,429	2,109.89
September	15,282	3,125	2,044.89
October	15,576	3,146	2,019.77
November	15,195	3,090	2,033.56
December	15,500	3,203	2,066.45
<i>2012</i>			
January	16,185	3,407	2,105.04
February	15,044	3,126	2,077.90
March	15,716	3,345	2,128.40
April	14,726	3,093	2,100.37
May	14,945	3,158	2,113.08
June	13,605	2,816	2,069.83
July	16,221	3,370	2,077.55
August	15,887	3,226	2,030.59
September	14,757	3,114	2,110.18
October	15,715	3,377	2,148.90
November	15,058	3,090	2,052.07
December	15,440	3,142	2,034.97

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	16,921	3,575	2,112.76
February	14,365	2,960	2,060.56
March	15,751	3,257	2,067.81
April	15,543	3,202	2,060.09
May	14,896	3,007	2,018.66
June	13,350	2,776	2,079.40
July	19,346	4,030	2,083.12
August	17,910	3,578	1,997.77
September	16,587	3,298	1,988.30
October	17,962	3,611	2,010.36
November	15,950	3,249	2,036.99
December	17,136	3,337	1,947.36
<i>2014</i>			
January	17,634	3,656	2,073.27
February	15,697	3,250	2,070.46
March	17,350	3,503	2,019.02
April	17,216	3,507	2,037.06
May	16,710	3,412	2,041.89
June	15,246	2,943	1,930.34
July	18,296	3,598	1,966.55
August	16,942	3,273	1,931.89
September	16,854	3,247	1,926.55
October	17,898	3,394	1,896.30
November	15,972	3,114	1,949.66
December	18,562	3,640	1,961.00
<i>2015</i>			
January	18,510	3,516	1,899.51
February	16,578	3,272	1,973.70
March	18,268	3,630	1,987.08
April	17,890	3,577	1,999.44
May	17,136	3,313	1,933.36
June	17,007	3,269	1,922.15
July	19,273	3,673	1,905.77
August	18,203	3,414	1,875.52
September	18,750	3,508	1,870.93

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF not excluding Myocardial Infarction at baseline			
<i>2010</i>			
July	258,567	21,688	838.78
August	215,738	17,769	823.64
September	183,893	14,974	814.28
October	159,685	12,973	812.41
November	137,459	11,220	816.24
December	122,366	10,022	819.02
<i>2011</i>			
January	116,198	10,052	865.08
February	101,625	8,780	863.96
March	113,838	9,718	853.67
April	96,589	8,200	848.96
May	95,073	7,988	840.20
June	90,993	7,493	823.47
July	89,573	7,527	840.32
August	93,301	7,571	811.46
September	86,899	6,998	805.30
October	86,609	7,069	816.20
November	82,250	6,604	802.92
December	79,081	6,383	807.15
<i>2012</i>			
January	84,202	7,143	848.32
February	78,858	6,451	818.05
March	81,341	6,871	844.72
April	74,934	6,124	817.25
May	75,455	6,221	824.46
June	69,088	5,543	802.31
July	84,307	6,591	781.79
August	83,134	6,403	770.20
September	74,288	5,768	776.44
October	81,952	6,278	766.06
November	74,026	5,763	778.51
December	69,851	5,668	811.44

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HF_rEF) or Preserved Ejection Fraction Heart Failure (HF_pEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	78,438	6,294	802.42
February	67,095	5,306	790.82
March	70,114	5,616	800.98
April	71,505	5,715	799.24
May	68,137	5,541	813.21
June	61,127	4,839	791.63
July	98,805	7,352	744.09
August	92,856	6,727	724.46
September	86,149	6,175	716.78
October	92,626	6,506	702.39
November	78,421	5,590	712.82
December	77,034	5,625	730.20
<i>2014</i>			
January	78,399	5,966	760.98
February	69,085	5,243	758.92
March	74,621	5,729	767.75
April	74,536	5,590	749.97
May	70,389	5,201	738.89
June	66,918	4,936	737.62
July	81,197	5,699	701.87
August	75,452	5,182	686.79
September	75,706	5,245	692.81
October	78,800	5,417	687.44
November	67,409	4,674	693.38
December	74,203	5,240	706.17
<i>2015</i>			
January	72,501	5,280	728.27
February	65,162	4,828	740.92
March	73,603	5,326	723.61
April	73,115	5,156	705.19
May	66,954	4,834	721.99
June	68,813	4,698	682.72
July	77,804	5,256	675.54
August	73,826	4,983	674.97
September	75,123	5,098	678.62

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF excluding Myocardial Infarction at baseline			
<i>2010</i>			
July	251,350	20,981	834.73
August	210,423	17,238	819.21
September	179,892	14,593	811.21
October	156,486	12,681	810.36
November	134,627	10,913	810.61
December	119,862	9,774	815.44
<i>2011</i>			
January	113,782	9,816	862.70
February	99,653	8,561	859.08
March	111,697	9,497	850.25
April	94,612	7,976	843.02
May	93,132	7,806	838.17
June	89,250	7,329	821.18
July	87,637	7,317	834.92
August	91,476	7,392	808.08
September	85,129	6,819	801.02
October	84,874	6,884	811.08
November	80,585	6,446	799.90
December	77,423	6,214	802.60
<i>2012</i>			
January	82,539	6,971	844.57
February	77,363	6,288	812.79
March	79,614	6,673	838.17
April	73,365	5,965	813.06
May	73,944	6,083	822.65
June	67,679	5,397	797.44
July	82,551	6,434	779.40
August	81,395	6,247	767.49
September	72,801	5,632	773.62
October	80,340	6,103	759.65
November	72,543	5,640	777.47
December	68,192	5,529	810.80

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HF_rEF) or Preserved Ejection Fraction Heart Failure (HF_pEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	76,508	6,093	796.39
February	65,571	5,173	788.92
March	68,515	5,471	798.51
April	70,024	5,564	794.58
May	66,685	5,382	807.08
June	59,882	4,709	786.38
July	96,466	7,126	738.71
August	90,802	6,513	717.27
September	84,475	6,010	711.45
October	90,859	6,351	699.00
November	76,873	5,440	707.66
December	75,235	5,461	725.86
<i>2014</i>			
January	76,776	5,823	758.44
February	67,602	5,086	752.34
March	73,074	5,562	761.15
April	73,000	5,459	747.81
May	68,845	5,070	736.44
June	65,544	4,806	733.25
July	79,377	5,537	697.56
August	73,921	5,042	682.08
September	74,125	5,071	684.11
October	77,271	5,256	680.20
November	66,049	4,538	687.07
December	72,516	5,090	701.91
<i>2015</i>			
January	70,795	5,104	720.95
February	63,615	4,671	734.26
March	71,898	5,135	714.21
April	71,598	5,007	699.32
May	65,396	4,705	719.46
June	67,349	4,554	676.18
July	75,879	5,081	669.62
August	72,096	4,835	670.63
September	73,417	4,944	673.41

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018			
No Spironolactone Incidence Washout			
HFrEF			
<i>2016</i>			
April	94,830	18,987	2,002.21
May	59,937	11,676	1,948.05
June	48,392	9,453	1,953.42
July	42,481	8,327	1,960.17
August	40,381	7,997	1,980.39
September	35,512	6,871	1,934.84
October	34,702	6,621	1,907.96
November	33,212	6,401	1,927.32
December	32,528	6,053	1,860.86
<i>2017</i>			
January	33,413	6,451	1,930.69
February	29,568	5,510	1,863.50
March	32,234	6,008	1,863.87
April	28,327	5,283	1,865.01
May	28,771	5,199	1,807.03
June	26,715	4,875	1,824.82
July	28,677	4,944	1,724.03
August	29,112	5,068	1,740.86
September	26,156	4,585	1,752.94
October	28,341	4,875	1,720.12
November	26,622	4,437	1,666.67
December	26,601	4,260	1,601.44
<i>2018</i>			
January	29,383	4,834	1,645.17
February	25,116	4,192	1,669.06
March	26,825	4,330	1,614.17
April	25,990	4,130	1,589.07
May	25,739	4,112	1,597.58
June	23,341	3,613	1,547.92
July	26,671	3,988	1,495.26
August	25,846	3,638	1,407.57
September	23,196	3,318	1,430.42

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF not excluding Myocardial Infarction at baseline			
<i>2016</i>			
April	382,618	28,345	740.82
May	273,877	19,191	700.72
June	231,187	15,608	675.12
July	189,344	12,867	679.56
August	186,769	12,715	680.79
September	171,055	11,285	659.73
October	184,765	12,610	682.49
November	174,165	11,740	674.07
December	165,336	11,089	670.69
<i>2017</i>			
January	169,902	11,763	692.34
February	150,461	10,105	671.60
March	161,559	10,986	680.00
April	141,555	9,509	671.75
May	145,326	9,568	658.38
June	134,100	8,673	646.76
July	142,969	8,836	618.04
August	147,031	8,865	602.93
September	131,263	7,751	590.49
October	140,091	8,272	590.47
November	132,499	7,615	574.72
December	126,641	7,177	566.72
<i>2018</i>			
January	135,753	7,925	583.78
February	118,205	6,486	548.71
March	125,163	6,841	546.57
April	121,023	6,650	549.48
May	121,371	6,055	498.88
June	110,053	5,255	477.50
July	124,365	5,754	462.67
August	125,119	5,382	430.15
September	109,819	4,469	406.94

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF excluding Myocardial Infarction at baseline			
<i>2016</i>			
April	367,203	26,878	731.97
May	265,035	18,344	692.14
June	224,649	15,043	669.62
July	184,093	12,436	675.53
August	182,324	12,289	674.02
September	167,324	10,941	653.88
October	180,144	12,240	679.46
November	169,839	11,293	664.92
December	161,055	10,721	665.67
<i>2017</i>			
January	165,554	11,372	686.91
February	146,776	9,740	663.60
March	157,184	10,618	675.51
April	137,936	9,188	666.11
May	141,685	9,205	649.68
June	130,708	8,323	636.76
July	139,023	8,511	612.20
August	143,499	8,563	596.73
September	128,277	7,500	584.67
October	136,920	8,005	584.65
November	129,488	7,390	570.71
December	123,353	6,926	561.48
<i>2018</i>			
January	132,387	7,647	577.62
February	115,194	6,216	539.61
March	121,895	6,562	538.33
April	118,063	6,407	542.68
May	118,576	5,855	493.78
June	107,555	5,081	472.41
July	121,020	5,486	453.31
August	122,141	5,177	423.85
September	107,329	4,282	398.96

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Spironolactone 183-Day Incidence Washout			
HFrEF			
<i>2016</i>			
April	85,861	14,629	1,703.80
May	54,654	8,991	1,645.08
June	44,108	7,150	1,621.02
July	38,855	6,298	1,620.90
August	37,050	6,073	1,639.14
September	32,782	5,280	1,610.64
October	32,281	5,190	1,607.76
November	31,058	5,096	1,640.80
December	30,558	4,901	1,603.84
<i>2017</i>			
January	31,310	5,160	1,648.04
February	27,939	4,480	1,603.49
March	30,375	4,832	1,590.78
April	26,628	4,202	1,578.04
May	27,226	4,155	1,526.11
June	25,125	3,863	1,537.51
July	26,899	3,930	1,461.02
August	27,349	3,971	1,451.97
September	24,588	3,664	1,490.16
October	26,790	3,915	1,461.37
November	25,166	3,599	1,430.10
December	25,180	3,488	1,385.23
<i>2018</i>			
January	27,856	3,902	1,400.78
February	23,811	3,327	1,397.25
March	25,486	3,522	1,381.94
April	24,706	3,297	1,334.49
May	24,473	3,335	1,362.73
June	22,049	2,821	1,279.42
July	24,995	3,039	1,215.84
August	24,349	2,778	1,140.91
September	21,784	2,580	1,184.36

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF not excluding Myocardial Infarction at baseline			
<i>2016</i>			
April	374,638	24,627	657.35
May	268,574	16,634	619.35
June	226,649	13,313	587.38
July	185,599	10,915	588.10
August	183,060	10,729	586.09
September	167,798	9,531	568.00
October	181,234	10,584	584.00
November	170,775	9,897	579.53
December	162,377	9,462	582.72
<i>2017</i>			
January	166,903	9,973	597.53
February	147,827	8,521	576.42
March	158,770	9,240	581.97
April	139,171	8,019	576.20
May	142,685	7,975	558.92
June	131,736	7,161	543.59
July	140,410	7,293	519.41
August	144,658	7,374	509.75
September	129,097	6,394	495.29
October	137,813	6,825	495.24
November	130,348	6,281	481.86
December	124,616	5,935	476.26
<i>2018</i>			
January	133,516	6,492	486.23
February	116,412	5,262	452.02
March	123,366	5,669	459.53
April	119,243	5,377	450.93
May	119,530	4,832	404.25
June	108,303	4,128	381.15
July	122,435	4,563	372.69
August	123,141	4,198	340.91
September	108,147	3,432	317.35

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF excluding Myocardial Infarction at baseline			
<i>2016</i>			
April	359,770	23,342	648.80
May	260,081	15,918	612.04
June	220,335	12,852	583.29
July	180,494	10,542	584.06
August	178,758	10,362	579.67
September	164,192	9,262	564.10
October	176,696	10,276	581.56
November	166,589	9,512	570.99
December	158,182	9,152	578.57
<i>2017</i>			
January	162,635	9,640	592.74
February	144,229	8,213	569.44
March	154,486	8,921	577.46
April	135,614	7,755	571.84
May	139,142	7,650	549.80
June	128,437	6,854	533.65
July	136,559	7,001	512.67
August	141,206	7,124	504.51
September	126,179	6,177	489.54
October	134,711	6,592	489.34
November	127,381	6,073	476.76
December	121,404	5,719	471.07
<i>2018</i>			
January	130,239	6,246	479.58
February	113,470	5,035	443.73
March	120,156	5,419	451.00
April	116,334	5,154	443.03
May	116,787	4,654	398.50
June	105,871	3,991	376.97
July	119,141	4,322	362.76
August	120,250	4,030	335.14
September	105,713	3,274	309.71

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018			
No Spironolactone Incidence Washout			
HFrEF			
<i>2010</i>			
July	37,407	9,354	2,500.60
August	29,453	7,292	2,475.81
September	25,419	6,140	2,415.52
October	22,728	5,523	2,430.04
November	21,166	5,052	2,386.85
December	20,399	4,864	2,384.43
<i>2011</i>			
January	20,676	4,981	2,409.07
February	18,399	4,520	2,456.66
March	20,257	4,794	2,366.59
April	17,923	4,275	2,385.20
May	17,649	4,183	2,370.11
June	16,550	3,883	2,346.22
July	17,087	4,007	2,345.06
August	17,377	4,030	2,319.16
September	16,368	3,759	2,296.55
October	16,660	3,714	2,229.29
November	16,248	3,642	2,241.51
December	16,546	3,813	2,304.48
<i>2012</i>			
January	17,216	4,025	2,337.94
February	15,916	3,630	2,280.72
March	16,607	3,873	2,332.15
April	15,621	3,642	2,331.48
May	15,850	3,696	2,331.86
June	14,431	3,301	2,287.44
July	17,263	3,961	2,294.50
August	16,901	3,799	2,247.80
September	15,697	3,634	2,315.09
October	16,720	3,915	2,341.51
November	15,926	3,582	2,249.15
December	16,356	3,638	2,224.26

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	17,872	4,144	2,318.71
February	15,216	3,428	2,252.89
March	16,640	3,752	2,254.81
April	16,417	3,727	2,270.21
May	15,751	3,532	2,242.40
June	14,158	3,250	2,295.52
July	20,704	4,776	2,306.80
August	19,177	4,299	2,241.75
September	17,659	3,905	2,211.34
October	19,054	4,231	2,220.53
November	16,894	3,745	2,216.76
December	18,047	3,848	2,132.21
<i>2014</i>			
January	18,624	4,240	2,276.63
February	16,507	3,735	2,262.68
March	18,247	4,047	2,217.90
April	18,259	4,108	2,249.85
May	17,575	3,919	2,229.87
June	16,230	3,541	2,181.76
July	19,449	4,245	2,182.63
August	18,005	3,881	2,155.51
September	17,981	3,919	2,179.52
October	18,898	3,962	2,096.52
November	16,866	3,658	2,168.86
December	19,564	4,200	2,146.80
<i>2015</i>			
January	19,472	4,074	2,092.24
February	17,466	3,835	2,195.69
March	19,224	4,212	2,191.01
April	18,882	4,180	2,213.75
May	18,114	3,900	2,153.03
June	17,991	3,879	2,156.08
July	20,519	4,404	2,146.30
August	19,369	4,050	2,090.97
September	19,911	4,165	2,091.81
October	30,998	6,017	1,941.09
November	25,624	5,067	1,977.44
December	26,084	5,202	1,994.33

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2016</i>			
January	25,058	5,029	2,006.94
February	23,890	4,790	2,005.02
March	25,162	5,035	2,001.03
April	23,400	4,582	1,958.12
May	22,665	4,475	1,974.41
June	21,701	4,283	1,973.64
July	24,369	4,789	1,965.20
August	24,589	4,849	1,972.02
September	22,641	4,369	1,929.69
October	23,579	4,437	1,881.76
November	23,259	4,437	1,907.65
December	23,631	4,364	1,846.73
<i>2017</i>			
January	25,055	4,743	1,893.04
February	22,372	4,149	1,854.55
March	24,814	4,542	1,830.42
April	22,466	4,154	1,849.02
May	22,795	4,065	1,783.29
June	21,480	3,870	1,801.68
July	23,984	4,105	1,711.56
August	24,399	4,236	1,736.14
September	22,052	3,886	1,762.20
October	24,026	4,098	1,705.65
November	22,665	3,768	1,662.48
December	23,059	3,638	1,577.69
<i>2018</i>			
January	25,543	4,206	1,646.64
February	21,883	3,645	1,665.68
March	23,529	3,768	1,601.43
April	22,955	3,639	1,585.28
May	22,799	3,672	1,610.60
June	20,750	3,220	1,551.81
July	24,179	3,624	1,498.82
August	23,391	3,278	1,401.39
September	21,125	3,004	1,422.01

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF not excluding Myocardial Infarction at baseline			
<i>2010</i>			
July	262,068	23,460	895.19
August	218,907	19,417	887.00
September	186,657	16,414	879.37
October	162,080	14,246	878.95
November	139,446	12,348	885.50
December	124,195	11,007	886.27
<i>2011</i>			
January	118,011	11,062	937.37
February	103,074	9,612	932.53
March	115,284	10,606	919.99
April	97,867	8,982	917.78
May	96,333	8,710	904.16
June	92,275	8,278	897.10
July	90,773	8,225	906.11
August	94,652	8,392	886.62
September	88,145	7,761	880.48
October	87,758	7,731	880.95
November	83,361	7,280	873.31
December	80,143	6,982	871.19
<i>2012</i>			
January	85,312	7,870	922.50
February	79,859	7,088	887.56
March	82,363	7,518	912.79
April	75,849	6,715	885.31
May	76,483	6,842	894.58
June	70,000	6,117	873.86
July	85,431	7,283	852.50
August	84,289	7,105	842.93
September	75,286	6,373	846.51
October	82,941	6,925	834.93
November	74,988	6,349	846.67
December	70,751	6,216	878.57

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HF_rEF) or Preserved Ejection Fraction Heart Failure (HF_pEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	79,397	6,879	866.41
February	67,930	5,853	861.62
March	71,069	6,242	878.30
April	72,382	6,285	868.31
May	68,998	6,108	885.24
June	61,992	5,377	867.37
July	100,222	8,212	819.38
August	94,204	7,488	794.87
September	87,291	6,840	783.59
October	93,856	7,259	773.42
November	79,447	6,195	779.77
December	78,122	6,253	800.41
<i>2014</i>			
January	79,481	6,624	833.41
February	69,985	5,830	833.04
March	75,543	6,353	840.98
April	75,574	6,284	831.50
May	71,313	5,843	819.35
June	67,821	5,511	812.58
July	82,279	6,379	775.29
August	76,402	5,797	758.75
September	76,785	5,946	774.37
October	79,880	6,071	760.02
November	68,306	5,237	766.70
December	75,191	5,841	776.82
<i>2015</i>			
January	73,499	5,905	803.41
February	65,975	5,349	810.76
March	74,504	5,924	795.13
April	73,984	5,771	780.03
May	67,920	5,438	800.65
June	69,684	5,319	763.30
July	78,877	5,924	751.04
August	74,880	5,600	747.86
September	76,248	5,804	761.20
October	116,466	8,164	700.98
November	94,329	6,564	695.86
December	92,225	6,685	724.86

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2016</i>			
January	88,749	6,644	748.63
February	85,682	6,207	724.42
March	89,790	6,635	738.95
April	81,369	6,022	740.09
May	79,029	5,708	722.27
June	76,371	5,427	710.61
July	81,808	5,818	711.18
August	87,939	6,190	703.90
September	84,926	5,755	677.65
October	106,902	7,342	686.80
November	106,148	7,091	668.03
December	105,739	7,007	662.67
<i>2017</i>			
January	110,324	7,580	687.07
February	100,467	6,792	676.04
March	110,576	7,503	678.54
April	100,309	6,694	667.34
May	105,147	6,833	649.85
June	99,056	6,252	631.16
July	111,059	6,694	602.74
August	114,701	6,759	589.27
September	103,219	5,964	577.80
October	111,100	6,435	579.21
November	105,990	5,942	560.62
December	102,427	5,730	559.42
<i>2018</i>			
January	110,109	6,327	574.61
February	96,725	5,213	538.95
March	102,992	5,568	540.62
April	100,018	5,414	541.30
May	101,388	4,995	492.66
June	92,281	4,342	470.52
July	106,693	4,837	453.36
August	107,391	4,578	426.29
September	94,448	3,797	402.02

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF excluding Myocardial Infarction at baseline			
<i>2010</i>			
July	254,644	22,676	890.50
August	213,404	18,813	881.57
September	182,534	15,986	875.78
October	158,765	13,906	875.89
November	136,540	12,007	879.38
December	121,607	10,737	882.93
<i>2011</i>			
January	115,513	10,785	933.66
February	101,048	9,378	928.07
March	113,086	10,353	915.50
April	95,846	8,740	911.88
May	94,326	8,496	900.71
June	90,483	8,083	893.32
July	88,816	8,010	901.86
August	92,816	8,202	883.68
September	86,346	7,566	876.24
October	85,974	7,527	875.50
November	81,652	7,096	869.05
December	78,463	6,804	867.16
<i>2012</i>			
January	83,603	7,661	916.35
February	78,333	6,912	882.39
March	80,618	7,310	906.75
April	74,269	6,553	882.33
May	74,932	6,689	892.68
June	68,554	5,955	868.66
July	83,636	7,119	851.19
August	82,500	6,939	841.09
September	73,758	6,217	842.89
October	81,294	6,729	827.74
November	73,464	6,204	844.50
December	69,059	6,059	877.37

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HF_rEF) or Preserved Ejection Fraction Heart Failure (HF_pEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	77,421	6,656	859.72
February	66,359	5,701	859.11
March	69,434	6,082	875.94
April	70,891	6,118	863.02
May	67,518	5,933	878.73
June	60,718	5,229	861.19
July	97,812	7,942	811.97
August	92,106	7,257	787.90
September	85,556	6,656	777.97
October	92,035	7,078	769.06
November	77,877	6,038	775.33
December	76,259	6,067	795.58
<i>2014</i>			
January	77,834	6,465	830.61
February	68,457	5,659	826.65
March	73,945	6,158	832.78
April	74,012	6,138	829.32
May	69,726	5,687	815.62
June	66,403	5,368	808.40
July	80,421	6,200	770.94
August	74,842	5,643	753.99
September	75,178	5,756	765.65
October	78,317	5,891	752.20
November	66,930	5,094	761.09
December	73,467	5,669	771.64
<i>2015</i>			
January	71,760	5,716	796.54
February	64,424	5,186	804.98
March	72,771	5,738	788.50
April	72,429	5,615	775.24
May	66,362	5,305	799.40
June	68,190	5,157	756.27
July	76,903	5,734	745.61
August	73,107	5,437	743.70
September	74,475	5,629	755.82
October	113,898	7,916	695.01
November	92,207	6,375	691.38
December	89,927	6,458	718.14

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2016</i>			
January	86,698	6,460	745.12
February	83,642	6,034	721.41
March	87,739	6,455	735.70
April	79,438	5,826	733.40
May	77,205	5,514	714.20
June	74,734	5,290	707.84
July	79,616	5,616	705.39
August	85,791	5,991	698.32
September	82,964	5,572	671.62
October	104,166	7,144	685.83
November	103,427	6,802	657.66
December	102,967	6,770	657.49
<i>2017</i>			
January	107,478	7,340	682.93
February	98,048	6,533	666.31
March	107,530	7,225	671.91
April	97,927	6,467	660.39
May	102,599	6,577	641.04
June	96,609	5,989	619.92
July	107,933	6,437	596.39
August	112,060	6,523	582.10
September	100,921	5,780	572.73
October	108,560	6,226	573.51
November	103,666	5,754	555.05
December	99,805	5,513	552.38
<i>2018</i>			
January	107,461	6,089	566.62
February	94,368	5,016	531.54
March	100,389	5,352	533.13
April	97,605	5,212	533.99
May	99,142	4,849	489.10
June	90,286	4,215	466.85
July	103,895	4,619	444.58
August	104,844	4,398	419.48
September	92,356	3,625	392.50

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
Spironolactone 183-Day Incidence Washout			
HFrEF			
<i>2010</i>			
July	33,824	7,555	2,233.62
August	26,742	5,858	2,190.56
September	23,193	4,997	2,154.53
October	20,915	4,521	2,161.61
November	19,580	4,186	2,137.90
December	18,999	4,068	2,141.17
<i>2011</i>			
January	19,207	4,164	2,167.96
February	17,178	3,773	2,196.41
March	19,023	4,079	2,144.25
April	16,780	3,629	2,162.69
May	16,447	3,479	2,115.28
June	15,508	3,259	2,101.50
July	15,923	3,351	2,104.50
August	16,252	3,429	2,109.89
September	15,282	3,125	2,044.89
October	15,576	3,146	2,019.77
November	15,195	3,090	2,033.56
December	15,500	3,203	2,066.45
<i>2012</i>			
January	16,185	3,407	2,105.04
February	15,044	3,126	2,077.90
March	15,716	3,345	2,128.40
April	14,726	3,093	2,100.37
May	14,945	3,158	2,113.08
June	13,605	2,816	2,069.83
July	16,221	3,370	2,077.55
August	15,887	3,226	2,030.59
September	14,757	3,114	2,110.18
October	15,715	3,377	2,148.90
November	15,058	3,090	2,052.07
December	15,440	3,142	2,034.97

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	16,921	3,575	2,112.76
February	14,365	2,960	2,060.56
March	15,751	3,257	2,067.81
April	15,543	3,202	2,060.09
May	14,896	3,007	2,018.66
June	13,350	2,776	2,079.40
July	19,346	4,030	2,083.12
August	17,910	3,578	1,997.77
September	16,587	3,298	1,988.30
October	17,962	3,611	2,010.36
November	15,950	3,249	2,036.99
December	17,136	3,337	1,947.36
<i>2014</i>			
January	17,634	3,656	2,073.27
February	15,697	3,250	2,070.46
March	17,350	3,503	2,019.02
April	17,216	3,507	2,037.06
May	16,710	3,412	2,041.89
June	15,246	2,943	1,930.34
July	18,296	3,598	1,966.55
August	16,942	3,273	1,931.89
September	16,854	3,247	1,926.55
October	17,898	3,394	1,896.30
November	15,972	3,114	1,949.66
December	18,562	3,640	1,961.00
<i>2015</i>			
January	18,510	3,516	1,899.51
February	16,578	3,272	1,973.70
March	18,268	3,630	1,987.08
April	17,890	3,577	1,999.44
May	17,136	3,313	1,933.36
June	17,007	3,269	1,922.15
July	19,273	3,673	1,905.77
August	18,203	3,414	1,875.52
September	18,750	3,508	1,870.93
October	29,189	5,006	1,715.03
November	24,340	4,235	1,739.93
December	24,694	4,392	1,778.57

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2016</i>			
January	23,821	4,259	1,787.92
February	22,665	4,039	1,782.04
March	23,971	4,284	1,787.16
April	22,216	3,847	1,731.63
May	21,588	3,810	1,764.87
June	20,526	3,576	1,742.18
July	22,949	3,880	1,690.71
August	23,176	3,944	1,701.76
September	21,333	3,615	1,694.56
October	22,377	3,684	1,646.33
November	22,078	3,684	1,668.63
December	22,544	3,689	1,636.36
<i>2017</i>			
January	23,880	4,004	1,676.72
February	21,446	3,541	1,651.12
March	23,654	3,807	1,609.45
April	21,329	3,437	1,611.42
May	21,827	3,427	1,570.07
June	20,363	3,180	1,561.66
July	22,715	3,376	1,486.24
August	23,106	3,437	1,487.49
September	20,858	3,206	1,537.06
October	22,875	3,391	1,482.40
November	21,551	3,136	1,455.15
December	21,949	3,059	1,393.69
<i>2018</i>			
January	24,388	3,487	1,429.80
February	20,869	2,981	1,428.43
March	22,438	3,130	1,394.95
April	21,945	3,008	1,370.70
May	21,772	3,061	1,405.93
June	19,747	2,579	1,306.02
July	22,767	2,838	1,246.54
August	22,168	2,599	1,172.41
September	19,941	2,410	1,208.57

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF not excluding Myocardial Infarction at baseline			
<i>2010</i>			
July	258,567	21,688	838.78
August	215,738	17,769	823.64
September	183,893	14,974	814.28
October	159,685	12,973	812.41
November	137,459	11,220	816.24
December	122,366	10,022	819.02
<i>2011</i>			
January	116,198	10,052	865.08
February	101,625	8,780	863.96
March	113,838	9,718	853.67
April	96,589	8,200	848.96
May	95,073	7,988	840.20
June	90,993	7,493	823.47
July	89,573	7,527	840.32
August	93,301	7,571	811.46
September	86,899	6,998	805.30
October	86,609	7,069	816.20
November	82,250	6,604	802.92
December	79,081	6,383	807.15
<i>2012</i>			
January	84,202	7,143	848.32
February	78,858	6,451	818.05
March	81,341	6,871	844.72
April	74,934	6,124	817.25
May	75,455	6,221	824.46
June	69,088	5,543	802.31
July	84,307	6,591	781.79
August	83,134	6,403	770.20
September	74,288	5,768	776.44
October	81,952	6,278	766.06
November	74,026	5,763	778.51
December	69,851	5,668	811.44

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	78,438	6,294	802.42
February	67,095	5,306	790.82
March	70,114	5,616	800.98
April	71,505	5,715	799.24
May	68,137	5,541	813.21
June	61,127	4,839	791.63
July	98,805	7,352	744.09
August	92,856	6,727	724.46
September	86,149	6,175	716.78
October	92,626	6,506	702.39
November	78,421	5,590	712.82
December	77,034	5,625	730.20
<i>2014</i>			
January	78,399	5,966	760.98
February	69,085	5,243	758.92
March	74,621	5,729	767.75
April	74,536	5,590	749.97
May	70,389	5,201	738.89
June	66,918	4,936	737.62
July	81,197	5,699	701.87
August	75,452	5,182	686.79
September	75,706	5,245	692.81
October	78,800	5,417	687.44
November	67,409	4,674	693.38
December	74,203	5,240	706.17
<i>2015</i>			
January	72,501	5,280	728.27
February	65,162	4,828	740.92
March	73,603	5,326	723.61
April	73,115	5,156	705.19
May	66,954	4,834	721.99
June	68,813	4,698	682.72
July	77,804	5,256	675.54
August	73,826	4,983	674.97
September	75,123	5,098	678.62
October	115,002	7,218	627.64
November	93,080	5,770	619.90
December	90,981	5,963	655.41

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2016</i>			
January	87,560	5,877	671.20
February	84,521	5,462	646.23
March	88,684	5,871	662.01
April	80,304	5,280	657.50
May	78,031	5,024	643.85
June	75,306	4,664	619.34
July	80,571	5,026	623.80
August	86,630	5,333	615.61
September	83,688	4,986	595.78
October	105,295	6,329	601.07
November	104,579	6,145	587.59
December	104,329	6,129	587.47
<i>2017</i>			
January	108,838	6,565	603.19
February	99,020	5,824	588.16
March	108,959	6,426	589.76
April	98,984	5,792	585.15
May	103,502	5,780	558.44
June	97,544	5,276	540.88
July	109,376	5,665	517.94
August	113,108	5,724	506.06
September	101,760	5,028	494.10
October	109,503	5,419	494.87
November	104,491	4,989	477.46
December	100,975	4,844	479.72
<i>2018</i>			
January	108,543	5,296	487.92
February	95,417	4,333	454.11
March	101,693	4,680	460.21
April	98,727	4,470	452.76
May	100,003	4,063	406.29
June	90,949	3,463	380.76
July	105,125	3,909	371.84
August	105,842	3,644	344.29
September	93,126	2,968	318.71

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
HFpEF excluding Myocardial Infarction at baseline			
<i>2010</i>			
July	251,350	20,981	834.73
August	210,423	17,238	819.21
September	179,892	14,593	811.21
October	156,486	12,681	810.36
November	134,627	10,913	810.61
December	119,862	9,774	815.44
<i>2011</i>			
January	113,782	9,816	862.70
February	99,653	8,561	859.08
March	111,697	9,497	850.25
April	94,612	7,976	843.02
May	93,132	7,806	838.17
June	89,250	7,329	821.18
July	87,637	7,317	834.92
August	91,476	7,392	808.08
September	85,129	6,819	801.02
October	84,874	6,884	811.08
November	80,585	6,446	799.90
December	77,423	6,214	802.60
<i>2012</i>			
January	82,539	6,971	844.57
February	77,363	6,288	812.79
March	79,614	6,673	838.17
April	73,365	5,965	813.06
May	73,944	6,083	822.65
June	67,679	5,397	797.44
July	82,551	6,434	779.40
August	81,395	6,247	767.49
September	72,801	5,632	773.62
October	80,340	6,103	759.65
November	72,543	5,640	777.47
December	68,192	5,529	810.80

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HF_rEF) or Preserved Ejection Fraction Heart Failure (HF_pEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2013</i>			
January	76,508	6,093	796.39
February	65,571	5,173	788.92
March	68,515	5,471	798.51
April	70,024	5,564	794.58
May	66,685	5,382	807.08
June	59,882	4,709	786.38
July	96,466	7,126	738.71
August	90,802	6,513	717.27
September	84,475	6,010	711.45
October	90,859	6,351	699.00
November	76,873	5,440	707.66
December	75,235	5,461	725.86
<i>2014</i>			
January	76,776	5,823	758.44
February	67,602	5,086	752.34
March	73,074	5,562	761.15
April	73,000	5,459	747.81
May	68,845	5,070	736.44
June	65,544	4,806	733.25
July	79,377	5,537	697.56
August	73,921	5,042	682.08
September	74,125	5,071	684.11
October	77,271	5,256	680.20
November	66,049	4,538	687.07
December	72,516	5,090	701.91
<i>2015</i>			
January	70,795	5,104	720.95
February	63,615	4,671	734.26
March	71,898	5,135	714.21
April	71,598	5,007	699.32
May	65,396	4,705	719.46
June	67,349	4,554	676.18
July	75,879	5,081	669.62
August	72,096	4,835	670.63
September	73,417	4,944	673.41
October	112,485	6,991	621.51
November	90,998	5,593	614.63
December	88,719	5,754	648.56

Table 2e. Summary of Individuals with Reduced Ejection Fraction Heart Failure (HFrEF) or Preserved Ejection Fraction Heart Failure (HFpEF) and Spironolactone Dispensing Event Outcomes in the Sentinel Distributed Database (SDD) between July 1, 2010 and September 30, 2018, by Year and Month*

	Heart Failure Episodes	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome	Heart Failure Episodes with a Spironolactone Dispensing Event Outcome per 10,000 Heart Failure Episodes
<i>2016</i>			
January	85,545	5,706	667.02
February	82,533	5,303	642.53
March	86,681	5,724	660.35
April	78,394	5,101	650.69
May	76,217	4,847	635.95
June	73,677	4,530	614.85
July	78,415	4,842	617.48
August	84,512	5,146	608.91
September	81,790	4,840	591.76
October	102,598	6,154	599.82
November	101,963	5,887	577.37
December	101,596	5,920	582.70
<i>2017</i>			
January	106,028	6,350	598.90
February	96,636	5,604	579.91
March	105,974	6,181	583.26
April	96,632	5,590	578.48
May	101,015	5,548	549.23
June	95,156	5,037	529.34
July	106,321	5,431	510.81
August	110,519	5,526	500.00
September	99,524	4,875	489.83
October	107,012	5,238	489.48
November	102,192	4,811	470.78
December	98,412	4,656	473.11
<i>2018</i>			
January	105,962	5,085	479.89
February	93,107	4,158	446.58
March	99,149	4,483	452.15
April	96,340	4,287	444.99
May	97,784	3,922	401.09
June	88,992	3,352	376.66
July	102,364	3,710	362.43
August	103,380	3,493	337.88
September	91,080	2,821	309.73

*Calendar month-year during which the diagnosis for index heart failure occurred.

Table 3. Summary of Follow-up Time for Individuals Censored due to Spironolactone Dispensing Event Outcome after Heart Failure Index Diagnosis in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

	Number of Heart Failure Episodes by Length of Follow-Up Time until Censoring due to Spironolactone Dispensing Event Outcome								
	Total Number of Episodes Censored due to Spironolactone Dispensing	<1 month		1 - < 3 months		3 - < 6 months		6 months - < 1 year	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015									
No Spironolactone Incidence Washout									
HFrEF	263,313	72,350	27%	45,552	17%	29,530	11%	30,098	11%
HFpEF not excluding Myocardial Infarction at baseline	484,655	67,232	14%	54,309	11%	42,700	9%	54,569	11%
HFpEF excluding Myocardial Infarction at baseline	471,514	64,595	14%	52,067	11%	41,199	9%	53,093	11%
Spironolactone 183-Day Incidence Washout									
HFrEF	222,765	59,657	27%	30,283	14%	23,637	11%	26,917	12%
HFpEF not excluding Myocardial Infarction at baseline	438,720	52,462	12%	37,582	9%	35,986	8%	50,982	12%
HFpEF excluding Myocardial Infarction at baseline	426,868	50,158	12%	35,870	8%	34,713	8%	49,592	12%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018									
No Spironolactone Incidence Washout									
HFrEF	180,036	59,705	33%	40,632	23%	25,896	14%	24,933	14%
HFpEF not excluding Myocardial Infarction at baseline	299,387	68,150	23%	56,607	19%	44,509	15%	53,037	18%
HFpEF excluding Myocardial Infarction at baseline	288,239	64,997	23%	54,024	19%	42,938	15%	51,348	18%
Spironolactone 183-Day Incidence Washout									
HFrEF	141,468	47,882	34%	25,254	18%	19,706	14%	21,700	15%
HFpEF not excluding Myocardial Infarction at baseline	250,636	52,783	21%	37,569	15%	36,583	15%	48,969	20%
HFpEF excluding Myocardial Infarction at baseline	241,062	50,042	21%	35,677	15%	35,248	15%	47,416	20%

Table 3. Summary of Follow-up Time for Individuals Censored due to Spironolactone Dispensing Event Outcome after Heart Failure Index Diagnosis in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

	Number of Heart Failure Episodes by Length of Follow-Up Time until Censoring due to Spironolactone Dispensing Event Outcome							
	1 - < 2 years		2 - < 3 years		3 - < 5 years		5+ years	
	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015								
No Spironolactone Incidence Washout								
HFrEF	33,339	13%	20,669	8%	22,307	8%	9,468	4%
HFpEF not excluding Myocardial Infarction at baseline	76,829	16%	58,767	12%	78,992	16%	51,257	11%
HFpEF excluding Myocardial Infarction at baseline	75,013	16%	57,600	12%	77,488	16%	50,459	11%
Spironolactone 183-Day Incidence Washout								
HFrEF	31,426	14%	19,947	9%	21,684	10%	9,214	4%
HFpEF not excluding Myocardial Infarction at baseline	74,711	17%	57,862	13%	78,269	18%	50,866	12%
HFpEF excluding Myocardial Infarction at baseline	72,952	17%	56,710	13%	76,796	18%	50,077	12%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018								
No Spironolactone Incidence Washout								
HFrEF	21,996	12%	6,836	4%	38	%	0	%
HFpEF not excluding Myocardial Infarction at baseline	57,404	19%	19,547	7%	133	%	0	%
HFpEF excluding Myocardial Infarction at baseline	55,833	19%	18,968	7%	131	%	0	%
Spironolactone 183-Day Incidence Washout								
HFrEF	20,466	14%	6,423	5%	37	%	0	%
HFpEF not excluding Myocardial Infarction at baseline	55,523	22%	19,077	8%	132	%	0	%
HFpEF excluding Myocardial Infarction at baseline	54,018	22%	18,531	8%	130	%	0	%

Table 3. Summary of Follow-up Time for Individuals Censored due to Spironolactone Dispensing Event Outcome after Heart Failure Index Diagnosis in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

Distribution of Length of Follow-up Time in Days, by Episode

	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015							
No Spironolactone Incidence Washout							
HFrEF	1	24	124	557	3,262	394	558
HFpEF not excluding Myocardial Infarction at baseline	1	90	462	1,161	3,283	719	741
HFpEF excluding Myocardial Infarction at baseline	1	92	470	1,169	3,283	725	743
Spironolactone 183-Day Incidence Washout							
HFrEF	1	25	171	660	3,262	441	583
HFpEF not excluding Myocardial Infarction at baseline	1	135	555	1,240	3,283	779	747
HFpEF excluding Myocardial Infarction at baseline	1	141	565	1,248	3,283	785	749
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018							
No Spironolactone Incidence Washout							
HFrEF	1	16	68	231	1,173	167	220
HFpEF not excluding Myocardial Infarction at baseline	1	35	135	373	1,182	236	253
HFpEF excluding Myocardial Infarction at baseline	1	35	137	377	1,182	238	254
Spironolactone 183-Day Incidence Washout							
HFrEF	1	13	82	280	1,173	186	234
HFpEF not excluding Myocardial Infarction at baseline	1	42	177	422	1,182	264	262
HFpEF excluding Myocardial Infarction at baseline	1	43	181	425	1,182	266	262

Table 3. Summary of Follow-up Time for Individuals Censored due to Spironolactone Dispensing Event Outcome after Heart Failure Index Diagnosis in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

	Number of Heart Failure Episodes by Length of Follow-Up Time until Censoring due to Spironolactone Dispensing Event Outcome								
	Total Number of Episodes Censored due to Spironolactone Dispensing	<1 month		1 - < 3 months		3 - < 6 months		6 months - < 1 year	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018									
No Spironolactone Incidence Washout									
HFrEF	416,348	128,209	31%	80,045	19%	50,626	12%	49,397	12%
HFpEF not excluding Myocardial Infarction at baseline	706,163	122,741	17%	97,301	14%	75,632	11%	91,758	13%
HFpEF excluding Myocardial Infarction at baseline	685,476	117,699	17%	93,205	14%	73,058	11%	89,195	13%
Spironolactone 183-Day Incidence Washout									
HFrEF	349,803	107,267	31%	53,894	15%	40,622	12%	44,338	13%
HFpEF not excluding Myocardial Infarction at baseline	627,955	97,220	15%	67,672	11%	63,688	10%	85,842	14%
HFpEF excluding Myocardial Infarction at baseline	609,364	92,718	15%	64,490	11%	61,477	10%	83,422	14%

Table 3. Summary of Follow-up Time for Individuals Censored due to Spironolactone Dispensing Event Outcome after Heart Failure Index Diagnosis in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

	Number of Heart Failure Episodes by Length of Follow-Up Time until Censoring due to Spironolactone Dispensing Event Outcome							
	1 - < 2 years		2 - < 3 years		3 - < 5 years		5+ years	
	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018								
No Spironolactone Incidence Washout								
HFrEF	49,627	12%	25,991	6%	22,985	6%	9,468	2%
HFpEF not excluding Myocardial Infarction at baseline	114,873	16%	71,913	10%	80,688	11%	51,257	7%
HFpEF excluding Myocardial Infarction at baseline	112,250	16%	70,456	10%	79,154	12%	50,459	7%
Spironolactone 183-Day Incidence Washout								
HFrEF	47,005	13%	25,120	7%	22,343	6%	9,214	3%
HFpEF not excluding Myocardial Infarction at baseline	111,860	18%	70,850	11%	79,957	13%	50,866	8%
HFpEF excluding Myocardial Infarction at baseline	109,304	18%	69,422	11%	78,454	13%	50,077	8%

Table 3. Summary of Follow-up Time for Individuals Censored due to Spironolactone Dispensing Event Outcome after Heart Failure Index Diagnosis in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

Distribution of Length of Follow-up Time in Days, by Episode

	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018							
No Spironolactone Incidence Washout							
HFrEF	1	19	90	385	3,262	307	478
HFpEF not excluding Myocardial Infarction at baseline	1	57	286	851	3,283	565	671
HFpEF excluding Myocardial Infarction at baseline	1	58	293	861	3,283	570	673
Spironolactone 183-Day Incidence Washout							
HFrEF	1	17	115	462	3,262	343	503
HFpEF not excluding Myocardial Infarction at baseline	1	81	363	942	3,283	620	686
HFpEF excluding Myocardial Infarction at baseline	1	85	371	953	3,283	626	688

Table 4. Descriptive Statistics of the First Continuous Treatment Episode (in Days) of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

	Number	Mean	Standard Deviation	Minimum	1%	5%	10%	25% Q1	50% Median	75% Q3	90%	95%	99%	Maximum
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	263,313	287	414	1	7	28	30	34	120	339	784	1,204	1,990	3,270
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	484,655	273	391	1	6	23	30	30	116	326	738	1,110	1,914	3,233
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	471,514	273	391	1	6	24	30	30	116	328	739	1,110	1,915	3,233
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	222,765	292	419	1	7	27	30	34	120	353	806	1,225	2,004	3,270
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	438,720	273	389	1	5	22	30	30	119	330	739	1,105	1,900	3,233
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	426,868	274	389	1	5	22	30	30	119	330	740	1,105	1,900	3,233
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	180,036	207	220	1	6	24	30	51	120	287	531	705	964	1,180
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	299,387	191	205	1	5	19	30	39	105	270	482	647	916	1,179
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	288,239	191	204	1	5	19	30	40	105	270	482	646	916	1,179
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	141,468	208	221	1	6	22	30	45	120	292	532	706	965	1,180
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	250,636	190	204	1	5	17	30	33	105	269	480	642	909	1,173
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	241,062	190	204	1	5	17	30	33	105	269	480	641	909	1,173

Table 4. Descriptive Statistics of the First Continuous Treatment Episode (in Days) of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

	Number	Mean	Standard Deviation	Minimum	1%	5%	10%	25% Q1	50% Median	75% Q3	90%	95%	99%	Maximum
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HF _r EF	416,348	262	361	1	6	26	30	44	120	321	684	998	1,793	3,270
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	706,163	250	348	1	5	21	30	32	114	301	645	949	1,741	3,233
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	685,476	250	348	1	5	22	30	32	114	301	647	950	1,744	3,233
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HF _r EF	349,803	266	366	1	6	25	30	41	120	330	696	1,015	1,813	3,270
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	627,955	250	348	1	5	20	30	30	116	304	650	953	1,737	3,233
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	609,364	251	348	1	5	20	30	30	117	304	651	954	1,739	3,233

¹Assessed in the 183 days prior to the heart failure index date.

Table 5a. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HF _r EF	263,313	100%	14,057	5%	106,447	40%	41,139	16%	40,262	15%	61,408	23%
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	484,655	100%	29,282	6%	196,173	40%	75,569	16%	74,679	15%	108,952	22%
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	471,514	100%	28,350	6%	190,866	40%	73,325	16%	72,741	15%	106,232	23%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HF _r EF	222,765	100%	12,254	6%	87,813	39%	35,155	16%	34,212	15%	53,331	24%
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	438,720	100%	27,519	6%	174,949	40%	68,908	16%	67,885	15%	99,459	23%
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	426,868	100%	26,666	6%	170,180	40%	66,901	16%	66,117	15%	97,004	23%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HF _r EF	180,036	100%	10,777	6%	71,273	40%	30,386	17%	34,255	19%	33,345	19%
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	299,387	100%	21,915	7%	120,545	40%	51,597	17%	56,330	19%	49,000	16%
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	288,239	100%	21,003	7%	116,186	40%	49,645	17%	54,322	19%	47,083	16%

Table 5a. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
183-Day Spironolactone Incidence washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HFrEF	141,468	100%	9,107	6%	54,343	38%	24,349	17%	27,127	19%	26,542	19%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	250,636	100%	19,717	8%	99,211	40%	43,903	18%	47,042	19%	40,763	16%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	241,062	100%	18,919	8%	95,476	40%	42,205	18%	45,322	19%	39,140	16%
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HFrEF	416,348	100%	23,149	6%	164,851	40%	66,887	16%	69,781	17%	91,680	22%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	706,163	100%	45,375	6%	283,835	40%	113,761	16%	116,664	17%	146,528	21%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	685,476	100%	43,816	6%	275,730	40%	110,198	16%	113,344	17%	142,388	21%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HFrEF	349,803	100%	20,206	6%	135,183	39%	56,911	16%	58,790	17%	78,713	23%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	627,955	100%	42,156	7%	248,599	40%	102,029	16%	103,719	17%	131,452	21%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	609,364	100%	40,752	7%	241,326	40%	98,821	16%	100,716	17%	127,749	21%

¹Assessed in the 183 days prior to the heart failure index date.

Table 5b. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HF_rEF</i>												
2010	13,559	100%	747	6%	6,111	45%	2,020	15%	1,942	14%	2,739	20%
2011	35,701	100%	1,858	5%	15,197	43%	5,609	16%	5,202	15%	7,835	22%
2012	38,041	100%	2,047	5%	15,630	41%	5,955	16%	5,704	15%	8,705	23%
2013	42,596	100%	2,151	5%	16,947	40%	6,704	16%	6,453	15%	10,341	24%
2014	46,215	100%	2,321	5%	18,358	40%	7,133	15%	6,990	15%	11,413	25%
2015	45,468	100%	2,206	5%	17,730	39%	6,869	15%	6,989	15%	11,674	26%
2016	18,949	100%	1,028	5%	7,338	39%	2,895	15%	2,857	15%	4,831	25%
2017	12,030	100%	628	5%	4,577	38%	1,827	15%	1,853	15%	3,145	26%
2018	8,699	100%	443	5%	3,272	38%	1,987	23%	2,272	26%	725	8%
2019	2,055	100%	628	31%	1,287	63%	140	7%	0	0%	0	0%
<i>Spironolactone episode after HF_pEF, not excluding Myocardial Infarction at baseline¹</i>												
2010	16,389	100%	825	5%	7,413	45%	2,434	15%	2,277	14%	3,440	21%
2011	52,662	100%	2,872	5%	22,338	42%	8,277	16%	7,562	14%	11,613	22%
2012	60,531	100%	3,473	6%	25,124	42%	9,282	15%	8,745	14%	13,907	23%
2013	69,495	100%	3,856	6%	28,007	40%	10,507	15%	10,463	15%	16,662	24%
2014	74,010	100%	4,158	6%	29,709	40%	11,287	15%	11,082	15%	17,774	24%
2015	74,877	100%	4,272	6%	29,659	40%	11,292	15%	11,110	15%	18,544	25%
2016	51,922	100%	2,835	5%	19,953	38%	7,803	15%	7,932	15%	13,399	26%
2017	40,883	100%	2,236	5%	15,540	38%	6,018	15%	6,316	15%	10,773	26%
2018	35,205	100%	1,898	5%	13,065	37%	8,210	23%	9,192	26%	2,840	8%
2019	8,681	100%	2,857	33%	5,365	62%	459	5%	0	0%	0	0%

Table 5b. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
2010	15,630	100%	781	5%	7,071	45%	2,313	15%	2,163	14%	3,302	21%
2011	50,732	100%	2,738	5%	21,535	42%	7,949	16%	7,284	14%	11,226	22%
2012	58,753	100%	3,352	6%	24,370	41%	8,999	15%	8,492	14%	13,540	23%
2013	67,387	100%	3,713	6%	27,186	40%	10,158	15%	10,137	15%	16,193	24%
2014	71,970	100%	4,023	6%	28,922	40%	10,930	15%	10,773	15%	17,322	24%
2015	72,872	100%	4,127	6%	28,897	40%	10,936	15%	10,842	15%	18,070	25%
2016	50,883	100%	2,760	5%	19,525	38%	7,624	15%	7,787	15%	13,187	26%
2017	40,143	100%	2,191	5%	15,239	38%	5,894	15%	6,223	16%	10,596	26%
2018	34,613	100%	1,861	5%	12,848	37%	8,068	23%	9,040	26%	2,796	8%
2019	8,531	100%	2,804	33%	5,273	62%	454	5%	0	0%	0	0%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
2010	9,405	100%	553	6%	3,976	42%	1,425	15%	1,384	15%	2,067	22%
2011	27,691	100%	1,521	5%	11,328	41%	4,448	16%	4,054	15%	6,340	23%
2012	31,245	100%	1,749	6%	12,597	40%	4,932	16%	4,643	15%	7,324	23%
2013	35,884	100%	1,847	5%	13,938	39%	5,658	16%	5,435	15%	9,006	25%
2014	39,264	100%	2,006	5%	15,262	39%	6,113	16%	5,945	15%	9,938	25%
2015	38,954	100%	1,925	5%	14,819	38%	5,963	15%	6,006	15%	10,241	26%
2016	18,093	100%	988	5%	6,988	39%	2,760	15%	2,716	15%	4,641	26%
2017	11,721	100%	619	5%	4,456	38%	1,775	15%	1,811	15%	3,060	26%
2018	8,499	100%	427	5%	3,199	38%	1,941	23%	2,218	26%	714	8%
2019	2,009	100%	619	31%	1,250	62%	140	7%	0	0%	0	0%

Table 5b. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
2010	11,608	100%	666	6%	4,978	43%	1,767	15%	1,645	14%	2,552	22%
2011	43,247	100%	2,516	6%	17,814	41%	6,904	16%	6,199	14%	9,814	23%
2012	52,734	100%	3,156	6%	21,524	41%	8,166	15%	7,581	14%	12,307	23%
2013	61,803	100%	3,542	6%	24,543	40%	9,381	15%	9,305	15%	15,032	24%
2014	66,097	100%	3,892	6%	26,128	40%	10,101	15%	9,922	15%	16,054	24%
2015	68,175	100%	4,022	6%	26,684	39%	10,344	15%	10,087	15%	17,038	25%
2016	50,944	100%	2,774	5%	19,550	38%	7,676	15%	7,777	15%	13,167	26%
2017	40,478	100%	2,213	5%	15,392	38%	5,953	15%	6,254	15%	10,666	26%
2018	34,989	100%	1,891	5%	12,993	37%	8,161	23%	9,115	26%	2,829	8%
2019	8,645	100%	2,847	33%	5,343	62%	455	5%	0	0%	0	0%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
2010	11,025	100%	628	6%	4,723	43%	1,673	15%	1,557	14%	2,444	22%
2011	41,613	100%	2,402	6%	17,141	41%	6,621	16%	5,962	14%	9,487	23%
2012	51,156	100%	3,049	6%	20,856	41%	7,924	15%	7,358	14%	11,969	23%
2013	59,912	100%	3,406	6%	23,805	40%	9,078	15%	9,016	15%	14,607	24%
2014	64,275	100%	3,766	6%	25,432	40%	9,791	15%	9,633	15%	15,653	24%
2015	66,323	100%	3,895	6%	25,977	39%	10,015	15%	9,832	15%	16,604	25%
2016	49,925	100%	2,704	5%	19,122	38%	7,504	15%	7,634	15%	12,961	26%
2017	39,743	100%	2,168	5%	15,096	38%	5,827	15%	6,159	15%	10,493	26%
2018	34,400	100%	1,853	5%	12,777	37%	8,018	23%	8,966	26%	2,786	8%
2019	8,496	100%	2,795	33%	5,251	62%	450	5%	0	0%	0	0%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFpEF</i>												
2016	45,805	100%	2,238	5%	18,516	40%	6,996	15%	6,877	15%	11,178	24%
2017	65,832	100%	3,124	5%	25,420	39%	9,876	15%	10,312	16%	17,100	26%
2018	59,958	100%	2,856	5%	22,154	37%	12,815	21%	17,066	28%	5,067	8%
2019	8,441	100%	2,559	30%	5,183	61%	699	8%	0	0%	0	0%

Table 5b. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
2016	53,603	100%	2,844	5%	21,878	41%	8,062	15%	7,813	15%	13,006	24%
2017	107,062	100%	5,836	5%	41,665	39%	15,850	15%	16,662	16%	27,049	25%
2018	116,337	100%	6,207	5%	43,177	37%	26,153	22%	31,855	27%	8,945	8%
2019	22,385	100%	7,028	31%	13,825	62%	1,532	7%	0	0%	0	0%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
2016	50,951	100%	2,636	5%	20,840	41%	7,645	15%	7,405	15%	12,425	24%
2017	102,931	100%	5,556	5%	40,114	39%	15,178	15%	16,053	16%	26,030	25%
2018	112,528	100%	5,960	5%	41,751	37%	25,325	23%	30,864	27%	8,628	8%
2019	21,829	100%	6,851	31%	13,481	62%	1,497	7%	0	0%	0	0%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
2016	31,896	100%	1,664	5%	12,004	38%	4,966	16%	4,834	15%	8,428	26%
2017	51,772	100%	2,602	5%	19,354	37%	7,894	15%	8,047	16%	13,875	27%
2018	49,988	100%	2,463	5%	18,196	36%	10,844	22%	14,246	28%	4,239	8%
2019	7,812	100%	2,378	30%	4,789	61%	645	8%	0	0%	0	0%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
2016	39,550	100%	2,249	6%	15,414	39%	5,972	15%	5,754	15%	10,161	26%
2017	87,833	100%	5,037	6%	33,336	38%	13,090	15%	13,533	15%	22,837	26%
2018	101,722	100%	5,614	6%	37,205	37%	23,383	23%	27,755	27%	7,765	8%
2019	21,531	100%	6,817	32%	13,256	62%	1,458	7%	0	0%	0	0%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
2016	37,470	100%	2,076	6%	14,619	39%	5,640	15%	5,429	14%	9,706	26%
2017	84,279	100%	4,797	6%	31,997	38%	12,520	15%	13,009	15%	21,956	26%
2018	98,311	100%	5,401	5%	35,928	37%	22,620	23%	26,884	27%	7,478	8%
2019	21,002	100%	6,645	32%	12,932	62%	1,425	7%	0	0%	0	0%

Table 5b. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HF_rEF</i>												
2010	13,559	100%	747	6%	6,111	45%	2,020	15%	1,942	14%	2,739	20%
2011	35,701	100%	1,858	5%	15,197	43%	5,609	16%	5,202	15%	7,835	22%
2012	38,041	100%	2,047	5%	15,630	41%	5,955	16%	5,704	15%	8,705	23%
2013	42,596	100%	2,151	5%	16,947	40%	6,704	16%	6,453	15%	10,341	24%
2014	46,215	100%	2,321	5%	18,358	40%	7,133	15%	6,990	15%	11,413	25%
2015	51,345	100%	2,532	5%	19,993	39%	7,711	15%	7,870	15%	13,239	26%
2016	60,125	100%	2,970	5%	22,806	38%	9,180	15%	9,365	16%	15,804	26%
2017	62,002	100%	3,029	5%	23,276	38%	9,372	15%	9,683	16%	16,642	27%
2018	57,989	100%	2,837	5%	21,141	36%	12,477	22%	16,572	29%	4,962	9%
2019	8,775	100%	2,657	30%	5,392	61%	726	8%	0	0%	0	0%
<i>Spironolactone episode after HF_pEF, not excluding Myocardial Infarction at baseline¹</i>												
2010	16,389	100%	825	5%	7,413	45%	2,434	15%	2,277	14%	3,440	21%
2011	52,662	100%	2,872	5%	22,338	42%	8,277	16%	7,562	14%	11,613	22%
2012	60,531	100%	3,473	6%	25,124	42%	9,282	15%	8,745	14%	13,907	23%
2013	69,495	100%	3,856	6%	28,007	40%	10,507	15%	10,463	15%	16,662	24%
2014	74,010	100%	4,158	6%	29,709	40%	11,287	15%	11,082	15%	17,774	24%
2015	79,773	100%	4,582	6%	31,567	40%	11,990	15%	11,803	15%	19,831	25%
2016	94,801	100%	5,222	6%	36,624	39%	14,247	15%	14,326	15%	24,382	26%
2017	113,148	100%	6,142	5%	43,207	38%	16,756	15%	17,503	15%	29,540	26%
2018	120,400	100%	6,325	5%	44,503	37%	27,290	23%	32,903	27%	9,379	8%
2019	24,954	100%	7,920	32%	15,343	61%	1,691	7%	0	0%	0	0%

Table 5b. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
2010	15,630	100%	781	5%	7,071	45%	2,313	15%	2,163	14%	3,302	21%
2011	50,732	100%	2,738	5%	21,535	42%	7,949	16%	7,284	14%	11,226	22%
2012	58,753	100%	3,352	6%	24,370	41%	8,999	15%	8,492	14%	13,540	23%
2013	67,387	100%	3,713	6%	27,186	40%	10,158	15%	10,137	15%	16,193	24%
2014	71,970	100%	4,023	6%	28,922	40%	10,930	15%	10,773	15%	17,322	24%
2015	77,567	100%	4,412	6%	30,741	40%	11,603	15%	11,503	15%	19,308	25%
2016	92,103	100%	5,015	5%	35,635	39%	13,810	15%	13,907	15%	23,736	26%
2017	109,806	100%	5,921	5%	41,960	38%	16,222	15%	17,044	16%	28,659	26%
2018	117,110	100%	6,121	5%	43,291	37%	26,555	23%	32,041	27%	9,102	8%
2019	24,418	100%	7,740	32%	15,019	62%	1,659	7%	0	0%	0	0%

183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis

<i>Spironolactone episode after HFrEF</i>												
2010	9,405	100%	553	6%	3,976	42%	1,425	15%	1,384	15%	2,067	22%
2011	27,691	100%	1,521	5%	11,328	41%	4,448	16%	4,054	15%	6,340	23%
2012	31,245	100%	1,749	6%	12,597	40%	4,932	16%	4,643	15%	7,324	23%
2013	35,884	100%	1,847	5%	13,938	39%	5,658	16%	5,435	15%	9,006	25%
2014	39,264	100%	2,006	5%	15,262	39%	6,113	16%	5,945	15%	9,938	25%
2015	43,578	100%	2,204	5%	16,521	38%	6,637	15%	6,703	15%	11,513	26%
2016	50,858	100%	2,587	5%	18,836	37%	7,852	15%	7,900	16%	13,683	27%
2017	53,182	100%	2,694	5%	19,527	37%	8,151	15%	8,313	16%	14,497	27%
2018	50,399	100%	2,524	5%	18,105	36%	11,012	22%	14,413	29%	4,345	9%
2019	8,297	100%	2,521	30%	5,093	61%	683	8%	0	0%	0	0%

Table 5b. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
2010	11,608	100%	666	6%	4,978	43%	1,767	15%	1,645	14%	2,552	22%
2011	43,247	100%	2,516	6%	17,814	41%	6,904	16%	6,199	14%	9,814	23%
2012	52,734	100%	3,156	6%	21,524	41%	8,166	15%	7,581	14%	12,307	23%
2013	61,803	100%	3,542	6%	24,543	40%	9,381	15%	9,305	15%	15,032	24%
2014	66,097	100%	3,892	6%	26,128	40%	10,101	15%	9,922	15%	16,054	24%
2015	71,910	100%	4,254	6%	28,088	39%	10,891	15%	10,604	15%	18,073	25%
2016	85,191	100%	4,791	6%	32,466	38%	12,872	15%	12,899	15%	22,163	26%
2017	101,256	100%	5,656	6%	38,060	38%	15,034	15%	15,636	15%	26,870	27%
2018	109,777	100%	5,911	5%	40,070	37%	25,281	23%	29,928	27%	8,587	8%
2019	24,332	100%	7,772	32%	14,928	61%	1,632	7%	0	0%	0	0%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
2010	11,025	100%	628	6%	4,723	43%	1,673	15%	1,557	14%	2,444	22%
2011	41,613	100%	2,402	6%	17,141	41%	6,621	16%	5,962	14%	9,487	23%
2012	51,156	100%	3,049	6%	20,856	41%	7,924	15%	7,358	14%	11,969	23%
2013	59,912	100%	3,406	6%	23,805	40%	9,078	15%	9,016	15%	14,607	24%
2014	64,275	100%	3,766	6%	25,432	40%	9,791	15%	9,633	15%	15,653	24%
2015	69,874	100%	4,106	6%	27,320	39%	10,536	15%	10,318	15%	17,594	25%
2016	82,742	100%	4,607	6%	31,548	38%	12,470	15%	12,524	15%	21,593	26%
2017	98,200	100%	5,462	6%	36,936	38%	14,531	15%	15,205	15%	26,066	27%
2018	106,751	100%	5,730	5%	38,947	36%	24,595	23%	29,143	27%	8,336	8%
2019	23,816	100%	7,596	32%	14,618	61%	1,602	7%	0	0%	0	0%

*Calendar year during which treatment with spironolactone was initiated.

¹Assessed in the 183 days prior to the heart failure index date.

Table 5c. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Sex

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
Female	108,107	100%	6,001	6%	43,628	40%	16,788	16%	16,095	15%	25,595	24%
Male	155,206	100%	8,056	5%	62,819	40%	24,351	16%	24,167	16%	35,813	23%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
Female	303,556	100%	18,255	6%	123,822	41%	46,796	15%	45,872	15%	68,811	23%
Male	181,099	100%	11,027	6%	72,351	40%	28,773	16%	28,807	16%	40,141	22%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
Female	296,149	100%	17,711	6%	120,805	41%	45,574	15%	44,806	15%	67,253	23%
Male	175,365	100%	10,639	6%	70,061	40%	27,751	16%	27,935	16%	38,979	22%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
Female	91,259	100%	5,256	6%	35,929	39%	14,290	16%	13,606	15%	22,178	24%
Male	131,506	100%	6,998	5%	51,884	39%	20,865	16%	20,606	16%	31,153	24%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
Female	273,274	100%	17,134	6%	109,886	40%	42,441	16%	41,405	15%	62,408	23%
Male	165,446	100%	10,385	6%	65,063	39%	26,467	16%	26,480	16%	37,051	22%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
Female	266,667	100%	16,647	6%	107,208	40%	41,364	16%	40,437	15%	61,011	23%
Male	160,201	100%	10,019	6%	62,972	39%	25,537	16%	25,680	16%	35,993	22%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
Female	71,636	100%	4,358	6%	28,374	40%	11,942	17%	13,447	19%	13,515	19%
Male	108,400	100%	6,419	6%	42,899	40%	18,444	17%	20,808	19%	19,830	18%

Table 5c. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Sex

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline</i> ¹												
Female	179,126	100%	13,030	7%	72,280	40%	30,606	17%	33,259	19%	29,951	17%
Male	120,261	100%	8,885	7%	48,265	40%	20,991	17%	23,071	19%	19,049	16%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline</i> ¹												
Female	173,309	100%	12,549	7%	70,000	40%	29,597	17%	32,252	19%	28,911	17%
Male	114,930	100%	8,454	7%	46,186	40%	20,048	17%	22,070	19%	18,172	16%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
Female	56,113	100%	3,695	7%	21,548	38%	9,514	17%	10,619	19%	10,737	19%
Male	85,355	100%	5,412	6%	32,795	38%	14,835	17%	16,508	19%	15,805	19%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline</i> ¹												
Female	148,411	100%	11,675	8%	58,990	40%	25,844	17%	27,360	18%	24,542	17%
Male	102,225	100%	8,042	8%	40,221	39%	18,059	18%	19,682	19%	16,221	16%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline</i> ¹												
Female	143,506	100%	11,255	8%	57,088	40%	24,962	17%	26,504	18%	23,697	17%
Male	97,556	100%	7,664	8%	38,388	39%	17,243	18%	18,818	19%	15,443	16%
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
Female	170,917	100%	9,835	6%	67,552	40%	27,163	16%	28,000	16%	38,367	22%
Male	245,431	100%	13,314	5%	97,299	40%	39,724	16%	41,781	17%	53,313	22%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline</i> ¹												
Female	431,014	100%	27,451	6%	174,235	40%	68,648	16%	69,744	16%	90,936	21%
Male	275,149	100%	17,924	7%	109,600	40%	45,113	16%	46,920	17%	55,592	20%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline</i> ¹												
Female	419,936	100%	26,604	6%	169,877	40%	66,765	16%	68,033	16%	88,657	21%
Male	265,540	100%	17,212	6%	105,853	40%	43,433	16%	45,311	17%	53,731	20%

Table 5c. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Sex

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HF_rEF</i>												
Female	143,473	100%	8,596	6%	55,400	39%	23,033	16%	23,494	16%	32,950	23%
Male	206,330	100%	11,610	6%	79,783	39%	33,878	16%	35,296	17%	45,763	22%
<i>Spironolactone episode after HF_pEF, not excluding Myocardial Infarction at baseline¹</i>												
Female	381,224	100%	25,478	7%	152,004	40%	61,248	16%	61,523	16%	80,971	21%
Male	246,731	100%	16,678	7%	96,595	39%	40,781	17%	42,196	17%	50,481	20%
<i>Spironolactone episode after HF_pEF, excluding Myocardial Infarction at baseline¹</i>												
Female	371,416	100%	24,726	7%	148,169	40%	59,563	16%	59,983	16%	78,975	21%
Male	237,948	100%	16,026	7%	93,157	39%	39,258	16%	40,733	17%	48,774	20%

¹Assessed in the 183 days prior to the heart failure index date.

Table 5d. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Age Group

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HF_rEF</i>												
0-17	57	100%	*****	*****	20	35%	*****	*****	13	23%	13	23%
18-44	7,918	100%	*****	*****	3,810	48%	*****	*****	1,104	14%	1,418	18%
45-64	53,824	100%	2,223	4%	23,026	43%	8,497	16%	8,165	15%	11,913	22%
65+	201,514	100%	11,550	6%	79,591	39%	31,329	16%	30,980	15%	48,064	24%
<i>Spironolactone episode after HF_pEF, not excluding Myocardial Infarction at baseline¹</i>												
0-17	95	100%	*****	*****	45	47%	14	15%	*****	*****	22	23%
18-44	7,697	100%	*****	*****	3,974	52%	1,236	16%	*****	*****	1,165	15%
45-64	70,553	100%	3,525	5%	30,445	43%	11,155	16%	10,749	15%	14,679	21%
65+	406,310	100%	25,428	6%	161,709	40%	63,164	16%	62,923	15%	93,086	23%
<i>Spironolactone episode after HF_pEF, excluding Myocardial Infarction at baseline¹</i>												
0-17	95	100%	*****	*****	45	47%	14	15%	*****	*****	22	23%
18-44	7,557	100%	*****	*****	3,903	52%	1,211	16%	*****	*****	1,145	15%
45-64	68,579	100%	3,412	5%	29,583	43%	10,819	16%	10,459	15%	14,306	21%
65+	395,283	100%	24,614	6%	157,335	40%	61,281	16%	61,294	16%	90,759	23%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HF_rEF</i>												
0-17	43	100%	*****	*****	12	28%	*****	*****	11	26%	*****	*****
18-44	5,859	100%	*****	*****	2,695	46%	*****	*****	837	14%	*****	*****
45-64	43,123	100%	1,861	4%	17,880	41%	6,814	16%	6,604	15%	9,964	23%
65+	173,740	100%	10,178	6%	67,226	39%	27,348	16%	26,760	15%	42,228	24%
<i>Spironolactone episode after HF_pEF, not excluding Myocardial Infarction at baseline¹</i>												
0-17	79	100%	*****	*****	37	47%	14	18%	*****	*****	17	22%
18-44	6,623	100%	*****	*****	3,328	50%	1,079	16%	*****	*****	1,058	16%
45-64	61,476	100%	3,213	5%	25,957	42%	9,758	16%	9,415	15%	13,133	21%
65+	370,542	100%	24,015	6%	145,627	39%	58,057	16%	57,592	16%	85,251	23%

Table 5d. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Age Group

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline</i> ¹												
0-17	79	100%	*****	*****	37	47%	14	18%	*****	*****	17	22%
18-44	6,502	100%	*****	*****	3,266	50%	1,062	16%	*****	*****	1,039	16%
45-64	59,736	100%	3,108	5%	25,190	42%	9,457	16%	9,176	15%	12,805	21%
65+	360,551	100%	23,272	6%	141,687	39%	56,368	16%	56,081	16%	83,143	23%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
0-17	42	100%	*****	*****	17	40%	*****	*****	*****	*****	*****	*****
18-44	5,465	100%	*****	*****	2,456	45%	*****	*****	*****	*****	*****	*****
45-64	37,952	100%	1,908	5%	15,965	42%	6,463	17%	7,117	19%	6,499	17%
65+	136,577	100%	8,594	6%	52,835	39%	22,991	17%	26,146	19%	26,011	19%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline</i> ¹												
0-17	50	100%	*****	*****	24	48%	*****	*****	*****	*****	*****	*****
18-44	4,468	100%	*****	*****	2,183	49%	*****	*****	*****	*****	*****	*****
45-64	44,811	100%	2,912	6%	19,289	43%	7,951	18%	8,163	18%	6,496	14%
65+	250,058	100%	18,736	7%	99,049	40%	42,864	17%	47,395	19%	42,014	17%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline</i> ¹												
0-17	50	100%	*****	*****	24	48%	*****	*****	*****	*****	*****	*****
18-44	4,354	100%	*****	*****	2,122	49%	*****	*****	*****	*****	*****	*****
45-64	43,070	100%	2,796	6%	18,536	43%	7,641	18%	7,869	18%	6,228	14%
65+	240,765	100%	17,946	7%	95,504	40%	41,237	17%	45,699	19%	40,379	17%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
0-17	33	100%	*****	*****	13	39%	*****	*****	*****	*****	*****	*****
18-44	3,727	100%	*****	*****	1,596	43%	*****	*****	*****	*****	*****	*****
45-64	27,661	100%	1,526	6%	11,220	41%	4,803	17%	5,207	19%	4,905	18%
65+	110,047	100%	7,381	7%	41,514	38%	18,896	17%	21,227	19%	21,029	19%

Table 5d. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Age Group

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
0-17	36	100%	*****	*****	18	50%	*****	*****	*****	*****	*****	*****
18-44	3,561	100%	*****	*****	1,732	49%	*****	*****	*****	*****	*****	*****
45-64	35,842	100%	2,496	7%	14,989	42%	6,463	18%	6,569	18%	5,325	15%
65+	211,197	100%	17,000	8%	82,472	39%	36,817	17%	39,858	19%	35,050	17%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
0-17	36	100%	*****	*****	18	50%	*****	*****	*****	*****	*****	*****
18-44	3,464	100%	*****	*****	1,678	48%	*****	*****	*****	*****	*****	*****
45-64	34,375	100%	2,393	7%	14,355	42%	6,202	18%	6,314	18%	5,111	15%
65+	203,187	100%	16,313	8%	79,425	39%	35,389	17%	38,408	19%	33,652	17%
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
0-17	98	100%	*****	*****	35	36%	*****	*****	21	21%	20	20%
18-44	12,672	100%	*****	*****	5,866	46%	*****	*****	2,006	16%	2,201	17%
45-64	85,903	100%	3,860	4%	35,999	42%	13,992	16%	14,290	17%	17,762	21%
65+	317,675	100%	18,762	6%	122,951	39%	50,801	16%	53,464	17%	71,697	23%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
0-17	145	100%	*****	*****	69	48%	25	17%	*****	*****	27	19%
18-44	11,816	100%	*****	*****	5,962	50%	1,953	17%	*****	*****	1,622	14%
45-64	107,831	100%	5,943	6%	46,195	43%	17,778	16%	17,611	16%	20,304	19%
65+	586,371	100%	38,856	7%	231,609	39%	94,005	16%	97,326	17%	124,575	21%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
0-17	145	100%	*****	*****	69	48%	25	17%	*****	*****	27	19%
18-44	11,593	100%	*****	*****	5,846	50%	1,918	17%	*****	*****	1,593	14%
45-64	104,558	100%	5,743	5%	44,822	43%	17,180	16%	17,106	16%	19,707	19%
65+	569,180	100%	37,506	7%	224,993	40%	91,075	16%	94,545	17%	121,061	21%

Table 5d. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Age Group

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
<i>Spironolactone episode after HFrEF</i>												
0-17	76	100%	*****	*****	24	32%	*****	*****	18	24%	17	22%
18-44	9,426	100%	*****	*****	4,192	44%	*****	*****	1,511	16%	1,747	19%
45-64	68,144	100%	3,225	5%	27,691	41%	11,193	16%	11,368	17%	14,667	22%
65+	272,157	100%	16,579	6%	103,276	38%	44,127	16%	45,893	17%	62,282	23%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>												
0-17	119	100%	*****	*****	57	48%	21	18%	*****	*****	22	18%
18-44	10,003	100%	*****	*****	4,955	50%	1,661	17%	*****	*****	1,437	14%
45-64	91,982	100%	5,313	6%	38,485	42%	15,275	17%	15,069	16%	17,840	19%
65+	525,851	100%	36,345	7%	205,102	39%	85,072	16%	87,179	17%	112,153	21%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>												
0-17	119	100%	*****	*****	57	48%	21	18%	*****	*****	22	18%
18-44	9,810	100%	*****	*****	4,852	49%	1,639	17%	*****	*****	1,410	14%
45-64	89,093	100%	5,132	6%	37,262	42%	14,736	17%	14,631	16%	17,332	19%
65+	510,342	100%	35,132	7%	199,155	39%	82,425	16%	84,645	17%	108,985	21%

¹Assessed in the 183 days prior to the heart failure index date.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be re-calculated through the cells presented.

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HFrEF												
<i>2010</i>												
July	1,214	100%	63	5%	547	45%	201	17%	162	13%	241	20%
August	2,008	100%	100	5%	914	46%	292	15%	310	15%	392	20%
September	2,367	100%	89	4%	1,068	45%	393	17%	342	14%	475	20%
October	2,498	100%	124	5%	1,118	45%	365	15%	384	15%	507	20%
November	2,562	100%	152	6%	1,187	46%	338	13%	342	13%	543	21%
December	2,910	100%	219	8%	1,277	44%	431	15%	402	14%	581	20%
<i>2011</i>												
January	2,990	100%	156	5%	1,238	41%	468	16%	462	15%	666	22%
February	2,877	100%	145	5%	1,213	42%	447	16%	454	16%	618	21%
March	3,339	100%	153	5%	1,411	42%	530	16%	494	15%	751	22%
April	2,914	100%	152	5%	1,224	42%	454	16%	420	14%	664	23%
May	3,085	100%	152	5%	1,327	43%	458	15%	476	15%	672	22%
June	2,968	100%	127	4%	1,273	43%	459	15%	450	15%	659	22%
July	2,705	100%	118	4%	1,171	43%	455	17%	350	13%	611	23%
August	2,854	100%	159	6%	1,203	42%	459	16%	442	15%	591	21%
September	2,921	100%	141	5%	1,224	42%	522	18%	388	13%	646	22%
October	2,946	100%	166	6%	1,286	44%	444	15%	399	14%	651	22%
November	2,982	100%	155	5%	1,270	43%	478	16%	418	14%	661	22%
December	3,120	100%	234	8%	1,357	43%	435	14%	449	14%	645	21%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>												
January	3,152	100%	173	5%	1,292	41%	478	15%	475	15%	734	23%
February	3,102	100%	168	5%	1,280	41%	511	16%	476	15%	667	22%
March	3,200	100%	145	5%	1,267	40%	523	16%	516	16%	749	23%
April	3,135	100%	169	5%	1,253	40%	481	15%	503	16%	729	23%
May	3,316	100%	172	5%	1,377	42%	495	15%	511	15%	761	23%
June	2,999	100%	159	5%	1,254	42%	471	16%	434	14%	681	23%
July	2,843	100%	149	5%	1,158	41%	492	17%	430	15%	614	22%
August	3,173	100%	158	5%	1,274	40%	519	16%	488	15%	734	23%
September	2,935	100%	149	5%	1,202	41%	496	17%	411	14%	677	23%
October	3,441	100%	146	4%	1,468	43%	501	15%	484	14%	842	24%
November	3,395	100%	159	5%	1,450	43%	500	15%	500	15%	786	23%
December	3,350	100%	300	9%	1,355	40%	488	15%	476	14%	731	22%
<i>2013</i>												
January	3,563	100%	173	5%	1,395	39%	561	16%	545	15%	889	25%
February	3,333	100%	159	5%	1,332	40%	524	16%	520	16%	798	24%
March	3,566	100%	154	4%	1,368	38%	616	17%	580	16%	848	24%
April	3,566	100%	156	4%	1,422	40%	550	15%	576	16%	862	24%
May	3,650	100%	161	4%	1,468	40%	549	15%	547	15%	925	25%
June	3,263	100%	163	5%	1,260	39%	511	16%	541	17%	788	24%
July	3,446	100%	171	5%	1,326	38%	577	17%	530	15%	842	24%
August	3,592	100%	185	5%	1,475	41%	563	16%	535	15%	834	23%
September	3,389	100%	163	5%	1,363	40%	571	17%	504	15%	788	23%
October	3,973	100%	202	5%	1,679	42%	570	14%	556	14%	966	24%
November	3,619	100%	174	5%	1,450	40%	574	16%	540	15%	881	24%
December	3,636	100%	290	8%	1,409	39%	538	15%	479	13%	920	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>												
January	3,796	100%	187	5%	1,486	39%	579	15%	607	16%	937	25%
February	3,577	100%	166	5%	1,436	40%	541	15%	593	17%	841	24%
March	3,978	100%	165	4%	1,590	40%	650	16%	607	15%	966	24%
April	4,083	100%	209	5%	1,631	40%	587	14%	627	15%	1,029	25%
May	4,078	100%	180	4%	1,628	40%	597	15%	650	16%	1,023	25%
June	3,607	100%	185	5%	1,456	40%	530	15%	570	16%	866	24%
July	3,751	100%	173	5%	1,476	39%	603	16%	546	15%	953	25%
August	3,650	100%	185	5%	1,423	39%	612	17%	544	15%	886	24%
September	3,761	100%	184	5%	1,426	38%	668	18%	540	14%	943	25%
October	4,084	100%	170	4%	1,627	40%	644	16%	603	15%	1,040	25%
November	3,764	100%	205	5%	1,601	43%	543	14%	535	14%	880	23%
December	4,086	100%	312	8%	1,578	39%	579	14%	568	14%	1,049	26%
<i>2015</i>												
January	4,041	100%	193	5%	1,563	39%	579	14%	667	17%	1,039	26%
February	3,763	100%	181	5%	1,488	40%	536	14%	619	16%	939	25%
March	4,426	100%	231	5%	1,695	38%	690	16%	663	15%	1,147	26%
April	4,317	100%	189	4%	1,713	40%	642	15%	708	16%	1,065	25%
May	4,081	100%	191	5%	1,566	38%	605	15%	666	16%	1,053	26%
June	4,194	100%	202	5%	1,601	38%	605	14%	649	15%	1,137	27%
July	4,150	100%	186	4%	1,576	38%	668	16%	628	15%	1,092	26%
August	3,903	100%	187	5%	1,500	38%	626	16%	565	14%	1,025	26%
September	4,095	100%	193	5%	1,541	38%	695	17%	579	14%	1,087	27%
October	3,468	100%	163	5%	1,399	40%	505	15%	531	15%	870	25%
November	2,661	100%	118	4%	1,130	42%	386	15%	372	14%	655	25%
December	2,369	100%	172	7%	958	40%	332	14%	342	14%	565	24%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>												
January	2,001	100%	109	5%	780	39%	326	16%	315	16%	471	24%
February	1,966	100%	107	5%	763	39%	289	15%	302	15%	505	26%
March	2,005	100%	94	5%	770	38%	302	15%	328	16%	511	25%
April	1,793	100%	90	5%	706	39%	272	15%	278	16%	447	25%
May	1,713	100%	96	6%	656	38%	244	14%	288	17%	429	25%
June	1,528	100%	94	6%	591	39%	235	15%	238	16%	370	24%
July	1,406	100%	77	5%	527	37%	212	15%	207	15%	383	27%
August	1,401	100%	76	5%	536	38%	233	17%	204	15%	352	25%
September	1,351	100%	64	5%	519	38%	235	17%	180	13%	353	26%
October	1,282	100%	63	5%	513	40%	198	15%	162	13%	346	27%
November	1,238	100%	54	4%	519	42%	170	14%	170	14%	325	26%
December	1,265	100%	104	8%	458	36%	179	14%	185	15%	339	27%
<i>2017</i>												
January	1,200	100%	60	5%	473	39%	168	14%	161	13%	338	28%
February	1,128	100%	51	5%	424	38%	168	15%	185	16%	300	27%
March	1,207	100%	60	5%	456	38%	188	16%	180	15%	323	27%
April	1,026	100%	48	5%	387	38%	162	16%	161	16%	268	26%
May	1,102	100%	59	5%	406	37%	156	14%	182	17%	299	27%
June	1,074	100%	57	5%	398	37%	158	15%	174	16%	287	27%
July	926	100%	43	5%	370	40%	148	16%	151	16%	214	23%
August	940	100%	47	5%	331	35%	166	18%	139	15%	257	27%
September	826	100%	53	6%	304	37%	144	17%	136	16%	189	23%
October	910	100%	54	6%	367	40%	124	14%	134	15%	231	25%
November	897	100%	41	5%	364	41%	122	14%	140	16%	230	26%
December	794	100%	55	7%	297	37%	123	15%	110	14%	209	26%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	895	100%	39	4%	343	38%	134	15%	150	17%	229	26%
February	787	100%	41	5%	308	39%	99	13%	143	18%	196	25%
March	857	100%	43	5%	336	39%	123	14%	136	16%	219	26%
April	767	100%	43	6%	286	37%	105	14%	290	38%	43	6%
May	863	100%	38	4%	326	38%	125	14%	358	41%	16	2%
June	707	100%	35	5%	273	39%	84	12%	293	41%	22	3%
July	670	100%	36	5%	263	39%	100	15%	271	40%	0	0%
August	704	100%	32	5%	236	34%	111	16%	325	46%	0	0%
September	564	100%	34	6%	201	36%	105	19%	224	40%	0	0%
October	676	100%	31	5%	240	36%	357	53%	48	7%	0	0%
November	604	100%	28	5%	218	36%	339	56%	19	3%	0	0%
December	605	100%	43	7%	242	40%	305	50%	15	2%	0	0%
<i>2019</i>												
January	688	100%	32	5%	578	84%	78	11%	0	0%	0	0%
February	586	100%	*****	*****	529	90%	*****	*****	0	0%	0	0%
March	586	100%	464	79%	88	15%	34	6%	0	0%	0	0%
April	109	100%	63	58%	*****	*****	*****	*****	0	0%	0	0%
May	46	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	40	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%

Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹

<i>2010</i>												
July	1,265	100%	53	4%	565	45%	205	16%	184	15%	258	20%
August	2,273	100%	96	4%	1,030	45%	352	15%	302	13%	493	22%
September	2,698	100%	110	4%	1,222	45%	412	15%	340	13%	614	23%
October	3,142	100%	135	4%	1,402	45%	483	15%	463	15%	659	21%
November	3,434	100%	168	5%	1,620	47%	492	14%	484	14%	670	20%
December	3,577	100%	263	7%	1,574	44%	490	14%	504	14%	746	21%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>												
January	3,905	100%	198	5%	1,688	43%	580	15%	587	15%	852	22%
February	3,960	100%	186	5%	1,681	42%	627	16%	602	15%	864	22%
March	4,617	100%	270	6%	1,978	43%	715	15%	693	15%	961	21%
April	4,390	100%	246	6%	1,840	42%	677	15%	665	15%	962	22%
May	4,507	100%	227	5%	1,929	43%	697	15%	624	14%	1,030	23%
June	4,651	100%	248	5%	2,010	43%	683	15%	686	15%	1,024	22%
July	4,280	100%	217	5%	1,867	44%	668	16%	581	14%	947	22%
August	4,419	100%	234	5%	1,825	41%	784	18%	624	14%	952	22%
September	4,253	100%	201	5%	1,824	43%	733	17%	577	14%	918	22%
October	4,449	100%	229	5%	1,856	42%	705	16%	639	14%	1,020	23%
November	4,577	100%	266	6%	1,948	43%	697	15%	643	14%	1,023	22%
December	4,654	100%	350	8%	1,892	41%	711	15%	641	14%	1,060	23%
<i>2012</i>												
January	4,805	100%	272	6%	2,012	42%	713	15%	723	15%	1,085	23%
February	4,877	100%	250	5%	2,022	41%	770	16%	765	16%	1,070	22%
March	5,144	100%	276	5%	2,071	40%	837	16%	749	15%	1,211	24%
April	4,958	100%	283	6%	2,030	41%	726	15%	732	15%	1,187	24%
May	5,363	100%	274	5%	2,245	42%	819	15%	829	15%	1,196	22%
June	4,876	100%	264	5%	2,044	42%	758	16%	751	15%	1,059	22%
July	4,891	100%	265	5%	2,081	43%	747	15%	689	14%	1,109	23%
August	5,162	100%	303	6%	2,067	40%	866	17%	730	14%	1,196	23%
September	4,634	100%	258	6%	1,889	41%	753	16%	642	14%	1,092	24%
October	5,352	100%	280	5%	2,313	43%	754	14%	732	14%	1,273	24%
November	5,293	100%	332	6%	2,257	43%	779	15%	680	13%	1,245	24%
December	5,176	100%	416	8%	2,093	40%	760	15%	723	14%	1,184	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>												
January	5,698	100%	347	6%	2,279	40%	856	15%	868	15%	1,348	24%
February	5,187	100%	268	5%	2,089	40%	777	15%	814	16%	1,239	24%
March	5,829	100%	312	5%	2,292	39%	890	15%	900	15%	1,435	25%
April	5,916	100%	300	5%	2,378	40%	871	15%	924	16%	1,443	24%
May	6,093	100%	297	5%	2,442	40%	914	15%	904	15%	1,536	25%
June	5,461	100%	301	6%	2,212	41%	807	15%	866	16%	1,275	23%
July	5,901	100%	320	5%	2,407	41%	885	15%	870	15%	1,419	24%
August	5,926	100%	316	5%	2,355	40%	985	17%	877	15%	1,393	24%
September	5,642	100%	278	5%	2,291	41%	901	16%	858	15%	1,314	23%
October	6,260	100%	328	5%	2,593	41%	929	15%	912	15%	1,498	24%
November	5,915	100%	328	6%	2,394	40%	865	15%	855	14%	1,473	25%
December	5,667	100%	461	8%	2,275	40%	827	15%	815	14%	1,289	23%
<i>2014</i>												
January	6,015	100%	311	5%	2,419	40%	955	16%	968	16%	1,362	23%
February	5,682	100%	299	5%	2,306	41%	877	15%	866	15%	1,334	23%
March	6,432	100%	342	5%	2,640	41%	977	15%	971	15%	1,502	23%
April	6,718	100%	353	5%	2,663	40%	985	15%	1,052	16%	1,665	25%
May	6,679	100%	351	5%	2,640	40%	1,011	15%	1,069	16%	1,608	24%
June	6,100	100%	348	6%	2,417	40%	881	14%	962	16%	1,492	24%
July	6,208	100%	327	5%	2,548	41%	948	15%	893	14%	1,492	24%
August	5,820	100%	341	6%	2,359	41%	961	17%	834	14%	1,325	23%
September	5,735	100%	333	6%	2,206	38%	989	17%	803	14%	1,404	24%
October	6,497	100%	343	5%	2,605	40%	1,047	16%	937	14%	1,565	24%
November	5,648	100%	307	5%	2,329	41%	767	14%	825	15%	1,420	25%
December	6,476	100%	503	8%	2,577	40%	889	14%	902	14%	1,605	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>												
January	6,290	100%	343	5%	2,497	40%	923	15%	952	15%	1,575	25%
February	5,829	100%	327	6%	2,335	40%	874	15%	845	14%	1,448	25%
March	6,911	100%	386	6%	2,735	40%	1,038	15%	1,009	15%	1,743	25%
April	6,882	100%	408	6%	2,666	39%	998	15%	1,107	16%	1,703	25%
May	6,429	100%	334	5%	2,512	39%	989	15%	1,031	16%	1,563	24%
June	6,710	100%	419	6%	2,653	40%	945	14%	1,027	15%	1,666	25%
July	6,510	100%	354	5%	2,557	39%	995	15%	977	15%	1,627	25%
August	6,184	100%	341	6%	2,455	40%	1,009	16%	856	14%	1,523	25%
September	6,526	100%	335	5%	2,573	39%	1,079	17%	947	15%	1,592	24%
October	6,243	100%	327	5%	2,522	40%	928	15%	868	14%	1,598	26%
November	5,154	100%	293	6%	2,102	41%	743	14%	757	15%	1,259	24%
December	5,209	100%	405	8%	2,052	39%	771	15%	734	14%	1,247	24%
<i>2016</i>												
January	4,609	100%	266	6%	1,689	37%	709	15%	725	16%	1,220	26%
February	4,777	100%	272	6%	1,850	39%	700	15%	775	16%	1,180	25%
March	5,181	100%	274	5%	1,999	39%	804	16%	816	16%	1,288	25%
April	4,744	100%	241	5%	1,821	38%	665	14%	745	16%	1,272	27%
May	4,597	100%	235	5%	1,724	38%	663	14%	753	16%	1,222	27%
June	4,421	100%	223	5%	1,792	41%	599	14%	689	16%	1,118	25%
July	4,107	100%	217	5%	1,597	39%	642	16%	624	15%	1,027	25%
August	4,225	100%	199	5%	1,639	39%	663	16%	602	14%	1,122	27%
September	3,885	100%	201	5%	1,470	38%	655	17%	557	14%	1,002	26%
October	3,870	100%	202	5%	1,500	39%	589	15%	572	15%	1,007	26%
November	3,778	100%	188	5%	1,470	39%	554	15%	562	15%	1,004	27%
December	3,728	100%	317	9%	1,402	38%	560	15%	512	14%	937	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	3,674	100%	220	6%	1,399	38%	565	15%	549	15%	941	26%
February	3,401	100%	180	5%	1,274	37%	473	14%	546	16%	928	27%
March	3,903	100%	197	5%	1,481	38%	585	15%	600	15%	1,040	27%
April	3,431	100%	185	5%	1,317	38%	499	15%	534	16%	896	26%
May	3,805	100%	169	4%	1,404	37%	525	14%	652	17%	1,055	28%
June	3,568	100%	183	5%	1,353	38%	511	14%	595	17%	926	26%
July	3,304	100%	183	6%	1,251	38%	512	15%	487	15%	871	26%
August	3,363	100%	172	5%	1,303	39%	523	16%	478	14%	887	26%
September	3,053	100%	175	6%	1,112	36%	499	16%	466	15%	801	26%
October	3,348	100%	190	6%	1,303	39%	480	14%	508	15%	867	26%
November	3,091	100%	157	5%	1,245	40%	437	14%	480	16%	772	25%
December	2,942	100%	225	8%	1,098	37%	409	14%	421	14%	789	27%
<i>2018</i>												
January	3,108	100%	165	5%	1,175	38%	453	15%	456	15%	859	28%
February	2,840	100%	141	5%	1,017	36%	417	15%	474	17%	791	28%
March	3,322	100%	163	5%	1,206	36%	491	15%	549	17%	913	27%
April	3,132	100%	183	6%	1,196	38%	443	14%	1,173	37%	137	4%
May	3,334	100%	161	5%	1,278	38%	437	13%	1,373	41%	85	3%
June	2,985	100%	139	5%	1,129	38%	421	14%	1,241	42%	55	2%
July	2,729	100%	155	6%	1,043	38%	378	14%	1,153	42%	0	0%
August	3,151	100%	173	5%	1,130	36%	504	16%	1,344	43%	0	0%
September	2,527	100%	124	5%	934	37%	393	16%	1,076	43%	0	0%
October	2,923	100%	168	6%	1,060	36%	1,498	51%	197	7%	0	0%
November	2,694	100%	129	5%	996	37%	1,486	55%	83	3%	0	0%
December	2,460	100%	197	8%	901	37%	1,289	52%	73	3%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	2,726	100%	149	5%	2,344	86%	233	9%	0	0%	0	0%
February	2,527	100%	*****	*****	2,289	91%	*****	*****	0	0%	0	0%
March	2,661	100%	2,192	82%	356	13%	113	4%	0	0%	0	0%
April	418	100%	*****	*****	181	43%	*****	*****	0	0%	0	0%
May	195	100%	*****	*****	192	98%	0	0%	0	0%	0	0%
June	154	100%	*****	*****	3	2%	0	0%	0	0%	0	0%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹												
<i>2010</i>												
July	1,201	100%	52	4%	537	45%	196	16%	175	15%	241	20%
August	2,169	100%	90	4%	994	46%	331	15%	285	13%	469	22%
September	2,570	100%	103	4%	1,154	45%	397	15%	326	13%	590	23%
October	3,000	100%	124	4%	1,339	45%	460	15%	441	15%	636	21%
November	3,296	100%	160	5%	1,556	47%	464	14%	464	14%	652	20%
December	3,394	100%	252	7%	1,491	44%	465	14%	472	14%	714	21%
<i>2011</i>												
January	3,728	100%	187	5%	1,613	43%	546	15%	567	15%	815	22%
February	3,804	100%	177	5%	1,618	43%	603	16%	582	15%	824	22%
March	4,431	100%	252	6%	1,903	43%	690	16%	655	15%	931	21%
April	4,217	100%	231	5%	1,764	42%	652	15%	643	15%	927	22%
May	4,336	100%	218	5%	1,845	43%	665	15%	600	14%	1,008	23%
June	4,490	100%	237	5%	1,943	43%	660	15%	658	15%	992	22%
July	4,125	100%	207	5%	1,794	43%	647	16%	560	14%	917	22%
August	4,260	100%	227	5%	1,749	41%	755	18%	601	14%	928	22%
September	4,105	100%	193	5%	1,766	43%	698	17%	559	14%	889	22%
October	4,300	100%	216	5%	1,800	42%	676	16%	620	14%	988	23%
November	4,424	100%	258	6%	1,894	43%	670	15%	619	14%	983	22%
December	4,512	100%	335	7%	1,846	41%	687	15%	620	14%	1,024	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>												
January	4,639	100%	259	6%	1,934	42%	693	15%	698	15%	1,055	23%
February	4,709	100%	244	5%	1,954	41%	745	16%	733	16%	1,033	22%
March	5,004	100%	269	5%	2,017	40%	806	16%	728	15%	1,184	24%
April	4,801	100%	268	6%	1,976	41%	702	15%	706	15%	1,149	24%
May	5,215	100%	262	5%	2,181	42%	798	15%	806	15%	1,168	22%
June	4,732	100%	256	5%	1,977	42%	738	16%	731	15%	1,030	22%
July	4,742	100%	257	5%	2,013	42%	722	15%	666	14%	1,084	23%
August	5,032	100%	291	6%	2,006	40%	845	17%	713	14%	1,177	23%
September	4,492	100%	248	6%	1,831	41%	723	16%	626	14%	1,064	24%
October	5,196	100%	267	5%	2,255	43%	732	14%	708	14%	1,234	24%
November	5,155	100%	325	6%	2,198	43%	753	15%	663	13%	1,216	24%
December	5,036	100%	406	8%	2,028	40%	742	15%	714	14%	1,146	23%
<i>2013</i>												
January	5,520	100%	331	6%	2,213	40%	823	15%	842	15%	1,311	24%
February	5,031	100%	258	5%	2,036	40%	749	15%	785	16%	1,203	24%
March	5,679	100%	298	5%	2,230	39%	872	15%	871	15%	1,408	25%
April	5,739	100%	290	5%	2,300	40%	847	15%	897	16%	1,405	24%
May	5,896	100%	286	5%	2,368	40%	881	15%	875	15%	1,486	25%
June	5,277	100%	291	6%	2,138	41%	780	15%	841	16%	1,227	23%
July	5,724	100%	311	5%	2,344	41%	848	15%	839	15%	1,382	24%
August	5,751	100%	304	5%	2,292	40%	945	16%	847	15%	1,363	24%
September	5,466	100%	268	5%	2,218	41%	871	16%	834	15%	1,275	23%
October	6,065	100%	313	5%	2,502	41%	897	15%	889	15%	1,464	24%
November	5,759	100%	317	6%	2,338	41%	849	15%	825	14%	1,430	25%
December	5,480	100%	446	8%	2,207	40%	796	15%	792	14%	1,239	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>												
January	5,871	100%	303	5%	2,367	40%	929	16%	943	16%	1,329	23%
February	5,508	100%	288	5%	2,239	41%	846	15%	846	15%	1,289	23%
March	6,244	100%	331	5%	2,566	41%	948	15%	946	15%	1,453	23%
April	6,543	100%	341	5%	2,595	40%	953	15%	1,027	16%	1,627	25%
May	6,473	100%	340	5%	2,555	39%	979	15%	1,030	16%	1,569	24%
June	5,948	100%	339	6%	2,352	40%	860	14%	937	16%	1,460	25%
July	6,043	100%	314	5%	2,490	41%	911	15%	871	14%	1,457	24%
August	5,644	100%	330	6%	2,294	41%	920	16%	803	14%	1,297	23%
September	5,582	100%	318	6%	2,151	39%	960	17%	782	14%	1,371	25%
October	6,315	100%	332	5%	2,535	40%	1,010	16%	910	14%	1,528	24%
November	5,515	100%	298	5%	2,267	41%	753	14%	812	15%	1,385	25%
December	6,284	100%	489	8%	2,511	40%	861	14%	866	14%	1,557	25%
<i>2015</i>												
January	6,116	100%	327	5%	2,442	40%	890	15%	924	15%	1,533	25%
February	5,641	100%	312	6%	2,258	40%	842	15%	826	15%	1,403	25%
March	6,713	100%	369	5%	2,662	40%	999	15%	984	15%	1,699	25%
April	6,700	100%	392	6%	2,599	39%	969	14%	1,078	16%	1,662	25%
May	6,252	100%	322	5%	2,444	39%	964	15%	1,007	16%	1,515	24%
June	6,526	100%	409	6%	2,583	40%	909	14%	999	15%	1,626	25%
July	6,340	100%	344	5%	2,494	39%	955	15%	963	15%	1,584	25%
August	6,034	100%	327	5%	2,399	40%	982	16%	832	14%	1,494	25%
September	6,340	100%	322	5%	2,501	39%	1,051	17%	921	15%	1,545	24%
October	6,101	100%	323	5%	2,460	40%	904	15%	850	14%	1,564	26%
November	5,020	100%	284	6%	2,055	41%	723	14%	734	15%	1,224	24%
December	5,089	100%	396	8%	2,000	39%	748	15%	724	14%	1,221	24%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>												
January	4,501	100%	259	6%	1,642	36%	690	15%	711	16%	1,199	27%
February	4,670	100%	259	6%	1,807	39%	687	15%	762	16%	1,155	25%
March	5,060	100%	270	5%	1,947	38%	781	15%	802	16%	1,260	25%
April	4,631	100%	227	5%	1,783	39%	652	14%	724	16%	1,245	27%
May	4,515	100%	229	5%	1,695	38%	644	14%	744	16%	1,203	27%
June	4,349	100%	220	5%	1,756	40%	583	13%	680	16%	1,110	26%
July	4,026	100%	208	5%	1,567	39%	634	16%	607	15%	1,010	25%
August	4,158	100%	198	5%	1,606	39%	646	16%	593	14%	1,115	27%
September	3,803	100%	197	5%	1,433	38%	635	17%	546	14%	992	26%
October	3,790	100%	194	5%	1,473	39%	576	15%	562	15%	985	26%
November	3,712	100%	186	5%	1,441	39%	545	15%	549	15%	991	27%
December	3,668	100%	313	9%	1,375	37%	551	15%	507	14%	922	25%
<i>2017</i>												
January	3,601	100%	215	6%	1,366	38%	556	15%	538	15%	926	26%
February	3,341	100%	176	5%	1,247	37%	464	14%	541	16%	913	27%
March	3,840	100%	194	5%	1,456	38%	572	15%	594	15%	1,024	27%
April	3,361	100%	179	5%	1,291	38%	481	14%	529	16%	881	26%
May	3,741	100%	163	4%	1,384	37%	516	14%	642	17%	1,036	28%
June	3,514	100%	183	5%	1,333	38%	499	14%	590	17%	909	26%
July	3,234	100%	179	6%	1,226	38%	501	15%	477	15%	851	26%
August	3,299	100%	169	5%	1,278	39%	513	16%	467	14%	872	26%
September	2,996	100%	173	6%	1,086	36%	490	16%	460	15%	787	26%
October	3,292	100%	186	6%	1,280	39%	475	14%	501	15%	850	26%
November	3,034	100%	153	5%	1,219	40%	430	14%	468	15%	764	25%
December	2,890	100%	221	8%	1,073	37%	397	14%	416	14%	783	27%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	3,054	100%	161	5%	1,155	38%	447	15%	446	15%	845	28%
February	2,803	100%	139	5%	1,007	36%	411	15%	464	17%	782	28%
March	3,269	100%	160	5%	1,188	36%	485	15%	540	17%	896	27%
April	3,087	100%	179	6%	1,179	38%	437	14%	1,156	37%	136	4%
May	3,271	100%	158	5%	1,246	38%	432	13%	1,352	41%	83	3%
June	2,939	100%	139	5%	1,110	38%	416	14%	1,220	42%	54	2%
July	2,689	100%	152	6%	1,032	38%	371	14%	1,134	42%	0	0%
August	3,090	100%	170	6%	1,111	36%	488	16%	1,321	43%	0	0%
September	2,484	100%	124	5%	918	37%	384	15%	1,058	43%	0	0%
October	2,869	100%	163	6%	1,041	36%	1,470	51%	195	7%	0	0%
November	2,649	100%	125	5%	981	37%	1,461	55%	82	3%	0	0%
December	2,409	100%	191	8%	880	37%	1,266	53%	72	3%	0	0%
<i>2019</i>												
January	2,682	100%	147	5%	2,305	86%	230	9%	0	0%	0	0%
February	2,486	100%	*****	*****	2,250	91%	*****	*****	0	0%	0	0%
March	2,611	100%	2,148	82%	351	13%	112	4%	0	0%	0	0%
April	410	100%	*****	*****	177	43%	*****	*****	0	0%	0	0%
May	190	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	152	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HFrEF												
<i>2010</i>												
July	911	100%	50	5%	393	43%	151	17%	117	13%	200	22%
August	1,340	100%	70	5%	581	43%	191	14%	211	16%	287	21%
September	1,565	100%	65	4%	642	41%	269	17%	240	15%	349	22%
October	1,675	100%	85	5%	719	43%	242	14%	261	16%	368	22%
November	1,758	100%	118	7%	768	44%	236	13%	239	14%	397	23%
December	2,156	100%	165	8%	873	40%	336	16%	316	15%	466	22%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>												
January	2,211	100%	115	5%	864	39%	356	16%	338	15%	538	24%
February	2,198	100%	115	5%	898	41%	356	16%	345	16%	484	22%
March	2,585	100%	115	4%	1,059	41%	415	16%	393	15%	603	23%
April	2,244	100%	133	6%	900	40%	351	16%	311	14%	549	24%
May	2,396	100%	127	5%	982	41%	375	16%	384	16%	528	22%
June	2,282	100%	103	5%	926	41%	368	16%	340	15%	545	24%
July	2,076	100%	95	5%	852	41%	367	18%	279	13%	483	23%
August	2,207	100%	126	6%	907	41%	358	16%	343	16%	473	21%
September	2,290	100%	122	5%	931	41%	400	17%	314	14%	523	23%
October	2,313	100%	133	6%	979	42%	341	15%	310	13%	550	24%
November	2,378	100%	134	6%	958	40%	403	17%	340	14%	543	23%
December	2,511	100%	203	8%	1,072	43%	358	14%	357	14%	521	21%
<i>2012</i>												
January	2,555	100%	147	6%	1,010	40%	412	16%	383	15%	603	24%
February	2,541	100%	145	6%	1,025	40%	430	17%	380	15%	561	22%
March	2,618	100%	125	5%	1,010	39%	440	17%	413	16%	630	24%
April	2,563	100%	139	5%	1,021	40%	397	15%	401	16%	605	24%
May	2,729	100%	149	5%	1,118	41%	407	15%	424	16%	631	23%
June	2,475	100%	134	5%	1,017	41%	393	16%	355	14%	576	23%
July	2,345	100%	127	5%	955	41%	394	17%	350	15%	519	22%
August	2,584	100%	129	5%	1,012	39%	413	16%	411	16%	619	24%
September	2,364	100%	130	5%	936	40%	411	17%	328	14%	559	24%
October	2,832	100%	131	5%	1,209	43%	386	14%	391	14%	715	25%
November	2,821	100%	144	5%	1,167	41%	427	15%	406	14%	677	24%
December	2,818	100%	249	9%	1,117	40%	422	15%	401	14%	629	22%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>												
January	3,018	100%	147	5%	1,162	39%	469	16%	459	15%	781	26%
February	2,758	100%	134	5%	1,083	39%	431	16%	427	15%	683	25%
March	3,046	100%	137	4%	1,144	38%	525	17%	502	16%	738	24%
April	3,061	100%	129	4%	1,183	39%	471	15%	510	17%	768	25%
May	3,072	100%	131	4%	1,212	39%	470	15%	446	15%	813	26%
June	2,745	100%	137	5%	1,032	38%	431	16%	454	17%	691	25%
July	2,919	100%	155	5%	1,095	38%	493	17%	449	15%	727	25%
August	2,990	100%	158	5%	1,204	40%	461	15%	450	15%	717	24%
September	2,767	100%	136	5%	1,091	39%	475	17%	401	14%	664	24%
October	3,355	100%	179	5%	1,363	41%	493	15%	464	14%	856	26%
November	3,109	100%	161	5%	1,217	39%	485	16%	469	15%	777	25%
December	3,044	100%	243	8%	1,152	38%	454	15%	404	13%	791	26%
<i>2014</i>												
January	3,228	100%	153	5%	1,224	38%	506	16%	526	16%	819	25%
February	3,035	100%	147	5%	1,199	40%	463	15%	493	16%	733	24%
March	3,455	100%	146	4%	1,353	39%	575	17%	527	15%	854	25%
April	3,545	100%	182	5%	1,401	40%	515	15%	548	15%	899	25%
May	3,512	100%	158	4%	1,366	39%	520	15%	568	16%	900	26%
June	3,083	100%	167	5%	1,224	40%	451	15%	484	16%	757	25%
July	3,143	100%	141	4%	1,192	38%	516	16%	457	15%	837	27%
August	3,078	100%	169	5%	1,182	38%	511	17%	453	15%	763	25%
September	3,128	100%	162	5%	1,166	37%	559	18%	447	14%	794	25%
October	3,445	100%	139	4%	1,336	39%	545	16%	518	15%	907	26%
November	3,129	100%	180	6%	1,297	41%	450	14%	450	14%	752	24%
December	3,483	100%	262	8%	1,322	38%	502	14%	474	14%	923	27%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>												
January	3,485	100%	170	5%	1,313	38%	507	15%	581	17%	914	26%
February	3,209	100%	165	5%	1,258	39%	429	13%	536	17%	821	26%
March	3,824	100%	191	5%	1,415	37%	613	16%	577	15%	1,028	27%
April	3,728	100%	168	5%	1,438	39%	561	15%	618	17%	943	25%
May	3,509	100%	168	5%	1,309	37%	539	15%	574	16%	919	26%
June	3,556	100%	182	5%	1,338	38%	521	15%	539	15%	976	27%
July	3,525	100%	159	5%	1,290	37%	579	16%	545	15%	952	27%
August	3,289	100%	166	5%	1,233	37%	555	17%	466	14%	869	26%
September	3,472	100%	166	5%	1,274	37%	585	17%	499	14%	948	27%
October	2,901	100%	144	5%	1,134	39%	424	15%	448	15%	751	26%
November	2,303	100%	101	4%	958	42%	350	15%	314	14%	580	25%
December	2,153	100%	145	7%	859	40%	300	14%	309	14%	540	25%
<i>2016</i>												
January	1,860	100%	107	6%	712	38%	308	17%	293	16%	440	24%
February	1,827	100%	101	6%	704	39%	269	15%	279	15%	474	26%
March	1,905	100%	91	5%	730	38%	289	15%	313	16%	482	25%
April	1,712	100%	86	5%	675	39%	257	15%	264	15%	430	25%
May	1,629	100%	94	6%	613	38%	232	14%	270	17%	420	26%
June	1,468	100%	92	6%	566	39%	223	15%	233	16%	354	24%
July	1,355	100%	72	5%	515	38%	204	15%	195	14%	369	27%
August	1,360	100%	73	5%	523	38%	224	16%	198	15%	342	25%
September	1,296	100%	58	4%	504	39%	224	17%	167	13%	343	26%
October	1,245	100%	61	5%	495	40%	194	16%	155	12%	340	27%
November	1,201	100%	52	4%	505	42%	163	14%	163	14%	318	26%
December	1,235	100%	101	8%	446	36%	173	14%	186	15%	329	27%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	1,143	100%	61	5%	449	39%	157	14%	153	13%	323	28%
February	1,088	100%	50	5%	413	38%	164	15%	181	17%	280	26%
March	1,168	100%	58	5%	437	37%	184	16%	176	15%	313	27%
April	1,000	100%	48	5%	379	38%	160	16%	153	15%	260	26%
May	1,079	100%	60	6%	396	37%	150	14%	179	17%	294	27%
June	1,055	100%	56	5%	391	37%	154	15%	174	16%	280	27%
July	903	100%	42	5%	360	40%	143	16%	146	16%	212	23%
August	925	100%	46	5%	331	36%	163	18%	133	14%	252	27%
September	812	100%	52	6%	296	36%	139	17%	139	17%	186	23%
October	893	100%	52	6%	360	40%	120	13%	131	15%	230	26%
November	880	100%	40	5%	352	40%	120	14%	142	16%	226	26%
December	775	100%	54	7%	292	38%	121	16%	104	13%	204	26%
<i>2018</i>												
January	873	100%	39	4%	332	38%	130	15%	147	17%	225	26%
February	765	100%	38	5%	298	39%	97	13%	138	18%	194	25%
March	842	100%	43	5%	330	39%	123	15%	131	16%	215	26%
April	750	100%	43	6%	279	37%	102	14%	284	38%	42	6%
May	844	100%	34	4%	321	38%	120	14%	353	42%	16	2%
June	691	100%	34	5%	271	39%	80	12%	284	41%	22	3%
July	653	100%	35	5%	256	39%	96	15%	266	41%	0	0%
August	690	100%	32	5%	229	33%	111	16%	318	46%	0	0%
September	555	100%	32	6%	200	36%	105	19%	218	39%	0	0%
October	658	100%	29	4%	233	35%	349	53%	47	7%	0	0%
November	585	100%	27	5%	216	37%	324	55%	18	3%	0	0%
December	593	100%	41	7%	234	39%	304	51%	14	2%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	670	100%	31	5%	561	84%	78	12%	0	0%	0	0%
February	571	100%	*****	*****	515	90%	*****	*****	0	0%	0	0%
March	577	100%	458	79%	85	15%	34	6%	0	0%	0	0%
April	107	100%	*****	*****	44	41%	*****	*****	0	0%	0	0%
May	44	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	40	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹												
<i>2010</i>												
July	957	100%	44	5%	396	41%	161	17%	149	16%	207	22%
August	1,590	100%	79	5%	678	43%	245	15%	222	14%	366	23%
September	1,824	100%	87	5%	786	43%	275	15%	231	13%	445	24%
October	2,194	100%	107	5%	945	43%	339	15%	320	15%	483	22%
November	2,422	100%	138	6%	1,060	44%	376	16%	347	14%	501	21%
December	2,621	100%	211	8%	1,113	42%	371	14%	376	14%	550	21%
<i>2011</i>												
January	2,988	100%	163	5%	1,243	42%	450	15%	443	15%	689	23%
February	3,112	100%	162	5%	1,280	41%	493	16%	471	15%	706	23%
March	3,708	100%	226	6%	1,537	41%	589	16%	556	15%	800	22%
April	3,561	100%	216	6%	1,437	40%	571	16%	541	15%	796	22%
May	3,712	100%	203	5%	1,534	41%	585	16%	518	14%	872	23%
June	3,884	100%	222	6%	1,620	42%	569	15%	587	15%	886	23%
July	3,552	100%	190	5%	1,521	43%	560	16%	484	14%	797	22%
August	3,673	100%	206	6%	1,457	40%	675	18%	516	14%	819	22%
September	3,530	100%	179	5%	1,474	42%	615	17%	482	14%	780	22%
October	3,757	100%	205	5%	1,554	41%	588	16%	526	14%	884	24%
November	3,842	100%	242	6%	1,585	41%	603	16%	550	14%	862	22%
December	3,928	100%	302	8%	1,572	40%	606	15%	525	13%	923	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>												
January	4,089	100%	250	6%	1,673	41%	612	15%	606	15%	948	23%
February	4,234	100%	231	5%	1,726	41%	675	16%	655	15%	947	22%
March	4,445	100%	239	5%	1,750	39%	728	16%	654	15%	1,074	24%
April	4,341	100%	262	6%	1,757	40%	647	15%	631	15%	1,044	24%
May	4,655	100%	248	5%	1,920	41%	726	16%	699	15%	1,062	23%
June	4,284	100%	245	6%	1,760	41%	688	16%	650	15%	941	22%
July	4,309	100%	239	6%	1,811	42%	668	16%	602	14%	989	23%
August	4,481	100%	279	6%	1,746	39%	760	17%	640	14%	1,056	24%
September	4,040	100%	233	6%	1,617	40%	655	16%	563	14%	972	24%
October	4,688	100%	255	5%	1,994	43%	663	14%	654	14%	1,122	24%
November	4,638	100%	310	7%	1,947	42%	681	15%	583	13%	1,117	24%
December	4,530	100%	365	8%	1,823	40%	663	15%	644	14%	1,035	23%
<i>2013</i>												
January	4,994	100%	307	6%	1,973	40%	759	15%	758	15%	1,197	24%
February	4,607	100%	250	5%	1,828	40%	687	15%	726	16%	1,116	24%
March	5,271	100%	286	5%	2,041	39%	812	15%	820	16%	1,312	25%
April	5,271	100%	281	5%	2,072	39%	774	15%	821	16%	1,323	25%
May	5,486	100%	273	5%	2,185	40%	825	15%	799	15%	1,404	26%
June	4,954	100%	282	6%	1,994	40%	728	15%	791	16%	1,159	23%
July	5,248	100%	299	6%	2,095	40%	800	15%	780	15%	1,274	24%
August	5,207	100%	287	6%	2,051	39%	858	16%	781	15%	1,230	24%
September	4,963	100%	250	5%	1,986	40%	792	16%	770	16%	1,165	23%
October	5,557	100%	306	6%	2,262	41%	829	15%	792	14%	1,368	25%
November	5,235	100%	306	6%	2,082	40%	770	15%	758	14%	1,319	25%
December	5,010	100%	415	8%	1,974	39%	747	15%	709	14%	1,165	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>												
January	5,337	100%	288	5%	2,131	40%	834	16%	862	16%	1,222	23%
February	5,046	100%	282	6%	2,032	40%	787	16%	767	15%	1,178	23%
March	5,785	100%	324	6%	2,348	41%	874	15%	865	15%	1,374	24%
April	6,058	100%	330	5%	2,383	39%	887	15%	936	15%	1,522	25%
May	5,982	100%	333	6%	2,337	39%	917	15%	961	16%	1,434	24%
June	5,458	100%	326	6%	2,124	39%	781	14%	879	16%	1,348	25%
July	5,527	100%	313	6%	2,213	40%	841	15%	803	15%	1,357	25%
August	5,212	100%	317	6%	2,092	40%	868	17%	743	14%	1,192	23%
September	5,107	100%	311	6%	1,944	38%	877	17%	712	14%	1,263	25%
October	5,825	100%	322	6%	2,269	39%	943	16%	856	15%	1,435	25%
November	4,969	100%	279	6%	2,011	40%	680	14%	724	15%	1,275	26%
December	5,791	100%	467	8%	2,244	39%	812	14%	814	14%	1,454	25%
<i>2015</i>												
January	5,708	100%	321	6%	2,238	39%	845	15%	858	15%	1,446	25%
February	5,237	100%	301	6%	2,081	40%	787	15%	752	14%	1,316	25%
March	6,315	100%	361	6%	2,464	39%	962	15%	923	15%	1,605	25%
April	6,216	100%	383	6%	2,392	38%	892	14%	995	16%	1,554	25%
May	5,811	100%	309	5%	2,243	39%	907	16%	920	16%	1,432	25%
June	6,085	100%	395	6%	2,354	39%	875	14%	931	15%	1,530	25%
July	5,895	100%	335	6%	2,289	39%	898	15%	889	15%	1,484	25%
August	5,531	100%	318	6%	2,162	39%	911	16%	772	14%	1,368	25%
September	5,877	100%	317	5%	2,301	39%	968	16%	845	14%	1,446	25%
October	5,741	100%	314	5%	2,283	40%	859	15%	801	14%	1,484	26%
November	4,812	100%	284	6%	1,942	40%	701	15%	703	15%	1,182	25%
December	4,947	100%	384	8%	1,935	39%	739	15%	698	14%	1,191	24%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>												
January	4,437	100%	258	6%	1,615	36%	685	15%	697	16%	1,182	27%
February	4,650	100%	265	6%	1,790	38%	691	15%	755	16%	1,149	25%
March	5,079	100%	270	5%	1,954	38%	788	16%	801	16%	1,266	25%
April	4,635	100%	233	5%	1,782	38%	655	14%	725	16%	1,240	27%
May	4,521	100%	231	5%	1,690	37%	652	14%	745	16%	1,203	27%
June	4,342	100%	214	5%	1,759	41%	595	14%	673	15%	1,101	25%
July	4,043	100%	215	5%	1,574	39%	628	16%	614	15%	1,012	25%
August	4,159	100%	192	5%	1,610	39%	654	16%	591	14%	1,112	27%
September	3,829	100%	198	5%	1,449	38%	644	17%	549	14%	989	26%
October	3,824	100%	202	5%	1,486	39%	579	15%	564	15%	993	26%
November	3,731	100%	183	5%	1,451	39%	549	15%	557	15%	991	27%
December	3,694	100%	313	8%	1,390	38%	556	15%	506	14%	929	25%
<i>2017</i>												
January	3,630	100%	218	6%	1,382	38%	560	15%	540	15%	930	26%
February	3,358	100%	177	5%	1,251	37%	465	14%	543	16%	922	27%
March	3,855	100%	195	5%	1,460	38%	578	15%	597	15%	1,025	27%
April	3,384	100%	181	5%	1,302	38%	492	15%	525	16%	884	26%
May	3,764	100%	167	4%	1,391	37%	521	14%	644	17%	1,041	28%
June	3,545	100%	182	5%	1,342	38%	508	14%	596	17%	917	26%
July	3,268	100%	181	6%	1,243	38%	507	16%	478	15%	859	26%
August	3,335	100%	171	5%	1,293	39%	515	15%	473	14%	883	26%
September	3,033	100%	174	6%	1,107	36%	494	16%	459	15%	799	26%
October	3,317	100%	187	6%	1,288	39%	476	14%	503	15%	863	26%
November	3,063	100%	156	5%	1,237	40%	434	14%	477	16%	759	25%
December	2,926	100%	224	8%	1,096	37%	403	14%	419	14%	784	27%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	3,077	100%	164	5%	1,162	38%	448	15%	446	14%	857	28%
February	2,815	100%	138	5%	1,009	36%	411	15%	470	17%	787	28%
March	3,310	100%	162	5%	1,206	36%	487	15%	544	16%	911	28%
April	3,112	100%	183	6%	1,186	38%	442	14%	1,164	37%	137	4%
May	3,308	100%	161	5%	1,271	38%	434	13%	1,357	41%	85	3%
June	2,963	100%	140	5%	1,119	38%	416	14%	1,236	42%	52	2%
July	2,715	100%	155	6%	1,038	38%	377	14%	1,145	42%	0	0%
August	3,128	100%	171	5%	1,125	36%	501	16%	1,331	43%	0	0%
September	2,517	100%	123	5%	930	37%	390	15%	1,074	43%	0	0%
October	2,913	100%	169	6%	1,055	36%	1,496	51%	193	7%	0	0%
November	2,684	100%	128	5%	994	37%	1,480	55%	82	3%	0	0%
December	2,447	100%	197	8%	898	37%	1,279	52%	73	3%	0	0%
<i>2019</i>												
January	2,716	100%	149	5%	2,335	86%	232	9%	0	0%	0	0%
February	2,519	100%	*****	*****	2,281	91%	*****	*****	0	0%	0	0%
March	2,648	100%	2,185	83%	353	13%	110	4%	0	0%	0	0%
April	414	100%	*****	*****	179	43%	*****	*****	0	0%	0	0%
May	195	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	153	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%

Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹

<i>2010</i>												
July	907	100%	43	5%	376	41%	154	17%	141	16%	193	21%
August	1,507	100%	73	5%	651	43%	229	15%	207	14%	347	23%
September	1,731	100%	81	5%	739	43%	264	15%	221	13%	426	25%
October	2,095	100%	97	5%	902	43%	323	15%	306	15%	467	22%
November	2,311	100%	134	6%	1,005	43%	353	15%	332	14%	487	21%
December	2,474	100%	200	8%	1,050	42%	350	14%	350	14%	524	21%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>												
January	2,842	100%	156	5%	1,180	42%	425	15%	425	15%	656	23%
February	2,983	100%	152	5%	1,230	41%	473	16%	454	15%	674	23%
March	3,554	100%	213	6%	1,475	42%	566	16%	525	15%	775	22%
April	3,411	100%	203	6%	1,372	40%	549	16%	522	15%	765	22%
May	3,566	100%	195	5%	1,461	41%	561	16%	498	14%	851	24%
June	3,752	100%	215	6%	1,563	42%	549	15%	565	15%	860	23%
July	3,417	100%	183	5%	1,462	43%	537	16%	464	14%	771	23%
August	3,543	100%	199	6%	1,401	40%	649	18%	495	14%	799	23%
September	3,404	100%	171	5%	1,426	42%	584	17%	464	14%	759	22%
October	3,629	100%	194	5%	1,500	41%	566	16%	513	14%	856	24%
November	3,704	100%	231	6%	1,537	41%	578	16%	529	14%	829	22%
December	3,808	100%	290	8%	1,534	40%	584	15%	508	13%	892	23%
<i>2012</i>												
January	3,939	100%	236	6%	1,602	41%	595	15%	587	15%	919	23%
February	4,086	100%	226	6%	1,664	41%	654	16%	629	15%	913	22%
March	4,328	100%	234	5%	1,703	39%	702	16%	637	15%	1,052	24%
April	4,202	100%	252	6%	1,705	41%	627	15%	608	14%	1,010	24%
May	4,525	100%	238	5%	1,859	41%	709	16%	683	15%	1,036	23%
June	4,152	100%	237	6%	1,700	41%	670	16%	632	15%	913	22%
July	4,173	100%	232	6%	1,750	42%	648	16%	579	14%	964	23%
August	4,360	100%	267	6%	1,694	39%	740	17%	623	14%	1,036	24%
September	3,915	100%	221	6%	1,571	40%	631	16%	546	14%	946	24%
October	4,555	100%	244	5%	1,950	43%	643	14%	627	14%	1,091	24%
November	4,508	100%	303	7%	1,889	42%	656	15%	572	13%	1,088	24%
December	4,413	100%	359	8%	1,769	40%	649	15%	635	14%	1,001	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>												
January	4,835	100%	293	6%	1,916	40%	730	15%	733	15%	1,163	24%
February	4,467	100%	242	5%	1,780	40%	663	15%	702	16%	1,080	24%
March	5,134	100%	273	5%	1,979	39%	797	16%	795	15%	1,290	25%
April	5,117	100%	272	5%	2,008	39%	753	15%	796	16%	1,288	25%
May	5,303	100%	261	5%	2,116	40%	795	15%	773	15%	1,358	26%
June	4,773	100%	269	6%	1,920	40%	700	15%	767	16%	1,117	23%
July	5,109	100%	290	6%	2,044	40%	776	15%	755	15%	1,244	24%
August	5,050	100%	276	5%	1,995	40%	823	16%	753	15%	1,203	24%
September	4,811	100%	241	5%	1,928	40%	766	16%	747	16%	1,129	23%
October	5,377	100%	292	5%	2,181	41%	798	15%	774	14%	1,332	25%
November	5,103	100%	296	6%	2,032	40%	756	15%	734	14%	1,285	25%
December	4,833	100%	401	8%	1,906	39%	721	15%	687	14%	1,118	23%
<i>2014</i>												
January	5,211	100%	280	5%	2,087	40%	816	16%	839	16%	1,189	23%
February	4,891	100%	271	6%	1,972	40%	761	16%	748	15%	1,139	23%
March	5,609	100%	312	6%	2,282	41%	848	15%	840	15%	1,327	24%
April	5,905	100%	320	5%	2,319	39%	861	15%	914	15%	1,491	25%
May	5,812	100%	324	6%	2,271	39%	893	15%	923	16%	1,401	24%
June	5,314	100%	317	6%	2,067	39%	758	14%	856	16%	1,316	25%
July	5,383	100%	304	6%	2,161	40%	811	15%	784	15%	1,323	25%
August	5,052	100%	305	6%	2,031	40%	835	17%	711	14%	1,170	23%
September	4,964	100%	297	6%	1,890	38%	852	17%	689	14%	1,236	25%
October	5,660	100%	312	6%	2,206	39%	907	16%	833	15%	1,402	25%
November	4,850	100%	271	6%	1,955	40%	666	14%	712	15%	1,246	26%
December	5,624	100%	453	8%	2,191	39%	783	14%	784	14%	1,413	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>												
January	5,554	100%	309	6%	2,191	39%	814	15%	832	15%	1,408	25%
February	5,073	100%	290	6%	2,018	40%	758	15%	736	15%	1,271	25%
March	6,134	100%	347	6%	2,392	39%	928	15%	900	15%	1,567	26%
April	6,033	100%	367	6%	2,324	39%	863	14%	963	16%	1,516	25%
May	5,647	100%	300	5%	2,179	39%	882	16%	901	16%	1,385	25%
June	5,912	100%	382	6%	2,291	39%	845	14%	903	15%	1,491	25%
July	5,736	100%	324	6%	2,231	39%	860	15%	873	15%	1,448	25%
August	5,394	100%	307	6%	2,111	39%	884	16%	748	14%	1,344	25%
September	5,705	100%	305	5%	2,226	39%	947	17%	822	14%	1,405	25%
October	5,601	100%	309	6%	2,223	40%	832	15%	784	14%	1,453	26%
November	4,693	100%	277	6%	1,899	40%	685	15%	684	15%	1,148	24%
December	4,841	100%	378	8%	1,892	39%	717	15%	686	14%	1,168	24%
<i>2016</i>												
January	4,335	100%	252	6%	1,570	36%	667	15%	684	16%	1,162	27%
February	4,543	100%	254	6%	1,746	38%	678	15%	742	16%	1,123	25%
March	4,962	100%	266	5%	1,904	38%	767	15%	787	16%	1,238	25%
April	4,525	100%	220	5%	1,742	38%	642	14%	705	16%	1,216	27%
May	4,436	100%	225	5%	1,658	37%	633	14%	735	17%	1,185	27%
June	4,272	100%	211	5%	1,725	40%	579	14%	664	16%	1,093	26%
July	3,961	100%	206	5%	1,542	39%	620	16%	598	15%	995	25%
August	4,097	100%	191	5%	1,579	39%	639	16%	583	14%	1,105	27%
September	3,750	100%	194	5%	1,414	38%	625	17%	538	14%	979	26%
October	3,748	100%	195	5%	1,459	39%	567	15%	554	15%	973	26%
November	3,664	100%	181	5%	1,421	39%	540	15%	543	15%	979	27%
December	3,632	100%	309	9%	1,362	38%	547	15%	501	14%	913	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	3,558	100%	213	6%	1,351	38%	551	15%	529	15%	914	26%
February	3,298	100%	173	5%	1,224	37%	457	14%	537	16%	907	28%
March	3,793	100%	191	5%	1,437	38%	564	15%	591	16%	1,010	27%
April	3,316	100%	175	5%	1,277	39%	475	14%	520	16%	869	26%
May	3,699	100%	162	4%	1,370	37%	512	14%	633	17%	1,022	28%
June	3,488	100%	182	5%	1,321	38%	495	14%	590	17%	900	26%
July	3,199	100%	177	6%	1,216	38%	496	16%	468	15%	842	26%
August	3,273	100%	168	5%	1,269	39%	505	15%	463	14%	868	27%
September	2,976	100%	172	6%	1,081	36%	485	16%	452	15%	786	26%
October	3,263	100%	183	6%	1,266	39%	471	14%	497	15%	846	26%
November	3,005	100%	152	5%	1,212	40%	425	14%	465	15%	751	25%
December	2,875	100%	220	8%	1,072	37%	391	14%	414	14%	778	27%
<i>2018</i>												
January	3,022	100%	160	5%	1,141	38%	442	15%	436	14%	843	28%
February	2,780	100%	136	5%	999	36%	405	15%	461	17%	779	28%
March	3,258	100%	159	5%	1,188	36%	481	15%	536	16%	894	27%
April	3,065	100%	179	6%	1,168	38%	436	14%	1,146	37%	136	4%
May	3,244	100%	158	5%	1,239	38%	428	13%	1,336	41%	83	3%
June	2,919	100%	139	5%	1,103	38%	411	14%	1,215	42%	51	2%
July	2,676	100%	152	6%	1,026	38%	371	14%	1,127	42%	0	0%
August	3,068	100%	168	5%	1,106	36%	485	16%	1,309	43%	0	0%
September	2,473	100%	123	5%	913	37%	381	15%	1,056	43%	0	0%
October	2,860	100%	164	6%	1,037	36%	1,468	51%	191	7%	0	0%
November	2,639	100%	124	5%	979	37%	1,455	55%	81	3%	0	0%
December	2,396	100%	191	8%	878	37%	1,255	52%	72	3%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	2,672	100%	147	6%	2,296	86%	229	9%	0	0%	0	0%
February	2,478	100%	*****	*****	2,242	90%	*****	*****	0	0%	0	0%
March	2,599	100%	2,142	82%	348	13%	109	4%	0	0%	0	0%
April	406	100%	*****	*****	175	43%	*****	*****	0	0%	0	0%
May	190	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	151	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HFReF												
<i>2016</i>												
April	3,234	100%	127	4%	1,269	39%	508	16%	531	16%	799	25%
May	4,616	100%	196	4%	1,862	40%	689	15%	786	17%	1,083	23%
June	5,044	100%	244	5%	2,015	40%	751	15%	881	17%	1,153	23%
July	5,192	100%	239	5%	2,144	41%	860	17%	767	15%	1,182	23%
August	5,506	100%	221	4%	2,250	41%	902	16%	779	14%	1,354	25%
September	5,418	100%	237	4%	2,178	40%	907	17%	748	14%	1,348	25%
October	5,539	100%	237	4%	2,302	42%	807	15%	812	15%	1,381	25%
November	5,520	100%	233	4%	2,328	42%	768	14%	803	15%	1,388	25%
December	5,736	100%	504	9%	2,168	38%	804	14%	770	13%	1,490	26%
<i>2017</i>												
January	5,636	100%	248	4%	2,213	39%	823	15%	900	16%	1,452	26%
February	5,190	100%	247	5%	2,001	39%	754	15%	865	17%	1,323	25%
March	5,914	100%	260	4%	2,242	38%	860	15%	1,009	17%	1,543	26%
April	5,371	100%	240	4%	2,118	39%	788	15%	843	16%	1,382	26%
May	5,780	100%	263	5%	2,195	38%	772	13%	987	17%	1,563	27%
June	5,541	100%	272	5%	2,133	38%	800	14%	910	16%	1,426	26%
July	5,093	100%	204	4%	1,971	39%	851	17%	773	15%	1,294	25%
August	5,501	100%	249	5%	2,097	38%	905	16%	797	14%	1,453	26%
September	5,128	100%	222	4%	1,909	37%	912	18%	769	15%	1,316	26%
October	5,654	100%	248	4%	2,268	40%	790	14%	835	15%	1,513	27%
November	5,674	100%	234	4%	2,305	41%	808	14%	863	15%	1,464	26%
December	5,350	100%	437	8%	1,968	37%	813	15%	761	14%	1,371	26%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	5,564	100%	238	4%	2,022	36%	832	15%	956	17%	1,516	27%
February	5,115	100%	247	5%	1,883	37%	746	15%	895	17%	1,344	26%
March	5,872	100%	267	5%	2,140	36%	919	16%	1,022	17%	1,524	26%
April	5,442	100%	238	4%	2,055	38%	799	15%	2,018	37%	332	6%
May	6,011	100%	261	4%	2,193	36%	857	14%	2,518	42%	182	3%
June	5,396	100%	*****	*****	1,965	36%	771	14%	2,204	41%	*****	*****
July	5,305	100%	*****	*****	2,010	38%	803	15%	2,242	42%	*****	*****
August	5,610	100%	242	4%	2,002	36%	970	17%	2,396	43%	0	0%
September	4,969	100%	212	4%	1,774	36%	866	17%	2,117	43%	0	0%
October	4,553	100%	220	5%	1,754	39%	2,150	47%	429	9%	0	0%
November	3,362	100%	163	5%	1,296	39%	1,753	52%	150	4%	0	0%
December	2,759	100%	231	8%	1,060	38%	1,349	49%	119	4%	0	0%
<i>2019</i>												
January	2,757	100%	139	5%	2,259	82%	359	13%	0	0%	0	0%
February	2,343	100%	*****	*****	2,061	88%	*****	*****	0	0%	0	0%
March	2,419	100%	1,826	75%	419	17%	174	7%	0	0%	0	0%
April	527	100%	*****	*****	244	46%	*****	*****	0	0%	0	0%
May	201	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	194	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%

Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹

<i>2016</i>												
April	2,995	100%	127	4%	1,175	39%	410	14%	489	16%	794	27%
May	4,837	100%	202	4%	1,972	41%	738	15%	772	16%	1,153	24%
June	5,480	100%	252	5%	2,243	41%	782	14%	905	17%	1,298	24%
July	5,647	100%	247	4%	2,327	41%	916	16%	827	15%	1,330	24%
August	6,494	100%	294	5%	2,627	40%	1,056	16%	909	14%	1,608	25%
September	6,208	100%	329	5%	2,467	40%	1,047	17%	889	14%	1,476	24%
October	6,899	100%	332	5%	2,927	42%	1,019	15%	959	14%	1,662	24%
November	7,348	100%	352	5%	3,181	43%	1,041	14%	1,032	14%	1,742	24%
December	7,695	100%	709	9%	2,959	38%	1,053	14%	1,031	13%	1,943	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	7,883	100%	415	5%	3,120	40%	1,116	14%	1,227	16%	2,005	25%
February	7,588	100%	392	5%	2,948	39%	1,087	14%	1,242	16%	1,919	25%
March	9,211	100%	467	5%	3,627	39%	1,326	14%	1,487	16%	2,304	25%
April	8,346	100%	417	5%	3,261	39%	1,228	15%	1,341	16%	2,099	25%
May	9,567	100%	482	5%	3,660	38%	1,355	14%	1,635	17%	2,435	25%
June	9,271	100%	484	5%	3,563	38%	1,299	14%	1,611	17%	2,314	25%
July	8,731	100%	462	5%	3,352	38%	1,450	17%	1,293	15%	2,174	25%
August	9,472	100%	461	5%	3,651	39%	1,556	16%	1,364	14%	2,440	26%
September	8,679	100%	456	5%	3,272	38%	1,420	16%	1,277	15%	2,254	26%
October	9,562	100%	509	5%	3,886	41%	1,332	14%	1,457	15%	2,378	25%
November	9,499	100%	500	5%	3,897	41%	1,318	14%	1,410	15%	2,374	25%
December	9,253	100%	791	9%	3,428	37%	1,363	15%	1,318	14%	2,353	25%
<i>2018</i>												
January	9,741	100%	500	5%	3,625	37%	1,433	15%	1,571	16%	2,612	27%
February	9,391	100%	520	6%	3,474	37%	1,385	15%	1,571	17%	2,441	26%
March	10,708	100%	509	5%	3,873	36%	1,668	16%	1,842	17%	2,816	26%
April	10,568	100%	575	5%	3,933	37%	1,554	15%	3,964	38%	542	5%
May	11,431	100%	585	5%	4,311	38%	1,615	14%	4,641	41%	279	2%
June	10,065	100%	*****	*****	3,688	37%	1,405	14%	4,160	41%	*****	*****
July	9,912	100%	*****	*****	3,646	37%	1,515	15%	4,251	43%	*****	*****
August	10,735	100%	550	5%	3,945	37%	1,730	16%	4,510	42%	0	0%
September	9,562	100%	468	5%	3,495	37%	1,580	17%	4,019	42%	0	0%
October	9,658	100%	499	5%	3,604	37%	4,760	49%	795	8%	0	0%
November	7,711	100%	383	5%	2,948	38%	4,086	53%	294	4%	0	0%
December	6,855	100%	561	8%	2,635	38%	3,422	50%	237	3%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	7,148	100%	358	5%	5,961	83%	829	12%	0	0%	0	0%
February	6,336	100%	376	6%	5,628	89%	332	5%	0	0%	0	0%
March	6,559	100%	5,104	78%	1,102	17%	353	5%	0	0%	0	0%
April	1,317	100%	707	54%	592	45%	18	1%	0	0%	0	0%
May	555	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	470	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹												
<i>2016</i>												
April	2,807	100%	116	4%	1,111	40%	385	14%	454	16%	741	26%
May	4,578	100%	185	4%	1,860	41%	695	15%	732	16%	1,106	24%
June	5,165	100%	221	4%	2,124	41%	730	14%	845	16%	1,245	24%
July	5,343	100%	227	4%	2,207	41%	865	16%	775	15%	1,269	24%
August	6,181	100%	271	4%	2,506	41%	996	16%	872	14%	1,536	25%
September	5,906	100%	306	5%	2,362	40%	993	17%	843	14%	1,402	24%
October	6,607	100%	310	5%	2,808	43%	982	15%	913	14%	1,594	24%
November	7,003	100%	331	5%	3,038	43%	983	14%	984	14%	1,667	24%
December	7,361	100%	669	9%	2,824	38%	1,016	14%	987	13%	1,865	25%
<i>2017</i>												
January	7,559	100%	393	5%	2,997	40%	1,063	14%	1,182	16%	1,924	25%
February	7,278	100%	370	5%	2,832	39%	1,046	14%	1,186	16%	1,844	25%
March	8,822	100%	448	5%	3,463	39%	1,274	14%	1,435	16%	2,202	25%
April	7,998	100%	403	5%	3,118	39%	1,166	15%	1,290	16%	2,021	25%
May	9,206	100%	459	5%	3,550	39%	1,294	14%	1,562	17%	2,341	25%
June	8,902	100%	463	5%	3,430	39%	1,235	14%	1,554	17%	2,220	25%
July	8,386	100%	437	5%	3,227	38%	1,374	16%	1,250	15%	2,098	25%
August	9,120	100%	433	5%	3,531	39%	1,492	16%	1,329	15%	2,335	26%
September	8,344	100%	437	5%	3,147	38%	1,361	16%	1,230	15%	2,169	26%
October	9,218	100%	480	5%	3,752	41%	1,286	14%	1,393	15%	2,307	25%
November	9,148	100%	473	5%	3,750	41%	1,269	14%	1,369	15%	2,287	25%
December	8,950	100%	760	8%	3,317	37%	1,318	15%	1,273	14%	2,282	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	9,402	100%	483	5%	3,508	37%	1,381	15%	1,517	16%	2,513	27%
February	9,030	100%	489	5%	3,328	37%	1,340	15%	1,521	17%	2,352	26%
March	10,359	100%	493	5%	3,756	36%	1,613	16%	1,779	17%	2,718	26%
April	10,240	100%	555	5%	3,819	37%	1,500	15%	3,844	38%	522	5%
May	11,058	100%	552	5%	4,179	38%	1,566	14%	4,489	41%	272	2%
June	9,725	100%	*****	*****	3,560	37%	1,350	14%	4,030	41%	*****	*****
July	9,584	100%	*****	*****	3,507	37%	1,464	15%	4,129	43%	*****	*****
August	10,415	100%	525	5%	3,812	37%	1,689	16%	4,389	42%	0	0%
September	9,224	100%	449	5%	3,376	37%	1,521	16%	3,878	42%	0	0%
October	9,340	100%	477	5%	3,491	37%	4,601	49%	771	8%	0	0%
November	7,503	100%	373	5%	2,870	38%	3,973	53%	287	4%	0	0%
December	6,648	100%	546	8%	2,545	38%	3,327	50%	230	3%	0	0%
<i>2019</i>												
January	6,976	100%	348	5%	5,815	83%	813	12%	0	0%	0	0%
February	6,160	100%	362	6%	5,480	89%	318	5%	0	0%	0	0%
March	6,406	100%	4,982	78%	1,076	17%	348	5%	0	0%	0	0%
April	1,288	100%	688	53%	582	45%	18	1%	0	0%	0	0%
May	542	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	457	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%

183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis

Spironolactone episode after HFrEF

<i>2016</i>												
April	2,418	100%	92	4%	882	36%	389	16%	403	17%	652	27%
May	3,187	100%	140	4%	1,196	38%	476	15%	544	17%	831	26%
June	3,298	100%	172	5%	1,233	37%	489	15%	570	17%	834	25%
July	3,418	100%	172	5%	1,275	37%	578	17%	532	16%	861	25%
August	3,656	100%	158	4%	1,397	38%	614	17%	521	14%	966	26%
September	3,753	100%	174	5%	1,395	37%	656	17%	508	14%	1,020	27%
October	3,895	100%	184	5%	1,520	39%	582	15%	584	15%	1,025	26%
November	4,036	100%	179	4%	1,604	40%	578	14%	595	15%	1,080	27%
December	4,235	100%	393	9%	1,502	35%	604	14%	577	14%	1,159	27%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	4,232	100%	202	5%	1,587	38%	620	15%	664	16%	1,159	27%
February	3,968	100%	203	5%	1,434	36%	600	15%	672	17%	1,059	27%
March	4,608	100%	223	5%	1,676	36%	682	15%	788	17%	1,239	27%
April	4,142	100%	201	5%	1,571	38%	649	16%	630	15%	1,091	26%
May	4,540	100%	223	5%	1,677	37%	614	14%	776	17%	1,250	28%
June	4,364	100%	222	5%	1,626	37%	645	15%	700	16%	1,171	27%
July	4,024	100%	172	4%	1,550	39%	674	17%	598	15%	1,030	26%
August	4,323	100%	212	5%	1,603	37%	716	17%	606	14%	1,186	27%
September	4,099	100%	191	5%	1,464	36%	745	18%	619	15%	1,080	26%
October	4,509	100%	205	5%	1,764	39%	624	14%	676	15%	1,240	28%
November	4,620	100%	184	4%	1,837	40%	673	15%	698	15%	1,228	27%
December	4,343	100%	364	8%	1,565	36%	652	15%	620	14%	1,142	26%
<i>2018</i>												
January	4,587	100%	194	4%	1,648	36%	691	15%	783	17%	1,271	28%
February	4,233	100%	206	5%	1,534	36%	638	15%	735	17%	1,120	26%
March	4,863	100%	232	5%	1,740	36%	771	16%	832	17%	1,288	26%
April	4,495	100%	203	5%	1,694	38%	656	15%	1,670	37%	272	6%
May	5,081	100%	219	4%	1,817	36%	735	14%	2,159	42%	151	3%
June	4,495	100%	*****	*****	1,604	36%	649	14%	1,858	41%	*****	*****
July	4,392	100%	*****	*****	1,634	37%	675	15%	1,867	43%	*****	*****
August	4,683	100%	203	4%	1,658	35%	822	18%	2,000	43%	0	0%
September	4,085	100%	188	5%	1,433	35%	708	17%	1,756	43%	0	0%
October	3,764	100%	196	5%	1,409	37%	1,799	48%	360	10%	0	0%
November	2,853	100%	150	5%	1,087	38%	1,496	52%	120	4%	0	0%
December	2,457	100%	209	9%	938	38%	1,204	49%	106	4%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	2,538	100%	130	5%	2,084	82%	324	13%	0	0%	0	0%
February	2,175	100%	*****	*****	1,911	88%	*****	*****	0	0%	0	0%
March	2,244	100%	1,692	75%	386	17%	166	7%	0	0%	0	0%
April	488	100%	*****	*****	228	47%	*****	*****	0	0%	0	0%
May	180	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	187	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹												
<i>2016</i>												
April	2,352	100%	101	4%	884	38%	333	14%	382	16%	652	28%
May	3,454	100%	152	4%	1,341	39%	534	15%	530	15%	897	26%
June	3,903	100%	202	5%	1,539	39%	550	14%	642	16%	970	25%
July	4,010	100%	193	5%	1,558	39%	655	16%	576	14%	1,028	26%
August	4,669	100%	220	5%	1,817	39%	739	16%	652	14%	1,241	27%
September	4,520	100%	259	6%	1,674	37%	765	17%	673	15%	1,149	25%
October	5,176	100%	276	5%	2,098	41%	767	15%	729	14%	1,306	25%
November	5,539	100%	288	5%	2,283	41%	807	15%	775	14%	1,386	25%
December	5,927	100%	558	9%	2,220	37%	822	14%	795	13%	1,532	26%
<i>2017</i>												
January	6,180	100%	357	6%	2,395	39%	864	14%	951	15%	1,613	26%
February	6,120	100%	331	5%	2,309	38%	858	14%	1,002	16%	1,620	26%
March	7,397	100%	398	5%	2,832	38%	1,085	15%	1,174	16%	1,908	26%
April	6,704	100%	343	5%	2,576	38%	1,003	15%	1,045	16%	1,737	26%
May	7,849	100%	423	5%	2,888	37%	1,117	14%	1,350	17%	2,071	26%
June	7,593	100%	415	5%	2,862	38%	1,079	14%	1,299	17%	1,938	26%
July	7,165	100%	405	6%	2,672	37%	1,191	17%	1,054	15%	1,843	26%
August	7,827	100%	401	5%	2,924	37%	1,314	17%	1,111	14%	2,077	27%
September	7,261	100%	414	6%	2,656	37%	1,201	17%	1,051	14%	1,939	27%
October	7,929	100%	441	6%	3,154	40%	1,093	14%	1,222	15%	2,019	25%
November	7,997	100%	439	5%	3,204	40%	1,123	14%	1,176	15%	2,055	26%
December	7,811	100%	670	9%	2,864	37%	1,162	15%	1,098	14%	2,017	26%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	8,300	100%	442	5%	3,032	37%	1,241	15%	1,332	16%	2,253	27%
February	7,943	100%	455	6%	2,877	36%	1,186	15%	1,325	17%	2,100	26%
March	9,228	100%	452	5%	3,269	35%	1,453	16%	1,591	17%	2,463	27%
April	9,143	100%	520	6%	3,366	37%	1,355	15%	3,434	38%	468	5%
May	9,977	100%	532	5%	3,717	37%	1,415	14%	4,064	41%	249	2%
June	8,816	100%	*****	*****	3,210	36%	1,251	14%	3,621	41%	*****	*****
July	8,633	100%	*****	*****	3,156	37%	1,334	15%	3,678	43%	*****	*****
August	9,393	100%	483	5%	3,413	36%	1,518	16%	3,979	42%	0	0%
September	8,309	100%	419	5%	2,958	36%	1,384	17%	3,548	43%	0	0%
October	8,559	100%	456	5%	3,141	37%	4,265	50%	697	8%	0	0%
November	7,014	100%	359	5%	2,645	38%	3,748	53%	262	4%	0	0%
December	6,407	100%	529	8%	2,421	38%	3,233	50%	224	3%	0	0%
<i>2019</i>												
January	6,812	100%	352	5%	5,679	83%	781	11%	0	0%	0	0%
February	6,094	100%	364	6%	5,416	89%	314	5%	0	0%	0	0%
March	6,359	100%	4,949	78%	1,066	17%	344	5%	0	0%	0	0%
April	1,270	100%	683	54%	568	45%	19	1%	0	0%	0	0%
May	539	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	457	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%

Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹

<i>2016</i>												
April	2,191	100%	92	4%	830	38%	310	14%	352	16%	607	28%
May	3,244	100%	135	4%	1,257	39%	495	15%	499	15%	858	26%
June	3,670	100%	174	5%	1,453	40%	514	14%	595	16%	934	25%
July	3,780	100%	178	5%	1,467	39%	614	16%	539	14%	982	26%
August	4,436	100%	201	5%	1,731	39%	694	16%	625	14%	1,185	27%
September	4,282	100%	240	6%	1,595	37%	722	17%	635	15%	1,090	25%
October	4,946	100%	256	5%	2,007	41%	733	15%	696	14%	1,254	25%
November	5,258	100%	270	5%	2,165	41%	766	15%	732	14%	1,325	25%
December	5,663	100%	530	9%	2,114	37%	792	14%	756	13%	1,471	26%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	5,916	100%	338	6%	2,294	39%	823	14%	915	15%	1,546	26%
February	5,858	100%	314	5%	2,211	38%	825	14%	953	16%	1,555	27%
March	7,077	100%	380	5%	2,711	38%	1,039	15%	1,132	16%	1,815	26%
April	6,409	100%	330	5%	2,456	38%	952	15%	1,000	16%	1,671	26%
May	7,527	100%	404	5%	2,791	37%	1,065	14%	1,282	17%	1,985	26%
June	7,273	100%	401	6%	2,738	38%	1,027	14%	1,248	17%	1,859	26%
July	6,872	100%	381	6%	2,565	37%	1,125	16%	1,016	15%	1,785	26%
August	7,517	100%	378	5%	2,819	38%	1,257	17%	1,078	14%	1,985	26%
September	6,978	100%	396	6%	2,547	37%	1,152	17%	1,014	15%	1,869	27%
October	7,633	100%	417	5%	3,034	40%	1,053	14%	1,172	15%	1,957	26%
November	7,671	100%	414	5%	3,065	40%	1,078	14%	1,141	15%	1,973	26%
December	7,548	100%	644	9%	2,766	37%	1,124	15%	1,058	14%	1,956	26%
<i>2018</i>												
January	8,004	100%	429	5%	2,928	37%	1,193	15%	1,289	16%	2,165	27%
February	7,634	100%	430	6%	2,759	36%	1,138	15%	1,283	17%	2,024	27%
March	8,921	100%	438	5%	3,172	36%	1,404	16%	1,537	17%	2,370	27%
April	8,837	100%	504	6%	3,254	37%	1,309	15%	3,320	38%	450	5%
May	9,641	100%	505	5%	3,595	37%	1,364	14%	3,934	41%	243	3%
June	8,514	100%	*****	*****	3,101	36%	1,199	14%	3,505	41%	*****	*****
July	8,335	100%	*****	*****	3,031	36%	1,286	15%	3,569	43%	*****	*****
August	9,106	100%	460	5%	3,293	36%	1,486	16%	3,867	42%	0	0%
September	8,015	100%	402	5%	2,857	36%	1,328	17%	3,428	43%	0	0%
October	8,276	100%	439	5%	3,031	37%	4,127	50%	679	8%	0	0%
November	6,815	100%	348	5%	2,565	38%	3,646	53%	256	4%	0	0%
December	6,213	100%	514	8%	2,342	38%	3,140	51%	217	3%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	6,651	100%	343	5%	5,543	83%	765	12%	0	0%	0	0%
February	5,925	100%	349	6%	5,275	89%	301	5%	0	0%	0	0%
March	6,211	100%	4,831	78%	1,040	17%	340	5%	0	0%	0	0%
April	1,244	100%	666	54%	559	45%	19	2%	0	0%	0	0%
May	527	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	444	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018												
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HFref												
<i>2010</i>												
July	1,214	100%	63	5%	547	45%	201	17%	162	13%	241	20%
August	2,008	100%	100	5%	914	46%	292	15%	310	15%	392	20%
September	2,367	100%	89	4%	1,068	45%	393	17%	342	14%	475	20%
October	2,498	100%	124	5%	1,118	45%	365	15%	384	15%	507	20%
November	2,562	100%	152	6%	1,187	46%	338	13%	342	13%	543	21%
December	2,910	100%	219	8%	1,277	44%	431	15%	402	14%	581	20%
<i>2011</i>												
January	2,990	100%	156	5%	1,238	41%	468	16%	462	15%	666	22%
February	2,877	100%	145	5%	1,213	42%	447	16%	454	16%	618	21%
March	3,339	100%	153	5%	1,411	42%	530	16%	494	15%	751	22%
April	2,914	100%	152	5%	1,224	42%	454	16%	420	14%	664	23%
May	3,085	100%	152	5%	1,327	43%	458	15%	476	15%	672	22%
June	2,968	100%	127	4%	1,273	43%	459	15%	450	15%	659	22%
July	2,705	100%	118	4%	1,171	43%	455	17%	350	13%	611	23%
August	2,854	100%	159	6%	1,203	42%	459	16%	442	15%	591	21%
September	2,921	100%	141	5%	1,224	42%	522	18%	388	13%	646	22%
October	2,946	100%	166	6%	1,286	44%	444	15%	399	14%	651	22%
November	2,982	100%	155	5%	1,270	43%	478	16%	418	14%	661	22%
December	3,120	100%	234	8%	1,357	43%	435	14%	449	14%	645	21%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>												
January	3,152	100%	173	5%	1,292	41%	478	15%	475	15%	734	23%
February	3,102	100%	168	5%	1,280	41%	511	16%	476	15%	667	22%
March	3,200	100%	145	5%	1,267	40%	523	16%	516	16%	749	23%
April	3,135	100%	169	5%	1,253	40%	481	15%	503	16%	729	23%
May	3,316	100%	172	5%	1,377	42%	495	15%	511	15%	761	23%
June	2,999	100%	159	5%	1,254	42%	471	16%	434	14%	681	23%
July	2,843	100%	149	5%	1,158	41%	492	17%	430	15%	614	22%
August	3,173	100%	158	5%	1,274	40%	519	16%	488	15%	734	23%
September	2,935	100%	149	5%	1,202	41%	496	17%	411	14%	677	23%
October	3,441	100%	146	4%	1,468	43%	501	15%	484	14%	842	24%
November	3,395	100%	159	5%	1,450	43%	500	15%	500	15%	786	23%
December	3,350	100%	300	9%	1,355	40%	488	15%	476	14%	731	22%
<i>2013</i>												
January	3,563	100%	173	5%	1,395	39%	561	16%	545	15%	889	25%
February	3,333	100%	159	5%	1,332	40%	524	16%	520	16%	798	24%
March	3,566	100%	154	4%	1,368	38%	616	17%	580	16%	848	24%
April	3,566	100%	156	4%	1,422	40%	550	15%	576	16%	862	24%
May	3,650	100%	161	4%	1,468	40%	549	15%	547	15%	925	25%
June	3,263	100%	163	5%	1,260	39%	511	16%	541	17%	788	24%
July	3,446	100%	171	5%	1,326	38%	577	17%	530	15%	842	24%
August	3,592	100%	185	5%	1,475	41%	563	16%	535	15%	834	23%
September	3,389	100%	163	5%	1,363	40%	571	17%	504	15%	788	23%
October	3,973	100%	202	5%	1,679	42%	570	14%	556	14%	966	24%
November	3,619	100%	174	5%	1,450	40%	574	16%	540	15%	881	24%
December	3,636	100%	290	8%	1,409	39%	538	15%	479	13%	920	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>												
January	3,796	100%	187	5%	1,486	39%	579	15%	607	16%	937	25%
February	3,577	100%	166	5%	1,436	40%	541	15%	593	17%	841	24%
March	3,978	100%	165	4%	1,590	40%	650	16%	607	15%	966	24%
April	4,083	100%	209	5%	1,631	40%	587	14%	627	15%	1,029	25%
May	4,078	100%	180	4%	1,628	40%	597	15%	650	16%	1,023	25%
June	3,607	100%	185	5%	1,456	40%	530	15%	570	16%	866	24%
July	3,751	100%	173	5%	1,476	39%	603	16%	546	15%	953	25%
August	3,650	100%	185	5%	1,423	39%	612	17%	544	15%	886	24%
September	3,761	100%	184	5%	1,426	38%	668	18%	540	14%	943	25%
October	4,084	100%	170	4%	1,627	40%	644	16%	603	15%	1,040	25%
November	3,764	100%	205	5%	1,601	43%	543	14%	535	14%	880	23%
December	4,086	100%	312	8%	1,578	39%	579	14%	568	14%	1,049	26%
<i>2015</i>												
January	4,041	100%	193	5%	1,563	39%	579	14%	667	17%	1,039	26%
February	3,763	100%	181	5%	1,488	40%	536	14%	619	16%	939	25%
March	4,426	100%	231	5%	1,695	38%	690	16%	663	15%	1,147	26%
April	4,317	100%	189	4%	1,713	40%	642	15%	708	16%	1,065	25%
May	4,081	100%	191	5%	1,566	38%	605	15%	666	16%	1,053	26%
June	4,194	100%	202	5%	1,601	38%	605	14%	649	15%	1,137	27%
July	4,150	100%	186	4%	1,576	38%	668	16%	628	15%	1,092	26%
August	3,903	100%	187	5%	1,500	38%	626	16%	565	14%	1,025	26%
September	4,095	100%	193	5%	1,541	38%	695	17%	579	14%	1,087	27%
October	4,719	100%	207	4%	1,879	40%	692	15%	720	15%	1,221	26%
November	4,634	100%	197	4%	1,918	41%	665	14%	683	15%	1,171	25%
December	5,022	100%	375	7%	1,953	39%	708	14%	723	14%	1,263	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>												
January	4,702	100%	219	5%	1,802	38%	714	15%	800	17%	1,167	25%
February	4,921	100%	236	5%	1,855	38%	737	15%	797	16%	1,296	26%
March	5,300	100%	244	5%	2,003	38%	779	15%	850	16%	1,424	27%
April	5,023	100%	203	4%	1,895	38%	786	16%	843	17%	1,296	26%
May	5,079	100%	237	5%	1,923	38%	744	15%	848	17%	1,327	26%
June	4,799	100%	248	5%	1,791	37%	710	15%	832	17%	1,218	25%
July	4,799	100%	227	5%	1,827	38%	781	16%	755	16%	1,209	25%
August	5,034	100%	213	4%	1,899	38%	876	17%	726	14%	1,320	26%
September	4,985	100%	218	4%	1,872	38%	868	17%	691	14%	1,336	27%
October	5,093	100%	231	5%	2,005	39%	735	14%	736	14%	1,386	27%
November	5,094	100%	222	4%	2,055	40%	722	14%	746	15%	1,349	26%
December	5,296	100%	472	9%	1,879	35%	728	14%	741	14%	1,476	28%
<i>2017</i>												
January	5,255	100%	244	5%	1,997	38%	772	15%	816	16%	1,426	27%
February	4,836	100%	248	5%	1,756	36%	719	15%	815	17%	1,298	27%
March	5,597	100%	252	5%	2,063	37%	833	15%	944	17%	1,505	27%
April	4,980	100%	229	5%	1,916	38%	742	15%	782	16%	1,311	26%
May	5,424	100%	249	5%	1,994	37%	737	14%	926	17%	1,518	28%
June	5,208	100%	251	5%	1,987	38%	742	14%	857	16%	1,371	26%
July	4,799	100%	205	4%	1,812	38%	800	17%	737	15%	1,245	26%
August	5,184	100%	238	5%	1,911	37%	862	17%	753	15%	1,420	27%
September	4,870	100%	219	4%	1,749	36%	875	18%	729	15%	1,298	27%
October	5,334	100%	247	5%	2,093	39%	742	14%	772	14%	1,480	28%
November	5,436	100%	233	4%	2,161	40%	790	15%	825	15%	1,427	26%
December	5,079	100%	414	8%	1,837	36%	758	15%	727	14%	1,343	26%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	5,377	100%	225	4%	1,934	36%	815	15%	909	17%	1,494	28%
February	4,986	100%	249	5%	1,808	36%	720	14%	897	18%	1,312	26%
March	5,587	100%	259	5%	2,001	36%	864	15%	972	17%	1,491	27%
April	5,202	100%	233	4%	1,937	37%	768	15%	1,939	37%	325	6%
May	5,782	100%	258	4%	2,092	36%	825	14%	2,431	42%	176	3%
June	5,188	100%	*****	*****	1,875	36%	722	14%	2,148	41%	*****	*****
July	5,097	100%	*****	*****	1,905	37%	775	15%	2,169	43%	*****	*****
August	5,420	100%	240	4%	1,902	35%	938	17%	2,340	43%	0	0%
September	4,777	100%	217	5%	1,674	35%	824	17%	2,062	43%	0	0%
October	4,417	100%	220	5%	1,674	38%	2,098	47%	425	10%	0	0%
November	3,341	100%	170	5%	1,263	38%	1,753	52%	155	5%	0	0%
December	2,815	100%	239	8%	1,076	38%	1,375	49%	125	4%	0	0%
<i>2019</i>												
January	2,857	100%	140	5%	2,341	82%	376	13%	0	0%	0	0%
February	2,439	100%	129	5%	2,150	88%	160	7%	0	0%	0	0%
March	2,523	100%	1,907	76%	437	17%	179	7%	0	0%	0	0%
April	540	100%	277	51%	252	47%	11	2%	0	0%	0	0%
May	212	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	204	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%

Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹

2010

July	1,265	100%	53	4%	565	45%	205	16%	184	15%	258	20%
August	2,273	100%	96	4%	1,030	45%	352	15%	302	13%	493	22%
September	2,698	100%	110	4%	1,222	45%	412	15%	340	13%	614	23%
October	3,142	100%	135	4%	1,402	45%	483	15%	463	15%	659	21%
November	3,434	100%	168	5%	1,620	47%	492	14%	484	14%	670	20%
December	3,577	100%	263	7%	1,574	44%	490	14%	504	14%	746	21%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>												
January	3,905	100%	198	5%	1,688	43%	580	15%	587	15%	852	22%
February	3,960	100%	186	5%	1,681	42%	627	16%	602	15%	864	22%
March	4,617	100%	270	6%	1,978	43%	715	15%	693	15%	961	21%
April	4,390	100%	246	6%	1,840	42%	677	15%	665	15%	962	22%
May	4,507	100%	227	5%	1,929	43%	697	15%	624	14%	1,030	23%
June	4,651	100%	248	5%	2,010	43%	683	15%	686	15%	1,024	22%
July	4,280	100%	217	5%	1,867	44%	668	16%	581	14%	947	22%
August	4,419	100%	234	5%	1,825	41%	784	18%	624	14%	952	22%
September	4,253	100%	201	5%	1,824	43%	733	17%	577	14%	918	22%
October	4,449	100%	229	5%	1,856	42%	705	16%	639	14%	1,020	23%
November	4,577	100%	266	6%	1,948	43%	697	15%	643	14%	1,023	22%
December	4,654	100%	350	8%	1,892	41%	711	15%	641	14%	1,060	23%
<i>2012</i>												
January	4,805	100%	272	6%	2,012	42%	713	15%	723	15%	1,085	23%
February	4,877	100%	250	5%	2,022	41%	770	16%	765	16%	1,070	22%
March	5,144	100%	276	5%	2,071	40%	837	16%	749	15%	1,211	24%
April	4,958	100%	283	6%	2,030	41%	726	15%	732	15%	1,187	24%
May	5,363	100%	274	5%	2,245	42%	819	15%	829	15%	1,196	22%
June	4,876	100%	264	5%	2,044	42%	758	16%	751	15%	1,059	22%
July	4,891	100%	265	5%	2,081	43%	747	15%	689	14%	1,109	23%
August	5,162	100%	303	6%	2,067	40%	866	17%	730	14%	1,196	23%
September	4,634	100%	258	6%	1,889	41%	753	16%	642	14%	1,092	24%
October	5,352	100%	280	5%	2,313	43%	754	14%	732	14%	1,273	24%
November	5,293	100%	332	6%	2,257	43%	779	15%	680	13%	1,245	24%
December	5,176	100%	416	8%	2,093	40%	760	15%	723	14%	1,184	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>												
January	5,698	100%	347	6%	2,279	40%	856	15%	868	15%	1,348	24%
February	5,187	100%	268	5%	2,089	40%	777	15%	814	16%	1,239	24%
March	5,829	100%	312	5%	2,292	39%	890	15%	900	15%	1,435	25%
April	5,916	100%	300	5%	2,378	40%	871	15%	924	16%	1,443	24%
May	6,093	100%	297	5%	2,442	40%	914	15%	904	15%	1,536	25%
June	5,461	100%	301	6%	2,212	41%	807	15%	866	16%	1,275	23%
July	5,901	100%	320	5%	2,407	41%	885	15%	870	15%	1,419	24%
August	5,926	100%	316	5%	2,355	40%	985	17%	877	15%	1,393	24%
September	5,642	100%	278	5%	2,291	41%	901	16%	858	15%	1,314	23%
October	6,260	100%	328	5%	2,593	41%	929	15%	912	15%	1,498	24%
November	5,915	100%	328	6%	2,394	40%	865	15%	855	14%	1,473	25%
December	5,667	100%	461	8%	2,275	40%	827	15%	815	14%	1,289	23%
<i>2014</i>												
January	6,015	100%	311	5%	2,419	40%	955	16%	968	16%	1,362	23%
February	5,682	100%	299	5%	2,306	41%	877	15%	866	15%	1,334	23%
March	6,432	100%	342	5%	2,640	41%	977	15%	971	15%	1,502	23%
April	6,718	100%	353	5%	2,663	40%	985	15%	1,052	16%	1,665	25%
May	6,679	100%	351	5%	2,640	40%	1,011	15%	1,069	16%	1,608	24%
June	6,100	100%	348	6%	2,417	40%	881	14%	962	16%	1,492	24%
July	6,208	100%	327	5%	2,548	41%	948	15%	893	14%	1,492	24%
August	5,820	100%	341	6%	2,359	41%	961	17%	834	14%	1,325	23%
September	5,735	100%	333	6%	2,206	38%	989	17%	803	14%	1,404	24%
October	6,497	100%	343	5%	2,605	40%	1,047	16%	937	14%	1,565	24%
November	5,648	100%	307	5%	2,329	41%	767	14%	825	15%	1,420	25%
December	6,476	100%	503	8%	2,577	40%	889	14%	902	14%	1,605	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>												
January	6,290	100%	343	5%	2,497	40%	923	15%	952	15%	1,575	25%
February	5,829	100%	327	6%	2,335	40%	874	15%	845	14%	1,448	25%
March	6,911	100%	386	6%	2,735	40%	1,038	15%	1,009	15%	1,743	25%
April	6,882	100%	408	6%	2,666	39%	998	15%	1,107	16%	1,703	25%
May	6,429	100%	334	5%	2,512	39%	989	15%	1,031	16%	1,563	24%
June	6,710	100%	419	6%	2,653	40%	945	14%	1,027	15%	1,666	25%
July	6,510	100%	354	5%	2,557	39%	995	15%	977	15%	1,627	25%
August	6,184	100%	341	6%	2,455	40%	1,009	16%	856	14%	1,523	25%
September	6,526	100%	335	5%	2,573	39%	1,079	17%	947	15%	1,592	24%
October	7,292	100%	370	5%	2,966	41%	1,070	15%	1,015	14%	1,871	26%
November	6,821	100%	384	6%	2,753	40%	989	14%	1,005	15%	1,690	25%
December	7,389	100%	581	8%	2,865	39%	1,081	15%	1,032	14%	1,830	25%
<i>2016</i>												
January	7,014	100%	372	5%	2,614	37%	1,089	16%	1,096	16%	1,843	26%
February	7,449	100%	424	6%	2,901	39%	1,090	15%	1,196	16%	1,838	25%
March	8,399	100%	425	5%	3,225	38%	1,256	15%	1,340	16%	2,153	26%
April	7,859	100%	410	5%	2,960	38%	1,116	14%	1,274	16%	2,099	27%
May	8,012	100%	404	5%	3,063	38%	1,171	15%	1,291	16%	2,083	26%
June	7,856	100%	394	5%	3,101	39%	1,099	14%	1,282	16%	1,980	25%
July	7,517	100%	378	5%	2,903	39%	1,219	16%	1,110	15%	1,907	25%
August	8,109	100%	380	5%	3,149	39%	1,320	16%	1,144	14%	2,116	26%
September	7,625	100%	398	5%	2,864	38%	1,303	17%	1,119	15%	1,941	25%
October	8,084	100%	427	5%	3,262	40%	1,192	15%	1,128	14%	2,075	26%
November	8,222	100%	427	5%	3,383	41%	1,144	14%	1,171	14%	2,097	26%
December	8,655	100%	783	9%	3,199	37%	1,248	14%	1,175	14%	2,250	26%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	8,645	100%	476	6%	3,295	38%	1,253	14%	1,333	15%	2,288	26%
February	8,327	100%	408	5%	3,185	38%	1,185	14%	1,354	16%	2,195	26%
March	9,846	100%	503	5%	3,758	38%	1,427	14%	1,575	16%	2,583	26%
April	8,942	100%	454	5%	3,423	38%	1,319	15%	1,433	16%	2,313	26%
May	10,135	100%	493	5%	3,776	37%	1,438	14%	1,714	17%	2,714	27%
June	9,817	100%	520	5%	3,700	38%	1,386	14%	1,690	17%	2,521	26%
July	9,135	100%	491	5%	3,459	38%	1,505	16%	1,347	15%	2,333	26%
August	9,833	100%	479	5%	3,744	38%	1,625	17%	1,395	14%	2,590	26%
September	9,066	100%	484	5%	3,355	37%	1,497	17%	1,311	14%	2,419	27%
October	9,970	100%	530	5%	3,996	40%	1,371	14%	1,526	15%	2,547	26%
November	9,833	100%	497	5%	4,008	41%	1,357	14%	1,464	15%	2,507	25%
December	9,599	100%	807	8%	3,508	37%	1,393	15%	1,361	14%	2,530	26%
<i>2018</i>												
January	10,116	100%	506	5%	3,766	37%	1,495	15%	1,600	16%	2,749	27%
February	9,626	100%	521	5%	3,541	37%	1,438	15%	1,610	17%	2,516	26%
March	11,038	100%	518	5%	3,960	36%	1,686	15%	1,875	17%	2,999	27%
April	10,873	100%	576	5%	4,075	37%	1,576	14%	4,088	38%	558	5%
May	11,739	100%	582	5%	4,415	38%	1,618	14%	4,827	41%	297	3%
June	10,356	100%	*****	*****	3,787	37%	1,440	14%	4,319	42%	*****	*****
July	10,098	100%	*****	*****	3,731	37%	1,500	15%	4,342	43%	*****	*****
August	11,062	100%	569	5%	4,039	37%	1,775	16%	4,679	42%	0	0%
September	9,716	100%	471	5%	3,509	36%	1,597	16%	4,139	43%	0	0%
October	10,079	100%	504	5%	3,746	37%	4,995	50%	834	8%	0	0%
November	8,275	100%	397	5%	3,123	38%	4,435	54%	320	4%	0	0%
December	7,422	100%	606	8%	2,811	38%	3,735	50%	270	4%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	7,869	100%	399	5%	6,577	84%	893	11%	0	0%	0	0%
February	7,056	100%	399	6%	6,279	89%	378	5%	0	0%	0	0%
March	7,383	100%	5,786	78%	1,197	16%	400	5%	0	0%	0	0%
April	1,477	100%	787	53%	670	45%	20	1%	0	0%	0	0%
May	632	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	537	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹												
<i>2010</i>												
July	1,201	100%	52	4%	537	45%	196	16%	175	15%	241	20%
August	2,169	100%	90	4%	994	46%	331	15%	285	13%	469	22%
September	2,570	100%	103	4%	1,154	45%	397	15%	326	13%	590	23%
October	3,000	100%	124	4%	1,339	45%	460	15%	441	15%	636	21%
November	3,296	100%	160	5%	1,556	47%	464	14%	464	14%	652	20%
December	3,394	100%	252	7%	1,491	44%	465	14%	472	14%	714	21%
<i>2011</i>												
January	3,728	100%	187	5%	1,613	43%	546	15%	567	15%	815	22%
February	3,804	100%	177	5%	1,618	43%	603	16%	582	15%	824	22%
March	4,431	100%	252	6%	1,903	43%	690	16%	655	15%	931	21%
April	4,217	100%	231	5%	1,764	42%	652	15%	643	15%	927	22%
May	4,336	100%	218	5%	1,845	43%	665	15%	600	14%	1,008	23%
June	4,490	100%	237	5%	1,943	43%	660	15%	658	15%	992	22%
July	4,125	100%	207	5%	1,794	43%	647	16%	560	14%	917	22%
August	4,260	100%	227	5%	1,749	41%	755	18%	601	14%	928	22%
September	4,105	100%	193	5%	1,766	43%	698	17%	559	14%	889	22%
October	4,300	100%	216	5%	1,800	42%	676	16%	620	14%	988	23%
November	4,424	100%	258	6%	1,894	43%	670	15%	619	14%	983	22%
December	4,512	100%	335	7%	1,846	41%	687	15%	620	14%	1,024	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>												
January	4,639	100%	259	6%	1,934	42%	693	15%	698	15%	1,055	23%
February	4,709	100%	244	5%	1,954	41%	745	16%	733	16%	1,033	22%
March	5,004	100%	269	5%	2,017	40%	806	16%	728	15%	1,184	24%
April	4,801	100%	268	6%	1,976	41%	702	15%	706	15%	1,149	24%
May	5,215	100%	262	5%	2,181	42%	798	15%	806	15%	1,168	22%
June	4,732	100%	256	5%	1,977	42%	738	16%	731	15%	1,030	22%
July	4,742	100%	257	5%	2,013	42%	722	15%	666	14%	1,084	23%
August	5,032	100%	291	6%	2,006	40%	845	17%	713	14%	1,177	23%
September	4,492	100%	248	6%	1,831	41%	723	16%	626	14%	1,064	24%
October	5,196	100%	267	5%	2,255	43%	732	14%	708	14%	1,234	24%
November	5,155	100%	325	6%	2,198	43%	753	15%	663	13%	1,216	24%
December	5,036	100%	406	8%	2,028	40%	742	15%	714	14%	1,146	23%
<i>2013</i>												
January	5,520	100%	331	6%	2,213	40%	823	15%	842	15%	1,311	24%
February	5,031	100%	258	5%	2,036	40%	749	15%	785	16%	1,203	24%
March	5,679	100%	298	5%	2,230	39%	872	15%	871	15%	1,408	25%
April	5,739	100%	290	5%	2,300	40%	847	15%	897	16%	1,405	24%
May	5,896	100%	286	5%	2,368	40%	881	15%	875	15%	1,486	25%
June	5,277	100%	291	6%	2,138	41%	780	15%	841	16%	1,227	23%
July	5,724	100%	311	5%	2,344	41%	848	15%	839	15%	1,382	24%
August	5,751	100%	304	5%	2,292	40%	945	16%	847	15%	1,363	24%
September	5,466	100%	268	5%	2,218	41%	871	16%	834	15%	1,275	23%
October	6,065	100%	313	5%	2,502	41%	897	15%	889	15%	1,464	24%
November	5,759	100%	317	6%	2,338	41%	849	15%	825	14%	1,430	25%
December	5,480	100%	446	8%	2,207	40%	796	15%	792	14%	1,239	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>												
January	5,871	100%	303	5%	2,367	40%	929	16%	943	16%	1,329	23%
February	5,508	100%	288	5%	2,239	41%	846	15%	846	15%	1,289	23%
March	6,244	100%	331	5%	2,566	41%	948	15%	946	15%	1,453	23%
April	6,543	100%	341	5%	2,595	40%	953	15%	1,027	16%	1,627	25%
May	6,473	100%	340	5%	2,555	39%	979	15%	1,030	16%	1,569	24%
June	5,948	100%	339	6%	2,352	40%	860	14%	937	16%	1,460	25%
July	6,043	100%	314	5%	2,490	41%	911	15%	871	14%	1,457	24%
August	5,644	100%	330	6%	2,294	41%	920	16%	803	14%	1,297	23%
September	5,582	100%	318	6%	2,151	39%	960	17%	782	14%	1,371	25%
October	6,315	100%	332	5%	2,535	40%	1,010	16%	910	14%	1,528	24%
November	5,515	100%	298	5%	2,267	41%	753	14%	812	15%	1,385	25%
December	6,284	100%	489	8%	2,511	40%	861	14%	866	14%	1,557	25%
<i>2015</i>												
January	6,116	100%	327	5%	2,442	40%	890	15%	924	15%	1,533	25%
February	5,641	100%	312	6%	2,258	40%	842	15%	826	15%	1,403	25%
March	6,713	100%	369	5%	2,662	40%	999	15%	984	15%	1,699	25%
April	6,700	100%	392	6%	2,599	39%	969	14%	1,078	16%	1,662	25%
May	6,252	100%	322	5%	2,444	39%	964	15%	1,007	16%	1,515	24%
June	6,526	100%	409	6%	2,583	40%	909	14%	999	15%	1,626	25%
July	6,340	100%	344	5%	2,494	39%	955	15%	963	15%	1,584	25%
August	6,034	100%	327	5%	2,399	40%	982	16%	832	14%	1,494	25%
September	6,340	100%	322	5%	2,501	39%	1,051	17%	921	15%	1,545	24%
October	7,104	100%	366	5%	2,887	41%	1,035	15%	994	14%	1,822	26%
November	6,627	100%	365	6%	2,680	40%	963	15%	970	15%	1,649	25%
December	7,174	100%	557	8%	2,792	39%	1,044	15%	1,005	14%	1,776	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>												
January	6,808	100%	364	5%	2,532	37%	1,058	16%	1,062	16%	1,792	26%
February	7,237	100%	399	6%	2,833	39%	1,058	15%	1,166	16%	1,781	25%
March	8,165	100%	414	5%	3,149	39%	1,215	15%	1,299	16%	2,088	26%
April	7,616	100%	383	5%	2,883	38%	1,090	14%	1,222	16%	2,038	27%
May	7,834	100%	390	5%	2,988	38%	1,134	14%	1,276	16%	2,046	26%
June	7,637	100%	376	5%	3,026	40%	1,053	14%	1,239	16%	1,943	25%
July	7,329	100%	362	5%	2,832	39%	1,189	16%	1,081	15%	1,865	25%
August	7,885	100%	365	5%	3,064	39%	1,272	16%	1,115	14%	2,069	26%
September	7,385	100%	385	5%	2,784	38%	1,258	17%	1,079	15%	1,879	25%
October	7,848	100%	404	5%	3,170	40%	1,160	15%	1,098	14%	2,016	26%
November	7,973	100%	416	5%	3,277	41%	1,109	14%	1,136	14%	2,035	26%
December	8,386	100%	757	9%	3,097	37%	1,214	14%	1,134	14%	2,184	26%
<i>2017</i>												
January	8,413	100%	461	5%	3,210	38%	1,213	14%	1,302	15%	2,227	26%
February	8,084	100%	397	5%	3,086	38%	1,151	14%	1,317	16%	2,133	26%
March	9,552	100%	491	5%	3,635	38%	1,387	15%	1,536	16%	2,503	26%
April	8,660	100%	433	5%	3,316	38%	1,266	15%	1,388	16%	2,257	26%
May	9,846	100%	476	5%	3,688	37%	1,399	14%	1,661	17%	2,622	27%
June	9,522	100%	507	5%	3,602	38%	1,329	14%	1,649	17%	2,435	26%
July	8,854	100%	469	5%	3,358	38%	1,447	16%	1,315	15%	2,265	26%
August	9,523	100%	456	5%	3,635	38%	1,569	16%	1,368	14%	2,495	26%
September	8,795	100%	469	5%	3,262	37%	1,450	16%	1,276	15%	2,338	27%
October	9,681	100%	500	5%	3,880	40%	1,337	14%	1,478	15%	2,486	26%
November	9,542	100%	481	5%	3,870	41%	1,324	14%	1,431	15%	2,436	26%
December	9,334	100%	781	8%	3,418	37%	1,350	14%	1,323	14%	2,462	26%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	9,831	100%	492	5%	3,666	37%	1,451	15%	1,561	16%	2,661	27%
February	9,330	100%	501	5%	3,424	37%	1,393	15%	1,569	17%	2,443	26%
March	10,738	100%	501	5%	3,865	36%	1,643	15%	1,821	17%	2,908	27%
April	10,579	100%	557	5%	3,972	38%	1,530	14%	3,978	38%	542	5%
May	11,419	100%	553	5%	4,296	38%	1,584	14%	4,694	41%	292	3%
June	10,064	100%	*****	*****	3,683	37%	1,388	14%	4,205	42%	*****	*****
July	9,822	100%	*****	*****	3,615	37%	1,460	15%	4,236	43%	*****	*****
August	10,780	100%	546	5%	3,924	36%	1,737	16%	4,573	42%	0	0%
September	9,425	100%	459	5%	3,407	36%	1,543	16%	4,016	43%	0	0%
October	9,808	100%	487	5%	3,649	37%	4,860	50%	812	8%	0	0%
November	8,077	100%	390	5%	3,055	38%	4,320	53%	312	4%	0	0%
December	7,237	100%	592	8%	2,735	38%	3,646	50%	264	4%	0	0%
<i>2019</i>												
January	7,711	100%	388	5%	6,444	84%	879	11%	0	0%	0	0%
February	6,893	100%	389	6%	6,138	89%	366	5%	0	0%	0	0%
March	7,227	100%	5,661	78%	1,172	16%	394	5%	0	0%	0	0%
April	1,447	100%	768	53%	659	46%	20	1%	0	0%	0	0%
May	619	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	521	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis												
Spironolactone episode after HFrEF												
<i>2010</i>												
July	911	100%	50	5%	393	43%	151	17%	117	13%	200	22%
August	1,340	100%	70	5%	581	43%	191	14%	211	16%	287	21%
September	1,565	100%	65	4%	642	41%	269	17%	240	15%	349	22%
October	1,675	100%	85	5%	719	43%	242	14%	261	16%	368	22%
November	1,758	100%	118	7%	768	44%	236	13%	239	14%	397	23%
December	2,156	100%	165	8%	873	40%	336	16%	316	15%	466	22%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>												
January	2,211	100%	115	5%	864	39%	356	16%	338	15%	538	24%
February	2,198	100%	115	5%	898	41%	356	16%	345	16%	484	22%
March	2,585	100%	115	4%	1,059	41%	415	16%	393	15%	603	23%
April	2,244	100%	133	6%	900	40%	351	16%	311	14%	549	24%
May	2,396	100%	127	5%	982	41%	375	16%	384	16%	528	22%
June	2,282	100%	103	5%	926	41%	368	16%	340	15%	545	24%
July	2,076	100%	95	5%	852	41%	367	18%	279	13%	483	23%
August	2,207	100%	126	6%	907	41%	358	16%	343	16%	473	21%
September	2,290	100%	122	5%	931	41%	400	17%	314	14%	523	23%
October	2,313	100%	133	6%	979	42%	341	15%	310	13%	550	24%
November	2,378	100%	134	6%	958	40%	403	17%	340	14%	543	23%
December	2,511	100%	203	8%	1,072	43%	358	14%	357	14%	521	21%
<i>2012</i>												
January	2,555	100%	147	6%	1,010	40%	412	16%	383	15%	603	24%
February	2,541	100%	145	6%	1,025	40%	430	17%	380	15%	561	22%
March	2,618	100%	125	5%	1,010	39%	440	17%	413	16%	630	24%
April	2,563	100%	139	5%	1,021	40%	397	15%	401	16%	605	24%
May	2,729	100%	149	5%	1,118	41%	407	15%	424	16%	631	23%
June	2,475	100%	134	5%	1,017	41%	393	16%	355	14%	576	23%
July	2,345	100%	127	5%	955	41%	394	17%	350	15%	519	22%
August	2,584	100%	129	5%	1,012	39%	413	16%	411	16%	619	24%
September	2,364	100%	130	5%	936	40%	411	17%	328	14%	559	24%
October	2,832	100%	131	5%	1,209	43%	386	14%	391	14%	715	25%
November	2,821	100%	144	5%	1,167	41%	427	15%	406	14%	677	24%
December	2,818	100%	249	9%	1,117	40%	422	15%	401	14%	629	22%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>												
January	3,018	100%	147	5%	1,162	39%	469	16%	459	15%	781	26%
February	2,758	100%	134	5%	1,083	39%	431	16%	427	15%	683	25%
March	3,046	100%	137	4%	1,144	38%	525	17%	502	16%	738	24%
April	3,061	100%	129	4%	1,183	39%	471	15%	510	17%	768	25%
May	3,072	100%	131	4%	1,212	39%	470	15%	446	15%	813	26%
June	2,745	100%	137	5%	1,032	38%	431	16%	454	17%	691	25%
July	2,919	100%	155	5%	1,095	38%	493	17%	449	15%	727	25%
August	2,990	100%	158	5%	1,204	40%	461	15%	450	15%	717	24%
September	2,767	100%	136	5%	1,091	39%	475	17%	401	14%	664	24%
October	3,355	100%	179	5%	1,363	41%	493	15%	464	14%	856	26%
November	3,109	100%	161	5%	1,217	39%	485	16%	469	15%	777	25%
December	3,044	100%	243	8%	1,152	38%	454	15%	404	13%	791	26%
<i>2014</i>												
January	3,228	100%	153	5%	1,224	38%	506	16%	526	16%	819	25%
February	3,035	100%	147	5%	1,199	40%	463	15%	493	16%	733	24%
March	3,455	100%	146	4%	1,353	39%	575	17%	527	15%	854	25%
April	3,545	100%	182	5%	1,401	40%	515	15%	548	15%	899	25%
May	3,512	100%	158	4%	1,366	39%	520	15%	568	16%	900	26%
June	3,083	100%	167	5%	1,224	40%	451	15%	484	16%	757	25%
July	3,143	100%	141	4%	1,192	38%	516	16%	457	15%	837	27%
August	3,078	100%	169	5%	1,182	38%	511	17%	453	15%	763	25%
September	3,128	100%	162	5%	1,166	37%	559	18%	447	14%	794	25%
October	3,445	100%	139	4%	1,336	39%	545	16%	518	15%	907	26%
November	3,129	100%	180	6%	1,297	41%	450	14%	450	14%	752	24%
December	3,483	100%	262	8%	1,322	38%	502	14%	474	14%	923	27%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>												
January	3,485	100%	170	5%	1,313	38%	507	15%	581	17%	914	26%
February	3,209	100%	165	5%	1,258	39%	429	13%	536	17%	821	26%
March	3,824	100%	191	5%	1,415	37%	613	16%	577	15%	1,028	27%
April	3,728	100%	168	5%	1,438	39%	561	15%	618	17%	943	25%
May	3,509	100%	168	5%	1,309	37%	539	15%	574	16%	919	26%
June	3,556	100%	182	5%	1,338	38%	521	15%	539	15%	976	27%
July	3,525	100%	159	5%	1,290	37%	579	16%	545	15%	952	27%
August	3,289	100%	166	5%	1,233	37%	555	17%	466	14%	869	26%
September	3,472	100%	166	5%	1,274	37%	585	17%	499	14%	948	27%
October	3,969	100%	187	5%	1,534	39%	574	14%	613	15%	1,061	27%
November	3,842	100%	169	4%	1,554	40%	578	15%	548	14%	993	26%
December	4,170	100%	313	8%	1,565	38%	596	14%	607	15%	1,089	26%
<i>2016</i>												
January	3,948	100%	195	5%	1,470	37%	599	15%	663	17%	1,021	26%
February	4,187	100%	208	5%	1,550	37%	627	15%	664	16%	1,138	27%
March	4,532	100%	210	5%	1,676	37%	699	15%	721	16%	1,226	27%
April	4,279	100%	171	4%	1,566	37%	692	16%	717	17%	1,133	26%
May	4,316	100%	205	5%	1,587	37%	646	15%	724	17%	1,154	27%
June	4,088	100%	225	6%	1,502	37%	599	15%	710	17%	1,052	26%
July	4,032	100%	196	5%	1,489	37%	655	16%	633	16%	1,059	26%
August	4,198	100%	188	4%	1,563	37%	725	17%	598	14%	1,124	27%
September	4,183	100%	188	4%	1,535	37%	729	17%	572	14%	1,159	28%
October	4,255	100%	205	5%	1,629	38%	625	15%	625	15%	1,171	28%
November	4,340	100%	190	4%	1,708	39%	626	14%	641	15%	1,175	27%
December	4,500	100%	406	9%	1,561	35%	630	14%	632	14%	1,271	28%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	4,466	100%	219	5%	1,653	37%	659	15%	681	15%	1,254	28%
February	4,186	100%	221	5%	1,485	35%	640	15%	710	17%	1,130	27%
March	4,853	100%	227	5%	1,752	36%	741	15%	823	17%	1,310	27%
April	4,269	100%	205	5%	1,595	37%	666	16%	659	15%	1,144	27%
May	4,647	100%	228	5%	1,661	36%	651	14%	805	17%	1,302	28%
June	4,478	100%	223	5%	1,648	37%	649	14%	739	17%	1,219	27%
July	4,107	100%	185	5%	1,544	38%	687	17%	618	15%	1,073	26%
August	4,417	100%	214	5%	1,583	36%	733	17%	637	14%	1,250	28%
September	4,153	100%	200	5%	1,457	35%	751	18%	626	15%	1,119	27%
October	4,559	100%	216	5%	1,769	39%	633	14%	666	15%	1,275	28%
November	4,679	100%	195	4%	1,825	39%	694	15%	717	15%	1,248	27%
December	4,368	100%	361	8%	1,555	36%	647	15%	632	14%	1,173	27%
<i>2018</i>												
January	4,652	100%	199	4%	1,636	35%	708	15%	787	17%	1,322	28%
February	4,309	100%	215	5%	1,551	36%	639	15%	766	18%	1,138	26%
March	4,865	100%	235	5%	1,712	35%	768	16%	832	17%	1,318	27%
April	4,494	100%	207	5%	1,663	37%	658	15%	1,690	38%	276	6%
May	5,114	100%	221	4%	1,812	35%	745	15%	2,185	43%	151	3%
June	4,486	100%	*****	*****	1,598	36%	635	14%	1,868	42%	*****	*****
July	4,390	100%	*****	*****	1,623	37%	668	15%	1,879	43%	*****	*****
August	4,677	100%	208	4%	1,619	35%	828	18%	2,022	43%	0	0%
September	4,087	100%	195	5%	1,420	35%	700	17%	1,772	43%	0	0%
October	3,810	100%	202	5%	1,397	37%	1,841	48%	370	10%	0	0%
November	2,939	100%	156	5%	1,098	37%	1,557	53%	128	4%	0	0%
December	2,576	100%	221	9%	976	38%	1,265	49%	114	4%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	2,699	100%	135	5%	2,214	82%	350	13%	0	0%	0	0%
February	2,310	100%	121	5%	2,038	88%	151	7%	0	0%	0	0%
March	2,382	100%	1,805	76%	406	17%	171	7%	0	0%	0	0%
April	513	100%	262	51%	240	47%	11	2%	0	0%	0	0%
May	196	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	197	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹												
<i>2010</i>												
July	957	100%	44	5%	396	41%	161	17%	149	16%	207	22%
August	1,590	100%	79	5%	678	43%	245	15%	222	14%	366	23%
September	1,824	100%	87	5%	786	43%	275	15%	231	13%	445	24%
October	2,194	100%	107	5%	945	43%	339	15%	320	15%	483	22%
November	2,422	100%	138	6%	1,060	44%	376	16%	347	14%	501	21%
December	2,621	100%	211	8%	1,113	42%	371	14%	376	14%	550	21%
<i>2011</i>												
January	2,988	100%	163	5%	1,243	42%	450	15%	443	15%	689	23%
February	3,112	100%	162	5%	1,280	41%	493	16%	471	15%	706	23%
March	3,708	100%	226	6%	1,537	41%	589	16%	556	15%	800	22%
April	3,561	100%	216	6%	1,437	40%	571	16%	541	15%	796	22%
May	3,712	100%	203	5%	1,534	41%	585	16%	518	14%	872	23%
June	3,884	100%	222	6%	1,620	42%	569	15%	587	15%	886	23%
July	3,552	100%	190	5%	1,521	43%	560	16%	484	14%	797	22%
August	3,673	100%	206	6%	1,457	40%	675	18%	516	14%	819	22%
September	3,530	100%	179	5%	1,474	42%	615	17%	482	14%	780	22%
October	3,757	100%	205	5%	1,554	41%	588	16%	526	14%	884	24%
November	3,842	100%	242	6%	1,585	41%	603	16%	550	14%	862	22%
December	3,928	100%	302	8%	1,572	40%	606	15%	525	13%	923	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>												
January	4,089	100%	250	6%	1,673	41%	612	15%	606	15%	948	23%
February	4,234	100%	231	5%	1,726	41%	675	16%	655	15%	947	22%
March	4,445	100%	239	5%	1,750	39%	728	16%	654	15%	1,074	24%
April	4,341	100%	262	6%	1,757	40%	647	15%	631	15%	1,044	24%
May	4,655	100%	248	5%	1,920	41%	726	16%	699	15%	1,062	23%
June	4,284	100%	245	6%	1,760	41%	688	16%	650	15%	941	22%
July	4,309	100%	239	6%	1,811	42%	668	16%	602	14%	989	23%
August	4,481	100%	279	6%	1,746	39%	760	17%	640	14%	1,056	24%
September	4,040	100%	233	6%	1,617	40%	655	16%	563	14%	972	24%
October	4,688	100%	255	5%	1,994	43%	663	14%	654	14%	1,122	24%
November	4,638	100%	310	7%	1,947	42%	681	15%	583	13%	1,117	24%
December	4,530	100%	365	8%	1,823	40%	663	15%	644	14%	1,035	23%
<i>2013</i>												
January	4,994	100%	307	6%	1,973	40%	759	15%	758	15%	1,197	24%
February	4,607	100%	250	5%	1,828	40%	687	15%	726	16%	1,116	24%
March	5,271	100%	286	5%	2,041	39%	812	15%	820	16%	1,312	25%
April	5,271	100%	281	5%	2,072	39%	774	15%	821	16%	1,323	25%
May	5,486	100%	273	5%	2,185	40%	825	15%	799	15%	1,404	26%
June	4,954	100%	282	6%	1,994	40%	728	15%	791	16%	1,159	23%
July	5,248	100%	299	6%	2,095	40%	800	15%	780	15%	1,274	24%
August	5,207	100%	287	6%	2,051	39%	858	16%	781	15%	1,230	24%
September	4,963	100%	250	5%	1,986	40%	792	16%	770	16%	1,165	23%
October	5,557	100%	306	6%	2,262	41%	829	15%	792	14%	1,368	25%
November	5,235	100%	306	6%	2,082	40%	770	15%	758	14%	1,319	25%
December	5,010	100%	415	8%	1,974	39%	747	15%	709	14%	1,165	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>												
January	5,337	100%	288	5%	2,131	40%	834	16%	862	16%	1,222	23%
February	5,046	100%	282	6%	2,032	40%	787	16%	767	15%	1,178	23%
March	5,785	100%	324	6%	2,348	41%	874	15%	865	15%	1,374	24%
April	6,058	100%	330	5%	2,383	39%	887	15%	936	15%	1,522	25%
May	5,982	100%	333	6%	2,337	39%	917	15%	961	16%	1,434	24%
June	5,458	100%	326	6%	2,124	39%	781	14%	879	16%	1,348	25%
July	5,527	100%	313	6%	2,213	40%	841	15%	803	15%	1,357	25%
August	5,212	100%	317	6%	2,092	40%	868	17%	743	14%	1,192	23%
September	5,107	100%	311	6%	1,944	38%	877	17%	712	14%	1,263	25%
October	5,825	100%	322	6%	2,269	39%	943	16%	856	15%	1,435	25%
November	4,969	100%	279	6%	2,011	40%	680	14%	724	15%	1,275	26%
December	5,791	100%	467	8%	2,244	39%	812	14%	814	14%	1,454	25%
<i>2015</i>												
January	5,708	100%	321	6%	2,238	39%	845	15%	858	15%	1,446	25%
February	5,237	100%	301	6%	2,081	40%	787	15%	752	14%	1,316	25%
March	6,315	100%	361	6%	2,464	39%	962	15%	923	15%	1,605	25%
April	6,216	100%	383	6%	2,392	38%	892	14%	995	16%	1,554	25%
May	5,811	100%	309	5%	2,243	39%	907	16%	920	16%	1,432	25%
June	6,085	100%	395	6%	2,354	39%	875	14%	931	15%	1,530	25%
July	5,895	100%	335	6%	2,289	39%	898	15%	889	15%	1,484	25%
August	5,531	100%	318	6%	2,162	39%	911	16%	772	14%	1,368	25%
September	5,877	100%	317	5%	2,301	39%	968	16%	845	14%	1,446	25%
October	6,612	100%	342	5%	2,634	40%	984	15%	926	14%	1,726	26%
November	6,041	100%	358	6%	2,405	40%	883	15%	881	15%	1,514	25%
December	6,582	100%	514	8%	2,525	38%	979	15%	912	14%	1,652	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>												
January	6,255	100%	345	6%	2,282	36%	995	16%	977	16%	1,656	26%
February	6,693	100%	390	6%	2,572	38%	995	15%	1,070	16%	1,666	25%
March	7,644	100%	402	5%	2,892	38%	1,160	15%	1,206	16%	1,984	26%
April	7,095	100%	371	5%	2,629	37%	1,023	14%	1,153	16%	1,919	27%
May	7,267	100%	370	5%	2,769	38%	1,060	15%	1,172	16%	1,896	26%
June	7,134	100%	373	5%	2,795	39%	999	14%	1,154	16%	1,813	25%
July	6,777	100%	345	5%	2,587	38%	1,089	16%	996	15%	1,760	26%
August	7,240	100%	347	5%	2,798	39%	1,154	16%	1,030	14%	1,911	26%
September	6,809	100%	369	5%	2,513	37%	1,156	17%	1,011	15%	1,760	26%
October	7,241	100%	398	5%	2,862	40%	1,077	15%	1,026	14%	1,878	26%
November	7,323	100%	388	5%	2,934	40%	1,040	14%	1,050	14%	1,911	26%
December	7,713	100%	693	9%	2,833	37%	1,124	15%	1,054	14%	2,009	26%
<i>2017</i>												
January	7,721	100%	451	6%	2,913	38%	1,110	14%	1,188	15%	2,059	27%
February	7,496	100%	384	5%	2,818	38%	1,050	14%	1,225	16%	2,019	27%
March	8,832	100%	464	5%	3,318	38%	1,302	15%	1,406	16%	2,342	27%
April	7,936	100%	413	5%	3,019	38%	1,169	15%	1,251	16%	2,084	26%
May	9,109	100%	459	5%	3,320	36%	1,298	14%	1,561	17%	2,471	27%
June	8,782	100%	480	5%	3,260	37%	1,254	14%	1,507	17%	2,281	26%
July	8,160	100%	453	6%	3,045	37%	1,340	16%	1,191	15%	2,131	26%
August	8,813	100%	445	5%	3,292	37%	1,456	17%	1,244	14%	2,376	27%
September	8,134	100%	457	6%	2,954	36%	1,348	17%	1,167	14%	2,208	27%
October	8,894	100%	483	5%	3,504	39%	1,221	14%	1,367	15%	2,319	26%
November	8,807	100%	453	5%	3,510	40%	1,225	14%	1,322	15%	2,297	26%
December	8,572	100%	714	8%	3,107	36%	1,261	15%	1,207	14%	2,283	27%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>												
January	9,120	100%	459	5%	3,337	37%	1,362	15%	1,453	16%	2,509	28%
February	8,606	100%	472	5%	3,103	36%	1,311	15%	1,426	17%	2,294	27%
March	10,041	100%	486	5%	3,551	35%	1,534	15%	1,709	17%	2,761	27%
April	9,842	100%	543	6%	3,627	37%	1,441	15%	3,730	38%	501	5%
May	10,695	100%	552	5%	3,986	37%	1,481	14%	4,398	41%	278	3%
June	9,432	100%	*****	*****	3,423	36%	1,323	14%	3,931	42%	*****	*****
July	9,152	100%	*****	*****	3,369	37%	1,369	15%	3,917	43%	*****	*****
August	10,061	100%	517	5%	3,645	36%	1,618	16%	4,281	43%	0	0%
September	8,758	100%	431	5%	3,102	35%	1,446	17%	3,779	43%	0	0%
October	9,246	100%	478	5%	3,374	36%	4,638	50%	756	8%	0	0%
November	7,744	100%	379	5%	2,904	38%	4,170	54%	291	4%	0	0%
December	7,080	100%	586	8%	2,649	37%	3,588	51%	257	4%	0	0%
<i>2019</i>												
January	7,626	100%	398	5%	6,373	84%	855	11%	0	0%	0	0%
February	6,878	100%	387	6%	6,128	89%	363	5%	0	0%	0	0%
March	7,246	100%	5,680	78%	1,172	16%	394	5%	0	0%	0	0%
April	1,435	100%	766	53%	649	45%	20	1%	0	0%	0	0%
May	618	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	529	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%

Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹

2010

July	907	100%	43	5%	376	41%	154	17%	141	16%	193	21%
August	1,507	100%	73	5%	651	43%	229	15%	207	14%	347	23%
September	1,731	100%	81	5%	739	43%	264	15%	221	13%	426	25%
October	2,095	100%	97	5%	902	43%	323	15%	306	15%	467	22%
November	2,311	100%	134	6%	1,005	43%	353	15%	332	14%	487	21%
December	2,474	100%	200	8%	1,050	42%	350	14%	350	14%	524	21%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>												
January	2,842	100%	156	5%	1,180	42%	425	15%	425	15%	656	23%
February	2,983	100%	152	5%	1,230	41%	473	16%	454	15%	674	23%
March	3,554	100%	213	6%	1,475	42%	566	16%	525	15%	775	22%
April	3,411	100%	203	6%	1,372	40%	549	16%	522	15%	765	22%
May	3,566	100%	195	5%	1,461	41%	561	16%	498	14%	851	24%
June	3,752	100%	215	6%	1,563	42%	549	15%	565	15%	860	23%
July	3,417	100%	183	5%	1,462	43%	537	16%	464	14%	771	23%
August	3,543	100%	199	6%	1,401	40%	649	18%	495	14%	799	23%
September	3,404	100%	171	5%	1,426	42%	584	17%	464	14%	759	22%
October	3,629	100%	194	5%	1,500	41%	566	16%	513	14%	856	24%
November	3,704	100%	231	6%	1,537	41%	578	16%	529	14%	829	22%
December	3,808	100%	290	8%	1,534	40%	584	15%	508	13%	892	23%
<i>2012</i>												
January	3,939	100%	236	6%	1,602	41%	595	15%	587	15%	919	23%
February	4,086	100%	226	6%	1,664	41%	654	16%	629	15%	913	22%
March	4,328	100%	234	5%	1,703	39%	702	16%	637	15%	1,052	24%
April	4,202	100%	252	6%	1,705	41%	627	15%	608	14%	1,010	24%
May	4,525	100%	238	5%	1,859	41%	709	16%	683	15%	1,036	23%
June	4,152	100%	237	6%	1,700	41%	670	16%	632	15%	913	22%
July	4,173	100%	232	6%	1,750	42%	648	16%	579	14%	964	23%
August	4,360	100%	267	6%	1,694	39%	740	17%	623	14%	1,036	24%
September	3,915	100%	221	6%	1,571	40%	631	16%	546	14%	946	24%
October	4,555	100%	244	5%	1,950	43%	643	14%	627	14%	1,091	24%
November	4,508	100%	303	7%	1,889	42%	656	15%	572	13%	1,088	24%
December	4,413	100%	359	8%	1,769	40%	649	15%	635	14%	1,001	23%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>												
January	4,835	100%	293	6%	1,916	40%	730	15%	733	15%	1,163	24%
February	4,467	100%	242	5%	1,780	40%	663	15%	702	16%	1,080	24%
March	5,134	100%	273	5%	1,979	39%	797	16%	795	15%	1,290	25%
April	5,117	100%	272	5%	2,008	39%	753	15%	796	16%	1,288	25%
May	5,303	100%	261	5%	2,116	40%	795	15%	773	15%	1,358	26%
June	4,773	100%	269	6%	1,920	40%	700	15%	767	16%	1,117	23%
July	5,109	100%	290	6%	2,044	40%	776	15%	755	15%	1,244	24%
August	5,050	100%	276	5%	1,995	40%	823	16%	753	15%	1,203	24%
September	4,811	100%	241	5%	1,928	40%	766	16%	747	16%	1,129	23%
October	5,377	100%	292	5%	2,181	41%	798	15%	774	14%	1,332	25%
November	5,103	100%	296	6%	2,032	40%	756	15%	734	14%	1,285	25%
December	4,833	100%	401	8%	1,906	39%	721	15%	687	14%	1,118	23%
<i>2014</i>												
January	5,211	100%	280	5%	2,087	40%	816	16%	839	16%	1,189	23%
February	4,891	100%	271	6%	1,972	40%	761	16%	748	15%	1,139	23%
March	5,609	100%	312	6%	2,282	41%	848	15%	840	15%	1,327	24%
April	5,905	100%	320	5%	2,319	39%	861	15%	914	15%	1,491	25%
May	5,812	100%	324	6%	2,271	39%	893	15%	923	16%	1,401	24%
June	5,314	100%	317	6%	2,067	39%	758	14%	856	16%	1,316	25%
July	5,383	100%	304	6%	2,161	40%	811	15%	784	15%	1,323	25%
August	5,052	100%	305	6%	2,031	40%	835	17%	711	14%	1,170	23%
September	4,964	100%	297	6%	1,890	38%	852	17%	689	14%	1,236	25%
October	5,660	100%	312	6%	2,206	39%	907	16%	833	15%	1,402	25%
November	4,850	100%	271	6%	1,955	40%	666	14%	712	15%	1,246	26%
December	5,624	100%	453	8%	2,191	39%	783	14%	784	14%	1,413	25%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>												
January	5,554	100%	309	6%	2,191	39%	814	15%	832	15%	1,408	25%
February	5,073	100%	290	6%	2,018	40%	758	15%	736	15%	1,271	25%
March	6,134	100%	347	6%	2,392	39%	928	15%	900	15%	1,567	26%
April	6,033	100%	367	6%	2,324	39%	863	14%	963	16%	1,516	25%
May	5,647	100%	300	5%	2,179	39%	882	16%	901	16%	1,385	25%
June	5,912	100%	382	6%	2,291	39%	845	14%	903	15%	1,491	25%
July	5,736	100%	324	6%	2,231	39%	860	15%	873	15%	1,448	25%
August	5,394	100%	307	6%	2,111	39%	884	16%	748	14%	1,344	25%
September	5,705	100%	305	5%	2,226	39%	947	17%	822	14%	1,405	25%
October	6,428	100%	337	5%	2,558	40%	947	15%	905	14%	1,681	26%
November	5,869	100%	342	6%	2,342	40%	862	15%	850	14%	1,473	25%
December	6,389	100%	496	8%	2,457	38%	946	15%	885	14%	1,605	25%
<i>2016</i>												
January	6,074	100%	338	6%	2,201	36%	968	16%	948	16%	1,619	27%
February	6,492	100%	368	6%	2,507	39%	962	15%	1,043	16%	1,612	25%
March	7,434	100%	390	5%	2,827	38%	1,122	15%	1,172	16%	1,923	26%
April	6,869	100%	350	5%	2,554	37%	996	14%	1,107	16%	1,862	27%
May	7,100	100%	357	5%	2,695	38%	1,026	14%	1,158	16%	1,864	26%
June	6,940	100%	356	5%	2,730	39%	960	14%	1,116	16%	1,778	26%
July	6,594	100%	332	5%	2,516	38%	1,059	16%	966	15%	1,721	26%
August	7,050	100%	333	5%	2,722	39%	1,116	16%	1,007	14%	1,872	27%
September	6,591	100%	356	5%	2,434	37%	1,114	17%	978	15%	1,709	26%
October	7,023	100%	376	5%	2,779	40%	1,042	15%	999	14%	1,827	26%
November	7,098	100%	377	5%	2,840	40%	1,013	14%	1,014	14%	1,854	26%
December	7,477	100%	674	9%	2,743	37%	1,092	15%	1,016	14%	1,952	26%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>												
January	7,507	100%	434	6%	2,836	38%	1,075	14%	1,157	15%	2,005	27%
February	7,270	100%	374	5%	2,725	37%	1,020	14%	1,190	16%	1,961	27%
March	8,568	100%	452	5%	3,216	38%	1,260	15%	1,374	16%	2,266	26%
April	7,689	100%	398	5%	2,930	38%	1,123	15%	1,208	16%	2,030	26%
May	8,834	100%	444	5%	3,239	37%	1,258	14%	1,506	17%	2,387	27%
June	8,511	100%	472	6%	3,163	37%	1,203	14%	1,466	17%	2,207	26%
July	7,900	100%	432	5%	2,952	37%	1,286	16%	1,157	15%	2,073	26%
August	8,523	100%	425	5%	3,193	37%	1,399	16%	1,220	14%	2,286	27%
September	7,896	100%	443	6%	2,871	36%	1,304	17%	1,136	14%	2,142	27%
October	8,640	100%	459	5%	3,400	39%	1,190	14%	1,329	15%	2,262	26%
November	8,528	100%	437	5%	3,383	40%	1,192	14%	1,289	15%	2,227	26%
December	8,334	100%	692	8%	3,028	36%	1,221	15%	1,173	14%	2,220	27%
<i>2018</i>												
January	8,865	100%	449	5%	3,248	37%	1,322	15%	1,417	16%	2,429	27%
February	8,346	100%	455	5%	3,001	36%	1,268	15%	1,392	17%	2,230	27%
March	9,766	100%	469	5%	3,467	36%	1,496	15%	1,658	17%	2,676	27%
April	9,575	100%	527	6%	3,530	37%	1,402	15%	3,628	38%	488	5%
May	10,393	100%	528	5%	3,872	37%	1,441	14%	4,278	41%	274	3%
June	9,170	100%	*****	*****	3,334	36%	1,274	14%	3,828	42%	*****	*****
July	8,890	100%	*****	*****	3,259	37%	1,329	15%	3,818	43%	*****	*****
August	9,800	100%	494	5%	3,541	36%	1,584	16%	4,181	43%	0	0%
September	8,493	100%	420	5%	3,008	35%	1,396	16%	3,669	43%	0	0%
October	9,000	100%	465	5%	3,279	36%	4,517	50%	739	8%	0	0%
November	7,553	100%	371	5%	2,829	37%	4,068	54%	285	4%	0	0%
December	6,900	100%	573	8%	2,579	37%	3,498	51%	250	4%	0	0%

Table 5e. Distribution of the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, 30-Day Bridged Gap, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month*

	Total		Episode duration, <1 month		Episode duration, 1 - <3 months		Episode duration, 3 - <6 months		Episode duration, 6 months - <1 year		Episode duration, 1+ years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>												
January	7,474	100%	387	5%	6,245	84%	842	11%	0	0%	0	0%
February	6,721	100%	376	6%	5,994	89%	351	5%	0	0%	0	0%
March	7,095	100%	5,559	78%	1,147	16%	389	5%	0	0%	0	0%
April	1,407	100%	748	53%	639	45%	20	1%	0	0%	0	0%
May	605	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%
June	514	100%	*****	*****	*****	*****	0	0%	0	0%	0	0%

*Calendar month-year during which treatment with spironolactone was initiated.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be re-calculated through the cells presented.

¹Assessed in the 183 days prior to the heart failure index date.

Table 6. Descriptive Statistics of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall**

	Number	Mean	Standard Deviation	Minimum	1%	5%	10%	25% Q1	50% Median	75% Q3	90%	95%	99%	Maximum
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	262,415	28	18	6	13	13	13	25	25	25	50	50	100	571
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	482,905	34	25	6	13	13	13	25	25	47	50	96	115	800
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	469,795	34	25	6	13	13	13	25	25	47	50	97	117	800
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	222,036	28	17	6	13	13	13	25	25	25	50	50	100	571
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	437,158	34	23	6	13	13	13	25	25	43	50	84	103	477
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	425,334	34	23	6	13	13	13	25	25	43	50	85	103	477
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	179,419	27	16	6	13	13	13	24	25	25	50	50	100	571
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	298,325	33	24	6	13	13	13	25	25	39	50	88	106	600
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	287,215	33	24	6	13	13	13	25	25	39	50	88	107	600
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	141,014	27	15	6	13	13	13	22	25	25	50	50	100	571
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	249,789	32	22	6	13	13	13	25	25	32	50	73	101	429
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	240,252	32	22	6	13	13	13	25	25	32	50	75	101	429

Table 6. Descriptive Statistics of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall**

	Number	Mean	Standard Deviation	Minimum	1%	5%	10%	25% Q1	50% Median	75% Q3	90%	95%	99%	Maximum
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HF _r EF	414,952	28	17	6	13	13	13	25	25	25	50	50	100	571
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	703,732	34	25	6	13	13	13	25	25	45	50	97	115	800
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	683,099	34	25	6	13	13	13	25	25	46	50	98	117	800
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HF _r EF	348,681	27	17	6	13	13	13	25	25	25	50	50	100	571
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	625,821	33	23	6	13	13	13	25	25	40	50	83	103	800
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	607,285	33	23	6	13	13	13	25	25	41	50	83	103	800

*Calculated average daily dose for only those treatment episodes in which the amount supplied divided by days supply for all dispensings was ≥ 0.25 and ≤ 8 .

**Calculated average daily dose for only exposed time within the first continuous treatment episode. That is, bridged gap days (≤ 30 days) were removed from the calculation.

¹Assessed in the 183 days prior to the heart failure index date.

Table 7a. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	262,415	100%	45,395	17%	168,840	64%	9,231	4%	31,587	12%	1,901	<1%	5,461	2%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	482,905	100%	52,527	11%	285,965	59%	20,896	4%	92,677	19%	7,295	2%	23,545	5%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	469,795	100%	50,820	11%	277,930	59%	20,359	4%	90,520	19%	7,160	2%	23,006	5%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	222,036	100%	40,088	18%	143,680	65%	7,728	3%	25,108	11%	1,419	<1%	4,013	2%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	437,158	100%	48,955	11%	262,473	60%	19,185	4%	81,218	19%	6,305	1%	19,022	4%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	425,334	100%	47,360	11%	255,148	60%	18,700	4%	79,336	19%	6,179	1%	18,611	4%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF	179,419	100%	35,726	20%	115,327	64%	5,641	3%	18,762	10%	972	<1%	2,991	2%
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline ¹	298,325	100%	36,812	12%	179,213	60%	12,310	4%	52,595	18%	3,818	1%	13,577	5%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline ¹	287,215	100%	35,104	12%	172,342	60%	11,880	4%	50,948	18%	3,729	1%	13,212	5%

Table 7a. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, Overall**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HF _r EF	141,014	100%	29,332	21%	91,372	65%	4,391	3%	13,245	9%	677	<1%	1,997	1%
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	249,789	100%	32,114	13%	153,534	61%	10,500	4%	41,285	17%	2,939	1%	9,417	4%
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	240,252	100%	30,574	13%	147,547	61%	10,137	4%	39,961	17%	2,878	1%	9,155	4%
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HF _r EF	414,952	100%	75,183	18%	267,485	64%	14,155	3%	47,396	11%	2,699	<1%	8,034	2%
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	703,732	100%	79,451	11%	417,642	59%	30,059	4%	131,902	19%	10,277	1%	34,401	5%
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	683,099	100%	76,525	11%	404,896	59%	29,243	4%	128,723	19%	10,092	1%	33,620	5%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HF _r EF	348,681	100%	65,928	19%	226,109	65%	11,755	3%	37,036	11%	2,017	<1%	5,836	2%
Spironolactone episode after HF _p EF, not excluding Myocardial Infarction at baseline ¹	625,821	100%	72,994	12%	377,536	60%	27,145	4%	112,753	18%	8,676	1%	26,717	4%
Spironolactone episode after HF _p EF, excluding Myocardial Infarction at baseline ¹	607,285	100%	70,262	12%	365,936	60%	26,419	4%	110,029	18%	8,513	1%	26,126	4%

*Calculated average daily dose for only those treatment episodes in which the amount supplied divided by days supply for all dispensings was ≥ 0.25 and ≤ 8 .

**Calculated average daily dose for only exposed time within the first continuous treatment episode. That is, bridged gap days (≤ 30 days) were removed from the calculation.

¹Assessed in the 183 days prior to the heart failure index date.

Table 7b. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
2010	13,513	100%	2,038	15%	8,611	64%	518	4%	1,900	14%	105	<1%	341	3%
2011	35,565	100%	5,321	15%	22,975	65%	1,268	4%	4,831	14%	299	<1%	871	2%
2012	37,923	100%	6,113	16%	24,342	64%	1,411	4%	4,785	13%	324	<1%	948	2%
2013	42,453	100%	7,264	17%	27,483	65%	1,486	4%	5,039	12%	286	<1%	895	2%
2014	46,043	100%	8,261	18%	29,642	64%	1,561	3%	5,379	12%	323	<1%	877	2%
2015	45,332	100%	8,236	18%	29,177	64%	1,604	4%	5,217	12%	292	<1%	806	2%
2016	18,882	100%	3,501	19%	12,106	64%	652	3%	2,141	11%	137	<1%	345	2%
2017	11,980	100%	2,315	19%	7,714	64%	408	3%	1,287	11%	71	<1%	185	2%
2018	8,671	100%	1,833	21%	5,510	64%	284	3%	821	9%	*****	*****	*****	*****
2019	2,053	100%	513	25%	1,280	62%	39	2%	187	9%	*****	*****	*****	*****
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
2010	16,322	100%	1,443	9%	9,188	56%	706	4%	3,555	22%	318	2%	1,112	7%
2011	52,470	100%	4,884	9%	30,012	57%	2,264	4%	11,073	21%	936	2%	3,301	6%
2012	60,325	100%	5,938	10%	34,642	57%	2,643	4%	12,628	21%	1,014	2%	3,460	6%
2013	69,219	100%	7,086	10%	40,567	59%	3,009	4%	13,896	20%	1,070	2%	3,591	5%
2014	73,724	100%	7,769	11%	43,444	59%	3,250	4%	14,430	20%	1,155	2%	3,676	5%
2015	74,607	100%	8,340	11%	43,886	59%	3,256	4%	14,396	19%	1,157	2%	3,572	5%
2016	51,744	100%	6,083	12%	31,316	61%	2,313	4%	9,294	18%	709	1%	2,029	4%
2017	40,739	100%	5,025	12%	25,208	62%	1,806	4%	6,785	17%	523	1%	1,392	3%
2018	35,098	100%	4,599	13%	22,238	63%	1,409	4%	5,367	15%	371	1%	1,114	3%
2019	8,657	100%	1,360	16%	5,464	63%	240	3%	1,253	14%	42	<1%	298	3%

Table 7b. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
2010	15,564	100%	1,366	9%	8,728	56%	675	4%	3,414	22%	313	2%	1,068	7%
2011	50,543	100%	4,674	9%	28,839	57%	2,192	4%	10,740	21%	913	2%	3,185	6%
2012	58,554	100%	5,716	10%	33,566	57%	2,572	4%	12,334	21%	990	2%	3,376	6%
2013	67,114	100%	6,819	10%	39,255	58%	2,916	4%	13,542	20%	1,056	2%	3,526	5%
2014	71,688	100%	7,478	10%	42,238	59%	3,157	4%	14,081	20%	1,131	2%	3,603	5%
2015	72,609	100%	8,054	11%	42,625	59%	3,187	4%	14,103	19%	1,139	2%	3,501	5%
2016	50,706	100%	5,950	12%	30,700	61%	2,263	4%	9,112	18%	700	1%	1,981	4%
2017	40,002	100%	4,920	12%	24,744	62%	1,770	4%	6,683	17%	512	1%	1,373	3%
2018	34,508	100%	4,506	13%	21,872	63%	1,392	4%	5,275	15%	364	1%	1,099	3%
2019	8,507	100%	1,337	16%	5,363	63%	235	3%	1,236	15%	42	<1%	294	3%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
2010	9,373	100%	1,507	16%	6,097	65%	363	4%	1,182	13%	55	<1%	169	2%
2011	27,596	100%	4,329	16%	18,065	65%	980	4%	3,466	13%	192	<1%	564	2%
2012	31,156	100%	5,272	17%	20,109	65%	1,149	4%	3,728	12%	238	<1%	660	2%
2013	35,776	100%	6,427	18%	23,252	65%	1,215	3%	4,010	11%	204	<1%	668	2%
2014	39,119	100%	7,296	19%	25,349	65%	1,314	3%	4,257	11%	253	<1%	650	2%
2015	38,838	100%	7,329	19%	25,113	65%	1,367	4%	4,200	11%	218	<1%	611	2%
2016	18,026	100%	3,370	19%	11,545	64%	628	3%	2,028	11%	130	<1%	325	2%
2017	11,671	100%	2,270	19%	7,505	64%	401	3%	1,250	11%	66	<1%	179	2%
2018	8,474	100%	1,786	21%	5,395	64%	274	3%	802	9%	*****	*****	*****	*****
2019	2,007	100%	502	25%	1,250	62%	37	2%	185	9%	*****	*****	*****	*****

Table 7b. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
2010	11,564	100%	1,096	9%	6,730	58%	544	5%	2,339	20%	210	2%	645	6%
2011	43,087	100%	4,166	10%	25,248	59%	1,902	4%	8,695	20%	718	2%	2,358	5%
2012	52,557	100%	5,332	10%	30,768	59%	2,362	4%	10,605	20%	850	2%	2,640	5%
2013	61,556	100%	6,511	11%	36,604	59%	2,735	4%	11,978	19%	910	1%	2,818	5%
2014	65,852	100%	7,162	11%	39,262	60%	2,939	4%	12,579	19%	992	2%	2,918	4%
2015	67,932	100%	7,804	11%	40,526	60%	3,012	4%	12,663	19%	1,010	1%	2,917	4%
2016	50,770	100%	5,978	12%	30,784	61%	2,267	4%	9,078	18%	692	1%	1,971	4%
2017	40,333	100%	4,977	12%	24,979	62%	1,792	4%	6,712	17%	515	1%	1,358	3%
2018	34,885	100%	4,575	13%	22,126	63%	1,394	4%	5,322	15%	366	1%	1,102	3%
2019	8,622	100%	1,354	16%	5,446	63%	238	3%	1,247	14%	42	<1%	295	3%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
2010	10,982	100%	1,032	9%	6,378	58%	516	5%	2,237	20%	207	2%	612	6%
2011	41,455	100%	3,981	10%	24,216	58%	1,843	4%	8,439	20%	695	2%	2,281	6%
2012	50,986	100%	5,129	10%	29,802	58%	2,297	5%	10,353	20%	827	2%	2,578	5%
2013	59,666	100%	6,254	10%	35,422	59%	2,654	4%	11,667	20%	898	2%	2,771	5%
2014	64,034	100%	6,893	11%	38,169	60%	2,855	4%	12,282	19%	972	2%	2,863	4%
2015	66,087	100%	7,538	11%	39,358	60%	2,947	4%	12,391	19%	993	2%	2,860	4%
2016	49,752	100%	5,846	12%	30,180	61%	2,220	4%	8,898	18%	682	1%	1,926	4%
2017	39,601	100%	4,875	12%	24,520	62%	1,757	4%	6,604	17%	504	1%	1,341	3%
2018	34,298	100%	4,481	13%	21,757	63%	1,378	4%	5,235	15%	359	1%	1,088	3%
2019	8,473	100%	1,331	16%	5,346	63%	233	3%	1,230	15%	42	<1%	291	3%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
2016	45,648	100%	8,536	19%	29,368	64%	1,537	3%	5,110	11%	291	<1%	806	2%
2017	65,614	100%	12,725	19%	42,342	65%	2,122	3%	7,016	11%	358	<1%	1,051	2%
2018	59,740	100%	12,398	21%	38,376	64%	1,809	3%	5,872	10%	297	<1%	988	2%
2019	8,417	100%	2,067	25%	5,241	62%	173	2%	764	9%	26	<1%	146	2%

Table 7b. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
2016	53,385	100%	6,000	11%	31,250	59%	2,386	4%	10,209	19%	786	1%	2,754	5%
2017	106,675	100%	12,430	12%	63,420	59%	4,594	4%	19,671	18%	1,543	1%	5,017	5%
2018	115,937	100%	14,861	13%	70,679	61%	4,734	4%	19,327	17%	1,367	1%	4,969	4%
2019	22,328	100%	3,521	16%	13,864	62%	596	3%	3,388	15%	122	<1%	837	4%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
2016	50,745	100%	5,634	11%	29,671	58%	2,263	4%	9,764	19%	758	1%	2,655	5%
2017	102,559	100%	11,822	12%	60,824	59%	4,431	4%	19,063	19%	1,518	1%	4,901	5%
2018	112,139	100%	14,239	13%	68,317	61%	4,599	4%	18,811	17%	1,335	1%	4,838	4%
2019	21,772	100%	3,409	16%	13,530	62%	587	3%	3,310	15%	118	<1%	818	4%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
2016	31,792	100%	6,398	20%	20,714	65%	1,051	3%	3,034	10%	161	<1%	434	1%
2017	51,612	100%	10,348	20%	33,640	65%	1,667	3%	5,001	10%	256	<1%	700	1%
2018	49,822	100%	10,652	21%	32,174	65%	1,507	3%	4,525	9%	236	<1%	728	1%
2019	7,788	100%	1,934	25%	4,844	62%	166	2%	685	9%	24	<1%	135	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
2016	39,402	100%	4,685	12%	23,938	61%	1,844	5%	6,861	17%	519	1%	1,555	4%
2017	87,527	100%	10,657	12%	53,283	61%	3,874	4%	15,163	17%	1,173	1%	3,377	4%
2018	101,383	100%	13,377	13%	62,933	62%	4,208	4%	16,032	16%	1,130	1%	3,703	4%
2019	21,477	100%	3,395	16%	13,380	62%	574	3%	3,229	15%	117	<1%	782	4%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
2016	37,333	100%	4,382	12%	22,666	61%	1,750	5%	6,535	18%	505	1%	1,495	4%
2017	83,989	100%	10,110	12%	51,023	61%	3,734	4%	14,680	17%	1,154	1%	3,288	4%
2018	97,982	100%	12,800	13%	60,793	62%	4,086	4%	15,591	16%	1,106	1%	3,606	4%
2019	20,948	100%	3,282	16%	13,065	62%	567	3%	3,155	15%	113	<1%	766	4%

Table 7b. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
2010	13,513	100%	2,038	15%	8,611	64%	518	4%	1,900	14%	105	<1%	341	3%
2011	35,565	100%	5,321	15%	22,975	65%	1,268	4%	4,831	14%	299	<1%	871	2%
2012	37,923	100%	6,113	16%	24,342	64%	1,411	4%	4,785	13%	324	<1%	948	2%
2013	42,453	100%	7,264	17%	27,483	65%	1,486	4%	5,039	12%	286	<1%	895	2%
2014	46,043	100%	8,261	18%	29,642	64%	1,561	3%	5,379	12%	323	<1%	877	2%
2015	51,191	100%	9,320	18%	33,024	65%	1,811	4%	5,815	11%	321	<1%	900	2%
2016	59,914	100%	11,076	18%	38,697	65%	2,072	3%	6,602	11%	391	<1%	1,076	2%
2017	61,802	100%	11,787	19%	40,051	65%	2,055	3%	6,580	11%	334	<1%	995	2%
2018	57,796	100%	11,905	21%	37,177	64%	1,793	3%	5,655	10%	294	<1%	972	2%
2019	8,752	100%	2,098	24%	5,483	63%	180	2%	810	9%	22	<1%	159	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
2010	16,322	100%	1,443	9%	9,188	56%	706	4%	3,555	22%	318	2%	1,112	7%
2011	52,470	100%	4,884	9%	30,012	57%	2,264	4%	11,073	21%	936	2%	3,301	6%
2012	60,325	100%	5,938	10%	34,642	57%	2,643	4%	12,628	21%	1,014	2%	3,460	6%
2013	69,219	100%	7,086	10%	40,567	59%	3,009	4%	13,896	20%	1,070	2%	3,591	5%
2014	73,724	100%	7,769	11%	43,444	59%	3,250	4%	14,430	20%	1,155	2%	3,676	5%
2015	79,488	100%	8,871	11%	46,771	59%	3,485	4%	15,304	19%	1,219	2%	3,838	5%
2016	94,494	100%	10,684	11%	56,195	59%	4,270	5%	17,567	19%	1,384	1%	4,394	5%
2017	112,785	100%	13,443	12%	67,722	60%	4,848	4%	20,120	18%	1,624	1%	5,028	4%
2018	120,012	100%	15,413	13%	73,594	61%	4,916	4%	19,604	16%	1,419	1%	5,066	4%
2019	24,893	100%	3,920	16%	15,507	62%	668	3%	3,725	15%	138	<1%	935	4%

Table 7b. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
2010	15,564	100%	1,366	9%	8,728	56%	675	4%	3,414	22%	313	2%	1,068	7%
2011	50,543	100%	4,674	9%	28,839	57%	2,192	4%	10,740	21%	913	2%	3,185	6%
2012	58,554	100%	5,716	10%	33,566	57%	2,572	4%	12,334	21%	990	2%	3,376	6%
2013	67,114	100%	6,819	10%	39,255	58%	2,916	4%	13,542	20%	1,056	2%	3,526	5%
2014	71,688	100%	7,478	10%	42,238	59%	3,157	4%	14,081	20%	1,131	2%	3,603	5%
2015	77,291	100%	8,561	11%	45,367	59%	3,412	4%	14,992	19%	1,200	2%	3,759	5%
2016	91,802	100%	10,301	11%	54,567	59%	4,146	5%	17,132	19%	1,361	1%	4,295	5%
2017	109,455	100%	12,943	12%	65,603	60%	4,716	4%	19,657	18%	1,603	1%	4,933	5%
2018	116,733	100%	14,850	13%	71,561	61%	4,799	4%	19,174	16%	1,392	1%	4,957	4%
2019	24,355	100%	3,817	16%	15,172	62%	658	3%	3,657	15%	133	<1%	918	4%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
2010	9,373	100%	1,507	16%	6,097	65%	363	4%	1,182	13%	55	<1%	169	2%
2011	27,596	100%	4,329	16%	18,065	65%	980	4%	3,466	13%	192	<1%	564	2%
2012	31,156	100%	5,272	17%	20,109	65%	1,149	4%	3,728	12%	238	<1%	660	2%
2013	35,776	100%	6,427	18%	23,252	65%	1,215	3%	4,010	11%	204	<1%	668	2%
2014	39,119	100%	7,296	19%	25,349	65%	1,314	3%	4,257	11%	253	<1%	650	2%
2015	43,449	100%	8,251	19%	28,186	65%	1,518	3%	4,597	11%	232	<1%	665	2%
2016	50,678	100%	9,771	19%	32,893	65%	1,733	3%	5,182	10%	305	<1%	794	2%
2017	53,016	100%	10,428	20%	34,530	65%	1,752	3%	5,274	10%	272	<1%	760	1%
2018	50,244	100%	10,643	21%	32,455	65%	1,559	3%	4,587	9%	243	<1%	757	2%
2019	8,274	100%	2,004	24%	5,173	63%	172	2%	753	9%	23	<1%	149	2%

Table 7b. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
2010	11,564	100%	1,096	9%	6,730	58%	544	5%	2,339	20%	210	2%	645	6%
2011	43,087	100%	4,166	10%	25,248	59%	1,902	4%	8,695	20%	718	2%	2,358	5%
2012	52,557	100%	5,332	10%	30,768	59%	2,362	4%	10,605	20%	850	2%	2,640	5%
2013	61,556	100%	6,511	11%	36,604	59%	2,735	4%	11,978	19%	910	1%	2,818	5%
2014	65,852	100%	7,162	11%	39,262	60%	2,939	4%	12,579	19%	992	2%	2,918	4%
2015	71,657	100%	8,255	12%	42,809	60%	3,193	4%	13,278	19%	1,053	1%	3,069	4%
2016	84,919	100%	9,877	12%	51,332	60%	3,882	5%	15,186	18%	1,183	1%	3,459	4%
2017	100,933	100%	12,396	12%	61,582	61%	4,412	4%	17,273	17%	1,384	1%	3,886	4%
2018	109,424	100%	14,367	13%	68,051	62%	4,525	4%	17,208	16%	1,243	1%	4,030	4%
2019	24,272	100%	3,832	16%	15,150	62%	651	3%	3,612	15%	133	<1%	894	4%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
2010	10,982	100%	1,032	9%	6,378	58%	516	5%	2,237	20%	207	2%	612	6%
2011	41,455	100%	3,981	10%	24,216	58%	1,843	4%	8,439	20%	695	2%	2,281	6%
2012	50,986	100%	5,129	10%	29,802	58%	2,297	5%	10,353	20%	827	2%	2,578	5%
2013	59,666	100%	6,254	10%	35,422	59%	2,654	4%	11,667	20%	898	2%	2,771	5%
2014	64,034	100%	6,893	11%	38,169	60%	2,855	4%	12,282	19%	972	2%	2,863	4%
2015	69,630	100%	7,966	11%	41,510	60%	3,126	4%	12,986	19%	1,035	1%	3,007	4%
2016	82,476	100%	9,518	12%	49,831	60%	3,777	5%	14,806	18%	1,163	1%	3,381	4%
2017	97,892	100%	11,923	12%	59,633	61%	4,286	4%	16,874	17%	1,365	1%	3,811	4%
2018	106,409	100%	13,838	13%	66,148	62%	4,422	4%	16,837	16%	1,223	1%	3,941	4%
2019	23,755	100%	3,728	16%	14,827	62%	643	3%	3,548	15%	128	<1%	881	4%

*Calculated average daily dose for only those treatment episodes in which the amount supplied divided by days supply for all dispensings was ≥ 0.25 and ≤ 8 .

**Calculated average daily dose for only exposed time within the first continuous treatment episode. That is, bridged gap days (≤ 30 days) were removed from the calculation.

***Calendar year during which treatment with spironolactone was initiated.

****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be re-calculated through the cells presented.

¹Assessed in the 183 days prior to the heart failure index date.

Table 7c. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Sex**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
Female	107,729	100%	18,450	17%	69,266	64%	3,895	4%	13,117	12%	787	<1%	2,214	2%
Male	154,686	100%	26,945	17%	99,574	64%	5,336	3%	18,470	12%	1,114	<1%	3,247	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
Female	302,426	100%	32,642	11%	180,124	60%	13,271	4%	57,900	19%	4,439	1%	14,050	5%
Male	180,479	100%	19,885	11%	105,841	59%	7,625	4%	34,777	19%	2,856	2%	9,495	5%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
Female	295,036	100%	31,661	11%	175,622	60%	12,963	4%	56,673	19%	4,358	1%	13,759	5%
Male	174,759	100%	19,159	11%	102,308	59%	7,396	4%	33,847	19%	2,802	2%	9,247	5%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
Female	90,953	100%	16,234	18%	58,900	65%	3,241	4%	10,407	11%	582	<1%	1,589	2%
Male	131,083	100%	23,854	18%	84,780	65%	4,487	3%	14,701	11%	837	<1%	2,424	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
Female	272,276	100%	30,294	11%	164,549	60%	12,105	4%	50,389	19%	3,787	1%	11,152	4%
Male	164,882	100%	18,661	11%	97,924	59%	7,080	4%	30,829	19%	2,518	2%	7,870	5%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
Female	265,684	100%	29,402	11%	160,476	60%	11,832	4%	49,333	19%	3,708	1%	10,933	4%
Male	159,650	100%	17,958	11%	94,672	59%	6,868	4%	30,003	19%	2,471	2%	7,678	5%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
Female	71,416	100%	14,223	20%	45,859	64%	2,218	3%	7,593	11%	374	<1%	1,149	2%
Male	108,003	100%	21,503	20%	69,468	64%	3,423	3%	11,169	10%	598	<1%	1,842	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
Female	178,459	100%	21,901	12%	107,540	60%	7,451	4%	31,500	18%	2,212	1%	7,855	4%
Male	119,866	100%	14,911	12%	71,673	60%	4,859	4%	21,095	18%	1,606	1%	5,722	5%

Table 7c. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Sex**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
Female	172,664	100%	21,018	12%	103,965	60%	7,213	4%	30,637	18%	2,163	1%	7,668	4%
Male	114,551	100%	14,086	12%	68,377	60%	4,667	4%	20,311	18%	1,566	1%	5,544	5%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFpEF</i>														
Female	55,946	100%	11,736	21%	36,277	65%	1,713	3%	5,255	9%	249	<1%	716	1%
Male	85,068	100%	17,596	21%	55,095	65%	2,678	3%	7,990	9%	428	<1%	1,281	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
Female	147,879	100%	18,993	13%	91,414	62%	6,280	4%	24,294	16%	1,651	1%	5,247	4%
Male	101,910	100%	13,121	13%	62,120	61%	4,220	4%	16,991	17%	1,288	1%	4,170	4%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
Female	142,994	100%	18,197	13%	88,345	62%	6,087	4%	23,623	17%	1,620	1%	5,122	4%
Male	97,258	100%	12,377	13%	59,202	61%	4,050	4%	16,338	17%	1,258	1%	4,033	4%
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFpEF</i>														
Female	170,354	100%	30,731	18%	109,630	64%	5,912	3%	19,708	12%	1,095	<1%	3,278	2%
Male	244,598	100%	44,452	18%	157,855	65%	8,243	3%	27,688	11%	1,604	<1%	4,756	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
Female	429,471	100%	47,968	11%	255,899	60%	18,641	4%	80,675	19%	6,108	1%	20,180	5%
Male	274,261	100%	31,483	11%	161,743	59%	11,418	4%	51,227	19%	4,169	2%	14,221	5%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
Female	418,426	100%	46,401	11%	249,141	60%	18,188	4%	78,916	19%	6,002	1%	19,778	5%
Male	264,673	100%	30,124	11%	155,755	59%	11,055	4%	49,807	19%	4,090	2%	13,842	5%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFpEF</i>														
Female	143,019	100%	26,962	19%	92,759	65%	4,882	3%	15,312	11%	805	<1%	2,299	2%
Male	205,662	100%	38,966	19%	133,350	65%	6,873	3%	21,724	11%	1,212	<1%	3,537	2%

Table 7c. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Sex**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
Female	379,882	100%	43,949	12%	230,380	61%	16,734	4%	68,396	18%	5,078	1%	15,345	4%
Male	245,939	100%	29,045	12%	147,156	60%	10,411	4%	44,357	18%	3,598	1%	11,372	5%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
Female	370,104	100%	42,509	11%	224,288	61%	16,340	4%	66,932	18%	4,982	1%	15,053	4%
Male	237,181	100%	27,753	12%	141,648	60%	10,079	4%	43,097	18%	3,531	1%	11,073	5%

*Calculated average daily dose for only those treatment episodes in which the amount supplied divided by days supply for all dispensings was ≥ 0.25 and ≤ 8 .

**Calculated average daily dose for only exposed time within the first continuous treatment episode. That is, bridged gap days (≤ 30 days) were removed from the calculation.

¹Assessed in the 183 days prior to the heart failure index date.

Table 7d. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Age Group**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
0-17	54	100%	*****	*****	22	41%	*****	*****	13	24%	0	0%	*****	*****
18-44	7,904	100%	*****	*****	5,109	65%	*****	*****	1,099	14%	85	1%	*****	*****
45-64	53,708	100%	7,655	14%	34,724	65%	1,999	4%	7,211	13%	494	<1%	1,625	3%
65+	200,749	100%	36,754	18%	128,985	64%	6,895	3%	23,264	12%	1,322	<1%	3,529	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
0-17	79	100%	*****	*****	25	32%	*****	*****	18	23%	*****	*****	14	18%
18-44	7,683	100%	*****	*****	3,680	48%	*****	*****	2,058	27%	*****	*****	1,028	13%
45-64	70,413	100%	4,715	7%	36,727	52%	3,114	4%	17,151	24%	1,779	3%	6,927	10%
65+	404,730	100%	47,407	12%	245,533	61%	17,466	4%	73,450	18%	5,298	1%	15,576	4%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
0-17	79	100%	*****	*****	25	32%	*****	*****	18	23%	*****	*****	14	18%
18-44	7,543	100%	*****	*****	3,603	48%	*****	*****	2,025	27%	*****	*****	1,018	13%
45-64	68,439	100%	4,526	7%	35,642	52%	3,027	4%	16,714	24%	1,748	3%	6,782	10%
65+	393,734	100%	45,900	12%	238,660	61%	17,022	4%	71,763	18%	5,197	1%	15,192	4%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
0-17	41	100%	*****	*****	17	41%	*****	*****	*****	*****	0	0%	*****	*****
18-44	5,847	100%	*****	*****	3,807	65%	*****	*****	*****	*****	48	<1%	*****	*****
45-64	43,035	100%	6,679	16%	28,070	65%	1,586	4%	5,276	12%	349	<1%	1,075	2%
65+	173,113	100%	32,568	19%	111,786	65%	5,890	3%	19,102	11%	1,022	<1%	2,745	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
0-17	68	100%	*****	*****	21	31%	12	18%	16	24%	*****	*****	*****	*****
18-44	6,611	100%	*****	*****	3,253	49%	270	4%	1,745	26%	*****	*****	*****	*****
45-64	61,363	100%	4,356	7%	32,887	54%	2,831	5%	14,574	24%	1,494	2%	5,221	9%
65+	369,116	100%	44,225	12%	226,312	61%	16,072	4%	64,883	18%	4,621	1%	13,003	4%

Table 7d. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Age Group**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
0-17	68	100%	*****	*****	21	31%	12	18%	16	24%	*****	*****	*****	*****
18-44	6,490	100%	*****	*****	3,182	49%	266	4%	1,721	27%	*****	*****	*****	*****
45-64	59,623	100%	4,185	7%	31,912	54%	2,753	5%	14,193	24%	1,463	2%	5,117	9%
65+	359,153	100%	42,811	12%	220,033	61%	15,669	4%	63,406	18%	4,529	1%	12,705	4%
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFpEF</i>														
0-17	40	100%	*****	*****	*****	*****	*****	*****	11	28%	*****	*****	*****	*****
18-44	5,453	100%	*****	*****	*****	*****	*****	*****	764	14%	*****	*****	*****	*****
45-64	37,883	100%	6,437	17%	24,483	65%	1,297	3%	4,552	12%	266	<1%	848	2%
65+	136,043	100%	28,553	21%	87,333	64%	4,098	3%	13,435	10%	661	<1%	1,963	1%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
0-17	46	100%	*****	*****	15	33%	*****	*****	13	28%	*****	*****	*****	*****
18-44	4,464	100%	*****	*****	2,275	51%	*****	*****	1,114	25%	*****	*****	*****	*****
45-64	44,740	100%	3,613	8%	24,327	54%	1,974	4%	9,926	22%	899	2%	4,001	9%
65+	249,075	100%	32,948	13%	152,596	61%	10,135	4%	41,542	17%	2,803	1%	9,051	4%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
0-17	46	100%	*****	*****	15	33%	*****	*****	13	28%	*****	*****	*****	*****
18-44	4,350	100%	*****	*****	2,210	51%	*****	*****	1,094	25%	*****	*****	*****	*****
45-64	43,001	100%	3,402	8%	23,281	54%	1,906	4%	9,632	22%	881	2%	3,899	9%
65+	239,818	100%	31,464	13%	146,836	61%	9,779	4%	40,209	17%	2,734	1%	8,796	4%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFpEF</i>														
0-17	31	100%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
18-44	3,718	100%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
45-64	27,609	100%	5,067	18%	18,075	65%	930	3%	2,865	10%	167	<1%	505	2%
65+	109,656	100%	23,685	22%	70,844	65%	3,297	3%	9,940	9%	488	<1%	1,402	1%

Table 7d. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Age Group**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
0-17	32	100%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
18-44	3,558	100%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
45-64	35,787	100%	3,136	9%	20,327	57%	1,676	5%	7,439	21%	686	2%	2,523	7%
65+	210,412	100%	28,768	14%	131,316	62%	8,651	4%	32,992	16%	2,161	1%	6,524	3%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
0-17	32	100%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
18-44	3,461	100%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
45-64	34,320	100%	2,951	9%	19,416	57%	1,619	5%	7,203	21%	675	2%	2,456	7%
65+	202,439	100%	27,425	14%	126,291	62%	8,351	4%	31,923	16%	2,112	1%	6,337	3%
Heart Failures Identified Overall: 7/1/2010 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFpEF</i>														
0-17	93	100%	*****	*****	32	34%	*****	*****	22	24%	*****	*****	18	19%
18-44	12,647	100%	*****	*****	8,193	65%	*****	*****	1,713	14%	*****	*****	434	3%
45-64	85,730	100%	13,092	15%	55,555	65%	3,094	4%	10,937	13%	703	<1%	2,349	3%
65+	316,482	100%	60,438	19%	203,705	64%	10,502	3%	34,724	11%	1,880	<1%	5,233	2%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
0-17	124	100%	*****	*****	42	34%	15	12%	30	24%	*****	*****	22	18%
18-44	11,800	100%	*****	*****	5,743	49%	487	4%	3,091	26%	*****	*****	1,519	13%
45-64	107,631	100%	7,759	7%	56,986	53%	4,758	4%	25,232	23%	2,547	2%	10,349	10%
65+	584,177	100%	71,049	12%	354,871	61%	24,799	4%	103,549	18%	7,398	1%	22,511	4%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
0-17	124	100%	*****	*****	42	34%	15	12%	30	24%	*****	*****	22	18%
18-44	11,577	100%	*****	*****	5,622	49%	478	4%	3,041	26%	*****	*****	1,501	13%
45-64	104,361	100%	7,402	7%	55,077	53%	4,618	4%	24,617	24%	2,507	2%	10,140	10%
65+	567,037	100%	68,501	12%	344,155	61%	24,132	4%	101,035	18%	7,257	1%	21,957	4%

Table 7d. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Age Group**

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
<i>Spironolactone episode after HFrEF</i>														
0-17	72	100%	12	17%	26	36%	*****	*****	15	21%	*****	*****	*****	*****
18-44	9,404	100%	1,393	15%	6,170	66%	*****	*****	1,108	12%	*****	*****	*****	*****
45-64	68,010	100%	11,230	17%	44,478	65%	2,433	4%	7,847	12%	487	<1%	1,535	2%
65+	271,195	100%	53,293	20%	175,435	65%	8,915	3%	28,066	10%	1,463	<1%	4,023	1%
<i>Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹</i>														
0-17	104	100%	*****	*****	33	32%	15	14%	26	25%	*****	*****	16	15%
18-44	9,989	100%	*****	*****	5,002	50%	434	4%	2,550	26%	*****	*****	1,158	12%
45-64	91,823	100%	7,034	8%	50,157	55%	4,252	5%	20,816	23%	2,096	2%	7,468	8%
65+	523,905	100%	65,385	12%	322,344	62%	22,444	4%	89,361	17%	6,296	1%	18,075	3%
<i>Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹</i>														
0-17	104	100%	*****	*****	33	32%	15	14%	26	25%	*****	*****	16	15%
18-44	9,796	100%	*****	*****	4,898	50%	425	4%	2,511	26%	*****	*****	1,141	12%
45-64	88,936	100%	6,715	8%	48,437	54%	4,129	5%	20,280	23%	2,056	2%	7,319	8%
65+	508,449	100%	62,993	12%	312,568	61%	21,850	4%	87,212	17%	6,176	1%	17,650	3%

*Calculated average daily dose for only those treatment episodes in which the amount supplied divided by days supply for all dispensings was ≥ 0.25 and ≤ 8 .

**Calculated average daily dose for only exposed time within the first continuous treatment episode. That is, bridged gap days (≤ 30 days) were removed from the calculation.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be re-calculated through the cells presented.

¹Assessed in the 183 days prior to the heart failure index date.

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Heart Failures Identified in the ICD-9-CM Era Only: 7/1/2010 - 9/30/2015														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF														
<i>2010</i>														
July	1,210	100%	219	18%	758	63%	32	3%	164	14%	*****	*****	*****	*****
August	1,997	100%	285	14%	1,290	65%	83	4%	269	13%	*****	*****	*****	*****
September	2,359	100%	321	14%	1,499	64%	92	4%	360	15%	19	<1%	68	3%
October	2,494	100%	369	15%	1,601	64%	97	4%	342	14%	24	<1%	61	2%
November	2,551	100%	392	15%	1,624	64%	100	4%	358	14%	14	<1%	63	2%
December	2,902	100%	452	16%	1,839	63%	114	4%	407	14%	23	<1%	67	2%
<i>2011</i>														
January	2,980	100%	430	14%	1,950	65%	110	4%	388	13%	27	<1%	75	3%
February	2,860	100%	418	15%	1,865	65%	96	3%	394	14%	28	<1%	59	2%
March	3,329	100%	467	14%	2,229	67%	113	3%	426	13%	22	<1%	72	2%
April	2,900	100%	433	15%	1,900	66%	108	4%	373	13%	27	<1%	59	2%
May	3,069	100%	471	15%	1,956	64%	101	3%	431	14%	28	<1%	82	3%
June	2,953	100%	433	15%	1,906	65%	110	4%	397	13%	29	<1%	78	3%
July	2,692	100%	401	15%	1,729	64%	95	4%	377	14%	27	1%	63	2%
August	2,841	100%	454	16%	1,749	62%	116	4%	417	15%	19	<1%	86	3%
September	2,915	100%	433	15%	1,853	64%	101	3%	417	14%	24	<1%	87	3%
October	2,936	100%	463	16%	1,860	63%	111	4%	416	14%	19	<1%	67	2%
November	2,977	100%	437	15%	1,948	65%	110	4%	392	13%	18	<1%	72	2%
December	3,113	100%	481	15%	2,030	65%	97	3%	403	13%	31	<1%	71	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>														
January	3,140	100%	525	17%	1,994	64%	102	3%	410	13%	27	<1%	82	3%
February	3,093	100%	500	16%	1,984	64%	116	4%	382	12%	28	<1%	83	3%
March	3,191	100%	502	16%	2,047	64%	127	4%	407	13%	34	1%	74	2%
April	3,128	100%	499	16%	2,021	65%	85	3%	413	13%	28	<1%	82	3%
May	3,304	100%	549	17%	2,095	63%	132	4%	400	12%	32	<1%	96	3%
June	2,991	100%	467	16%	1,928	64%	121	4%	384	13%	23	<1%	68	2%
July	2,836	100%	437	15%	1,835	65%	117	4%	364	13%	18	<1%	65	2%
August	3,164	100%	490	15%	2,012	64%	124	4%	407	13%	27	<1%	104	3%
September	2,923	100%	467	16%	1,873	64%	99	3%	393	13%	27	<1%	64	2%
October	3,431	100%	560	16%	2,204	64%	152	4%	404	12%	32	<1%	79	2%
November	3,384	100%	557	16%	2,177	64%	131	4%	419	12%	26	<1%	74	2%
December	3,338	100%	560	17%	2,172	65%	105	3%	402	12%	22	<1%	77	2%
<i>2013</i>														
January	3,552	100%	572	16%	2,325	65%	127	4%	436	12%	29	<1%	63	2%
February	3,326	100%	571	17%	2,133	64%	121	4%	395	12%	21	<1%	85	3%
March	3,556	100%	577	16%	2,303	65%	128	4%	443	12%	24	<1%	81	2%
April	3,554	100%	576	16%	2,319	65%	129	4%	424	12%	22	<1%	84	2%
May	3,640	100%	612	17%	2,366	65%	116	3%	451	12%	27	<1%	68	2%
June	3,251	100%	559	17%	2,094	64%	110	3%	401	12%	20	<1%	67	2%
July	3,437	100%	616	18%	2,198	64%	122	4%	395	11%	22	<1%	84	2%
August	3,585	100%	616	17%	2,323	65%	121	3%	427	12%	32	<1%	66	2%
September	3,375	100%	569	17%	2,198	65%	131	4%	384	11%	23	<1%	70	2%
October	3,952	100%	741	19%	2,528	64%	136	3%	446	11%	22	<1%	79	2%
November	3,601	100%	635	18%	2,340	65%	134	4%	405	11%	17	<1%	70	2%
December	3,624	100%	620	17%	2,356	65%	111	3%	432	12%	27	<1%	78	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>														
January	3,775	100%	658	17%	2,488	66%	120	3%	411	11%	28	<1%	70	2%
February	3,559	100%	611	17%	2,302	65%	110	3%	419	12%	34	<1%	83	2%
March	3,968	100%	715	18%	2,575	65%	149	4%	440	11%	24	<1%	65	2%
April	4,072	100%	728	18%	2,607	64%	131	3%	487	12%	30	<1%	89	2%
May	4,061	100%	721	18%	2,579	64%	147	4%	496	12%	27	<1%	91	2%
June	3,596	100%	640	18%	2,357	66%	109	3%	378	11%	26	<1%	86	2%
July	3,739	100%	696	19%	2,359	63%	137	4%	453	12%	29	<1%	65	2%
August	3,639	100%	629	17%	2,335	64%	147	4%	445	12%	22	<1%	61	2%
September	3,750	100%	678	18%	2,404	64%	144	4%	445	12%	30	<1%	49	1%
October	4,067	100%	734	18%	2,599	64%	128	3%	502	12%	35	<1%	69	2%
November	3,747	100%	706	19%	2,423	65%	91	2%	432	12%	13	<1%	82	2%
December	4,070	100%	745	18%	2,614	64%	148	4%	471	12%	25	<1%	67	2%
<i>2015</i>														
January	4,030	100%	702	17%	2,630	65%	128	3%	462	11%	32	<1%	76	2%
February	3,750	100%	666	18%	2,432	65%	125	3%	439	12%	17	<1%	71	2%
March	4,415	100%	781	18%	2,866	65%	152	3%	524	12%	28	<1%	64	1%
April	4,309	100%	774	18%	2,780	65%	166	4%	485	11%	29	<1%	75	2%
May	4,072	100%	768	19%	2,589	64%	138	3%	470	12%	25	<1%	82	2%
June	4,178	100%	765	18%	2,657	64%	164	4%	500	12%	27	<1%	65	2%
July	4,134	100%	765	19%	2,685	65%	129	3%	460	11%	27	<1%	68	2%
August	3,894	100%	726	19%	2,487	64%	156	4%	440	11%	25	<1%	60	2%
September	4,082	100%	722	18%	2,668	65%	130	3%	456	11%	32	<1%	74	2%
October	3,456	100%	652	19%	2,171	63%	133	4%	412	12%	19	<1%	69	2%
November	2,650	100%	487	18%	1,693	64%	104	4%	297	11%	14	<1%	55	2%
December	2,362	100%	428	18%	1,519	64%	79	3%	272	12%	17	<1%	47	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>														
January	1,995	100%	364	18%	1,281	64%	73	4%	231	12%	13	<1%	33	2%
February	1,960	100%	349	18%	1,262	64%	78	4%	218	11%	*****	*****	*****	*****
March	1,997	100%	388	19%	1,286	64%	64	3%	206	10%	15	<1%	38	2%
April	1,784	100%	311	17%	1,155	65%	68	4%	205	11%	12	<1%	33	2%
May	1,704	100%	311	18%	1,061	62%	59	3%	222	13%	18	1%	33	2%
June	1,521	100%	279	18%	971	64%	50	3%	178	12%	15	<1%	28	2%
July	1,397	100%	267	19%	898	64%	39	3%	155	11%	13	<1%	25	2%
August	1,398	100%	274	20%	881	63%	46	3%	155	11%	13	<1%	29	2%
September	1,347	100%	252	19%	873	65%	40	3%	150	11%	*****	*****	*****	*****
October	1,280	100%	244	19%	809	63%	41	3%	151	12%	13	1%	22	2%
November	1,237	100%	231	19%	798	65%	53	4%	130	11%	*****	*****	*****	*****
December	1,262	100%	231	18%	831	66%	41	3%	140	11%	*****	*****	*****	*****
<i>2017</i>														
January	1,190	100%	225	19%	781	66%	30	3%	123	10%	12	1%	19	2%
February	1,125	100%	208	18%	732	65%	47	4%	118	10%	*****	*****	*****	*****
March	1,202	100%	225	19%	780	65%	37	3%	138	11%	*****	*****	*****	*****
April	1,021	100%	198	19%	674	66%	31	3%	97	10%	*****	*****	*****	*****
May	1,095	100%	214	20%	691	63%	43	4%	119	11%	*****	*****	*****	*****
June	1,069	100%	204	19%	675	63%	46	4%	125	12%	*****	*****	*****	*****
July	919	100%	187	20%	567	62%	35	4%	111	12%	*****	*****	*****	*****
August	938	100%	196	21%	594	63%	29	3%	102	11%	*****	*****	*****	*****
September	826	100%	160	19%	531	64%	28	3%	86	10%	*****	*****	*****	*****
October	908	100%	176	19%	588	65%	33	4%	98	11%	*****	*****	*****	*****
November	894	100%	179	20%	566	63%	29	3%	92	10%	*****	*****	*****	*****
December	793	100%	143	18%	535	67%	20	3%	78	10%	*****	*****	*****	*****

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>														
January	893	100%	185	21%	570	64%	26	3%	88	10%	*****	*****	*****	*****
February	787	100%	154	20%	489	62%	28	4%	90	11%	*****	*****	*****	*****
March	853	100%	173	20%	548	64%	31	4%	81	9%	*****	*****	*****	*****
April	761	100%	164	22%	475	62%	27	4%	75	10%	*****	*****	*****	*****
May	859	100%	194	23%	548	64%	28	3%	78	9%	*****	*****	*****	*****
June	701	100%	143	20%	461	66%	14	2%	67	10%	*****	*****	*****	*****
July	669	100%	143	21%	426	64%	20	3%	66	10%	*****	*****	*****	*****
August	702	100%	142	20%	463	66%	25	4%	53	8%	*****	*****	*****	*****
September	564	100%	133	24%	343	61%	15	3%	54	10%	*****	*****	*****	*****
October	675	100%	137	20%	438	65%	23	3%	55	8%	*****	*****	*****	*****
November	603	100%	143	24%	357	59%	31	5%	54	9%	*****	*****	*****	*****
December	604	100%	122	20%	392	65%	16	3%	60	10%	*****	*****	*****	*****
<i>2019</i>														
January	688	100%	161	23%	445	65%	17	2%	54	8%	*****	*****	*****	*****
February	584	100%	143	24%	359	61%	*****	*****	56	10%	*****	*****	*****	*****
March	586	100%	154	26%	362	62%	*****	*****	56	10%	0	0%	*****	*****
April	109	100%	33	30%	63	58%	0	0%	*****	*****	0	0%	*****	*****
May	46	100%	*****	*****	27	59%	*****	*****	*****	*****	*****	*****	0	0%
June	40	100%	*****	*****	24	60%	0	0%	*****	*****	0	0%	*****	*****
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹														
<i>2010</i>														
July	1,259	100%	110	9%	741	59%	55	4%	267	21%	27	2%	59	5%
August	2,263	100%	188	8%	1,299	57%	97	4%	487	22%	40	2%	152	7%
September	2,688	100%	255	9%	1,495	56%	111	4%	573	21%	51	2%	203	8%
October	3,131	100%	246	8%	1,787	57%	142	5%	680	22%	62	2%	214	7%
November	3,419	100%	301	9%	1,877	55%	162	5%	757	22%	70	2%	252	7%
December	3,562	100%	343	10%	1,989	56%	139	4%	791	22%	68	2%	232	7%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>														
January	3,891	100%	359	9%	2,260	58%	168	4%	805	21%	72	2%	227	6%
February	3,947	100%	347	9%	2,285	58%	169	4%	816	21%	67	2%	263	7%
March	4,596	100%	405	9%	2,664	58%	188	4%	968	21%	89	2%	282	6%
April	4,374	100%	401	9%	2,508	57%	194	4%	934	21%	84	2%	253	6%
May	4,490	100%	431	10%	2,574	57%	167	4%	957	21%	86	2%	275	6%
June	4,627	100%	388	8%	2,674	58%	203	4%	972	21%	80	2%	310	7%
July	4,263	100%	402	9%	2,423	57%	188	4%	883	21%	72	2%	295	7%
August	4,412	100%	424	10%	2,519	57%	172	4%	945	21%	69	2%	283	6%
September	4,242	100%	395	9%	2,423	57%	194	5%	916	22%	70	2%	244	6%
October	4,431	100%	394	9%	2,538	57%	187	4%	948	21%	72	2%	292	7%
November	4,563	100%	445	10%	2,523	55%	229	5%	971	21%	94	2%	301	7%
December	4,634	100%	493	11%	2,621	57%	205	4%	958	21%	81	2%	276	6%
<i>2012</i>														
January	4,778	100%	466	10%	2,775	58%	148	3%	1,036	22%	85	2%	268	6%
February	4,857	100%	479	10%	2,819	58%	191	4%	995	20%	94	2%	279	6%
March	5,128	100%	459	9%	2,966	58%	247	5%	1,086	21%	90	2%	280	5%
April	4,947	100%	472	10%	2,822	57%	210	4%	1,071	22%	86	2%	286	6%
May	5,341	100%	510	10%	3,072	58%	235	4%	1,119	21%	88	2%	317	6%
June	4,861	100%	483	10%	2,807	58%	222	5%	1,003	21%	72	1%	274	6%
July	4,877	100%	472	10%	2,738	56%	232	5%	1,042	21%	94	2%	299	6%
August	5,146	100%	511	10%	2,891	56%	248	5%	1,061	21%	96	2%	339	7%
September	4,620	100%	468	10%	2,598	56%	212	5%	1,004	22%	76	2%	262	6%
October	5,336	100%	552	10%	3,059	57%	250	5%	1,120	21%	72	1%	283	5%
November	5,279	100%	544	10%	3,101	59%	226	4%	1,040	20%	82	2%	286	5%
December	5,155	100%	522	10%	2,994	58%	222	4%	1,051	20%	79	2%	287	6%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>														
January	5,668	100%	584	10%	3,258	57%	226	4%	1,207	21%	93	2%	300	5%
February	5,166	100%	510	10%	3,032	59%	245	5%	1,021	20%	86	2%	272	5%
March	5,802	100%	569	10%	3,432	59%	246	4%	1,141	20%	104	2%	310	5%
April	5,901	100%	559	9%	3,471	59%	255	4%	1,212	21%	96	2%	308	5%
May	6,071	100%	657	11%	3,564	59%	243	4%	1,226	20%	83	1%	298	5%
June	5,440	100%	558	10%	3,238	60%	231	4%	1,034	19%	78	1%	301	6%
July	5,884	100%	621	11%	3,425	58%	256	4%	1,193	20%	81	1%	308	5%
August	5,909	100%	610	10%	3,438	58%	268	5%	1,176	20%	94	2%	323	5%
September	5,615	100%	569	10%	3,303	59%	262	5%	1,099	20%	81	1%	301	5%
October	6,237	100%	644	10%	3,620	58%	293	5%	1,294	21%	98	2%	288	5%
November	5,891	100%	617	10%	3,456	59%	286	5%	1,150	20%	90	2%	292	5%
December	5,635	100%	588	10%	3,330	59%	198	4%	1,143	20%	86	2%	290	5%
<i>2014</i>														
January	5,992	100%	627	10%	3,554	59%	258	4%	1,173	20%	99	2%	281	5%
February	5,665	100%	620	11%	3,292	58%	226	4%	1,134	20%	92	2%	301	5%
March	6,405	100%	632	10%	3,798	59%	288	4%	1,290	20%	102	2%	295	5%
April	6,697	100%	705	11%	3,987	60%	317	5%	1,225	18%	101	2%	362	5%
May	6,648	100%	685	10%	3,939	59%	284	4%	1,301	20%	101	2%	338	5%
June	6,067	100%	642	11%	3,564	59%	280	5%	1,167	19%	96	2%	318	5%
July	6,184	100%	637	10%	3,680	60%	258	4%	1,226	20%	86	1%	297	5%
August	5,801	100%	625	11%	3,387	58%	269	5%	1,126	19%	97	2%	297	5%
September	5,720	100%	601	11%	3,357	59%	244	4%	1,147	20%	98	2%	273	5%
October	6,471	100%	680	11%	3,777	58%	307	5%	1,274	20%	108	2%	325	5%
November	5,617	100%	641	11%	3,278	58%	252	4%	1,095	19%	85	2%	266	5%
December	6,457	100%	674	10%	3,831	59%	267	4%	1,272	20%	90	1%	323	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>														
January	6,272	100%	692	11%	3,762	60%	240	4%	1,177	19%	96	2%	305	5%
February	5,814	100%	660	11%	3,415	59%	250	4%	1,124	19%	73	1%	292	5%
March	6,871	100%	739	11%	4,078	59%	294	4%	1,338	19%	109	2%	313	5%
April	6,863	100%	761	11%	4,045	59%	310	5%	1,331	19%	96	1%	320	5%
May	6,406	100%	752	12%	3,703	58%	259	4%	1,289	20%	116	2%	287	4%
June	6,676	100%	750	11%	3,899	58%	306	5%	1,312	20%	97	1%	312	5%
July	6,491	100%	713	11%	3,788	58%	285	4%	1,266	20%	110	2%	329	5%
August	6,160	100%	650	11%	3,600	58%	299	5%	1,201	19%	108	2%	302	5%
September	6,508	100%	757	12%	3,791	58%	288	4%	1,263	19%	96	1%	313	5%
October	6,223	100%	692	11%	3,706	60%	261	4%	1,133	18%	103	2%	328	5%
November	5,136	100%	569	11%	3,024	59%	223	4%	990	19%	78	2%	252	5%
December	5,187	100%	605	12%	3,075	59%	241	5%	972	19%	75	1%	219	4%
<i>2016</i>														
January	4,597	100%	557	12%	2,793	61%	216	5%	765	17%	79	2%	187	4%
February	4,764	100%	551	12%	2,813	59%	206	4%	915	19%	70	1%	209	4%
March	5,166	100%	559	11%	3,102	60%	244	5%	961	19%	78	2%	222	4%
April	4,722	100%	564	12%	2,894	61%	201	4%	807	17%	73	2%	183	4%
May	4,582	100%	532	12%	2,754	60%	200	4%	847	18%	65	1%	184	4%
June	4,403	100%	529	12%	2,640	60%	217	5%	797	18%	43	<1%	177	4%
July	4,095	100%	474	12%	2,469	60%	175	4%	765	19%	58	1%	154	4%
August	4,210	100%	481	11%	2,545	60%	186	4%	794	19%	51	1%	153	4%
September	3,866	100%	482	12%	2,341	61%	164	4%	695	18%	50	1%	134	3%
October	3,857	100%	432	11%	2,351	61%	168	4%	702	18%	51	1%	153	4%
November	3,765	100%	431	11%	2,362	63%	183	5%	619	16%	46	1%	124	3%
December	3,717	100%	491	13%	2,252	61%	153	4%	627	17%	45	1%	149	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	3,658	100%	448	12%	2,234	61%	167	5%	617	17%	60	2%	132	4%
February	3,389	100%	440	13%	2,018	60%	162	5%	594	18%	46	1%	129	4%
March	3,885	100%	455	12%	2,378	61%	172	4%	685	18%	54	1%	141	4%
April	3,419	100%	407	12%	2,094	61%	154	5%	597	17%	48	1%	119	3%
May	3,785	100%	472	12%	2,337	62%	189	5%	614	16%	50	1%	123	3%
June	3,555	100%	405	11%	2,250	63%	141	4%	607	17%	35	<1%	117	3%
July	3,298	100%	408	12%	2,038	62%	140	4%	565	17%	39	1%	108	3%
August	3,351	100%	412	12%	2,081	62%	125	4%	574	17%	50	1%	109	3%
September	3,048	100%	393	13%	1,860	61%	167	5%	497	16%	35	1%	96	3%
October	3,338	100%	406	12%	2,118	63%	145	4%	527	16%	39	1%	103	3%
November	3,083	100%	400	13%	1,953	63%	132	4%	455	15%	40	1%	103	3%
December	2,930	100%	379	13%	1,847	63%	112	4%	453	15%	27	<1%	112	4%
<i>2018</i>														
January	3,096	100%	405	13%	1,961	63%	126	4%	461	15%	41	1%	102	3%
February	2,831	100%	355	13%	1,774	63%	115	4%	474	17%	30	1%	83	3%
March	3,312	100%	411	12%	2,094	63%	141	4%	524	16%	36	1%	106	3%
April	3,125	100%	385	12%	1,976	63%	122	4%	506	16%	33	1%	103	3%
May	3,318	100%	448	14%	2,160	65%	125	4%	468	14%	29	<1%	88	3%
June	2,976	100%	388	13%	1,907	64%	128	4%	430	14%	39	1%	84	3%
July	2,722	100%	358	13%	1,693	62%	103	4%	437	16%	33	1%	98	4%
August	3,142	100%	408	13%	1,942	62%	123	4%	518	16%	42	1%	109	3%
September	2,521	100%	346	14%	1,584	63%	89	4%	391	16%	24	<1%	87	3%
October	2,916	100%	406	14%	1,856	64%	120	4%	420	14%	22	<1%	92	3%
November	2,685	100%	350	13%	1,731	64%	118	4%	372	14%	24	<1%	90	3%
December	2,454	100%	339	14%	1,560	64%	99	4%	366	15%	18	<1%	72	3%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>														
January	2,718	100%	407	15%	1,708	63%	*****	*****	416	15%	*****	*****	81	3%
February	2,523	100%	397	16%	1,565	62%	92	4%	360	14%	21	<1%	88	3%
March	2,650	100%	429	16%	1,702	64%	*****	*****	375	14%	*****	*****	100	4%
April	418	100%	66	16%	267	64%	*****	*****	61	15%	0	0%	*****	*****
May	195	100%	29	15%	126	65%	*****	*****	28	14%	*****	*****	*****	*****
June	153	100%	32	21%	96	63%	*****	*****	13	8%	*****	*****	*****	*****
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹														
<i>2010</i>														
July	1,195	100%	104	9%	704	59%	51	4%	253	21%	25	2%	58	5%
August	2,160	100%	179	8%	1,242	58%	93	4%	461	21%	39	2%	146	7%
September	2,560	100%	241	9%	1,418	55%	107	4%	553	22%	50	2%	191	7%
October	2,989	100%	230	8%	1,694	57%	136	5%	662	22%	62	2%	205	7%
November	3,281	100%	287	9%	1,797	55%	154	5%	729	22%	70	2%	244	7%
December	3,379	100%	325	10%	1,873	55%	134	4%	756	22%	67	2%	224	7%
<i>2011</i>														
January	3,714	100%	333	9%	2,147	58%	164	4%	783	21%	69	2%	218	6%
February	3,791	100%	329	9%	2,186	58%	162	4%	794	21%	66	2%	254	7%
March	4,410	100%	384	9%	2,556	58%	180	4%	935	21%	86	2%	269	6%
April	4,201	100%	381	9%	2,406	57%	187	4%	902	21%	79	2%	246	6%
May	4,320	100%	415	10%	2,470	57%	161	4%	924	21%	84	2%	266	6%
June	4,466	100%	371	8%	2,573	58%	194	4%	945	21%	79	2%	304	7%
July	4,108	100%	383	9%	2,328	57%	183	4%	858	21%	72	2%	284	7%
August	4,253	100%	409	10%	2,418	57%	171	4%	917	22%	67	2%	271	6%
September	4,094	100%	384	9%	2,336	57%	189	5%	882	22%	69	2%	234	6%
October	4,284	100%	382	9%	2,458	57%	176	4%	913	21%	70	2%	285	7%
November	4,410	100%	426	10%	2,433	55%	223	5%	949	22%	93	2%	286	6%
December	4,492	100%	477	11%	2,528	56%	202	4%	938	21%	79	2%	268	6%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>														
January	4,613	100%	441	10%	2,693	58%	141	3%	993	22%	83	2%	262	6%
February	4,690	100%	462	10%	2,705	58%	184	4%	975	21%	94	2%	270	6%
March	4,987	100%	445	9%	2,877	58%	241	5%	1,062	21%	86	2%	276	6%
April	4,790	100%	452	9%	2,717	57%	206	4%	1,051	22%	83	2%	281	6%
May	5,195	100%	498	10%	2,981	57%	229	4%	1,090	21%	85	2%	312	6%
June	4,718	100%	466	10%	2,721	58%	216	5%	978	21%	72	2%	265	6%
July	4,729	100%	459	10%	2,649	56%	223	5%	1,015	21%	93	2%	290	6%
August	5,015	100%	490	10%	2,827	56%	239	5%	1,037	21%	94	2%	328	7%
September	4,478	100%	446	10%	2,520	56%	205	5%	978	22%	75	2%	254	6%
October	5,181	100%	530	10%	2,955	57%	248	5%	1,101	21%	69	1%	278	5%
November	5,141	100%	527	10%	3,006	58%	221	4%	1,027	20%	81	2%	279	5%
December	5,017	100%	500	10%	2,915	58%	219	4%	1,027	20%	75	1%	281	6%
<i>2013</i>														
January	5,492	100%	554	10%	3,153	57%	214	4%	1,186	22%	90	2%	295	5%
February	5,010	100%	494	10%	2,934	59%	238	5%	991	20%	83	2%	270	5%
March	5,652	100%	553	10%	3,338	59%	239	4%	1,112	20%	103	2%	307	5%
April	5,724	100%	537	9%	3,362	59%	249	4%	1,181	21%	94	2%	301	5%
May	5,874	100%	637	11%	3,440	59%	237	4%	1,183	20%	83	1%	294	5%
June	5,256	100%	531	10%	3,119	59%	224	4%	1,007	19%	78	1%	297	6%
July	5,707	100%	595	10%	3,316	58%	249	4%	1,165	20%	81	1%	301	5%
August	5,734	100%	597	10%	3,323	58%	262	5%	1,145	20%	92	2%	315	5%
September	5,439	100%	551	10%	3,190	59%	251	5%	1,069	20%	79	1%	299	5%
October	6,042	100%	613	10%	3,497	58%	287	5%	1,261	21%	98	2%	286	5%
November	5,736	100%	597	10%	3,369	59%	281	5%	1,121	20%	90	2%	278	5%
December	5,448	100%	560	10%	3,214	59%	185	3%	1,121	21%	85	2%	283	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>														
January	5,848	100%	606	10%	3,475	59%	252	4%	1,142	20%	97	2%	276	5%
February	5,491	100%	595	11%	3,190	58%	220	4%	1,105	20%	90	2%	291	5%
March	6,218	100%	609	10%	3,684	59%	277	4%	1,259	20%	97	2%	292	5%
April	6,522	100%	684	10%	3,878	59%	311	5%	1,195	18%	98	2%	356	5%
May	6,442	100%	656	10%	3,820	59%	273	4%	1,266	20%	101	2%	326	5%
June	5,916	100%	619	10%	3,477	59%	274	5%	1,141	19%	95	2%	310	5%
July	6,020	100%	614	10%	3,575	59%	251	4%	1,201	20%	85	1%	294	5%
August	5,625	100%	595	11%	3,273	58%	266	5%	1,102	20%	93	2%	296	5%
September	5,567	100%	575	10%	3,273	59%	237	4%	1,117	20%	98	2%	267	5%
October	6,289	100%	654	10%	3,676	58%	294	5%	1,241	20%	104	2%	320	5%
November	5,485	100%	618	11%	3,207	58%	248	5%	1,070	20%	84	2%	258	5%
December	6,265	100%	653	10%	3,710	59%	254	4%	1,242	20%	89	1%	317	5%
<i>2015</i>														
January	6,099	100%	671	11%	3,651	60%	234	4%	1,151	19%	95	2%	297	5%
February	5,626	100%	633	11%	3,303	59%	243	4%	1,091	19%	73	1%	283	5%
March	6,674	100%	710	11%	3,961	59%	281	4%	1,308	20%	107	2%	307	5%
April	6,682	100%	746	11%	3,922	59%	305	5%	1,303	20%	92	1%	314	5%
May	6,228	100%	725	12%	3,591	58%	251	4%	1,267	20%	113	2%	281	5%
June	6,492	100%	715	11%	3,782	58%	301	5%	1,287	20%	98	2%	309	5%
July	6,323	100%	687	11%	3,681	58%	279	4%	1,244	20%	108	2%	324	5%
August	6,011	100%	639	11%	3,498	58%	295	5%	1,176	20%	106	2%	297	5%
September	6,323	100%	724	11%	3,679	58%	282	4%	1,239	20%	94	1%	305	5%
October	6,082	100%	667	11%	3,622	60%	256	4%	1,113	18%	102	2%	322	5%
November	5,002	100%	551	11%	2,938	59%	222	4%	967	19%	77	2%	247	5%
December	5,067	100%	586	12%	2,997	59%	238	5%	957	19%	74	1%	215	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>														
January	4,490	100%	551	12%	2,720	61%	210	5%	747	17%	77	2%	185	4%
February	4,657	100%	537	12%	2,755	59%	201	4%	891	19%	70	2%	203	4%
March	5,045	100%	544	11%	3,034	60%	239	5%	936	19%	77	2%	215	4%
April	4,609	100%	552	12%	2,821	61%	196	4%	788	17%	72	2%	180	4%
May	4,500	100%	519	12%	2,706	60%	194	4%	840	19%	63	1%	178	4%
June	4,332	100%	519	12%	2,603	60%	215	5%	780	18%	43	<1%	172	4%
July	4,014	100%	463	12%	2,422	60%	172	4%	749	19%	56	1%	152	4%
August	4,143	100%	469	11%	2,503	60%	185	4%	787	19%	51	1%	148	4%
September	3,784	100%	468	12%	2,294	61%	159	4%	683	18%	50	1%	130	3%
October	3,777	100%	424	11%	2,303	61%	165	4%	684	18%	50	1%	151	4%
November	3,698	100%	424	11%	2,323	63%	178	5%	607	16%	45	1%	121	3%
December	3,657	100%	480	13%	2,216	61%	149	4%	620	17%	46	1%	146	4%
<i>2017</i>														
January	3,585	100%	438	12%	2,189	61%	164	5%	605	17%	58	2%	131	4%
February	3,329	100%	432	13%	1,984	60%	158	5%	582	17%	45	1%	128	4%
March	3,823	100%	444	12%	2,339	61%	169	4%	677	18%	54	1%	140	4%
April	3,349	100%	402	12%	2,044	61%	152	5%	589	18%	46	1%	116	3%
May	3,722	100%	463	12%	2,303	62%	185	5%	602	16%	48	1%	121	3%
June	3,502	100%	398	11%	2,214	63%	138	4%	602	17%	34	<1%	116	3%
July	3,228	100%	396	12%	1,993	62%	135	4%	559	17%	39	1%	106	3%
August	3,287	100%	401	12%	2,046	62%	124	4%	560	17%	49	1%	107	3%
September	2,991	100%	388	13%	1,826	61%	159	5%	488	16%	34	1%	96	3%
October	3,282	100%	400	12%	2,075	63%	143	4%	523	16%	39	1%	102	3%
November	3,026	100%	394	13%	1,912	63%	131	4%	448	15%	39	1%	102	3%
December	2,878	100%	364	13%	1,819	63%	112	4%	448	16%	27	<1%	108	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2018														
January	3,042	100%	399	13%	1,928	63%	123	4%	452	15%	39	1%	101	3%
February	2,795	100%	348	12%	1,751	63%	114	4%	469	17%	30	1%	83	3%
March	3,259	100%	401	12%	2,064	63%	139	4%	514	16%	36	1%	105	3%
April	3,080	100%	381	12%	1,946	63%	122	4%	498	16%	31	1%	102	3%
May	3,255	100%	433	13%	2,124	65%	124	4%	459	14%	29	<1%	86	3%
June	2,930	100%	378	13%	1,881	64%	126	4%	422	14%	39	1%	84	3%
July	2,682	100%	350	13%	1,670	62%	102	4%	430	16%	33	1%	97	4%
August	3,081	100%	398	13%	1,907	62%	122	4%	504	16%	41	1%	109	4%
September	2,478	100%	340	14%	1,555	63%	89	4%	387	16%	23	<1%	84	3%
October	2,862	100%	400	14%	1,819	64%	117	4%	414	14%	22	<1%	90	3%
November	2,641	100%	344	13%	1,701	64%	117	4%	368	14%	23	<1%	88	3%
December	2,403	100%	334	14%	1,526	64%	97	4%	358	15%	18	<1%	70	3%
2019														
January	2,674	100%	402	15%	1,674	63%	*****	*****	411	15%	*****	*****	81	3%
February	2,482	100%	392	16%	1,538	62%	87	4%	357	14%	21	<1%	87	4%
March	2,600	100%	419	16%	1,670	64%	*****	*****	369	14%	*****	*****	98	4%
April	410	100%	66	16%	262	64%	*****	*****	59	14%	0	0%	*****	*****
May	190	100%	27	14%	123	65%	*****	*****	28	15%	*****	*****	*****	*****
June	151	100%	31	21%	96	64%	*****	*****	12	8%	*****	*****	*****	*****
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF														
2010														
July	907	100%	181	20%	557	61%	25	3%	120	13%	*****	*****	*****	*****
August	1,332	100%	206	15%	879	66%	52	4%	162	12%	*****	*****	*****	*****
September	1,560	100%	223	14%	1,026	66%	67	4%	203	13%	*****	*****	*****	*****
October	1,672	100%	262	16%	1,106	66%	57	3%	210	13%	11	<1%	26	2%
November	1,752	100%	286	16%	1,135	65%	72	4%	220	13%	*****	*****	*****	*****
December	2,150	100%	349	16%	1,394	65%	90	4%	267	12%	14	<1%	36	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>														
January	2,203	100%	340	15%	1,445	66%	85	4%	271	12%	15	<1%	47	2%
February	2,187	100%	338	15%	1,474	67%	69	3%	261	12%	17	<1%	28	1%
March	2,578	100%	373	14%	1,749	68%	87	3%	312	12%	11	<1%	46	2%
April	2,236	100%	343	15%	1,489	67%	76	3%	272	12%	19	<1%	37	2%
May	2,382	100%	393	16%	1,525	64%	81	3%	314	13%	20	<1%	49	2%
June	2,276	100%	343	15%	1,487	65%	78	3%	293	13%	18	<1%	57	3%
July	2,066	100%	330	16%	1,351	65%	73	4%	250	12%	17	<1%	45	2%
August	2,196	100%	377	17%	1,371	62%	89	4%	295	13%	11	<1%	53	2%
September	2,287	100%	347	15%	1,483	65%	83	4%	301	13%	15	<1%	58	3%
October	2,306	100%	380	16%	1,472	64%	91	4%	298	13%	13	<1%	52	2%
November	2,373	100%	373	16%	1,557	66%	87	4%	297	13%	14	<1%	45	2%
December	2,506	100%	392	16%	1,662	66%	81	3%	302	12%	22	<1%	47	2%
<i>2012</i>														
January	2,546	100%	461	18%	1,617	64%	78	3%	325	13%	*****	*****	*****	*****
February	2,532	100%	421	17%	1,642	65%	100	4%	290	11%	19	<1%	60	2%
March	2,611	100%	431	17%	1,687	65%	110	4%	306	12%	27	1%	50	2%
April	2,558	100%	431	17%	1,653	65%	67	3%	330	13%	21	<1%	56	2%
May	2,722	100%	472	17%	1,743	64%	102	4%	315	12%	24	<1%	66	2%
June	2,470	100%	398	16%	1,612	65%	97	4%	297	12%	17	<1%	49	2%
July	2,341	100%	369	16%	1,530	65%	96	4%	288	12%	*****	*****	*****	*****
August	2,577	100%	416	16%	1,653	64%	95	4%	318	12%	20	<1%	75	3%
September	2,354	100%	406	17%	1,514	64%	81	3%	292	12%	22	<1%	39	2%
October	2,824	100%	484	17%	1,821	64%	128	5%	311	11%	25	<1%	55	2%
November	2,811	100%	487	17%	1,809	64%	109	4%	333	12%	20	<1%	53	2%
December	2,810	100%	496	18%	1,828	65%	86	3%	323	11%	19	<1%	58	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>														
January	3,008	100%	513	17%	1,969	65%	109	4%	351	12%	22	<1%	44	1%
February	2,753	100%	492	18%	1,776	65%	93	3%	317	12%	16	<1%	59	2%
March	3,042	100%	510	17%	1,993	66%	106	3%	351	12%	20	<1%	62	2%
April	3,051	100%	522	17%	1,996	65%	107	4%	348	11%	15	<1%	63	2%
May	3,066	100%	534	17%	2,019	66%	91	3%	352	11%	16	<1%	54	2%
June	2,738	100%	501	18%	1,766	64%	91	3%	320	12%	13	<1%	47	2%
July	2,911	100%	556	19%	1,861	64%	103	4%	312	11%	16	<1%	63	2%
August	2,984	100%	545	18%	1,937	65%	94	3%	338	11%	22	<1%	48	2%
September	2,755	100%	502	18%	1,787	65%	109	4%	285	10%	19	<1%	53	2%
October	3,339	100%	649	19%	2,139	64%	115	3%	359	11%	16	<1%	61	2%
November	3,093	100%	563	18%	2,022	65%	109	4%	333	11%	13	<1%	53	2%
December	3,036	100%	540	18%	1,987	65%	88	3%	344	11%	16	<1%	61	2%
<i>2014</i>														
January	3,210	100%	592	18%	2,113	66%	99	3%	333	10%	24	<1%	49	2%
February	3,021	100%	532	18%	1,975	65%	90	3%	330	11%	28	<1%	66	2%
March	3,447	100%	653	19%	2,236	65%	129	4%	358	10%	17	<1%	54	2%
April	3,535	100%	656	19%	2,285	65%	108	3%	392	11%	25	<1%	69	2%
May	3,499	100%	638	18%	2,246	64%	122	3%	399	11%	23	<1%	71	2%
June	3,075	100%	565	18%	2,028	66%	92	3%	304	10%	23	<1%	63	2%
July	3,133	100%	611	20%	2,002	64%	116	4%	336	11%	22	<1%	46	1%
August	3,067	100%	542	18%	1,984	65%	128	4%	356	12%	18	<1%	39	1%
September	3,119	100%	584	19%	2,001	64%	115	4%	353	11%	23	<1%	43	1%
October	3,429	100%	647	19%	2,215	65%	108	3%	390	11%	23	<1%	46	1%
November	3,116	100%	616	20%	2,033	65%	75	2%	328	11%	*****	*****	*****	*****
December	3,468	100%	660	19%	2,231	64%	132	4%	378	11%	*****	*****	*****	*****

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>														
January	3,477	100%	625	18%	2,280	66%	107	3%	379	11%	24	<1%	62	2%
February	3,199	100%	589	18%	2,084	65%	106	3%	359	11%	*****	*****	*****	*****
March	3,814	100%	718	19%	2,479	65%	129	3%	419	11%	18	<1%	51	1%
April	3,720	100%	677	18%	2,424	65%	141	4%	404	11%	22	<1%	52	1%
May	3,503	100%	683	19%	2,227	64%	115	3%	390	11%	20	<1%	68	2%
June	3,540	100%	670	19%	2,278	64%	138	4%	387	11%	20	<1%	47	1%
July	3,512	100%	678	19%	2,284	65%	116	3%	364	10%	21	<1%	49	1%
August	3,281	100%	640	20%	2,099	64%	130	4%	350	11%	16	<1%	46	1%
September	3,461	100%	651	19%	2,274	66%	109	3%	352	10%	25	<1%	50	1%
October	2,890	100%	566	20%	1,824	63%	114	4%	317	11%	15	<1%	54	2%
November	2,295	100%	434	19%	1,468	64%	91	4%	250	11%	*****	*****	*****	*****
December	2,146	100%	398	19%	1,392	65%	71	3%	229	11%	17	<1%	39	2%
<i>2016</i>														
January	1,854	100%	343	19%	1,184	64%	70	4%	213	11%	13	<1%	31	2%
February	1,821	100%	330	18%	1,171	64%	74	4%	199	11%	9	<1%	38	2%
March	1,897	100%	371	20%	1,222	64%	59	3%	194	10%	14	<1%	37	2%
April	1,703	100%	300	18%	1,102	65%	62	4%	193	11%	12	<1%	34	2%
May	1,619	100%	295	18%	1,007	62%	58	4%	212	13%	16	<1%	31	2%
June	1,461	100%	271	19%	931	64%	52	4%	164	11%	15	1%	28	2%
July	1,347	100%	261	19%	864	64%	38	3%	146	11%	13	<1%	25	2%
August	1,357	100%	260	19%	859	63%	45	3%	153	11%	12	<1%	28	2%
September	1,292	100%	242	19%	840	65%	35	3%	147	11%	*****	*****	*****	*****
October	1,243	100%	242	19%	784	63%	40	3%	147	12%	11	<1%	19	2%
November	1,200	100%	223	19%	772	64%	54	5%	128	11%	*****	*****	*****	*****
December	1,232	100%	232	19%	809	66%	41	3%	132	11%	*****	*****	*****	*****

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	1,133	100%	221	20%	738	65%	29	3%	116	10%	11	<1%	18	2%
February	1,085	100%	199	18%	707	65%	46	4%	114	11%	*****	*****	*****	*****
March	1,163	100%	217	19%	758	65%	35	3%	133	11%	*****	*****	*****	*****
April	995	100%	196	20%	653	66%	29	3%	96	10%	*****	*****	*****	*****
May	1,072	100%	214	20%	671	63%	45	4%	118	11%	*****	*****	*****	*****
June	1,050	100%	203	19%	662	63%	47	4%	119	11%	*****	*****	*****	*****
July	896	100%	184	21%	553	62%	35	4%	106	12%	*****	*****	*****	*****
August	923	100%	196	21%	579	63%	29	3%	102	11%	*****	*****	*****	*****
September	812	100%	158	19%	522	64%	29	4%	83	10%	*****	*****	*****	*****
October	891	100%	171	19%	580	65%	30	3%	97	11%	*****	*****	*****	*****
November	877	100%	172	20%	558	64%	29	3%	90	10%	*****	*****	*****	*****
December	774	100%	139	18%	524	68%	18	2%	76	10%	*****	*****	*****	*****
<i>2018</i>														
January	871	100%	181	21%	555	64%	25	3%	87	10%	*****	*****	*****	*****
February	765	100%	151	20%	478	62%	27	4%	85	11%	*****	*****	*****	*****
March	839	100%	171	20%	537	64%	31	4%	81	10%	*****	*****	*****	*****
April	746	100%	157	21%	468	63%	26	3%	75	10%	*****	*****	*****	*****
May	841	100%	191	23%	534	63%	*****	*****	77	9%	*****	*****	*****	*****
June	685	100%	138	20%	454	66%	*****	*****	66	10%	*****	*****	*****	*****
July	652	100%	139	21%	414	63%	19	3%	66	10%	*****	*****	*****	*****
August	688	100%	136	20%	456	66%	25	4%	52	8%	*****	*****	*****	*****
September	555	100%	131	24%	340	61%	15	3%	50	9%	*****	*****	*****	*****
October	657	100%	133	20%	430	65%	21	3%	52	8%	*****	*****	*****	*****
November	584	100%	140	24%	344	59%	29	5%	53	9%	*****	*****	*****	*****
December	591	100%	118	20%	385	65%	16	3%	58	10%	*****	*****	*****	*****

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>														
January	670	100%	156	23%	435	65%	*****	*****	53	8%	*****	*****	*****	*****
February	569	100%	139	24%	350	62%	*****	*****	55	10%	*****	*****	*****	*****
March	577	100%	154	27%	353	61%	*****	*****	56	10%	0	0%	*****	*****
April	107	100%	31	29%	63	59%	0	0%	*****	*****	0	0%	*****	*****
May	44	100%	*****	*****	25	57%	*****	*****	*****	*****	*****	*****	0	0%
June	40	100%	*****	*****	24	60%	0	0%	*****	*****	0	0%	*****	*****
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹														
<i>2010</i>														
July	954	100%	86	9%	566	59%	46	5%	195	20%	20	2%	41	4%
August	1,586	100%	132	8%	955	60%	82	5%	295	19%	31	2%	91	6%
September	1,816	100%	189	10%	1,047	58%	78	4%	368	20%	31	2%	103	6%
October	2,185	100%	181	8%	1,293	59%	108	5%	438	20%	40	2%	125	6%
November	2,411	100%	232	10%	1,375	57%	123	5%	503	21%	42	2%	136	6%
December	2,612	100%	276	11%	1,494	57%	107	4%	540	21%	46	2%	149	6%
<i>2011</i>														
January	2,974	100%	288	10%	1,758	59%	134	5%	587	20%	50	2%	157	5%
February	3,102	100%	281	9%	1,858	60%	137	4%	604	19%	51	2%	171	6%
March	3,691	100%	344	9%	2,199	60%	150	4%	732	20%	68	2%	198	5%
April	3,547	100%	340	10%	2,079	59%	168	5%	718	20%	65	2%	177	5%
May	3,698	100%	376	10%	2,168	59%	145	4%	753	20%	58	2%	198	5%
June	3,866	100%	326	8%	2,287	59%	175	5%	783	20%	62	2%	233	6%
July	3,537	100%	340	10%	2,078	59%	153	4%	702	20%	59	2%	205	6%
August	3,666	100%	373	10%	2,155	59%	146	4%	742	20%	53	1%	197	5%
September	3,520	100%	328	9%	2,056	58%	168	5%	730	21%	55	2%	183	5%
October	3,740	100%	352	9%	2,202	59%	156	4%	748	20%	56	1%	226	6%
November	3,834	100%	383	10%	2,148	56%	196	5%	810	21%	78	2%	219	6%
December	3,912	100%	435	11%	2,260	58%	174	4%	786	20%	63	2%	194	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>														
January	4,069	100%	412	10%	2,404	59%	139	3%	846	21%	67	2%	201	5%
February	4,217	100%	437	10%	2,491	59%	173	4%	835	20%	73	2%	208	5%
March	4,430	100%	400	9%	2,625	59%	217	5%	899	20%	78	2%	211	5%
April	4,332	100%	418	10%	2,513	58%	191	4%	914	21%	72	2%	224	5%
May	4,637	100%	465	10%	2,707	58%	211	5%	936	20%	77	2%	241	5%
June	4,271	100%	444	10%	2,497	58%	202	5%	859	20%	61	1%	208	5%
July	4,298	100%	431	10%	2,465	57%	204	5%	887	21%	84	2%	227	5%
August	4,466	100%	456	10%	2,549	57%	223	5%	899	20%	84	2%	255	6%
September	4,028	100%	416	10%	2,322	58%	185	5%	843	21%	61	2%	201	5%
October	4,672	100%	489	10%	2,722	58%	217	5%	955	20%	59	1%	230	5%
November	4,626	100%	497	11%	2,772	60%	200	4%	868	19%	68	1%	221	5%
December	4,511	100%	467	10%	2,701	60%	200	4%	864	19%	66	1%	213	5%
<i>2013</i>														
January	4,971	100%	523	11%	2,912	59%	206	4%	1,021	21%	74	1%	235	5%
February	4,590	100%	468	10%	2,719	59%	221	5%	902	20%	71	2%	209	5%
March	5,246	100%	538	10%	3,169	60%	229	4%	975	19%	91	2%	244	5%
April	5,257	100%	530	10%	3,156	60%	230	4%	1,020	19%	86	2%	235	4%
May	5,466	100%	601	11%	3,268	60%	220	4%	1,067	20%	70	1%	240	4%
June	4,932	100%	516	10%	2,973	60%	212	4%	915	19%	68	1%	248	5%
July	5,232	100%	577	11%	3,068	59%	234	4%	1,031	20%	74	1%	248	5%
August	5,191	100%	557	11%	3,070	59%	239	5%	992	19%	74	1%	259	5%
September	4,938	100%	527	11%	2,932	59%	238	5%	941	19%	67	1%	233	5%
October	5,540	100%	602	11%	3,228	58%	269	5%	1,132	20%	82	1%	227	4%
November	5,213	100%	538	10%	3,104	60%	261	5%	1,006	19%	77	1%	227	4%
December	4,980	100%	534	11%	3,005	60%	176	4%	976	20%	76	2%	213	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>														
January	5,317	100%	577	11%	3,178	60%	221	4%	1,026	19%	86	2%	229	4%
February	5,029	100%	566	11%	2,932	58%	214	4%	994	20%	82	2%	241	5%
March	5,765	100%	585	10%	3,459	60%	260	5%	1,135	20%	85	1%	241	4%
April	6,039	100%	648	11%	3,637	60%	297	5%	1,068	18%	90	1%	299	5%
May	5,954	100%	640	11%	3,560	60%	262	4%	1,157	19%	85	1%	250	4%
June	5,429	100%	588	11%	3,237	60%	247	5%	1,020	19%	85	2%	252	5%
July	5,506	100%	591	11%	3,303	60%	238	4%	1,068	19%	73	1%	233	4%
August	5,196	100%	583	11%	3,063	59%	242	5%	985	19%	79	2%	244	5%
September	5,094	100%	542	11%	3,041	60%	218	4%	990	19%	86	2%	217	4%
October	5,803	100%	633	11%	3,429	59%	277	5%	1,116	19%	90	2%	258	4%
November	4,943	100%	595	12%	2,932	59%	224	5%	924	19%	67	1%	201	4%
December	5,777	100%	614	11%	3,491	60%	239	4%	1,096	19%	84	1%	253	4%
<i>2015</i>														
January	5,693	100%	645	11%	3,463	61%	221	4%	1,029	18%	82	1%	253	4%
February	5,224	100%	600	11%	3,117	60%	234	4%	982	19%	61	1%	230	4%
March	6,281	100%	687	11%	3,797	60%	272	4%	1,190	19%	93	1%	242	4%
April	6,201	100%	708	11%	3,719	60%	279	4%	1,158	19%	81	1%	256	4%
May	5,787	100%	695	12%	3,388	59%	236	4%	1,132	20%	100	2%	236	4%
June	6,055	100%	689	11%	3,600	59%	280	5%	1,139	19%	86	1%	261	4%
July	5,877	100%	675	11%	3,488	59%	259	4%	1,099	19%	92	2%	264	4%
August	5,507	100%	608	11%	3,248	59%	274	5%	1,051	19%	92	2%	234	4%
September	5,860	100%	709	12%	3,471	59%	272	5%	1,073	18%	81	1%	254	4%
October	5,724	100%	659	12%	3,442	60%	241	4%	1,009	18%	97	2%	276	5%
November	4,795	100%	535	11%	2,856	60%	215	4%	894	19%	73	2%	222	5%
December	4,928	100%	594	12%	2,937	60%	229	5%	907	18%	72	1%	189	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>														
January	4,427	100%	537	12%	2,701	61%	207	5%	732	17%	73	2%	177	4%
February	4,637	100%	528	11%	2,754	59%	203	4%	883	19%	71	2%	198	4%
March	5,063	100%	553	11%	3,054	60%	239	5%	928	18%	76	2%	213	4%
April	4,613	100%	551	12%	2,828	61%	196	4%	787	17%	70	2%	181	4%
May	4,508	100%	527	12%	2,711	60%	195	4%	830	18%	64	1%	181	4%
June	4,325	100%	521	12%	2,590	60%	214	5%	789	18%	42	<1%	169	4%
July	4,031	100%	470	12%	2,433	60%	173	4%	747	19%	58	1%	150	4%
August	4,144	100%	472	11%	2,516	61%	184	4%	774	19%	51	1%	147	4%
September	3,810	100%	477	13%	2,307	61%	161	4%	685	18%	48	1%	132	3%
October	3,811	100%	425	11%	2,326	61%	165	4%	692	18%	50	1%	153	4%
November	3,718	100%	433	12%	2,330	63%	176	5%	613	16%	45	1%	121	3%
December	3,683	100%	484	13%	2,234	61%	154	4%	618	17%	44	1%	149	4%
<i>2017</i>														
January	3,614	100%	445	12%	2,206	61%	165	5%	611	17%	61	2%	126	3%
February	3,346	100%	435	13%	1,994	60%	161	5%	587	18%	44	1%	125	4%
March	3,837	100%	446	12%	2,357	61%	172	4%	675	18%	52	1%	135	4%
April	3,372	100%	401	12%	2,068	61%	151	4%	588	17%	47	1%	117	3%
May	3,744	100%	470	13%	2,312	62%	189	5%	602	16%	50	1%	121	3%
June	3,532	100%	405	11%	2,234	63%	141	4%	603	17%	35	<1%	114	3%
July	3,262	100%	406	12%	2,020	62%	137	4%	556	17%	38	1%	105	3%
August	3,323	100%	407	12%	2,065	62%	126	4%	569	17%	50	2%	106	3%
September	3,028	100%	389	13%	1,853	61%	164	5%	492	16%	35	1%	95	3%
October	3,306	100%	399	12%	2,102	64%	143	4%	523	16%	37	1%	102	3%
November	3,055	100%	396	13%	1,932	63%	131	4%	456	15%	39	1%	101	3%
December	2,914	100%	378	13%	1,836	63%	112	4%	450	15%	27	<1%	111	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>														
January	3,065	100%	397	13%	1,946	63%	124	4%	457	15%	41	1%	100	3%
February	2,806	100%	355	13%	1,761	63%	114	4%	466	17%	29	1%	81	3%
March	3,301	100%	413	13%	2,086	63%	142	4%	520	16%	36	1%	104	3%
April	3,105	100%	385	12%	1,963	63%	122	4%	502	16%	32	1%	101	3%
May	3,292	100%	443	13%	2,149	65%	124	4%	459	14%	29	<1%	88	3%
June	2,954	100%	387	13%	1,899	64%	125	4%	423	14%	39	1%	81	3%
July	2,709	100%	356	13%	1,687	62%	100	4%	436	16%	32	1%	98	4%
August	3,119	100%	405	13%	1,931	62%	121	4%	511	16%	42	1%	109	3%
September	2,511	100%	346	14%	1,577	63%	89	4%	390	16%	23	<1%	86	3%
October	2,907	100%	404	14%	1,850	64%	116	4%	424	15%	22	<1%	91	3%
November	2,675	100%	348	13%	1,726	65%	118	4%	368	14%	24	<1%	91	3%
December	2,441	100%	336	14%	1,551	64%	99	4%	366	15%	17	<1%	72	3%
<i>2019</i>														
January	2,709	100%	406	15%	1,705	63%	94	3%	413	15%	*****	*****	*****	*****
February	2,515	100%	395	16%	1,560	62%	92	4%	360	14%	21	<1%	87	3%
March	2,637	100%	426	16%	1,697	64%	*****	*****	372	14%	*****	*****	98	4%
April	414	100%	66	16%	263	64%	*****	*****	61	15%	0	0%	*****	*****
May	195	100%	29	15%	126	65%	*****	*****	28	14%	*****	*****	*****	*****
June	152	100%	32	21%	95	63%	*****	*****	13	9%	*****	*****	*****	*****

Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹

<i>2010</i>														
July	904	100%	82	9%	536	59%	42	5%	186	21%	18	2%	40	4%
August	1,504	100%	125	8%	908	60%	78	5%	277	18%	31	2%	85	6%
September	1,723	100%	178	10%	994	58%	75	4%	351	20%	30	2%	95	6%
October	2,086	100%	169	8%	1,229	59%	103	5%	427	20%	40	2%	118	6%
November	2,300	100%	218	9%	1,310	57%	116	5%	483	21%	42	2%	131	6%
December	2,465	100%	260	11%	1,401	57%	102	4%	513	21%	46	2%	143	6%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>														
January	2,828	100%	265	9%	1,664	59%	131	5%	568	20%	48	2%	152	5%
February	2,973	100%	266	9%	1,774	60%	131	4%	587	20%	50	2%	165	6%
March	3,537	100%	328	9%	2,108	60%	144	4%	704	20%	66	2%	187	5%
April	3,397	100%	320	9%	1,988	59%	161	5%	695	20%	60	2%	173	5%
May	3,553	100%	360	10%	2,078	58%	140	4%	727	20%	57	2%	191	5%
June	3,734	100%	314	8%	2,200	59%	168	4%	762	20%	61	2%	229	6%
July	3,402	100%	323	9%	1,991	59%	148	4%	684	20%	58	2%	198	6%
August	3,536	100%	359	10%	2,066	58%	145	4%	722	20%	52	1%	192	5%
September	3,394	100%	316	9%	1,977	58%	164	5%	709	21%	53	2%	175	5%
October	3,613	100%	342	9%	2,126	59%	149	4%	721	20%	54	1%	221	6%
November	3,696	100%	367	10%	2,061	56%	191	5%	791	21%	77	2%	209	6%
December	3,792	100%	421	11%	2,183	58%	171	5%	769	20%	59	2%	189	5%
<i>2012</i>														
January	3,919	100%	388	10%	2,329	59%	132	3%	805	21%	66	2%	199	5%
February	4,070	100%	422	10%	2,387	59%	167	4%	820	20%	73	2%	201	5%
March	4,312	100%	387	9%	2,552	59%	212	5%	878	20%	75	2%	208	5%
April	4,193	100%	401	10%	2,419	58%	188	4%	897	21%	69	2%	219	5%
May	4,509	100%	455	10%	2,630	58%	205	5%	910	20%	74	2%	235	5%
June	4,140	100%	427	10%	2,420	58%	196	5%	836	20%	59	1%	202	5%
July	4,162	100%	419	10%	2,384	57%	193	5%	864	21%	83	2%	219	5%
August	4,345	100%	435	10%	2,486	57%	215	5%	881	20%	81	2%	247	6%
September	3,903	100%	398	10%	2,248	58%	178	5%	825	21%	60	2%	194	5%
October	4,541	100%	468	10%	2,635	58%	217	5%	938	21%	56	1%	227	5%
November	4,496	100%	480	11%	2,683	60%	196	4%	853	19%	67	1%	217	5%
December	4,396	100%	449	10%	2,629	60%	198	5%	846	19%	64	1%	210	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>														
January	4,812	100%	496	10%	2,817	59%	194	4%	1,001	21%	72	1%	232	5%
February	4,450	100%	449	10%	2,629	59%	215	5%	881	20%	69	2%	207	5%
March	5,109	100%	522	10%	3,083	60%	223	4%	952	19%	90	2%	239	5%
April	5,103	100%	509	10%	3,062	60%	224	4%	993	19%	84	2%	231	5%
May	5,283	100%	584	11%	3,149	60%	215	4%	1,030	19%	70	1%	235	4%
June	4,751	100%	485	10%	2,860	60%	206	4%	886	19%	68	1%	246	5%
July	5,093	100%	556	11%	2,981	59%	229	4%	1,011	20%	74	1%	242	5%
August	5,034	100%	542	11%	2,966	59%	233	5%	966	19%	72	1%	255	5%
September	4,786	100%	511	11%	2,835	59%	229	5%	915	19%	65	1%	231	5%
October	5,360	100%	573	11%	3,119	58%	264	5%	1,098	20%	82	2%	224	4%
November	5,082	100%	520	10%	3,028	60%	257	5%	979	19%	77	2%	221	4%
December	4,803	100%	507	11%	2,893	60%	165	3%	955	20%	75	2%	208	4%
<i>2014</i>														
January	5,191	100%	557	11%	3,102	60%	218	4%	1,004	19%	86	2%	224	4%
February	4,874	100%	542	11%	2,839	58%	208	4%	971	20%	80	2%	234	5%
March	5,590	100%	564	10%	3,349	60%	248	4%	1,110	20%	80	1%	239	4%
April	5,886	100%	629	11%	3,540	60%	293	5%	1,039	18%	89	2%	296	5%
May	5,784	100%	613	11%	3,461	60%	253	4%	1,128	20%	85	1%	244	4%
June	5,286	100%	567	11%	3,149	60%	242	5%	996	19%	85	2%	247	5%
July	5,363	100%	569	11%	3,216	60%	232	4%	1,044	19%	71	1%	231	4%
August	5,036	100%	554	11%	2,963	59%	239	5%	962	19%	75	1%	243	5%
September	4,951	100%	522	11%	2,952	60%	212	4%	967	20%	86	2%	212	4%
October	5,638	100%	610	11%	3,338	59%	263	5%	1,088	19%	87	2%	252	4%
November	4,825	100%	573	12%	2,869	59%	220	5%	904	19%	65	1%	194	4%
December	5,610	100%	593	11%	3,391	60%	227	4%	1,069	19%	83	1%	247	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>														
January	5,540	100%	630	11%	3,361	61%	218	4%	1,001	18%	80	1%	250	5%
February	5,060	100%	580	11%	3,011	60%	227	4%	957	19%	61	1%	224	4%
March	6,100	100%	658	11%	3,691	61%	261	4%	1,163	19%	92	2%	235	4%
April	6,019	100%	693	12%	3,602	60%	271	5%	1,126	19%	77	1%	250	4%
May	5,622	100%	668	12%	3,283	58%	229	4%	1,112	20%	98	2%	232	4%
June	5,882	100%	658	11%	3,492	59%	275	5%	1,115	19%	86	1%	256	4%
July	5,720	100%	650	11%	3,388	59%	253	4%	1,080	19%	91	2%	258	5%
August	5,372	100%	596	11%	3,158	59%	270	5%	1,027	19%	90	2%	231	4%
September	5,689	100%	676	12%	3,369	59%	267	5%	1,049	18%	79	1%	249	4%
October	5,585	100%	635	11%	3,359	60%	236	4%	989	18%	96	2%	270	5%
November	4,676	100%	516	11%	2,780	59%	214	5%	876	19%	72	2%	218	5%
December	4,822	100%	578	12%	2,864	59%	226	5%	896	19%	71	1%	187	4%
<i>2016</i>														
January	4,326	100%	530	12%	2,633	61%	202	5%	715	17%	71	2%	175	4%
February	4,530	100%	517	11%	2,696	60%	198	4%	857	19%	70	2%	192	4%
March	4,946	100%	537	11%	2,988	60%	234	5%	905	18%	75	2%	207	4%
April	4,503	100%	540	12%	2,757	61%	192	4%	767	17%	69	2%	178	4%
May	4,423	100%	514	12%	2,660	60%	189	4%	823	19%	62	1%	175	4%
June	4,256	100%	511	12%	2,553	60%	212	5%	773	18%	42	<1%	165	4%
July	3,949	100%	458	12%	2,385	60%	170	4%	732	19%	56	1%	148	4%
August	4,082	100%	461	11%	2,477	61%	183	4%	767	19%	51	1%	143	4%
September	3,731	100%	464	12%	2,262	61%	156	4%	673	18%	48	1%	128	3%
October	3,735	100%	417	11%	2,281	61%	162	4%	675	18%	49	1%	151	4%
November	3,650	100%	425	12%	2,291	63%	172	5%	600	16%	44	1%	118	3%
December	3,621	100%	472	13%	2,197	61%	150	4%	611	17%	45	1%	146	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	3,542	100%	435	12%	2,162	61%	162	5%	599	17%	59	2%	125	4%
February	3,286	100%	427	13%	1,960	60%	157	5%	575	17%	43	1%	124	4%
March	3,776	100%	437	12%	2,317	61%	169	4%	667	18%	52	1%	134	4%
April	3,304	100%	396	12%	2,019	61%	149	5%	581	18%	45	1%	114	3%
May	3,680	100%	461	13%	2,278	62%	185	5%	589	16%	48	1%	119	3%
June	3,476	100%	398	11%	2,197	63%	138	4%	596	17%	34	<1%	113	3%
July	3,193	100%	394	12%	1,976	62%	133	4%	549	17%	38	1%	103	3%
August	3,261	100%	397	12%	2,031	62%	125	4%	555	17%	49	2%	104	3%
September	2,971	100%	384	13%	1,819	61%	156	5%	483	16%	34	1%	95	3%
October	3,252	100%	393	12%	2,061	63%	141	4%	519	16%	37	1%	101	3%
November	2,997	100%	390	13%	1,892	63%	130	4%	447	15%	38	1%	100	3%
December	2,863	100%	363	13%	1,808	63%	112	4%	444	16%	27	<1%	109	4%
<i>2018</i>														
January	3,010	100%	391	13%	1,912	64%	121	4%	448	15%	39	1%	99	3%
February	2,772	100%	348	13%	1,739	63%	113	4%	462	17%	29	1%	81	3%
March	3,249	100%	403	12%	2,057	63%	140	4%	510	16%	36	1%	103	3%
April	3,058	100%	381	12%	1,931	63%	122	4%	494	16%	30	<1%	100	3%
May	3,228	100%	428	13%	2,111	65%	123	4%	450	14%	29	<1%	87	3%
June	2,910	100%	377	13%	1,873	64%	123	4%	417	14%	39	1%	81	3%
July	2,670	100%	348	13%	1,664	62%	100	4%	429	16%	32	1%	97	4%
August	3,059	100%	395	13%	1,896	62%	120	4%	498	16%	41	1%	109	4%
September	2,467	100%	339	14%	1,548	63%	89	4%	386	16%	22	<1%	83	3%
October	2,854	100%	398	14%	1,814	64%	113	4%	418	15%	22	<1%	89	3%
November	2,631	100%	342	13%	1,696	64%	117	4%	364	14%	23	<1%	89	3%
December	2,390	100%	331	14%	1,516	63%	97	4%	359	15%	17	<1%	70	3%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2019														
January	2,665	100%	401	15%	1,671	63%	94	4%	408	15%	*****	*****	*****	*****
February	2,474	100%	390	16%	1,533	62%	87	4%	357	14%	21	<1%	86	3%
March	2,588	100%	416	16%	1,666	64%	*****	*****	366	14%	*****	*****	96	4%
April	406	100%	66	16%	258	64%	*****	*****	59	15%	0	0%	*****	*****
May	190	100%	27	14%	123	65%	*****	*****	28	15%	*****	*****	*****	*****
June	150	100%	31	21%	95	63%	*****	*****	12	8%	*****	*****	*****	*****
Heart Failures Identified in the ICD-10-CM Era Only: 4/1/2016 - 9/30/2018														
No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HF rEF														
2016														
April	3,226	100%	583	18%	2,125	66%	116	4%	344	11%	13	<1%	45	1%
May	4,604	100%	878	19%	2,908	63%	162	4%	518	11%	34	<1%	104	2%
June	5,033	100%	912	18%	3,267	65%	170	3%	567	11%	36	<1%	81	2%
July	5,171	100%	948	18%	3,341	65%	165	3%	592	11%	32	<1%	93	2%
August	5,481	100%	970	18%	3,559	65%	196	4%	621	11%	34	<1%	101	2%
September	5,398	100%	1,019	19%	3,463	64%	181	3%	595	11%	36	<1%	104	2%
October	5,525	100%	1,050	19%	3,560	64%	186	3%	594	11%	39	<1%	96	2%
November	5,496	100%	1,090	20%	3,495	64%	186	3%	616	11%	28	<1%	81	1%
December	5,714	100%	1,086	19%	3,650	64%	175	3%	663	12%	39	<1%	101	2%
2017														
January	5,616	100%	1,056	19%	3,628	65%	178	3%	628	11%	33	<1%	93	2%
February	5,170	100%	960	19%	3,329	64%	178	3%	589	11%	35	<1%	79	2%
March	5,895	100%	1,116	19%	3,846	65%	205	3%	606	10%	31	<1%	91	2%
April	5,356	100%	1,067	20%	3,449	64%	147	3%	573	11%	32	<1%	88	2%
May	5,760	100%	1,189	21%	3,589	62%	199	3%	660	11%	35	<1%	88	2%
June	5,526	100%	1,017	18%	3,609	65%	177	3%	609	11%	24	<1%	90	2%
July	5,076	100%	971	19%	3,284	65%	155	3%	564	11%	26	<1%	76	1%
August	5,482	100%	1,071	20%	3,500	64%	198	4%	591	11%	29	<1%	93	2%
September	5,113	100%	1,042	20%	3,265	64%	162	3%	528	10%	23	<1%	93	2%
October	5,637	100%	1,114	20%	3,704	66%	158	3%	543	10%	35	<1%	83	1%
November	5,655	100%	1,139	20%	3,635	64%	184	3%	584	10%	28	<1%	85	2%
December	5,328	100%	983	18%	3,504	66%	181	3%	541	10%	27	<1%	92	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2018														
January	5,543	100%	1,115	20%	3,633	66%	169	3%	514	9%	20	<1%	92	2%
February	5,100	100%	1,010	20%	3,272	64%	188	4%	511	10%	15	<1%	104	2%
March	5,850	100%	1,165	20%	3,793	65%	184	3%	585	10%	24	<1%	99	2%
April	5,421	100%	1,093	20%	3,520	65%	166	3%	545	10%	25	<1%	72	1%
May	5,989	100%	1,218	20%	3,891	65%	187	3%	561	9%	39	<1%	93	2%
June	5,373	100%	1,089	20%	3,452	64%	162	3%	545	10%	27	<1%	98	2%
July	5,287	100%	1,170	22%	3,352	63%	138	3%	516	10%	26	<1%	85	2%
August	5,594	100%	1,169	21%	3,610	65%	163	3%	534	10%	31	<1%	87	2%
September	4,957	100%	1,064	21%	3,142	63%	145	3%	491	10%	24	<1%	91	2%
October	4,532	100%	971	21%	2,889	64%	129	3%	452	10%	24	<1%	67	1%
November	3,345	100%	729	22%	2,092	63%	111	3%	328	10%	28	<1%	57	2%
December	2,749	100%	605	22%	1,730	63%	67	2%	290	11%	14	<1%	43	2%
2019														
January	2,749	100%	626	23%	1,747	64%	70	3%	245	9%	11	<1%	50	2%
February	2,339	100%	585	25%	1,430	61%	64	3%	216	9%	*****	*****	*****	*****
March	2,409	100%	610	25%	1,496	62%	*****	*****	231	10%	*****	*****	47	2%
April	527	100%	122	23%	348	66%	*****	*****	40	8%	0	0%	*****	*****
May	200	100%	67	34%	105	53%	*****	*****	*****	*****	*****	*****	*****	*****
June	193	100%	57	30%	115	60%	*****	*****	*****	*****	0	0%	*****	*****
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹														
2016														
April	2,983	100%	349	12%	1,775	60%	131	4%	566	19%	38	1%	124	4%
May	4,822	100%	510	11%	2,820	58%	223	5%	955	20%	75	2%	239	5%
June	5,452	100%	646	12%	3,154	58%	239	4%	1,047	19%	77	1%	289	5%
July	5,625	100%	598	11%	3,284	58%	252	4%	1,092	19%	92	2%	307	5%
August	6,466	100%	720	11%	3,743	58%	306	5%	1,285	20%	99	2%	313	5%
September	6,182	100%	646	10%	3,651	59%	274	4%	1,188	19%	98	2%	325	5%
October	6,866	100%	775	11%	4,060	59%	275	4%	1,301	19%	99	1%	356	5%
November	7,329	100%	844	12%	4,265	58%	353	5%	1,364	19%	94	1%	409	6%
December	7,660	100%	912	12%	4,498	59%	333	4%	1,411	18%	114	1%	392	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	7,859	100%	906	12%	4,593	58%	359	5%	1,491	19%	120	2%	390	5%
February	7,552	100%	851	11%	4,430	59%	342	5%	1,409	19%	115	2%	405	5%
March	9,179	100%	1,017	11%	5,487	60%	396	4%	1,717	19%	127	1%	435	5%
April	8,323	100%	965	12%	4,880	59%	363	4%	1,595	19%	122	1%	398	5%
May	9,521	100%	1,104	12%	5,727	60%	425	4%	1,712	18%	142	1%	411	4%
June	9,241	100%	1,062	11%	5,474	59%	381	4%	1,752	19%	121	1%	451	5%
July	8,701	100%	992	11%	5,111	59%	374	4%	1,685	19%	133	2%	406	5%
August	9,431	100%	1,138	12%	5,587	59%	399	4%	1,701	18%	164	2%	442	5%
September	8,649	100%	1,019	12%	5,139	59%	366	4%	1,589	18%	116	1%	420	5%
October	9,533	100%	1,154	12%	5,700	60%	403	4%	1,670	18%	133	1%	473	5%
November	9,472	100%	1,153	12%	5,710	60%	400	4%	1,688	18%	128	1%	393	4%
December	9,214	100%	1,069	12%	5,582	61%	386	4%	1,662	18%	122	1%	393	4%
<i>2018</i>														
January	9,702	100%	1,214	13%	5,827	60%	441	5%	1,656	17%	122	1%	442	5%
February	9,361	100%	1,145	12%	5,637	60%	415	4%	1,630	17%	109	1%	425	5%
March	10,667	100%	1,343	13%	6,463	61%	483	5%	1,809	17%	135	1%	434	4%
April	10,537	100%	1,351	13%	6,419	61%	428	4%	1,786	17%	120	1%	433	4%
May	11,382	100%	1,438	13%	7,011	62%	441	4%	1,882	17%	140	1%	470	4%
June	10,029	100%	1,248	12%	6,172	62%	406	4%	1,644	16%	118	1%	441	4%
July	9,875	100%	1,245	13%	6,027	61%	380	4%	1,668	17%	120	1%	435	4%
August	10,706	100%	1,370	13%	6,493	61%	378	4%	1,848	17%	144	1%	473	4%
September	9,535	100%	1,226	13%	5,779	61%	407	4%	1,575	17%	124	1%	424	4%
October	9,625	100%	1,293	13%	5,932	62%	388	4%	1,516	16%	103	1%	393	4%
November	7,679	100%	1,034	13%	4,728	62%	317	4%	1,218	16%	75	<1%	307	4%
December	6,839	100%	954	14%	4,191	61%	250	4%	1,095	16%	57	<1%	292	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>														
January	7,126	100%	1,048	15%	4,455	63%	238	3%	1,098	15%	33	<1%	254	4%
February	6,322	100%	999	16%	3,841	61%	219	3%	976	15%	45	<1%	242	4%
March	6,541	100%	1,082	17%	4,125	63%	85	1%	973	15%	30	<1%	246	4%
April	1,316	100%	190	14%	836	64%	*****	*****	203	15%	*****	*****	50	4%
May	554	100%	102	18%	332	60%	*****	*****	79	14%	*****	*****	23	4%
June	469	100%	100	21%	275	59%	*****	*****	59	13%	*****	*****	22	5%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹														
<i>2016</i>														
April	2,796	100%	322	12%	1,656	59%	125	4%	534	19%	37	1%	122	4%
May	4,563	100%	472	10%	2,674	59%	211	5%	906	20%	74	2%	226	5%
June	5,141	100%	612	12%	2,977	58%	221	4%	984	19%	71	1%	276	5%
July	5,322	100%	555	10%	3,108	58%	239	4%	1,036	19%	86	2%	298	6%
August	6,154	100%	674	11%	3,558	58%	287	5%	1,236	20%	98	2%	301	5%
September	5,882	100%	606	10%	3,456	59%	259	4%	1,145	19%	97	2%	319	5%
October	6,574	100%	735	11%	3,875	59%	266	4%	1,262	19%	94	1%	342	5%
November	6,984	100%	786	11%	4,064	58%	336	5%	1,310	19%	91	1%	397	6%
December	7,329	100%	872	12%	4,303	59%	319	4%	1,351	18%	110	2%	374	5%
<i>2017</i>														
January	7,538	100%	862	11%	4,391	58%	345	5%	1,443	19%	118	2%	379	5%
February	7,243	100%	811	11%	4,234	58%	331	5%	1,359	19%	115	2%	393	5%
March	8,790	100%	951	11%	5,254	60%	380	4%	1,660	19%	124	1%	421	5%
April	7,977	100%	913	11%	4,669	59%	347	4%	1,547	19%	118	1%	383	5%
May	9,161	100%	1,047	11%	5,508	60%	408	4%	1,652	18%	139	2%	407	4%
June	8,875	100%	1,011	11%	5,248	59%	368	4%	1,694	19%	118	1%	436	5%
July	8,357	100%	938	11%	4,904	59%	356	4%	1,633	20%	129	2%	397	5%
August	9,079	100%	1,083	12%	5,361	59%	386	4%	1,650	18%	161	2%	438	5%
September	8,315	100%	973	12%	4,918	59%	354	4%	1,545	19%	115	1%	410	5%
October	9,190	100%	1,104	12%	5,471	60%	393	4%	1,624	18%	132	1%	466	5%
November	9,122	100%	1,103	12%	5,473	60%	385	4%	1,649	18%	127	1%	385	4%
December	8,912	100%	1,026	12%	5,393	61%	378	4%	1,607	18%	122	1%	386	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2018														
January	9,364	100%	1,158	12%	5,616	60%	426	5%	1,608	17%	121	1%	435	5%
February	9,001	100%	1,091	12%	5,417	60%	404	4%	1,567	17%	108	1%	414	5%
March	10,318	100%	1,290	13%	6,229	60%	477	5%	1,762	17%	132	1%	428	4%
April	10,209	100%	1,304	13%	6,219	61%	405	4%	1,743	17%	116	1%	422	4%
May	11,010	100%	1,382	13%	6,776	62%	424	4%	1,836	17%	136	1%	456	4%
June	9,691	100%	1,202	12%	5,954	61%	391	4%	1,604	17%	115	1%	425	4%
July	9,548	100%	1,176	12%	5,836	61%	371	4%	1,629	17%	116	1%	420	4%
August	10,386	100%	1,316	13%	6,304	61%	369	4%	1,800	17%	139	1%	458	4%
September	9,198	100%	1,171	13%	5,576	61%	392	4%	1,526	17%	121	1%	412	4%
October	9,307	100%	1,242	13%	5,720	61%	381	4%	1,476	16%	102	1%	386	4%
November	7,473	100%	996	13%	4,600	62%	311	4%	1,190	16%	74	<1%	302	4%
December	6,634	100%	911	14%	4,070	61%	248	4%	1,070	16%	55	<1%	280	4%
2019														
January	6,954	100%	1,010	15%	4,356	63%	234	3%	1,076	15%	33	<1%	245	4%
February	6,146	100%	969	16%	3,737	61%	216	4%	944	15%	43	<1%	237	4%
March	6,388	100%	1,050	16%	4,029	63%	84	1%	955	15%	28	<1%	242	4%
April	1,287	100%	182	14%	818	64%	*****	*****	201	16%	*****	*****	49	4%
May	541	100%	101	19%	322	60%	*****	*****	77	14%	*****	*****	23	4%
June	456	100%	97	21%	268	59%	*****	*****	57	13%	*****	*****	22	5%
183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis														
Spironolactone episode after HFrEF														
2016														
April	2,412	100%	471	20%	1,596	66%	79	3%	237	10%	*****	*****	*****	*****
May	3,177	100%	657	21%	2,047	64%	104	3%	298	9%	*****	*****	*****	*****
June	3,291	100%	641	19%	2,172	66%	112	3%	306	9%	17	<1%	43	1%
July	3,405	100%	681	20%	2,236	66%	105	3%	321	9%	18	<1%	44	1%
August	3,642	100%	691	19%	2,416	66%	127	3%	341	9%	13	<1%	54	1%
September	3,741	100%	772	21%	2,429	65%	130	3%	338	9%	20	<1%	52	1%
October	3,886	100%	790	20%	2,499	64%	141	4%	368	9%	26	<1%	62	2%
November	4,019	100%	846	21%	2,599	65%	126	3%	388	10%	17	<1%	43	1%
December	4,219	100%	849	20%	2,720	64%	127	3%	437	10%	27	<1%	59	1%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	4,218	100%	835	20%	2,748	65%	143	3%	414	10%	24	<1%	54	1%
February	3,958	100%	763	19%	2,583	65%	136	3%	396	10%	27	<1%	53	1%
March	4,592	100%	904	20%	3,023	66%	160	3%	427	9%	15	<1%	63	1%
April	4,128	100%	844	20%	2,712	66%	112	3%	379	9%	23	<1%	58	1%
May	4,525	100%	963	21%	2,841	63%	153	3%	479	11%	26	<1%	63	1%
June	4,351	100%	819	19%	2,877	66%	144	3%	437	10%	16	<1%	58	1%
July	4,009	100%	805	20%	2,607	65%	117	3%	412	10%	20	<1%	48	1%
August	4,313	100%	859	20%	2,802	65%	147	3%	419	10%	25	<1%	61	1%
September	4,092	100%	868	21%	2,632	64%	123	3%	382	9%	18	<1%	69	2%
October	4,495	100%	923	21%	2,966	66%	130	3%	404	9%	25	<1%	47	1%
November	4,605	100%	964	21%	2,966	64%	151	3%	450	10%	17	<1%	57	1%
December	4,326	100%	801	19%	2,883	67%	151	3%	402	9%	20	<1%	69	2%
<i>2018</i>														
January	4,573	100%	973	21%	3,011	66%	139	3%	364	8%	17	<1%	69	2%
February	4,220	100%	858	20%	2,738	65%	148	4%	393	9%	*****	*****	*****	*****
March	4,846	100%	992	20%	3,166	65%	154	3%	447	9%	19	<1%	68	1%
April	4,480	100%	924	21%	2,910	65%	142	3%	428	10%	16	<1%	60	1%
May	5,063	100%	1,064	21%	3,299	65%	160	3%	440	9%	32	<1%	68	1%
June	4,477	100%	930	21%	2,910	65%	133	3%	416	9%	19	<1%	69	2%
July	4,378	100%	1,008	23%	2,769	63%	120	3%	397	9%	20	<1%	64	1%
August	4,671	100%	1,025	22%	3,012	64%	135	3%	412	9%	25	<1%	62	1%
September	4,074	100%	897	22%	2,605	64%	121	3%	362	9%	22	<1%	67	2%
October	3,750	100%	822	22%	2,409	64%	102	3%	349	9%	17	<1%	51	1%
November	2,843	100%	625	22%	1,792	63%	96	3%	261	9%	25	<1%	44	2%
December	2,447	100%	534	22%	1,553	63%	57	2%	256	10%	*****	*****	*****	*****

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2019														
January	2,530	100%	589	23%	1,606	63%	65	3%	214	8%	11	<1%	45	2%
February	2,171	100%	548	25%	1,328	61%	62	3%	196	9%	*****	*****	*****	*****
March	2,234	100%	574	26%	1,378	62%	*****	*****	209	9%	*****	*****	47	2%
April	488	100%	114	23%	321	66%	*****	*****	37	8%	0	0%	*****	*****
May	179	100%	55	31%	99	55%	*****	*****	*****	*****	*****	*****	*****	*****
June	186	100%	54	29%	112	60%	*****	*****	*****	*****	0	0%	*****	*****
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹														
2016														
April	2,342	100%	293	13%	1,444	62%	101	4%	393	17%	30	1%	81	3%
May	3,447	100%	395	11%	2,135	62%	175	5%	576	17%	42	1%	124	4%
June	3,885	100%	480	12%	2,331	60%	187	5%	665	17%	52	1%	170	4%
July	3,999	100%	455	11%	2,452	61%	180	5%	702	18%	51	1%	159	4%
August	4,648	100%	556	12%	2,767	60%	226	5%	868	19%	68	1%	163	4%
September	4,503	100%	512	11%	2,771	62%	209	5%	766	17%	61	1%	184	4%
October	5,155	100%	607	12%	3,129	61%	226	4%	924	18%	73	1%	196	4%
November	5,525	100%	656	12%	3,333	60%	273	5%	954	17%	64	1%	245	4%
December	5,898	100%	731	12%	3,576	61%	267	5%	1,013	17%	78	1%	233	4%
2017														
January	6,162	100%	723	12%	3,704	60%	295	5%	1,108	18%	89	1%	243	4%
February	6,092	100%	727	12%	3,673	60%	288	5%	1,064	17%	83	1%	257	4%
March	7,372	100%	855	12%	4,502	61%	331	4%	1,309	18%	88	1%	287	4%
April	6,683	100%	803	12%	4,056	61%	303	5%	1,163	17%	98	1%	260	4%
May	7,820	100%	945	12%	4,825	62%	351	4%	1,303	17%	114	1%	282	4%
June	7,571	100%	913	12%	4,578	60%	314	4%	1,363	18%	90	1%	313	4%
July	7,139	100%	865	12%	4,261	60%	315	4%	1,311	18%	99	1%	288	4%
August	7,792	100%	983	13%	4,709	60%	338	4%	1,340	17%	122	2%	300	4%
September	7,239	100%	889	12%	4,396	61%	309	4%	1,255	17%	99	1%	291	4%
October	7,904	100%	1,004	13%	4,859	61%	346	4%	1,283	16%	101	1%	311	4%
November	7,974	100%	1,007	13%	4,931	62%	353	4%	1,316	17%	94	1%	273	3%
December	7,779	100%	943	12%	4,789	62%	331	4%	1,348	17%	96	1%	272	3%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2018														
January	8,265	100%	1,065	13%	5,062	61%	375	5%	1,351	16%	91	1%	321	4%
February	7,918	100%	987	12%	4,879	62%	367	5%	1,297	16%	83	1%	305	4%
March	9,196	100%	1,190	13%	5,683	62%	420	5%	1,481	16%	107	1%	315	3%
April	9,118	100%	1,200	13%	5,660	62%	371	4%	1,465	16%	101	1%	321	4%
May	9,934	100%	1,301	13%	6,255	63%	397	4%	1,528	15%	115	1%	338	3%
June	8,787	100%	1,135	13%	5,494	63%	368	4%	1,372	16%	89	1%	329	4%
July	8,602	100%	1,117	13%	5,357	62%	337	4%	1,373	16%	102	1%	316	4%
August	9,369	100%	1,244	13%	5,796	62%	332	4%	1,533	16%	124	1%	340	4%
September	8,289	100%	1,095	13%	5,108	62%	356	4%	1,312	16%	103	1%	315	4%
October	8,528	100%	1,199	14%	5,302	62%	354	4%	1,274	15%	92	1%	307	4%
November	6,986	100%	949	14%	4,383	63%	292	4%	1,051	15%	71	1%	240	3%
December	6,391	100%	895	14%	3,954	62%	239	4%	995	16%	52	<1%	256	4%
2019														
January	6,792	100%	1,001	15%	4,267	63%	227	3%	1,029	15%	32	<1%	236	3%
February	6,081	100%	965	16%	3,700	61%	215	4%	935	15%	41	<1%	225	4%
March	6,341	100%	1,052	17%	4,009	63%	81	1%	937	15%	31	<1%	231	4%
April	1,269	100%	181	14%	810	64%	*****	*****	194	15%	*****	*****	49	4%
May	538	100%	99	18%	324	60%	*****	*****	75	14%	*****	*****	22	4%
June	456	100%	97	21%	270	59%	*****	*****	59	13%	*****	*****	19	4%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline[†]														
2016														
April	2,182	100%	269	12%	1,342	62%	95	4%	367	17%	30	1%	79	4%
May	3,237	100%	362	11%	2,014	62%	168	5%	539	17%	41	1%	113	3%
June	3,655	100%	457	13%	2,192	60%	173	5%	623	17%	49	1%	161	4%
July	3,770	100%	420	11%	2,312	61%	172	5%	665	18%	49	1%	152	4%
August	4,416	100%	522	12%	2,622	59%	211	5%	837	19%	67	2%	157	4%
September	4,267	100%	477	11%	2,620	61%	197	5%	731	17%	61	1%	181	4%
October	4,925	100%	572	12%	2,982	61%	219	4%	894	18%	72	1%	186	4%
November	5,244	100%	605	12%	3,169	60%	260	5%	909	17%	62	1%	239	5%
December	5,637	100%	698	12%	3,413	61%	255	5%	970	17%	74	1%	227	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	5,901	100%	687	12%	3,536	60%	283	5%	1,070	18%	88	1%	237	4%
February	5,831	100%	693	12%	3,502	60%	279	5%	1,024	18%	83	1%	250	4%
March	7,052	100%	802	11%	4,304	61%	318	5%	1,263	18%	86	1%	279	4%
April	6,390	100%	753	12%	3,874	61%	289	5%	1,128	18%	96	2%	250	4%
May	7,500	100%	891	12%	4,635	62%	335	4%	1,253	17%	112	1%	274	4%
June	7,254	100%	866	12%	4,379	60%	302	4%	1,316	18%	87	1%	304	4%
July	6,847	100%	815	12%	4,083	60%	302	4%	1,269	19%	97	1%	281	4%
August	7,482	100%	932	12%	4,508	60%	326	4%	1,301	17%	119	2%	296	4%
September	6,957	100%	848	12%	4,206	60%	301	4%	1,222	18%	98	1%	282	4%
October	7,609	100%	957	13%	4,663	61%	336	4%	1,246	16%	100	1%	307	4%
November	7,649	100%	959	13%	4,717	62%	339	4%	1,281	17%	93	1%	260	3%
December	7,517	100%	907	12%	4,616	61%	324	4%	1,307	17%	95	1%	268	4%
<i>2018</i>														
January	7,970	100%	1,018	13%	4,873	61%	363	5%	1,311	16%	91	1%	314	4%
February	7,610	100%	941	12%	4,692	62%	356	5%	1,240	16%	82	1%	299	4%
March	8,889	100%	1,141	13%	5,474	62%	412	5%	1,447	16%	104	1%	311	3%
April	8,812	100%	1,153	13%	5,472	62%	351	4%	1,424	16%	99	1%	313	4%
May	9,599	100%	1,248	13%	6,040	63%	380	4%	1,491	16%	113	1%	327	3%
June	8,487	100%	1,092	13%	5,289	62%	356	4%	1,343	16%	87	1%	320	4%
July	8,305	100%	1,054	13%	5,185	62%	327	4%	1,334	16%	97	1%	308	4%
August	9,082	100%	1,192	13%	5,619	62%	326	4%	1,497	16%	121	1%	327	4%
September	7,995	100%	1,043	13%	4,932	62%	343	4%	1,269	16%	101	1%	307	4%
October	8,245	100%	1,150	14%	5,112	62%	350	4%	1,239	15%	92	1%	302	4%
November	6,789	100%	911	13%	4,267	63%	285	4%	1,023	15%	69	1%	234	3%
December	6,199	100%	857	14%	3,838	62%	237	4%	973	16%	50	<1%	244	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>														
January	6,631	100%	963	15%	4,171	63%	224	3%	1,011	15%	32	<1%	230	3%
February	5,912	100%	933	16%	3,605	61%	212	4%	902	15%	39	<1%	221	4%
March	6,193	100%	1,019	16%	3,919	63%	81	1%	919	15%	29	<1%	226	4%
April	1,243	100%	174	14%	794	64%	*****	*****	192	15%	*****	*****	48	4%
May	526	100%	98	19%	314	60%	*****	*****	74	14%	*****	*****	*****	*****
June	443	100%	95	21%	262	59%	*****	*****	57	13%	*****	*****	*****	*****

Heart Failures Identified Overall: 7/1/2010 - 9/30/2018

No Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis

Spironolactone episode after HFrEF

<i>2010</i>														
July	1,210	100%	219	18%	758	63%	32	3%	164	14%	*****	*****	*****	*****
August	1,997	100%	285	14%	1,290	65%	83	4%	269	13%	*****	*****	*****	*****
September	2,359	100%	321	14%	1,499	64%	92	4%	360	15%	19	<1%	68	3%
October	2,494	100%	369	15%	1,601	64%	97	4%	342	14%	24	<1%	61	2%
November	2,551	100%	392	15%	1,624	64%	100	4%	358	14%	14	<1%	63	2%
December	2,902	100%	452	16%	1,839	63%	114	4%	407	14%	23	<1%	67	2%
<i>2011</i>														
January	2,980	100%	430	14%	1,950	65%	110	4%	388	13%	27	<1%	75	3%
February	2,860	100%	418	15%	1,865	65%	96	3%	394	14%	28	<1%	59	2%
March	3,329	100%	467	14%	2,229	67%	113	3%	426	13%	22	<1%	72	2%
April	2,900	100%	433	15%	1,900	66%	108	4%	373	13%	27	<1%	59	2%
May	3,069	100%	471	15%	1,956	64%	101	3%	431	14%	28	<1%	82	3%
June	2,953	100%	433	15%	1,906	65%	110	4%	397	13%	29	<1%	78	3%
July	2,692	100%	401	15%	1,729	64%	95	4%	377	14%	27	1%	63	2%
August	2,841	100%	454	16%	1,749	62%	116	4%	417	15%	19	<1%	86	3%
September	2,915	100%	433	15%	1,853	64%	101	3%	417	14%	24	<1%	87	3%
October	2,936	100%	463	16%	1,860	63%	111	4%	416	14%	19	<1%	67	2%
November	2,977	100%	437	15%	1,948	65%	110	4%	392	13%	18	<1%	72	2%
December	3,113	100%	481	15%	2,030	65%	97	3%	403	13%	31	<1%	71	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>														
January	3,140	100%	525	17%	1,994	64%	102	3%	410	13%	27	<1%	82	3%
February	3,093	100%	500	16%	1,984	64%	116	4%	382	12%	28	<1%	83	3%
March	3,191	100%	502	16%	2,047	64%	127	4%	407	13%	34	1%	74	2%
April	3,128	100%	499	16%	2,021	65%	85	3%	413	13%	28	<1%	82	3%
May	3,304	100%	549	17%	2,095	63%	132	4%	400	12%	32	<1%	96	3%
June	2,991	100%	467	16%	1,928	64%	121	4%	384	13%	23	<1%	68	2%
July	2,836	100%	437	15%	1,835	65%	117	4%	364	13%	18	<1%	65	2%
August	3,164	100%	490	15%	2,012	64%	124	4%	407	13%	27	<1%	104	3%
September	2,923	100%	467	16%	1,873	64%	99	3%	393	13%	27	<1%	64	2%
October	3,431	100%	560	16%	2,204	64%	152	4%	404	12%	32	<1%	79	2%
November	3,384	100%	557	16%	2,177	64%	131	4%	419	12%	26	<1%	74	2%
December	3,338	100%	560	17%	2,172	65%	105	3%	402	12%	22	<1%	77	2%
<i>2013</i>														
January	3,552	100%	572	16%	2,325	65%	127	4%	436	12%	29	<1%	63	2%
February	3,326	100%	571	17%	2,133	64%	121	4%	395	12%	21	<1%	85	3%
March	3,556	100%	577	16%	2,303	65%	128	4%	443	12%	24	<1%	81	2%
April	3,554	100%	576	16%	2,319	65%	129	4%	424	12%	22	<1%	84	2%
May	3,640	100%	612	17%	2,366	65%	116	3%	451	12%	27	<1%	68	2%
June	3,251	100%	559	17%	2,094	64%	110	3%	401	12%	20	<1%	67	2%
July	3,437	100%	616	18%	2,198	64%	122	4%	395	11%	22	<1%	84	2%
August	3,585	100%	616	17%	2,323	65%	121	3%	427	12%	32	<1%	66	2%
September	3,375	100%	569	17%	2,198	65%	131	4%	384	11%	23	<1%	70	2%
October	3,952	100%	741	19%	2,528	64%	136	3%	446	11%	22	<1%	79	2%
November	3,601	100%	635	18%	2,340	65%	134	4%	405	11%	17	<1%	70	2%
December	3,624	100%	620	17%	2,356	65%	111	3%	432	12%	27	<1%	78	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>														
January	3,775	100%	658	17%	2,488	66%	120	3%	411	11%	28	<1%	70	2%
February	3,559	100%	611	17%	2,302	65%	110	3%	419	12%	34	<1%	83	2%
March	3,968	100%	715	18%	2,575	65%	149	4%	440	11%	24	<1%	65	2%
April	4,072	100%	728	18%	2,607	64%	131	3%	487	12%	30	<1%	89	2%
May	4,061	100%	721	18%	2,579	64%	147	4%	496	12%	27	<1%	91	2%
June	3,596	100%	640	18%	2,357	66%	109	3%	378	11%	26	<1%	86	2%
July	3,739	100%	696	19%	2,359	63%	137	4%	453	12%	29	<1%	65	2%
August	3,639	100%	629	17%	2,335	64%	147	4%	445	12%	22	<1%	61	2%
September	3,750	100%	678	18%	2,404	64%	144	4%	445	12%	30	<1%	49	1%
October	4,067	100%	734	18%	2,599	64%	128	3%	502	12%	35	<1%	69	2%
November	3,747	100%	706	19%	2,423	65%	91	2%	432	12%	13	<1%	82	2%
December	4,070	100%	745	18%	2,614	64%	148	4%	471	12%	25	<1%	67	2%
<i>2015</i>														
January	4,030	100%	702	17%	2,630	65%	128	3%	462	11%	32	<1%	76	2%
February	3,750	100%	666	18%	2,432	65%	125	3%	439	12%	17	<1%	71	2%
March	4,415	100%	781	18%	2,866	65%	152	3%	524	12%	28	<1%	64	1%
April	4,309	100%	774	18%	2,780	65%	166	4%	485	11%	29	<1%	75	2%
May	4,072	100%	768	19%	2,589	64%	138	3%	470	12%	25	<1%	82	2%
June	4,178	100%	765	18%	2,657	64%	164	4%	500	12%	27	<1%	65	2%
July	4,134	100%	765	19%	2,685	65%	129	3%	460	11%	27	<1%	68	2%
August	3,894	100%	726	19%	2,487	64%	156	4%	440	11%	25	<1%	60	2%
September	4,082	100%	722	18%	2,668	65%	130	3%	456	11%	32	<1%	74	2%
October	4,702	100%	897	19%	3,000	64%	173	4%	522	11%	27	<1%	83	2%
November	4,619	100%	839	18%	3,002	65%	168	4%	503	11%	23	<1%	84	2%
December	5,006	100%	915	18%	3,228	64%	182	4%	554	11%	29	<1%	98	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>														
January	4,687	100%	838	18%	3,044	65%	172	4%	529	11%	27	<1%	77	2%
February	4,905	100%	878	18%	3,181	65%	189	4%	546	11%	30	<1%	81	2%
March	5,277	100%	937	18%	3,461	66%	170	3%	565	11%	38	<1%	106	2%
April	5,004	100%	882	18%	3,261	65%	187	4%	555	11%	29	<1%	90	2%
May	5,060	100%	964	19%	3,155	62%	175	3%	600	12%	50	<1%	116	2%
June	4,782	100%	888	19%	3,086	65%	159	3%	532	11%	32	<1%	85	2%
July	4,779	100%	900	19%	3,098	65%	148	3%	518	11%	29	<1%	86	2%
August	5,015	100%	924	18%	3,244	65%	188	4%	542	11%	33	<1%	84	2%
September	4,969	100%	918	18%	3,244	65%	167	3%	532	11%	30	<1%	78	2%
October	5,081	100%	963	19%	3,273	64%	171	3%	544	11%	35	<1%	95	2%
November	5,077	100%	989	19%	3,243	64%	185	4%	551	11%	23	<1%	86	2%
December	5,278	100%	995	19%	3,407	65%	161	3%	588	11%	35	<1%	92	2%
<i>2017</i>														
January	5,236	100%	976	19%	3,385	65%	175	3%	582	11%	32	<1%	86	2%
February	4,820	100%	882	18%	3,115	65%	180	4%	546	11%	28	<1%	69	1%
March	5,580	100%	1,027	18%	3,682	66%	194	3%	564	10%	23	<1%	90	2%
April	4,966	100%	979	20%	3,230	65%	143	3%	504	10%	32	<1%	78	2%
May	5,402	100%	1,094	20%	3,373	62%	196	4%	623	12%	32	<1%	84	2%
June	5,192	100%	946	18%	3,399	65%	168	3%	578	11%	26	<1%	75	1%
July	4,781	100%	917	19%	3,088	65%	148	3%	530	11%	24	<1%	74	2%
August	5,170	100%	988	19%	3,315	64%	185	4%	565	11%	34	<1%	83	2%
September	4,856	100%	965	20%	3,121	64%	160	3%	496	10%	21	<1%	93	2%
October	5,322	100%	1,034	19%	3,511	66%	154	3%	518	10%	30	<1%	75	1%
November	5,418	100%	1,076	20%	3,474	64%	181	3%	566	10%	26	<1%	95	2%
December	5,059	100%	903	18%	3,358	66%	171	3%	508	10%	26	<1%	93	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2018														
January	5,359	100%	1,072	20%	3,500	65%	169	3%	508	9%	18	<1%	92	2%
February	4,973	100%	962	19%	3,185	64%	184	4%	512	10%	20	<1%	110	2%
March	5,565	100%	1,108	20%	3,610	65%	177	3%	558	10%	23	<1%	89	2%
April	5,180	100%	1,043	20%	3,366	65%	159	3%	516	10%	25	<1%	71	1%
May	5,762	100%	1,170	20%	3,743	65%	185	3%	535	9%	39	<1%	90	2%
June	5,169	100%	1,039	20%	3,318	64%	163	3%	524	10%	25	<1%	100	2%
July	5,081	100%	1,122	22%	3,231	64%	137	3%	486	10%	25	<1%	80	2%
August	5,405	100%	1,133	21%	3,505	65%	159	3%	490	9%	32	<1%	86	2%
September	4,766	100%	1,010	21%	3,044	64%	140	3%	465	10%	23	<1%	84	2%
October	4,402	100%	917	21%	2,824	64%	130	3%	438	10%	24	<1%	69	2%
November	3,328	100%	726	22%	2,070	62%	120	4%	331	10%	25	<1%	56	2%
December	2,806	100%	603	21%	1,781	63%	70	2%	292	10%	15	<1%	45	2%
2019														
January	2,850	100%	641	22%	1,823	64%	72	3%	250	9%	*****	*****	*****	*****
February	2,435	100%	584	24%	1,502	62%	69	3%	234	10%	*****	*****	*****	*****
March	2,513	100%	622	25%	1,565	62%	25	<1%	247	10%	*****	*****	*****	*****
April	540	100%	125	23%	355	66%	*****	*****	46	9%	0	0%	*****	*****
May	211	100%	*****	*****	118	56%	*****	*****	16	8%	*****	*****	*****	*****
June	203	100%	*****	*****	120	59%	*****	*****	17	8%	0	0%	*****	*****
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹														
2010														
July	1,259	100%	110	9%	741	59%	55	4%	267	21%	27	2%	59	5%
August	2,263	100%	188	8%	1,299	57%	97	4%	487	22%	40	2%	152	7%
September	2,688	100%	255	9%	1,495	56%	111	4%	573	21%	51	2%	203	8%
October	3,131	100%	246	8%	1,787	57%	142	5%	680	22%	62	2%	214	7%
November	3,419	100%	301	9%	1,877	55%	162	5%	757	22%	70	2%	252	7%
December	3,562	100%	343	10%	1,989	56%	139	4%	791	22%	68	2%	232	7%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>														
January	3,891	100%	359	9%	2,260	58%	168	4%	805	21%	72	2%	227	6%
February	3,947	100%	347	9%	2,285	58%	169	4%	816	21%	67	2%	263	7%
March	4,596	100%	405	9%	2,664	58%	188	4%	968	21%	89	2%	282	6%
April	4,374	100%	401	9%	2,508	57%	194	4%	934	21%	84	2%	253	6%
May	4,490	100%	431	10%	2,574	57%	167	4%	957	21%	86	2%	275	6%
June	4,627	100%	388	8%	2,674	58%	203	4%	972	21%	80	2%	310	7%
July	4,263	100%	402	9%	2,423	57%	188	4%	883	21%	72	2%	295	7%
August	4,412	100%	424	10%	2,519	57%	172	4%	945	21%	69	2%	283	6%
September	4,242	100%	395	9%	2,423	57%	194	5%	916	22%	70	2%	244	6%
October	4,431	100%	394	9%	2,538	57%	187	4%	948	21%	72	2%	292	7%
November	4,563	100%	445	10%	2,523	55%	229	5%	971	21%	94	2%	301	7%
December	4,634	100%	493	11%	2,621	57%	205	4%	958	21%	81	2%	276	6%
<i>2012</i>														
January	4,778	100%	466	10%	2,775	58%	148	3%	1,036	22%	85	2%	268	6%
February	4,857	100%	479	10%	2,819	58%	191	4%	995	20%	94	2%	279	6%
March	5,128	100%	459	9%	2,966	58%	247	5%	1,086	21%	90	2%	280	5%
April	4,947	100%	472	10%	2,822	57%	210	4%	1,071	22%	86	2%	286	6%
May	5,341	100%	510	10%	3,072	58%	235	4%	1,119	21%	88	2%	317	6%
June	4,861	100%	483	10%	2,807	58%	222	5%	1,003	21%	72	1%	274	6%
July	4,877	100%	472	10%	2,738	56%	232	5%	1,042	21%	94	2%	299	6%
August	5,146	100%	511	10%	2,891	56%	248	5%	1,061	21%	96	2%	339	7%
September	4,620	100%	468	10%	2,598	56%	212	5%	1,004	22%	76	2%	262	6%
October	5,336	100%	552	10%	3,059	57%	250	5%	1,120	21%	72	1%	283	5%
November	5,279	100%	544	10%	3,101	59%	226	4%	1,040	20%	82	2%	286	5%
December	5,155	100%	522	10%	2,994	58%	222	4%	1,051	20%	79	2%	287	6%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>														
January	5,668	100%	584	10%	3,258	57%	226	4%	1,207	21%	93	2%	300	5%
February	5,166	100%	510	10%	3,032	59%	245	5%	1,021	20%	86	2%	272	5%
March	5,802	100%	569	10%	3,432	59%	246	4%	1,141	20%	104	2%	310	5%
April	5,901	100%	559	9%	3,471	59%	255	4%	1,212	21%	96	2%	308	5%
May	6,071	100%	657	11%	3,564	59%	243	4%	1,226	20%	83	1%	298	5%
June	5,440	100%	558	10%	3,238	60%	231	4%	1,034	19%	78	1%	301	6%
July	5,884	100%	621	11%	3,425	58%	256	4%	1,193	20%	81	1%	308	5%
August	5,909	100%	610	10%	3,438	58%	268	5%	1,176	20%	94	2%	323	5%
September	5,615	100%	569	10%	3,303	59%	262	5%	1,099	20%	81	1%	301	5%
October	6,237	100%	644	10%	3,620	58%	293	5%	1,294	21%	98	2%	288	5%
November	5,891	100%	617	10%	3,456	59%	286	5%	1,150	20%	90	2%	292	5%
December	5,635	100%	588	10%	3,330	59%	198	4%	1,143	20%	86	2%	290	5%
<i>2014</i>														
January	5,992	100%	627	10%	3,554	59%	258	4%	1,173	20%	99	2%	281	5%
February	5,665	100%	620	11%	3,292	58%	226	4%	1,134	20%	92	2%	301	5%
March	6,405	100%	632	10%	3,798	59%	288	4%	1,290	20%	102	2%	295	5%
April	6,697	100%	705	11%	3,987	60%	317	5%	1,225	18%	101	2%	362	5%
May	6,648	100%	685	10%	3,939	59%	284	4%	1,301	20%	101	2%	338	5%
June	6,067	100%	642	11%	3,564	59%	280	5%	1,167	19%	96	2%	318	5%
July	6,184	100%	637	10%	3,680	60%	258	4%	1,226	20%	86	1%	297	5%
August	5,801	100%	625	11%	3,387	58%	269	5%	1,126	19%	97	2%	297	5%
September	5,720	100%	601	11%	3,357	59%	244	4%	1,147	20%	98	2%	273	5%
October	6,471	100%	680	11%	3,777	58%	307	5%	1,274	20%	108	2%	325	5%
November	5,617	100%	641	11%	3,278	58%	252	4%	1,095	19%	85	2%	266	5%
December	6,457	100%	674	10%	3,831	59%	267	4%	1,272	20%	90	1%	323	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>														
January	6,272	100%	692	11%	3,762	60%	240	4%	1,177	19%	96	2%	305	5%
February	5,814	100%	660	11%	3,415	59%	250	4%	1,124	19%	73	1%	292	5%
March	6,871	100%	739	11%	4,078	59%	294	4%	1,338	19%	109	2%	313	5%
April	6,863	100%	761	11%	4,045	59%	310	5%	1,331	19%	96	1%	320	5%
May	6,406	100%	752	12%	3,703	58%	259	4%	1,289	20%	116	2%	287	4%
June	6,676	100%	750	11%	3,899	58%	306	5%	1,312	20%	97	1%	312	5%
July	6,491	100%	713	11%	3,788	58%	285	4%	1,266	20%	110	2%	329	5%
August	6,160	100%	650	11%	3,600	58%	299	5%	1,201	19%	108	2%	302	5%
September	6,508	100%	757	12%	3,791	58%	288	4%	1,263	19%	96	1%	313	5%
October	7,272	100%	802	11%	4,338	60%	318	4%	1,322	18%	117	2%	375	5%
November	6,799	100%	735	11%	4,036	59%	292	4%	1,289	19%	102	2%	345	5%
December	7,356	100%	860	12%	4,316	59%	344	5%	1,392	19%	99	1%	345	5%
<i>2016</i>														
January	6,992	100%	790	11%	4,183	60%	310	4%	1,270	18%	117	2%	322	5%
February	7,429	100%	843	11%	4,314	58%	324	4%	1,470	20%	120	2%	358	5%
March	8,373	100%	875	10%	4,937	59%	415	5%	1,618	19%	134	2%	394	5%
April	7,826	100%	886	11%	4,686	60%	345	4%	1,419	18%	123	2%	367	5%
May	7,989	100%	902	11%	4,749	59%	362	5%	1,497	19%	121	2%	358	4%
June	7,828	100%	896	11%	4,639	59%	363	5%	1,460	19%	97	1%	373	5%
July	7,501	100%	836	11%	4,445	59%	332	4%	1,424	19%	114	2%	350	5%
August	8,081	100%	940	12%	4,764	59%	363	4%	1,559	19%	110	1%	345	4%
September	7,595	100%	833	11%	4,544	60%	327	4%	1,430	19%	112	1%	349	5%
October	8,058	100%	901	11%	4,829	60%	357	4%	1,475	18%	117	1%	379	5%
November	8,199	100%	951	12%	4,921	60%	392	5%	1,454	18%	96	1%	385	5%
December	8,623	100%	1,031	12%	5,184	60%	380	4%	1,491	17%	123	1%	414	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	8,614	100%	1,010	12%	5,148	60%	385	4%	1,550	18%	131	2%	390	5%
February	8,298	100%	973	12%	4,877	59%	378	5%	1,541	19%	123	1%	406	5%
March	9,813	100%	1,137	12%	5,906	60%	438	4%	1,760	18%	141	1%	431	4%
April	8,919	100%	1,039	12%	5,289	59%	392	4%	1,662	19%	135	2%	402	5%
May	10,093	100%	1,220	12%	6,114	61%	459	5%	1,742	17%	143	1%	415	4%
June	9,792	100%	1,148	12%	5,876	60%	386	4%	1,796	18%	132	1%	454	5%
July	9,110	100%	1,094	12%	5,433	60%	374	4%	1,655	18%	142	2%	412	5%
August	9,799	100%	1,187	12%	5,837	60%	409	4%	1,763	18%	161	2%	442	5%
September	9,039	100%	1,099	12%	5,391	60%	416	5%	1,598	18%	120	1%	415	5%
October	9,941	100%	1,207	12%	6,024	61%	420	4%	1,690	17%	137	1%	463	5%
November	9,807	100%	1,202	12%	5,992	61%	403	4%	1,676	17%	133	1%	401	4%
December	9,560	100%	1,127	12%	5,835	61%	388	4%	1,687	18%	126	1%	397	4%
<i>2018</i>														
January	10,078	100%	1,246	12%	6,114	61%	449	4%	1,680	17%	130	1%	459	5%
February	9,595	100%	1,197	12%	5,809	61%	417	4%	1,645	17%	114	1%	413	4%
March	10,999	100%	1,393	13%	6,716	61%	499	5%	1,809	16%	145	1%	437	4%
April	10,845	100%	1,362	13%	6,674	62%	438	4%	1,811	17%	122	1%	438	4%
May	11,688	100%	1,506	13%	7,257	62%	462	4%	1,867	16%	135	1%	461	4%
June	10,324	100%	1,291	13%	6,387	62%	416	4%	1,661	16%	125	1%	444	4%
July	10,068	100%	1,279	13%	6,153	61%	396	4%	1,661	16%	128	1%	451	4%
August	11,031	100%	1,413	13%	6,700	61%	403	4%	1,884	17%	149	1%	482	4%
September	9,691	100%	1,254	13%	5,894	61%	418	4%	1,575	16%	123	1%	427	4%
October	10,047	100%	1,345	13%	6,232	62%	397	4%	1,558	16%	105	1%	410	4%
November	8,245	100%	1,094	13%	5,104	62%	347	4%	1,286	16%	81	<1%	333	4%
December	7,401	100%	1,033	14%	4,554	62%	274	4%	1,167	16%	62	<1%	311	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>														
January	7,846	100%	1,142	15%	4,928	63%	270	3%	1,192	15%	37	<1%	277	4%
February	7,042	100%	1,107	16%	4,294	61%	241	3%	1,071	15%	53	<1%	276	4%
March	7,363	100%	1,229	17%	4,650	63%	95	1%	1,078	15%	32	<1%	279	4%
April	1,476	100%	221	15%	934	63%	*****	*****	228	15%	*****	*****	54	4%
May	631	100%	111	18%	378	60%	*****	*****	94	15%	*****	*****	25	4%
June	535	100%	110	21%	323	60%	*****	*****	62	12%	*****	*****	24	4%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹														
<i>2010</i>														
July	1,195	100%	104	9%	704	59%	51	4%	253	21%	25	2%	58	5%
August	2,160	100%	179	8%	1,242	58%	93	4%	461	21%	39	2%	146	7%
September	2,560	100%	241	9%	1,418	55%	107	4%	553	22%	50	2%	191	7%
October	2,989	100%	230	8%	1,694	57%	136	5%	662	22%	62	2%	205	7%
November	3,281	100%	287	9%	1,797	55%	154	5%	729	22%	70	2%	244	7%
December	3,379	100%	325	10%	1,873	55%	134	4%	756	22%	67	2%	224	7%
<i>2011</i>														
January	3,714	100%	333	9%	2,147	58%	164	4%	783	21%	69	2%	218	6%
February	3,791	100%	329	9%	2,186	58%	162	4%	794	21%	66	2%	254	7%
March	4,410	100%	384	9%	2,556	58%	180	4%	935	21%	86	2%	269	6%
April	4,201	100%	381	9%	2,406	57%	187	4%	902	21%	79	2%	246	6%
May	4,320	100%	415	10%	2,470	57%	161	4%	924	21%	84	2%	266	6%
June	4,466	100%	371	8%	2,573	58%	194	4%	945	21%	79	2%	304	7%
July	4,108	100%	383	9%	2,328	57%	183	4%	858	21%	72	2%	284	7%
August	4,253	100%	409	10%	2,418	57%	171	4%	917	22%	67	2%	271	6%
September	4,094	100%	384	9%	2,336	57%	189	5%	882	22%	69	2%	234	6%
October	4,284	100%	382	9%	2,458	57%	176	4%	913	21%	70	2%	285	7%
November	4,410	100%	426	10%	2,433	55%	223	5%	949	22%	93	2%	286	6%
December	4,492	100%	477	11%	2,528	56%	202	4%	938	21%	79	2%	268	6%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>														
January	4,613	100%	441	10%	2,693	58%	141	3%	993	22%	83	2%	262	6%
February	4,690	100%	462	10%	2,705	58%	184	4%	975	21%	94	2%	270	6%
March	4,987	100%	445	9%	2,877	58%	241	5%	1,062	21%	86	2%	276	6%
April	4,790	100%	452	9%	2,717	57%	206	4%	1,051	22%	83	2%	281	6%
May	5,195	100%	498	10%	2,981	57%	229	4%	1,090	21%	85	2%	312	6%
June	4,718	100%	466	10%	2,721	58%	216	5%	978	21%	72	2%	265	6%
July	4,729	100%	459	10%	2,649	56%	223	5%	1,015	21%	93	2%	290	6%
August	5,015	100%	490	10%	2,827	56%	239	5%	1,037	21%	94	2%	328	7%
September	4,478	100%	446	10%	2,520	56%	205	5%	978	22%	75	2%	254	6%
October	5,181	100%	530	10%	2,955	57%	248	5%	1,101	21%	69	1%	278	5%
November	5,141	100%	527	10%	3,006	58%	221	4%	1,027	20%	81	2%	279	5%
December	5,017	100%	500	10%	2,915	58%	219	4%	1,027	20%	75	1%	281	6%
<i>2013</i>														
January	5,492	100%	554	10%	3,153	57%	214	4%	1,186	22%	90	2%	295	5%
February	5,010	100%	494	10%	2,934	59%	238	5%	991	20%	83	2%	270	5%
March	5,652	100%	553	10%	3,338	59%	239	4%	1,112	20%	103	2%	307	5%
April	5,724	100%	537	9%	3,362	59%	249	4%	1,181	21%	94	2%	301	5%
May	5,874	100%	637	11%	3,440	59%	237	4%	1,183	20%	83	1%	294	5%
June	5,256	100%	531	10%	3,119	59%	224	4%	1,007	19%	78	1%	297	6%
July	5,707	100%	595	10%	3,316	58%	249	4%	1,165	20%	81	1%	301	5%
August	5,734	100%	597	10%	3,323	58%	262	5%	1,145	20%	92	2%	315	5%
September	5,439	100%	551	10%	3,190	59%	251	5%	1,069	20%	79	1%	299	5%
October	6,042	100%	613	10%	3,497	58%	287	5%	1,261	21%	98	2%	286	5%
November	5,736	100%	597	10%	3,369	59%	281	5%	1,121	20%	90	2%	278	5%
December	5,448	100%	560	10%	3,214	59%	185	3%	1,121	21%	85	2%	283	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>														
January	5,848	100%	606	10%	3,475	59%	252	4%	1,142	20%	97	2%	276	5%
February	5,491	100%	595	11%	3,190	58%	220	4%	1,105	20%	90	2%	291	5%
March	6,218	100%	609	10%	3,684	59%	277	4%	1,259	20%	97	2%	292	5%
April	6,522	100%	684	10%	3,878	59%	311	5%	1,195	18%	98	2%	356	5%
May	6,442	100%	656	10%	3,820	59%	273	4%	1,266	20%	101	2%	326	5%
June	5,916	100%	619	10%	3,477	59%	274	5%	1,141	19%	95	2%	310	5%
July	6,020	100%	614	10%	3,575	59%	251	4%	1,201	20%	85	1%	294	5%
August	5,625	100%	595	11%	3,273	58%	266	5%	1,102	20%	93	2%	296	5%
September	5,567	100%	575	10%	3,273	59%	237	4%	1,117	20%	98	2%	267	5%
October	6,289	100%	654	10%	3,676	58%	294	5%	1,241	20%	104	2%	320	5%
November	5,485	100%	618	11%	3,207	58%	248	5%	1,070	20%	84	2%	258	5%
December	6,265	100%	653	10%	3,710	59%	254	4%	1,242	20%	89	1%	317	5%
<i>2015</i>														
January	6,099	100%	671	11%	3,651	60%	234	4%	1,151	19%	95	2%	297	5%
February	5,626	100%	633	11%	3,303	59%	243	4%	1,091	19%	73	1%	283	5%
March	6,674	100%	710	11%	3,961	59%	281	4%	1,308	20%	107	2%	307	5%
April	6,682	100%	746	11%	3,922	59%	305	5%	1,303	20%	92	1%	314	5%
May	6,228	100%	725	12%	3,591	58%	251	4%	1,267	20%	113	2%	281	5%
June	6,492	100%	715	11%	3,782	58%	301	5%	1,287	20%	98	2%	309	5%
July	6,323	100%	687	11%	3,681	58%	279	4%	1,244	20%	108	2%	324	5%
August	6,011	100%	639	11%	3,498	58%	295	5%	1,176	20%	106	2%	297	5%
September	6,323	100%	724	11%	3,679	58%	282	4%	1,239	20%	94	1%	305	5%
October	7,085	100%	774	11%	4,213	59%	313	4%	1,300	18%	116	2%	369	5%
November	6,606	100%	710	11%	3,910	59%	291	4%	1,254	19%	101	2%	340	5%
December	7,142	100%	827	12%	4,176	58%	337	5%	1,372	19%	97	1%	333	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>														
January	6,787	100%	767	11%	4,054	60%	301	4%	1,236	18%	114	2%	315	5%
February	7,217	100%	814	11%	4,177	58%	318	4%	1,433	20%	120	2%	355	5%
March	8,141	100%	840	10%	4,811	59%	407	5%	1,565	19%	131	2%	387	5%
April	7,583	100%	865	11%	4,527	60%	334	4%	1,376	18%	122	2%	359	5%
May	7,811	100%	871	11%	4,647	59%	347	4%	1,477	19%	121	2%	348	4%
June	7,609	100%	871	11%	4,513	59%	354	5%	1,414	19%	95	1%	362	5%
July	7,313	100%	804	11%	4,335	59%	326	4%	1,389	19%	113	2%	346	5%
August	7,858	100%	902	11%	4,634	59%	349	4%	1,528	19%	110	1%	335	4%
September	7,357	100%	800	11%	4,387	60%	312	4%	1,404	19%	111	2%	343	5%
October	7,822	100%	864	11%	4,685	60%	347	4%	1,447	18%	111	1%	368	5%
November	7,949	100%	902	11%	4,774	60%	381	5%	1,421	18%	93	1%	378	5%
December	8,355	100%	1,001	12%	5,023	60%	370	4%	1,442	17%	120	1%	399	5%
<i>2017</i>														
January	8,384	100%	982	12%	4,999	60%	374	4%	1,513	18%	132	2%	384	5%
February	8,054	100%	940	12%	4,716	59%	369	5%	1,507	19%	122	2%	400	5%
March	9,519	100%	1,082	11%	5,723	60%	428	4%	1,725	18%	138	1%	423	4%
April	8,637	100%	999	12%	5,108	59%	379	4%	1,629	19%	132	2%	390	5%
May	9,805	100%	1,171	12%	5,939	61%	445	5%	1,699	17%	142	1%	409	4%
June	9,500	100%	1,109	12%	5,699	60%	375	4%	1,748	18%	128	1%	441	5%
July	8,831	100%	1,042	12%	5,271	60%	359	4%	1,616	18%	138	2%	405	5%
August	9,489	100%	1,133	12%	5,646	60%	399	4%	1,717	18%	158	2%	436	5%
September	8,769	100%	1,061	12%	5,207	59%	404	5%	1,567	18%	121	1%	409	5%
October	9,654	100%	1,167	12%	5,827	60%	412	4%	1,654	17%	136	1%	458	5%
November	9,517	100%	1,166	12%	5,791	61%	394	4%	1,645	17%	131	1%	390	4%
December	9,296	100%	1,091	12%	5,677	61%	378	4%	1,637	18%	125	1%	388	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>														
January	9,794	100%	1,199	12%	5,938	61%	438	4%	1,637	17%	129	1%	453	5%
February	9,300	100%	1,145	12%	5,635	61%	406	4%	1,596	17%	113	1%	405	4%
March	10,700	100%	1,344	13%	6,509	61%	496	5%	1,776	17%	142	1%	433	4%
April	10,551	100%	1,321	13%	6,497	62%	419	4%	1,769	17%	118	1%	427	4%
May	11,369	100%	1,455	13%	7,061	62%	445	4%	1,827	16%	132	1%	449	4%
June	10,034	100%	1,245	12%	6,204	62%	406	4%	1,627	16%	122	1%	430	4%
July	9,792	100%	1,220	12%	5,995	61%	386	4%	1,627	17%	125	1%	439	4%
August	10,749	100%	1,359	13%	6,528	61%	395	4%	1,850	17%	145	1%	472	4%
September	9,401	100%	1,212	13%	5,712	61%	404	4%	1,535	16%	120	1%	418	4%
October	9,776	100%	1,301	13%	6,048	62%	392	4%	1,528	16%	104	1%	403	4%
November	8,049	100%	1,057	13%	4,985	62%	341	4%	1,259	16%	81	1%	326	4%
December	7,218	100%	992	14%	4,449	62%	271	4%	1,143	16%	61	<1%	302	4%
<i>2019</i>														
January	7,687	100%	1,109	14%	4,834	63%	267	3%	1,173	15%	36	<1%	268	3%
February	6,879	100%	1,080	16%	4,195	61%	236	3%	1,045	15%	51	<1%	272	4%
March	7,206	100%	1,199	17%	4,545	63%	94	1%	1,062	15%	30	<1%	276	4%
April	1,446	100%	214	15%	914	63%	*****	*****	226	16%	*****	*****	53	4%
May	618	100%	109	18%	369	60%	*****	*****	92	15%	*****	*****	25	4%
June	519	100%	106	20%	315	61%	*****	*****	59	11%	*****	*****	24	5%

183-Day Spironolactone Incidence Washout prior to Heart Failure Index Diagnosis

Spironolactone episode after HFrEF

<i>2010</i>														
July	907	100%	181	20%	557	61%	25	3%	120	13%	*****	*****	*****	*****
August	1,332	100%	206	15%	879	66%	52	4%	162	12%	*****	*****	*****	*****
September	1,560	100%	223	14%	1,026	66%	67	4%	203	13%	*****	*****	*****	*****
October	1,672	100%	262	16%	1,106	66%	57	3%	210	13%	11	<1%	26	2%
November	1,752	100%	286	16%	1,135	65%	72	4%	220	13%	*****	*****	*****	*****
December	2,150	100%	349	16%	1,394	65%	90	4%	267	12%	14	<1%	36	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>														
January	2,203	100%	340	15%	1,445	66%	85	4%	271	12%	15	<1%	47	2%
February	2,187	100%	338	15%	1,474	67%	69	3%	261	12%	17	<1%	28	1%
March	2,578	100%	373	14%	1,749	68%	87	3%	312	12%	11	<1%	46	2%
April	2,236	100%	343	15%	1,489	67%	76	3%	272	12%	19	<1%	37	2%
May	2,382	100%	393	16%	1,525	64%	81	3%	314	13%	20	<1%	49	2%
June	2,276	100%	343	15%	1,487	65%	78	3%	293	13%	18	<1%	57	3%
July	2,066	100%	330	16%	1,351	65%	73	4%	250	12%	17	<1%	45	2%
August	2,196	100%	377	17%	1,371	62%	89	4%	295	13%	11	<1%	53	2%
September	2,287	100%	347	15%	1,483	65%	83	4%	301	13%	15	<1%	58	3%
October	2,306	100%	380	16%	1,472	64%	91	4%	298	13%	13	<1%	52	2%
November	2,373	100%	373	16%	1,557	66%	87	4%	297	13%	14	<1%	45	2%
December	2,506	100%	392	16%	1,662	66%	81	3%	302	12%	22	<1%	47	2%
<i>2012</i>														
January	2,546	100%	461	18%	1,617	64%	78	3%	325	13%	*****	*****	*****	*****
February	2,532	100%	421	17%	1,642	65%	100	4%	290	11%	19	<1%	60	2%
March	2,611	100%	431	17%	1,687	65%	110	4%	306	12%	27	1%	50	2%
April	2,558	100%	431	17%	1,653	65%	67	3%	330	13%	21	<1%	56	2%
May	2,722	100%	472	17%	1,743	64%	102	4%	315	12%	24	<1%	66	2%
June	2,470	100%	398	16%	1,612	65%	97	4%	297	12%	17	<1%	49	2%
July	2,341	100%	369	16%	1,530	65%	96	4%	288	12%	*****	*****	*****	*****
August	2,577	100%	416	16%	1,653	64%	95	4%	318	12%	20	<1%	75	3%
September	2,354	100%	406	17%	1,514	64%	81	3%	292	12%	22	<1%	39	2%
October	2,824	100%	484	17%	1,821	64%	128	5%	311	11%	25	<1%	55	2%
November	2,811	100%	487	17%	1,809	64%	109	4%	333	12%	20	<1%	53	2%
December	2,810	100%	496	18%	1,828	65%	86	3%	323	11%	19	<1%	58	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>														
January	3,008	100%	513	17%	1,969	65%	109	4%	351	12%	22	<1%	44	1%
February	2,753	100%	492	18%	1,776	65%	93	3%	317	12%	16	<1%	59	2%
March	3,042	100%	510	17%	1,993	66%	106	3%	351	12%	20	<1%	62	2%
April	3,051	100%	522	17%	1,996	65%	107	4%	348	11%	15	<1%	63	2%
May	3,066	100%	534	17%	2,019	66%	91	3%	352	11%	16	<1%	54	2%
June	2,738	100%	501	18%	1,766	64%	91	3%	320	12%	13	<1%	47	2%
July	2,911	100%	556	19%	1,861	64%	103	4%	312	11%	16	<1%	63	2%
August	2,984	100%	545	18%	1,937	65%	94	3%	338	11%	22	<1%	48	2%
September	2,755	100%	502	18%	1,787	65%	109	4%	285	10%	19	<1%	53	2%
October	3,339	100%	649	19%	2,139	64%	115	3%	359	11%	16	<1%	61	2%
November	3,093	100%	563	18%	2,022	65%	109	4%	333	11%	13	<1%	53	2%
December	3,036	100%	540	18%	1,987	65%	88	3%	344	11%	16	<1%	61	2%
<i>2014</i>														
January	3,210	100%	592	18%	2,113	66%	99	3%	333	10%	24	<1%	49	2%
February	3,021	100%	532	18%	1,975	65%	90	3%	330	11%	28	<1%	66	2%
March	3,447	100%	653	19%	2,236	65%	129	4%	358	10%	17	<1%	54	2%
April	3,535	100%	656	19%	2,285	65%	108	3%	392	11%	25	<1%	69	2%
May	3,499	100%	638	18%	2,246	64%	122	3%	399	11%	23	<1%	71	2%
June	3,075	100%	565	18%	2,028	66%	92	3%	304	10%	23	<1%	63	2%
July	3,133	100%	611	20%	2,002	64%	116	4%	336	11%	22	<1%	46	1%
August	3,067	100%	542	18%	1,984	65%	128	4%	356	12%	18	<1%	39	1%
September	3,119	100%	584	19%	2,001	64%	115	4%	353	11%	23	<1%	43	1%
October	3,429	100%	647	19%	2,215	65%	108	3%	390	11%	23	<1%	46	1%
November	3,116	100%	616	20%	2,033	65%	75	2%	328	11%	*****	*****	*****	*****
December	3,468	100%	660	19%	2,231	64%	132	4%	378	11%	*****	*****	*****	*****

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>														
January	3,477	100%	625	18%	2,280	66%	107	3%	379	11%	24	<1%	62	2%
February	3,199	100%	589	18%	2,084	65%	106	3%	359	11%	12	<1%	49	2%
March	3,814	100%	718	19%	2,479	65%	129	3%	419	11%	18	<1%	51	1%
April	3,720	100%	677	18%	2,424	65%	141	4%	404	11%	22	<1%	52	1%
May	3,503	100%	683	19%	2,227	64%	115	3%	390	11%	20	<1%	68	2%
June	3,540	100%	670	19%	2,278	64%	138	4%	387	11%	20	<1%	47	1%
July	3,512	100%	678	19%	2,284	65%	116	3%	364	10%	21	<1%	49	1%
August	3,281	100%	640	20%	2,099	64%	130	4%	350	11%	16	<1%	46	1%
September	3,461	100%	651	19%	2,274	66%	109	3%	352	10%	25	<1%	50	1%
October	3,954	100%	792	20%	2,531	64%	152	4%	399	10%	20	<1%	60	2%
November	3,832	100%	727	19%	2,517	66%	127	3%	389	10%	12	<1%	60	2%
December	4,156	100%	801	19%	2,709	65%	148	4%	405	10%	22	<1%	71	2%
<i>2016</i>														
January	3,936	100%	744	19%	2,564	65%	144	4%	402	10%	22	<1%	60	2%
February	4,174	100%	780	19%	2,727	65%	154	4%	435	10%	24	<1%	54	1%
March	4,515	100%	841	19%	2,960	66%	142	3%	457	10%	30	<1%	85	2%
April	4,263	100%	788	18%	2,776	65%	157	4%	454	11%	23	<1%	65	2%
May	4,296	100%	844	20%	2,702	63%	146	3%	489	11%	37	<1%	78	2%
June	4,073	100%	785	19%	2,636	65%	142	3%	417	10%	29	<1%	64	2%
July	4,016	100%	783	19%	2,622	65%	123	3%	402	10%	25	<1%	61	2%
August	4,181	100%	798	19%	2,733	65%	152	4%	410	10%	21	<1%	67	2%
September	4,168	100%	820	20%	2,722	65%	140	3%	403	10%	23	<1%	60	1%
October	4,246	100%	837	20%	2,732	64%	149	4%	427	10%	31	<1%	70	2%
November	4,325	100%	875	20%	2,801	65%	148	3%	426	10%	15	<1%	60	1%
December	4,485	100%	876	20%	2,918	65%	136	3%	460	10%	25	<1%	70	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	4,451	100%	858	19%	2,893	65%	153	3%	453	10%	27	<1%	67	2%
February	4,175	100%	804	19%	2,703	65%	155	4%	433	10%	23	<1%	57	1%
March	4,837	100%	918	19%	3,191	66%	167	3%	475	10%	15	<1%	71	1%
April	4,255	100%	863	20%	2,797	66%	119	3%	387	9%	27	<1%	62	1%
May	4,628	100%	963	21%	2,896	63%	166	4%	512	11%	25	<1%	66	1%
June	4,464	100%	823	18%	2,951	66%	153	3%	461	10%	19	<1%	57	1%
July	4,090	100%	810	20%	2,650	65%	126	3%	428	10%	24	<1%	52	1%
August	4,407	100%	866	20%	2,859	65%	150	3%	440	10%	31	<1%	61	1%
September	4,146	100%	855	21%	2,673	64%	127	3%	398	10%	19	<1%	74	2%
October	4,548	100%	916	20%	3,005	66%	131	3%	425	9%	24	<1%	47	1%
November	4,664	100%	960	21%	3,000	64%	154	3%	462	10%	16	<1%	72	2%
December	4,351	100%	792	18%	2,912	67%	151	3%	400	9%	22	<1%	74	2%
<i>2018</i>														
January	4,638	100%	984	21%	3,035	65%	146	3%	385	8%	18	<1%	70	2%
February	4,297	100%	850	20%	2,788	65%	148	3%	415	10%	18	<1%	78	2%
March	4,848	100%	980	20%	3,172	65%	157	3%	454	9%	19	<1%	66	1%
April	4,478	100%	928	21%	2,901	65%	140	3%	430	10%	17	<1%	62	1%
May	5,096	100%	1,067	21%	3,311	65%	173	3%	443	9%	33	<1%	69	1%
June	4,470	100%	910	20%	2,913	65%	136	3%	419	9%	19	<1%	73	2%
July	4,377	100%	999	23%	2,774	63%	121	3%	396	9%	22	<1%	65	1%
August	4,665	100%	1,026	22%	3,019	65%	136	3%	396	8%	26	<1%	62	1%
September	4,077	100%	885	22%	2,618	64%	123	3%	363	9%	21	<1%	67	2%
October	3,801	100%	816	21%	2,450	64%	108	3%	352	9%	17	<1%	58	2%
November	2,931	100%	649	22%	1,832	63%	109	4%	272	9%	22	<1%	47	2%
December	2,566	100%	549	21%	1,642	64%	62	2%	262	10%	11	<1%	40	2%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2019														
January	2,692	100%	618	23%	1,719	64%	66	2%	229	9%	11	<1%	49	2%
February	2,306	100%	560	24%	1,420	62%	67	3%	218	9%	*****	*****	*****	*****
March	2,372	100%	591	25%	1,471	62%	*****	*****	231	10%	*****	*****	52	2%
April	513	100%	120	23%	335	65%	*****	*****	44	9%	0	0%	*****	*****
May	195	100%	*****	*****	111	57%	*****	*****	15	8%	*****	*****	*****	*****
June	196	100%	*****	*****	117	60%	*****	*****	16	8%	0	0%	*****	*****
Spironolactone episode after HFpEF, not excluding Myocardial Infarction at baseline¹														
2010														
July	954	100%	86	9%	566	59%	46	5%	195	20%	20	2%	41	4%
August	1,586	100%	132	8%	955	60%	82	5%	295	19%	31	2%	91	6%
September	1,816	100%	189	10%	1,047	58%	78	4%	368	20%	31	2%	103	6%
October	2,185	100%	181	8%	1,293	59%	108	5%	438	20%	40	2%	125	6%
November	2,411	100%	232	10%	1,375	57%	123	5%	503	21%	42	2%	136	6%
December	2,612	100%	276	11%	1,494	57%	107	4%	540	21%	46	2%	149	6%
2011														
January	2,974	100%	288	10%	1,758	59%	134	5%	587	20%	50	2%	157	5%
February	3,102	100%	281	9%	1,858	60%	137	4%	604	19%	51	2%	171	6%
March	3,691	100%	344	9%	2,199	60%	150	4%	732	20%	68	2%	198	5%
April	3,547	100%	340	10%	2,079	59%	168	5%	718	20%	65	2%	177	5%
May	3,698	100%	376	10%	2,168	59%	145	4%	753	20%	58	2%	198	5%
June	3,866	100%	326	8%	2,287	59%	175	5%	783	20%	62	2%	233	6%
July	3,537	100%	340	10%	2,078	59%	153	4%	702	20%	59	2%	205	6%
August	3,666	100%	373	10%	2,155	59%	146	4%	742	20%	53	1%	197	5%
September	3,520	100%	328	9%	2,056	58%	168	5%	730	21%	55	2%	183	5%
October	3,740	100%	352	9%	2,202	59%	156	4%	748	20%	56	1%	226	6%
November	3,834	100%	383	10%	2,148	56%	196	5%	810	21%	78	2%	219	6%
December	3,912	100%	435	11%	2,260	58%	174	4%	786	20%	63	2%	194	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2012</i>														
January	4,069	100%	412	10%	2,404	59%	139	3%	846	21%	67	2%	201	5%
February	4,217	100%	437	10%	2,491	59%	173	4%	835	20%	73	2%	208	5%
March	4,430	100%	400	9%	2,625	59%	217	5%	899	20%	78	2%	211	5%
April	4,332	100%	418	10%	2,513	58%	191	4%	914	21%	72	2%	224	5%
May	4,637	100%	465	10%	2,707	58%	211	5%	936	20%	77	2%	241	5%
June	4,271	100%	444	10%	2,497	58%	202	5%	859	20%	61	1%	208	5%
July	4,298	100%	431	10%	2,465	57%	204	5%	887	21%	84	2%	227	5%
August	4,466	100%	456	10%	2,549	57%	223	5%	899	20%	84	2%	255	6%
September	4,028	100%	416	10%	2,322	58%	185	5%	843	21%	61	2%	201	5%
October	4,672	100%	489	10%	2,722	58%	217	5%	955	20%	59	1%	230	5%
November	4,626	100%	497	11%	2,772	60%	200	4%	868	19%	68	1%	221	5%
December	4,511	100%	467	10%	2,701	60%	200	4%	864	19%	66	1%	213	5%
<i>2013</i>														
January	4,971	100%	523	11%	2,912	59%	206	4%	1,021	21%	74	1%	235	5%
February	4,590	100%	468	10%	2,719	59%	221	5%	902	20%	71	2%	209	5%
March	5,246	100%	538	10%	3,169	60%	229	4%	975	19%	91	2%	244	5%
April	5,257	100%	530	10%	3,156	60%	230	4%	1,020	19%	86	2%	235	4%
May	5,466	100%	601	11%	3,268	60%	220	4%	1,067	20%	70	1%	240	4%
June	4,932	100%	516	10%	2,973	60%	212	4%	915	19%	68	1%	248	5%
July	5,232	100%	577	11%	3,068	59%	234	4%	1,031	20%	74	1%	248	5%
August	5,191	100%	557	11%	3,070	59%	239	5%	992	19%	74	1%	259	5%
September	4,938	100%	527	11%	2,932	59%	238	5%	941	19%	67	1%	233	5%
October	5,540	100%	602	11%	3,228	58%	269	5%	1,132	20%	82	1%	227	4%
November	5,213	100%	538	10%	3,104	60%	261	5%	1,006	19%	77	1%	227	4%
December	4,980	100%	534	11%	3,005	60%	176	4%	976	20%	76	2%	213	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2014</i>														
January	5,317	100%	577	11%	3,178	60%	221	4%	1,026	19%	86	2%	229	4%
February	5,029	100%	566	11%	2,932	58%	214	4%	994	20%	82	2%	241	5%
March	5,765	100%	585	10%	3,459	60%	260	5%	1,135	20%	85	1%	241	4%
April	6,039	100%	648	11%	3,637	60%	297	5%	1,068	18%	90	1%	299	5%
May	5,954	100%	640	11%	3,560	60%	262	4%	1,157	19%	85	1%	250	4%
June	5,429	100%	588	11%	3,237	60%	247	5%	1,020	19%	85	2%	252	5%
July	5,506	100%	591	11%	3,303	60%	238	4%	1,068	19%	73	1%	233	4%
August	5,196	100%	583	11%	3,063	59%	242	5%	985	19%	79	2%	244	5%
September	5,094	100%	542	11%	3,041	60%	218	4%	990	19%	86	2%	217	4%
October	5,803	100%	633	11%	3,429	59%	277	5%	1,116	19%	90	2%	258	4%
November	4,943	100%	595	12%	2,932	59%	224	5%	924	19%	67	1%	201	4%
December	5,777	100%	614	11%	3,491	60%	239	4%	1,096	19%	84	1%	253	4%
<i>2015</i>														
January	5,693	100%	645	11%	3,463	61%	221	4%	1,029	18%	82	1%	253	4%
February	5,224	100%	600	11%	3,117	60%	234	4%	982	19%	61	1%	230	4%
March	6,281	100%	687	11%	3,797	60%	272	4%	1,190	19%	93	1%	242	4%
April	6,201	100%	708	11%	3,719	60%	279	4%	1,158	19%	81	1%	256	4%
May	5,787	100%	695	12%	3,388	59%	236	4%	1,132	20%	100	2%	236	4%
June	6,055	100%	689	11%	3,600	59%	280	5%	1,139	19%	86	1%	261	4%
July	5,877	100%	675	11%	3,488	59%	259	4%	1,099	19%	92	2%	264	4%
August	5,507	100%	608	11%	3,248	59%	274	5%	1,051	19%	92	2%	234	4%
September	5,860	100%	709	12%	3,471	59%	272	5%	1,073	18%	81	1%	254	4%
October	6,595	100%	762	12%	3,978	60%	292	4%	1,150	17%	108	2%	305	5%
November	6,021	100%	669	11%	3,623	60%	270	4%	1,093	18%	87	1%	279	5%
December	6,556	100%	808	12%	3,917	60%	304	5%	1,182	18%	90	1%	255	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2016</i>														
January	6,241	100%	722	12%	3,802	61%	284	5%	1,075	17%	98	2%	260	4%
February	6,675	100%	785	12%	3,937	59%	291	4%	1,270	19%	104	2%	288	4%
March	7,620	100%	825	11%	4,565	60%	383	5%	1,401	18%	120	2%	326	4%
April	7,066	100%	826	12%	4,305	61%	310	4%	1,232	17%	107	2%	286	4%
May	7,249	100%	842	12%	4,375	60%	334	5%	1,308	18%	102	1%	288	4%
June	7,107	100%	837	12%	4,266	60%	337	5%	1,272	18%	88	1%	307	4%
July	6,761	100%	773	11%	4,074	60%	301	4%	1,255	19%	92	1%	266	4%
August	7,213	100%	854	12%	4,330	60%	323	4%	1,346	19%	96	1%	264	4%
September	6,782	100%	787	12%	4,130	61%	296	4%	1,208	18%	87	1%	274	4%
October	7,217	100%	822	11%	4,388	61%	328	5%	1,288	18%	105	1%	286	4%
November	7,305	100%	863	12%	4,455	61%	351	5%	1,252	17%	83	1%	301	4%
December	7,683	100%	941	12%	4,705	61%	344	4%	1,279	17%	101	1%	313	4%
<i>2017</i>														
January	7,694	100%	917	12%	4,672	61%	353	5%	1,344	17%	116	2%	292	4%
February	7,470	100%	903	12%	4,481	60%	340	5%	1,326	18%	105	1%	315	4%
March	8,803	100%	1,047	12%	5,362	61%	402	5%	1,544	18%	113	1%	335	4%
April	7,914	100%	951	12%	4,810	61%	356	4%	1,372	17%	118	1%	307	4%
May	9,073	100%	1,121	12%	5,606	62%	408	4%	1,486	16%	125	1%	327	4%
June	8,761	100%	1,060	12%	5,347	61%	347	4%	1,546	18%	110	1%	351	4%
July	8,136	100%	1,022	13%	4,900	60%	339	4%	1,432	18%	119	1%	324	4%
August	8,779	100%	1,089	12%	5,306	60%	373	4%	1,532	17%	140	2%	339	4%
September	8,113	100%	1,024	13%	4,905	60%	375	5%	1,379	17%	107	1%	323	4%
October	8,868	100%	1,111	13%	5,469	62%	385	4%	1,434	16%	118	1%	351	4%
November	8,783	100%	1,107	13%	5,453	62%	375	4%	1,424	16%	108	1%	316	4%
December	8,539	100%	1,044	12%	5,271	62%	359	4%	1,454	17%	105	1%	306	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2018</i>														
January	9,084	100%	1,145	13%	5,587	62%	408	4%	1,473	16%	108	1%	363	4%
February	8,579	100%	1,090	13%	5,295	62%	385	4%	1,400	16%	95	1%	314	4%
March	10,008	100%	1,294	13%	6,194	62%	453	5%	1,594	16%	126	1%	347	3%
April	9,818	100%	1,267	13%	6,102	62%	401	4%	1,590	16%	110	1%	348	4%
May	10,649	100%	1,409	13%	6,724	63%	432	4%	1,602	15%	123	1%	359	3%
June	9,402	100%	1,211	13%	5,903	63%	386	4%	1,450	15%	101	1%	351	4%
July	9,121	100%	1,190	13%	5,668	62%	352	4%	1,450	16%	112	1%	349	4%
August	10,033	100%	1,317	13%	6,189	62%	370	4%	1,656	17%	132	1%	369	4%
September	8,738	100%	1,157	13%	5,393	62%	379	4%	1,376	16%	106	1%	327	4%
October	9,216	100%	1,272	14%	5,764	63%	371	4%	1,375	15%	96	1%	338	4%
November	7,717	100%	1,034	13%	4,851	63%	327	4%	1,149	15%	76	<1%	280	4%
December	7,059	100%	981	14%	4,381	62%	261	4%	1,093	15%	58	<1%	285	4%
<i>2019</i>														
January	7,604	100%	1,110	15%	4,789	63%	262	3%	1,140	15%	37	<1%	266	3%
February	6,864	100%	1,084	16%	4,190	61%	238	3%	1,043	15%	49	<1%	260	4%
March	7,226	100%	1,209	17%	4,568	63%	92	1%	1,057	15%	32	<1%	268	4%
April	1,434	100%	212	15%	912	64%	*****	*****	220	15%	*****	*****	53	4%
May	617	100%	109	18%	371	60%	*****	*****	90	15%	*****	*****	24	4%
June	527	100%	108	20%	320	61%	*****	*****	62	12%	*****	*****	23	4%
Spironolactone episode after HFpEF, excluding Myocardial Infarction at baseline¹														
<i>2010</i>														
July	904	100%	82	9%	536	59%	42	5%	186	21%	18	2%	40	4%
August	1,504	100%	125	8%	908	60%	78	5%	277	18%	31	2%	85	6%
September	1,723	100%	178	10%	994	58%	75	4%	351	20%	30	2%	95	6%
October	2,086	100%	169	8%	1,229	59%	103	5%	427	20%	40	2%	118	6%
November	2,300	100%	218	9%	1,310	57%	116	5%	483	21%	42	2%	131	6%
December	2,465	100%	260	11%	1,401	57%	102	4%	513	21%	46	2%	143	6%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2011</i>														
January	2,828	100%	265	9%	1,664	59%	131	5%	568	20%	48	2%	152	5%
February	2,973	100%	266	9%	1,774	60%	131	4%	587	20%	50	2%	165	6%
March	3,537	100%	328	9%	2,108	60%	144	4%	704	20%	66	2%	187	5%
April	3,397	100%	320	9%	1,988	59%	161	5%	695	20%	60	2%	173	5%
May	3,553	100%	360	10%	2,078	58%	140	4%	727	20%	57	2%	191	5%
June	3,734	100%	314	8%	2,200	59%	168	4%	762	20%	61	2%	229	6%
July	3,402	100%	323	9%	1,991	59%	148	4%	684	20%	58	2%	198	6%
August	3,536	100%	359	10%	2,066	58%	145	4%	722	20%	52	1%	192	5%
September	3,394	100%	316	9%	1,977	58%	164	5%	709	21%	53	2%	175	5%
October	3,613	100%	342	9%	2,126	59%	149	4%	721	20%	54	1%	221	6%
November	3,696	100%	367	10%	2,061	56%	191	5%	791	21%	77	2%	209	6%
December	3,792	100%	421	11%	2,183	58%	171	5%	769	20%	59	2%	189	5%
<i>2012</i>														
January	3,919	100%	388	10%	2,329	59%	132	3%	805	21%	66	2%	199	5%
February	4,070	100%	422	10%	2,387	59%	167	4%	820	20%	73	2%	201	5%
March	4,312	100%	387	9%	2,552	59%	212	5%	878	20%	75	2%	208	5%
April	4,193	100%	401	10%	2,419	58%	188	4%	897	21%	69	2%	219	5%
May	4,509	100%	455	10%	2,630	58%	205	5%	910	20%	74	2%	235	5%
June	4,140	100%	427	10%	2,420	58%	196	5%	836	20%	59	1%	202	5%
July	4,162	100%	419	10%	2,384	57%	193	5%	864	21%	83	2%	219	5%
August	4,345	100%	435	10%	2,486	57%	215	5%	881	20%	81	2%	247	6%
September	3,903	100%	398	10%	2,248	58%	178	5%	825	21%	60	2%	194	5%
October	4,541	100%	468	10%	2,635	58%	217	5%	938	21%	56	1%	227	5%
November	4,496	100%	480	11%	2,683	60%	196	4%	853	19%	67	1%	217	5%
December	4,396	100%	449	10%	2,629	60%	198	5%	846	19%	64	1%	210	5%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2013</i>														
January	4,812	100%	496	10%	2,817	59%	194	4%	1,001	21%	72	1%	232	5%
February	4,450	100%	449	10%	2,629	59%	215	5%	881	20%	69	2%	207	5%
March	5,109	100%	522	10%	3,083	60%	223	4%	952	19%	90	2%	239	5%
April	5,103	100%	509	10%	3,062	60%	224	4%	993	19%	84	2%	231	5%
May	5,283	100%	584	11%	3,149	60%	215	4%	1,030	19%	70	1%	235	4%
June	4,751	100%	485	10%	2,860	60%	206	4%	886	19%	68	1%	246	5%
July	5,093	100%	556	11%	2,981	59%	229	4%	1,011	20%	74	1%	242	5%
August	5,034	100%	542	11%	2,966	59%	233	5%	966	19%	72	1%	255	5%
September	4,786	100%	511	11%	2,835	59%	229	5%	915	19%	65	1%	231	5%
October	5,360	100%	573	11%	3,119	58%	264	5%	1,098	20%	82	2%	224	4%
November	5,082	100%	520	10%	3,028	60%	257	5%	979	19%	77	2%	221	4%
December	4,803	100%	507	11%	2,893	60%	165	3%	955	20%	75	2%	208	4%
<i>2014</i>														
January	5,191	100%	557	11%	3,102	60%	218	4%	1,004	19%	86	2%	224	4%
February	4,874	100%	542	11%	2,839	58%	208	4%	971	20%	80	2%	234	5%
March	5,590	100%	564	10%	3,349	60%	248	4%	1,110	20%	80	1%	239	4%
April	5,886	100%	629	11%	3,540	60%	293	5%	1,039	18%	89	2%	296	5%
May	5,784	100%	613	11%	3,461	60%	253	4%	1,128	20%	85	1%	244	4%
June	5,286	100%	567	11%	3,149	60%	242	5%	996	19%	85	2%	247	5%
July	5,363	100%	569	11%	3,216	60%	232	4%	1,044	19%	71	1%	231	4%
August	5,036	100%	554	11%	2,963	59%	239	5%	962	19%	75	1%	243	5%
September	4,951	100%	522	11%	2,952	60%	212	4%	967	20%	86	2%	212	4%
October	5,638	100%	610	11%	3,338	59%	263	5%	1,088	19%	87	2%	252	4%
November	4,825	100%	573	12%	2,869	59%	220	5%	904	19%	65	1%	194	4%
December	5,610	100%	593	11%	3,391	60%	227	4%	1,069	19%	83	1%	247	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2015</i>														
January	5,540	100%	630	11%	3,361	61%	218	4%	1,001	18%	80	1%	250	5%
February	5,060	100%	580	11%	3,011	60%	227	4%	957	19%	61	1%	224	4%
March	6,100	100%	658	11%	3,691	61%	261	4%	1,163	19%	92	2%	235	4%
April	6,019	100%	693	12%	3,602	60%	271	5%	1,126	19%	77	1%	250	4%
May	5,622	100%	668	12%	3,283	58%	229	4%	1,112	20%	98	2%	232	4%
June	5,882	100%	658	11%	3,492	59%	275	5%	1,115	19%	86	1%	256	4%
July	5,720	100%	650	11%	3,388	59%	253	4%	1,080	19%	91	2%	258	5%
August	5,372	100%	596	11%	3,158	59%	270	5%	1,027	19%	90	2%	231	4%
September	5,689	100%	676	12%	3,369	59%	267	5%	1,049	18%	79	1%	249	4%
October	6,412	100%	735	11%	3,858	60%	287	4%	1,127	18%	107	2%	298	5%
November	5,850	100%	643	11%	3,513	60%	269	5%	1,065	18%	86	1%	274	5%
December	6,364	100%	779	12%	3,784	59%	299	5%	1,164	18%	88	1%	250	4%
<i>2016</i>														
January	6,062	100%	698	12%	3,690	61%	277	5%	1,047	17%	97	2%	253	4%
February	6,474	100%	757	12%	3,810	59%	284	4%	1,236	19%	103	2%	284	4%
March	7,412	100%	793	11%	4,447	60%	375	5%	1,358	18%	117	2%	322	4%
April	6,840	100%	805	12%	4,153	61%	303	4%	1,193	17%	106	2%	280	4%
May	7,082	100%	814	11%	4,277	60%	322	5%	1,289	18%	101	1%	279	4%
June	6,913	100%	816	12%	4,151	60%	328	5%	1,234	18%	86	1%	298	4%
July	6,578	100%	740	11%	3,964	60%	295	4%	1,226	19%	91	1%	262	4%
August	7,024	100%	824	12%	4,214	60%	312	4%	1,322	19%	95	1%	257	4%
September	6,566	100%	757	12%	3,988	61%	286	4%	1,179	18%	87	1%	269	4%
October	6,998	100%	786	11%	4,252	61%	319	5%	1,262	18%	102	1%	277	4%
November	7,079	100%	818	12%	4,324	61%	341	5%	1,220	17%	80	1%	296	4%
December	7,448	100%	910	12%	4,561	61%	335	4%	1,240	17%	98	1%	304	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2017</i>														
January	7,482	100%	892	12%	4,531	61%	342	5%	1,313	18%	115	2%	289	4%
February	7,244	100%	874	12%	4,328	60%	333	5%	1,293	18%	104	1%	312	4%
March	8,539	100%	997	12%	5,200	61%	390	5%	1,509	18%	111	1%	332	4%
April	7,668	100%	910	12%	4,652	61%	344	4%	1,348	18%	117	2%	297	4%
May	8,801	100%	1,075	12%	5,443	62%	394	4%	1,446	16%	124	1%	319	4%
June	8,493	100%	1,025	12%	5,181	61%	336	4%	1,503	18%	106	1%	342	4%
July	7,878	100%	971	12%	4,752	60%	327	4%	1,393	18%	117	1%	318	4%
August	8,489	100%	1,039	12%	5,124	60%	362	4%	1,493	18%	137	2%	334	4%
September	7,876	100%	986	13%	4,743	60%	366	5%	1,359	17%	107	1%	315	4%
October	8,615	100%	1,074	12%	5,297	61%	376	4%	1,403	16%	117	1%	348	4%
November	8,505	100%	1,070	13%	5,266	62%	365	4%	1,395	16%	106	1%	303	4%
December	8,302	100%	1,010	12%	5,116	62%	351	4%	1,419	17%	104	1%	302	4%
<i>2018</i>														
January	8,830	100%	1,102	12%	5,426	61%	399	5%	1,439	16%	108	1%	356	4%
February	8,320	100%	1,044	13%	5,142	62%	376	5%	1,354	16%	94	1%	310	4%
March	9,734	100%	1,249	13%	6,004	62%	448	5%	1,566	16%	123	1%	344	4%
April	9,551	100%	1,228	13%	5,936	62%	386	4%	1,554	16%	108	1%	339	4%
May	10,348	100%	1,359	13%	6,532	63%	415	4%	1,571	15%	121	1%	350	3%
June	9,142	100%	1,168	13%	5,731	63%	378	4%	1,423	16%	99	1%	343	4%
July	8,859	100%	1,133	13%	5,517	62%	343	4%	1,417	16%	108	1%	341	4%
August	9,772	100%	1,268	13%	6,023	62%	363	4%	1,629	17%	130	1%	359	4%
September	8,474	100%	1,110	13%	5,234	62%	367	4%	1,340	16%	103	1%	320	4%
October	8,970	100%	1,232	14%	5,593	62%	369	4%	1,348	15%	96	1%	332	4%
November	7,528	100%	1,000	13%	4,737	63%	320	4%	1,123	15%	76	1%	272	4%
December	6,881	100%	945	14%	4,273	62%	258	4%	1,073	16%	57	<1%	275	4%

Table 7e. Distribution of the Average Daily Dose* (mg per Day) in the First Continuous Treatment Episode of Spironolactone Dispensing Event Outcomes among Individuals with Heart Failure, Including Only Exposed Time, in the Sentinel Distributed Database (SDD) between July 1, 2010 and Data Partner End Date, by Year and Month *****

	Total		<15 mg per day		15 - <30 mg per day		30 - <45 mg per day		45 - <75 mg per day		75 - <100 mg per day		100+ mg per day	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>2019</i>														
January	7,452	100%	1,077	14%	4,695	63%	260	3%	1,124	15%	36	<1%	260	3%
February	6,707	100%	1,056	16%	4,096	61%	233	3%	1,017	15%	47	<1%	258	4%
March	7,074	100%	1,177	17%	4,470	63%	92	1%	1,041	15%	30	<1%	264	4%
April	1,406	100%	206	15%	893	64%	*****	*****	218	16%	*****	*****	52	4%
May	604	100%	107	18%	361	60%	*****	*****	89	15%	*****	*****	24	4%
June	512	100%	105	21%	312	61%	*****	*****	59	12%	*****	*****	23	4%

*Calculated average daily dose for only those treatment episodes in which the amount supplied divided by days supply for all dispensings was ≥ 0.25 and ≤ 8 .

**Calculated average daily dose for only exposed time within the first continuous treatment episode. That is, bridged gap days (≤ 30 days) were removed from the calculation.

***Calendar month-year during which treatment with spironolactone was initiated.

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be re-calculated through the cells presented.

¹Assessed in the 183 days prior to the heart failure index date.

Appendix A. Start and End Dates for Each Data Partner (DP) as of Request Distribution Date (February 13, 2020)

DP	DP Start Date*	DP End Date*
DP01	01/01/2000	02/28/2019
DP02	01/01/2000	01/31/2019
DP03	01/01/2004	08/31/2019
DP04	01/01/2008	09/30/2019
DP05	01/01/2006	06/30/2019
DP06	01/01/2000	12/31/2017
DP07	01/01/2010	03/31/2019
DP08	01/01/2000	07/31/2019
DP09	06/01/2007	04/30/2019
DP10	01/01/2000	04/30/2018
DP11	01/01/2005	07/31/2018
DP12	01/01/2000	04/30/2019
DP13	01/01/2000	06/30/2019
DP14	01/01/2008	03/31/2019
DP15	01/01/2000	03/31/2019
DP16	01/01/2012	06/30/2018

*The start and end dates are based on the minimum and maximum dates within each DP. The month with the maximum date must have at least 80% of the number of records in the previous month.

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
Reduced Ejection Fraction Heart Failure (HFrEF)						
HFrEF Combo #1	Index-defining	Any	428.1	Left heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Index-defining	Any	150.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	428.2	Systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	150.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	150.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	150.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	150.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	428.3	Diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	150.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	150.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	150.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	150.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	428.4	Combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #1	Exclusion on index date	Any	150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFrEF Combo #1	Exclusion on index date	Any	150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #1	Exclusion on index date	Any	150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Index-defining	Any	428.2	Systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Index-defining	Any	428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Index-defining	Any	428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Index-defining	Any	428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Index-defining	Any	428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Index-defining	Any	150.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Index-defining	Any	150.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Index-defining	Any	150.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Index-defining	Any	150.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	428.1	Left heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	150.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	428.3	Diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	150.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	150.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	150.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	150.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	428.4	Combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFrEF Combo #2	Exclusion on index date	Any	428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFrEF Combo #2	Exclusion on index date	Any	150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFrEF Combo #2	Exclusion on index date	Any	150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
Preserved Ejection Fraction Heart Failure (HFpEF)						
HFpEF Combo #1	Index-defining	AV, OA, or ED	428.3	Diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Index-defining	AV, OA, or ED	428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Index-defining	AV, OA, or ED	428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Index-defining	AV, OA, or ED	428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Index-defining	AV, OA, or ED	428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Index-defining	AV, OA, or ED	150.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Index-defining	AV, OA, or ED	150.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Index-defining	AV, OA, or ED	150.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Index-defining	AV, OA, or ED	150.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	428.1	Left heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	150.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	428.2	Systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	150.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	150.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	150.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	150.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	428.4	Combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #1	Exclusion on index date	Any	428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #1	Exclusion on index date	Any	150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #1	Exclusion on index date	Any	150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Index-defining	IP* IS*	428.3	Diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Index-defining	IP* IS*	428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Index-defining	IP* IS*	428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Index-defining	IP* IS*	428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Index-defining	IP* IS*	428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Index-defining	IP* IS*	150.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Index-defining	IP* IS*	150.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Index-defining	IP* IS*	150.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Index-defining	IP* IS*	150.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion on index date	Any	428.1	Left heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	150.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion on index date	Any	428.2	Systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	150.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion on index date	Any	150.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion on index date	Any	150.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion on index date	Any	150.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort						Code	
Combination	Code Definition	Care Setting	Code	Description		Category	Code Type
HFpEF Combo #2	Exclusion on index date	Any	428.4	Combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	428.40	Unspecified combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	428.41	Acute combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	428.42	Chronic combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	428.43	Acute on chronic combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion on index date	Any	150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart		Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion on index date	Any	150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure		Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion on index date	Any	150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure		Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion on index date	Any	150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure		Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428	Heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.0	Congestive heart failure, unspecified		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.1	Left heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.2	Systolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.20	Unspecified systolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.21	Acute systolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.22	Chronic systolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.23	Acute on chronic systolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.3	Diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.30	Unspecified diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.31	Acute diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.32	Chronic diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.33	Acute on chronic diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.4	Combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.40	Unspecified combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.41	Acute combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.42	Chronic combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.43	Acute on chronic combined systolic and diastolic heart failure		Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort					Code	
Combination	Code Definition	Care Setting	Code	Description	Category	Code Type
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	428.9	Unspecified heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.811	Acute right heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.812	Chronic right heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.82	Biventricular heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.83	High output heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.84	End stage heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.89	Other heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	150.9	Heart failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	109.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402	Hypertensive heart disease	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.0	Malignant hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.1	Benign hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.9	Unspecified hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.0	Hypertensive heart and chronic kidney disease, malignant	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.1	Hypertensive heart and chronic kidney disease, benign	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.9	Hypertensive heart and chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
HFpEF Combo #2	Exclusion (-183, -1)	IPP ISP	I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	I09.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402	Hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.0	Malignant hypertensive heart disease	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.1	Benign hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.9	Unspecified hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.0	Hypertensive heart and chronic kidney disease, malignant	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.1	Hypertensive heart and chronic kidney disease, benign	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.9	Hypertensive heart and chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
HFpEF Combo #3	Index-defining	AV, OA, or ED	I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	428.1	Left heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	I50.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	428.2	Systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #3	Exclusion on index date	Any	428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	150.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	150.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	150.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	150.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	428.4	Combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #3	Exclusion on index date	Any	150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #3	Exclusion on index date	Any	150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Index-defining	IP* IS*	398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	109.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Index-defining	IP* IS*	402	Hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.0	Malignant hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.1	Benign hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.9	Unspecified hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #4	Index-defining	IP* IS*	I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Index-defining	IP* IS*	404	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.0	Hypertensive heart and chronic kidney disease, malignant	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.1	Hypertensive heart and chronic kidney disease, benign	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.9	Hypertensive heart and chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #4	Index-defining	IP* IS*	404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Index-defining	IP* IS*	I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
HFpEF Combo #4	Index-defining	IP* IS*	I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
HFpEF Combo #4	Index-defining	IP* IS*	I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
HFpEF Combo #4	Index-defining	IP* IS*	I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	428.1	Left heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	I50.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	428.2	Systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	I50.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	I50.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	I50.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	I50.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	428.4	Combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #4	Exclusion on index date	Any	428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion on index date	Any	150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion on index date	Any	150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428	Heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.0	Congestive heart failure, unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.1	Left heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.2	Systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.3	Diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.4	Combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	428.9	Unspecified heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.811	Acute right heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.812	Chronic right heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.82	Biventricular heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.83	High output heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.84	End stage heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.89	Other heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	150.9	Heart failure, unspecified	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	109.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402	Hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.0	Malignant hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.1	Benign hypertensive heart disease	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.9	Unspecified hypertensive heart disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.0	Hypertensive heart and chronic kidney disease, malignant	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.1	Hypertensive heart and chronic kidney disease, benign	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.9	Hypertensive heart and chronic kidney disease, unspecified	Diagnosis	ICD-9-CM

Appendix B. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Heart Failure in this Request

Cohort Combination	Code Definition	Care Setting	Code	Description	Code Category	Code Type
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
HFpEF Combo #4	Exclusion (-183, -1)	IPP ISP	I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) Codes Used to Define Inclusion and Exclusion Criteria in this Request

Cohort for Inclusion Criteria	Cohort for Exclusion Criteria	Evaluation Window (Days)	Code	Description	Code Category	Code Type
Implantable Cardioverter Defibrillator						
HFrEF ¹	HFpEF ²	(-183, -1)	V45.02	Automatic implantable cardiac defibrillator in situ	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	Z95.810	Presence of automatic (implantable) cardiac defibrillator	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	37.94	Implantation or replacement of automatic cardioverter/ defibrillator, total system (AICD)	Procedure	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	37.95	Implantation of automatic cardioverter/defibrillator leads(s) only	Procedure	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	37.96	Implantation of automatic cardioverter/defibrillator pulse generator only	Procedure	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	37.97	Replacement of automatic cardioverter/defibrillator leads(s) only	Procedure	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	37.98	Replacement of automatic cardioverter/defibrillator pulse generator only	Procedure	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	02H40KZ	Insertion of Defibrillator Lead into Coronary Vein, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02H44KZ	Insertion of Defibrillator Lead into Coronary Vein, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02H60KZ	Insertion of Defibrillator Lead into Right Atrium, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02H63KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02H64KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02H70KZ	Insertion of Defibrillator Lead into Left Atrium, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02H73KZ	Insertion of Defibrillator Lead into Left Atrium, Percutaneous Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02H74KZ	Insertion of Defibrillator Lead into Left Atrium, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HK0KZ	Insertion of Defibrillator Lead into Right Ventricle, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HL0KZ	Insertion of Defibrillator Lead into Left Ventricle, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HL3KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HL4KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HN0KZ	Insertion of Defibrillator Lead into Pericardium, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HN3KZ	Insertion of Defibrillator Lead into Pericardium, Percutaneous Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02HN4KZ	Insertion of Defibrillator Lead into Pericardium, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02PA0MZ	Removal of Cardiac Lead from Heart, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02PA3MZ	Removal of Cardiac Lead from Heart, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) Codes Used to Define Inclusion and Exclusion Criteria in this Request

Cohort for Inclusion Criteria	Cohort for Exclusion Criteria	Evaluation Window (Days)	Code	Description	Code Category	Code Type
HFrEF	HFpEF	(-183, -1)	02PA4MZ	Removal of Cardiac Lead from Heart, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	02PAXMZ	Removal of Cardiac Lead from Heart, External Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	0JH608Z	Insertion of Defibrillator Generator into Chest Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	0JH638Z	Insertion of Defibrillator Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	0JH808Z	Insertion of Defibrillator Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	0JH838Z	Insertion of Defibrillator Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	0JPT0PZ	Removal of Cardiac Rhythm Related Device from Trunk Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
HFrEF	HFpEF	(-183, -1)	0JPT3PZ	Removal of Cardiac Rhythm Related Device from Trunk Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
Cardiomyopathy						
HFrEF	HFpEF	(-183, -1)	425	Cardiomyopathy	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.0	Endomyocardial fibrosis	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.1	Hypertrophic cardiomyopathy	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.11	Hypertrophic obstructive cardiomyopathy	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.18	Other hypertrophic cardiomyopathy	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.2	Obscure cardiomyopathy of Africa	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.3	Endocardial fibroelastosis	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.4	Other primary cardiomyopathies	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.5	Alcoholic cardiomyopathy	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.7	Nutritional and metabolic cardiomyopathy	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.8	Cardiomyopathy in other diseases classified elsewhere	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	425.9	Unspecified secondary cardiomyopathy	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	A18.84	Tuberculosis of heart	Diagnosis	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) Codes Used to Define Inclusion and Exclusion Criteria in this Request

Cohort for Inclusion Criteria	Cohort for Exclusion Criteria	Evaluation Window (Days)	Code	Description	Code Category	Code Type
HFrEF	HFpEF	(-183, -1)	I42.0	Dilated cardiomyopathy	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.1	Obstructive hypertrophic cardiomyopathy	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.2	Other hypertrophic cardiomyopathy	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.3	Endomyocardial (eosinophilic) disease	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.4	Endocardial fibroelastosis	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.5	Other restrictive cardiomyopathy	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.6	Alcoholic cardiomyopathy	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.7	Cardiomyopathy due to drug and external agent	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.8	Other cardiomyopathies	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I42.9	Cardiomyopathy, unspecified	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I43	Cardiomyopathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
Myocardial Infarction						
HFrEF	HFpEF	(-183, -1)	410	Acute myocardial infarction	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.0	Acute myocardial infarction of anterolateral wall	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.00	Acute myocardial infarction of anterolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.02	Acute myocardial infarction of anterolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.1	Acute myocardial infarction of other anterior wall	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.10	Acute myocardial infarction of other anterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.11	Acute myocardial infarction of other anterior wall, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.12	Acute myocardial infarction of other anterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.2	Acute myocardial infarction of inferolateral wall	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.20	Acute myocardial infarction of inferolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.22	Acute myocardial infarction of inferolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.3	Acute myocardial infarction of inferoposterior wall	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.30	Acute myocardial infarction of inferoposterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	Diagnosis	ICD-9-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) Codes Used to Define Inclusion and Exclusion Criteria in this Request

Cohort for Inclusion Criteria	Cohort for Exclusion Criteria	Evaluation Window (Days)	Code	Description	Code Category	Code Type
HFrEF	HFpEF	(-183, -1)	410.32	Acute myocardial infarction of inferoposterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.4	Acute myocardial infarction of other inferior wall	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.40	Acute myocardial infarction of other inferior wall, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.41	Acute myocardial infarction of other inferior wall, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.42	Acute myocardial infarction of other inferior wall, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.5	Acute myocardial infarction of other lateral wall	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.50	Acute myocardial infarction of other lateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.51	Acute myocardial infarction of other lateral wall, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.52	Acute myocardial infarction of other lateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.6	Acute myocardial infarction, true posterior wall infarction	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.60	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.62	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.7	Acute myocardial infarction, subendocardial infarction	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.70	Acute myocardial infarction, subendocardial infarction, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.72	Acute myocardial infarction, subendocardial infarction, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.8	Acute myocardial infarction of other specified sites	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.80	Acute myocardial infarction of other specified sites, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.81	Acute myocardial infarction of other specified sites, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.82	Acute myocardial infarction of other specified sites, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.9	Acute myocardial infarction, unspecified site	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.90	Acute myocardial infarction, unspecified site, episode of care unspecified	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.91	Acute myocardial infarction, unspecified site, initial episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	410.92	Acute myocardial infarction, unspecified site, subsequent episode of care	Diagnosis	ICD-9-CM
HFrEF	HFpEF	(-183, -1)	I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM

Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) Codes Used to Define Inclusion and Exclusion Criteria in this Request

Cohort for Inclusion Criteria	Cohort for Exclusion Criteria	Evaluation Window (Days)	Code	Description	Code Category	Code Type
HFrEF	HFpEF	(-183, -1)	I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.9	Acute myocardial infarction, unspecified	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I21.A9	Other myocardial infarction type	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
HFrEF	HFpEF	(-183, -1)	I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM

¹ Reduced Ejection Fraction Heart Failure

² Preserved Ejection Fraction Heart Failure

Appendix D. List of Generic and Brand Names of Medical Products Used to Define Spironolactone Utilization in this Request

Generic Name	Brand Name
Spironolactone	
Spironolactone	Aldactone
Spironolactone	Spironolactone
Spironolactone/hydrochlorothiazide	Aldactazide
Spironolactone/hydrochlorothiazide	Spironolacton-hydrochlorothiaz

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
Angiotensin-Converting Enzyme Inhibitors	
amlodipine besylate/benazepril HCl	amlodipine-benazepril
amlodipine besylate/benazepril HCl	Lotrel
benazepril HCl	benazepril
benazepril HCl	Lotensin
benazepril HCl/hydrochlorothiazide	benazepril-hydrochlorothiazide
benazepril HCl/hydrochlorothiazide	Lotensin HCT
captopril	Capoten
captopril	captopril
captopril/hydrochlorothiazide	captopril-hydrochlorothiazide
enalapril maleate	enalapril maleate
enalapril maleate	Vasotec
enalapril maleate/hydrochlorothiazide	enalapril-hydrochlorothiazide
enalapril maleate/hydrochlorothiazide	Vaseretic
fosinopril sodium	fosinopril
fosinopril sodium	Monopril
fosinopril sodium/hydrochlorothiazide	fosinopril-hydrochlorothiazide
lisinopril	lisinopril
lisinopril	Prinivil
lisinopril	Zestril
lisinopril/dietary supplement,comb.10	Lytensopril
lisinopril/dietary supplement,comb.10	Lytensopril-90
lisinopril/hydrochlorothiazide	lisinopril-hydrochlorothiazide
lisinopril/hydrochlorothiazide	Prinzide
lisinopril/hydrochlorothiazide	Zestoretic
moexipril HCl	moexipril
moexipril HCl	Univasc
moexipril HCl/hydrochlorothiazide	moexipril-hydrochlorothiazide
moexipril HCl/hydrochlorothiazide	Uniretic
perindopril arginine/amlodipine besylate	Prestalia
perindopril erbumine	Aceon
perindopril erbumine	perindopril erbumine
quinapril HCl	Accupril
quinapril HCl	quinapril
quinapril HCl/hydrochlorothiazide	Accuretic
quinapril HCl/hydrochlorothiazide	quinapril-hydrochlorothiazide
quinapril HCl/hydrochlorothiazide	Quinaretic
ramipril	Altace
ramipril	ramipril
trandolapril	Mavik
trandolapril	trandolapril
trandolapril/verapamil HCl	Tarka
trandolapril/verapamil HCl	trandolapril-verapamil

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
Angiotensin II Receptor Blockers	
amlodipine besylate/olmesartan medoxomil	amlodipine-olmesartan
amlodipine besylate/olmesartan medoxomil	Azor
amlodipine besylate/valsartan	amlodipine-valsartan
amlodipine besylate/valsartan	Exforge
amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiazid
amlodipine besylate/valsartan/hydrochlorothiazide	Exforge HCT
azilsartan medoxomil	Edarbi
azilsartan medoxomil/chlorthalidone	Edarbyclor
candesartan cilexetil	Atacand
candesartan cilexetil	candesartan
candesartan cilexetil/hydrochlorothiazide	Atacand HCT
candesartan cilexetil/hydrochlorothiazide	candesartan-hydrochlorothiazid
eprosartan mesylate	eprosartan
eprosartan mesylate	Teveten
eprosartan mesylate/hydrochlorothiazide	Teveten HCT
irbesartan	Avapro
irbesartan	irbesartan
irbesartan/hydrochlorothiazide	Avalide
irbesartan/hydrochlorothiazide	irbesartan-hydrochlorothiazide
losartan potassium	Cozaar
losartan potassium	losartan
losartan potassium/hydrochlorothiazide	Hyzaar
losartan potassium/hydrochlorothiazide	losartan-hydrochlorothiazide
nebivolol HCl/valsartan	Byvalson
olmesartan medoxomil	Benicar
olmesartan medoxomil	olmesartan
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	olmesartan-amlodipin-hcthiazid
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	Tribenzor
olmesartan medoxomil/hydrochlorothiazide	Benicar HCT
olmesartan medoxomil/hydrochlorothiazide	olmesartan-hydrochlorothiazide
sacubitril/valsartan	Entresto
telmisartan	Micardis
telmisartan	telmisartan
telmisartan/amlodipine besylate	telmisartan-amlodipine
telmisartan/amlodipine besylate	Twynsta
telmisartan/hydrochlorothiazide	Micardis HCT
telmisartan/hydrochlorothiazide	telmisartan-hydrochlorothiazid
valsartan	Diovan
valsartan	valsartan
valsartan/hydrochlorothiazide	Diovan HCT
valsartan/hydrochlorothiazide	valsartan-hydrochlorothiazide

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
Antiarrhythmics	
amiodarone HCl	amiodarone
amiodarone HCl	Cordarone
amiodarone HCl	Pacerone
disopyramide phosphate	disopyramide phosphate
disopyramide phosphate	Norpace
disopyramide phosphate	Norpace CR
dofetilide	dofetilide
dofetilide	Tikosyn
dronedarone HCl	Multaq
flecainide acetate	flecainide
flecainide acetate	Tambocor
mexiletine HCl	mexiletine
mexiletine HCl	Mexitil
propafenone HCl	propafenone
propafenone HCl	Rythmol
propafenone HCl	Rythmol SR
quinidine gluconate	quinidine gluconate
quinidine sulfate	Quinidex Extentabs
quinidine sulfate	quinidine sulfate
sotalol HCl	Betapace
sotalol HCl	Betapace AF
sotalol HCl	Sorine
sotalol HCl	sotalol
sotalol HCl	Sotalol AF
verapamil HCl	Calan
verapamil HCl	verapamil
Beta Blockers	
acebutolol HCl	acebutolol
acebutolol HCl	Sectral
atenolol	atenolol
atenolol	Tenormin
betaxolol HCl	betaxolol
betaxolol HCl	Kerlone
bisoprolol fumarate	bisoprolol fumarate
bisoprolol fumarate	Zebeta
carvedilol	carvedilol
carvedilol	Coreg
carvedilol phosphate	carvedilol phosphate
carvedilol phosphate	Coreg CR
labetalol HCl	labetalol
labetalol HCl	Trandate
metoprolol succinate	Kapsargo Sprinkle
metoprolol succinate	metoprolol succinate

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
metoprolol succinate	Toprol XL
metoprolol tartrate	Lopressor
metoprolol tartrate	metoprolol tartrate
metoprolol tartrate/dietary supplement,comb.10	Hypertensolol
nadolol	Corgard
nadolol	nadolol
nadolol/bendroflumethiazide	Corzide
nadolol/bendroflumethiazide	nadolol-bendroflumethiazide
nebivolol HCl	Bystolic
propranolol HCl	Inderal LA
propranolol HCl	Inderal XL
propranolol HCl	InnoPran XL
propranolol HCl	propranolol
propranolol HCl/hydrochlorothiazide	propranolol-hydrochlorothiazid
Digoxin	
digoxin	Digitek
digoxin	Digox
digoxin	digoxin
digoxin	Lanoxin
Hydralazine	
hydralazine HCl	hydralazine
hydralazine HCl/hydrochlorothiazide	Hydra-Zide
isosorbide dinitrate/hydralazine HCl	BiDil
Loop Diuretics	
bumetanide	bumetanide
ethacrynic acid	Edecrin
ethacrynic acid	ethacrynic acid
furosemide	furosemide
furosemide	Lasix
toremide	Demadex
toremide	toremide
Mineralocorticoid Receptor Antagonists (Eplerenone)	
eplerenone	eplerenone
eplerenone	Inspra
Nitrates	
isosorbide dinitrate	Dilatrate-SR
isosorbide dinitrate	ISOCHRON
isosorbide dinitrate	IsoDitrate
isosorbide dinitrate	Isordil
isosorbide dinitrate	Isordil Titradose
isosorbide dinitrate	isosorbide dinitrate
isosorbide mononitrate	Imdur
isosorbide mononitrate	Ismo
isosorbide mononitrate	isosorbide mononitrate

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
isosorbide mononitrate	Monoket
nitroglycerin	GoNitro
nitroglycerin	Minitran
nitroglycerin	Nitro-Bid
nitroglycerin	Nitro-Dur
nitroglycerin	nitroglycerin
nitroglycerin	Nitrolingual
nitroglycerin	Nitromist
nitroglycerin	NitroQuick
nitroglycerin	Nitrostat
nitroglycerin	Nitro-Time

Anti-Obesity Medications

benzphetamine HCl	benzphetamine
benzphetamine HCl	Didrex
benzphetamine HCl	Regimex
diethylpropion HCl	diethylpropion
diethylpropion HCl	diethylpropion HCl (bulk)
orlistat	Alli
orlistat	Xenical
phendimetrazine tartrate	Bontril PDM
phendimetrazine tartrate	Bontril Slow-Release
phendimetrazine tartrate	Bontril SR
phendimetrazine tartrate	phendimetrazine tartrate
phentermine HCl	Adipex-P
phentermine HCl	Lomaira
phentermine HCl	phentermine
phentermine HCl	phentermine HCl (bulk)
phentermine HCl	Suprenza
phentermine HCl/topiramate	Qsymia
phentermine resin	Ionamin
phentermine resin	Ionamin-15
sibutramine HCl m-hydrate	Meridia

Potassium-Sparing Diuretics

amiloride HCl	amiloride
amiloride HCl	Midamor
amiloride HCl/hydrochlorothiazide	amiloride-hydrochlorothiazide
eplerenone	eplerenone
eplerenone	Inspra
spironolactone	Aldactone
spironolactone	CaroSpir
spironolactone	spironolactone
spironolactone/hydrochlorothiazide	Aldactazide
spironolactone/hydrochlorothiazide	spironolacton-hydrochlorothiaz
triamterene	Dyrenium

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
triamterene/hydrochlorothiazide	Dyazide
triamterene/hydrochlorothiazide	Maxzide
triamterene/hydrochlorothiazide	Maxzide-25mg
triamterene/hydrochlorothiazide	triamterene-hydrochlorothiazid
Smoking Cessation Medications	
bupropion HCl	Buproban
bupropion HCl	bupropion HCl (smoking deter)
bupropion HCl	Zyban
nicotine	Nicoderm CQ
nicotine	nicotine
nicotine	Nicotrol
nicotine	Nicotrol NS
nicotine	NTS Step 1
nicotine	NTS Step 2
nicotine bitartrate	Nicotine Tartrate
nicotine polacrilex	Commit
nicotine polacrilex	Nicorelief
nicotine polacrilex	Nicorette
nicotine polacrilex	Nicorette Refill
nicotine polacrilex	nicotine (polacrilex)
nicotine polacrilex	nicotine polacrilex (bulk)
nicotine polacrilex	Quit 2
nicotine polacrilex	Quit 4
nicotine polacrilex	Stop Smoking Aid
nicotine polacrilex	Thrive Nicotine
silver nitrate	silver nitrate (bulk)
varenicline tartrate	Chantix
varenicline tartrate	Chantix Continuing Month Box
varenicline tartrate	Chantix Continuing Month Pak
varenicline tartrate	Chantix Starting Month Box
varenicline tartrate	Chantix Starting Month Pak
Thiazide Diuretics	
aliskiren hemifumarate/amlodipine/hydrochlorothiazide	Amturnide
aliskiren hemifumarate/hydrochlorothiazide	Tekturna HCT
amiloride HCl/hydrochlorothiazide	amiloride-hydrochlorothiazide
amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiaizid
amlodipine besylate/valsartan/hydrochlorothiazide	Exforge HCT
atenolol/chlorthalidone	atenolol-chlorthalidone
atenolol/chlorthalidone	Tenoretic 100
atenolol/chlorthalidone	Tenoretic 50
azilsartan medoxomil/chlorthalidone	Edarbyclor
benazepril HCl/hydrochlorothiazide	benazepril-hydrochlorothiazide
benazepril HCl/hydrochlorothiazide	Lotensin HCT
bisoprolol fumarate/hydrochlorothiazide	bisoprolol-hydrochlorothiazide

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
bisoprolol fumarate/hydrochlorothiazide	Ziac
candesartan cilexetil/hydrochlorothiazide	Atacand HCT
candesartan cilexetil/hydrochlorothiazide	candesartan-hydrochlorothiazid
captopril/hydrochlorothiazide	captopril-hydrochlorothiazide
chlorothiazide	chlorothiazide
chlorothiazide	Diuril
chlorthalidone	chlorthalidone
chlorthalidone	Thalitone
clonidine HCl/chlorthalidone	Clorpres
enalapril maleate/hydrochlorothiazide	enalapril-hydrochlorothiazide
enalapril maleate/hydrochlorothiazide	Vaseretic
eprosartan mesylate/hydrochlorothiazide	Teveten HCT
fosinopril sodium/hydrochlorothiazide	fosinopril-hydrochlorothiazide
hydralazine HCl/hydrochlorothiazide	Hydra-Zide
hydrochlorothiazide	hydrochlorothiazide
hydrochlorothiazide	Microzide
indapamide	indapamide
irbesartan/hydrochlorothiazide	Avalide
irbesartan/hydrochlorothiazide	irbesartan-hydrochlorothiazide
lisinopril/hydrochlorothiazide	lisinopril-hydrochlorothiazide
lisinopril/hydrochlorothiazide	Prinzide
lisinopril/hydrochlorothiazide	Zestoretic
losartan potassium/hydrochlorothiazide	Hyzaar
losartan potassium/hydrochlorothiazide	losartan-hydrochlorothiazide
methyclothiazide	Enduron
methyclothiazide	methyclothiazide
methyldopa/hydrochlorothiazide	methyldopa-hydrochlorothiazide
metolazone	metolazone
metolazone	Zaroxolyn
metoprolol succinate/hydrochlorothiazide	Dutoprol
metoprolol succinate/hydrochlorothiazide	metoprolol su-hydrochlorothiaz
metoprolol tartrate/hydrochlorothiazide	Lopressor HCT
metoprolol tartrate/hydrochlorothiazide	metoprolol ta-hydrochlorothiaz
moexipril HCl/hydrochlorothiazide	moexipril-hydrochlorothiazide
moexipril HCl/hydrochlorothiazide	Uniretic
nadolol/bendroflumethiazide	Corzide
nadolol/bendroflumethiazide	nadolol-bendroflumethiazide
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	olmesartan-amlodipin-hcthiazid
olmesartan medoxomil/amlodipine besylate/hydrochlorothiazide	Tribenzor
olmesartan medoxomil/hydrochlorothiazide	Benicar HCT
olmesartan medoxomil/hydrochlorothiazide	olmesartan-hydrochlorothiazide
propranolol HCl/hydrochlorothiazide	propranolol-hydrochlorothiazid
quinapril HCl/hydrochlorothiazide	Accuretic
quinapril HCl/hydrochlorothiazide	quinapril-hydrochlorothiazide

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
quinapril HCl/hydrochlorothiazide	Quinaretic
spironolactone/hydrochlorothiazide	Aldactazide
spironolactone/hydrochlorothiazide	spironolacton-hydrochlorothiaz
telmisartan/hydrochlorothiazide	Micardis HCT
telmisartan/hydrochlorothiazide	telmisartan-hydrochlorothiazid
triamterene/hydrochlorothiazide	Dyazide
triamterene/hydrochlorothiazide	Maxzide
triamterene/hydrochlorothiazide	Maxzide-25mg
triamterene/hydrochlorothiazide	triamterene-hydrochlorothiazid
valsartan/hydrochlorothiazide	Diovan HCT
valsartan/hydrochlorothiazide	valsartan-hydrochlorothiazide

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
Anemia			
280	Iron deficiency anemias	Diagnosis	ICD-9-CM
280.0	Iron deficiency anemia secondary to blood loss (chronic)	Diagnosis	ICD-9-CM
280.1	Iron deficiency anemia secondary to inadequate dietary iron intake	Diagnosis	ICD-9-CM
280.8	Other specified iron deficiency anemias	Diagnosis	ICD-9-CM
280.9	Unspecified iron deficiency anemia	Diagnosis	ICD-9-CM
281	Other deficiency anemias	Diagnosis	ICD-9-CM
281.0	Pernicious anemia	Diagnosis	ICD-9-CM
281.1	Other vitamin B12 deficiency anemia	Diagnosis	ICD-9-CM
281.2	Folate-deficiency anemia	Diagnosis	ICD-9-CM
281.3	Other specified megaloblastic anemias not elsewhere classified	Diagnosis	ICD-9-CM
281.4	Protein-deficiency anemia	Diagnosis	ICD-9-CM
281.8	Anemia associated with other specified nutritional deficiency	Diagnosis	ICD-9-CM
281.9	Unspecified deficiency anemia	Diagnosis	ICD-9-CM
282	Hereditary hemolytic anemias	Diagnosis	ICD-9-CM
282.0	Hereditary spherocytosis	Diagnosis	ICD-9-CM
282.1	Hereditary elliptocytosis	Diagnosis	ICD-9-CM
282.2	Anemias due to disorders of glutathione metabolism	Diagnosis	ICD-9-CM
282.3	Other hemolytic anemias due to enzyme deficiency	Diagnosis	ICD-9-CM
282.4	Thalassemias	Diagnosis	ICD-9-CM
282.40	Thalassemia, unspecified	Diagnosis	ICD-9-CM
282.41	Sickle-cell thalassemia without crisis	Diagnosis	ICD-9-CM
282.42	Sickle-cell thalassemia with crisis	Diagnosis	ICD-9-CM
282.43	Alpha thalassemia	Diagnosis	ICD-9-CM
282.44	Beta thalassemia	Diagnosis	ICD-9-CM
282.45	Delta-beta thalassemia	Diagnosis	ICD-9-CM
282.46	Thalassemia minor	Diagnosis	ICD-9-CM
282.47	Hemoglobin E-beta thalassemia	Diagnosis	ICD-9-CM
282.49	Other thalassemia	Diagnosis	ICD-9-CM

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
282.5	Sickle-cell trait	Diagnosis	ICD-9-CM
282.6	Sickle-cell disease	Diagnosis	ICD-9-CM
282.60	Sickle-cell disease, unspecified	Diagnosis	ICD-9-CM
282.61	Hb-SS disease without crisis	Diagnosis	ICD-9-CM
282.62	Hb-SS disease with crisis	Diagnosis	ICD-9-CM
282.63	Sickle-cell/Hb-C disease without crisis	Diagnosis	ICD-9-CM
282.64	Sickle-cell/Hb-C disease with crisis	Diagnosis	ICD-9-CM
282.68	Other sickle-cell disease without crisis	Diagnosis	ICD-9-CM
282.69	Other sickle-cell disease with crisis	Diagnosis	ICD-9-CM
282.7	Other hemoglobinopathies	Diagnosis	ICD-9-CM
282.8	Other specified hereditary hemolytic anemias	Diagnosis	ICD-9-CM
282.9	Unspecified hereditary hemolytic anemia	Diagnosis	ICD-9-CM
283	Acquired hemolytic anemias	Diagnosis	ICD-9-CM
283.0	Autoimmune hemolytic anemias	Diagnosis	ICD-9-CM
283.1	Non-autoimmune hemolytic anemias	Diagnosis	ICD-9-CM
283.10	Unspecified non-autoimmune hemolytic anemia	Diagnosis	ICD-9-CM
283.11	Hemolytic-uremic syndrome	Diagnosis	ICD-9-CM
283.19	Other non-autoimmune hemolytic anemias	Diagnosis	ICD-9-CM
283.2	Hemoglobinuria due to hemolysis from external causes	Diagnosis	ICD-9-CM
283.9	Acquired hemolytic anemia, unspecified	Diagnosis	ICD-9-CM
284	Aplastic anemia and other bone marrow failure syndromes	Diagnosis	ICD-9-CM
284.0	Constitutional aplastic anemia	Diagnosis	ICD-9-CM
284.01	Constitutional red blood cell aplasia	Diagnosis	ICD-9-CM
284.09	Other constitutional aplastic anemia	Diagnosis	ICD-9-CM
284.1	Pancytopenia	Diagnosis	ICD-9-CM
284.11	Antineoplastic chemotherapy induced pancytopenia	Diagnosis	ICD-9-CM
284.12	Other drug induced pancytopenia	Diagnosis	ICD-9-CM
284.19	Other pancytopenia	Diagnosis	ICD-9-CM
284.2	Myelophthisis	Diagnosis	ICD-9-CM

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
284.8	Other specified aplastic anemias	Diagnosis	ICD-9-CM
284.81	Red cell aplasia (acquired) (adult) (with thymoma)	Diagnosis	ICD-9-CM
284.89	Other specified aplastic anemias	Diagnosis	ICD-9-CM
284.9	Unspecified aplastic anemia	Diagnosis	ICD-9-CM
285	Other and unspecified anemias	Diagnosis	ICD-9-CM
285.0	Sideroblastic anemia	Diagnosis	ICD-9-CM
285.1	Acute posthemorrhagic anemia	Diagnosis	ICD-9-CM
285.2	Anemia of chronic disease	Diagnosis	ICD-9-CM
285.21	Anemia in chronic kidney disease	Diagnosis	ICD-9-CM
285.22	Anemia in neoplastic disease	Diagnosis	ICD-9-CM
285.29	Anemia of other chronic disease	Diagnosis	ICD-9-CM
285.3	Antineoplastic chemotherapy induced anemia	Diagnosis	ICD-9-CM
285.8	Other specified anemias	Diagnosis	ICD-9-CM
285.9	Unspecified anemia	Diagnosis	ICD-9-CM
D50.0	Iron deficiency anemia secondary to blood loss (chronic)	Diagnosis	ICD-10-CM
D50.1	Sideropenic dysphagia	Diagnosis	ICD-10-CM
D50.8	Other iron deficiency anemias	Diagnosis	ICD-10-CM
D50.9	Iron deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D51.0	Vitamin B12 deficiency anemia due to intrinsic factor deficiency	Diagnosis	ICD-10-CM
D51.1	Vitamin B12 deficiency anemia due to selective vitamin B12 malabsorption with proteinuria	Diagnosis	ICD-10-CM
D51.2	Transcobalamin II deficiency	Diagnosis	ICD-10-CM
D51.3	Other dietary vitamin B12 deficiency anemia	Diagnosis	ICD-10-CM
D51.8	Other vitamin B12 deficiency anemias	Diagnosis	ICD-10-CM
D51.9	Vitamin B12 deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D52.0	Dietary folate deficiency anemia	Diagnosis	ICD-10-CM
D52.1	Drug-induced folate deficiency anemia	Diagnosis	ICD-10-CM
D52.8	Other folate deficiency anemias	Diagnosis	ICD-10-CM
D52.9	Folate deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D53.0	Protein deficiency anemia	Diagnosis	ICD-10-CM

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
D53.1	Other megaloblastic anemias, not elsewhere classified	Diagnosis	ICD-10-CM
D53.2	Scorbutic anemia	Diagnosis	ICD-10-CM
D53.8	Other specified nutritional anemias	Diagnosis	ICD-10-CM
D53.9	Nutritional anemia, unspecified	Diagnosis	ICD-10-CM
D55.0	Anemia due to glucose-6-phosphate dehydrogenase [G6PD] deficiency	Diagnosis	ICD-10-CM
D55.1	Anemia due to other disorders of glutathione metabolism	Diagnosis	ICD-10-CM
D55.2	Anemia due to disorders of glycolytic enzymes	Diagnosis	ICD-10-CM
D55.3	Anemia due to disorders of nucleotide metabolism	Diagnosis	ICD-10-CM
D55.8	Other anemias due to enzyme disorders	Diagnosis	ICD-10-CM
D55.9	Anemia due to enzyme disorder, unspecified	Diagnosis	ICD-10-CM
D56.0	Alpha thalassemia	Diagnosis	ICD-10-CM
D56.1	Beta thalassemia	Diagnosis	ICD-10-CM
D56.2	Delta-beta thalassemia	Diagnosis	ICD-10-CM
D56.3	Thalassemia minor	Diagnosis	ICD-10-CM
D56.4	Hereditary persistence of fetal hemoglobin [HPFH]	Diagnosis	ICD-10-CM
D56.5	Hemoglobin E-beta thalassemia	Diagnosis	ICD-10-CM
D56.8	Other thalassemias	Diagnosis	ICD-10-CM
D56.9	Thalassemia, unspecified	Diagnosis	ICD-10-CM
D57.00	Hb-SS disease with crisis, unspecified	Diagnosis	ICD-10-CM
D57.01	Hb-SS disease with acute chest syndrome	Diagnosis	ICD-10-CM
D57.02	Hb-SS disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.1	Sickle-cell disease without crisis	Diagnosis	ICD-10-CM
D57.20	Sickle-cell/Hb-C disease without crisis	Diagnosis	ICD-10-CM
D57.211	Sickle-cell/Hb-C disease with acute chest syndrome	Diagnosis	ICD-10-CM
D57.212	Sickle-cell/Hb-C disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.219	Sickle-cell/Hb-C disease with crisis, unspecified	Diagnosis	ICD-10-CM
D57.3	Sickle-cell trait	Diagnosis	ICD-10-CM
D57.40	Sickle-cell thalassemia without crisis	Diagnosis	ICD-10-CM
D57.411	Sickle-cell thalassemia with acute chest syndrome	Diagnosis	ICD-10-CM

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
D57.412	Sickle-cell thalassemia with splenic sequestration	Diagnosis	ICD-10-CM
D57.419	Sickle-cell thalassemia with crisis, unspecified	Diagnosis	ICD-10-CM
D57.80	Other sickle-cell disorders without crisis	Diagnosis	ICD-10-CM
D57.811	Other sickle-cell disorders with acute chest syndrome	Diagnosis	ICD-10-CM
D57.812	Other sickle-cell disorders with splenic sequestration	Diagnosis	ICD-10-CM
D57.819	Other sickle-cell disorders with crisis, unspecified	Diagnosis	ICD-10-CM
D58.0	Hereditary spherocytosis	Diagnosis	ICD-10-CM
D58.1	Hereditary elliptocytosis	Diagnosis	ICD-10-CM
D58.2	Other hemoglobinopathies	Diagnosis	ICD-10-CM
D58.8	Other specified hereditary hemolytic anemias	Diagnosis	ICD-10-CM
D58.9	Hereditary hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D59.0	Drug-induced autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.1	Other autoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.2	Drug-induced nonautoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
D59.4	Other nonautoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.5	Paroxysmal nocturnal hemoglobinuria [Marchiafava-Micheli]	Diagnosis	ICD-10-CM
D59.6	Hemoglobinuria due to hemolysis from other external causes	Diagnosis	ICD-10-CM
D59.8	Other acquired hemolytic anemias	Diagnosis	ICD-10-CM
D59.9	Acquired hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D60.0	Chronic acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D60.1	Transient acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D60.8	Other acquired pure red cell aplasias	Diagnosis	ICD-10-CM
D60.9	Acquired pure red cell aplasia, unspecified	Diagnosis	ICD-10-CM
D61.01	Constitutional (pure) red blood cell aplasia	Diagnosis	ICD-10-CM
D61.09	Other constitutional aplastic anemia	Diagnosis	ICD-10-CM
D61.1	Drug-induced aplastic anemia	Diagnosis	ICD-10-CM
D61.2	Aplastic anemia due to other external agents	Diagnosis	ICD-10-CM
D61.3	Idiopathic aplastic anemia	Diagnosis	ICD-10-CM

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
D61.810	Antineoplastic chemotherapy induced pancytopenia	Diagnosis	ICD-10-CM
D61.811	Other drug-induced pancytopenia	Diagnosis	ICD-10-CM
D61.818	Other pancytopenia	Diagnosis	ICD-10-CM
D61.82	Myelophthisis	Diagnosis	ICD-10-CM
D61.89	Other specified aplastic anemias and other bone marrow failure syndromes	Diagnosis	ICD-10-CM
D61.9	Aplastic anemia, unspecified	Diagnosis	ICD-10-CM
D62	Acute posthemorrhagic anemia	Diagnosis	ICD-10-CM
D63.0	Anemia in neoplastic disease	Diagnosis	ICD-10-CM
D63.1	Anemia in chronic kidney disease	Diagnosis	ICD-10-CM
D63.8	Anemia in other chronic diseases classified elsewhere	Diagnosis	ICD-10-CM
D64.0	Hereditary sideroblastic anemia	Diagnosis	ICD-10-CM
D64.1	Secondary sideroblastic anemia due to disease	Diagnosis	ICD-10-CM
D64.2	Secondary sideroblastic anemia due to drugs and toxins	Diagnosis	ICD-10-CM
D64.3	Other sideroblastic anemias	Diagnosis	ICD-10-CM
D64.4	Congenital dyserythropoietic anemia	Diagnosis	ICD-10-CM
D64.81	Anemia due to antineoplastic chemotherapy	Diagnosis	ICD-10-CM
D64.89	Other specified anemias	Diagnosis	ICD-10-CM
D64.9	Anemia, unspecified	Diagnosis	ICD-10-CM
Atrial fibrillation or flutter			
427.3	Atrial fibrillation and flutter	Diagnosis	ICD-9-CM
427.31	Atrial fibrillation	Diagnosis	ICD-9-CM
427.32	Atrial flutter	Diagnosis	ICD-9-CM
I48.0	Paroxysmal atrial fibrillation	Diagnosis	ICD-10-CM
I48.1	Persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.2	Chronic atrial fibrillation	Diagnosis	ICD-10-CM
I48.3	Typical atrial flutter	Diagnosis	ICD-10-CM
I48.4	Atypical atrial flutter	Diagnosis	ICD-10-CM
I48.91	Unspecified atrial fibrillation	Diagnosis	ICD-10-CM
I48.92	Unspecified atrial flutter	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
Cardiomyopathy			
425	Cardiomyopathy	Diagnosis	ICD-9-CM
425.0	Endomyocardial fibrosis	Diagnosis	ICD-9-CM
425.1	Hypertrophic cardiomyopathy	Diagnosis	ICD-9-CM
425.11	Hypertrophic obstructive cardiomyopathy	Diagnosis	ICD-9-CM
425.18	Other hypertrophic cardiomyopathy	Diagnosis	ICD-9-CM
425.2	Obscure cardiomyopathy of Africa	Diagnosis	ICD-9-CM
425.3	Endocardial fibroelastosis	Diagnosis	ICD-9-CM
425.4	Other primary cardiomyopathies	Diagnosis	ICD-9-CM
425.5	Alcoholic cardiomyopathy	Diagnosis	ICD-9-CM
425.7	Nutritional and metabolic cardiomyopathy	Diagnosis	ICD-9-CM
425.8	Cardiomyopathy in other diseases classified elsewhere	Diagnosis	ICD-9-CM
425.9	Unspecified secondary cardiomyopathy	Diagnosis	ICD-9-CM
A18.84	Tuberculosis of heart	Diagnosis	ICD-10-CM
I42.0	Dilated cardiomyopathy	Diagnosis	ICD-10-CM
I42.1	Obstructive hypertrophic cardiomyopathy	Diagnosis	ICD-10-CM
I42.2	Other hypertrophic cardiomyopathy	Diagnosis	ICD-10-CM
I42.3	Endomyocardial (eosinophilic) disease	Diagnosis	ICD-10-CM
I42.4	Endocardial fibroelastosis	Diagnosis	ICD-10-CM
I42.5	Other restrictive cardiomyopathy	Diagnosis	ICD-10-CM
I42.6	Alcoholic cardiomyopathy	Diagnosis	ICD-10-CM
I42.7	Cardiomyopathy due to drug and external agent	Diagnosis	ICD-10-CM
I42.8	Other cardiomyopathies	Diagnosis	ICD-10-CM
I42.9	Cardiomyopathy, unspecified	Diagnosis	ICD-10-CM
I43	Cardiomyopathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
Chronic obstructive pulmonary disease			
491	Chronic bronchitis	Diagnosis	ICD-9-CM
491.0	Simple chronic bronchitis	Diagnosis	ICD-9-CM
491.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
491.2	Obstructive chronic bronchitis	Diagnosis	ICD-9-CM
491.20	Obstructive chronic bronchitis, without exacerbation	Diagnosis	ICD-9-CM
491.21	Obstructive chronic bronchitis, with (acute) exacerbation	Diagnosis	ICD-9-CM
491.22	Obstructive chronic bronchitis with acute bronchitis	Diagnosis	ICD-9-CM
491.8	Other chronic bronchitis	Diagnosis	ICD-9-CM
491.9	Unspecified chronic bronchitis	Diagnosis	ICD-9-CM
492	Emphysema	Diagnosis	ICD-9-CM
492.0	Emphysematous bleb	Diagnosis	ICD-9-CM
492.8	Other emphysema	Diagnosis	ICD-9-CM
493.2	Chronic obstructive asthma	Diagnosis	ICD-9-CM
493.20	Chronic obstructive asthma, unspecified	Diagnosis	ICD-9-CM
493.21	Chronic obstructive asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.22	Chronic obstructive asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
496	Chronic airway obstruction, not elsewhere classified	Diagnosis	ICD-9-CM
J41.0	Simple chronic bronchitis	Diagnosis	ICD-10-CM
J41.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J41.8	Mixed simple and mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J42	Unspecified chronic bronchitis	Diagnosis	ICD-10-CM
J43.0	Unilateral pulmonary emphysema [MacLeod's syndrome]	Diagnosis	ICD-10-CM
J43.1	Panlobular emphysema	Diagnosis	ICD-10-CM
J43.2	Centrilobular emphysema	Diagnosis	ICD-10-CM
J43.8	Other emphysema	Diagnosis	ICD-10-CM
J43.9	Emphysema, unspecified	Diagnosis	ICD-10-CM
J44.0	Chronic obstructive pulmonary disease with (acute) lower respiratory infection	Diagnosis	ICD-10-CM
J44.1	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J44.9	Chronic obstructive pulmonary disease, unspecified	Diagnosis	ICD-10-CM
Coronary artery bypass graft			
36.1	Bypass anastomosis for heart revascularization	Procedure	ICD-9-CM
36.10	Aortocoronary bypass for heart revascularization, not otherwise specified	Procedure	ICD-9-CM

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Code	Description	Code Category	Code Type
36.11	(Aorto)coronary bypass of one coronary artery	Procedure	ICD-9-CM
36.12	(Aorto)coronary bypass of two coronary arteries	Procedure	ICD-9-CM
36.13	(Aorto)coronary bypass of three coronary arteries	Procedure	ICD-9-CM
36.14	(Aorto)coronary bypass of four or more coronary arteries	Procedure	ICD-9-CM
36.15	Single internal mammary-coronary artery bypass	Procedure	ICD-9-CM
36.16	Double internal mammary-coronary artery bypass	Procedure	ICD-9-CM
36.17	Abdominal-coronary artery bypass	Procedure	ICD-9-CM
36.19	Other bypass anastomosis for heart revascularization	Procedure	ICD-9-CM
36.2	Heart revascularization by arterial implant	Procedure	ICD-9-CM
0210083	Bypass Coronary Artery, One Artery from Coronary Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0210088	Bypass Coronary Artery, One Artery from Right Internal Mammary with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0210089	Bypass Coronary Artery, One Artery from Left Internal Mammary with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021008C	Bypass Coronary Artery, One Artery from Thoracic Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021008F	Bypass Coronary Artery, One Artery from Abdominal Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021008W	Bypass Coronary Artery, One Artery from Aorta with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0210093	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
0210098	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
0210099	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021009C	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021009F	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021009W	Bypass Coronary Artery, One Artery from Aorta with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
02100A3	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02100A8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02100A9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02100AC	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02100AF	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02100AW	Bypass Coronary Artery, One Artery from Aorta with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02100J3	Bypass Coronary Artery, One Artery from Coronary Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02100J8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
02100J9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02100JC	Bypass Coronary Artery, One Artery from Thoracic Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02100JF	Bypass Coronary Artery, One Artery from Abdominal Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02100JW	Bypass Coronary Artery, One Artery from Aorta with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02100K3	Bypass Coronary Artery, One Artery from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02100K8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02100K9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02100KC	Bypass Coronary Artery, One Artery from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02100KF	Bypass Coronary Artery, One Artery from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02100KW	Bypass Coronary Artery, One Artery from Aorta with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02100Z3	Bypass Coronary Artery, One Artery from Coronary Artery, Open Approach	Procedure	ICD-10-PCS
02100Z8	Bypass Coronary Artery, One Artery from Right Internal Mammary, Open Approach	Procedure	ICD-10-PCS
02100Z9	Bypass Coronary Artery, One Artery from Left Internal Mammary, Open Approach	Procedure	ICD-10-PCS
02100ZC	Bypass Coronary Artery, One Artery from Thoracic Artery, Open Approach	Procedure	ICD-10-PCS
02100ZF	Bypass Coronary Artery, One Artery from Abdominal Artery, Open Approach	Procedure	ICD-10-PCS
0210483	Bypass Coronary Artery, One Artery from Coronary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0210488	Bypass Coronary Artery, One Artery from Right Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0210489	Bypass Coronary Artery, One Artery from Left Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021048C	Bypass Coronary Artery, One Artery from Thoracic Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021048F	Bypass Coronary Artery, One Artery from Abdominal Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021048W	Bypass Coronary Artery, One Artery from Aorta with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0210493	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0210498	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0210499	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021049C	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021049F	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021049W	Bypass Coronary Artery, One Artery from Aorta with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
02104A3	Bypass Coronary Artery, One Artery from Coronary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104A8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104A9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104AC	Bypass Coronary Artery, One Artery from Thoracic Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104AF	Bypass Coronary Artery, One Artery from Abdominal Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104AW	Bypass Coronary Artery, One Artery from Aorta with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104J3	Bypass Coronary Artery, One Artery from Coronary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104J8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104J9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104JC	Bypass Coronary Artery, One Artery from Thoracic Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104JF	Bypass Coronary Artery, One Artery from Abdominal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104JW	Bypass Coronary Artery, One Artery from Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104K3	Bypass Coronary Artery, One Artery from Coronary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104K8	Bypass Coronary Artery, One Artery from Right Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104K9	Bypass Coronary Artery, One Artery from Left Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104KC	Bypass Coronary Artery, One Artery from Thoracic Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104KF	Bypass Coronary Artery, One Artery from Abdominal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104KW	Bypass Coronary Artery, One Artery from Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104Z3	Bypass Coronary Artery, One Artery from Coronary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104Z8	Bypass Coronary Artery, One Artery from Right Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104Z9	Bypass Coronary Artery, One Artery from Left Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104ZC	Bypass Coronary Artery, One Artery from Thoracic Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02104ZF	Bypass Coronary Artery, One Artery from Abdominal Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0211083	Bypass Coronary Artery, Two Arteries from Coronary Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0211088	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
0211089	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021108C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021108F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021108W	Bypass Coronary Artery, Two Arteries from Aorta with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0211093	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
0211098	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
0211099	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021109C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021109F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021109W	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
02110A3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02110A8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02110A9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02110AC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02110AF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02110AW	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02110J3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02110J8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02110J9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02110JC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02110JF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02110JW	Bypass Coronary Artery, Two Arteries from Aorta with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02110K3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02110K8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02110K9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02110KC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02110KF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02110KW	Bypass Coronary Artery, Two Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02110Z3	Bypass Coronary Artery, Two Arteries from Coronary Artery, Open Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
02110Z8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary, Open Approach	Procedure	ICD-10-PCS
02110Z9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary, Open Approach	Procedure	ICD-10-PCS
02110ZC	Bypass Coronary Artery, Two Arteries from Thoracic Artery, Open Approach	Procedure	ICD-10-PCS
02110ZF	Bypass Coronary Artery, Two Arteries from Abdominal Artery, Open Approach	Procedure	ICD-10-PCS
0211483	Bypass Coronary Artery, Two Arteries from Coronary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0211488	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0211489	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021148C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021148F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021148W	Bypass Coronary Artery, Two Arteries from Aorta with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0211493	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0211498	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic	Procedure	ICD-10-PCS
0211499	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021149C	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021149F	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021149W	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114A3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114A8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114A9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114AC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114AF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114AW	Bypass Coronary Artery, Two Arteries from Aorta with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114J3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114J8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114J9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114JC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114JF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
02114JW	Bypass Coronary Artery, Two Arteries from Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114K3	Bypass Coronary Artery, Two Arteries from Coronary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114K8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114K9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114KC	Bypass Coronary Artery, Two Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114KF	Bypass Coronary Artery, Two Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic	Procedure	ICD-10-PCS
02114KW	Bypass Coronary Artery, Two Arteries from Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114Z3	Bypass Coronary Artery, Two Arteries from Coronary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114Z8	Bypass Coronary Artery, Two Arteries from Right Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114Z9	Bypass Coronary Artery, Two Arteries from Left Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114ZC	Bypass Coronary Artery, Two Arteries from Thoracic Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114ZF	Bypass Coronary Artery, Two Arteries from Abdominal Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0212083	Bypass Coronary Artery, Three Arteries from Coronary Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0212088	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0212089	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021208C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021208F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021208W	Bypass Coronary Artery, Three Arteries from Aorta with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0212093	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
0212098	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
0212099	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021209C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021209F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021209W	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
02120A3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02120A8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02120A9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02120AC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02120AF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02120AW	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02120J3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02120J8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02120J9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02120JC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02120JF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02120JW	Bypass Coronary Artery, Three Arteries from Aorta with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02120K3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02120K8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02120K9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02120KC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02120KF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02120KW	Bypass Coronary Artery, Three Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02120Z3	Bypass Coronary Artery, Three Arteries from Coronary Artery, Open Approach	Procedure	ICD-10-PCS
02120Z8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary, Open Approach	Procedure	ICD-10-PCS
02120Z9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary, Open Approach	Procedure	ICD-10-PCS
02120ZC	Bypass Coronary Artery, Three Arteries from Thoracic Artery, Open Approach	Procedure	ICD-10-PCS
02120ZF	Bypass Coronary Artery, Three Arteries from Abdominal Artery, Open Approach	Procedure	ICD-10-PCS
0212483	Bypass Coronary Artery, Three Arteries from Coronary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0212488	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0212489	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021248C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021248F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021248W	Bypass Coronary Artery, Three Arteries from Aorta with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0212493	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
0212498	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0212499	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021249C	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021249F	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021249W	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124A3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124A8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124A9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124AC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124AF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124AW	Bypass Coronary Artery, Three Arteries from Aorta with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124J3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124J8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124J9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124JC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124JF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124JW	Bypass Coronary Artery, Three Arteries from Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124K3	Bypass Coronary Artery, Three Arteries from Coronary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124K8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124K9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
02124KC	Bypass Coronary Artery, Three Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124KF	Bypass Coronary Artery, Three Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124KW	Bypass Coronary Artery, Three Arteries from Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124Z3	Bypass Coronary Artery, Three Arteries from Coronary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124Z8	Bypass Coronary Artery, Three Arteries from Right Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124Z9	Bypass Coronary Artery, Three Arteries from Left Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124ZC	Bypass Coronary Artery, Three Arteries from Thoracic Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124ZF	Bypass Coronary Artery, Three Arteries from Abdominal Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0213083	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0213088	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0213089	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021308C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021308F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021308W	Bypass Coronary Artery, Four or More Arteries from Aorta with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
0213093	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
0213098	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
0213099	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021309C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021309F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021309W	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
02130A3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02130A8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02130A9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02130AC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02130AF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
02130AW	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
02130J3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02130J8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02130J9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02130JC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02130JF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02130JW	Bypass Coronary Artery, Four or More Arteries from Aorta with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02130K3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02130K8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02130K9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02130KC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02130KF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02130KW	Bypass Coronary Artery, Four or More Arteries from Aorta with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02130Z3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery, Open Approach	Procedure	ICD-10-PCS
02130Z8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary, Open Approach	Procedure	ICD-10-PCS
02130Z9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary, Open Approach	Procedure	ICD-10-PCS
02130ZC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery, Open Approach	Procedure	ICD-10-PCS
02130ZF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery, Open Approach	Procedure	ICD-10-PCS
0213483	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0213488	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0213489	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021348C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021348F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021348W	Bypass Coronary Artery, Four or More Arteries from Aorta with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0213493	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
0213498	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0213499	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021349C	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021349F	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021349W	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134A3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134A8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134A9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134AC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134AF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134AW	Bypass Coronary Artery, Four or More Arteries from Aorta with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134J3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134J8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134J9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134JC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134JF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134JW	Bypass Coronary Artery, Four or More Arteries from Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
02134K3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134K8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134K9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134KC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134KF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134KW	Bypass Coronary Artery, Four or More Arteries from Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134Z3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134Z8	Bypass Coronary Artery, Four or More Arteries from Right Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134Z9	Bypass Coronary Artery, Four or More Arteries from Left Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134ZC	Bypass Coronary Artery, Four or More Arteries from Thoracic Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02134ZF	Bypass Coronary Artery, Four or More Arteries from Abdominal Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021K0Z8	Bypass Right Ventricle to Right Internal Mammary, Open Approach	Procedure	ICD-10-PCS
021K0Z9	Bypass Right Ventricle to Left Internal Mammary, Open Approach	Procedure	ICD-10-PCS
021K0ZC	Bypass Right Ventricle to Thoracic Artery, Open Approach	Procedure	ICD-10-PCS
021K0ZF	Bypass Right Ventricle to Abdominal Artery, Open Approach	Procedure	ICD-10-PCS
021K0ZW	Bypass Right Ventricle to Aorta, Open Approach	Procedure	ICD-10-PCS
021K4Z8	Bypass Right Ventricle to Right Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021K4Z9	Bypass Right Ventricle to Left Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021K4ZC	Bypass Right Ventricle to Thoracic Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021K4ZF	Bypass Right Ventricle to Abdominal Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021K4ZW	Bypass Right Ventricle to Aorta, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L08P	Bypass Left Ventricle to Pulmonary Trunk with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021L08Q	Bypass Left Ventricle to Right Pulmonary Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS
021L08R	Bypass Left Ventricle to Left Pulmonary Artery with Zooplastic Tissue, Open Approach	Procedure	ICD-10-PCS

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
021L09P	Bypass Left Ventricle to Pulmonary Trunk with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021L09Q	Bypass Left Ventricle to Right Pulmonary Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021L09R	Bypass Left Ventricle to Left Pulmonary Artery with Autologous Venous Tissue, Open Approach	Procedure	ICD-10-PCS
021L0AP	Bypass Left Ventricle to Pulmonary Trunk with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
021L0AQ	Bypass Left Ventricle to Right Pulmonary Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
021L0AR	Bypass Left Ventricle to Left Pulmonary Artery with Autologous Arterial Tissue, Open Approach	Procedure	ICD-10-PCS
021L0JP	Bypass Left Ventricle to Pulmonary Trunk with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
021L0JQ	Bypass Left Ventricle to Right Pulmonary Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
021L0JR	Bypass Left Ventricle to Left Pulmonary Artery with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
021L0KP	Bypass Left Ventricle to Pulmonary Trunk with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
021L0KQ	Bypass Left Ventricle to Right Pulmonary Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
021L0KR	Bypass Left Ventricle to Left Pulmonary Artery with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
021L0Z8	Bypass Left Ventricle to Right Internal Mammary, Open Approach	Procedure	ICD-10-PCS
021L0Z9	Bypass Left Ventricle to Left Internal Mammary, Open Approach	Procedure	ICD-10-PCS
021L0ZC	Bypass Left Ventricle to Thoracic Artery, Open Approach	Procedure	ICD-10-PCS
021L0ZF	Bypass Left Ventricle to Abdominal Artery, Open Approach	Procedure	ICD-10-PCS
021L0ZP	Bypass Left Ventricle to Pulmonary Trunk, Open Approach	Procedure	ICD-10-PCS
021L0ZQ	Bypass Left Ventricle to Right Pulmonary Artery, Open Approach	Procedure	ICD-10-PCS
021L0ZR	Bypass Left Ventricle to Left Pulmonary Artery, Open Approach	Procedure	ICD-10-PCS
021L48P	Bypass Left Ventricle to Pulmonary Trunk with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L48Q	Bypass Left Ventricle to Right Pulmonary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L48R	Bypass Left Ventricle to Left Pulmonary Artery with Zooplastic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L49P	Bypass Left Ventricle to Pulmonary Trunk with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L49Q	Bypass Left Ventricle to Right Pulmonary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L49R	Bypass Left Ventricle to Left Pulmonary Artery with Autologous Venous Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4AP	Bypass Left Ventricle to Pulmonary Trunk with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4AQ	Bypass Left Ventricle to Right Pulmonary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4AR	Bypass Left Ventricle to Left Pulmonary Artery with Autologous Arterial Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4JP	Bypass Left Ventricle to Pulmonary Trunk with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
021L4JQ	Bypass Left Ventricle to Right Pulmonary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4JR	Bypass Left Ventricle to Left Pulmonary Artery with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4KP	Bypass Left Ventricle to Pulmonary Trunk with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4KQ	Bypass Left Ventricle to Right Pulmonary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4KR	Bypass Left Ventricle to Left Pulmonary Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4Z8	Bypass Left Ventricle to Right Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4Z9	Bypass Left Ventricle to Left Internal Mammary, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4ZC	Bypass Left Ventricle to Thoracic Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4ZF	Bypass Left Ventricle to Abdominal Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4ZP	Bypass Left Ventricle to Pulmonary Trunk, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4ZQ	Bypass Left Ventricle to Right Pulmonary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
021L4ZR	Bypass Left Ventricle to Left Pulmonary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
33520	Coronary Artery Bypass, Nonautogenous Graft (eg, Synthetic Or Cadaver); Single Graft	Procedure	CPT-4
33525	Coronary Artery Bypass, Nonautogenous Graft (eg, Synthetic Or Cadaver); Two Coronary Grafts	Procedure	CPT-4
33530	Reoperation, coronary artery bypass procedure or valve procedure, more than 1 month after original operation (List separately in addition to code for primary procedure)	Procedure	CPT-4
33528	Coronary Artery Bypass, Nonautogenous Graft (eg, Synthetic Or Cadaver); Three Or More Coronary Grafts	Procedure	CPT-4
3352F	No significant depressive symptoms as categorized by using a standardized depression assessment tool (MDD)	Procedure	CPT II
33521	Coronary artery bypass, using venous graft(s) and arterial graft(s); 4 venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33518	Coronary artery bypass, using venous graft(s) and arterial graft(s); 2 venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33533	Coronary artery bypass, using arterial graft(s); single arterial graft	Procedure	CPT-4
33513	Coronary artery bypass, vein only; 4 coronary venous grafts	Procedure	CPT-4
33572	Coronary endarterectomy, open, any method, of left anterior descending, circumflex, or right coronary artery performed in conjunction with coronary artery bypass graft procedure, each vessel (List separately in addition to primary procedure)	Procedure	CPT-4
33536	Coronary artery bypass, using arterial graft(s); 4 or more coronary arterial grafts	Procedure	CPT-4
3351F	Negative screen for depressive symptoms as categorized by using a standardized depression screening/assessment tool (MDD)	Procedure	CPT II
33512	Coronary artery bypass, vein only; 3 coronary venous grafts	Procedure	CPT-4

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
33510	Coronary artery bypass, vein only; single coronary venous graft	Procedure	CPT-4
33535	Coronary artery bypass, using arterial graft(s); 3 coronary arterial grafts	Procedure	CPT-4
33534	Coronary artery bypass, using arterial graft(s); 2 coronary arterial grafts	Procedure	CPT-4
33514	Coronary artery bypass, vein only; 5 coronary venous grafts	Procedure	CPT-4
33545	Repair of postinfarction ventricular septal defect, with or without myocardial resection	Procedure	CPT-4
33511	Coronary artery bypass, vein only; 2 coronary venous grafts	Procedure	CPT-4
33517	Coronary artery bypass, using venous graft(s) and arterial graft(s); single vein graft (List separately in addition to code for primary procedure)	Procedure	CPT-4
33523	Coronary artery bypass, using venous graft(s) and arterial graft(s); 6 or more venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33522	Coronary artery bypass, using venous graft(s) and arterial graft(s); 5 venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33519	Coronary artery bypass, using venous graft(s) and arterial graft(s); 3 venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33516	Coronary artery bypass, vein only; 6 or more coronary venous grafts	Procedure	CPT-4
Depression			
293.83	Mood disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
296.2	Major depressive disorder, single episode	Diagnosis	ICD-9-CM
296.20	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-9-CM
296.21	Major depressive disorder, single episode, mild	Diagnosis	ICD-9-CM
296.22	Major depressive disorder, single episode, moderate	Diagnosis	ICD-9-CM
296.23	Major depressive disorder, single episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.24	Major depressive disorder, single episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.25	Major depressive disorder, single episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.26	Major depressive disorder, single episode in full remission	Diagnosis	ICD-9-CM
296.3	Major depressive disorder, recurrent episode	Diagnosis	ICD-9-CM
296.30	Major depressive disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.31	Major depressive disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.32	Major depressive disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
296.33	Major depressive disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.34	Major depressive disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.35	Major depressive disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.36	Major depressive disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.90	Unspecified episodic mood disorder	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
300.4	Dysthymic disorder	Diagnosis	ICD-9-CM
309.1	Prolonged depressive reaction as adjustment reaction	Diagnosis	ICD-9-CM
309.28	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-9-CM
311	Depressive disorder, not elsewhere classified	Diagnosis	ICD-9-CM
F06.30	Mood disorder due to known physiological condition, unspecified	Diagnosis	ICD-10-CM
F06.31	Mood disorder due to known physiological condition with depressive features	Diagnosis	ICD-10-CM
F06.32	Mood disorder due to known physiological condition with major depressive-like episode	Diagnosis	ICD-10-CM
F06.33	Mood disorder due to known physiological condition with manic features	Diagnosis	ICD-10-CM
F06.34	Mood disorder due to known physiological condition with mixed features	Diagnosis	ICD-10-CM
F32.0	Major depressive disorder, single episode, mild	Diagnosis	ICD-10-CM
F32.1	Major depressive disorder, single episode, moderate	Diagnosis	ICD-10-CM
F32.2	Major depressive disorder, single episode, severe without psychotic features	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM
F32.4	Major depressive disorder, single episode, in partial remission	Diagnosis	ICD-10-CM
F32.5	Major depressive disorder, single episode, in full remission	Diagnosis	ICD-10-CM
F32.9	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-10-CM
F33.0	Major depressive disorder, recurrent, mild	Diagnosis	ICD-10-CM
F33.1	Major depressive disorder, recurrent, moderate	Diagnosis	ICD-10-CM
F33.2	Major depressive disorder, recurrent severe without psychotic features	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F33.40	Major depressive disorder, recurrent, in remission, unspecified	Diagnosis	ICD-10-CM
F33.41	Major depressive disorder, recurrent, in partial remission	Diagnosis	ICD-10-CM
F33.42	Major depressive disorder, recurrent, in full remission	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
F33.9	Major depressive disorder, recurrent, unspecified	Diagnosis	ICD-10-CM
F34.1	Dysthymic disorder	Diagnosis	ICD-10-CM
F39	Unspecified mood [affective] disorder	Diagnosis	ICD-10-CM
F43.21	Adjustment disorder with depressed mood	Diagnosis	ICD-10-CM
F43.23	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-10-CM
Diabetes mellitus			
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3291	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3393	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3391	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3392	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E10.3493	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3491	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3492	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.638	Type 1 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E10.628	Type 1 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E10.8	Type 1 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E10.622	Type 1 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E10.9	Type 1 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E10.51	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
250.93	Diabetes with unspecified complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.91	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.83	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.81	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3533	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3291	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3311	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3393	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3391	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3392	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3511	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3512	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3593	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E11.3591	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3592	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3553	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E11.3552	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E11.3551	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3413	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3412	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3493	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3491	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3492	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.10	Type 2 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.628	Type 2 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E11.69	Type 2 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.11	Type 2 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E11.622	Type 2 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E11.9	Type 2 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
250.92	Diabetes with unspecified complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.90	Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
250.72	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.70	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.82	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.80	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.32	Diabetes with other coma, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.30	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.52	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.50	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.62	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.60	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.12	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.10	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.22	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.20	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.02	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
Endocarditis			
424.9	Endocarditis, valve unspecified	Diagnosis	ICD-9-CM
424.90	Endocarditis, valve unspecified, unspecified cause	Diagnosis	ICD-9-CM
424.91	Endocarditis in diseases classified elsewhere	Diagnosis	ICD-9-CM
424.99	Other endocarditis, valve unspecified	Diagnosis	ICD-9-CM
I38	Endocarditis, valve unspecified	Diagnosis	ICD-10-CM
I39	Endocarditis and heart valve disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
M32.11	Endocarditis in systemic lupus erythematosus	Diagnosis	ICD-10-CM
Heart transplant			
33935	Heart-lung transplant with recipient cardiectomy-pneumonectomy	Procedure	HCPCS
33945	Heart transplant, with or without recipient cardiectomy	Procedure	HCPCS
33.6	Combined heart-lung transplantation	Procedure	ICD-9-CM
37.51	Heart transplantation	Procedure	ICD-9-CM

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Code	Description	Code Category	Code Type
02Y	Heart and Great Vessels, Transplantation	Procedure	ICD-10-PCS
02YA	Transplantation / Heart	Procedure	ICD-10-PCS
02YA0Z0	Transplantation of Heart, Allogeneic, Open Approach	Procedure	ICD-10-PCS
T86.20	Unspecified complication of heart transplant	Diagnosis	ICD-10-CM
T86.21	Heart transplant rejection	Diagnosis	ICD-10-CM
T86.22	Heart transplant failure	Diagnosis	ICD-10-CM
996.83	Complications of transplanted heart	Diagnosis	ICD-9-CM
V42.1	Heart replaced by transplant	Diagnosis	ICD-9-CM
V42.2	Heart valve replaced by transplant	Diagnosis	ICD-9-CM
Human immunodeficiency virus			
042	Human immunodeficiency virus [HIV]	Diagnosis	ICD-9-CM
795.71	Nonspecific serologic evidence of human immunodeficiency virus (HIV)	Diagnosis	ICD-9-CM
V08	Asymptomatic human immunodeficiency virus (HIV) infection status	Diagnosis	ICD-9-CM
B20	Human immunodeficiency virus [HIV] disease	Diagnosis	ICD-10-CM
R75	Inconclusive laboratory evidence of human immunodeficiency virus [HIV]	Diagnosis	ICD-10-CM
Z21	Asymptomatic human immunodeficiency virus [HIV] infection status	Diagnosis	ICD-10-CM
043	HIV infection causing other specified conditions	Diagnosis	ICD-9-CM
043.1	HIV infection causing lymphadenopathy	Diagnosis	ICD-9-CM
043.2	HIV infection causing other disorders involving the immune mechanism	Diagnosis	ICD-9-CM
043.3	HIV infection causing other specified conditions	Diagnosis	ICD-9-CM
043.9	AIDS related complex, unspecified	Diagnosis	ICD-9-CM
044	Other HIV infection	Diagnosis	ICD-9-CM
044.0	Other HIV infection	Diagnosis	ICD-9-CM
044.9	HIV infection, unspecified	Diagnosis	ICD-9-CM
Hyperkalemia			
276.7	Hyperpotassemia	Diagnosis	ICD-9-CM
E87.5	Hyperkalemia	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
Hyperlipidemia			
272.0	Pure hypercholesterolemia	Diagnosis	ICD-9-CM
272.1	Pure hyperglyceridemia	Diagnosis	ICD-9-CM
272.2	Mixed hyperlipidemia	Diagnosis	ICD-9-CM
272.4	Other and unspecified hyperlipidemia	Diagnosis	ICD-9-CM
E78.00	Pure hypercholesterolemia, unspecified	Diagnosis	ICD-10-CM
E78.01	Familial hypercholesterolemia	Diagnosis	ICD-10-CM
E78.1	Pure hyperglyceridemia	Diagnosis	ICD-10-CM
E78.2	Mixed hyperlipidemia	Diagnosis	ICD-10-CM
E78.4	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.5	Hyperlipidemia, unspecified	Diagnosis	ICD-10-CM
Hypertension			
401	Essential hypertension	Diagnosis	ICD-9-CM
401.0	Essential hypertension, malignant	Diagnosis	ICD-9-CM
401.1	Essential hypertension, benign	Diagnosis	ICD-9-CM
401.9	Unspecified essential hypertension	Diagnosis	ICD-9-CM
402	Hypertensive heart disease	Diagnosis	ICD-9-CM
402.0	Malignant hypertensive heart disease	Diagnosis	ICD-9-CM
402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.1	Benign hypertensive heart disease	Diagnosis	ICD-9-CM
402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.9	Unspecified hypertensive heart disease	Diagnosis	ICD-9-CM
402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
403	Hypertensive chronic kidney disease	Diagnosis	ICD-9-CM
403.0	Hypertensive chronic kidney disease, malignant	Diagnosis	ICD-9-CM
403.00	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.1	Hypertensive chronic kidney disease, benign	Diagnosis	ICD-9-CM
403.10	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.9	Hypertensive chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
403.90	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-9-CM
404.0	Hypertensive heart and chronic kidney disease, malignant	Diagnosis	ICD-9-CM
404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.1	Hypertensive heart and chronic kidney disease, benign	Diagnosis	ICD-9-CM
404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.9	Hypertensive heart and chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
405	Secondary hypertension	Diagnosis	ICD-9-CM
405.0	Secondary hypertension, malignant	Diagnosis	ICD-9-CM
405.01	Secondary renovascular hypertension, malignant	Diagnosis	ICD-9-CM
405.09	Other secondary hypertension, malignant	Diagnosis	ICD-9-CM
405.1	Secondary hypertension, benign	Diagnosis	ICD-9-CM
405.11	Secondary renovascular hypertension, benign	Diagnosis	ICD-9-CM
405.19	Other secondary hypertension, benign	Diagnosis	ICD-9-CM
405.9	Unspecified secondary hypertension, unspecified	Diagnosis	ICD-9-CM
405.91	Secondary renovascular hypertension, unspecified	Diagnosis	ICD-9-CM
405.99	Other secondary hypertension, unspecified	Diagnosis	ICD-9-CM
I10	Essential (primary) hypertension	Diagnosis	ICD-10-CM
I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I15.0	Renovascular hypertension	Diagnosis	ICD-10-CM
I15.1	Hypertension secondary to other renal disorders	Diagnosis	ICD-10-CM
I15.2	Hypertension secondary to endocrine disorders	Diagnosis	ICD-10-CM
I15.8	Other secondary hypertension	Diagnosis	ICD-10-CM
I15.9	Secondary hypertension, unspecified	Diagnosis	ICD-10-CM
I16.0	Hypertensive urgency	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I16.1	Hypertensive emergency	Diagnosis	ICD-10-CM
I16.9	Hypertensive crisis, unspecified	Diagnosis	ICD-10-CM
N26.2	Page kidney	Diagnosis	ICD-10-CM
Hypertensive nephropathy			
403	Hypertensive chronic kidney disease	Diagnosis	ICD-9-CM
403.0	Hypertensive chronic kidney disease, malignant	Diagnosis	ICD-9-CM
403.00	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.1	Hypertensive chronic kidney disease, benign	Diagnosis	ICD-9-CM
403.10	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.9	Hypertensive chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
403.90	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404	Hypertensive heart and chronic kidney disease	Diagnosis	ICD-9-CM
404.0	Hypertensive heart and chronic kidney disease, malignant	Diagnosis	ICD-9-CM
404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.1	Hypertensive heart and chronic kidney disease, benign	Diagnosis	ICD-9-CM
404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.9	Hypertensive heart and chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
Hypotension			
458	Hypotension	Diagnosis	ICD-9-CM
458.0	Orthostatic hypotension	Diagnosis	ICD-9-CM
458.1	Chronic hypotension	Diagnosis	ICD-9-CM
458.2	Iatrogenic hypotension	Diagnosis	ICD-9-CM
458.21	Hypotension of hemodialysis	Diagnosis	ICD-9-CM
458.29	Other iatrogenic hypotension	Diagnosis	ICD-9-CM
458.8	Other specified hypotension	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
458.9	Unspecified hypotension	Diagnosis	ICD-9-CM
I95.0	Idiopathic hypotension	Diagnosis	ICD-10-CM
I95.1	Orthostatic hypotension	Diagnosis	ICD-10-CM
I95.2	Hypotension due to drugs	Diagnosis	ICD-10-CM
I95.3	Hypotension of hemodialysis	Diagnosis	ICD-10-CM
I95.81	Postprocedural hypotension	Diagnosis	ICD-10-CM
I95.89	Other hypotension	Diagnosis	ICD-10-CM
I95.9	Hypotension, unspecified	Diagnosis	ICD-10-CM
Implantable cardioverter defibrillator			
V45.02	Automatic implantable cardiac defibrillator in situ	Diagnosis	ICD-9-CM
Z95.810	Presence of automatic (implantable) cardiac defibrillator	Diagnosis	ICD-10-CM
37.94	Implantation or replacement of automatic cardioverter/ defibrillator, total system (AICD)	Procedure	ICD-9-CM
37.95	Implantation of automatic cardioverter/defibrillator leads(s) only	Procedure	ICD-9-CM
37.96	Implantation of automatic cardioverter/defibrillator pulse generator only	Procedure	ICD-9-CM
37.97	Replacement of automatic cardioverter/defibrillator leads(s) only	Procedure	ICD-9-CM
37.98	Replacement of automatic cardioverter/defibrillator pulse generator only	Procedure	ICD-9-CM
02H40KZ	Insertion of Defibrillator Lead into Coronary Vein, Open Approach	Procedure	ICD-10-PCS
02H44KZ	Insertion of Defibrillator Lead into Coronary Vein, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02H60KZ	Insertion of Defibrillator Lead into Right Atrium, Open Approach	Procedure	ICD-10-PCS
02H63KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Approach	Procedure	ICD-10-PCS
02H64KZ	Insertion of Defibrillator Lead into Right Atrium, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02H70KZ	Insertion of Defibrillator Lead into Left Atrium, Open Approach	Procedure	ICD-10-PCS
02H73KZ	Insertion of Defibrillator Lead into Left Atrium, Percutaneous Approach	Procedure	ICD-10-PCS
02H74KZ	Insertion of Defibrillator Lead into Left Atrium, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02HK0KZ	Insertion of Defibrillator Lead into Right Ventricle, Open Approach	Procedure	ICD-10-PCS
02HK3KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Approach	Procedure	ICD-10-PCS
02HK4KZ	Insertion of Defibrillator Lead into Right Ventricle, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02HL0KZ	Insertion of Defibrillator Lead into Left Ventricle, Open Approach	Procedure	ICD-10-PCS
02HL3KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02HL4KZ	Insertion of Defibrillator Lead into Left Ventricle, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02HN0KZ	Insertion of Defibrillator Lead into Pericardium, Open Approach	Procedure	ICD-10-PCS
02HN3KZ	Insertion of Defibrillator Lead into Pericardium, Percutaneous Approach	Procedure	ICD-10-PCS
02HN4KZ	Insertion of Defibrillator Lead into Pericardium, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02PA0MZ	Removal of Cardiac Lead from Heart, Open Approach	Procedure	ICD-10-PCS
02PA3MZ	Removal of Cardiac Lead from Heart, Percutaneous Approach	Procedure	ICD-10-PCS
02PA4MZ	Removal of Cardiac Lead from Heart, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02PAXMZ	Removal of Cardiac Lead from Heart, External Approach	Procedure	ICD-10-PCS
0JH608Z	Insertion of Defibrillator Generator into Chest Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
0JH638Z	Insertion of Defibrillator Generator into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
0JH808Z	Insertion of Defibrillator Generator into Abdomen Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
0JH838Z	Insertion of Defibrillator Generator into Abdomen Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
0JPT0PZ	Removal of Cardiac Rhythm Related Device from Trunk Subcutaneous Tissue and Fascia, Open Approach	Procedure	ICD-10-PCS
0JPT3PZ	Removal of Cardiac Rhythm Related Device from Trunk Subcutaneous Tissue and Fascia, Percutaneous Approach	Procedure	ICD-10-PCS
Ischemic stroke or transient ischemic attack			
430	Subarachnoid hemorrhage	Diagnosis	ICD-9-CM
431	Intracerebral hemorrhage	Diagnosis	ICD-9-CM
432	Other and unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
432.9	Unspecified intracranial hemorrhage	Diagnosis	ICD-9-CM
433	Occlusion and stenosis of precerebral arteries	Diagnosis	ICD-9-CM
433.0	Occlusion and stenosis of basilar artery	Diagnosis	ICD-9-CM
433.00	Occlusion and stenosis of basilar artery without mention of cerebral infarction	Diagnosis	ICD-9-CM
433.01	Occlusion and stenosis of basilar artery with cerebral infarction	Diagnosis	ICD-9-CM
433.1	Occlusion and stenosis of carotid artery	Diagnosis	ICD-9-CM
433.10	Occlusion and stenosis of carotid artery without mention of cerebral infarction	Diagnosis	ICD-9-CM
433.11	Occlusion and stenosis of carotid artery with cerebral infarction	Diagnosis	ICD-9-CM
433.2	Occlusion and stenosis of vertebral artery	Diagnosis	ICD-9-CM
433.20	Occlusion and stenosis of vertebral artery without mention of cerebral infarction	Diagnosis	ICD-9-CM
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
433.3	Occlusion and stenosis of multiple and bilateral precerebral arteries	Diagnosis	ICD-9-CM
433.30	Occlusion and stenosis of multiple and bilateral precerebral arteries without mention of cerebral infarction	Diagnosis	ICD-9-CM
433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction	Diagnosis	ICD-9-CM
433.8	Occlusion and stenosis of other specified precerebral artery	Diagnosis	ICD-9-CM
433.80	Occlusion and stenosis of other specified precerebral artery without mention of cerebral infarction	Diagnosis	ICD-9-CM
433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction	Diagnosis	ICD-9-CM
433.9	Occlusion and stenosis of unspecified precerebral artery	Diagnosis	ICD-9-CM
433.90	Occlusion and stenosis of unspecified precerebral artery without mention of cerebral infarction	Diagnosis	ICD-9-CM
433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction	Diagnosis	ICD-9-CM
434.0	Cerebral thrombosis	Diagnosis	ICD-9-CM
434.00	Cerebral thrombosis without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.1	Cerebral embolism	Diagnosis	ICD-9-CM
434.10	Cerebral embolism without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.9	Unspecified cerebral artery occlusion	Diagnosis	ICD-9-CM
434.90	Unspecified cerebral artery occlusion without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.01	Cerebral thrombosis with cerebral infarction	Diagnosis	ICD-9-CM
434.11	Cerebral embolism with cerebral infarction	Diagnosis	ICD-9-CM
434.91	Unspecified cerebral artery occlusion with cerebral infarction	Diagnosis	ICD-9-CM
436	Acute, but ill-defined, cerebrovascular disease	Diagnosis	ICD-9-CM
438	Late effects of cerebrovascular disease	Diagnosis	ICD-9-CM
438.0	Cognitive deficits due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.1	Speech and language deficits due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.10	Unspecified speech and language deficit due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.11	Aphasia due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.12	Dysphasia due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.13	Late effects of cerebrovascular disease, speech and language deficits, dysarthria	Diagnosis	ICD-9-CM
438.14	Late effects of cerebrovascular disease, speech and language deficits, fluency disorder	Diagnosis	ICD-9-CM
438.19	Other speech and language deficits due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.2	Hemiplegia/hemiparesis due to cerebrovascular disease	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
438.20	Hemiplegia affecting unspecified side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.21	Hemiplegia affecting dominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.22	Hemiplegia affecting nondominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.3	Monoplegia of upper limb due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.30	Monoplegia of upper limb affecting unspecified side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.31	Monoplegia of upper limb affecting dominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.32	Monoplegia of upper limb affecting nondominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.4	Monoplegia of lower limb due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.40	Monoplegia of lower limb affecting unspecified side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.41	Monoplegia of lower limb affecting dominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.42	Monoplegia of lower limb affecting nondominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.5	Other paralytic syndrome due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.50	Other paralytic syndrome affecting unspecified side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.51	Other paralytic syndrome affecting dominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.52	Other paralytic syndrome affecting nondominant side due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.6	Alteration of sensations as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.7	Disturbance of vision as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.8	Other late effects of cerebrovascular disease due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.81	Apraxia due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.82	Dysphagia due to cerebrovascular disease	Diagnosis	ICD-9-CM
438.83	Facial weakness as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.84	Ataxia as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.85	Vertigo as late effect of cerebrovascular disease	Diagnosis	ICD-9-CM
438.89	Other late effects of cerebrovascular disease	Diagnosis	ICD-9-CM
438.9	Unspecified late effects of cerebrovascular disease due to cerebrovascular disease	Diagnosis	ICD-9-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	Diagnosis	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	Diagnosis	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	Diagnosis	ICD-10-CM
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	Diagnosis	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	Diagnosis	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	Diagnosis	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	Diagnosis	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	Diagnosis	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	Diagnosis	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	Diagnosis	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	Diagnosis	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	Diagnosis	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	Diagnosis	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	Diagnosis	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	Diagnosis	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	Diagnosis	ICD-10-CM
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	Diagnosis	ICD-10-CM
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	Diagnosis	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	Diagnosis	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	Diagnosis	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	Diagnosis	ICD-10-CM
I62.9	Nontraumatic intracranial hemorrhage, unspecified	Diagnosis	ICD-10-CM
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.011	Cerebral infarction due to thrombosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.012	Cerebral infarction due to thrombosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I63.02	Cerebral infarction due to thrombosis of basilar artery	Diagnosis	ICD-10-CM
I63.031	Cerebral infarction due to thrombosis of right carotid artery	Diagnosis	ICD-10-CM
I63.032	Cerebral infarction due to thrombosis of left carotid artery	Diagnosis	ICD-10-CM
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	Diagnosis	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	Diagnosis	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	Diagnosis	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	Diagnosis	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	Diagnosis	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	Diagnosis	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.139	Cerebral infarction due to embolism of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.19	Cerebral infarction due to embolism of other precerebral artery	Diagnosis	ICD-10-CM
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries	Diagnosis	ICD-10-CM
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery	Diagnosis	ICD-10-CM
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	Diagnosis	ICD-10-CM
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	Diagnosis	ICD-10-CM
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	Diagnosis	ICD-10-CM
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.39	Cerebral infarction due to thrombosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.412	Cerebral infarction due to embolism of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.441	Cerebral infarction due to embolism of right cerebellar artery	Diagnosis	ICD-10-CM
I63.442	Cerebral infarction due to embolism of left cerebellar artery	Diagnosis	ICD-10-CM
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.49	Cerebral infarction due to embolism of other cerebral artery	Diagnosis	ICD-10-CM
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	Diagnosis	ICD-10-CM
I63.8	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.9	Cerebral infarction, unspecified	Diagnosis	ICD-10-CM
I65.01	Occlusion and stenosis of right vertebral artery	Diagnosis	ICD-10-CM
I65.02	Occlusion and stenosis of left vertebral artery	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I65.03	Occlusion and stenosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I65.09	Occlusion and stenosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I65.1	Occlusion and stenosis of basilar artery	Diagnosis	ICD-10-CM
I65.21	Occlusion and stenosis of right carotid artery	Diagnosis	ICD-10-CM
I65.22	Occlusion and stenosis of left carotid artery	Diagnosis	ICD-10-CM
I65.23	Occlusion and stenosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I65.29	Occlusion and stenosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I65.8	Occlusion and stenosis of other precerebral arteries	Diagnosis	ICD-10-CM
I65.9	Occlusion and stenosis of unspecified precerebral artery	Diagnosis	ICD-10-CM
I66.01	Occlusion and stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I66.02	Occlusion and stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I66.03	Occlusion and stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I66.09	Occlusion and stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I66.11	Occlusion and stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I66.12	Occlusion and stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I66.13	Occlusion and stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I66.19	Occlusion and stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I66.21	Occlusion and stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I66.22	Occlusion and stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I66.23	Occlusion and stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I66.29	Occlusion and stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I66.3	Occlusion and stenosis of cerebellar arteries	Diagnosis	ICD-10-CM
I66.8	Occlusion and stenosis of other cerebral arteries	Diagnosis	ICD-10-CM
I66.9	Occlusion and stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I67.89	Other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.00	Unspecified sequelae of nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.010	Attention and concentration deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.011	Memory deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.012	Visuospatial deficit and spatial neglect following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I69.013	Psychomotor deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.014	Frontal lobe and executive function deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.015	Cognitive social or emotional deficit following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.018	Other symptoms and signs involving cognitive functions following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.019	Unspecified symptoms and signs involving cognitive functions following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.020	Aphasia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.021	Dysphasia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.022	Dysarthria following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.023	Fluency disorder following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.028	Other speech and language deficits following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.031	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.032	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.033	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.034	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.039	Monoplegia of upper limb following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.041	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.042	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.043	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.044	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.049	Monoplegia of lower limb following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.051	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.052	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.053	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.054	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.059	Hemiplegia and hemiparesis following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.061	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.062	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.063	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.064	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I69.069	Other paralytic syndrome following nontraumatic subarachnoid hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.090	Apraxia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.091	Dysphagia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.092	Facial weakness following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.093	Ataxia following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.098	Other sequelae following nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I69.10	Unspecified sequelae of nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.110	Attention and concentration deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.111	Memory deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.112	Visuospatial deficit and spatial neglect following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.113	Psychomotor deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.114	Frontal lobe and executive function deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.115	Cognitive social or emotional deficit following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.118	Other symptoms and signs involving cognitive functions following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.119	Unspecified symptoms and signs involving cognitive functions following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.120	Aphasia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.121	Dysphasia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.122	Dysarthria following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.123	Fluency disorder following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.128	Other speech and language deficits following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.131	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.132	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.133	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.134	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.139	Monoplegia of upper limb following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.141	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.142	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.143	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.144	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
I69.149	Monoplegia of lower limb following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.151	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.152	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.153	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.154	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.159	Hemiplegia and hemiparesis following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.161	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.162	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.163	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.164	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.169	Other paralytic syndrome following nontraumatic intracerebral hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.190	Apraxia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.191	Dysphagia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.192	Facial weakness following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.193	Ataxia following nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.198	Other sequelae of nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I69.20	Unspecified sequelae of other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.210	Attention and concentration deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.211	Memory deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.212	Visuospatial deficit and spatial neglect following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.213	Psychomotor deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.214	Frontal lobe and executive function deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.215	Cognitive social or emotional deficit following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.218	Other symptoms and signs involving cognitive functions following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.219	Unspecified symptoms and signs involving cognitive functions following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.220	Aphasia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.221	Dysphasia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.222	Dysarthria following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.223	Fluency disorder following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I69.228	Other speech and language deficits following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.231	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.232	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.233	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.234	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.239	Monoplegia of upper limb following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.241	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.242	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.243	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.244	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.249	Monoplegia of lower limb following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.251	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.252	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.253	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.254	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.259	Hemiplegia and hemiparesis following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.261	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting right dominant side	Diagnosis	ICD-10-CM
I69.262	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting left dominant side	Diagnosis	ICD-10-CM
I69.263	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.264	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.269	Other paralytic syndrome following other nontraumatic intracranial hemorrhage affecting unspecified side	Diagnosis	ICD-10-CM
I69.290	Apraxia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.291	Dysphagia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.292	Facial weakness following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.293	Ataxia following other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.298	Other sequelae of other nontraumatic intracranial hemorrhage	Diagnosis	ICD-10-CM
I69.30	Unspecified sequelae of cerebral infarction	Diagnosis	ICD-10-CM
I69.310	Attention and concentration deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.311	Memory deficit following cerebral infarction	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I69.312	Visuospatial deficit and spatial neglect following cerebral infarction	Diagnosis	ICD-10-CM
I69.313	Psychomotor deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.314	Frontal lobe and executive function deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.315	Cognitive social or emotional deficit following cerebral infarction	Diagnosis	ICD-10-CM
I69.318	Other symptoms and signs involving cognitive functions following cerebral infarction	Diagnosis	ICD-10-CM
I69.319	Unspecified symptoms and signs involving cognitive functions following cerebral infarction	Diagnosis	ICD-10-CM
I69.320	Aphasia following cerebral infarction	Diagnosis	ICD-10-CM
I69.321	Dysphasia following cerebral infarction	Diagnosis	ICD-10-CM
I69.322	Dysarthria following cerebral infarction	Diagnosis	ICD-10-CM
I69.323	Fluency disorder following cerebral infarction	Diagnosis	ICD-10-CM
I69.328	Other speech and language deficits following cerebral infarction	Diagnosis	ICD-10-CM
I69.331	Monoplegia of upper limb following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.332	Monoplegia of upper limb following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
I69.333	Monoplegia of upper limb following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.334	Monoplegia of upper limb following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.339	Monoplegia of upper limb following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.341	Monoplegia of lower limb following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.342	Monoplegia of lower limb following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
I69.343	Monoplegia of lower limb following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.344	Monoplegia of lower limb following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.349	Monoplegia of lower limb following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.351	Hemiplegia and hemiparesis following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.352	Hemiplegia and hemiparesis following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
I69.353	Hemiplegia and hemiparesis following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.354	Hemiplegia and hemiparesis following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.359	Hemiplegia and hemiparesis following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.361	Other paralytic syndrome following cerebral infarction affecting right dominant side	Diagnosis	ICD-10-CM
I69.362	Other paralytic syndrome following cerebral infarction affecting left dominant side	Diagnosis	ICD-10-CM
I69.363	Other paralytic syndrome following cerebral infarction affecting right non-dominant side	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I69.364	Other paralytic syndrome following cerebral infarction affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.369	Other paralytic syndrome following cerebral infarction affecting unspecified side	Diagnosis	ICD-10-CM
I69.390	Apraxia following cerebral infarction	Diagnosis	ICD-10-CM
I69.391	Dysphagia following cerebral infarction	Diagnosis	ICD-10-CM
I69.392	Facial weakness following cerebral infarction	Diagnosis	ICD-10-CM
I69.393	Ataxia following cerebral infarction	Diagnosis	ICD-10-CM
I69.398	Other sequelae of cerebral infarction	Diagnosis	ICD-10-CM
I69.80	Unspecified sequelae of other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.810	Attention and concentration deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.811	Memory deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.812	Visuospatial deficit and spatial neglect following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.813	Psychomotor deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.814	Frontal lobe and executive function deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.815	Cognitive social or emotional deficit following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.818	Other symptoms and signs involving cognitive functions following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.819	Unspecified symptoms and signs involving cognitive functions following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.820	Aphasia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.821	Dysphasia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.822	Dysarthria following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.823	Fluency disorder following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.828	Other speech and language deficits following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.831	Monoplegia of upper limb following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.832	Monoplegia of upper limb following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.833	Monoplegia of upper limb following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.834	Monoplegia of upper limb following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.839	Monoplegia of upper limb following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.841	Monoplegia of lower limb following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.842	Monoplegia of lower limb following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.843	Monoplegia of lower limb following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I69.844	Monoplegia of lower limb following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.849	Monoplegia of lower limb following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.851	Hemiplegia and hemiparesis following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.852	Hemiplegia and hemiparesis following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.853	Hemiplegia and hemiparesis following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.854	Hemiplegia and hemiparesis following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.859	Hemiplegia and hemiparesis following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.861	Other paralytic syndrome following other cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.862	Other paralytic syndrome following other cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.863	Other paralytic syndrome following other cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.864	Other paralytic syndrome following other cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.869	Other paralytic syndrome following other cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.890	Apraxia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.891	Dysphagia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.892	Facial weakness following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.893	Ataxia following other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.898	Other sequelae of other cerebrovascular disease	Diagnosis	ICD-10-CM
I69.90	Unspecified sequelae of unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.910	Attention and concentration deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.911	Memory deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.912	Visuospatial deficit and spatial neglect following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.913	Psychomotor deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.914	Frontal lobe and executive function deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.915	Cognitive social or emotional deficit following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.918	Other symptoms and signs involving cognitive functions following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.919	Unspecified symptoms and signs involving cognitive functions following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.920	Aphasia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.921	Dysphasia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.922	Dysarthria following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I69.923	Fluency disorder following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.928	Other speech and language deficits following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.931	Monoplegia of upper limb following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.932	Monoplegia of upper limb following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.933	Monoplegia of upper limb following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.934	Monoplegia of upper limb following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.939	Monoplegia of upper limb following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.941	Monoplegia of lower limb following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.942	Monoplegia of lower limb following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.943	Monoplegia of lower limb following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.944	Monoplegia of lower limb following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.949	Monoplegia of lower limb following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.951	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.952	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.953	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.954	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.959	Hemiplegia and hemiparesis following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.961	Other paralytic syndrome following unspecified cerebrovascular disease affecting right dominant side	Diagnosis	ICD-10-CM
I69.962	Other paralytic syndrome following unspecified cerebrovascular disease affecting left dominant side	Diagnosis	ICD-10-CM
I69.963	Other paralytic syndrome following unspecified cerebrovascular disease affecting right non-dominant side	Diagnosis	ICD-10-CM
I69.964	Other paralytic syndrome following unspecified cerebrovascular disease affecting left non-dominant side	Diagnosis	ICD-10-CM
I69.969	Other paralytic syndrome following unspecified cerebrovascular disease affecting unspecified side	Diagnosis	ICD-10-CM
I69.990	Apraxia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.991	Dysphagia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.992	Facial weakness following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.993	Ataxia following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
I69.998	Other sequelae following unspecified cerebrovascular disease	Diagnosis	ICD-10-CM
61645	Percutaneous arterial transluminal mechanical thrombectomy and/or infusion for thrombolysis, intracranial, any method, including diagnostic angiography, fluoroscopic guidance, catheter placement, and intraprocedural pharmacological thrombolytic injection(s)	Procedure	CPT-4

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Code	Description	Code Category	Code Type
435	Transient cerebral ischemia	Diagnosis	ICD-9-CM
435.0	Basilar artery syndrome	Diagnosis	ICD-9-CM
435.1	Vertebral artery syndrome	Diagnosis	ICD-9-CM
435.2	Subclavian steal syndrome	Diagnosis	ICD-9-CM
435.3	Vertebrobasilar artery syndrome	Diagnosis	ICD-9-CM
435.8	Other specified transient cerebral ischemias	Diagnosis	ICD-9-CM
435.9	Unspecified transient cerebral ischemia	Diagnosis	ICD-9-CM
G45.0	Vertebro-basilar artery syndrome	Diagnosis	ICD-10-CM
G45.1	Carotid artery syndrome (hemispheric)	Diagnosis	ICD-10-CM
G45.2	Multiple and bilateral precerebral artery syndromes	Diagnosis	ICD-10-CM
G45.8	Other transient cerebral ischemic attacks and related syndromes	Diagnosis	ICD-10-CM
G45.9	Transient cerebral ischemic attack, unspecified	Diagnosis	ICD-10-CM
G46.0	Middle cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.1	Anterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.2	Posterior cerebral artery syndrome	Diagnosis	ICD-10-CM
I67.841	Reversible cerebrovascular vasoconstriction syndrome	Diagnosis	ICD-10-CM
I67.848	Other cerebrovascular vasospasm and vasoconstriction	Diagnosis	ICD-10-CM
Myocardial infarction			
410	Acute myocardial infarction	Diagnosis	ICD-9-CM
410.0	Acute myocardial infarction of anterolateral wall	Diagnosis	ICD-9-CM
410.00	Acute myocardial infarction of anterolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.02	Acute myocardial infarction of anterolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.1	Acute myocardial infarction of other anterior wall	Diagnosis	ICD-9-CM
410.10	Acute myocardial infarction of other anterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.12	Acute myocardial infarction of other anterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.2	Acute myocardial infarction of inferolateral wall	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
410.20	Acute myocardial infarction of inferolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.22	Acute myocardial infarction of inferolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.3	Acute myocardial infarction of inferoposterior wall	Diagnosis	ICD-9-CM
410.30	Acute myocardial infarction of inferoposterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.32	Acute myocardial infarction of inferoposterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.4	Acute myocardial infarction of other inferior wall	Diagnosis	ICD-9-CM
410.40	Acute myocardial infarction of other inferior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	Diagnosis	ICD-9-CM
410.42	Acute myocardial infarction of other inferior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.5	Acute myocardial infarction of other lateral wall	Diagnosis	ICD-9-CM
410.50	Acute myocardial infarction of other lateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.52	Acute myocardial infarction of other lateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.6	Acute myocardial infarction, true posterior wall infarction	Diagnosis	ICD-9-CM
410.60	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	Diagnosis	ICD-9-CM
410.62	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.7	Acute myocardial infarction, subendocardial infarction	Diagnosis	ICD-9-CM
410.70	Acute myocardial infarction, subendocardial infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	Diagnosis	ICD-9-CM
410.72	Acute myocardial infarction, subendocardial infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.8	Acute myocardial infarction of other specified sites	Diagnosis	ICD-9-CM
410.80	Acute myocardial infarction of other specified sites, episode of care unspecified	Diagnosis	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	Diagnosis	ICD-9-CM
410.82	Acute myocardial infarction of other specified sites, subsequent episode of care	Diagnosis	ICD-9-CM
410.9	Acute myocardial infarction, unspecified site	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
410.90	Acute myocardial infarction, unspecified site, episode of care unspecified	Diagnosis	ICD-9-CM
410.91	Acute myocardial infarction, unspecified site, initial episode of care	Diagnosis	ICD-9-CM
410.92	Acute myocardial infarction, unspecified site, subsequent episode of care	Diagnosis	ICD-9-CM
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I21.9	Acute myocardial infarction, unspecified	Diagnosis	ICD-10-CM
I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21.A9	Other myocardial infarction type	Diagnosis	ICD-10-CM
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
Nephropathy			
250.4	Diabetes with renal manifestations	Diagnosis	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
580	Acute glomerulonephritis	Diagnosis	ICD-9-CM
580.0	Acute glomerulonephritis with lesion of proliferative glomerulonephritis	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
580.4	Acute glomerulonephritis with lesion of rapidly progressive glomerulonephritis	Diagnosis	ICD-9-CM
580.8	Acute glomerulonephritis with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
580.81	Acute glomerulonephritis in diseases classified elsewhere	Diagnosis	ICD-9-CM
580.89	Acute glomerulonephritis with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
580.9	Acute glomerulonephritis with unspecified pathological lesion in kidney	Diagnosis	ICD-9-CM
581	Nephrotic syndrome	Diagnosis	ICD-9-CM
581.81	Nephrotic syndrome in diseases classified elsewhere	Diagnosis	ICD-9-CM
582	Chronic glomerulonephritis	Diagnosis	ICD-9-CM
582.0	Chronic glomerulonephritis with lesion of proliferative glomerulonephritis	Diagnosis	ICD-9-CM
582.1	Chronic glomerulonephritis with lesion of membranous glomerulonephritis	Diagnosis	ICD-9-CM
582.2	Chronic glomerulonephritis with lesion of membranoproliferative glomerulonephritis	Diagnosis	ICD-9-CM
582.4	Chronic glomerulonephritis with lesion of rapidly progressive glomerulonephritis	Diagnosis	ICD-9-CM
582.8	Chronic glomerulonephritis with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
582.81	Chronic glomerulonephritis in diseases classified elsewhere	Diagnosis	ICD-9-CM
582.89	Chronic glomerulonephritis with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
582.9	Chronic glomerulonephritis with unspecified pathological lesion in kidney	Diagnosis	ICD-9-CM
583	Nephritis and nephropathy not specified as acute or chronic	Diagnosis	ICD-9-CM
583.0	Nephritis and nephropathy, not specified as acute or chronic, with lesion of proliferative glomerulo	Diagnosis	ICD-9-CM
583.1	Nephritis and nephropathy, not specified as acute or chronic, with lesion of membranous glomerulonep	Diagnosis	ICD-9-CM
583.2	Nephritis and nephropathy, not specified as acute or chronic, with lesion of membranoproliferative g	Diagnosis	ICD-9-CM
583.4	Nephritis and nephropathy, not specified as acute or chronic, with lesion of rapidly progressive glo	Diagnosis	ICD-9-CM
583.6	Nephritis and nephropathy, not specified as acute or chronic, with lesion of renal cortical necrosis	Diagnosis	ICD-9-CM
583.7	Nephritis and nephropathy, not specified as acute or chronic, with lesion of renal medullary necrosi	Diagnosis	ICD-9-CM
583.8	Nephritis and nephropathy not specified as acute or chronic with other specified pathological lesion	Diagnosis	ICD-9-CM
583.81	Nephritis and nephropathy, not specified as acute or chronic, in diseases classified elsewhere	Diagnosis	ICD-9-CM
583.89	Nephritis and nephropathy, not specified as acute or chronic, with other specified pathological lesi	Diagnosis	ICD-9-CM
583.9	Nephritis and nephropathy, not specified as acute or chronic, with unspecified pathological lesion i	Diagnosis	ICD-9-CM
585	Chronic kidney disease (ckd)	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
585.1	Chronic kidney disease, Stage I	Diagnosis	ICD-9-CM
585.2	Chronic kidney disease, Stage II (mild)	Diagnosis	ICD-9-CM
585.3	Chronic kidney disease, Stage III (moderate)	Diagnosis	ICD-9-CM
585.4	Chronic kidney disease, Stage IV (severe)	Diagnosis	ICD-9-CM
585.5	Chronic kidney disease, Stage V	Diagnosis	ICD-9-CM
585.6	End stage renal disease	Diagnosis	ICD-9-CM
585.9	Chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
586	Renal failure, unspecified	Diagnosis	ICD-9-CM
593.9	Unspecified disorder of kidney and ureter	Diagnosis	ICD-9-CM
B52.0	Plasmodium malariae malaria with nephropathy	Diagnosis	ICD-10-CM
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis	ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M35.04	Sicca syndrome with tubulo-interstitial nephropathy	Diagnosis	ICD-10-CM
N00.0	Acute nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
N00.1	Acute nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N00.2	Acute nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N00.3	Acute nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.4	Acute nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.5	Acute nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N00.6	Acute nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N00.7	Acute nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N00.8	Acute nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N00.9	Acute nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N01.0	Rapidly progressive nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N01.1	Rapidly progressive nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N01.2	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N01.3	Rapidly progressive nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.4	Rapidly progressive nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.5	Rapidly progressive nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N01.6	Rapidly progressive nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N01.7	Rapidly progressive nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N01.8	Rapidly progressive nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N01.9	Rapidly progressive nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N03.0	Chronic nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N03.1	Chronic nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N03.2	Chronic nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N03.3	Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.4	Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.5	Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N03.6	Chronic nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N03.7	Chronic nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N03.8	Chronic nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N03.9	Chronic nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
N05.0	Unspecified nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N05.1	Unspecified nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N05.2	Unspecified nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N05.3	Unspecified nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.4	Unspecified nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.5	Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N05.6	Unspecified nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N05.7	Unspecified nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N05.8	Unspecified nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N05.9	Unspecified nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N06.0	Isolated proteinuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N06.1	Isolated proteinuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N06.2	Isolated proteinuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N06.3	Isolated proteinuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.4	Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.5	Isolated proteinuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N06.6	Isolated proteinuria with dense deposit disease	Diagnosis	ICD-10-CM
N06.7	Isolated proteinuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N06.8	Isolated proteinuria with other morphologic lesion	Diagnosis	ICD-10-CM
N06.9	Isolated proteinuria with unspecified morphologic lesion	Diagnosis	ICD-10-CM
N07.0	Hereditary nephropathy, not elsewhere classified with minor glomerular abnormality	Diagnosis	ICD-10-CM
N07.1	Hereditary nephropathy, not elsewhere classified with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N07.2	Hereditary nephropathy, not elsewhere classified with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N07.3	Hereditary nephropathy, not elsewhere classified with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.4	Hereditary nephropathy, not elsewhere classified with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.5	Hereditary nephropathy, not elsewhere classified with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N07.6	Hereditary nephropathy, not elsewhere classified with dense deposit disease	Diagnosis	ICD-10-CM
N07.7	Hereditary nephropathy, not elsewhere classified with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N07.8	Hereditary nephropathy, not elsewhere classified with other morphologic lesions	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
N07.9	Hereditary nephropathy, not elsewhere classified with unspecified morphologic lesions	Diagnosis	ICD-10-CM
N08	Glomerular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N14.0	Analgesic nephropathy	Diagnosis	ICD-10-CM
N14.1	Nephropathy induced by other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
N14.2	Nephropathy induced by unspecified drug, medicament or biological substance	Diagnosis	ICD-10-CM
N14.3	Nephropathy induced by heavy metals	Diagnosis	ICD-10-CM
N14.4	Toxic nephropathy, not elsewhere classified	Diagnosis	ICD-10-CM
N15.0	Balkan nephropathy	Diagnosis	ICD-10-CM
N15.8	Other specified renal tubulo-interstitial diseases	Diagnosis	ICD-10-CM
N15.9	Renal tubulo-interstitial disease, unspecified	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N17.1	Acute kidney failure with acute cortical necrosis	Diagnosis	ICD-10-CM
N17.2	Acute kidney failure with medullary necrosis	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N19	Unspecified kidney failure	Diagnosis	ICD-10-CM
N28.9	Disorder of kidney and ureter, unspecified	Diagnosis	ICD-10-CM
N29	Other disorders of kidney and ureter in diseases classified elsewhere	Diagnosis	ICD-10-CM
249.40	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.41	Secondary diabetes mellitus with renal manifestations, uncontrolled	Diagnosis	ICD-9-CM
581.0	Nephrotic syndrome with lesion of proliferative glomerulonephritis	Diagnosis	ICD-9-CM
581.1	Nephrotic syndrome with lesion of membranous glomerulonephritis	Diagnosis	ICD-9-CM
581.2	Nephrotic syndrome with lesion of membranoproliferative glomerulonephritis	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
581.3	Nephrotic syndrome with lesion of minimal change glomerulonephritis	Diagnosis	ICD-9-CM
581.8	Nephrotic syndrome with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
581.89	Other nephrotic syndrome with specified pathological lesion in kidney	Diagnosis	ICD-9-CM
581.9	Nephrotic syndrome with unspecified pathological lesion in kidney	Diagnosis	ICD-9-CM
584	Acute kidney failure	Diagnosis	ICD-9-CM
584.5	Acute kidney failure with lesion of tubular necrosis	Diagnosis	ICD-9-CM
584.6	Acute kidney failure with lesion of renal cortical necrosis	Diagnosis	ICD-9-CM
584.7	Acute kidney failure with lesion of medullary [papillary] necrosis	Diagnosis	ICD-9-CM
584.8	Acute kidney failure with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
584.9	Acute kidney failure, unspecified	Diagnosis	ICD-9-CM
587	Unspecified renal sclerosis	Diagnosis	ICD-9-CM
588	Disorders resulting from impaired renal function	Diagnosis	ICD-9-CM
588.0	Renal osteodystrophy	Diagnosis	ICD-9-CM
588.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-9-CM
588.8	Other specified disorder resulting from impaired renal function	Diagnosis	ICD-9-CM
588.81	Secondary hyperparathyroidism (of renal origin)	Diagnosis	ICD-9-CM
588.89	Other specified disorders resulting from impaired renal function	Diagnosis	ICD-9-CM
588.9	Unspecified disorder resulting from impaired renal function	Diagnosis	ICD-9-CM
589	Small kidney of unknown cause	Diagnosis	ICD-9-CM
589.0	Unilateral small kidney	Diagnosis	ICD-9-CM
589.1	Bilateral small kidneys	Diagnosis	ICD-9-CM
589.9	Unspecified small kidney	Diagnosis	ICD-9-CM
590.2	Renal and perinephric abscess	Diagnosis	ICD-9-CM
590.81	Pyelitis or pyelonephritis in diseases classified elsewhere	Diagnosis	ICD-9-CM
590.9	Unspecified infection of kidney	Diagnosis	ICD-9-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
N02.0	Recurrent and persistent hematuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N02.1	Recurrent and persistent hematuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
N02.2	Recurrent and persistent hematuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N02.3	Recurrent and persistent hematuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.4	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.5	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N02.6	Recurrent and persistent hematuria with dense deposit disease	Diagnosis	ICD-10-CM
N02.7	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N02.8	Recurrent and persistent hematuria with other morphologic changes	Diagnosis	ICD-10-CM
N02.9	Recurrent and persistent hematuria with unspecified morphologic changes	Diagnosis	ICD-10-CM
N04.0	Nephrotic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N04.1	Nephrotic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N04.2	Nephrotic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N04.3	Nephrotic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.4	Nephrotic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.5	Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N04.6	Nephrotic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N04.7	Nephrotic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N04.8	Nephrotic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N04.9	Nephrotic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N17.0	Acute kidney failure with tubular necrosis	Diagnosis	ICD-10-CM
N17.8	Other acute kidney failure	Diagnosis	ICD-10-CM
N17.9	Acute kidney failure, unspecified	Diagnosis	ICD-10-CM
N25.0	Renal osteodystrophy	Diagnosis	ICD-10-CM
N25.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-10-CM
N25.81	Secondary hyperparathyroidism of renal origin	Diagnosis	ICD-10-CM
N25.89	Other disorders resulting from impaired renal tubular function	Diagnosis	ICD-10-CM
N25.9	Disorder resulting from impaired renal tubular function, unspecified	Diagnosis	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM
N27.0	Small kidney, unilateral	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
N27.1	Small kidney, bilateral	Diagnosis	ICD-10-CM
N27.9	Small kidney, unspecified	Diagnosis	ICD-10-CM
Obesity			
278.00	Obesity, unspecified	Diagnosis	ICD-9-CM
278.01	Morbid obesity	Diagnosis	ICD-9-CM
V85.3	Body Mass Index between 30-39, adult	Diagnosis	ICD-9-CM
V85.30	Body Mass Index 30.0-30.9, adult	Diagnosis	ICD-9-CM
V85.31	Body Mass Index 31.0-31.9, adult	Diagnosis	ICD-9-CM
V85.32	Body Mass Index 32.0-32.9, adult	Diagnosis	ICD-9-CM
V85.33	Body Mass Index 33.0-33.9, adult	Diagnosis	ICD-9-CM
V85.34	Body Mass Index 34.0-34.9, adult	Diagnosis	ICD-9-CM
V85.35	Body Mass Index 35.0-35.9, adult	Diagnosis	ICD-9-CM
V85.36	Body Mass Index 36.0-36.9, adult	Diagnosis	ICD-9-CM
V85.37	Body Mass Index 37.0-37.9, adult	Diagnosis	ICD-9-CM
V85.38	Body Mass Index 38.0-38.9, adult	Diagnosis	ICD-9-CM
V85.39	Body Mass Index 39.0-39.9, adult	Diagnosis	ICD-9-CM
V85.4	Body Mass Index 40 and over, adult	Diagnosis	ICD-9-CM
V85.41	Body Mass Index 40.0-44.9, adult	Diagnosis	ICD-9-CM
V85.42	Body Mass Index 45.0-49.9, adult	Diagnosis	ICD-9-CM
V85.43	Body Mass Index 50.0-59.9, adult	Diagnosis	ICD-9-CM
V85.44	Body Mass Index 60.0-69.9, adult	Diagnosis	ICD-9-CM
V85.45	Body Mass Index 70 and over, adult	Diagnosis	ICD-9-CM
E66.01	Morbid (severe) obesity due to excess calories	Diagnosis	ICD-10-CM
E66.09	Other obesity due to excess calories	Diagnosis	ICD-10-CM
E66.1	Drug-induced obesity	Diagnosis	ICD-10-CM
E66.8	Other obesity	Diagnosis	ICD-10-CM
E66.9	Obesity, unspecified	Diagnosis	ICD-10-CM
Z68.30	Body mass index (BMI) 30.0-30.9, adult	Diagnosis	ICD-10-CM
Z68.31	Body mass index (BMI) 31.0-31.9, adult	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
Z68.32	Body mass index (BMI) 32.0-32.9, adult	Diagnosis	ICD-10-CM
Z68.33	Body mass index (BMI) 33.0-33.9, adult	Diagnosis	ICD-10-CM
Z68.34	Body mass index (BMI) 34.0-34.9, adult	Diagnosis	ICD-10-CM
Z68.35	Body mass index (BMI) 35.0-35.9, adult	Diagnosis	ICD-10-CM
Z68.36	Body mass index (BMI) 36.0-36.9, adult	Diagnosis	ICD-10-CM
Z68.37	Body mass index (BMI) 37.0-37.9, adult	Diagnosis	ICD-10-CM
Z68.38	Body mass index (BMI) 38.0-38.9, adult	Diagnosis	ICD-10-CM
Z68.39	Body mass index (BMI) 39.0-39.9, adult	Diagnosis	ICD-10-CM
Z68.41	Body mass index (BMI) 40.0-44.9, adult	Diagnosis	ICD-10-CM
Z68.42	Body mass index (BMI) 45.0-49.9, adult	Diagnosis	ICD-10-CM
Z68.43	Body mass index (BMI) 50.0-59.9, adult	Diagnosis	ICD-10-CM
Z68.44	Body mass index (BMI) 60.0-69.9, adult	Diagnosis	ICD-10-CM
Z68.45	Body mass index (BMI) 70 or greater, adult	Diagnosis	ICD-10-CM
G0447	Face-to-face behavioral counseling for obesity, 15 minutes	Procedure	HCPCS
43843	Gastric restrictive procedure, without gastric bypass, for morbid obesity; other than vertical-banded gastroplasty	Procedure	CPT-4
43847	Gastric restrictive procedure, with gastric bypass for morbid obesity; with small intestine reconstruction to limit absorption	Procedure	CPT-4
43846	Gastric restrictive procedure, with gastric bypass for morbid obesity; with short limb (150 cm or less) Roux-en-Y gastroenterostomy	Procedure	CPT-4
43848	Revision, open, of gastric restrictive procedure for morbid obesity, other than adjustable gastric restrictive device (separate procedure)	Procedure	CPT-4
43842	Gastric restrictive procedure, without gastric bypass, for morbid obesity; vertical-banded gastroplasty	Procedure	CPT-4
Other dysrhythmias			
427.0	Paroxysmal supraventricular tachycardia	Diagnosis	ICD-9-CM
427.1	Paroxysmal ventricular tachycardia	Diagnosis	ICD-9-CM
427.2	Unspecified paroxysmal tachycardia	Diagnosis	ICD-9-CM
427.4	Ventricular fibrillation and flutter	Diagnosis	ICD-9-CM
427.41	Ventricular fibrillation	Diagnosis	ICD-9-CM
427.42	Ventricular flutter	Diagnosis	ICD-9-CM
427.6	Premature beats	Diagnosis	ICD-9-CM
427.60	Unspecified premature beats	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
427.61	Supraventricular premature beats	Diagnosis	ICD-9-CM
427.69	Other premature beats	Diagnosis	ICD-9-CM
427.8	Other specified cardiac dysrhythmias	Diagnosis	ICD-9-CM
427.81	Sinoatrial node dysfunction	Diagnosis	ICD-9-CM
427.89	Other specified cardiac dysrhythmias	Diagnosis	ICD-9-CM
427.9	Unspecified cardiac dysrhythmia	Diagnosis	ICD-9-CM
785.0	Unspecified tachycardia	Diagnosis	ICD-9-CM
I47.0	Re-entry ventricular arrhythmia	Diagnosis	ICD-10-CM
I47.1	Supraventricular tachycardia	Diagnosis	ICD-10-CM
I47.2	Ventricular tachycardia	Diagnosis	ICD-10-CM
I47.9	Paroxysmal tachycardia, unspecified	Diagnosis	ICD-10-CM
I49.01	Ventricular fibrillation	Diagnosis	ICD-10-CM
I49.02	Ventricular flutter	Diagnosis	ICD-10-CM
I49.1	Atrial premature depolarization	Diagnosis	ICD-10-CM
I49.2	Junctional premature depolarization	Diagnosis	ICD-10-CM
I49.3	Ventricular premature depolarization	Diagnosis	ICD-10-CM
I49.40	Unspecified premature depolarization	Diagnosis	ICD-10-CM
I49.49	Other premature depolarization	Diagnosis	ICD-10-CM
I49.5	Sick sinus syndrome	Diagnosis	ICD-10-CM
I49.8	Other specified cardiac arrhythmias	Diagnosis	ICD-10-CM
I49.9	Cardiac arrhythmia, unspecified	Diagnosis	ICD-10-CM
R00.0	Tachycardia, unspecified	Diagnosis	ICD-10-CM
R00.1	Bradycardia, unspecified	Diagnosis	ICD-10-CM
Psychosis			
290.8	Other specified senile psychotic conditions	Diagnosis	ICD-9-CM
290.9	Unspecified senile psychotic condition	Diagnosis	ICD-9-CM
295	Schizophrenic disorders	Diagnosis	ICD-9-CM
295.0	Simple type schizophrenia	Diagnosis	ICD-9-CM
295.00	Simple schizophrenia, unspecified condition	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
295.01	Simple schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.02	Simple schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.03	Simple schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.04	Simple schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.05	Simple schizophrenia, in remission	Diagnosis	ICD-9-CM
295.1	Disorganized type schizophrenia	Diagnosis	ICD-9-CM
295.10	Disorganized schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.11	Disorganized schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.12	Disorganized schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.13	Disorganized schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.14	Disorganized schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.15	Disorganized schizophrenia, in remission	Diagnosis	ICD-9-CM
295.2	Catatonic type schizophrenia	Diagnosis	ICD-9-CM
295.20	Catatonic schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.21	Catatonic schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.22	Catatonic schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.23	Catatonic schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.24	Catatonic schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.25	Catatonic schizophrenia, in remission	Diagnosis	ICD-9-CM
295.3	Paranoid type schizophrenia	Diagnosis	ICD-9-CM
295.30	Paranoid schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.31	Paranoid schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.32	Paranoid schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.33	Paranoid schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.34	Paranoid schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.35	Paranoid schizophrenia, in remission	Diagnosis	ICD-9-CM
295.4	Schizophreniform disorder	Diagnosis	ICD-9-CM
295.40	Schizophreniform disorder, unspecified	Diagnosis	ICD-9-CM
295.41	Schizophreniform disorder, subchronic	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
295.42	Schizophreniform disorder, chronic	Diagnosis	ICD-9-CM
295.43	Schizophreniform disorder, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.44	Schizophreniform disorder, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.45	Schizophreniform disorder, in remission	Diagnosis	ICD-9-CM
295.5	Latent schizophrenia	Diagnosis	ICD-9-CM
295.50	Latent schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.51	Latent schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.52	Latent schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.53	Latent schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.54	Latent schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.55	Latent schizophrenia, in remission	Diagnosis	ICD-9-CM
295.6	Schizophrenic disorders, residual type	Diagnosis	ICD-9-CM
295.60	Schizophrenic disorders, residual type, unspecified	Diagnosis	ICD-9-CM
295.61	Schizophrenic disorders, residual type, subchronic	Diagnosis	ICD-9-CM
295.62	Schizophrenic disorders, residual type, chronic	Diagnosis	ICD-9-CM
295.63	Schizophrenic disorders, residual type, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.64	Schizophrenic disorders, residual type, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.65	Schizophrenic disorders, residual type, in remission	Diagnosis	ICD-9-CM
295.7	Schizoaffective disorder	Diagnosis	ICD-9-CM
295.70	Schizoaffective disorder, unspecified	Diagnosis	ICD-9-CM
295.71	Schizoaffective disorder, subchronic	Diagnosis	ICD-9-CM
295.72	Schizoaffective disorder, chronic	Diagnosis	ICD-9-CM
295.73	Schizoaffective disorder, subchronic with acute exacerbation	Diagnosis	ICD-9-CM
295.74	Schizoaffective disorder, chronic with acute exacerbation	Diagnosis	ICD-9-CM
295.75	Schizoaffective disorder, in remission	Diagnosis	ICD-9-CM
295.8	Other specified types of schizophrenia	Diagnosis	ICD-9-CM
295.80	Other specified types of schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.81	Other specified types of schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.82	Other specified types of schizophrenia, chronic condition	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
295.83	Other specified types of schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.84	Other specified types of schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.85	Other specified types of schizophrenia, in remission	Diagnosis	ICD-9-CM
295.9	Unspecified schizophrenia	Diagnosis	ICD-9-CM
295.90	Unspecified schizophrenia, unspecified condition	Diagnosis	ICD-9-CM
295.91	Unspecified schizophrenia, subchronic condition	Diagnosis	ICD-9-CM
295.92	Unspecified schizophrenia, chronic condition	Diagnosis	ICD-9-CM
295.93	Unspecified schizophrenia, subchronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.94	Unspecified schizophrenia, chronic condition with acute exacerbation	Diagnosis	ICD-9-CM
295.95	Unspecified schizophrenia, in remission	Diagnosis	ICD-9-CM
297	Delusional disorders	Diagnosis	ICD-9-CM
297.0	Paranoid state, simple	Diagnosis	ICD-9-CM
297.1	Delusional disorder	Diagnosis	ICD-9-CM
297.2	Paraphrenia	Diagnosis	ICD-9-CM
297.3	Shared psychotic disorder	Diagnosis	ICD-9-CM
297.8	Other specified paranoid states	Diagnosis	ICD-9-CM
297.9	Unspecified paranoid state	Diagnosis	ICD-9-CM
298	Other nonorganic psychoses	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
298.1	Excitative type psychosis	Diagnosis	ICD-9-CM
298.2	Reactive confusion	Diagnosis	ICD-9-CM
298.3	Acute paranoid reaction	Diagnosis	ICD-9-CM
298.4	Psychogenic paranoid psychosis	Diagnosis	ICD-9-CM
298.8	Other and unspecified reactive psychosis	Diagnosis	ICD-9-CM
298.9	Unspecified psychosis	Diagnosis	ICD-9-CM
299	Pervasive developmental disorders	Diagnosis	ICD-9-CM
299.0	Autistic disorder	Diagnosis	ICD-9-CM
299.00	Autistic disorder, current or active state	Diagnosis	ICD-9-CM
299.01	Autistic disorder, residual state	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
299.1	Childhood disintegrative disorder	Diagnosis	ICD-9-CM
299.10	Childhood disintegrative disorder, current or active state	Diagnosis	ICD-9-CM
299.11	Childhood disintegrative disorder, residual state	Diagnosis	ICD-9-CM
299.8	Other specified pervasive developmental disorders	Diagnosis	ICD-9-CM
299.80	Other specified pervasive developmental disorders, current or active state	Diagnosis	ICD-9-CM
299.81	Other specified pervasive developmental disorders, residual state	Diagnosis	ICD-9-CM
299.9	Unspecified pervasive developmental disorder	Diagnosis	ICD-9-CM
299.90	Unspecified pervasive developmental disorder, current or active state	Diagnosis	ICD-9-CM
299.91	Unspecified pervasive developmental disorder, residual state	Diagnosis	ICD-9-CM
F03.90	Unspecified dementia without behavioral disturbance	Diagnosis	ICD-10-CM
F20.0	Paranoid schizophrenia	Diagnosis	ICD-10-CM
F20.1	Disorganized schizophrenia	Diagnosis	ICD-10-CM
F20.2	Catatonic schizophrenia	Diagnosis	ICD-10-CM
F20.3	Undifferentiated schizophrenia	Diagnosis	ICD-10-CM
F20.5	Residual schizophrenia	Diagnosis	ICD-10-CM
F20.81	Schizophreniform disorder	Diagnosis	ICD-10-CM
F20.89	Other schizophrenia	Diagnosis	ICD-10-CM
F20.9	Schizophrenia, unspecified	Diagnosis	ICD-10-CM
F22	Delusional disorders	Diagnosis	ICD-10-CM
F23	Brief psychotic disorder	Diagnosis	ICD-10-CM
F24	Shared psychotic disorder	Diagnosis	ICD-10-CM
F25.0	Schizoaffective disorder, bipolar type	Diagnosis	ICD-10-CM
F25.1	Schizoaffective disorder, depressive type	Diagnosis	ICD-10-CM
F25.8	Other schizoaffective disorders	Diagnosis	ICD-10-CM
F25.9	Schizoaffective disorder, unspecified	Diagnosis	ICD-10-CM
F28	Other psychotic disorder not due to a substance or known physiological condition	Diagnosis	ICD-10-CM
F29	Unspecified psychosis not due to a substance or known physiological condition	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
F44.89	Other dissociative and conversion disorders	Diagnosis	ICD-10-CM
F84.0	Autistic disorder	Diagnosis	ICD-10-CM
F84.3	Other childhood disintegrative disorder	Diagnosis	ICD-10-CM
F84.5	Asperger's syndrome	Diagnosis	ICD-10-CM
F84.8	Other pervasive developmental disorders	Diagnosis	ICD-10-CM
F84.9	Pervasive developmental disorder, unspecified	Diagnosis	ICD-10-CM
Pulmonary hypertension			
I27.0	Primary pulmonary hypertension	Diagnosis	ICD-10-CM
I27.2	Other secondary pulmonary hypertension	Diagnosis	ICD-10-CM
I27.20	Pulmonary hypertension, unspecified	Diagnosis	ICD-10-CM
I27.21	Secondary pulmonary arterial hypertension	Diagnosis	ICD-10-CM
I27.22	Pulmonary hypertension due to left heart disease	Diagnosis	ICD-10-CM
I27.23	Pulmonary hypertension due to lung diseases and hypoxia	Diagnosis	ICD-10-CM
I27.24	Chronic thromboembolic pulmonary hypertension	Diagnosis	ICD-10-CM
I27.29	Other secondary pulmonary hypertension	Diagnosis	ICD-10-CM
I27.8	Other specified pulmonary heart diseases	Diagnosis	ICD-10-CM
I27.81	Cor pulmonale (chronic)	Diagnosis	ICD-10-CM
I27.82	Chronic pulmonary embolism	Diagnosis	ICD-10-CM
I27.83	Eisenmenger's syndrome	Diagnosis	ICD-10-CM
I27.89	Other specified pulmonary heart diseases	Diagnosis	ICD-10-CM
I27.9	Pulmonary heart disease, unspecified	Diagnosis	ICD-10-CM
416.0	Primary pulmonary hypertension	Diagnosis	ICD-9-CM
416.2	Chronic pulmonary embolism	Diagnosis	ICD-9-CM
416.8	Other chronic pulmonary heart diseases	Diagnosis	ICD-9-CM
416.9	Unspecified chronic pulmonary heart disease	Diagnosis	ICD-9-CM
745.4	Ventricular septal defect	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
Renal disorder			
585	Chronic kidney disease (CKD)	Diagnosis	ICD-9-CM
585.1	Chronic kidney disease, Stage I	Diagnosis	ICD-9-CM
585.2	Chronic kidney disease, Stage II (mild)	Diagnosis	ICD-9-CM
585.3	Chronic kidney disease, Stage III (moderate)	Diagnosis	ICD-9-CM
585.4	Chronic kidney disease, Stage IV (severe)	Diagnosis	ICD-9-CM
585.5	Chronic kidney disease, Stage V	Diagnosis	ICD-9-CM
585.6	End stage renal disease	Diagnosis	ICD-9-CM
585.9	Chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
Rheumatic heart disease			
393	Chronic rheumatic pericarditis	Diagnosis	ICD-9-CM
394	Diseases of mitral valve	Diagnosis	ICD-9-CM
394.0	Mitral stenosis	Diagnosis	ICD-9-CM
394.1	Rheumatic mitral insufficiency	Diagnosis	ICD-9-CM
394.2	Mitral stenosis with insufficiency	Diagnosis	ICD-9-CM
394.9	Other and unspecified mitral valve diseases	Diagnosis	ICD-9-CM
395	Diseases of aortic valve	Diagnosis	ICD-9-CM
395.0	Rheumatic aortic stenosis	Diagnosis	ICD-9-CM
395.1	Rheumatic aortic insufficiency	Diagnosis	ICD-9-CM
395.2	Rheumatic aortic stenosis with insufficiency	Diagnosis	ICD-9-CM
395.9	Other and unspecified rheumatic aortic diseases	Diagnosis	ICD-9-CM
396	Diseases of mitral and aortic valves	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
396.0	Mitral valve stenosis and aortic valve stenosis	Diagnosis	ICD-9-CM
396.1	Mitral valve stenosis and aortic valve insufficiency	Diagnosis	ICD-9-CM
396.2	Mitral valve insufficiency and aortic valve stenosis	Diagnosis	ICD-9-CM
396.3	Mitral valve insufficiency and aortic valve insufficiency	Diagnosis	ICD-9-CM
396.8	Multiple involvement of mitral and aortic valves	Diagnosis	ICD-9-CM
396.9	Unspecified mitral and aortic valve diseases	Diagnosis	ICD-9-CM
397	Diseases of other endocardial structures	Diagnosis	ICD-9-CM
397.0	Diseases of tricuspid valve	Diagnosis	ICD-9-CM
397.1	Rheumatic diseases of pulmonary valve	Diagnosis	ICD-9-CM
397.9	Rheumatic diseases of endocardium, valve unspecified	Diagnosis	ICD-9-CM
398	Other rheumatic heart disease	Diagnosis	ICD-9-CM
398.0	Rheumatic myocarditis	Diagnosis	ICD-9-CM
398.9	Other and unspecified rheumatic heart diseases	Diagnosis	ICD-9-CM
398.90	Unspecified rheumatic heart disease	Diagnosis	ICD-9-CM
398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
398.99	Other and unspecified rheumatic heart diseases	Diagnosis	ICD-9-CM
I05.0	Rheumatic mitral stenosis	Diagnosis	ICD-10-CM
I05.1	Rheumatic mitral insufficiency	Diagnosis	ICD-10-CM
I05.2	Rheumatic mitral stenosis with insufficiency	Diagnosis	ICD-10-CM
I05.8	Other rheumatic mitral valve diseases	Diagnosis	ICD-10-CM
I05.9	Rheumatic mitral valve disease, unspecified	Diagnosis	ICD-10-CM
I06.0	Rheumatic aortic stenosis	Diagnosis	ICD-10-CM
I06.1	Rheumatic aortic insufficiency	Diagnosis	ICD-10-CM
I06.2	Rheumatic aortic stenosis with insufficiency	Diagnosis	ICD-10-CM
I06.8	Other rheumatic aortic valve diseases	Diagnosis	ICD-10-CM
I06.9	Rheumatic aortic valve disease, unspecified	Diagnosis	ICD-10-CM
I07.0	Rheumatic tricuspid stenosis	Diagnosis	ICD-10-CM
I07.1	Rheumatic tricuspid insufficiency	Diagnosis	ICD-10-CM
I07.2	Rheumatic tricuspid stenosis and insufficiency	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I07.8	Other rheumatic tricuspid valve diseases	Diagnosis	ICD-10-CM
I07.9	Rheumatic tricuspid valve disease, unspecified	Diagnosis	ICD-10-CM
I08.0	Rheumatic disorders of both mitral and aortic valves	Diagnosis	ICD-10-CM
I08.1	Rheumatic disorders of both mitral and tricuspid valves	Diagnosis	ICD-10-CM
I08.2	Rheumatic disorders of both aortic and tricuspid valves	Diagnosis	ICD-10-CM
I08.3	Combined rheumatic disorders of mitral, aortic and tricuspid valves	Diagnosis	ICD-10-CM
I08.8	Other rheumatic multiple valve diseases	Diagnosis	ICD-10-CM
I08.9	Rheumatic multiple valve disease, unspecified	Diagnosis	ICD-10-CM
I09.0	Rheumatic myocarditis	Diagnosis	ICD-10-CM
I09.1	Rheumatic diseases of endocardium, valve unspecified	Diagnosis	ICD-10-CM
I09.2	Chronic rheumatic pericarditis	Diagnosis	ICD-10-CM
I09.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
I09.89	Other specified rheumatic heart diseases	Diagnosis	ICD-10-CM
I09.9	Rheumatic heart disease, unspecified	Diagnosis	ICD-10-CM
Sleep apnea			
327.2	Organic sleep apnea	Diagnosis	ICD-9-CM
327.20	Organic sleep apnea, unspecified	Diagnosis	ICD-9-CM
327.21	Primary central sleep apnea	Diagnosis	ICD-9-CM
327.22	High altitude periodic breathing	Diagnosis	ICD-9-CM
327.23	Obstructive sleep apnea (adult) (pediatric)	Diagnosis	ICD-9-CM
327.24	Idiopathic sleep related nonobstructive alveolar hypoventilation	Diagnosis	ICD-9-CM
327.25	Congenital central alveolar hypoventilation syndrome	Diagnosis	ICD-9-CM
327.26	Sleep related hypoventilation/hypoxemia in conditions classifiable elsewhere	Diagnosis	ICD-9-CM
327.27	Central sleep apnea in conditions classified elsewhere	Diagnosis	ICD-9-CM
327.29	Other organic sleep apnea	Diagnosis	ICD-9-CM
780.51	Insomnia with sleep apnea, unspecified	Diagnosis	ICD-9-CM
780.53	Hypersomnia with sleep apnea, unspecified	Diagnosis	ICD-9-CM
780.57	Unspecified sleep apnea	Diagnosis	ICD-9-CM
G47.30	Sleep apnea, unspecified	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
G47.31	Primary central sleep apnea	Diagnosis	ICD-10-CM
G47.32	High altitude periodic breathing	Diagnosis	ICD-10-CM
G47.33	Obstructive sleep apnea (adult) (pediatric)	Diagnosis	ICD-10-CM
G47.34	Idiopathic sleep related nonobstructive alveolar hypoventilation	Diagnosis	ICD-10-CM
G47.35	Congenital central alveolar hypoventilation syndrome	Diagnosis	ICD-10-CM
G47.36	Sleep related hypoventilation in conditions classified elsewhere	Diagnosis	ICD-10-CM
G47.37	Central sleep apnea in conditions classified elsewhere	Diagnosis	ICD-10-CM
G47.39	Other sleep apnea	Diagnosis	ICD-10-CM
Smoking			
305.1	Nondependent tobacco use disorder	Diagnosis	ICD-9-CM
649.0	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium	Diagnosis	ICD-9-CM
649.00	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care or not applicable	Diagnosis	ICD-9-CM
649.01	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum	Diagnosis	ICD-9-CM
649.02	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	Diagnosis	ICD-9-CM
649.03	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication	Diagnosis	ICD-9-CM
649.04	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication	Diagnosis	ICD-9-CM
989.84	Toxic effect of tobacco	Diagnosis	ICD-9-CM
F17.200	Nicotine dependence, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F17.201	Nicotine dependence, unspecified, in remission	Diagnosis	ICD-10-CM
F17.210	Nicotine dependence, cigarettes, uncomplicated	Diagnosis	ICD-10-CM
F17.211	Nicotine dependence, cigarettes, in remission	Diagnosis	ICD-10-CM
F17.290	Nicotine dependence, other tobacco product, uncomplicated	Diagnosis	ICD-10-CM
F17.291	Nicotine dependence, other tobacco product, in remission	Diagnosis	ICD-10-CM
O99.330	Smoking (tobacco) complicating pregnancy, unspecified trimester	Diagnosis	ICD-10-CM
O99.331	Smoking (tobacco) complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O99.332	Smoking (tobacco) complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O99.333	Smoking (tobacco) complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O99.334	Smoking (tobacco) complicating childbirth	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
O99.335	Smoking (tobacco) complicating the puerperium	Diagnosis	ICD-10-CM
T65.221A	Toxic effect of tobacco cigarettes, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.222A	Toxic effect of tobacco cigarettes, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.223A	Toxic effect of tobacco cigarettes, assault, initial encounter	Diagnosis	ICD-10-CM
T65.224A	Toxic effect of tobacco cigarettes, undetermined, initial encounter	Diagnosis	ICD-10-CM
T65.291A	Toxic effect of other tobacco and nicotine, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.292A	Toxic effect of other tobacco and nicotine, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.293A	Toxic effect of other tobacco and nicotine, assault, initial encounter	Diagnosis	ICD-10-CM
T65.294A	Toxic effect of other tobacco and nicotine, undetermined, initial encounter	Diagnosis	ICD-10-CM
1034F	Current tobacco smoker (CAD, CAP, COPD, PV) (DM)	Procedure	CPT II
4001F	Tobacco use cessation intervention, pharmacologic therapy (COPD, CAD, CAP, PV, Asthma) (DM) (PV)	Procedure	CPT II
G9276	Documentation that patient is a current tobacco user	Procedure	HCPCS
G9458	Patient documented as tobacco user and received tobacco cessation intervention (must include at least one of the following: advice given to quit smoking or tobacco use, counseling on the benefits of quitting smoking or tobacco use, assistance with or referral to external smoking or tobacco cessation support programs, or current enrollment in smoking or tobacco use cessation program) if identified as a tobacco user	Procedure	HCPCS
F17.203	Nicotine dependence unspecified, with withdrawal	Diagnosis	ICD-10-CM
F17.208	Nicotine dependence unspecified, with other nicotine induced disorders	Diagnosis	ICD-10-CM
F17.209	Nicotine dependence unspecified, unspecified nicotine induced disorders	Diagnosis	ICD-10-CM
F17.213	Nicotine dependence, cigarettes, with withdrawal	Diagnosis	ICD-10-CM
F17.218	Nicotine dependence, cigarettes, with other nicotine induced disorders	Diagnosis	ICD-10-CM
F17.219	Nicotine dependence, cigarettes, with unspecified nicotine induced disorders	Diagnosis	ICD-10-CM
F17.291	Nicotine dependence, other tobacco product, in remission	Diagnosis	ICD-10-CM
F17.293	Nicotine dependence, other tobacco product, with withdrawal	Diagnosis	ICD-10-CM
F17.298	Nicotine dependence, other tobacco product, with other nicotine induced disorders	Diagnosis	ICD-10-CM
F17.299	Nicotine dependence, other tobacco product, with unspecified nicotine induced disorders	Diagnosis	ICD-10-CM
Z72.0	Tobacco use	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
Stable angina			
413	Angina pectoris	Diagnosis	ICD-9-CM
413.0	Angina decubitus	Diagnosis	ICD-9-CM
413.1	Prinzmetal angina	Diagnosis	ICD-9-CM
413.9	Other and unspecified angina pectoris	Diagnosis	ICD-9-CM
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I20.9	Angina pectoris, unspecified	Diagnosis	ICD-10-CM
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
Unstable angina			
411.1	Intermediate coronary syndrome	Diagnosis	ICD-9-CM
413	Angina pectoris	Diagnosis	ICD-9-CM
413.0	Angina decubitus	Diagnosis	ICD-9-CM
413.1	Prinzmetal angina	Diagnosis	ICD-9-CM
413.9	Other and unspecified angina pectoris	Diagnosis	ICD-9-CM
I20.0	Unstable angina	Diagnosis	ICD-10-CM
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I20.9	Angina pectoris, unspecified	Diagnosis	ICD-10-CM
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
Valve disorders			
394	Diseases of mitral valve	Diagnosis	ICD-9-CM
394.0	Mitral stenosis	Diagnosis	ICD-9-CM
394.1	Rheumatic mitral insufficiency	Diagnosis	ICD-9-CM
394.2	Mitral stenosis with insufficiency	Diagnosis	ICD-9-CM
394.9	Other and unspecified mitral valve diseases	Diagnosis	ICD-9-CM
395	Diseases of aortic valve	Diagnosis	ICD-9-CM
395.0	Rheumatic aortic stenosis	Diagnosis	ICD-9-CM
395.1	Rheumatic aortic insufficiency	Diagnosis	ICD-9-CM
395.2	Rheumatic aortic stenosis with insufficiency	Diagnosis	ICD-9-CM
395.9	Other and unspecified rheumatic aortic diseases	Diagnosis	ICD-9-CM
396	Diseases of mitral and aortic valves	Diagnosis	ICD-9-CM
396.0	Mitral valve stenosis and aortic valve stenosis	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
396.1	Mitral valve stenosis and aortic valve insufficiency	Diagnosis	ICD-9-CM
396.2	Mitral valve insufficiency and aortic valve stenosis	Diagnosis	ICD-9-CM
396.3	Mitral valve insufficiency and aortic valve insufficiency	Diagnosis	ICD-9-CM
396.8	Multiple involvement of mitral and aortic valves	Diagnosis	ICD-9-CM
396.9	Unspecified mitral and aortic valve diseases	Diagnosis	ICD-9-CM
397	Diseases of other endocardial structures	Diagnosis	ICD-9-CM
397.0	Diseases of tricuspid valve	Diagnosis	ICD-9-CM
397.1	Rheumatic diseases of pulmonary valve	Diagnosis	ICD-9-CM
397.9	Rheumatic diseases of endocardium, valve unspecified	Diagnosis	ICD-9-CM
398.9	Other and unspecified rheumatic heart diseases	Diagnosis	ICD-9-CM
398.90	Unspecified rheumatic heart disease	Diagnosis	ICD-9-CM
398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
398.99	Other and unspecified rheumatic heart diseases	Diagnosis	ICD-9-CM
V42.2	Heart valve replaced by transplant	Diagnosis	ICD-9-CM
V43.3	Heart valve replaced by other means	Diagnosis	ICD-9-CM
I05.0	Rheumatic mitral stenosis	Diagnosis	ICD-10-CM
I05.1	Rheumatic mitral insufficiency	Diagnosis	ICD-10-CM
I05.2	Rheumatic mitral stenosis with insufficiency	Diagnosis	ICD-10-CM
I05.8	Other rheumatic mitral valve diseases	Diagnosis	ICD-10-CM
I05.9	Rheumatic mitral valve disease, unspecified	Diagnosis	ICD-10-CM
I06.0	Rheumatic aortic stenosis	Diagnosis	ICD-10-CM
I06.1	Rheumatic aortic insufficiency	Diagnosis	ICD-10-CM
I06.2	Rheumatic aortic stenosis with insufficiency	Diagnosis	ICD-10-CM
I06.8	Other rheumatic aortic valve diseases	Diagnosis	ICD-10-CM
I06.9	Rheumatic aortic valve disease, unspecified	Diagnosis	ICD-10-CM
I07.0	Rheumatic tricuspid stenosis	Diagnosis	ICD-10-CM
I07.1	Rheumatic tricuspid insufficiency	Diagnosis	ICD-10-CM
I07.2	Rheumatic tricuspid stenosis and insufficiency	Diagnosis	ICD-10-CM
I07.8	Other rheumatic tricuspid valve diseases	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I07.9	Rheumatic tricuspid valve disease, unspecified	Diagnosis	ICD-10-CM
I08.0	Rheumatic disorders of both mitral and aortic valves	Diagnosis	ICD-10-CM
I08.1	Rheumatic disorders of both mitral and tricuspid valves	Diagnosis	ICD-10-CM
I08.2	Rheumatic disorders of both aortic and tricuspid valves	Diagnosis	ICD-10-CM
I08.3	Combined rheumatic disorders of mitral, aortic and tricuspid valves	Diagnosis	ICD-10-CM
I08.8	Other rheumatic multiple valve diseases	Diagnosis	ICD-10-CM
I08.9	Rheumatic multiple valve disease, unspecified	Diagnosis	ICD-10-CM
I09.1	Rheumatic diseases of endocardium, valve unspecified	Diagnosis	ICD-10-CM
I09.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
I09.89	Other specified rheumatic heart diseases	Diagnosis	ICD-10-CM
I09.9	Rheumatic heart disease, unspecified	Diagnosis	ICD-10-CM
Z95.2	Presence of prosthetic heart valve	Diagnosis	ICD-10-CM
Z95.3	Presence of xenogenic heart valve	Diagnosis	ICD-10-CM
Z95.4	Presence of other heart-valve replacement	Diagnosis	ICD-10-CM
35.1	Open heart valvuloplasty without replacement	Procedure	ICD-9-CM
35.10	Open heart valvuloplasty without replacement, unspecified valve	Procedure	ICD-9-CM
35.11	Open heart valvuloplasty of aortic valve without replacement	Procedure	ICD-9-CM
35.12	Open heart valvuloplasty of mitral valve without replacement	Procedure	ICD-9-CM
35.13	Open heart valvuloplasty of pulmonary valve without replacement	Procedure	ICD-9-CM
35.14	Open heart valvuloplasty of tricuspid valve without replacement	Procedure	ICD-9-CM
35.2	Open and other replacement of heart valve	Procedure	ICD-9-CM
35.20	Open and other replacement of unspecified heart valve	Procedure	ICD-9-CM
35.21	Open and other replacement of aortic valve with tissue graft	Procedure	ICD-9-CM
35.22	Open and other replacement of aortic valve	Procedure	ICD-9-CM
35.23	Open and other replacement of mitral valve with tissue graft	Procedure	ICD-9-CM
35.24	Open and other replacement of mitral valve	Procedure	ICD-9-CM
35.25	Open and other replacement of pulmonary valve with tissue graft	Procedure	ICD-9-CM
35.26	Open and other replacement of pulmonary valve	Procedure	ICD-9-CM
35.27	Open and other replacement of tricuspid valve with tissue graft	Procedure	ICD-9-CM

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Code	Description	Code Category	Code Type
35.28	Open and other replacement of tricuspid valve	Procedure	ICD-9-CM
027F04Z	Dilation of Aortic Valve with Drug-eluting Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
027F0DZ	Dilation of Aortic Valve with Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
027F0ZZ	Dilation of Aortic Valve, Open Approach	Procedure	ICD-10-PCS
027G04Z	Dilation of Mitral Valve with Drug-eluting Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
027G0DZ	Dilation of Mitral Valve with Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
027G0ZZ	Dilation of Mitral Valve, Open Approach	Procedure	ICD-10-PCS
027H04Z	Dilation of Pulmonary Valve with Drug-eluting Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
027H0DZ	Dilation of Pulmonary Valve with Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
027H0ZZ	Dilation of Pulmonary Valve, Open Approach	Procedure	ICD-10-PCS
027J04Z	Dilation of Tricuspid Valve with Drug-eluting Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
027J0DZ	Dilation of Tricuspid Valve with Intraluminal Device, Open Approach	Procedure	ICD-10-PCS
027J0ZZ	Dilation of Tricuspid Valve, Open Approach	Procedure	ICD-10-PCS
02NF0ZZ	Release Aortic Valve, Open Approach	Procedure	ICD-10-PCS
02NG0ZZ	Release Mitral Valve, Open Approach	Procedure	ICD-10-PCS
02NH0ZZ	Release Pulmonary Valve, Open Approach	Procedure	ICD-10-PCS
02NJ0ZZ	Release Tricuspid Valve, Open Approach	Procedure	ICD-10-PCS
02QF0ZZ	Repair Aortic Valve, Open Approach	Procedure	ICD-10-PCS
02QG0ZZ	Repair Mitral Valve, Open Approach	Procedure	ICD-10-PCS
02QH0ZZ	Repair Pulmonary Valve, Open Approach	Procedure	ICD-10-PCS
02QJ0ZZ	Repair Tricuspid Valve, Open Approach	Procedure	ICD-10-PCS
02RF07Z	Replacement of Aortic Valve with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02RF08Z	Replacement of Aortic Valve with Zooplasic Tissue, Open Approach	Procedure	ICD-10-PCS
02RF0JZ	Replacement of Aortic Valve with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02RF0KZ	Replacement of Aortic Valve with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02RF47Z	Replacement of Aortic Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RF48Z	Replacement of Aortic Valve with Zooplasic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RF4JZ	Replacement of Aortic Valve with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RF4KZ	Replacement of Aortic Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02RG07Z	Replacement of Mitral Valve with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02RG08Z	Replacement of Mitral Valve with Zooplasic Tissue, Open Approach	Procedure	ICD-10-PCS
02RG0JZ	Replacement of Mitral Valve with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02RG0KZ	Replacement of Mitral Valve with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02RG37Z	Replacement of Mitral Valve with Autologous Tissue Substitute, Percutaneous Approach	Procedure	ICD-10-PCS
02RG38Z	Replacement of Mitral Valve with Zooplasic Tissue, Percutaneous Approach	Procedure	ICD-10-PCS
02RG3JZ	Replacement of Mitral Valve with Synthetic Substitute, Percutaneous Approach	Procedure	ICD-10-PCS
02RG3KZ	Replacement of Mitral Valve with Nonautologous Tissue Substitute, Percutaneous Approach	Procedure	ICD-10-PCS
02RG47Z	Replacement of Mitral Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RG48Z	Replacement of Mitral Valve with Zooplasic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RG4JZ	Replacement of Mitral Valve with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RG4KZ	Replacement of Mitral Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RH07Z	Replacement of Pulmonary Valve with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02RH08Z	Replacement of Pulmonary Valve with Zooplasic Tissue, Open Approach	Procedure	ICD-10-PCS
02RH0JZ	Replacement of Pulmonary Valve with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02RH0KZ	Replacement of Pulmonary Valve with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02RH47Z	Replacement of Pulmonary Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RH48Z	Replacement of Pulmonary Valve with Zooplasic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RH4JZ	Replacement of Pulmonary Valve with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RH4KZ	Replacement of Pulmonary Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RJ07Z	Replacement of Tricuspid Valve with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02RJ08Z	Replacement of Tricuspid Valve with Zooplasic Tissue, Open Approach	Procedure	ICD-10-PCS
02RJ0JZ	Replacement of Tricuspid Valve with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
02RJ0KZ	Replacement of Tricuspid Valve with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
02RJ37Z	Replacement of Tricuspid Valve with Autologous Tissue Substitute, Percutaneous Approach	Procedure	ICD-10-PCS
02RJ38Z	Replacement of Tricuspid Valve with Zooplasic Tissue, Percutaneous Approach	Procedure	ICD-10-PCS
02RJ3JZ	Replacement of Tricuspid Valve with Synthetic Substitute, Percutaneous Approach	Procedure	ICD-10-PCS
02RJ3KZ	Replacement of Tricuspid Valve with Nonautologous Tissue Substitute, Percutaneous Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02RJ47Z	Replacement of Tricuspid Valve with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RJ48Z	Replacement of Tricuspid Valve with Zooplasic Tissue, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RJ4JZ	Replacement of Tricuspid Valve with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02RJ4KZ	Replacement of Tricuspid Valve with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02VG0ZZ	Restriction of Mitral Valve, Open Approach	Procedure	ICD-10-PCS
X2RF03Z	Replacement of Aortic Valve using Zooplasic Tissue, Rapid Deployment Technique, Open Approach, New Technology Group 2	Procedure	ICD-10-PCS
X2RF43Z	Replacement of Aortic Valve using Zooplasic Tissue, Rapid Deployment Technique, Percutaneous Endoscopic Approach, New Technology Group 2	Procedure	ICD-10-PCS
33496	Repair of non-structural prosthetic valve dysfunction with cardiopulmonary bypass (separate procedure)	Procedure	CPT-4
0262T	Implantation of catheter-delivered prosthetic pulmonary valve, endovascular approach	Procedure	CPT III
33400	Valvuloplasty, aortic valve; open, with cardiopulmonary bypass	Procedure	CPT-4
33420	Valvotomy, mitral valve; closed heart	Procedure	CPT-4
0258T	Transthoracic cardiac exposure (eg, sternotomy, thoracotomy, subxiphoid) for catheter-delivered aortic valve replacement; without cardiopulmonary bypass	Procedure	CPT III
33468	Tricuspid valve repositioning and plication for Ebstein anomaly	Procedure	CPT-4
33665	Repair of intermediate or transitional atrioventricular canal, with or without atrioventricular valve repair	Procedure	CPT-4
33425	Valvuloplasty, mitral valve, with cardiopulmonary bypass;	Procedure	CPT-4
33463	Valvuloplasty, tricuspid valve; without ring insertion	Procedure	CPT-4
33422	Valvotomy, mitral valve; open heart, with cardiopulmonary bypass	Procedure	CPT-4
0259T	Transthoracic cardiac exposure (eg, sternotomy, thoracotomy, subxiphoid) for catheter-delivered aortic valve replacement; with cardiopulmonary bypass	Procedure	CPT III
33403	Valvuloplasty, aortic valve; using transventricular dilation, with cardiopulmonary bypass	Procedure	CPT-4
3342F	Mammogram assessment category of "benign," documented (RAD)	Procedure	CPT II
33660	Repair of incomplete or partial atrioventricular canal (ostium primum atrial septal defect), with or without atrioventricular valve repair	Procedure	CPT-4
33430	Replacement, mitral valve, with cardiopulmonary bypass	Procedure	CPT-4
33465	Replacement, tricuspid valve, with cardiopulmonary bypass	Procedure	CPT-4
33426	Valvuloplasty, mitral valve, with cardiopulmonary bypass; with prosthetic ring	Procedure	CPT-4
33475	Replacement, pulmonary valve	Procedure	CPT-4
33401	Valvuloplasty, aortic valve; open, with inflow occlusion	Procedure	CPT-4

Appendix F. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
33427	Valvuloplasty, mitral valve, with cardiopulmonary bypass; radical reconstruction, with or without ring	Procedure	CPT-4
33460	Valvectomy, tricuspid valve, with cardiopulmonary bypass	Procedure	CPT-4
0257T	Implantation of catheter-delivered prosthetic aortic heart valve; open thoracic approach (eg, transapical, transventricular)	Procedure	CPT III
33464	Valvuloplasty, tricuspid valve; with ring insertion	Procedure	CPT-4

Appendix G. Specifications Defining Parameters for this Request

The Center for Drug Evaluation and Research requested execution of the Cohort Identification and Descriptive Analysis (CIDA) module version 9.0.1 with ad hoc programming to examine the number of individuals with reduced ejection fraction heart failure (HFrEF) or preserved ejection fraction heart failure (HFpEF) in the Sentinel Distributed Database (SDD) and to describe the utilization of spironolactone among these individuals.

Query period for identifying heart failure cohorts: ICD-9-CM only: July 1, 2010 - September 1, 2015
 ICD-10-CM only: April 1, 2016 - September 30, 2018
 Overall: July 1, 2010 - September 30, 2018

Coverage requirement: Medical and Drug Coverage

Pre-index enrollment requirement: 183 days

Post-index enrollment requirement: 0 days

Enrollment gap: 45 days

Age groups: <18, 18-44, 45-64, 65+ years

Sex: Male and Female

Stratifications: Calendar year, Sex, Age group, Calendar year*Month

Tensor output categorization: <1 month, 1-<3 months, 3-<6 months, 6 months-<1 year, 1-<2 years, 2-<3 years, 3-<5 years, 5+ years

Envelope macro: Reclassify encounters during inpatient stay as inpatient (default)

Index Defining Event

Scenario	Index Event	Cohort definition	Incident index event washout period	Incident with respect to:	Exclude evidence of days supply if exposure washout includes dispensings	Index episode length, applied as the very last CIDA order of operation	Care setting	Principal diagnosis position	Tensor index episode at evidence of:
1	Reduced Ejection Fraction Heart Failure (HFrEF); rEF Combo 1-2; see Appendix C	Only first valid index episode during query period	0 days	N/A	N/A	3,650 days	N/A	N/A	Death; Disenrollment; DP end date; Event outcome occurrence of spironolactone dispensing
2	Reduced Ejection Fraction Heart Failure (HFrEF); rEF Combo 1-2; see Appendix C	Only first valid index episode during query period	183 days	Spironolactone	Search for evidence of days supply	3,650 days	N/A	N/A	Death; Disenrollment; DP end date; Event outcome occurrence of spironolactone dispensing

Appendix G. Specifications Defining Parameters for this Request

The Center for Drug Evaluation and Research requested execution of the Cohort Identification and Descriptive Analysis (CIDA) module version 9.0.1 with ad hoc programming to examine the number of individuals with reduced ejection fraction heart failure (HFrEF) or preserved ejection fraction heart failure (HFpEF) in the Sentinel Distributed Database (SDD) and to describe the utilization of spironolactone among these individuals.

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Envelope macro: Reclassify encounters during inpatient stay as inpatient (default)

Index Defining Event

Scenario	Index Event	Cohort definition	Incident index event washout period	Incident with respect to:	Exclude evidence of days supply if exposure washout includes dispensings	Index episode length, applied as the very last CIDA order of operation	Care setting	Principal diagnosis position	Tensor index episode at evidence of:
3	Preserved Ejection Fraction Heart Failure (HFpEF); pEF Combo 1-4; see Appendix C	Only first valid index episode during query period	0 days	N/A	N/A	3,650 days	N/A	N/A	Death; Disenrollment; DP end date; Event outcome occurrence of spironolactone dispensing
4	Preserved Ejection Fraction Heart Failure (HFpEF); pEF Combo 1-4; see Appendix C	Only first valid index episode during query period	183 days	Spironolactone	Search for evidence of days supply	3,650 days	N/A	N/A	Death; Disenrollment; DP end date; Event outcome occurrence of spironolactone dispensing

Appendix G. Specifications Defining Parameters for this Request

The Center for Drug Evaluation and Research requested execution of the Cohort Identification and Descriptive Analysis (CIDA) module version 9.0.1 with ad hoc programming to examine the number of individuals with reduced ejection fraction heart failure (HFrEF) or preserved ejection fraction heart failure (HFpEF) in the Sentinel Distributed Database (SDD) and to describe the utilization of spironolactone among these individuals.

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Sex: Male and Female

Stratifications: Calendar year, Sex, Age group, Calendar year*Month

Tensor output categorization: <1 month, 1-<3 months, 3-<6 months, 6 months-<1 year, 1-<2 years, 2-<3 years, 3-<5 years, 5+ years

Envelope macro: Reclassify encounters during inpatient stay as inpatient (default)

Index Defining Event

Scenario	Index Event	Cohort definition	Incident index event washout period	Incident with respect to:	Exclude evidence of days supply if exposure washout includes dispensings	Index episode length, applied as the very last CIDA order of operation	Care setting	Principal diagnosis position	Tensor index episode at evidence of:
5	Preserved Ejection Fraction Heart Failure (HFpEF); pEF Combo 1-4; see Appendix C	Only first valid index episode during query period	0 days	N/A	N/A	3,650 days	N/A	N/A	Death; Disenrollment; DP end date; Event outcome occurrence of spironolactone dispensing
6	Preserved Ejection Fraction Heart Failure (HFpEF); pEF Combo 1-4; see Appendix C	Only first valid index episode during query period	183 days	Spironolactone	Search for evidence of days supply	3,650 days	N/A	N/A	Death; Disenrollment; DP end date; Event outcome occurrence of spironolactone dispensing

ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360.

NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."

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Envelope macro: Reclassify encounters during inpatient stay as inpatient (default)

Scenario	Inclusion/Exclusion Criteria							Event Outcome			
	Inclusion/ Exclusion group	Criteria	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Number of instances the criteria should be found in evaluation period	Event	Incident event washout period	Gap length to bridge first continuous exposure episode	Code strength
1	Implantable cardioverter OR Cardiomyopathy OR Myocardial infarction	Inclusion	N/A	N/A	-183	-1	1	Spironolactone dispensing	N/A	30 days	25, 50, or 100 mg;
2	Implantable cardioverter OR Cardiomyopathy OR Myocardial infarction	Inclusion	N/A	N/A	-183	-1	1	Spironolactone dispensing	N/A	30 days	25, 50, or 100 mg;

Appendix G. Specifications Defining Parameters for this Request

The Center for Drug Evaluation and Research requested execution of the Cohort Identification and Descriptive Analysis (CIDA) module version 9.0.1 with ad hoc programming to examine the number of individuals with reduced ejection fraction heart failure (HFrEF) or preserved ejection fraction heart failure (HFpEF) in the Sentinel Distributed Database (SDD) and to describe the utilization of spironolactone among these individuals.

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Envelope macro: Reclassify encounters during inpatient stay as inpatient (default)

Scenario	Inclusion/Exclusion Criteria							Event Outcome			
	Inclusion/ Exclusion group	Criteria	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Number of instances the criteria should be found in evaluation period	Event	Incident event washout period	Gap length to bridge first continuous exposure episode	Code strength
3	Implantable cardioverter OR Cardiomyopathy	Exclusion	N/A	N/A	-183	-1	1	Spironolactone dispensing	N/A	30 days	25, 50, or 100 mg;
4	Implantable cardioverter OR Cardiomyopathy	Exclusion	N/A	N/A	-183	-1	1	Spironolactone dispensing	N/A	30 days	25, 50, or 100 mg;

Appendix G. Specifications Defining Parameters for this Request

The Center for Drug Evaluation and Research requested execution of the Cohort Identification and Descriptive Analysis (CIDA) module version 9.0.1 with ad hoc programming to examine the number of individuals with reduced ejection fraction heart failure (HFrEF) or preserved ejection fraction heart failure (HFpEF) in the Sentinel Distributed Database (SDD) and to describe the utilization of spironolactone among these individuals.

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Sex: Male and Female

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Censor output categorization: <1 month, 1-<3 months, 3-<6 months, 6 months-<1 year, 1-<2 years, 2-<3 years, 3-<5 years, 5+ years

Envelope macro: Reclassify encounters during inpatient stay as inpatient (default)

Scenario	Inclusion/Exclusion Criteria							Event Outcome			
	Inclusion/ Exclusion group	Criteria	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Number of instances the criteria should be found in evaluation period	Event	Incident event washout period	Gap length to bridge first continuous exposure episode	Code strength
5	Implantable cardioverter OR Cardiomyopathy OR Myocardial infarction	Exclusion	N/A	N/A	-183	-1	1	Spironolactone dispensing	N/A	30 days	25, 50, or 100 mg;
6	Implantable cardioverter OR Cardiomyopathy OR Myocardial infarction	Exclusion	N/A	N/A	-183	-1	1	Spironolactone dispensing	N/A	30 days	25, 50, or 100 mg;

ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360.

NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."

Appendix H. Specifications Defining Baseline Characteristics Parameters in this Request

Baseline Characteristics							
Category	Baseline Characteristic	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Exclude evidence of days supply if characteristic includes dispensings	Number of instances the covariate should be found in evaluation period
Heart failure recorded on index date	Diastolic heart failure	N/A	N/A	0	0	N/A	1
Heart failure recorded on index date	Left heart failure	N/A	N/A	0	0	N/A	1
Heart failure recorded on index date	Systolic heart failure	N/A	N/A	0	0	N/A	1
Heart failure recorded on index date	Unspecified heart failure	N/A	N/A	0	0	N/A	1
Heart failure-related medication use	Angiotensin converting enzyme inhibitors	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Angiotensin II receptor blockers	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Antiarrhythmics	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Beta blockers	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Digoxin	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Hydralazine	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Loop diuretics	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Mineralocorticoid receptor antagonists (eplerenone)	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Nitrates	N/A	N/A	-183	-1	Search for evidence of days supply	1

Appendix H. Specifications Defining Baseline Characteristics Parameters in this Request

Baseline Characteristics							
Category	Baseline Characteristic	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Exclude evidence of days supply if characteristic includes dispensings	Number of instances the covariate should be found in evaluation period
Heart failure-related medication use	Potassium-sparing diuretics	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related medication use	Thiazide diuretics	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related comorbidities	Anemia	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Atrial fibrillation or flutter	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Cardiomyopathy	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Chronic obstructive pulmonary disease	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Coronary artery bypass graft	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Depression	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Diabetes mellitus	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Endocarditis	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Heart transplant	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Human immunodeficiency virus	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Hyperkalemia	N/A	N/A	-183	-1	N/A	1

Appendix H. Specifications Defining Baseline Characteristics Parameters in this Request

Baseline Characteristics							
Category	Baseline Characteristic	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Exclude evidence of days supply if characteristic includes dispensings	Number of instances the covariate should be found in evaluation period
Heart failure-related comorbidities	Hyperlipidemia	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Hypertension	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Hypertensive nephropathy	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Hypotension	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Implantable cardioverter defibrillator	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Ischemic stroke or transient ischemic attack	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Myocardial infarction	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Nephropathy	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Obesity	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related comorbidities	Other dysrhythmias	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Psychosis	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Pulmonary hypertension	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Renal disorder	N/A	N/A	-183	-1	N/A	1

Appendix H. Specifications Defining Baseline Characteristics Parameters in this Request

Baseline Characteristics							
Category	Baseline Characteristic	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Exclude evidence of days supply if characteristic includes dispensings	Number of instances the covariate should be found in evaluation period
Heart failure-related comorbidities	Rheumatic heart disease	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Sleep apnea	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Smoking	N/A	N/A	-183	-1	Search for evidence of days supply	1
Heart failure-related comorbidities	Stable angina	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Unstable angina	N/A	N/A	-183	-1	N/A	1
Heart failure-related comorbidities	Valve disorders	N/A	N/A	-183	-1	N/A	1

Appendix I. Diagram Detailing the Design of the Request

