

Disclaimer

The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

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.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

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_wp092_nsdv_v02

Request ID: cder_mpl1p_wp092_nsdv_v02

Request Description: In this report, we examined syphilis testing and treatment in the first 30 days of life in infants linked to pregnant women with a diagnosis of syphilis in the Sentinel Distributed Database (SDD).

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2, with custom programming.

Data Source: We distributed this request to four Sentinel Data Partners on August 1, 2024. These four Data Partners are a subset of the SDD and do not include patients with Medicare coverage. The study period included data from January 1, 2010 through December 31, 2023. Please see Appendix A for a list of dates of available data for each Data Partner.

Study Design: We identified infants linked to live birth deliveries occurring to females between the ages of 10 and 54 years of age who had evidence of syphilis diagnosis in pregnancy, using the Mother-Infant Linkage Table. This is a Type 4 analysis in the Query Request Package (QRP) documentation.

Pregnancy Episode Creation: We identified pregnancies ending in a live birth using a claims-based algorithm.¹ This algorithm used International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes indicative of weeks of gestation, and International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and ICD-10-CM diagnosis codes for pre-term and post-term deliveries, to calculate the length of the pregnancy episode. Codes had to occur within 7 days of a delivery date in the inpatient setting. In absence of pre-/post-term codes, pregnancy duration was set to 273 days for live births. Pregnancies were excluded from the cohort if there was evidence of a prior delivery in the 301 days before the delivery date of interest. Please see Appendix B for a list of Current Procedural Terminology, Fourth Edition (CPT-4) procedure codes and ICD-9-CM and ICD-10-CM codes used in the gestational age algorithm, and Appendix C for a list of ICD-9-CM and ICD-10-CM codes used to define live-birth pregnancies.

Exposure Identification During Pregnancy: We identified pregnancy episodes that had evidence of syphilis diagnosis, from last menstrual period (LMP) through pregnancy outcome.

Exposure/Event of Interest: Syphilis diagnoses were defined using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes. To be classified as a syphilis case, the pregnancy was required to have at least one diagnosis code for syphilis that did not occur on the same date as a procedure code for syphilis testing. In a secondary definition, the pregnancy was required to have at least two diagnosis codes for syphilis that did not occur on the same date as a procedure code for syphilis testing. Please see Appendix D for a list of diagnosis and procedure codes used to define syphilis testing and Appendix E for syphilis diagnosis codes.

Outcome of Interest: Among infants, we assessed the outcomes of interest, syphilis testing and treatment, using National Drug Codes (NDCs) and Healthcare Common Procedure Coding System (HCPCS) procedure codes. Treatment was defined as benzathine penicillin G or procaine penicillin G. See Appendix F and Appendix F.1 for a list of NDC and HCPCS codes used to define syphilis treatment.

Cohort Eligibility Criteria: We required pregnancies to be enrolled in health plans with medical and drug coverage from LMP through pregnancy outcome. We required that infants were enrolled within 7 days of birth and had continuous enrollment through 30 days after birth.

Baseline Characteristics: We assessed the following characteristics at the time of index: year, age, race, ethnicity. We assessed prenatal care visit in the first trimester and pregnancy-associated care in the first trimester from LMP date through 97 days post-LMP, by using ICD-9-CM, ICD-10-CM, and HCPCS codes. We assessed preterm birth from seven days before birth outcome to seven days after birth outcome. Syphilis treatment status was assessed from LMP to delivery in pregnancies using National Drug Codes (NDCs) and Healthcare Common Procedure Coding System (HCPCS) procedure codes. Standard treatment was defined as benzathine penicillin G. Alternative treatment was defined as other antibiotics sometimes given for syphilis, and required that a syphilis code occurred within 30 days prior to the antibiotic dispensing to count as an alternative treatment.

Overview for Request: cder_mpl1p_wp092_nsdv_v02

Limitations: Algorithms to define pregnancy, exposures, outcomes, inclusion and exclusion criteria, and characteristics are imperfect and may be misclassified. Therefore, data should be interpreted with this limitation in mind.

Notes: Please contact the Sentinel Operations Center (info@sentinel-system.org) for questions and to provide comments/suggestions for future enhancements to this document. For more information on Sentinel's routine querying modules, please refer to the documentation (<https://dev.sentinel-system.org/projects/SENTINEL/repos/sentinel-routine-querying-tool-documentation/browse>).

¹ Li, Q., et al., Validation of an algorithm to estimate gestational age in electronic health plan databases. *Pharmacoepidemiology Drug Saf*, 2013. 22(5): p. 524-32.

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 Supplied - 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"

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.

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

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

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

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Table 1a. Aggregated Characteristics of All Live Births from the Live Birth Delivery Cohort in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Cohort		
All Live Births from the Live Birth Delivery Cohort		
Mother Characteristics ^{2,3}	Number/Mean	Percent/ Standard Deviation ⁴
Unique patients	4,257,373	N/A
Episodes	4,995,666	100.0%
Infant Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Enrollment time after birth (days)	0.0	NaN
Difference between date of birth and date of enrollment (days)	0.0	NaN
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Age (years)	29.7	5.2
Age		
10-19 years	259,390	5.2%
20-29 years	2,274,757	45.5%
30-39 years	2,291,988	45.9%
40-54 years	169,531	3.4%
Sex		
Female	4,257,373	100.0%
Race ⁵		
American Indian or Alaska Native	50,890	1.2%
Asian	143,758	3.4%
Black or African American	530,121	12.5%
Multi-racial	43,252	1.0%
Native Hawaiian or Other Pacific Islander	15,917	0.4%
Unknown	2,135,898	50.2%
White	1,337,537	31.4%
Hispanic origin		
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Yes	527,507	12.4%
No	1,923,570	45.2%
Unknown	1,806,296	42.4%
Year		
2010	178,658	3.6%
2011	166,501	3.3%
2012	157,908	3.2%
2013	166,721	3.3%

Table 1a. Aggregated Characteristics of All Live Births from the Live Birth Delivery Cohort in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Cohort		
All Live Births from the Live Birth Delivery Cohort		
2014	196,420	3.9%
2015	273,214	5.5%
2016	418,670	8.4%
2017	614,422	12.3%
2018	649,460	13.0%
2019	626,324	12.5%
2020	637,468	12.8%
2021	606,120	12.1%
2022	183,617	3.7%
2023	120,163	2.4%
Pregnancy Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Preterm: less than 37 weeks	438,011	8.8%
Early term: 37 0/7 weeks through 38 6/7 weeks	1,363,487	27.3%
Full term: 39 0/7 weeks through 40 6/7 weeks	2,323,580	46.5%
Late term: 41 0/7 weeks through 41 6/7 weeks	795,798	15.9%
Postterm: 42 0/7 weeks and beyond	38,677	0.8%
Pregnancy Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Unknown Term	36,113	0.7%
Gestational age ⁶ at pregnancy outcome (weeks)	39.6	2.3

Table 1a. Aggregated Characteristics of All Live Births from the Live Birth Delivery Cohort in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Cohort		
All Live Births from the Live Birth Delivery Cohort		
Health Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Prenatal Care in First Trimester	4,507,316	90.2%
Treated with standard syphilis antibiotics	7,513	0.2%
Treated with non-standard syphilis antibiotics	N/A	N/A
Treated only with non-standard syphilis antibiotic	N/A	N/A
Treated with standard syphilis antibiotics ≤30	1,139	0.0%
Treated with standard syphilis antibiotics >30	6,725	0.1%
Preterm Birth	0	0.0%
Treated only with standard syph antibiotics ≤30	788	0.0%

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report.

²All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

³Characteristics in blue show a standardized difference greater than 0.1.

⁴Value represents standard deviation where no % follows the value.

⁵Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁶The length of the pregnancy episode was estimated using a hierarchy of pregnancy markers. If overlapping pregnancy episodes were constructed in the same patient due to observation of multiple pregnancy markers, then the markers providing more reliable estimation of pregnancy start was selected for estimation of pregnancy start date. If no pregnancy markers were observed, then a fixed pregnancy duration was assigned by pregnancy outcome type, as described in the overview section of this report.

Table 1b. Aggregated Characteristics of Infant Syphilis Testing among Pregnancies with One Syphilis Diagnosis Code Day in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Tested for Syphilis		
Mother Characteristics ^{2,3}	Number/Mean	Percent/ Standard Deviation ⁴
Unique patients	2,911	N/A
Infant Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Enrollment time after birth (days)	740.0	632.0
Difference between date of birth and date of enrollment (days)	-2.0	2.5
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Age (years)	28.2	5.6
Age		
10-19 years	252	8.6%
20-29 years	1,610	54.7%
30-39 years	983	33.4%
40-54 years	100	3.4%
Sex		
Female	2,911	100.0%
Race ⁵		
American Indian or Alaska Native	64	2.2%
Asian	62	2.1%
Black or African American	807	27.7%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	1,309	45.0%
White	634	21.8%
Hispanic origin		
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Yes	559	19.2%
No	1,540	52.9%
Unknown	812	27.9%
Year		
2010	47	1.6%
2011	34	1.2%
2012	45	1.5%
2013	65	2.2%
2014	70	2.4%

Table 1b. Aggregated Characteristics of Infant Syphilis Testing among Pregnancies with One Syphilis Diagnosis Code Day in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Tested for Syphilis		
2015	109	3.7%
2016	311	10.6%
2017	421	14.3%
2018	399	13.5%
2019	514	17.5%
2020	636	21.6%
2021	189	6.4%
2022	105	3.6%
2023	0	0.0%
Pregnancy Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Preterm: less than 37 weeks	357	12.1%
Early term: 37 0/7 weeks through 38 6/7 weeks	965	32.8%
Full term: 39 0/7 weeks through 40 6/7 weeks	1,264	42.9%
Late term: 41 0/7 weeks through 41 6/7 weeks	336	11.4%
Pregnancy Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Postterm: 42 0/7 weeks and beyond	11	0.4%
Unknown Term	12	0.4%
Gestational age ⁶ at pregnancy outcome (weeks)	39.2	2.3
Exposure Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Gestational age ⁶ of first exposure (weeks)	22.2	11.2
Mean number of dispensings in first trimester	0.7	1.3
Mean number of dispensings in second trimester	1.3	2.1
Mean number of dispensings in third trimester	2.0	2.7
Exposed during first trimester	1,007	34.2%
Exposed during second trimester	1,403	47.6%
Exposed during third trimester	1,988	67.5%
Exposed during user-defined pre-pregnancy period	0	0.0%
Health Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Prenatal Care in First Trimester	2,511	85.3%
Treated with standard syphilis antibiotics	1,025	34.8%
Treated with non-standard syphilis antibiotics	226	7.7%
Treated only with non-standard syphilis antibiotic	142	4.8%
Treated with standard syphilis antibiotics <=30	174	5.9%
Treated with standard syphilis antibiotics >30	928	31.5%

Table 1b. Aggregated Characteristics of Infant Syphilis Testing among Pregnancies with One Syphilis Diagnosis Code Day in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Tested for Syphilis		
Preterm Birth	0	0.0%
Treated only with standard syph antibiotics <=30	97	3.3%

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report. The pregnancy was required to have at least one diagnosis code for syphilis that did not occur on the same date as a procedure code for syphilis testing.

²Characteristics in blue show a standardized difference greater than 0.1.

³Baseline period in reference to user-defined index dates (start of first valid exposed pregnancy, exposure date, or pregnancy outcome date).

⁴Value represents standard deviation where no % follows the value.

⁵Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁶The length of the pregnancy episode was estimated using a hierarchy of pregnancy markers. If overlapping pregnancy episodes were constructed in the same patient due to observation of multiple pregnancy markers, then the markers providing more reliable estimation of pregnancy start was selected for estimation of pregnancy start date. If no pregnancy markers were observed, then a fixed pregnancy duration was assigned by pregnancy outcome type, as described in the overview section of this report.

*****Data are not presented in these cells due to a small sample size or to ensure a small cell cannot be recalculated through the cells presented.
NaN = Not a number.

Table 1c. Aggregated Characteristics of Infant Syphilis Treatment among Pregnancies with One Syphilis Diagnosis Code Day in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Treated for Syphilis		
Mother Characteristics ^{2,3}	Number/Mean	Percent/ Standard Deviation ⁴
Unique patients	2,911	
Infant Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Enrollment time after birth (days)	740.0	632.0
Difference between date of birth and date of enrollment (days)	-2.0	2.5
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Age (years)	28.2	5.6
Age		
10-19 years	252	8.6%
20-29 years	1,610	54.7%
30-39 years	983	33.4%
40-54 years	100	3.4%
Sex		
Female	2,911	100.0%
Race ⁵		
American Indian or Alaska Native	64	2.2%
Asian	62	2.1%
Black or African American	807	27.7%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	1,309	45.0%
White	634	21.8%
Hispanic origin		
Yes	559	19.2%
No	1,540	52.9%
Unknown	812	27.9%
Year		
2010	47	1.6%
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
2011	34	1.2%
2012	45	1.5%
2013	65	2.2%
2014	70	2.4%
2015	109	3.7%
2016	311	10.6%
2017	421	14.3%
2018	399	13.5%
2019	514	17.5%
2020	636	21.6%
2021	189	6.4%

Table 1c. Aggregated Characteristics of Infant Syphilis Treatment among Pregnancies with One Syphilis Diagnosis Code Day in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Treated for Syphilis		
2022	105	3.6%
2023	0	0.0%
Pregnancy Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Preterm: less than 37 weeks	357	12.1%
Early term: 37 0/7 weeks through 38 6/7 weeks	965	32.8%
Full term: 39 0/7 weeks through 40 6/7 weeks	1,264	42.9%
Late term: 41 0/7 weeks through 41 6/7 weeks	336	11.4%
Postterm: 42 0/7 weeks and beyond	11	0.4%
Unknown Term	12	0.4%
Gestational age ⁶ at pregnancy outcome (weeks)	39.2	2.3
Exposure Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Gestational age ⁶ of first exposure (weeks)	22.2	11.2
Mean number of dispensings in first trimester	0.7	1.3
Mean number of dispensings in second trimester	1.3	2.1
Mean number of dispensings in third trimester	2.0	2.7
Exposed during first trimester	1,007	34.2%
Exposed during second trimester	1,403	47.6%
Exposure Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Exposed during third trimester	1,988	67.5%
Exposed during user-defined pre-pregnancy period	0	0.0%

Table 1c. Aggregated Characteristics of Infant Syphilis Treatment among Pregnancies with One Syphilis Diagnosis Code Day in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Treated for Syphilis		
Health Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Prenatal Care in First Trimester	2,511	85.3%
Treated with standard syphilis antibiotics	1,025	34.8%
Treated with non-standard syphilis antibiotics	226	7.7%
Treated only with non-standard syphilis antibiotic	142	4.8%
Treated with standard syphilis antibiotics ≤30	174	5.9%
Treated with standard syphilis antibiotics >30	928	31.5%
Preterm Birth	0	0.0%
Treated only with standard syph antibiotics ≤30	97	3.3%

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report. The pregnancy was required to have at least one diagnosis code for syphilis that did not occur on the same date as a procedure code for syphilis testing.

²Characteristics in blue show a standardized difference greater than 0.1.

³Baseline period in reference to user-defined index dates (start of first valid exposed pregnancy, exposure date, or pregnancy outcome date).

⁴Value represents standard deviation where no % follows the value.

⁵Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁶The length of the pregnancy episode was estimated using a hierarchy of pregnancy markers. If overlapping pregnancy episodes were constructed in the same patient due to observation of multiple pregnancy markers, then the markers providing more reliable estimation of pregnancy start was selected for estimation of pregnancy start date. If no pregnancy markers were observed, then a fixed pregnancy duration was assigned by pregnancy outcome type, as described in the overview section of this report.

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NaN = Not a number.

Table 1d. Aggregated Characteristics of Infant Syphilis Testing among Pregnancies with Two Syphilis Diagnosis Code Days in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Tested for Syphilis		
Mother Characteristics ^{2,3}	Number/Mean	Percent/ Standard Deviation ⁴
Unique patients	1,667	N/A
Infant Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Enrollment time after birth (days)	729.3	590.2
Difference between date of birth and date of enrollment (days)	-2.3	2.6
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Age (years)	27.6	5.6
Age		
10-19 years	162	9.6%
20-29 years	976	58.0%
30-39 years	493	29.3%
40-54 years	51	3.0%
Sex		
Female	1,667	100.0%
Race ⁵		
American Indian or Alaska Native	47	2.8%
Asian	32	1.9%
Black or African American	528	31.7%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	699	41.9%
White	341	20.5%
Hispanic origin		
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Yes	373	22.4%
No	940	56.4%
Unknown	354	21.2%
Year		
2010	*****	*****
2011	*****	*****
2012	15	0.9%
2013	30	1.8%
2014	22	1.3%
2015	59	3.5%

Table 1d. Aggregated Characteristics of Infant Syphilis Testing among Pregnancies with Two Syphilis Diagnosis Code Days in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Tested for Syphilis		
2016	191	11.4%
2017	241	14.3%
2018	230	13.7%
2019	333	19.8%
2020	401	23.8%
2021	89	5.3%
2022	48	2.9%
2023	*****	*****
Pregnancy Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Preterm: less than 37 weeks	199	11.8%
Early term: 37 0/7 weeks through 38 6/7 weeks	529	31.5%
Full term: 39 0/7 weeks through 40 6/7 weeks	740	44.0%
Late term: 41 0/7 weeks through 41 6/7 weeks	201	12.0%
Pregnancy Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Postterm: 42 0/7 weeks and beyond	*****	*****
Unknown Term	*****	*****
Gestational age ⁶ at pregnancy outcome (weeks)	39.3	2.2
Exposure Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Gestational age ⁶ of first exposure (weeks)	20.0	9.9
Mean number of dispensings in first trimester	1.0	1.6
Mean number of dispensings in second trimester	2.0	2.4
Mean number of dispensings in third trimester	2.9	3.3
Exposed during first trimester	659	39.2%
Exposed during second trimester	1,054	62.7%
Exposed during third trimester	1,308	77.8%

Table 1d. Aggregated Characteristics of Infant Syphilis Testing among Pregnancies with Two Syphilis Diagnosis Code Days in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Tested for Syphilis		
Health Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Prenatal Care in First Trimester	1,388	82.5%
Treated with standard syphilis antibiotics	860	51.1%
Treated with non-standard syphilis antibiotics	148	8.8%
Treated only with non-standard syphilis antibiotic	73	4.3%
Treated with standard syphilis antibiotics <=30	143	8.5%
Treated with standard syphilis antibiotics >30	784	46.6%
Treated only with standard syph antibiotics <=30	76	4.5%

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report. The pregnancy was required to have at least two diagnosis codes for syphilis that did not occur on the same date as a procedure code for syphilis testing.

²Characteristics in blue show a standardized difference greater than 0.1.

³Baseline period in reference to user-defined index dates (start of first valid exposed pregnancy, exposure date, or pregnancy outcome date).

⁴Value represents standard deviation where no % follows the value.

⁵Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁶The length of the pregnancy episode was estimated using a hierarchy of pregnancy markers. If overlapping pregnancy episodes were constructed in the same patient due to observation of multiple pregnancy markers, then the markers providing more reliable estimation of pregnancy start was selected for estimation of pregnancy start date. If no pregnancy markers were observed, then a fixed pregnancy duration was assigned by pregnancy outcome type, as described in the overview section of this report.

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NaN = Not a number.

Table 1e. Aggregated Characteristics of Infant Syphilis Treatment among Pregnancies with Two Syphilis Diagnosis Code Days in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Treated for Syphilis		
Mother Characteristics ^{2,3}	Number/Mean	Percent/ Standard Deviation ⁴
Unique patients	1,667	N/A
Infant Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Enrollment time after birth (days)	729.3	590.2
Difference between date of birth and date of enrollment (days)	-2.3	2.6
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Age (years)	27.6	5.6
Age		
10-19 years	162	9.6%
20-29 years	976	58.0%
30-39 years	493	29.3%
40-54 years	51	3.0%
Sex		
Female	1,667	100.0%
Race ⁵		
American Indian or Alaska Native	47	2.8%
Asian	32	1.9%
Black or African American	528	31.7%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	699	41.9%
White	341	20.5%
Hispanic origin		
Yes	373	22.4%
No	940	56.4%
Unknown	354	21.2%
Year		
2010	14	0.8%
2011	*****	*****
2012	15	0.9%
2013	30	1.8%
2014	22	1.3%

Table 1e. Aggregated Characteristics of Infant Syphilis Treatment among Pregnancies with Two Syphilis Diagnosis Code Days in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Treated for Syphilis		
Demographic Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
2015	59	3.5%
2016	191	11.4%
2017	241	14.3%
2018	230	13.7%
2019	333	19.8%
2020	401	23.8%
2021	89	5.3%
2022	48	2.9%
2023	*****	*****
Pregnancy Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Preterm: less than 37 weeks	199	11.8%
Early term: 37 0/7 weeks through 38 6/7 weeks	529	31.5%
Full term: 39 0/7 weeks through 40 6/7 weeks	740	44.0%
Late term: 41 0/7 weeks through 41 6/7 weeks	201	12.0%
Postterm: 42 0/7 weeks and beyond	*****	*****
Unknown Term	*****	*****
Gestational age ⁶ at pregnancy outcome (weeks)	39.3	2.2
Exposure Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Gestational age ⁶ of first exposure (weeks)	20.0	9.9
Mean number of dispensings in first trimester	1.0	1.6
Mean number of dispensings in second trimester	2.0	2.4
Mean number of dispensings in third trimester	2.9	3.3
Exposed during first trimester	659	39.2%
Exposed during second trimester	1,054	62.7%
Exposed during third trimester	1,308	77.8%
Health Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Prenatal Care in First Trimester	1,388	82.5%
Treated with standard syphilis antibiotics	860	51.1%
Treated with non-standard syphilis antibiotics	148	8.8%

Table 1e. Aggregated Characteristics of Infant Syphilis Treatment among Pregnancies with Two Syphilis Diagnosis Code Days in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Medical Procedure		
Infants Treated for Syphilis		
Health Characteristics	Number/Mean	Percent/ Standard Deviation ⁴
Treated only with non-standard syphilis antibiotic	73	4.3%
Treated with standard syphilis antibiotics ≤30	143	8.5%
Treated with standard syphilis antibiotics >30	784	46.6%
Treated only with standard syph antibiotics ≤30	76	4.5%

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report. The pregnancy was required to have at least two diagnosis codes for syphilis that did not occur on the same date as a procedure code for syphilis testing.

²Characteristics in blue show a standardized difference greater than 0.1.

³Baseline period in reference to user-defined index dates (start of first valid exposed pregnancy, exposure date, or pregnancy outcome date).

⁴Value represents standard deviation where no % follows the value.

⁵Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

⁶The length of the pregnancy episode was estimated using a hierarchy of pregnancy markers. If overlapping pregnancy episodes were constructed in the same patient due to observation of multiple pregnancy markers, then the markers providing more reliable estimation of pregnancy start was selected for estimation of pregnancy start date. If no pregnancy markers were observed, then a fixed pregnancy duration was assigned by pregnancy outcome type, as described in the overview section of this report.

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Table 2. Pregnant Episodes with Exposure(s) of Interest in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Exposure(s) of Interest ⁴	Evidence in the Pre-Pregnancy Period		Evidence During Any Trimester		Evidence in First Trimester		Evidence in Second Trimester ²		Evidence in Third Trimester ³	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births (4,995,666 episodes reach the 2nd trimester, 4,953,732 episodes reach the 3rd trimester, 4,995,666 total episodes)										
Maternal Syphilis Testing	N/A	N/A	4,296,404	86.0%	3,443,094	68.9%	1,157,818	23.2%	1,426,209	28.8%
Maternal Syphilis Diagnosis	N/A	N/A	13,995	0.3%	4,479	0.1%	5,970	0.1%	8,859	0.2%

Table 2. Pregnant Episodes with Exposure(s) of Interest in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Exposure(s) of Interest ⁴	Evidence in All Trimesters		Evidence Only During First Trimester		Evidence Only During Second Trimester ²		Evidence Only During Third Trimester ³	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births (4,995,666 episodes reach the 2nd trimester, 4,953,732 episodes reach the 3rd trimester, 4,995,666 total episodes)								
Maternal Syphilis Testing	86,275	1.7%	2,003,794	40.1%	444,937	8.9%	203,231	4.1%
Maternal Syphilis Diagnosis	1,088	0.0%	2,235	0.0%	2,344	0.0%	5,191	0.1%

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report.

²Assessing medical product use in the second trimester requires a pregnancy to continue to the second trimester (i.e. pregnancy was not terminated in the first trimester); the denominator is the total number of pregnancy episodes that progress to the second trimester.

³Assessing medical product use in the third trimester requires a pregnancy to continue to the third trimester. The denominator is the total number of pregnancy episodes that progress to the third trimester.

⁴Displayed percentages represent the number of pregnancy episodes with evidence of the exposure of interest as a proportion of all pregnancy episodes.

Table 3. Exposure(s) of Interest Episodes Among Pregnant Cohort in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Exposure(s) of Interest	Exposure Episodes in the Pre-Pregnancy Period	Exposure Episodes During Any Trimester	Exposure Episodes in First Trimester	Exposure Episodes in Second Trimester	Exposure Episodes in Third Trimester
All Live births (4,995,666 episodes reach the 2nd trimester, 4,953,732 episodes reach the 3rd trimester, 4,995,666 total episodes)					
Maternal Syphilis Testing	N/A	6,373,725	3,534,897	1,239,656	1,599,172
Maternal Syphilis Diagnosis	N/A	36,773	7,188	11,849	17,736

Table 3. Exposure(s) of Interest Episodes Among Pregnant Cohort in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Exposure(s) of Interest	Exposure Episodes in All Trimesters	Exposure Episodes Only During First Trimester	Exposure Episodes Only During Second Trimester	Exposure Episodes Only During Third Trimester
All Live births (4,995,666 episodes reach the 2nd trimester, 4,953,732 episodes reach the 3rd trimester, 4,995,666 total episodes)				
Maternal Syphilis Testing	278,824	2,045,937	499,843	230,764
Maternal Syphilis Diagnosis	8,367	2,863	3,388	8,158

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report.

Table 4. Exposure(s) of Interest Codes Among Pregnant Cohort in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023¹

Exposure(s) of Interest	Codes in the Pre-Pregnancy Period	Codes During Any Trimester	Codes in First Trimester	Codes in Second Trimester	Codes in Third Trimester	Codes in All Trimesters	Codes Only During First Trimester	Codes Only During Second Trimester	Codes Only During Third Trimester
All Live births (4,995,666 episodes reach the 2nd trimester, 4,953,732 episodes reach the 3rd trimester, 4,995,666 total episodes)									
Maternal Syphilis Testing	N/A	6,583,262	3,651,993	1,281,201	1,650,068	300,493	2,100,471	513,567	240,216
Maternal Syphilis Diagnosis	N/A	46,138	8,497	14,270	23,371	10,584	3,214	3,917	10,905

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report.

Table 5. Pregnant Episodes with Exposure(s) of Interest in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023, by Gestational Week¹

Gestational Week										
1		2		3		4		5		
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births										
Maternal Syphilis Testing	13,040	0.3%	11,705	0.2%	12,510	0.3%	20,747	0.4%	67,447	1.4%
Maternal Syphilis Diagnosis	121	0.0%	94	0.0%	95	0.0%	109	0.0%	153	0.0%
Gestational Week										
10		11		12		13		14		
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births										
Maternal Syphilis Testing	519,600	10.4%	470,360	9.4%	403,972	8.1%	343,080	6.9%	212,815	4.3%
Maternal Syphilis Diagnosis	791	0.0%	862	0.0%	982	0.0%	1,090	0.0%	978	0.0%
Gestational Week										
19		20		21		22		23		
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births										
Maternal Syphilis Testing	56,755	1.1%	48,045	1.0%	41,220	0.8%	33,293	0.7%	28,682	0.6%
Maternal Syphilis Diagnosis	834	0.0%	839	0.0%	879	0.0%	815	0.0%	704	0.0%
Gestational Week										
28		29		30		31		32		
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births										
Maternal Syphilis Testing	269,772	5.4%	377,607	7.6%	216,502	4.4%	102,438	2.1%	70,589	1.4%
Maternal Syphilis Diagnosis	931	0.0%	1,053	0.0%	1,014	0.0%	1,027	0.0%	980	0.0%
Gestational Week										
37		38		39		40		41		
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births										
Maternal Syphilis Testing	143,129	3.0%	98,836	2.2%	86,826	2.1%	128,703	4.1%	41,482	3.1%
Maternal Syphilis Diagnosis	1,545	0.0%	1,732	0.0%	1,689	0.0%	1,936	0.1%	580	0.0%

Table 5. Pregnant Episodes with Exposure(s) of Interest in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023, by Gestational Week¹

Gestational Week								
6			7		8		9	
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births								
Maternal Syphilis Testing	161,564	3.2%	294,243	5.9%	431,528	8.6%	569,096	11.4%
Maternal Syphilis Diagnosis	247	0.0%	358	0.0%	468	0.0%	617	0.0%

Gestational Week								
15			16		17		18	
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births								
Maternal Syphilis Testing	126,961	2.5%	96,729	1.9%	89,848	1.8%	76,566	1.5%
Maternal Syphilis Diagnosis	953	0.0%	883	0.0%	876	0.0%	825	0.0%

Gestational Week								
24			25		26		27	
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births								
Maternal Syphilis Testing	32,111	0.6%	69,393	1.4%	103,556	2.1%	165,365	3.3%
Maternal Syphilis Diagnosis	692	0.0%	779	0.0%	727	0.0%	783	0.0%

Gestational Week								
33			34		35		36	
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Live births								
Maternal Syphilis Testing	69,959	1.4%	60,036	1.2%	60,159	1.2%	93,544	1.9%

Table 5. Pregnant Episodes with Exposure(s) of Interest in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023, by Gestational Week¹

Maternal Syphilis Diagnosis	1,143	0.0%	1,073	0.0%	1,217	0.0%	1,239	0.0%
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Gestational Week						
42		43		44		
Exposure(s) of Interest ²	Number	Percent	Number	Percent	Number	Percent
All Live births						
Maternal Syphilis Testing	42,137	5.0%	2,535	6.6%	127	4.4%
Maternal Syphilis Diagnosis	516	0.1%	22	0.1%	*****	*****

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report.

²Displayed percentages represent the number of pregnancy episodes with evidence of the exposure of interest as a proportion of all pregnancy episodes in the given gestational week

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Table 6. Exposure(s) of Interest Episodes Among Pregnant Cohort in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023, by Gestational Week¹

	Gestational Week										
Exposure(s) of Interest	1	2	3	4	5	6	7	8	9	10	11
All Live births											
Maternal Syphilis Testing	13,053	11,723	12,524	20,775	67,589	161,899	294,688	431,962	569,550	519,975	470,682
Maternal Syphilis Diagnosis	123	100	96	113	156	251	365	490	634	816	889

	Gestational Week										
Exposure(s) of Interest	23	24	25	26	27	28	29	30	31	32	33
All Live births											
Maternal Syphilis Testing	28,733	32,168	69,482	103,689	165,571	270,029	377,910	216,754	102,605	70,738	70,104
Maternal Syphilis Diagnosis	725	714	800	750	800	954	1,085	1,037	1,067	1,029	1,197

Table 6. Exposure(s) of Interest Episodes Among Pregnant Cohort in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023, by Gestational Week¹

Gestational Week											
Exposure(s) of Interest	12	13	14	15	16	17	18	19	20	21	22
All Live births											
Maternal Syphilis Testing	404,217	343,300	212,960	127,067	96,808	89,930	76,636	56,818	48,088	41,287	33,350
Maternal Syphilis Diagnosis	1,018	1,135	1,002	986	912	900	846	854	866	903	839
Gestational Week											
Exposure(s) of Interest	34	35	36	37	38	39	40	41	42	43	44
All Live births											
Maternal Syphilis Testing	60,198	60,368	93,852	143,739	99,406	87,325	129,543	41,708	42,248	2,547	127
Maternal Syphilis Diagnosis	1,139	1,306	1,319	1,655	1,843	1,803	2,067	622	537	25	*****

¹Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report.

*****Data are not presented in these cells due to a small sample size or to ensure a small cell cannot be recalculated through the cells presented.

Table 7. Summary of Episode-Level¹ Cohort Attrition in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023²

	Infant Testing, 1 Maternal Diagnosis Code Days		Infant Treatment, 1 Maternal Diagnosis Code Days		Infant Testing, 2 Maternal Diagnosis Code Days	
	Infants Tested for Syphilis		Infants Treated for Syphilis		Infants Tested for Syphilis	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements						
Enrolled at any point during the query period	353,678,155	N/A	353,678,155	N/A	353,678,155	N/A
Had required coverage type (medical and/or drug coverage)	273,087,352	80,590,803	273,087,352	80,590,803	273,087,352	80,590,803
Enrolled during specified age range	222,840,791	50,246,561	222,840,791	50,246,561	222,840,791	50,246,561
Had requestable medical charts	222,840,791	0	222,840,791	0	222,840,791	0
Met demographic requirements (sex, race, and Hispanic origin)	115,010,648	107,830,143	115,010,648	107,830,143	115,010,648	107,830,143
Members with a valid index event						
Had a pregnancy outcome claim during the query period	10,196,380	104,814,268	10,196,380	104,814,268	10,196,380	104,814,268
Pregnancy outcomes with a valid index date						
Total number of pregnancy outcomes during the query period	12,529,985	N/A	12,529,985	N/A	12,529,985	N/A
Pregnancy outcome must match specified Match Method values	8,609,159	3,920,826	8,609,159	3,920,826	8,609,159	3,920,826
Pregnancy outcome must match specified birth type values (singleton births only, twins, etc.)	7,763,254	845,905	7,763,254	845,905	7,763,254	845,905
Pregnancy outcome within the age range condition assessed at pregnancy outcome date	7,763,254	0	7,763,254	0	7,763,254	0
Pregnancy outcome during the query period sufficing user-specified incidence criteria	7,763,254	0	7,763,254	0	7,763,254	0
Had sufficient continuous enrollment prior to pregnancy outcome	5,172,018	2,591,236	5,172,018	2,591,236	5,172,018	2,591,236
Met inclusion and exclusion criteria	5,172,018	0	5,172,018	0	5,172,018	0
Pregnancy episodes with required post-index follow-up						
Had sufficient continuous enrollment post pregnancy outcome	4,995,666	176,352	4,995,666	176,352	4,995,666	176,352

Table 7. Summary of Episode-Level¹ Cohort Attrition in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023²

	Infant Testing, 1 Maternal Diagnosis Code Days		Infant Treatment, 1 Maternal Diagnosis Code Days		Infant Testing, 2 Maternal Diagnosis Code Days	
	Infants Tested for Syphilis		Infants Treated for Syphilis		Infants Tested for Syphilis	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Final cohort						
Number of members	4,257,373	N/A	4,257,373	N/A	4,257,373	N/A
Number of pregnancy episodes	4,995,666	N/A	4,995,666	N/A	4,995,666	N/A
Number of non-pregnant matched comparator episodes	0	N/A	0	N/A	0	N/A
Members meeting mother-infant linkage requirements						
Pregnancy episodes met initial cohort eligibility requirements	4,995,666	N/A	4,995,666	N/A	4,995,666	N/A
Medical product of interest recorded during pregnancy episode	13,602	4,982,064	13,602	4,982,064	13,602	4,982,064
Linked infant must meet requirement for maximum allowable days between birth date and enrollment start	4,668	8,934	4,668	8,934	4,668	8,934
Linked infant must meet requirement for maximum allowable days between birth date and delivery date	4,638	30	4,638	30	4,638	30
Linked infant met sex requirement	4,638	0	4,638	0	4,638	0
Mother excluded due to prior initiation of other exposure group	4,638	0	4,638	0	4,638	0
Pregnancy outcome recorded during query period and at specified age range evaluated at specified index date	4,568	70	4,568	70	4,568	70
Mother had sufficient pre-index continuous enrollment	4,568	0	4,568	0	4,568	0
Mother met inclusion and exclusion criteria ³	2,945	1,623	2,945	1,623	1,682	2,886
<i>No evidence of syphilis_dx</i>	N/A	1,623	N/A	1,623	N/A	2,886
Restricted to first valid pregnancy episode	2,945	0	2,945	0	1,682	0

Table 7. Summary of Episode-Level¹ Cohort Attrition in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023²

	Infant Treatment, 2 Maternal Diagnosis Code Days			
	Infants Treated for Syphilis		All Live births	
	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements				
Enrolled at any point during the query period	353,678,155	N/A	353,678,155	N/A
Had required coverage type (medical and/or drug coverage)	273,087,352	80,590,803	273,087,352	80,590,803
Enrolled during specified age range	222,840,791	50,246,561	222,840,791	50,246,561
Had requestable medical charts	222,840,791	0	222,840,791	0
Met demographic requirements (sex, race, and Hispanic origin)	115,010,648	107,830,143	115,010,648	107,830,143
Members with a valid index event				
Had a pregnancy outcome claim during the query period	10,196,380	104,814,268	10,196,380	104,814,268
Pregnancy outcomes with a valid index date				
Total number of pregnancy outcomes during the query period	12,529,985	N/A	12,529,985	N/A
Pregnancy outcome must match specified Match Method values	8,609,159	3,920,826	8,609,159	3,920,826
Pregnancy outcome must match specified birth type values (singleton births only, twins, etc.)	7,763,254	845,905	7,763,254	845,905
Pregnancy outcome within the age range condition assessed at pregnancy outcome date	7,763,254	0	7,763,254	0
Pregnancy outcome during the query period sufficing user-specified incidence criteria	7,763,254	0	7,763,254	0
Had sufficient continuous enrollment prior to pregnancy outcome	5,172,018	2,591,236	5,172,018	2,591,236
Met inclusion and exclusion criteria	5,172,018	0	5,172,018	0
Pregnancy episodes with required post-index follow-up				
Had sufficient continuous enrollment post pregnancy outcome	4,995,666	176,352	4,995,666	176,352
Final cohort				
Number of members	4,257,373	N/A	4,257,373	N/A
Number of pregnancy episodes	4,995,666	N/A	4,995,666	N/A
Number of non-pregnant matched comparator episodes	0	N/A	0	N/A

Table 7. Summary of Episode-Level¹ Cohort Attrition in the Sentinel Distributed Database from January 1, 2010 to October 31, 2023²

	Infant Treatment, 2 Maternal Diagnosis Code Days			
	Infants Treated for Syphilis		All Live births	
	Remaining	Excluded	Remaining	Excluded
Members meeting mother-infant linkage requirements				
Pregnancy episodes met initial cohort eligibility requirements	4,995,666	N/A	N/A	N/A
Medical product of interest recorded during pregnancy episode	13,602	4,982,064	N/A	N/A
Linked infant must meet requirement for maximum allowable days between birth date and enrollment start	4,668	8,934	N/A	N/A
Linked infant must meet requirement for maximum allowable days between birth date and delivery date	4,638	30	N/A	N/A
Linked infant met sex requirement				
Mother excluded due to prior initiation of other exposure group	4,638	0	N/A	N/A
Pregnancy outcome recorded during query period and at specified age range evaluated at specified index date	4,568	70	N/A	N/A
Mother had sufficient pre-index continuous enrollment	4,568	0	N/A	N/A
Mother met inclusion and exclusion criteria ³	1,682	2,886	N/A	N/A
<i>No evidence of syphilis_dx</i>	N/A	2,886	N/A	N/A
Restricted to first valid pregnancy episode	1,682	0	N/A	N/A

¹Cohorts are formed by first evaluating enrollment and demographic requirements as well as index events among members, then evaluating index dates, pre-index history, and post-index follow-up among pregnancy episodes. Because of this, the number remaining often increases from the member- to episode-level steps.

²Pregnancy is defined as a pregnancy that resulted in a live or non-live birth identified using the method specified in the overview section of this report.

³Pregnancy episodes can meet multiple inclusion and/or exclusion criteria; therefore, the total number of pregnancy episodes excluded overall may not equal the sum of all pregnancy episodes in each criterion.

PLUS Table 1. Infants Born to Pregnant Women With a Testing Code for Syphilis and at Least One Diagnosis Code for Syphilis in Pregnancy (Not Occurring on the Same Day as a Testing Code), January 1, 2010 to October 31, 2023

	Any Testing from Birth to 30 days		Any Treating from Birth to 30 days		Any Testing but No Treatment from Birth to 30 days		Any Treatment but No Testing from Birth to 30 Days		Both Testing and Treatment from Birth to 30 days		
	Number Total	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Infants	2,945	171	5.81%	15	0.51%	167	5.67%	11	0.37%	*****	*****
Age Group											
10-19	252	19	7.54%	*****	1.19%	*****	*****	*****	*****	*****	*****
20-29	1,610	96	5.96%	*****	0.56%	93	5.78%	*****	*****	*****	*****
30-39	983	47	4.78%	*****	0.20%	46	4.68%	*****	*****	*****	*****
40-54	100	*****	*****	*****	1.00%	*****	*****	*****	*****	*****	*****
Year											
2010	47	*****	*****	*****	*****	*****	*****	0	0.00%	0	0.00%
2011	34	*****	*****	*****	*****	*****	*****	*****	2.94%	0	0.00%
2012	45	*****	*****	*****	*****	*****	*****	0	0.00%	0	0.00%
2013	65	*****	*****	*****	*****	*****	*****	0	0.00%	0	0.00%
2014	70	*****	*****	*****	*****	*****	*****	0	0.00%	0	0.00%
2015	109	11	10.09%	*****	*****	*****	*****	0	0.00%	*****	*****
2016	311	12	3.86%	*****	*****	11	3.54%	0	0.00%	*****	*****
2017	421	21	4.99%	*****	*****	21	4.99%	*****	*****	0	0.00%
2018	399	21	5.26%	*****	*****	21	5.26%	*****	*****	0	0.00%
2019	514	38	7.39%	*****	*****	37	7.20%	*****	*****	*****	*****
2020	636	45	7.08%	*****	*****	44	6.92%	*****	*****	*****	*****
2021	189	*****	*****	*****	*****	*****	*****	*****	*****	0	0.00%
2022	105	*****	*****	*****	*****	*****	*****	0	0.00%	0	0.00%
2023	0	0	.	*****	*****	0	.	0	.	0	.
Race											
American Indian or Alaska Native	64	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Asian	63	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Black or African American	819	59	7.20%	*****	0.24%	59	7.20%	*****	0.24%	0	0.00%
Multi-racial	25	*****	*****	0	0.00%	*****	*****	0	0.00%	0	0.00%

PLUS Table 1. Infants Born to Pregnant Women With a Testing Code for Syphilis and at Least One Diagnosis Code for Syphilis in Pregnancy (Not Occurring on the Same Day as a Testing Code), January 1, 2010 to October 31, 2023

Any Testing from Birth to 30 days												Any Treating from Birth to 30 days		Any Testing but No Treatment from Birth to 30 days		Any Treatment but No Testing from Birth to 30 Days		Both Testing and Treatment from Birth to 30 days	
	Number																		
	Total	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Native Hawaiian or Other																			
Pacific Islander	10	0	0.00%	*****	*****	0	0.00%	*****	*****	0	0.00%	*****	*****	0	0.00%	*****	*****	0	0.00%
Unknown	1,319	73	5.53%	*****	*****	72	5.46%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
White	645	29	4.50%	*****	*****	27	4.19%	0	0.00%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Hispanic																			
Yes	563	25	4.44%	*****	*****	25	4.44%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
No	1,564	86	5.50%	*****	*****	83	5.31%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Unknown	818	60	7.33%	*****	*****	59	7.21%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Pregnancy Term																			
Preterm: less than 37 weeks	357	28	7.84%	*****	*****	27	7.56%	0	0.00%	1	0.28%	*****	*****	*****	*****	*****	*****	*****	*****
Early term: 37 0/7 weeks through 38 6/7 weeks	965	50	5.18%	*****	*****	50	5.18%	5	0.52%	*****	0.00%	*****	*****	*****	*****	*****	*****	*****	0.00%
Full term: 39 0/7 weeks through 40 6/7 weeks	1,264	68	5.38%	*****	*****	65	5.14%	*****	*****	*****	0.24%	*****	*****	*****	*****	*****	*****	*****	0.24%
Late term: 41 0/7 weeks through 41 6/7 weeks	336	23	6.85%	*****	*****	23	6.85%	*****	*****	0	0.00%	*****	*****	*****	*****	*****	*****	*****	0.00%
Postterm: 42 0/7 weeks and beyond	11	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Unknown Term	12	*****	*****	0	0.00%	*****	16.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Maternal Treatment Status																			
Any benzathine penicillin G in pregnancy	1,025	73	7.12%	11	1.07%	69	6.73%	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Any alternative antibiotics in pregnancy	226	*****	4.42%	*****	*****	*****	*****	*****	*****	*****	0.00%	*****	*****	*****	*****	*****	*****	*****	0.00%
Treated only with non-standard syphilis antibiotic	142	*****	*****	*****	*****	*****	*****	*****	*****	*****	0.00%	*****	*****	*****	*****	*****	*****	*****	0.00%
Treated with standard syphilis antibiotics <=30	174	12	6.90%	0	0.00%	12	6.90%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

PLUS Table 1. Infants Born to Pregnant Women With a Testing Code for Syphilis and at Least One Diagnosis Code for Syphilis in Pregnancy (Not Occurring on the Same Day as a Testing Code), January 1, 2010 to October 31, 2023

	Number Total	Any Testing from Birth to 30 days		Any Treating from Birth to 30 days		Any Testing but No Treatment from Birth to 30 days		Any Treatment but No Testing from Birth to 30 Days		Both Testing and Treatment from Birth to 30 days	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Treated with standard syphilis antibiotics >30 Any benzathine penicillin G in the 30 days prior to delivery only	928 97	68 *****	7.33% 5.15%	11 0	1.19% 0.00%	64 *****	6.90% *****	***** 0	***** 0.00%	***** 0	***** 0.00%
Other Covariates											
Prenatal Care in First Trimester	2,511	146	5.81%	12	0.48%	143	5.69%	*****	*****	*****	*****

*****Data are not presented in these cells due to a small sample size or to ensure a small cell cannot be recalculated through the cells presented.

Plus Table 2. Infants Born to Pregnant Women With a Testing Code for Syphilis and at Least Two Diagnosis Codes for Syphilis in Pregnancy (Not Occurring on the Same Day as a Testing Code), January 1, 2010 to October 31, 2023

Strata	N Total	Any testing from birth to 30 days		Any treatment from birth to 30 days		Any testing but no treatment from birth to 30 days		Any treatment but no testing from birth to 30 days		Both testing and treatment from birth to 30 days	
		N	%	N	%	N	%	N	%	N	%
All Infants	1,682	124	7.37%	15	0.89%	120	7.13%	11	0.65%	*****	*****
Age Group											
10-19	162	14	8.64%	*****	*****	14	8.64%	*****	*****	0	0.00%
20-29	976	68	6.97%	*****	*****	65	6.66%	*****	*****	*****	*****
30-39	493	35	7.10%	*****	*****	34	6.90%	*****	*****	*****	*****
40-54	51	*****	*****	*****	*****	*****	*****	*****	*****	0	0.00%
Year											
2010	14	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2011	9	*****	*****	*****	*****	*****	*****	*****	*****	0	0.00%
2012	15	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2013	30	*****	*****	0	0.00%	*****	*****	0	0.00%	0	0.00%
2014	22	*****	*****	0	0.00%	*****	*****	0	0.00%	0	0.00%
2015	59	*****	*****	*****	*****	*****	*****	0	0.00%	*****	*****
2016	191	*****	*****	*****	*****	*****	*****	0	0.00%	*****	*****
2017	241	15	6.22%	*****	*****	15	6.22%	*****	*****	0	0.00%
2018	230	17	7.39%	*****	*****	17	7.39%	*****	*****	0	0.00%
2019	333	32	9.61%	*****	*****	31	9.31%	*****	*****	*****	*****
2020	401	32	7.98%	*****	*****	31	7.73%	*****	*****	*****	*****
2021	89	*****	*****	*****	*****	*****	*****	*****	*****	0	0.00%
2022	48	*****	*****	0	0.00%	*****	*****	0	0.00%	0	0.00%
2023	0	0	.	0	.	0	.	0	.	0	.
Race											
American Indian or Alaska Native	47	*****	*****	*****	*****	*****	*****	*****	*****	0	0.00%
Asian	33	*****	*****	*****	*****	*****	*****	0	0.00%	*****	*****
Black or African American	534	39	7.30%	*****	*****	39	7.30%	*****	*****	0	0.00%
Multi-racial	13	*****	*****	0	0.00%	*****	*****	0	0.00%	0	0.00%
Native Hawaiian or Other Pacific Islander	*****	0	0.00%	*****	*****	0	0.00%	*****	*****	0	0.00%
Unknown	703	57	8.11%	*****	*****	56	7.97%	*****	*****	*****	*****

Plus Table 2. Infants Born to Pregnant Women With a Testing Code for Syphilis and at Least Two Diagnosis Codes for Syphilis in Pregnancy (Not Occurring on the Same Day as a Testing Code), January 1, 2010 to October 31, 2023

		Any testing from birth to 30 days		Any treatment from birth to 30 days		Any testing but no treatment from birth to 30 days		Any treatment but no testing from birth to 30 days		Both testing and treatment from birth to 30 days	
Strata	N Total	N	%	N	%	N	%	N	%	N	%
Race											
White	345	22	6.38%	*****	*****	20	5.80%	0	0.00%	*****	*****
Hispanic											
Yes	375	20	5.33%	*****	*****	20	5.33%	*****	*****	0	0.00%
No	951	56	5.89%	*****	*****	53	5.57%	*****	*****	*****	*****
Unknown	356	48	13.48%	*****	*****	47	13.20%	*****	*****	*****	*****
Pregnancy Term											
Preterm: less than 37 weeks	199	18	9.05%	*****	*****	17	8.54%	0	0.00%	*****	*****
Early term: 37 0/7 weeks through 38 6/7 weeks	529	37	6.99%	*****	*****	37	6.99%	*****	*****	0	0.00%
Full term: 39 0/7 weeks through 40 6/7 weeks	740	51	6.89%	*****	*****	48	6.49%	*****	*****	*****	*****
Late term: 41 0/7 weeks through 41 6/7 weeks	201	17	8.46%	*****	*****	17	8.46%	*****	*****	0	0.00%
Postterm: 42 0/7 weeks and beyond	*****	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Unknown Term	*****	*****	*****	0	0.00%	*****	*****	0	0.00%	0	0.00%
N/A	0	0	.	0	.	0	.	0	.	0	.
Maternal Treatment Status											
Any benzathine penicillin G in pregnancy	860	61	7.09%	11	1.28%	57	6.63%	*****	*****	*****	*****
Any alternative antibiotics in pregnancy	148	*****	*****	*****	*****	*****	*****	*****	*****	0	0.00%
Treated only with non-standard syphilis antibiotic	73	*****	*****	*****	*****	*****	*****	*****	*****	0	0.00%
Treated with standard syphilis antibiotics <=30	143	10	6.99%	0	0.00%	*****	*****	0	0.00%	0	0.00%
Treated with standard syphilis antibiotics >30	784	58	7.40%	11	1.40%	54	6.89%	*****	*****	*****	*****

Plus Table 2. Infants Born to Pregnant Women With a Testing Code for Syphilis and at Least Two Diagnosis Codes for Syphilis in Pregnancy (Not Occurring on the Same Day as a Testing Code), January 1, 2010 to October 31, 2023

Strata	N Total	Any testing from birth to 30 days		Any treatment from birth to 30 days		Any testing but no treatment from birth to 30 days		Any treatment but no testing from birth to 30 days		Both testing and treatment from birth to 30 days	
		N	%	N	%	N	%	N	%	N	%
Maternal Treatment Status											
Any benzathine penicillin G in the 30 days prior to delivery only	76	*****	*****	0	0.00%	*****	*****	0	0.00%	0	0.00%
Other Covariates											
Prenatal Care in First Trimester	1,388	105	7.56%	12	0.86%	102	7.35%	*****	*****	*****	*****

*****Data are not presented in these cells due to a small sample size or to ensure a small cell cannot be recalculated through the cells presented.

Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (August 1, 2024)

Masked DP ID	DP Start Date	DP End Date ¹
DP01	01/01/2014	12/31/2021
DP02	01/01/2006	10/31/2023
DP03	01/01/2008	09/30/2023
DP04	01/01/2008	08/31/2023

¹End Date represents the earliest of: (1) query end date, or (2) last day of the most recent month for which all of a Data Partner's data tables (enrollment, dispensing, etc.) have at least 80% of the record count relative to the prior month.

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority		Pregnancy Duration	durationanchor
				1	2		
Z3A49	Greater than 42 weeks gestation of pregnancy	DX	10	1	1	301	MARKER
Z3A42	42 weeks gestation of pregnancy	DX	10	1	2	298	MARKER
O481	Prolonged pregnancy	DX	10	1	3	294	MARKER
P0822	Prolonged gestation of newborn	DX	10	1	3	294	MARKER
Z3A41	41 weeks gestation of pregnancy	DX	10	1	4	291	MARKER
O480	Post-term pregnancy	DX	10	1	5	287	MARKER
P0821	Post-term newborn	DX	10	1	5	287	MARKER
Z3A40	40 weeks gestation of pregnancy	DX	10	1	6	284	MARKER
Z3A39	39 weeks gestation of pregnancy	DX	10	1	7	277	MARKER
Z3A38	38 weeks gestation of pregnancy	DX	10	1	8	270	MARKER
Z3A37	37 weeks gestation of pregnancy	DX	10	1	9	263	MARKER
P0739	Preterm newborn, gestational age 36 completed weeks	DX	10	1	10	256	MARKER
Z3A36	36 weeks gestation of pregnancy	DX	10	1	10	256	MARKER
P0738	Preterm newborn, gestational age 35 completed weeks	DX	10	1	11	249	MARKER
Z3A35	35 weeks gestation of pregnancy	DX	10	1	11	249	MARKER
P0737	Preterm newborn, gestational age 34 completed weeks	DX	10	1	12	242	MARKER
Z3A34	34 weeks gestation of pregnancy	DX	10	1	12	242	MARKER
P0736	Preterm newborn, gestational age 33 completed weeks	DX	10	1	13	235	MARKER
Z3A33	33 weeks gestation of pregnancy	DX	10	1	13	235	MARKER
P0735	Preterm newborn, gestational age 32 completed weeks	DX	10	1	14	228	MARKER
Z3A32	32 weeks gestation of pregnancy	DX	10	1	14	228	MARKER
P0734	Preterm newborn, gestational age 31 completed weeks	DX	10	1	15	221	MARKER
Z3A31	31 weeks gestation of pregnancy	DX	10	1	15	221	MARKER
P0733	Preterm newborn, gestational age 30 completed weeks	DX	10	1	16	214	MARKER
Z3A30	30 weeks gestation of pregnancy	DX	10	1	16	214	MARKER
P0732	Preterm newborn, gestational age 29 completed weeks	DX	10	1	17	207	MARKER
Z3A29	29 weeks gestation of pregnancy	DX	10	1	17	207	MARKER
P0731	Preterm newborn, gestational age 28 completed weeks	DX	10	1	18	200	MARKER
Z3A28	28 weeks gestation of pregnancy	DX	10	1	18	200	MARKER
P0726	Extreme immaturity of newborn, gestational age 27 completed weeks	DX	10	1	19	193	MARKER
Z3A27	27 weeks gestation of pregnancy	DX	10	1	19	193	MARKER
P0725	Extreme immaturity of newborn, gestational age 26 completed weeks	DX	10	1	20	186	MARKER
Z3A26	26 weeks gestation of pregnancy	DX	10	1	20	186	MARKER

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code		Priority 1	Priority 2	Pregnancy Duration	durationanchor
			Type					
P0724	Extreme immaturity of newborn, gestational age 25 completed weeks	DX	10		1	21	179	MARKER
Z3A25	25 weeks gestation of pregnancy	DX	10		1	21	179	MARKER
P0723	Extreme immaturity of newborn, gestational age 24 completed weeks	DX	10		1	22	172	MARKER
Z3A24	24 weeks gestation of pregnancy	DX	10		1	22	172	MARKER
P0722	Extreme immaturity of newborn, gestational age 23 completed weeks	DX	10		1	23	165	MARKER
Z3A23	23 weeks gestation of pregnancy	DX	10		1	23	165	MARKER
P0721	Extreme immaturity of newborn, gestational age less than 23 completed weeks	DX	10		1	24	158	MARKER
Z3A22	22 weeks gestation of pregnancy	DX	10		1	24	158	MARKER
Z3A21	21 weeks gestation of pregnancy	DX	10		1	25	151	MARKER
Z3A20	20 weeks gestation of pregnancy	DX	10		1	26	144	MARKER
Z3A19	19 weeks gestation of pregnancy	DX	10		1	27	137	MARKER
Z3A18	18 weeks gestation of pregnancy	DX	10		1	28	130	MARKER
Z3A17	17 weeks gestation of pregnancy	DX	10		1	29	123	MARKER
Z3A16	16 weeks gestation of pregnancy	DX	10		1	30	116	MARKER
Z3A15	15 weeks gestation of pregnancy	DX	10		1	31	109	MARKER
Z3A14	14 weeks gestation of pregnancy	DX	10		1	32	102	MARKER
Z3A13	13 weeks gestation of pregnancy	DX	10		1	33	95	MARKER
Z3A12	12 weeks gestation of pregnancy	DX	10		1	34	88	MARKER
Z3A11	11 weeks gestation of pregnancy	DX	10		1	35	81	MARKER
Z3A10	10 weeks gestation of pregnancy	DX	10		1	36	74	MARKER
Z3A09	9 weeks gestation of pregnancy	DX	10		1	37	67	MARKER
Z3A08	8 weeks gestation of pregnancy	DX	10		1	38	60	MARKER
Z3A01	Less than 8 weeks gestation of pregnancy	DX	10		1	39	53	MARKER
P0720	Extreme immaturity of newborn, unspecified weeks of gestation	DX	10		1	40	196	MARKER
O6013X0	Preterm labor second trimester with preterm delivery third trimester, not applicable or unspecified	DX	10		1	41	245	MARKER
O6013X1	Preterm labor second trimester with preterm delivery third trimester, fetus 1	DX	10		1	41	245	MARKER
O6013X2	Preterm labor second trimester with preterm delivery third trimester, fetus 2	DX	10		1	41	245	MARKER
O6013X3	Preterm labor second trimester with preterm delivery third trimester, fetus 3	DX	10		1	41	245	MARKER

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O6013X4	Preterm labor second trimester with preterm delivery third trimester, fetus 4	DX	10	1	41	245	MARKER
O6013X5	Preterm labor second trimester with preterm delivery third trimester, fetus 5	DX	10	1	41	245	MARKER
O6013X9	Preterm labor second trimester with preterm delivery third trimester, other fetus	DX	10	1	41	245	MARKER
O6014X0	Preterm labor third trimester with preterm delivery third trimester, not applicable or unspecified	DX	10	1	41	245	MARKER
O6014X1	Preterm labor third trimester with preterm delivery third trimester, fetus 1	DX	10	1	41	245	MARKER
O6014X2	Preterm labor third trimester with preterm delivery third trimester, fetus 2	DX	10	1	41	245	MARKER
O6014X3	Preterm labor third trimester with preterm delivery third trimester, fetus 3	DX	10	1	41	245	MARKER
O6014X4	Preterm labor third trimester with preterm delivery third trimester, fetus 4	DX	10	1	41	245	MARKER
O6014X5	Preterm labor third trimester with preterm delivery third trimester, fetus 5	DX	10	1	41	245	MARKER
O6014X9	Preterm labor third trimester with preterm delivery third trimester, other fetus	DX	10	1	41	245	MARKER
P0730	Preterm newborn, unspecified weeks of gestation	DX	10	1	41	245	MARKER
O6012X0	Preterm labor second trimester with preterm delivery second trimester, not applicable or unspecified	DX	10	1	42	168	MARKER
O6012X1	Preterm labor second trimester with preterm delivery second trimester, fetus 1	DX	10	1	42	168	MARKER
O6012X2	Preterm labor second trimester with preterm delivery second trimester, fetus 2	DX	10	1	42	168	MARKER
O6012X3	Preterm labor second trimester with preterm delivery second trimester, fetus 3	DX	10	1	42	168	MARKER

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Code	Description	Code Category	ICD Code Type	Priority		Pregnancy Duration	durationanchor
				1	2		
O6012X4	Preterm labor second trimester with preterm delivery second trimester, fetus 4	DX	10	1	42	168	MARKER
O6012X5	Preterm labor second trimester with preterm delivery second trimester, fetus 5	DX	10	1	42	168	MARKER
O6012X9	Preterm labor second trimester with preterm delivery second trimester, other fetus	DX	10	1	42	168	MARKER
64520	Prolonged pregnancy	DX	09	1	43	294	MARKER
64521	Prolonged pregnancy	DX	09	1	43	294	MARKER
64523	Prolonged pregnancy	DX	09	1	43	294	MARKER
76622	Prolonged gestation of infant	DX	09	1	43	294	MARKER
64510	Post term pregnancy	DX	09	1	44	287	MARKER
64511	Post term pregnancy	DX	09	1	44	287	MARKER
64513	Post term pregnancy	DX	09	1	44	287	MARKER
76621	Post-term infant	DX	09	1	44	287	MARKER
76529	37+ completed weeks of gestation	DX	09	1	45	259	MARKER
76528	35-36 completed weeks of gestation	DX	09	1	46	252	MARKER
76527	33-34 completed weeks of gestation	DX	09	1	47	238	MARKER
76526	31-32 completed weeks of gestation	DX	09	1	48	224	MARKER
76525	29-30 completed weeks of gestation	DX	09	1	49	210	MARKER
76524	27-28 completed weeks of gestation	DX	09	1	50	196	MARKER
76523	25-26 completed weeks of gestation	DX	09	1	51	182	MARKER
76522	24 completed weeks of gestation	DX	09	1	52	168	MARKER
76521	Less than 24 completed weeks of gestation	DX	09	1	53	165	MARKER
76509	Extreme immaturity, 2,500 grams and over	DX	09	1	54	245	MARKER
76508	Extreme immaturity, 2,000-2,499 grams	DX	09	1	55	238	MARKER
76507	Extreme immaturity, 1,750-1,999 grams	DX	09	1	56	224	MARKER
76506	Extreme immaturity, 1,500-1,749 grams	DX	09	1	57	217	MARKER
76505	Extreme immaturity, 1,250-1,499 grams	DX	09	1	58	210	MARKER
76504	Extreme immaturity, 1,000-1,249 grams	DX	09	1	59	203	MARKER
76500	Extreme immaturity, unspecified [weight]	DX	09	1	60	196	MARKER
76503	Extreme immaturity, 750-999 grams	DX	09	1	61	189	MARKER
76502	Extreme immaturity, 500-749 grams	DX	09	1	62	175	MARKER
76501	Extreme immaturity, less than 500 grams	DX	09	1	63	154	MARKER

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Code	Description	Code Category	ICD Code Type	Pregnancy		Duration	durationanchor
				Priority 1	Priority 2		
76510	Other preterm infants, unspecified [weight]	DX	09	1	64	245	MARKER
76519	Other preterm infants, 2,500 grams and over	DX	09	1	64	245	MARKER
76518	Other preterm infants, 2,000-2,499 grams	DX	09	1	65	238	MARKER
76517	Other preterm infants, 1,750-1,999 grams	DX	09	1	66	224	MARKER
76516	Other preterm infants, 1,500-1,749 grams	DX	09	1	67	217	MARKER
76515	Other preterm infants, 1,250-1,499 grams	DX	09	1	68	210	MARKER
76514	Other preterm infants, 1,000-1,249 grams	DX	09	1	69	203	MARKER
76513	Other preterm infants, 750-999 grams	DX	09	1	70	189	MARKER
76512	Other preterm infants, 500-749 grams	DX	09	1	71	175	MARKER
76511	Other preterm infants, less than 500 grams	DX	09	1	72	154	MARKER
76520	Unspecified weeks of gestation	DX	09	1	73	245	MARKER
58321	ARTIFICIAL INSEMINATION; INTRA-CERVICAL	PX	C4	2	1	14	MARKER
58322	ARTIFICIAL INSEMINATION	PX	C4	2	1	14	MARKER
58974	TRANSFER OF EMBRYO	PX	C4	2	1	14	MARKER
58976	Gamete, zygote, or embryo intrafallopian transfer	PX	C4	2	1	14	MARKER
S4011	IN VITRO FERTILIZATION;	PX	HC	2	1	14	MARKER
S4013	COMPLETE CYCLE GIFT CASE RATE	PX	HC	2	1	14	MARKER
S4014	COMPLETE CYCLE ZIFT CASE RATE	PX	HC	2	1	14	MARKER
S4015	COMPLETE IVF CYCLE CASE RATE NOS	PX	HC	2	1	14	MARKER
S4016	FROZEN IVF CYCLE CASE RATE	PX	HC	2	1	14	MARKER
S4035	STIMULATED INTRAUTERINE INSEMINATION (IUI), CASE RATE	PX	HC	2	1	14	MARKER
S4037	Cryopreserved embryo transfer, case rate	PX	HC	2	1	14	MARKER
76813	Nuchal Translucency Measurement (Single or First Gestation)	PX	C4	2	2	88	MARKER
76814	Nuchal Translucency Measurement (Each Additional Gestation)	PX	C4	2	2	88	MARKER
59015	Chorionic villus sampling, any method	PX	C4	2	3	84	MARKER
84163	PAPP-A serum test	PX	C4	2	4	85	MARKER
87081	Group B streptococcus screening (genital)	PX	C4	2	5	252	MARKER
82677	Assay of estriol	PX	C4	2	6	119	MARKER
86336	Inhibin A	PX	C4	2	7	119	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
81420	Fetal aneuploidy genomic sequence analysis, cell-free fetal DNA	PX	C4	2	8	85	MARKER
81507	Fetal aneuploidy (trisomy 21, 18, and 13) DNA sequence analysis of selected regions using maternal plasma algorithm reported as a risk score for each trisomy	PX	C4	2	8	85	MARKER
76811	Detailed fetal anatomic examination (single or first gestation)	PX	C4	2	9	138	MARKER
76812	Detailed fetal anatomic examination (Each additional Gestation)	PX	C4	2	9	138	MARKER
82106	Alpha-fetoprotein, amniotic	PX	C4	2	10	120	MARKER
82950	Glucose; post glucose dose (includes glucose)	PX	C4	2	11	190	MARKER
82951	Glucose; tolerance test (GTT), 3 specimens (includes glucose)	PX	C4	2	11	190	MARKER
82952	Glucose tolerance test, additional beyond 3 specimens	PX	C4	2	11	190	MARKER
76805	Complete Ultrasounds (Maternal and Fetal Evaluation); Second and Third Trimesters (Single or First Gestation)	PX	C4	2	12	140	MARKER
76810	Complete Ultrasounds (Maternal and Fetal Evaluation); Second and Third Trimesters (Each Additional Gestation)	PX	C4	2	12	140	MARKER
76801	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; single or first gestation	PX	C4	2	13	97	MARKER
76802	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; each additional gestation	PX	C4	2	13	97	MARKER
O6020X0	Term delivery with preterm labor, unspecified trimester, not applicable or unspecified	DX	10	3	1	273	OUTCOME
O6020X1	Term delivery with preterm labor, unspecified trimester, fetus 1	DX	10	3	2	273	OUTCOME
O6020X2	Term delivery with preterm labor, unspecified trimester, fetus 2	DX	10	3	3	273	OUTCOME

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Code	Description	Code Category	ICD Code Type	Pregnancy		Duration	durationanchor
				Priority 1	Priority 2		
O6020X3	Term delivery with preterm labor, unspecified trimester, fetus 3	DX	10	3	4	273	OUTCOME
O6020X4	Term delivery with preterm labor, unspecified trimester, fetus 4	DX	10	3	5	273	OUTCOME
O6020X5	Term delivery with preterm labor, unspecified trimester, fetus 5	DX	10	3	6	273	OUTCOME
O6020X9	Term delivery with preterm labor, unspecified trimester, other fetus	DX	10	3	7	273	OUTCOME
O6022X0	Term delivery with preterm labor, second trimester, not applicable or unspecified	DX	10	3	8	273	OUTCOME
O6022X1	Term delivery with preterm labor, second trimester, fetus 1	DX	10	3	9	273	OUTCOME
O6022X2	Term delivery with preterm labor, second trimester, fetus 2	DX	10	3	10	273	OUTCOME
O6022X3	Term delivery with preterm labor, second trimester, fetus 3	DX	10	3	11	273	OUTCOME
O6022X4	Term delivery with preterm labor, second trimester, fetus 4	DX	10	3	12	273	OUTCOME
O6022X5	Term delivery with preterm labor, second trimester, fetus 5	DX	10	3	13	273	OUTCOME
O6022X9	Term delivery with preterm labor, second trimester, other fetus	DX	10	3	14	273	OUTCOME
O6023X0	Term delivery with preterm labor, third trimester, not applicable or unspecified	DX	10	3	15	273	OUTCOME
O6023X1	Term delivery with preterm labor, third trimester, fetus 1	DX	10	3	16	273	OUTCOME
O6023X2	Term delivery with preterm labor, third trimester, fetus 2	DX	10	3	17	273	OUTCOME
O6023X3	Term delivery with preterm labor, third trimester, fetus 3	DX	10	3	18	273	OUTCOME
O6023X4	Term delivery with preterm labor, third trimester, fetus 4	DX	10	3	19	273	OUTCOME
O6023X5	Term delivery with preterm labor, third trimester, fetus 5	DX	10	3	20	273	OUTCOME
O6023X9	Term delivery with preterm labor, third trimester, other fetus	DX	10	3	21	273	OUTCOME
O4202	Full-term premature rupture of membranes, onset of labor within 24 hours of rupture	DX	10	3	22	273	OUTCOME
O4212	Full-term premature rupture of membranes, onset of labor more than 24 hours following rupture	DX	10	3	23	273	OUTCOME

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O4292	Full-term premature rupture of membranes, unspecified as to length of time between rupture and onset of labor	DX	10	3	24	273	OUTCOME
O471	False labor at or after 37 completed weeks of gestation	DX	10	3	25	273	OUTCOME
O80	Encounter for full-term uncomplicated delivery	DX	10	3	26	273	OUTCOME
O7582	Onset (spontaneous) of labor after 37 completed weeks of gestation but before 39 completed weeks gestation, with delivery by (planned) cesarean section	DX	10	3	27	273	OUTCOME
O42013	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, third trimester	DX	10	4	1	241	MARKER
O42113	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, third trimester	DX	10	4	2	241	MARKER
O42913	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, third trimester	DX	10	4	3	241	MARKER
O0903	Supervision of pregnancy with history of infertility, third trimester	DX	10	4	4	241	MARKER
O0913	Supervision of pregnancy with history of ectopic pregnancy, third trimester	DX	10	4	5	241	MARKER
O09213	Supervision of pregnancy with history of pre-term labor, third trimester	DX	10	4	6	241	MARKER
O09293	Supervision of pregnancy with other poor reproductive or obstetric history, third trimester	DX	10	4	7	241	MARKER
O0933	Supervision of pregnancy with insufficient antenatal care, third trimester	DX	10	4	8	241	MARKER
O0943	Supervision of pregnancy with grand multiparity, third trimester	DX	10	4	9	241	MARKER
O09513	Supervision of elderly primigravida, third trimester	DX	10	4	10	241	MARKER
O09523	Supervision of elderly multigravida, third trimester	DX	10	4	11	241	MARKER
O09613	Supervision of young primigravida, third trimester	DX	10	4	12	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O09623	Supervision of young multigravida, third trimester	DX	10	4	13	241	MARKER
O0973	Supervision of high risk pregnancy due to social problems, third trimester	DX	10	4	14	241	MARKER
O09813	Supervision of pregnancy resulting from assisted reproductive technology, third trimester	DX	10	4	15	241	MARKER
O09823	Supervision of pregnancy with history of in utero procedure during previous pregnancy, third trimester	DX	10	4	16	241	MARKER
O09893	Supervision of other high risk pregnancies, third trimester	DX	10	4	17	241	MARKER
O0993	Supervision of high risk pregnancy, unspecified, third trimester	DX	10	4	18	241	MARKER
O09A3	Supervision of pregnancy with history of molar pregnancy, third trimester	DX	10	4	19	241	MARKER
O10013	Pre-existing essential hypertension complicating pregnancy, third trimester	DX	10	4	20	241	MARKER
O10113	Pre-existing hypertensive heart disease complicating pregnancy, third trimester	DX	10	4	21	241	MARKER
O10213	Pre-existing hypertensive chronic kidney disease complicating pregnancy, third trimester	DX	10	4	22	241	MARKER
O10313	Pre-existing hypertensive heart and chronic kidney disease complicating pregnancy, third trimester	DX	10	4	23	241	MARKER
O10413	Pre-existing secondary hypertension complicating pregnancy, third trimester	DX	10	4	24	241	MARKER
O10913	Unspecified pre-existing hypertension complicating pregnancy, third trimester	DX	10	4	25	241	MARKER
O113	Pre-existing hypertension with pre-eclampsia, third trimester	DX	10	4	26	241	MARKER
O1203	Gestational edema, third trimester	DX	10	4	27	241	MARKER
O1213	Gestational proteinuria, third trimester	DX	10	4	28	241	MARKER
O1223	Gestational edema with proteinuria, third trimester	DX	10	4	29	241	MARKER
O133	Gestational [pregnancy-induced] hypertension without significant proteinuria, third trimester	DX	10	4	30	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O1403	Mild to moderate pre-eclampsia, third trimester	DX	10	4	31	241	MARKER
O1413	Severe pre-eclampsia, third trimester	DX	10	4	32	241	MARKER
O1423	HELLP syndrome (HELLP), third trimester	DX	10	4	33	241	MARKER
O1493	Unspecified pre-eclampsia, third trimester	DX	10	4	34	241	MARKER
O1503	Eclampsia complicating pregnancy, third trimester	DX	10	4	35	241	MARKER
O163	Unspecified maternal hypertension, third trimester	DX	10	4	36	241	MARKER
O2203	Varicose veins of lower extremity in pregnancy, third trimester	DX	10	4	37	241	MARKER
O2213	Genital varices in pregnancy, third trimester	DX	10	4	38	241	MARKER
O2223	Superficial thrombophlebitis in pregnancy, third trimester	DX	10	4	39	241	MARKER
O2233	Deep phlebothrombosis in pregnancy, third trimester	DX	10	4	40	241	MARKER
O2243	Hemorrhoids in pregnancy, third trimester	DX	10	4	41	241	MARKER
O2253	Cerebral venous thrombosis in pregnancy, third trimester	DX	10	4	42	241	MARKER
O228X3	Other venous complications in pregnancy, third trimester	DX	10	4	43	241	MARKER
O2293	Venous complication in pregnancy, unspecified, third trimester	DX	10	4	44	241	MARKER
O2303	Infections of kidney in pregnancy, third trimester	DX	10	4	45	241	MARKER
O2313	Infections of bladder in pregnancy, third trimester	DX	10	4	46	241	MARKER
O2323	Infections of urethra in pregnancy, third trimester	DX	10	4	47	241	MARKER
O2333	Infections of other parts of urinary tract in pregnancy, third trimester	DX	10	4	48	241	MARKER
O2343	Unspecified infection of urinary tract in pregnancy, third trimester	DX	10	4	49	241	MARKER
O23513	Infections of cervix in pregnancy, third trimester	DX	10	4	50	241	MARKER
O23523	Salpingo-oophoritis in pregnancy, third trimester	DX	10	4	51	241	MARKER
O23593	Infection of other part of genital tract in pregnancy, third trimester	DX	10	4	52	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O2393	Unspecified genitourinary tract infection in pregnancy, third trimester	DX	10	4	53	241	MARKER
O24013	Pre-existing type 1 diabetes mellitus, in pregnancy, third trimester	DX	10	4	54	241	MARKER
O24113	Pre-existing type 2 diabetes mellitus, in pregnancy, third trimester	DX	10	4	55	241	MARKER
O24313	Unspecified pre-existing diabetes mellitus in pregnancy, third trimester	DX	10	4	56	241	MARKER
O24813	Other pre-existing diabetes mellitus in pregnancy, third trimester	DX	10	4	57	241	MARKER
O24913	Unspecified diabetes mellitus in pregnancy, third trimester	DX	10	4	58	241	MARKER
O2513	Malnutrition in pregnancy, third trimester	DX	10	4	59	241	MARKER
O2603	Excessive weight gain in pregnancy, third trimester	DX	10	4	60	241	MARKER
O2613	Low weight gain in pregnancy, third trimester	DX	10	4	61	241	MARKER
O2623	Pregnancy care for patient with recurrent pregnancy loss, third trimester	DX	10	4	62	241	MARKER
O2633	Retained intrauterine contraceptive device in pregnancy, third trimester	DX	10	4	63	241	MARKER
O2643	Herpes gestationis, third trimester	DX	10	4	64	241	MARKER
O2653	Maternal hypotension syndrome, third trimester	DX	10	4	65	241	MARKER
O26613	Liver and biliary tract disorders in pregnancy, third trimester	DX	10	4	66	241	MARKER
O26713	Subluxation of symphysis (pubis) in pregnancy, third trimester	DX	10	4	67	241	MARKER
O26813	Pregnancy related exhaustion and fatigue, third trimester	DX	10	4	68	241	MARKER
O26823	Pregnancy related peripheral neuritis, third trimester	DX	10	4	69	241	MARKER
O26833	Pregnancy related renal disease, third trimester	DX	10	4	70	241	MARKER
O26843	Uterine size-date discrepancy, third trimester	DX	10	4	71	241	MARKER
O26853	Spotting complicating pregnancy, third trimester	DX	10	4	72	241	MARKER
O26873	Cervical shortening, third trimester	DX	10	4	73	241	MARKER
O26893	Other specified pregnancy related conditions, third trimester	DX	10	4	74	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O2693	Pregnancy related conditions, unspecified, third trimester	DX	10	4	75	241	MARKER
O29013	Aspiration pneumonitis due to anesthesia during pregnancy, third trimester	DX	10	4	76	241	MARKER
O29023	Pressure collapse of lung due to anesthesia during pregnancy, third trimester	DX	10	4	77	241	MARKER
O29093	Other pulmonary complications of anesthesia during pregnancy, third trimester	DX	10	4	78	241	MARKER
O29113	Cardiac arrest due to anesthesia during pregnancy, third trimester	DX	10	4	79	241	MARKER
O29123	Cardiac failure due to anesthesia during pregnancy, third trimester	DX	10	4	80	241	MARKER
O29193	Other cardiac complications of anesthesia during pregnancy, third trimester	DX	10	4	81	241	MARKER
O29213	Cerebral anoxia due to anesthesia during pregnancy, third trimester	DX	10	4	82	241	MARKER
O29293	Other central nervous system complications of anesthesia during pregnancy, third trimester	DX	10	4	83	241	MARKER
O293X3	Toxic reaction to local anesthesia during pregnancy, third trimester	DX	10	4	84	241	MARKER
O2943	Spinal and epidural anesthesia induced headache during pregnancy, third trimester	DX	10	4	85	241	MARKER
O295X3	Other complications of spinal and epidural anesthesia during pregnancy, third trimester	DX	10	4	86	241	MARKER
O2963	Failed or difficult intubation for anesthesia during pregnancy, third trimester	DX	10	4	87	241	MARKER
O298X3	Other complications of anesthesia during pregnancy, third trimester	DX	10	4	88	241	MARKER
O2993	Unspecified complication of anesthesia during pregnancy, third trimester	DX	10	4	89	241	MARKER
O30003	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester	DX	10	4	90	241	MARKER
O30013	Twin pregnancy, monochorionic/monoamniotic, third trimester	DX	10	4	91	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O30023	Conjoined twin pregnancy, third trimester	DX	10	4	92	241	MARKER
O30033	Twin pregnancy, monochorionic/diamniotic, third trimester	DX	10	4	93	241	MARKER
O30043	Twin pregnancy, dichorionic/diamniotic, third trimester	DX	10	4	94	241	MARKER
O30093	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester	DX	10	4	95	241	MARKER
O30103	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester	DX	10	4	96	241	MARKER
O30113	Triplet pregnancy with two or more monochorionic fetuses, third trimester	DX	10	4	97	241	MARKER
O30123	Triplet pregnancy with two or more monoamniotic fetuses, third trimester	DX	10	4	98	241	MARKER
O30133	Triplet pregnancy, trichorionic/triamniotic, third trimester	DX	10	4	99	241	MARKER
O30193	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester	DX	10	4	100	241	MARKER
O30203	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, third trimester	DX	10	4	101	241	MARKER
O30213	Quadruplet pregnancy with two or more monochorionic fetuses, third trimester	DX	10	4	102	241	MARKER
O30223	Quadruplet pregnancy with two or more monoamniotic fetuses, third trimester	DX	10	4	103	241	MARKER
O30233	Quadruplet pregnancy, quadrachorionic/quadra-amniotic, third trimester	DX	10	4	104	241	MARKER
O30293	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, third trimester	DX	10	4	105	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O30803	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, third trimester	DX	10	4	106	241	MARKER
O30813	Other specified multiple gestation with two or more monochorionic fetuses, third trimester	DX	10	4	107	241	MARKER
O30823	Other specified multiple gestation with two or more monoamniotic fetuses, third trimester	DX	10	4	108	241	MARKER
O30833	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, third trimester	DX	10	4	109	241	MARKER
O30893	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, third trimester	DX	10	4	110	241	MARKER
O3093	Multiple gestation, unspecified, third trimester	DX	10	4	111	241	MARKER
O3103X0	Papraceous fetus, third trimester, not applicable or unspecified	DX	10	4	112	241	MARKER
O3103X1	Papraceous fetus, third trimester, fetus 1	DX	10	4	113	241	MARKER
O3103X2	Papraceous fetus, third trimester, fetus 2	DX	10	4	114	241	MARKER
O3103X3	Papraceous fetus, third trimester, fetus 3	DX	10	4	115	241	MARKER
O3103X4	Papraceous fetus, third trimester, fetus 4	DX	10	4	116	241	MARKER
O3103X5	Papraceous fetus, third trimester, fetus 5	DX	10	4	117	241	MARKER
O3103X9	Papraceous fetus, third trimester, other fetus	DX	10	4	118	241	MARKER
O3113X0	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, not applicable or unspecified	DX	10	4	119	241	MARKER
O3113X1	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 1	DX	10	4	120	241	MARKER
O3113X2	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 2	DX	10	4	121	241	MARKER

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3113X3	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 3	DX	10	4	122	241	MARKER
O3113X4	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 4	DX	10	4	123	241	MARKER
O3113X5	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, fetus 5	DX	10	4	124	241	MARKER
O3113X9	Continuing pregnancy after spontaneous abortion of one fetus or more, third trimester, other fetus	DX	10	4	125	241	MARKER
O3123X0	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, not applicable or unspecified	DX	10	4	126	241	MARKER
O3123X1	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 1	DX	10	4	127	241	MARKER
O3123X2	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 2	DX	10	4	128	241	MARKER
O3123X3	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 3	DX	10	4	129	241	MARKER
O3123X4	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 4	DX	10	4	130	241	MARKER
O3123X5	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, fetus 5	DX	10	4	131	241	MARKER
O3123X9	Continuing pregnancy after intrauterine death of one fetus or more, third trimester, other fetus	DX	10	4	132	241	MARKER
O3133X0	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, not applicable or unspecified	DX	10	4	133	241	MARKER
O3133X1	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 1	DX	10	4	134	241	MARKER
O3133X2	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 2	DX	10	4	135	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3133X3	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 3	DX	10	4	136	241	MARKER
O3133X4	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 4	DX	10	4	137	241	MARKER
O3133X5	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, fetus 5	DX	10	4	138	241	MARKER
O3133X9	Continuing pregnancy after elective fetal reduction of one fetus or more, third trimester, other fetus	DX	10	4	139	241	MARKER
O318X30	Other complications specific to multiple gestation, third trimester, not applicable or unspecified	DX	10	4	140	241	MARKER
O318X31	Other complications specific to multiple gestation, third trimester, fetus 1	DX	10	4	141	241	MARKER
O318X32	Other complications specific to multiple gestation, third trimester, fetus 2	DX	10	4	142	241	MARKER
O318X33	Other complications specific to multiple gestation, third trimester, fetus 3	DX	10	4	143	241	MARKER
O318X34	Other complications specific to multiple gestation, third trimester, fetus 4	DX	10	4	144	241	MARKER
O318X35	Other complications specific to multiple gestation, third trimester, fetus 5	DX	10	4	145	241	MARKER
O318X39	Other complications specific to multiple gestation, third trimester, other fetus	DX	10	4	146	241	MARKER
O3403	Maternal care for unspecified congenital malformation of uterus, third trimester	DX	10	4	147	241	MARKER
O3413	Maternal care for benign tumor of corpus uteri, third trimester	DX	10	4	148	241	MARKER
O3433	Maternal care for cervical incompetence, third trimester	DX	10	4	149	241	MARKER
O3443	Maternal care for other abnormalities of cervix, third trimester	DX	10	4	150	241	MARKER
O34513	Maternal care for incarceration of gravid uterus, third trimester	DX	10	4	151	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O34523	Maternal care for prolapse of gravid uterus, third trimester	DX	10	4	152	241	MARKER
O34533	Maternal care for retroversion of gravid uterus, third trimester	DX	10	4	153	241	MARKER
O34593	Maternal care for other abnormalities of gravid uterus, third trimester	DX	10	4	154	241	MARKER
O3463	Maternal care for abnormality of vagina, third trimester	DX	10	4	155	241	MARKER
O3473	Maternal care for abnormality of vulva and perineum, third trimester	DX	10	4	156	241	MARKER
O3483	Maternal care for other abnormalities of pelvic organs, third trimester	DX	10	4	157	241	MARKER
O3493	Maternal care for abnormality of pelvic organ, unspecified, third trimester	DX	10	4	158	241	MARKER
O360130	Maternal care for anti-D [Rh] antibodies, third trimester, not applicable or unspecified	DX	10	4	159	241	MARKER
O360131	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 1	DX	10	4	160	241	MARKER
O360132	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 2	DX	10	4	161	241	MARKER
O360133	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 3	DX	10	4	162	241	MARKER
O360134	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 4	DX	10	4	163	241	MARKER
O360135	Maternal care for anti-D [Rh] antibodies, third trimester, fetus 5	DX	10	4	164	241	MARKER
O360139	Maternal care for anti-D [Rh] antibodies, third trimester, other fetus	DX	10	4	165	241	MARKER
O360930	Maternal care for other rhesus isoimmunization, third trimester, not applicable or unspecified	DX	10	4	166	241	MARKER
O360931	Maternal care for other rhesus isoimmunization, third trimester, fetus 1	DX	10	4	167	241	MARKER
O360932	Maternal care for other rhesus isoimmunization, third trimester, fetus 2	DX	10	4	168	241	MARKER
O360933	Maternal care for other rhesus isoimmunization, third trimester, fetus 3	DX	10	4	169	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O360934	Maternal care for other rhesus isoimmunization, third trimester, fetus 4	DX	10	4	170	241	MARKER
O360935	Maternal care for other rhesus isoimmunization, third trimester, fetus 5	DX	10	4	171	241	MARKER
O360939	Maternal care for other rhesus isoimmunization, third trimester, other fetus	DX	10	4	172	241	MARKER
O361130	Maternal care for Anti-A sensitization, third trimester, not applicable or unspecified	DX	10	4	173	241	MARKER
O361131	Maternal care for Anti-A sensitization, third trimester, fetus 1	DX	10	4	174	241	MARKER
O361132	Maternal care for Anti-A sensitization, third trimester, fetus 2	DX	10	4	175	241	MARKER
O361133	Maternal care for Anti-A sensitization, third trimester, fetus 3	DX	10	4	176	241	MARKER
O361134	Maternal care for Anti-A sensitization, third trimester, fetus 4	DX	10	4	177	241	MARKER
O361135	Maternal care for Anti-A sensitization, third trimester, fetus 5	DX	10	4	178	241	MARKER
O361139	Maternal care for Anti-A sensitization, third trimester, other fetus	DX	10	4	179	241	MARKER
O361930	Maternal care for other isoimmunization, third trimester, not applicable or unspecified	DX	10	4	180	241	MARKER
O361931	Maternal care for other isoimmunization, third trimester, fetus 1	DX	10	4	181	241	MARKER
O361932	Maternal care for other isoimmunization, third trimester, fetus 2	DX	10	4	182	241	MARKER
O361933	Maternal care for other isoimmunization, third trimester, fetus 3	DX	10	4	183	241	MARKER
O361934	Maternal care for other isoimmunization, third trimester, fetus 4	DX	10	4	184	241	MARKER
O361935	Maternal care for other isoimmunization, third trimester, fetus 5	DX	10	4	185	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O361939	Maternal care for other isoimmunization, third trimester, other fetus	DX	10	4	186	241	MARKER
O3623X0	Maternal care for hydrops fetalis, third trimester, not applicable or unspecified	DX	10	4	187	241	MARKER
O3623X1	Maternal care for hydrops fetalis, third trimester, fetus 1	DX	10	4	188	241	MARKER
O3623X2	Maternal care for hydrops fetalis, third trimester, fetus 2	DX	10	4	189	241	MARKER
O3623X3	Maternal care for hydrops fetalis, third trimester, fetus 3	DX	10	4	190	241	MARKER
O3623X4	Maternal care for hydrops fetalis, third trimester, fetus 4	DX	10	4	191	241	MARKER
O3623X5	Maternal care for hydrops fetalis, third trimester, fetus 5	DX	10	4	192	241	MARKER
O3623X9	Maternal care for hydrops fetalis, third trimester, other fetus	DX	10	4	193	241	MARKER
O365130	Maternal care for known or suspected placental insufficiency, third trimester, not applicable or unspecified	DX	10	4	194	241	MARKER
O365131	Maternal care for known or suspected placental insufficiency, third trimester, fetus 1	DX	10	4	195	241	MARKER
O365132	Maternal care for known or suspected placental insufficiency, third trimester, fetus 2	DX	10	4	196	241	MARKER
O365133	Maternal care for known or suspected placental insufficiency, third trimester, fetus 3	DX	10	4	197	241	MARKER
O365134	Maternal care for known or suspected placental insufficiency, third trimester, fetus 4	DX	10	4	198	241	MARKER
O365135	Maternal care for known or suspected placental insufficiency, third trimester, fetus 5	DX	10	4	199	241	MARKER
O365139	Maternal care for known or suspected placental insufficiency, third trimester, other fetus	DX	10	4	200	241	MARKER
O365930	Maternal care for other known or suspected poor fetal growth, third trimester, not applicable or unspecified	DX	10	4	201	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O365931	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 1	DX	10	4	202	241	MARKER
O365932	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 2	DX	10	4	203	241	MARKER
O365933	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 3	DX	10	4	204	241	MARKER
O365934	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 4	DX	10	4	205	241	MARKER
O365935	Maternal care for other known or suspected poor fetal growth, third trimester, fetus 5	DX	10	4	206	241	MARKER
O365939	Maternal care for other known or suspected poor fetal growth, third trimester, other fetus	DX	10	4	207	241	MARKER
O3663X0	Maternal care for excessive fetal growth, third trimester, not applicable or unspecified	DX	10	4	208	241	MARKER
O3663X1	Maternal care for excessive fetal growth, third trimester, fetus 1	DX	10	4	209	241	MARKER
O3663X2	Maternal care for excessive fetal growth, third trimester, fetus 2	DX	10	4	210	241	MARKER
O3663X3	Maternal care for excessive fetal growth, third trimester, fetus 3	DX	10	4	211	241	MARKER
O3663X4	Maternal care for excessive fetal growth, third trimester, fetus 4	DX	10	4	212	241	MARKER
O3663X5	Maternal care for excessive fetal growth, third trimester, fetus 5	DX	10	4	213	241	MARKER
O3663X9	Maternal care for excessive fetal growth, third trimester, other fetus	DX	10	4	214	241	MARKER
O3673X0	Maternal care for viable fetus in abdominal pregnancy, third trimester, not applicable or unspecified	DX	10	4	215	241	MARKER
O3673X1	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 1	DX	10	4	216	241	MARKER
O3673X2	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 2	DX	10	4	217	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3673X3	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 3	DX	10	4	218	241	MARKER
O3673X4	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 4	DX	10	4	219	241	MARKER
O3673X5	Maternal care for viable fetus in abdominal pregnancy, third trimester, fetus 5	DX	10	4	220	241	MARKER
O3673X9	Maternal care for viable fetus in abdominal pregnancy, third trimester, other fetus	DX	10	4	221	241	MARKER
O368130	Decreased fetal movements, third trimester, not applicable or unspecified	DX	10	4	222	241	MARKER
O368131	Decreased fetal movements, third trimester, fetus 1	DX	10	4	223	241	MARKER
O368132	Decreased fetal movements, third trimester, fetus 2	DX	10	4	224	241	MARKER
O368133	Decreased fetal movements, third trimester, fetus 3	DX	10	4	225	241	MARKER
O368134	Decreased fetal movements, third trimester, fetus 4	DX	10	4	226	241	MARKER
O368135	Decreased fetal movements, third trimester, fetus 5	DX	10	4	227	241	MARKER
O368139	Decreased fetal movements, third trimester, other fetus	DX	10	4	228	241	MARKER
O368230	Fetal anemia and thrombocytopenia, third trimester, not applicable or unspecified	DX	10	4	229	241	MARKER
O368231	Fetal anemia and thrombocytopenia, third trimester, fetus 1	DX	10	4	230	241	MARKER
O368232	Fetal anemia and thrombocytopenia, third trimester, fetus 2	DX	10	4	231	241	MARKER
O368233	Fetal anemia and thrombocytopenia, third trimester, fetus 3	DX	10	4	232	241	MARKER
O368234	Fetal anemia and thrombocytopenia, third trimester, fetus 4	DX	10	4	233	241	MARKER
O368235	Fetal anemia and thrombocytopenia, third trimester, fetus 5	DX	10	4	234	241	MARKER
O368239	Fetal anemia and thrombocytopenia, third trimester, other fetus	DX	10	4	235	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O368330	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, not applicable or unspecified	DX	10	4	236	241	MARKER
O368331	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 1	DX	10	4	237	241	MARKER
O368332	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 2	DX	10	4	238	241	MARKER
O368333	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 3	DX	10	4	239	241	MARKER
O368334	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 4	DX	10	4	240	241	MARKER
O368335	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, fetus 5	DX	10	4	241	241	MARKER
O368339	Maternal care for abnormalities of the fetal heart rate or rhythm, third trimester, other fetus	DX	10	4	242	241	MARKER
O368930	Maternal care for other specified fetal problems, third trimester, not applicable or unspecified	DX	10	4	243	241	MARKER
O368931	Maternal care for other specified fetal problems, third trimester, fetus 1	DX	10	4	244	241	MARKER
O368932	Maternal care for other specified fetal problems, third trimester, fetus 2	DX	10	4	245	241	MARKER
O368933	Maternal care for other specified fetal problems, third trimester, fetus 3	DX	10	4	246	241	MARKER
O368934	Maternal care for other specified fetal problems, third trimester, fetus 4	DX	10	4	247	241	MARKER
O368935	Maternal care for other specified fetal problems, third trimester, fetus 5	DX	10	4	248	241	MARKER
O368939	Maternal care for other specified fetal problems, third trimester, other fetus	DX	10	4	249	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3693X0	Maternal care for fetal problem, unspecified, third trimester, not applicable or unspecified	DX	10	4	250	241	MARKER
O3693X1	Maternal care for fetal problem, unspecified, third trimester, fetus 1	DX	10	4	251	241	MARKER
O3693X2	Maternal care for fetal problem, unspecified, third trimester, fetus 2	DX	10	4	252	241	MARKER
O3693X3	Maternal care for fetal problem, unspecified, third trimester, fetus 3	DX	10	4	253	241	MARKER
O3693X4	Maternal care for fetal problem, unspecified, third trimester, fetus 4	DX	10	4	254	241	MARKER
O3693X5	Maternal care for fetal problem, unspecified, third trimester, fetus 5	DX	10	4	255	241	MARKER
O3693X9	Maternal care for fetal problem, unspecified, third trimester, other fetus	DX	10	4	256	241	MARKER
O403XX0	Polyhydramnios, third trimester, not applicable or unspecified	DX	10	4	257	241	MARKER
O403XX1	Polyhydramnios, third trimester, fetus 1	DX	10	4	258	241	MARKER
O403XX2	Polyhydramnios, third trimester, fetus 2	DX	10	4	259	241	MARKER
O403XX3	Polyhydramnios, third trimester, fetus 3	DX	10	4	260	241	MARKER
O403XX4	Polyhydramnios, third trimester, fetus 4	DX	10	4	261	241	MARKER
O403XX5	Polyhydramnios, third trimester, fetus 5	DX	10	4	262	241	MARKER
O403XX9	Polyhydramnios, third trimester, other fetus	DX	10	4	263	241	MARKER
O4103X0	Oligohydramnios, third trimester, not applicable or unspecified	DX	10	4	264	241	MARKER
O4103X1	Oligohydramnios, third trimester, fetus 1	DX	10	4	265	241	MARKER
O4103X2	Oligohydramnios, third trimester, fetus 2	DX	10	4	266	241	MARKER
O4103X3	Oligohydramnios, third trimester, fetus 3	DX	10	4	267	241	MARKER
O4103X4	Oligohydramnios, third trimester, fetus 4	DX	10	4	268	241	MARKER
O4103X5	Oligohydramnios, third trimester, fetus 5	DX	10	4	269	241	MARKER
O4103X9	Oligohydramnios, third trimester, other fetus	DX	10	4	270	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O411030	Infection of amniotic sac and membranes, unspecified, third trimester, not applicable or unspecified	DX	10	4	271	241	MARKER
O411031	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 1	DX	10	4	272	241	MARKER
O411032	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 2	DX	10	4	273	241	MARKER
O411033	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 3	DX	10	4	274	241	MARKER
O411034	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 4	DX	10	4	275	241	MARKER
O411035	Infection of amniotic sac and membranes, unspecified, third trimester, fetus 5	DX	10	4	276	241	MARKER
O411039	Infection of amniotic sac and membranes, unspecified, third trimester, other fetus	DX	10	4	277	241	MARKER
O411230	Chorioamnionitis, third trimester, not applicable or unspecified	DX	10	4	278	241	MARKER
O411231	Chorioamnionitis, third trimester, fetus 1	DX	10	4	279	241	MARKER
O411232	Chorioamnionitis, third trimester, fetus 2	DX	10	4	280	241	MARKER
O411233	Chorioamnionitis, third trimester, fetus 3	DX	10	4	281	241	MARKER
O411234	Chorioamnionitis, third trimester, fetus 4	DX	10	4	282	241	MARKER
O411235	Chorioamnionitis, third trimester, fetus 5	DX	10	4	283	241	MARKER
O411239	Chorioamnionitis, third trimester, other fetus	DX	10	4	284	241	MARKER
O411430	Placentitis, third trimester, not applicable or unspecified	DX	10	4	285	241	MARKER
O411431	Placentitis, third trimester, fetus 1	DX	10	4	286	241	MARKER
O411432	Placentitis, third trimester, fetus 2	DX	10	4	287	241	MARKER
O411433	Placentitis, third trimester, fetus 3	DX	10	4	288	241	MARKER
O411434	Placentitis, third trimester, fetus 4	DX	10	4	289	241	MARKER
O411435	Placentitis, third trimester, fetus 5	DX	10	4	290	241	MARKER
O411439	Placentitis, third trimester, other fetus	DX	10	4	291	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O418X30	Other specified disorders of amniotic fluid and membranes, third trimester, not applicable or unspecified	DX	10	4	292	241	MARKER
O418X31	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 1	DX	10	4	293	241	MARKER
O418X32	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 2	DX	10	4	294	241	MARKER
O418X33	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 3	DX	10	4	295	241	MARKER
O418X34	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 4	DX	10	4	296	241	MARKER
O418X35	Other specified disorders of amniotic fluid and membranes, third trimester, fetus 5	DX	10	4	297	241	MARKER
O418X39	Other specified disorders of amniotic fluid and membranes, third trimester, other fetus	DX	10	4	298	241	MARKER
O4193X0	Disorder of amniotic fluid and membranes, unspecified, third trimester, not applicable or unspecified	DX	10	4	299	241	MARKER
O4193X1	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 1	DX	10	4	300	241	MARKER
O4193X2	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 2	DX	10	4	301	241	MARKER
O4193X3	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 3	DX	10	4	302	241	MARKER
O4193X4	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 4	DX	10	4	303	241	MARKER
O4193X5	Disorder of amniotic fluid and membranes, unspecified, third trimester, fetus 5	DX	10	4	304	241	MARKER
O4193X9	Disorder of amniotic fluid and membranes, unspecified, third trimester, other fetus	DX	10	4	305	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O43013	Fetomaternal placental transfusion syndrome, third trimester	DX	10	4	306	241	MARKER
O43023	Fetus-to-fetus placental transfusion syndrome, third trimester	DX	10	4	307	241	MARKER
O43103	Malformation of placenta, unspecified, third trimester	DX	10	4	308	241	MARKER
O43113	Circumvallate placenta, third trimester	DX	10	4	309	241	MARKER
O43123	Velamentous insertion of umbilical cord, third trimester	DX	10	4	310	241	MARKER
O43193	Other malformation of placenta, third trimester	DX	10	4	311	241	MARKER
O43213	Placenta accreta, third trimester	DX	10	4	312	241	MARKER
O43223	Placenta increta, third trimester	DX	10	4	313	241	MARKER
O43233	Placenta percreta, third trimester	DX	10	4	314	241	MARKER
O43813	Placental infarction, third trimester	DX	10	4	315	241	MARKER
O43893	Other placental disorders, third trimester	DX	10	4	316	241	MARKER
O4393	Unspecified placental disorder, third trimester	DX	10	4	317	241	MARKER
O4403	Complete placenta previa NOS or without hemorrhage, third trimester	DX	10	4	318	241	MARKER
O4413	Complete placenta previa with hemorrhage, third trimester	DX	10	4	319	241	MARKER
O4423	Partial placenta previa NOS or without hemorrhage, third trimester	DX	10	4	320	241	MARKER
O4433	Partial placenta previa with hemorrhage, third trimester	DX	10	4	321	241	MARKER
O4443	Low lying placenta NOS or without hemorrhage, third trimester	DX	10	4	322	241	MARKER
O4453	Low lying placenta with hemorrhage, third trimester	DX	10	4	323	241	MARKER
O45003	Premature separation of placenta with coagulation defect, unspecified, third trimester	DX	10	4	324	241	MARKER
O45013	Premature separation of placenta with afibrinogenemia, third trimester	DX	10	4	325	241	MARKER
O45023	Premature separation of placenta with disseminated intravascular coagulation, third trimester	DX	10	4	326	241	MARKER
O45093	Premature separation of placenta with other coagulation defect, third trimester	DX	10	4	327	241	MARKER
O458X3	Other premature separation of placenta, third trimester	DX	10	4	328	241	MARKER

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority		Pregnancy Duration	durationanchor
				1	2		
O4593	Premature separation of placenta, unspecified, third trimester	DX	10	4	329	241	MARKER
O46003	Antepartum hemorrhage with coagulation defect, unspecified, third trimester	DX	10	4	330	241	MARKER
O46013	Antepartum hemorrhage with afibrinogenemia, third trimester	DX	10	4	331	241	MARKER
O46023	Antepartum hemorrhage with disseminated intravascular coagulation, third trimester	DX	10	4	332	241	MARKER
O46093	Antepartum hemorrhage with other coagulation defect, third trimester	DX	10	4	333	241	MARKER
O468X3	Other antepartum hemorrhage, third trimester	DX	10	4	334	241	MARKER
O4693	Antepartum hemorrhage, unspecified, third trimester	DX	10	4	335	241	MARKER
O4703	False labor before 37 completed weeks of gestation, third trimester	DX	10	4	336	241	MARKER
O6003	Preterm labor without delivery, third trimester	DX	10	4	337	241	MARKER
O7103	Rupture of uterus before onset of labor, third trimester	DX	10	4	338	241	MARKER
O88013	Air embolism in pregnancy, third trimester	DX	10	4	339	241	MARKER
O88113	Amniotic fluid embolism in pregnancy, third trimester	DX	10	4	340	241	MARKER
O88213	Thromboembolism in pregnancy, third trimester	DX	10	4	341	241	MARKER
O88313	Pyemic and septic embolism in pregnancy, third trimester	DX	10	4	342	241	MARKER
O88813	Other embolism in pregnancy, third trimester	DX	10	4	343	241	MARKER
O91013	Infection of nipple associated with pregnancy, third trimester	DX	10	4	344	241	MARKER
O91113	Abscess of breast associated with pregnancy, third trimester	DX	10	4	345	241	MARKER
O91213	Nonpurulent mastitis associated with pregnancy, third trimester	DX	10	4	346	241	MARKER
O92013	Retracted nipple associated with pregnancy, third trimester	DX	10	4	347	241	MARKER
O92113	Cracked nipple associated with pregnancy, third trimester	DX	10	4	348	241	MARKER
O98013	Tuberculosis complicating pregnancy, third trimester	DX	10	4	349	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O98113	Syphilis complicating pregnancy, third trimester	DX	10	4	350	241	MARKER
O98213	Gonorrhea complicating pregnancy, third trimester	DX	10	4	351	241	MARKER
O98313	Other infections with a predominantly sexual mode of transmission complicating pregnancy, third trimester	DX	10	4	352	241	MARKER
O98413	Viral hepatitis complicating pregnancy, third trimester	DX	10	4	353	241	MARKER
O98513	Other viral diseases complicating pregnancy, third trimester	DX	10	4	354	241	MARKER
O98613	Protozoal diseases complicating pregnancy, third trimester	DX	10	4	355	241	MARKER
O98713	Human immunodeficiency virus [HIV] disease complicating pregnancy, third trimester	DX	10	4	356	241	MARKER
O98813	Other maternal infectious and parasitic diseases complicating pregnancy, third trimester	DX	10	4	357	241	MARKER
O98913	Unspecified maternal infectious and parasitic disease complicating pregnancy, third trimester	DX	10	4	358	241	MARKER
O99013	Anemia complicating pregnancy, third trimester	DX	10	4	359	241	MARKER
O99113	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy, third trimester	DX	10	4	360	241	MARKER
O99213	Obesity complicating pregnancy, third trimester	DX	10	4	361	241	MARKER
O99283	Endocrine, nutritional and metabolic diseases complicating pregnancy, third trimester	DX	10	4	362	241	MARKER
O99313	Alcohol use complicating pregnancy, third trimester	DX	10	4	363	241	MARKER
O99323	Drug use complicating pregnancy, third trimester	DX	10	4	364	241	MARKER
O99333	Smoking (tobacco) complicating pregnancy, third trimester	DX	10	4	365	241	MARKER
O99343	Other mental disorders complicating pregnancy, third trimester	DX	10	4	366	241	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O99353	Diseases of the nervous system complicating pregnancy, third trimester	DX	10	4	367	241	MARKER
O99413	Diseases of the circulatory system complicating pregnancy, third trimester	DX	10	4	368	241	MARKER
O99513	Diseases of the respiratory system complicating pregnancy, third trimester	DX	10	4	369	241	MARKER
O99613	Diseases of the digestive system complicating pregnancy, third trimester	DX	10	4	370	241	MARKER
O99713	Diseases of the skin and subcutaneous tissue complicating pregnancy, third trimester	DX	10	4	371	241	MARKER
O99843	Bariatric surgery status complicating pregnancy, third trimester	DX	10	4	372	241	MARKER
O9A113	Malignant neoplasm complicating pregnancy, third trimester	DX	10	4	373	241	MARKER
O9A213	Injury, poisoning and certain other consequences of external causes complicating pregnancy, third trimester	DX	10	4	374	241	MARKER
O9A313	Physical abuse complicating pregnancy, third trimester	DX	10	4	375	241	MARKER
O9A413	Sexual abuse complicating pregnancy, third trimester	DX	10	4	376	241	MARKER
O9A513	Psychological abuse complicating pregnancy, third trimester	DX	10	4	377	241	MARKER
Z3403	Encounter for supervision of normal first pregnancy, third trimester	DX	10	4	378	241	MARKER
Z3483	Encounter for supervision of other normal pregnancy, third trimester	DX	10	4	379	241	MARKER
Z3493	Encounter for supervision of normal pregnancy, unspecified, third trimester	DX	10	4	380	241	MARKER
O42012	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, second trimester	DX	10	5	1	147	MARKER
O42112	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, second trimester	DX	10	5	2	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O42912	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, second trimester	DX	10	5	3	147	MARKER
O0902	Supervision of pregnancy with history of infertility, second trimester	DX	10	5	4	147	MARKER
O0912	Supervision of pregnancy with history of ectopic pregnancy, second trimester	DX	10	5	5	147	MARKER
O09212	Supervision of pregnancy with history of pre-term labor, second trimester	DX	10	5	6	147	MARKER
O09292	Supervision of pregnancy with other poor reproductive or obstetric history, second trimester	DX	10	5	7	147	MARKER
O0932	Supervision of pregnancy with insufficient antenatal care, second trimester	DX	10	5	8	147	MARKER
O0942	Supervision of pregnancy with grand multiparity, second trimester	DX	10	5	9	147	MARKER
O09512	Supervision of elderly primigravida, second trimester	DX	10	5	10	147	MARKER
O09522	Supervision of elderly multigravida, second trimester	DX	10	5	11	147	MARKER
O09612	Supervision of young primigravida, second trimester	DX	10	5	12	147	MARKER
O09622	Supervision of young multigravida, second trimester	DX	10	5	13	147	MARKER
O0972	Supervision of high risk pregnancy due to social problems, second trimester	DX	10	5	14	147	MARKER
O09812	Supervision of pregnancy resulting from assisted reproductive technology, second trimester	DX	10	5	15	147	MARKER
O09822	Supervision of pregnancy with history of in utero procedure during previous pregnancy, second trimester	DX	10	5	16	147	MARKER
O09892	Supervision of other high risk pregnancies, second trimester	DX	10	5	17	147	MARKER
O0992	Supervision of high risk pregnancy, unspecified, second trimester	DX	10	5	18	147	MARKER
O09A2	Supervision of pregnancy with history of molar pregnancy, second trimester	DX	10	5	19	147	MARKER
O10012	Pre-existing essential hypertension complicating pregnancy, second trimester	DX	10	5	20	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O10112	Pre-existing hypertensive heart disease complicating pregnancy, second trimester	DX	10	5	21	147	MARKER
O10212	Pre-existing hypertensive chronic kidney disease complicating pregnancy, second trimester	DX	10	5	22	147	MARKER
O10312	Pre-existing hypertensive heart and chronic kidney disease complicating pregnancy, second trimester	DX	10	5	23	147	MARKER
O10412	Pre-existing secondary hypertension complicating pregnancy, second trimester	DX	10	5	24	147	MARKER
O10912	Unspecified pre-existing hypertension complicating pregnancy, second trimester	DX	10	5	25	147	MARKER
O112	Pre-existing hypertension with pre-eclampsia, second trimester	DX	10	5	26	147	MARKER
O1202	Gestational edema, second trimester	DX	10	5	27	147	MARKER
O1212	Gestational proteinuria, second trimester	DX	10	5	28	147	MARKER
O1222	Gestational edema with proteinuria, second trimester	DX	10	5	29	147	MARKER
O132	Gestational [pregnancy-induced] hypertension without significant proteinuria, second trimester	DX	10	5	30	147	MARKER
O1402	Mild to moderate pre-eclampsia, second trimester	DX	10	5	31	147	MARKER
O1412	Severe pre-eclampsia, second trimester	DX	10	5	32	147	MARKER
O1422	HELLP syndrome (HELLP), second trimester	DX	10	5	33	147	MARKER
O1492	Unspecified pre-eclampsia, second trimester	DX	10	5	34	147	MARKER
O1502	Eclampsia complicating pregnancy, second trimester	DX	10	5	35	147	MARKER
O162	Unspecified maternal hypertension, second trimester	DX	10	5	36	147	MARKER
O2202	Varicose veins of lower extremity in pregnancy, second trimester	DX	10	5	37	147	MARKER
O2212	Genital varices in pregnancy, second trimester	DX	10	5	38	147	MARKER
O2222	Superficial thrombophlebitis in pregnancy, second trimester	DX	10	5	39	147	MARKER
O2232	Deep phlebothrombosis in pregnancy, second trimester	DX	10	5	40	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O2242	Hemorrhoids in pregnancy, second trimester	DX	10	5	41	147	MARKER
O2252	Cerebral venous thrombosis in pregnancy, second trimester	DX	10	5	42	147	MARKER
O228X2	Other venous complications in pregnancy, second trimester	DX	10	5	43	147	MARKER
O2292	Venous complication in pregnancy, unspecified, second trimester	DX	10	5	44	147	MARKER
O2302	Infections of kidney in pregnancy, second trimester	DX	10	5	45	147	MARKER
O2312	Infections of bladder in pregnancy, second trimester	DX	10	5	46	147	MARKER
O2322	Infections of urethra in pregnancy, second trimester	DX	10	5	47	147	MARKER
O2332	Infections of other parts of urinary tract in pregnancy, second trimester	DX	10	5	48	147	MARKER
O2342	Unspecified infection of urinary tract in pregnancy, second trimester	DX	10	5	49	147	MARKER
O23512	Infections of cervix in pregnancy, second trimester	DX	10	5	50	147	MARKER
O23522	Salpingo-oophoritis in pregnancy, second trimester	DX	10	5	51	147	MARKER
O23592	Infection of other part of genital tract in pregnancy, second trimester	DX	10	5	52	147	MARKER
O2392	Unspecified genitourinary tract infection in pregnancy, second trimester	DX	10	5	53	147	MARKER
O24012	Pre-existing type 1 diabetes mellitus, in pregnancy, second trimester	DX	10	5	54	147	MARKER
O24112	Pre-existing type 2 diabetes mellitus, in pregnancy, second trimester	DX	10	5	55	147	MARKER
O24312	Unspecified pre-existing diabetes mellitus in pregnancy, second trimester	DX	10	5	56	147	MARKER
O24812	Other pre-existing diabetes mellitus in pregnancy, second trimester	DX	10	5	57	147	MARKER
O24912	Unspecified diabetes mellitus in pregnancy, second trimester	DX	10	5	58	147	MARKER
O2512	Malnutrition in pregnancy, second trimester	DX	10	5	59	147	MARKER
O2602	Excessive weight gain in pregnancy, second trimester	DX	10	5	60	147	MARKER
O2612	Low weight gain in pregnancy, second trimester	DX	10	5	61	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O2622	Pregnancy care for patient with recurrent pregnancy loss, second trimester	DX	10	5	62	147	MARKER
O2632	Retained intrauterine contraceptive device in pregnancy, second trimester	DX	10	5	63	147	MARKER
O2642	Herpes gestationis, second trimester	DX	10	5	64	147	MARKER
O2652	Maternal hypotension syndrome, second trimester	DX	10	5	65	147	MARKER
O26612	Liver and biliary tract disorders in pregnancy, second trimester	DX	10	5	66	147	MARKER
O26712	Subluxation of symphysis (pubis) in pregnancy, second trimester	DX	10	5	67	147	MARKER
O26812	Pregnancy related exhaustion and fatigue, second trimester	DX	10	5	68	147	MARKER
O26822	Pregnancy related peripheral neuritis, second trimester	DX	10	5	69	147	MARKER
O26832	Pregnancy related renal disease, second trimester	DX	10	5	70	147	MARKER
O26842	Uterine size-date discrepancy, second trimester	DX	10	5	71	147	MARKER
O26852	Spotting complicating pregnancy, second trimester	DX	10	5	72	147	MARKER
O26872	Cervical shortening, second trimester	DX	10	5	73	147	MARKER
O26892	Other specified pregnancy related conditions, second trimester	DX	10	5	74	147	MARKER
O2692	Pregnancy related conditions, unspecified, second trimester	DX	10	5	75	147	MARKER
O29012	Aspiration pneumonitis due to anesthesia during pregnancy, second trimester	DX	10	5	76	147	MARKER
O29022	Pressure collapse of lung due to anesthesia during pregnancy, second trimester	DX	10	5	77	147	MARKER
O29092	Other pulmonary complications of anesthesia during pregnancy, second trimester	DX	10	5	78	147	MARKER
O29112	Cardiac arrest due to anesthesia during pregnancy, second trimester	DX	10	5	79	147	MARKER
O29122	Cardiac failure due to anesthesia during pregnancy, second trimester	DX	10	5	80	147	MARKER
O29192	Other cardiac complications of anesthesia during pregnancy, second trimester	DX	10	5	81	147	MARKER
O29212	Cerebral anoxia due to anesthesia during pregnancy, second trimester	DX	10	5	82	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O29292	Other central nervous system complications of anesthesia during pregnancy, second trimester	DX	10	5	83	147	MARKER
O293X2	Toxic reaction to local anesthesia during pregnancy, second trimester	DX	10	5	84	147	MARKER
O2942	Spinal and epidural anesthesia induced headache during pregnancy, second trimester	DX	10	5	85	147	MARKER
O295X2	Other complications of spinal and epidural anesthesia during pregnancy, second trimester	DX	10	5	86	147	MARKER
O2962	Failed or difficult intubation for anesthesia during pregnancy, second trimester	DX	10	5	87	147	MARKER
O298X2	Other complications of anesthesia during pregnancy, second trimester	DX	10	5	88	147	MARKER
O2992	Unspecified complication of anesthesia during pregnancy, second trimester	DX	10	5	89	147	MARKER
O30002	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester	DX	10	5	90	147	MARKER
O30012	Twin pregnancy, monochorionic/monoamniotic, second trimester	DX	10	5	91	147	MARKER
O30022	Conjoined twin pregnancy, second trimester	DX	10	5	92	147	MARKER
O30032	Twin pregnancy, monochorionic/diamniotic, second trimester	DX	10	5	93	147	MARKER
O30042	Twin pregnancy, dichorionic/diamniotic, second trimester	DX	10	5	94	147	MARKER
O30092	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester	DX	10	5	95	147	MARKER
O30102	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester	DX	10	5	96	147	MARKER
O30112	Triplet pregnancy with two or more monochorionic fetuses, second trimester	DX	10	5	97	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O30122	Triplet pregnancy with two or more monoamniotic fetuses, second trimester	DX	10	5	98	147	MARKER
O30132	Triplet pregnancy, trichorionic/triamniotic, second trimester	DX	10	5	99	147	MARKER
O30192	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester	DX	10	5	100	147	MARKER
O30202	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, second trimester	DX	10	5	101	147	MARKER
O30212	Quadruplet pregnancy with two or more monochorionic fetuses, second trimester	DX	10	5	102	147	MARKER
O30222	Quadruplet pregnancy with two or more monoamniotic fetuses, second trimester	DX	10	5	103	147	MARKER
O30232	Quadruplet pregnancy, quadrachorionic/quadra-amniotic, second trimester	DX	10	5	104	147	MARKER
O30292	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, second trimester	DX	10	5	105	147	MARKER
O30802	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, second trimester	DX	10	5	106	147	MARKER
O30812	Other specified multiple gestation with two or more monochorionic fetuses, second trimester	DX	10	5	107	147	MARKER
O30822	Other specified multiple gestation with two or more monoamniotic fetuses, second trimester	DX	10	5	108	147	MARKER
O30832	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, second trimester	DX	10	5	109	147	MARKER
O30892	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, second trimester	DX	10	5	110	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3092	Multiple gestation, unspecified, second trimester	DX	10	5	111	147	MARKER
O3102X0	Papyraceous fetus, second trimester, not applicable or unspecified	DX	10	5	112	147	MARKER
O3102X1	Papyraceous fetus, second trimester, fetus 1	DX	10	5	113	147	MARKER
O3102X2	Papyraceous fetus, second trimester, fetus 2	DX	10	5	114	147	MARKER
O3102X3	Papyraceous fetus, second trimester, fetus 3	DX	10	5	115	147	MARKER
O3102X4	Papyraceous fetus, second trimester, fetus 4	DX	10	5	116	147	MARKER
O3102X5	Papyraceous fetus, second trimester, fetus 5	DX	10	5	117	147	MARKER
O3102X9	Papyraceous fetus, second trimester, other fetus	DX	10	5	118	147	MARKER
O3112X0	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, not applicable or unspecified	DX	10	5	119	147	MARKER
O3112X1	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 1	DX	10	5	120	147	MARKER
O3112X2	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 2	DX	10	5	121	147	MARKER
O3112X3	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 3	DX	10	5	122	147	MARKER
O3112X4	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 4	DX	10	5	123	147	MARKER
O3112X5	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, fetus 5	DX	10	5	124	147	MARKER
O3112X9	Continuing pregnancy after spontaneous abortion of one fetus or more, second trimester, other fetus	DX	10	5	125	147	MARKER
O3122X0	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, not applicable or unspecified	DX	10	5	126	147	MARKER
O3122X1	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 1	DX	10	5	127	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3122X2	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 2	DX	10	5	128	147	MARKER
O3122X3	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 3	DX	10	5	129	147	MARKER
O3122X4	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 4	DX	10	5	130	147	MARKER
O3122X5	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, fetus 5	DX	10	5	131	147	MARKER
O3122X9	Continuing pregnancy after intrauterine death of one fetus or more, second trimester, other fetus	DX	10	5	132	147	MARKER
O3132X0	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, not applicable or unspecified	DX	10	5	133	147	MARKER
O3132X1	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 1	DX	10	5	134	147	MARKER
O3132X2	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 2	DX	10	5	135	147	MARKER
O3132X3	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 3	DX	10	5	136	147	MARKER
O3132X4	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 4	DX	10	5	137	147	MARKER
O3132X5	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, fetus 5	DX	10	5	138	147	MARKER
O3132X9	Continuing pregnancy after elective fetal reduction of one fetus or more, second trimester, other fetus	DX	10	5	139	147	MARKER
O318X20	Other complications specific to multiple gestation, second trimester, not applicable or unspecified	DX	10	5	140	147	MARKER
O318X21	Other complications specific to multiple gestation, second trimester, fetus 1	DX	10	5	141	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O318X22	Other complications specific to multiple gestation, second trimester, fetus 2	DX	10	5	142	147	MARKER
O318X23	Other complications specific to multiple gestation, second trimester, fetus 3	DX	10	5	143	147	MARKER
O318X24	Other complications specific to multiple gestation, second trimester, fetus 4	DX	10	5	144	147	MARKER
O318X25	Other complications specific to multiple gestation, second trimester, fetus 5	DX	10	5	145	147	MARKER
O318X29	Other complications specific to multiple gestation, second trimester, other fetus	DX	10	5	146	147	MARKER
O3402	Maternal care for unspecified congenital malformation of uterus, second trimester	DX	10	5	147	147	MARKER
O3412	Maternal care for benign tumor of corpus uteri, second trimester	DX	10	5	148	147	MARKER
O3432	Maternal care for cervical incompetence, second trimester	DX	10	5	149	147	MARKER
O3442	Maternal care for other abnormalities of cervix, second trimester	DX	10	5	150	147	MARKER
O34512	Maternal care for incarceration of gravid uterus, second trimester	DX	10	5	151	147	MARKER
O34522	Maternal care for prolapse of gravid uterus, second trimester	DX	10	5	152	147	MARKER
O34532	Maternal care for retroversion of gravid uterus, second trimester	DX	10	5	153	147	MARKER
O34592	Maternal care for other abnormalities of gravid uterus, second trimester	DX	10	5	154	147	MARKER
O3462	Maternal care for abnormality of vagina, second trimester	DX	10	5	155	147	MARKER
O3472	Maternal care for abnormality of vulva and perineum, second trimester	DX	10	5	156	147	MARKER
O3482	Maternal care for other abnormalities of pelvic organs, second trimester	DX	10	5	157	147	MARKER
O3492	Maternal care for abnormality of pelvic organ, unspecified, second trimester	DX	10	5	158	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O360120	Maternal care for anti-D [Rh] antibodies, second trimester, not applicable or unspecified	DX	10	5	159	147	MARKER
O360121	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 1	DX	10	5	160	147	MARKER
O360122	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 2	DX	10	5	161	147	MARKER
O360123	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 3	DX	10	5	162	147	MARKER
O360124	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 4	DX	10	5	163	147	MARKER
O360125	Maternal care for anti-D [Rh] antibodies, second trimester, fetus 5	DX	10	5	164	147	MARKER
O360129	Maternal care for anti-D [Rh] antibodies, second trimester, other fetus	DX	10	5	165	147	MARKER
O360920	Maternal care for other rhesus isoimmunization, second trimester, not applicable or unspecified	DX	10	5	166	147	MARKER
O360921	Maternal care for other rhesus isoimmunization, second trimester, fetus 1	DX	10	5	167	147	MARKER
O360922	Maternal care for other rhesus isoimmunization, second trimester, fetus 2	DX	10	5	168	147	MARKER
O360923	Maternal care for other rhesus isoimmunization, second trimester, fetus 3	DX	10	5	169	147	MARKER
O360924	Maternal care for other rhesus isoimmunization, second trimester, fetus 4	DX	10	5	170	147	MARKER
O360925	Maternal care for other rhesus isoimmunization, second trimester, fetus 5	DX	10	5	171	147	MARKER
O360929	Maternal care for other rhesus isoimmunization, second trimester, other fetus	DX	10	5	172	147	MARKER
O361120	Maternal care for Anti-A sensitization, second trimester, not applicable or unspecified	DX	10	5	173	147	MARKER
O361121	Maternal care for Anti-A sensitization, second trimester, fetus 1	DX	10	5	174	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O361122	Maternal care for Anti-A sensitization, second trimester, fetus 2	DX	10	5	175	147	MARKER
O361123	Maternal care for Anti-A sensitization, second trimester, fetus 3	DX	10	5	176	147	MARKER
O361124	Maternal care for Anti-A sensitization, second trimester, fetus 4	DX	10	5	177	147	MARKER
O361125	Maternal care for Anti-A sensitization, second trimester, fetus 5	DX	10	5	178	147	MARKER
O361129	Maternal care for Anti-A sensitization, second trimester, other fetus	DX	10	5	179	147	MARKER
O361920	Maternal care for other isoimmunization, second trimester, not applicable or unspecified	DX	10	5	180	147	MARKER
O361921	Maternal care for other isoimmunization, second trimester, fetus 1	DX	10	5	181	147	MARKER
O361922	Maternal care for other isoimmunization, second trimester, fetus 2	DX	10	5	182	147	MARKER
O361923	Maternal care for other isoimmunization, second trimester, fetus 3	DX	10	5	183	147	MARKER
O361924	Maternal care for other isoimmunization, second trimester, fetus 4	DX	10	5	184	147	MARKER
O361925	Maternal care for other isoimmunization, second trimester, fetus 5	DX	10	5	185	147	MARKER
O361929	Maternal care for other isoimmunization, second trimester, other fetus	DX	10	5	186	147	MARKER
O3622X0	Maternal care for hydrops fetalis, second trimester, not applicable or unspecified	DX	10	5	187	147	MARKER
O3622X1	Maternal care for hydrops fetalis, second trimester, fetus 1	DX	10	5	188	147	MARKER
O3622X2	Maternal care for hydrops fetalis, second trimester, fetus 2	DX	10	5	189	147	MARKER
O3622X3	Maternal care for hydrops fetalis, second trimester, fetus 3	DX	10	5	190	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3622X4	Maternal care for hydrops fetalis, second trimester, fetus 4	DX	10	5	191	147	MARKER
O3622X5	Maternal care for hydrops fetalis, second trimester, fetus 5	DX	10	5	192	147	MARKER
O3622X9	Maternal care for hydrops fetalis, second trimester, other fetus	DX	10	5	193	147	MARKER
O365120	Maternal care for known or suspected placental insufficiency, second trimester, not applicable or unspecified	DX	10	5	194	147	MARKER
O365121	Maternal care for known or suspected placental insufficiency, second trimester, fetus 1	DX	10	5	195	147	MARKER
O365122	Maternal care for known or suspected placental insufficiency, second trimester, fetus 2	DX	10	5	196	147	MARKER
O365123	Maternal care for known or suspected placental insufficiency, second trimester, fetus 3	DX	10	5	197	147	MARKER
O365124	Maternal care for known or suspected placental insufficiency, second trimester, fetus 4	DX	10	5	198	147	MARKER
O365125	Maternal care for known or suspected placental insufficiency, second trimester, fetus 5	DX	10	5	199	147	MARKER
O365129	Maternal care for known or suspected placental insufficiency, second trimester, other fetus	DX	10	5	200	147	MARKER
O365920	Maternal care for other known or suspected poor fetal growth, second trimester, not applicable or unspecified	DX	10	5	201	147	MARKER
O365921	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 1	DX	10	5	202	147	MARKER
O365922	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 2	DX	10	5	203	147	MARKER
O365923	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 3	DX	10	5	204	147	MARKER
O365924	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 4	DX	10	5	205	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O365925	Maternal care for other known or suspected poor fetal growth, second trimester, fetus 5	DX	10	5	206	147	MARKER
O365929	Maternal care for other known or suspected poor fetal growth, second trimester, other fetus	DX	10	5	207	147	MARKER
O3662X0	Maternal care for excessive fetal growth, second trimester, not applicable or unspecified	DX	10	5	208	147	MARKER
O3662X1	Maternal care for excessive fetal growth, second trimester, fetus 1	DX	10	5	209	147	MARKER
O3662X2	Maternal care for excessive fetal growth, second trimester, fetus 2	DX	10	5	210	147	MARKER
O3662X3	Maternal care for excessive fetal growth, second trimester, fetus 3	DX	10	5	211	147	MARKER
O3662X4	Maternal care for excessive fetal growth, second trimester, fetus 4	DX	10	5	212	147	MARKER
O3662X5	Maternal care for excessive fetal growth, second trimester, fetus 5	DX	10	5	213	147	MARKER
O3662X9	Maternal care for excessive fetal growth, second trimester, other fetus	DX	10	5	214	147	MARKER
O3672X0	Maternal care for viable fetus in abdominal pregnancy, second trimester, not applicable or unspecified	DX	10	5	215	147	MARKER
O3672X1	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 1	DX	10	5	216	147	MARKER
O3672X2	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 2	DX	10	5	217	147	MARKER
O3672X3	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 3	DX	10	5	218	147	MARKER
O3672X4	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 4	DX	10	5	219	147	MARKER
O3672X5	Maternal care for viable fetus in abdominal pregnancy, second trimester, fetus 5	DX	10	5	220	147	MARKER
O3672X9	Maternal care for viable fetus in abdominal pregnancy, second trimester, other fetus	DX	10	5	221	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O368120	Decreased fetal movements, second trimester, not applicable or unspecified	DX	10	5	222	147	MARKER
O368121	Decreased fetal movements, second trimester, fetus 1	DX	10	5	223	147	MARKER
O368122	Decreased fetal movements, second trimester, fetus 2	DX	10	5	224	147	MARKER
O368123	Decreased fetal movements, second trimester, fetus 3	DX	10	5	225	147	MARKER
O368124	Decreased fetal movements, second trimester, fetus 4	DX	10	5	226	147	MARKER
O368125	Decreased fetal movements, second trimester, fetus 5	DX	10	5	227	147	MARKER
O368129	Decreased fetal movements, second trimester, other fetus	DX	10	5	228	147	MARKER
O368220	Fetal anemia and thrombocytopenia, second trimester, not applicable or unspecified	DX	10	5	229	147	MARKER
O368221	Fetal anemia and thrombocytopenia, second trimester, fetus 1	DX	10	5	230	147	MARKER
O368222	Fetal anemia and thrombocytopenia, second trimester, fetus 2	DX	10	5	231	147	MARKER
O368223	Fetal anemia and thrombocytopenia, second trimester, fetus 3	DX	10	5	232	147	MARKER
O368224	Fetal anemia and thrombocytopenia, second trimester, fetus 4	DX	10	5	233	147	MARKER
O368225	Fetal anemia and thrombocytopenia, second trimester, fetus 5	DX	10	5	234	147	MARKER
O368229	Fetal anemia and thrombocytopenia, second trimester, other fetus	DX	10	5	235	147	MARKER
O368320	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, not applicable or unspecified	DX	10	5	236	147	MARKER
O368321	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 1	DX	10	5	237	147	MARKER
O368322	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 2	DX	10	5	238	147	MARKER
O368323	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 3	DX	10	5	239	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O368324	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 4	DX	10	5	240	147	MARKER
O368325	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, fetus 5	DX	10	5	241	147	MARKER
O368329	Maternal care for abnormalities of the fetal heart rate or rhythm, second trimester, other fetus	DX	10	5	242	147	MARKER
O368920	Maternal care for other specified fetal problems, second trimester, not applicable or unspecified	DX	10	5	243	147	MARKER
O368921	Maternal care for other specified fetal problems, second trimester, fetus 1	DX	10	5	244	147	MARKER
O368922	Maternal care for other specified fetal problems, second trimester, fetus 2	DX	10	5	245	147	MARKER
O368923	Maternal care for other specified fetal problems, second trimester, fetus 3	DX	10	5	246	147	MARKER
O368924	Maternal care for other specified fetal problems, second trimester, fetus 4	DX	10	5	247	147	MARKER
O368925	Maternal care for other specified fetal problems, second trimester, fetus 5	DX	10	5	248	147	MARKER
O368929	Maternal care for other specified fetal problems, second trimester, other fetus	DX	10	5	249	147	MARKER
O3692X0	Maternal care for fetal problem, unspecified, second trimester, not applicable or unspecified	DX	10	5	250	147	MARKER
O3692X1	Maternal care for fetal problem, unspecified, second trimester, fetus 1	DX	10	5	251	147	MARKER
O3692X2	Maternal care for fetal problem, unspecified, second trimester, fetus 2	DX	10	5	252	147	MARKER
O3692X3	Maternal care for fetal problem, unspecified, second trimester, fetus 3	DX	10	5	253	147	MARKER
O3692X4	Maternal care for fetal problem, unspecified, second trimester, fetus 4	DX	10	5	254	147	MARKER
O3692X5	Maternal care for fetal problem, unspecified, second trimester, fetus 5	DX	10	5	255	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3692X9	Maternal care for fetal problem, unspecified, second trimester, other fetus	DX	10	5	256	147	MARKER
O402XX0	Polyhydramnios, second trimester, not applicable or unspecified	DX	10	5	257	147	MARKER
O402XX1	Polyhydramnios, second trimester, fetus 1	DX	10	5	258	147	MARKER
O402XX2	Polyhydramnios, second trimester, fetus 2	DX	10	5	259	147	MARKER
O402XX3	Polyhydramnios, second trimester, fetus 3	DX	10	5	260	147	MARKER
O402XX4	Polyhydramnios, second trimester, fetus 4	DX	10	5	261	147	MARKER
O402XX5	Polyhydramnios, second trimester, fetus 5	DX	10	5	262	147	MARKER
O402XX9	Polyhydramnios, second trimester, other fetus	DX	10	5	263	147	MARKER
O4102X0	Oligohydramnios, second trimester, not applicable or unspecified	DX	10	5	264	147	MARKER
O4102X1	Oligohydramnios, second trimester, fetus 1	DX	10	5	265	147	MARKER
O4102X2	Oligohydramnios, second trimester, fetus 2	DX	10	5	266	147	MARKER
O4102X3	Oligohydramnios, second trimester, fetus 3	DX	10	5	267	147	MARKER
O4102X4	Oligohydramnios, second trimester, fetus 4	DX	10	5	268	147	MARKER
O4102X5	Oligohydramnios, second trimester, fetus 5	DX	10	5	269	147	MARKER
O4102X9	Oligohydramnios, second trimester, other fetus	DX	10	5	270	147	MARKER
O411020	Infection of amniotic sac and membranes, unspecified, second trimester, not applicable or unspecified	DX	10	5	271	147	MARKER
O411021	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 1	DX	10	5	272	147	MARKER
O411022	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 2	DX	10	5	273	147	MARKER
O411023	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 3	DX	10	5	274	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O411024	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 4	DX	10	5	275	147	MARKER
O411025	Infection of amniotic sac and membranes, unspecified, second trimester, fetus 5	DX	10	5	276	147	MARKER
O411029	Infection of amniotic sac and membranes, unspecified, second trimester, other fetus	DX	10	5	277	147	MARKER
O411220	Chorioamnionitis, second trimester, not applicable or unspecified	DX	10	5	278	147	MARKER
O411221	Chorioamnionitis, second trimester, fetus 1	DX	10	5	279	147	MARKER
O411222	Chorioamnionitis, second trimester, fetus 2	DX	10	5	280	147	MARKER
O411223	Chorioamnionitis, second trimester, fetus 3	DX	10	5	281	147	MARKER
O411224	Chorioamnionitis, second trimester, fetus 4	DX	10	5	282	147	MARKER
O411225	Chorioamnionitis, second trimester, fetus 5	DX	10	5	283	147	MARKER
O411229	Chorioamnionitis, second trimester, other fetus	DX	10	5	284	147	MARKER
O411420	Placentitis, second trimester, not applicable or unspecified	DX	10	5	285	147	MARKER
O411421	Placentitis, second trimester, fetus 1	DX	10	5	286	147	MARKER
O411422	Placentitis, second trimester, fetus 2	DX	10	5	287	147	MARKER
O411423	Placentitis, second trimester, fetus 3	DX	10	5	288	147	MARKER
O411424	Placentitis, second trimester, fetus 4	DX	10	5	289	147	MARKER
O411425	Placentitis, second trimester, fetus 5	DX	10	5	290	147	MARKER
O411429	Placentitis, second trimester, other fetus	DX	10	5	291	147	MARKER
O418X20	Other specified disorders of amniotic fluid and membranes, second trimester, not applicable or unspecified	DX	10	5	292	147	MARKER
O418X21	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 1	DX	10	5	293	147	MARKER
O418X22	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 2	DX	10	5	294	147	MARKER
O418X23	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 3	DX	10	5	295	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O418X24	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 4	DX	10	5	296	147	MARKER
O418X25	Other specified disorders of amniotic fluid and membranes, second trimester, fetus 5	DX	10	5	297	147	MARKER
O418X29	Other specified disorders of amniotic fluid and membranes, second trimester, other fetus	DX	10	5	298	147	MARKER
O4192X0	Disorder of amniotic fluid and membranes, unspecified, second trimester, not applicable or unspecified	DX	10	5	299	147	MARKER
O4192X1	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 1	DX	10	5	300	147	MARKER
O4192X2	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 2	DX	10	5	301	147	MARKER
O4192X3	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 3	DX	10	5	302	147	MARKER
O4192X4	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 4	DX	10	5	303	147	MARKER
O4192X5	Disorder of amniotic fluid and membranes, unspecified, second trimester, fetus 5	DX	10	5	304	147	MARKER
O4192X9	Disorder of amniotic fluid and membranes, unspecified, second trimester, other fetus	DX	10	5	305	147	MARKER
O43012	Fetomaternal placental transfusion syndrome, second trimester	DX	10	5	306	147	MARKER
O43022	Fetus-to-fetus placental transfusion syndrome, second trimester	DX	10	5	307	147	MARKER
O43102	Malformation of placenta, unspecified, second trimester	DX	10	5	308	147	MARKER
O43112	Circumvallate placenta, second trimester	DX	10	5	309	147	MARKER
O43122	Velamentous insertion of umbilical cord, second trimester	DX	10	5	310	147	MARKER
O43192	Other malformation of placenta, second trimester	DX	10	5	311	147	MARKER
O43212	Placenta accreta, second trimester	DX	10	5	312	147	MARKER
O43222	Placenta increta, second trimester	DX	10	5	313	147	MARKER

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Code	Description	Code Category	ICD		Priority 1	Priority 2	Pregnancy Duration	durationanchor
			Code	Type				
O43232	Placenta percreta, second trimester	DX	10		5	314	147	MARKER
O43812	Placental infarction, second trimester	DX	10		5	315	147	MARKER
O43892	Other placental disorders, second trimester	DX	10		5	316	147	MARKER
O4392	Unspecified placental disorder, second trimester	DX	10		5	317	147	MARKER
O4402	Complete placenta previa NOS or without hemorrhage, second trimester	DX	10		5	318	147	MARKER
O4412	Complete placenta previa with hemorrhage, second trimester	DX	10		5	319	147	MARKER
O4422	Partial placenta previa NOS or without hemorrhage, second trimester	DX	10		5	320	147	MARKER
O4432	Partial placenta previa with hemorrhage, second trimester	DX	10		5	321	147	MARKER
O4442	Low lying placenta NOS or without hemorrhage, second trimester	DX	10		5	322	147	MARKER
O4452	Low lying placenta with hemorrhage, second trimester	DX	10		5	323	147	MARKER
O45002	Premature separation of placenta with coagulation defect, unspecified, second trimester	DX	10		5	324	147	MARKER
O45012	Premature separation of placenta with afibrinogenemia, second trimester	DX	10		5	325	147	MARKER
O45022	Premature separation of placenta with disseminated intravascular coagulation, second trimester	DX	10		5	326	147	MARKER
O45092	Premature separation of placenta with other coagulation defect, second trimester	DX	10		5	327	147	MARKER
O458X2	Other premature separation of placenta, second trimester	DX	10		5	328	147	MARKER
O4592	Premature separation of placenta, unspecified, second trimester	DX	10		5	329	147	MARKER
O46002	Antepartum hemorrhage with coagulation defect, unspecified, second trimester	DX	10		5	330	147	MARKER
O46012	Antepartum hemorrhage with afibrinogenemia, second trimester	DX	10		5	331	147	MARKER
O46022	Antepartum hemorrhage with disseminated intravascular coagulation, second trimester	DX	10		5	332	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O46092	Antepartum hemorrhage with other coagulation defect, second trimester	DX	10	5	333	147	MARKER
O468X2	Other antepartum hemorrhage, second trimester	DX	10	5	334	147	MARKER
O4692	Antepartum hemorrhage, unspecified, second trimester	DX	10	5	335	147	MARKER
O4702	False labor before 37 completed weeks of gestation, second trimester	DX	10	5	336	147	MARKER
O6002	Preterm labor without delivery, second trimester	DX	10	5	337	147	MARKER
O7102	Rupture of uterus before onset of labor, second trimester	DX	10	5	338	147	MARKER
O88012	Air embolism in pregnancy, second trimester	DX	10	5	339	147	MARKER
O88112	Amniotic fluid embolism in pregnancy, second trimester	DX	10	5	340	147	MARKER
O88212	Thromboembolism in pregnancy, second trimester	DX	10	5	341	147	MARKER
O88312	Pyemic and septic embolism in pregnancy, second trimester	DX	10	5	342	147	MARKER
O88812	Other embolism in pregnancy, second trimester	DX	10	5	343	147	MARKER
O91012	Infection of nipple associated with pregnancy, second trimester	DX	10	5	344	147	MARKER
O91112	Abscess of breast associated with pregnancy, second trimester	DX	10	5	345	147	MARKER
O91212	Nonpurulent mastitis associated with pregnancy, second trimester	DX	10	5	346	147	MARKER
O92012	Retracted nipple associated with pregnancy, second trimester	DX	10	5	347	147	MARKER
O92112	Cracked nipple associated with pregnancy, second trimester	DX	10	5	348	147	MARKER
O98012	Tuberculosis complicating pregnancy, second trimester	DX	10	5	349	147	MARKER
O98112	Syphilis complicating pregnancy, second trimester	DX	10	5	350	147	MARKER
O98212	Gonorrhea complicating pregnancy, second trimester	DX	10	5	351	147	MARKER
O98312	Other infections with a predominantly sexual mode of transmission complicating pregnancy, second trimester	DX	10	5	352	147	MARKER
O98412	Viral hepatitis complicating pregnancy, second trimester	DX	10	5	353	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O98512	Other viral diseases complicating pregnancy, second trimester	DX	10	5	354	147	MARKER
O98612	Protozoal diseases complicating pregnancy, second trimester	DX	10	5	355	147	MARKER
O98712	Human immunodeficiency virus [HIV] disease complicating pregnancy, second trimester	DX	10	5	356	147	MARKER
O98812	Other maternal infectious and parasitic diseases complicating pregnancy, second trimester	DX	10	5	357	147	MARKER
O98912	Unspecified maternal infectious and parasitic disease complicating pregnancy, second trimester	DX	10	5	358	147	MARKER
O99012	Anemia complicating pregnancy, second trimester	DX	10	5	359	147	MARKER
O99112	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy, second trimester	DX	10	5	360	147	MARKER
O99212	Obesity complicating pregnancy, second trimester	DX	10	5	361	147	MARKER
O99282	Endocrine, nutritional and metabolic diseases complicating pregnancy, second trimester	DX	10	5	362	147	MARKER
O99312	Alcohol use complicating pregnancy, second trimester	DX	10	5	363	147	MARKER
O99322	Drug use complicating pregnancy, second trimester	DX	10	5	364	147	MARKER
O99332	Smoking (tobacco) complicating pregnancy, second trimester	DX	10	5	365	147	MARKER
O99342	Other mental disorders complicating pregnancy, second trimester	DX	10	5	366	147	MARKER
O99352	Diseases of the nervous system complicating pregnancy, second trimester	DX	10	5	367	147	MARKER
O99412	Diseases of the circulatory system complicating pregnancy, second trimester	DX	10	5	368	147	MARKER
O99512	Diseases of the respiratory system complicating pregnancy, second trimester	DX	10	5	369	147	MARKER
O99612	Diseases of the digestive system complicating pregnancy, second trimester	DX	10	5	370	147	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O99712	Diseases of the skin and subcutaneous tissue complicating pregnancy, second trimester	DX	10	5	371	147	MARKER
O99842	Bariatric surgery status complicating pregnancy, second trimester	DX	10	5	372	147	MARKER
O9A112	Malignant neoplasm complicating pregnancy, second trimester	DX	10	5	373	147	MARKER
O9A212	Injury, poisoning and certain other consequences of external causes complicating pregnancy, second trimester	DX	10	5	374	147	MARKER
O9A312	Physical abuse complicating pregnancy, second trimester	DX	10	5	375	147	MARKER
O9A412	Sexual abuse complicating pregnancy, second trimester	DX	10	5	376	147	MARKER
O9A512	Psychological abuse complicating pregnancy, second trimester	DX	10	5	377	147	MARKER
Z3402	Encounter for supervision of normal first pregnancy, second trimester	DX	10	5	378	147	MARKER
Z3482	Encounter for supervision of other normal pregnancy, second trimester	DX	10	5	379	147	MARKER
Z3492	Encounter for supervision of normal pregnancy, unspecified, second trimester	DX	10	5	380	147	MARKER
O368310	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, not applicable or unspecified	DX	10	6	1	70	MARKER
O368311	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 1	DX	10	6	2	70	MARKER
O368312	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 2	DX	10	6	3	70	MARKER
O368313	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 3	DX	10	6	4	70	MARKER
O368314	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 4	DX	10	6	5	70	MARKER
O368315	Maternal care for abnormalities of the fetal heart rate or rhythm, first trimester, fetus 5	DX	10	6	6	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O42011	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, first trimester	DX	10	6	7	70	MARKER
O42111	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, first trimester	DX	10	6	8	70	MARKER
O42911	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, first trimester	DX	10	6	9	70	MARKER
O0901	Supervision of pregnancy with history of infertility, first trimester	DX	10	6	10	70	MARKER
O0911	Supervision of pregnancy with history of ectopic pregnancy, first trimester	DX	10	6	11	70	MARKER
O09211	Supervision of pregnancy with history of pre-term labor, first trimester	DX	10	6	12	70	MARKER
O09291	Supervision of pregnancy with other poor reproductive or obstetric history, first trimester	DX	10	6	13	70	MARKER
O0931	Supervision of pregnancy with insufficient antenatal care, first trimester	DX	10	6	14	70	MARKER
O0941	Supervision of pregnancy with grand multiparity, first trimester	DX	10	6	15	70	MARKER
O09511	Supervision of elderly primigravida, first trimester	DX	10	6	16	70	MARKER
O09521	Supervision of elderly multigravida, first trimester	DX	10	6	17	70	MARKER
O09611	Supervision of young primigravida, first trimester	DX	10	6	18	70	MARKER
O09621	Supervision of young multigravida, first trimester	DX	10	6	19	70	MARKER
O0971	Supervision of high risk pregnancy due to social problems, first trimester	DX	10	6	20	70	MARKER
O09811	Supervision of pregnancy resulting from assisted reproductive technology, first trimester	DX	10	6	21	70	MARKER
O09821	Supervision of pregnancy with history of in utero procedure during previous pregnancy, first trimester	DX	10	6	22	70	MARKER
O09891	Supervision of other high risk pregnancies, first trimester	DX	10	6	23	70	MARKER
O0991	Supervision of high risk pregnancy, unspecified, first trimester	DX	10	6	24	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O09A1	Supervision of pregnancy with history of molar pregnancy, first trimester	DX	10	6	25	70	MARKER
O10011	Pre-existing essential hypertension complicating pregnancy, first trimester	DX	10	6	26	70	MARKER
O10111	Pre-existing hypertensive heart disease complicating pregnancy, first trimester	DX	10	6	27	70	MARKER
O10211	Pre-existing hypertensive chronic kidney disease complicating pregnancy, first trimester	DX	10	6	28	70	MARKER
O10311	Pre-existing hypertensive heart and chronic kidney disease complicating pregnancy, first trimester	DX	10	6	29	70	MARKER
O10411	Pre-existing secondary hypertension complicating pregnancy, first trimester	DX	10	6	30	70	MARKER
O10911	Unspecified pre-existing hypertension complicating pregnancy, first trimester	DX	10	6	31	70	MARKER
O111	Pre-existing hypertension with pre-eclampsia, first trimester	DX	10	6	32	70	MARKER
O1201	Gestational edema, first trimester	DX	10	6	33	70	MARKER
O1211	Gestational proteinuria, first trimester	DX	10	6	34	70	MARKER
O1221	Gestational edema with proteinuria, first trimester	DX	10	6	35	70	MARKER
O131	Gestational [pregnancy-induced] hypertension without significant proteinuria, first trimester	DX	10	6	36	70	MARKER
O161	Unspecified maternal hypertension, first trimester	DX	10	6	37	70	MARKER
O2201	Varicose veins of lower extremity in pregnancy, first trimester	DX	10	6	38	70	MARKER
O2211	Genital varices in pregnancy, first trimester	DX	10	6	39	70	MARKER
O2221	Superficial thrombophlebitis in pregnancy, first trimester	DX	10	6	40	70	MARKER
O2231	Deep phlebothrombosis in pregnancy, first trimester	DX	10	6	41	70	MARKER
O2241	Hemorrhoids in pregnancy, first trimester	DX	10	6	42	70	MARKER
O2251	Cerebral venous thrombosis in pregnancy, first trimester	DX	10	6	43	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority		Pregnancy Duration	durationanchor
				1	2		
O228X1	Other venous complications in pregnancy, first trimester	DX	10	6	44	70	MARKER
O2291	Venous complication in pregnancy, unspecified, first trimester	DX	10	6	45	70	MARKER
O2301	Infections of kidney in pregnancy, first trimester	DX	10	6	46	70	MARKER
O2311	Infections of bladder in pregnancy, first trimester	DX	10	6	47	70	MARKER
O2321	Infections of urethra in pregnancy, first trimester	DX	10	6	48	70	MARKER
O2331	Infections of other parts of urinary tract in pregnancy, first trimester	DX	10	6	49	70	MARKER
O2341	Unspecified infection of urinary tract in pregnancy, first trimester	DX	10	6	50	70	MARKER
O23511	Infections of cervix in pregnancy, first trimester	DX	10	6	51	70	MARKER
O23521	Salpingo-oophoritis in pregnancy, first trimester	DX	10	6	52	70	MARKER
O23591	Infection of other part of genital tract in pregnancy, first trimester	DX	10	6	53	70	MARKER
O2391	Unspecified genitourinary tract infection in pregnancy, first trimester	DX	10	6	54	70	MARKER
O24011	Pre-existing type 1 diabetes mellitus, in pregnancy, first trimester	DX	10	6	55	70	MARKER
O24111	Pre-existing type 2 diabetes mellitus, in pregnancy, first trimester	DX	10	6	56	70	MARKER
O24311	Unspecified pre-existing diabetes mellitus in pregnancy, first trimester	DX	10	6	57	70	MARKER
O24811	Other pre-existing diabetes mellitus in pregnancy, first trimester	DX	10	6	58	70	MARKER
O24911	Unspecified diabetes mellitus in pregnancy, first trimester	DX	10	6	59	70	MARKER
O2511	Malnutrition in pregnancy, first trimester	DX	10	6	60	70	MARKER
O2601	Excessive weight gain in pregnancy, first trimester	DX	10	6	61	70	MARKER
O2611	Low weight gain in pregnancy, first trimester	DX	10	6	62	70	MARKER
O2621	Pregnancy care for patient with recurrent pregnancy loss, first trimester	DX	10	6	63	70	MARKER
O2631	Retained intrauterine contraceptive device in pregnancy, first trimester	DX	10	6	64	70	MARKER
O2641	Herpes gestationis, first trimester	DX	10	6	65	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O2651	Maternal hypotension syndrome, first trimester	DX	10	6	66	70	MARKER
O26611	Liver and biliary tract disorders in pregnancy, first trimester	DX	10	6	67	70	MARKER
O26711	Subluxation of symphysis (pubis) in pregnancy, first trimester	DX	10	6	68	70	MARKER
O26811	Pregnancy related exhaustion and fatigue, first trimester	DX	10	6	69	70	MARKER
O26821	Pregnancy related peripheral neuritis, first trimester	DX	10	6	70	70	MARKER
O26831	Pregnancy related renal disease, first trimester	DX	10	6	71	70	MARKER
O26841	Uterine size-date discrepancy, first trimester	DX	10	6	72	70	MARKER
O26851	Spotting complicating pregnancy, first trimester	DX	10	6	73	70	MARKER
O26891	Other specified pregnancy related conditions, first trimester	DX	10	6	74	70	MARKER
O2691	Pregnancy related conditions, unspecified, first trimester	DX	10	6	75	70	MARKER
O29011	Aspiration pneumonitis due to anesthesia during pregnancy, first trimester	DX	10	6	76	70	MARKER
O29021	Pressure collapse of lung due to anesthesia during pregnancy, first trimester	DX	10	6	77	70	MARKER
O29091	Other pulmonary complications of anesthesia during pregnancy, first trimester	DX	10	6	78	70	MARKER
O29111	Cardiac arrest due to anesthesia during pregnancy, first trimester	DX	10	6	79	70	MARKER
O29121	Cardiac failure due to anesthesia during pregnancy, first trimester	DX	10	6	80	70	MARKER
O29191	Other cardiac complications of anesthesia during pregnancy, first trimester	DX	10	6	81	70	MARKER
O29211	Cerebral anoxia due to anesthesia during pregnancy, first trimester	DX	10	6	82	70	MARKER
O29291	Other central nervous system complications of anesthesia during pregnancy, first trimester	DX	10	6	83	70	MARKER
O293X1	Toxic reaction to local anesthesia during pregnancy, first trimester	DX	10	6	84	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O2941	Spinal and epidural anesthesia induced headache during pregnancy, first trimester	DX	10	6	85	70	MARKER
O295X1	Other complications of spinal and epidural anesthesia during pregnancy, first trimester	DX	10	6	86	70	MARKER
O2961	Failed or difficult intubation for anesthesia during pregnancy, first trimester	DX	10	6	87	70	MARKER
O298X1	Other complications of anesthesia during pregnancy, first trimester	DX	10	6	88	70	MARKER
O2991	Unspecified complication of anesthesia during pregnancy, first trimester	DX	10	6	89	70	MARKER
O30001	Twin pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester	DX	10	6	90	70	MARKER
O30011	Twin pregnancy, monochorionic/monoamniotic, first trimester	DX	10	6	91	70	MARKER
O30021	Conjoined twin pregnancy, first trimester	DX	10	6	92	70	MARKER
O30031	Twin pregnancy, monochorionic/diamniotic, first trimester	DX	10	6	93	70	MARKER
O30041	Twin pregnancy, dichorionic/diamniotic, first trimester	DX	10	6	94	70	MARKER
O30091	Twin pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester	DX	10	6	95	70	MARKER
O30101	Triplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester	DX	10	6	96	70	MARKER
O30111	Triplet pregnancy with two or more monochorionic fetuses, first trimester	DX	10	6	97	70	MARKER
O30121	Triplet pregnancy with two or more monoamniotic fetuses, first trimester	DX	10	6	98	70	MARKER
O30131	Triplet pregnancy, trichorionic/triamniotic, first trimester	DX	10	6	99	70	MARKER
O30191	Triplet pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester	DX	10	6	100	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O30201	Quadruplet pregnancy, unspecified number of placenta and unspecified number of amniotic sacs, first trimester	DX	10	6	101	70	MARKER
O30211	Quadruplet pregnancy with two or more monochorionic fetuses, first trimester	DX	10	6	102	70	MARKER
O30221	Quadruplet pregnancy with two or more monoamniotic fetuses, first trimester	DX	10	6	103	70	MARKER
O30231	Quadruplet pregnancy, quadrachorionic/quadra-amniotic, first trimester	DX	10	6	104	70	MARKER
O30291	Quadruplet pregnancy, unable to determine number of placenta and number of amniotic sacs, first trimester	DX	10	6	105	70	MARKER
O30801	Other specified multiple gestation, unspecified number of placenta and unspecified number of amniotic sacs, first trimester	DX	10	6	106	70	MARKER
O30811	Other specified multiple gestation with two or more monochorionic fetuses, first trimester	DX	10	6	107	70	MARKER
O30821	Other specified multiple gestation with two or more monoamniotic fetuses, first trimester	DX	10	6	108	70	MARKER
O30831	Other specified multiple gestation, number of chorions and amnions are both equal to the number of fetuses, first trimester	DX	10	6	109	70	MARKER
O30891	Other specified multiple gestation, unable to determine number of placenta and number of amniotic sacs, first trimester	DX	10	6	110	70	MARKER
O3091	Multiple gestation, unspecified, first trimester	DX	10	6	111	70	MARKER
O3101X0	Papyraceous fetus, first trimester, not applicable or unspecified	DX	10	6	112	70	MARKER
O3101X1	Papyraceous fetus, first trimester, fetus 1	DX	10	6	113	70	MARKER
O3101X2	Papyraceous fetus, first trimester, fetus 2	DX	10	6	114	70	MARKER
O3101X3	Papyraceous fetus, first trimester, fetus 3	DX	10	6	115	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3101X4	Papyraceous fetus, first trimester, fetus 4	DX	10	6	116	70	MARKER
O3101X5	Papyraceous fetus, first trimester, fetus 5	DX	10	6	117	70	MARKER
O3101X9	Papyraceous fetus, first trimester, other fetus	DX	10	6	118	70	MARKER
O3111X0	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, not applicable or unspecified	DX	10	6	119	70	MARKER
O3111X1	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 1	DX	10	6	120	70	MARKER
O3111X2	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 2	DX	10	6	121	70	MARKER
O3111X3	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 3	DX	10	6	122	70	MARKER
O3111X4	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 4	DX	10	6	123	70	MARKER
O3111X5	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, fetus 5	DX	10	6	124	70	MARKER
O3111X9	Continuing pregnancy after spontaneous abortion of one fetus or more, first trimester, other fetus	DX	10	6	125	70	MARKER
O3121X0	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, not applicable or unspecified	DX	10	6	126	70	MARKER
O3121X1	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 1	DX	10	6	127	70	MARKER
O3121X2	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 2	DX	10	6	128	70	MARKER
O3121X3	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 3	DX	10	6	129	70	MARKER
O3121X4	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 4	DX	10	6	130	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O3121X5	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, fetus 5	DX	10	6	131	70	MARKER
O3121X9	Continuing pregnancy after intrauterine death of one fetus or more, first trimester, other fetus	DX	10	6	132	70	MARKER
O3131X0	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, not applicable or unspecified	DX	10	6	133	70	MARKER
O3131X1	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 1	DX	10	6	134	70	MARKER
O3131X2	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 2	DX	10	6	135	70	MARKER
O3131X3	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 3	DX	10	6	136	70	MARKER
O3131X4	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 4	DX	10	6	137	70	MARKER
O3131X5	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, fetus 5	DX	10	6	138	70	MARKER
O3131X9	Continuing pregnancy after elective fetal reduction of one fetus or more, first trimester, other fetus	DX	10	6	139	70	MARKER
O318X10	Other complications specific to multiple gestation, first trimester, not applicable or unspecified	DX	10	6	140	70	MARKER
O318X11	Other complications specific to multiple gestation, first trimester, fetus 1	DX	10	6	141	70	MARKER
O318X12	Other complications specific to multiple gestation, first trimester, fetus 2	DX	10	6	142	70	MARKER
O318X13	Other complications specific to multiple gestation, first trimester, fetus 3	DX	10	6	143	70	MARKER
O318X14	Other complications specific to multiple gestation, first trimester, fetus 4	DX	10	6	144	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O318X15	Other complications specific to multiple gestation, first trimester, fetus 5	DX	10	6	145	70	MARKER
O318X19	Other complications specific to multiple gestation, first trimester, other fetus	DX	10	6	146	70	MARKER
O3401	Maternal care for unspecified congenital malformation of uterus, first trimester	DX	10	6	147	70	MARKER
O3411	Maternal care for benign tumor of corpus uteri, first trimester	DX	10	6	148	70	MARKER
O3431	Maternal care for cervical incompetence, first trimester	DX	10	6	149	70	MARKER
O3441	Maternal care for other abnormalities of cervix, first trimester	DX	10	6	150	70	MARKER
O34511	Maternal care for incarceration of gravid uterus, first trimester	DX	10	6	151	70	MARKER
O34521	Maternal care for prolapse of gravid uterus, first trimester	DX	10	6	152	70	MARKER
O34531	Maternal care for retroversion of gravid uterus, first trimester	DX	10	6	153	70	MARKER
O34591	Maternal care for other abnormalities of gravid uterus, first trimester	DX	10	6	154	70	MARKER
O3461	Maternal care for abnormality of vagina, first trimester	DX	10	6	155	70	MARKER
O3471	Maternal care for abnormality of vulva and perineum, first trimester	DX	10	6	156	70	MARKER
O3481	Maternal care for other abnormalities of pelvic organs, first trimester	DX	10	6	157	70	MARKER
O3491	Maternal care for abnormality of pelvic organ, unspecified, first trimester	DX	10	6	158	70	MARKER
O360110	Maternal care for anti-D [Rh] antibodies, first trimester, not applicable or unspecified	DX	10	6	159	70	MARKER
O360111	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 1	DX	10	6	160	70	MARKER
O360112	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 2	DX	10	6	161	70	MARKER
O360113	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 3	DX	10	6	162	70	MARKER
O360114	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 4	DX	10	6	163	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O360115	Maternal care for anti-D [Rh] antibodies, first trimester, fetus 5	DX	10	6	164	70	MARKER
O360119	Maternal care for anti-D [Rh] antibodies, first trimester, other fetus	DX	10	6	165	70	MARKER
O360910	Maternal care for other rhesus isoimmunization, first trimester, not applicable or unspecified	DX	10	6	166	70	MARKER
O360911	Maternal care for other rhesus isoimmunization, first trimester, fetus 1	DX	10	6	167	70	MARKER
O360912	Maternal care for other rhesus isoimmunization, first trimester, fetus 2	DX	10	6	168	70	MARKER
O360913	Maternal care for other rhesus isoimmunization, first trimester, fetus 3	DX	10	6	169	70	MARKER
O360914	Maternal care for other rhesus isoimmunization, first trimester, fetus 4	DX	10	6	170	70	MARKER
O360915	Maternal care for other rhesus isoimmunization, first trimester, fetus 5	DX	10	6	171	70	MARKER
O360919	Maternal care for other rhesus isoimmunization, first trimester, other fetus	DX	10	6	172	70	MARKER
O361110	Maternal care for Anti-A sensitization, first trimester, not applicable or unspecified	DX	10	6	173	70	MARKER
O361111	Maternal care for Anti-A sensitization, first trimester, fetus 1	DX	10	6	174	70	MARKER
O361112	Maternal care for Anti-A sensitization, first trimester, fetus 2	DX	10	6	175	70	MARKER
O361113	Maternal care for Anti-A sensitization, first trimester, fetus 3	DX	10	6	176	70	MARKER
O361114	Maternal care for Anti-A sensitization, first trimester, fetus 4	DX	10	6	177	70	MARKER
O361115	Maternal care for Anti-A sensitization, first trimester, fetus 5	DX	10	6	178	70	MARKER
O361119	Maternal care for Anti-A sensitization, first trimester, other fetus	DX	10	6	179	70	MARKER
O361910	Maternal care for other isoimmunization, first trimester, not applicable or unspecified	DX	10	6	180	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O361911	Maternal care for other isoimmunization, first trimester, fetus 1	DX	10	6	181	70	MARKER
O361912	Maternal care for other isoimmunization, first trimester, fetus 2	DX	10	6	182	70	MARKER
O361913	Maternal care for other isoimmunization, first trimester, fetus 3	DX	10	6	183	70	MARKER
O361914	Maternal care for other isoimmunization, first trimester, fetus 4	DX	10	6	184	70	MARKER
O361915	Maternal care for other isoimmunization, first trimester, fetus 5	DX	10	6	185	70	MARKER
O361919	Maternal care for other isoimmunization, first trimester, other fetus	DX	10	6	186	70	MARKER
O3621X0	Maternal care for hydrops fetalis, first trimester, not applicable or unspecified	DX	10	6	187	70	MARKER
O3621X1	Maternal care for hydrops fetalis, first trimester, fetus 1	DX	10	6	188	70	MARKER
O3621X2	Maternal care for hydrops fetalis, first trimester, fetus 2	DX	10	6	189	70	MARKER
O3621X3	Maternal care for hydrops fetalis, first trimester, fetus 3	DX	10	6	190	70	MARKER
O3621X4	Maternal care for hydrops fetalis, first trimester, fetus 4	DX	10	6	191	70	MARKER
O3621X5	Maternal care for hydrops fetalis, first trimester, fetus 5	DX	10	6	192	70	MARKER
O3621X9	Maternal care for hydrops fetalis, first trimester, other fetus	DX	10	6	193	70	MARKER
O365110	Maternal care for known or suspected placental insufficiency, first trimester, not applicable or unspecified	DX	10	6	194	70	MARKER
O365111	Maternal care for known or suspected placental insufficiency, first trimester, fetus 1	DX	10	6	195	70	MARKER
O365112	Maternal care for known or suspected placental insufficiency, first trimester, fetus 2	DX	10	6	196	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O365113	Maternal care for known or suspected placental insufficiency, first trimester, fetus 3	DX	10	6	197	70	MARKER
O365114	Maternal care for known or suspected placental insufficiency, first trimester, fetus 4	DX	10	6	198	70	MARKER
O365115	Maternal care for known or suspected placental insufficiency, first trimester, fetus 5	DX	10	6	199	70	MARKER
O365119	Maternal care for known or suspected placental insufficiency, first trimester, other fetus	DX	10	6	200	70	MARKER
O365910	Maternal care for other known or suspected poor fetal growth, first trimester, not applicable or unspecified	DX	10	6	201	70	MARKER
O365911	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 1	DX	10	6	202	70	MARKER
O365912	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 2	DX	10	6	203	70	MARKER
O365913	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 3	DX	10	6	204	70	MARKER
O365914	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 4	DX	10	6	205	70	MARKER
O365915	Maternal care for other known or suspected poor fetal growth, first trimester, fetus 5	DX	10	6	206	70	MARKER
O365919	Maternal care for other known or suspected poor fetal growth, first trimester, other fetus	DX	10	6	207	70	MARKER
O3661X0	Maternal care for excessive fetal growth, first trimester, not applicable or unspecified	DX	10	6	208	70	MARKER
O3661X1	Maternal care for excessive fetal growth, first trimester, fetus 1	DX	10	6	209	70	MARKER
O3661X2	Maternal care for excessive fetal growth, first trimester, fetus 2	DX	10	6	210	70	MARKER
O3661X3	Maternal care for excessive fetal growth, first trimester, fetus 3	DX	10	6	211	70	MARKER
O3661X4	Maternal care for excessive fetal growth, first trimester, fetus 4	DX	10	6	212	70	MARKER

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority		Pregnancy Duration	durationanchor
				1	2		
O3661X5	Maternal care for excessive fetal growth, first trimester, fetus 5	DX	10	6	213	70	MARKER
O3661X9	Maternal care for excessive fetal growth, first trimester, other fetus	DX	10	6	214	70	MARKER
O3671X0	Maternal care for viable fetus in abdominal pregnancy, first trimester, not applicable or unspecified	DX	10	6	215	70	MARKER
O3671X1	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 1	DX	10	6	216	70	MARKER
O3671X2	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 2	DX	10	6	217	70	MARKER
O3671X3	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 3	DX	10	6	218	70	MARKER
O3671X4	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 4	DX	10	6	219	70	MARKER
O3671X5	Maternal care for viable fetus in abdominal pregnancy, first trimester, fetus 5	DX	10	6	220	70	MARKER
O3671X9	Maternal care for viable fetus in abdominal pregnancy, first trimester, other fetus	DX	10	6	221	70	MARKER
O368210	Fetal anemia and thrombocytopenia, first trimester, not applicable or unspecified	DX	10	6	222	70	MARKER
O368211	Fetal anemia and thrombocytopenia, first trimester, fetus 1	DX	10	6	223	70	MARKER
O368212	Fetal anemia and thrombocytopenia, first trimester, fetus 2	DX	10	6	224	70	MARKER
O368213	Fetal anemia and thrombocytopenia, first trimester, fetus 3	DX	10	6	225	70	MARKER
O368214	Fetal anemia and thrombocytopenia, first trimester, fetus 4	DX	10	6	226	70	MARKER
O368215	Fetal anemia and thrombocytopenia, first trimester, fetus 5	DX	10	6	227	70	MARKER
O368219	Fetal anemia and thrombocytopenia, first trimester, other fetus	DX	10	6	228	70	MARKER
O368910	Maternal care for other specified fetal problems, first trimester, not applicable or unspecified	DX	10	6	229	70	MARKER
O368911	Maternal care for other specified fetal problems, first trimester, fetus 1	DX	10	6	230	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O368912	Maternal care for other specified fetal problems, first trimester, fetus 2	DX	10	6	231	70	MARKER
O368913	Maternal care for other specified fetal problems, first trimester, fetus 3	DX	10	6	232	70	MARKER
O368914	Maternal care for other specified fetal problems, first trimester, fetus 4	DX	10	6	233	70	MARKER
O368915	Maternal care for other specified fetal problems, first trimester, fetus 5	DX	10	6	234	70	MARKER
O368919	Maternal care for other specified fetal problems, first trimester, other fetus	DX	10	6	235	70	MARKER
O3691X0	Maternal care for fetal problem, unspecified, first trimester, not applicable or unspecified	DX	10	6	236	70	MARKER
O3691X1	Maternal care for fetal problem, unspecified, first trimester, fetus 1	DX	10	6	237	70	MARKER
O3691X2	Maternal care for fetal problem, unspecified, first trimester, fetus 2	DX	10	6	238	70	MARKER
O3691X3	Maternal care for fetal problem, unspecified, first trimester, fetus 3	DX	10	6	239	70	MARKER
O3691X4	Maternal care for fetal problem, unspecified, first trimester, fetus 4	DX	10	6	240	70	MARKER
O3691X5	Maternal care for fetal problem, unspecified, first trimester, fetus 5	DX	10	6	241	70	MARKER
O3691X9	Maternal care for fetal problem, unspecified, first trimester, other fetus	DX	10	6	242	70	MARKER
O401XX0	Polyhydramnios, first trimester, not applicable or unspecified	DX	10	6	243	70	MARKER
O401XX1	Polyhydramnios, first trimester, fetus 1	DX	10	6	244	70	MARKER
O401XX2	Polyhydramnios, first trimester, fetus 2	DX	10	6	245	70	MARKER
O401XX3	Polyhydramnios, first trimester, fetus 3	DX	10	6	246	70	MARKER
O401XX4	Polyhydramnios, first trimester, fetus 4	DX	10	6	247	70	MARKER
O401XX5	Polyhydramnios, first trimester, fetus 5	DX	10	6	248	70	MARKER
O401XX9	Polyhydramnios, first trimester, other fetus	DX	10	6	249	70	MARKER
O4101X0	Oligohydramnios, first trimester, not applicable or unspecified	DX	10	6	250	70	MARKER
O4101X1	Oligohydramnios, first trimester, fetus 1	DX	10	6	251	70	MARKER

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O4101X2	Oligohydramnios, first trimester, fetus 2	DX	10	6	252	70	MARKER
O4101X3	Oligohydramnios, first trimester, fetus 3	DX	10	6	253	70	MARKER
O4101X4	Oligohydramnios, first trimester, fetus 4	DX	10	6	254	70	MARKER
O4101X5	Oligohydramnios, first trimester, fetus 5	DX	10	6	255	70	MARKER
O4101X9	Oligohydramnios, first trimester, other fetus	DX	10	6	256	70	MARKER
O411010	Infection of amniotic sac and membranes, unspecified, first trimester, not applicable or unspecified	DX	10	6	257	70	MARKER
O411011	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 1	DX	10	6	258	70	MARKER
O411012	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 2	DX	10	6	259	70	MARKER
O411013	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 3	DX	10	6	260	70	MARKER
O411014	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 4	DX	10	6	261	70	MARKER
O411015	Infection of amniotic sac and membranes, unspecified, first trimester, fetus 5	DX	10	6	262	70	MARKER
O411019	Infection of amniotic sac and membranes, unspecified, first trimester, other fetus	DX	10	6	263	70	MARKER
O411210	Chorioamnionitis, first trimester, not applicable or unspecified	DX	10	6	264	70	MARKER
O411211	Chorioamnionitis, first trimester, fetus 1	DX	10	6	265	70	MARKER
O411212	Chorioamnionitis, first trimester, fetus 2	DX	10	6	266	70	MARKER
O411213	Chorioamnionitis, first trimester, fetus 3	DX	10	6	267	70	MARKER
O411214	Chorioamnionitis, first trimester, fetus 4	DX	10	6	268	70	MARKER
O411215	Chorioamnionitis, first trimester, fetus 5	DX	10	6	269	70	MARKER

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O411219	Chorioamnionitis, first trimester, other fetus	DX	10	6	270	70	MARKER
O411410	Placentitis, first trimester, not applicable or unspecified	DX	10	6	271	70	MARKER
O411411	Placentitis, first trimester, fetus 1	DX	10	6	272	70	MARKER
O411412	Placentitis, first trimester, fetus 2	DX	10	6	273	70	MARKER
O411413	Placentitis, first trimester, fetus 3	DX	10	6	274	70	MARKER
O411414	Placentitis, first trimester, fetus 4	DX	10	6	275	70	MARKER
O411415	Placentitis, first trimester, fetus 5	DX	10	6	276	70	MARKER
O411419	Placentitis, first trimester, other fetus	DX	10	6	277	70	MARKER
O418X10	Other specified disorders of amniotic fluid and membranes, first trimester, not applicable or unspecified	DX	10	6	278	70	MARKER
O418X11	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 1	DX	10	6	279	70	MARKER
O418X12	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 2	DX	10	6	280	70	MARKER
O418X13	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 3	DX	10	6	281	70	MARKER
O418X14	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 4	DX	10	6	282	70	MARKER
O418X15	Other specified disorders of amniotic fluid and membranes, first trimester, fetus 5	DX	10	6	283	70	MARKER
O418X19	Other specified disorders of amniotic fluid and membranes, first trimester, other fetus	DX	10	6	284	70	MARKER
O4191X0	Disorder of amniotic fluid and membranes, unspecified, first trimester, not applicable or unspecified	DX	10	6	285	70	MARKER
O4191X1	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 1	DX	10	6	286	70	MARKER
O4191X2	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 2	DX	10	6	287	70	MARKER
O4191X3	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 3	DX	10	6	288	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O4191X4	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 4	DX	10	6	289	70	MARKER
O4191X5	Disorder of amniotic fluid and membranes, unspecified, first trimester, fetus 5	DX	10	6	290	70	MARKER
O4191X9	Disorder of amniotic fluid and membranes, unspecified, first trimester, other fetus	DX	10	6	291	70	MARKER
O43011	Fetomaternal placental transfusion syndrome, first trimester	DX	10	6	292	70	MARKER
O43021	Fetus-to-fetus placental transfusion syndrome, first trimester	DX	10	6	293	70	MARKER
O43101	Malformation of placenta, unspecified, first trimester	DX	10	6	294	70	MARKER
O43111	Circumvallate placenta, first trimester	DX	10	6	295	70	MARKER
O43121	Velamentous insertion of umbilical cord, first trimester	DX	10	6	296	70	MARKER
O43191	Other malformation of placenta, first trimester	DX	10	6	297	70	MARKER
O43211	Placenta accreta, first trimester	DX	10	6	298	70	MARKER
O43221	Placenta increta, first trimester	DX	10	6	299	70	MARKER
O43231	Placenta percreta, first trimester	DX	10	6	300	70	MARKER
O43811	Placental infarction, first trimester	DX	10	6	301	70	MARKER
O43891	Other placental disorders, first trimester	DX	10	6	302	70	MARKER
O4391	Unspecified placental disorder, first trimester	DX	10	6	303	70	MARKER
O4401	Complete placenta previa NOS or without hemorrhage, first trimester	DX	10	6	304	70	MARKER
O4411	Complete placenta previa with hemorrhage, first trimester	DX	10	6	305	70	MARKER
O4421	Partial placenta previa NOS or without hemorrhage, first trimester	DX	10	6	306	70	MARKER
O4431	Partial placenta previa with hemorrhage, first trimester	DX	10	6	307	70	MARKER
O4441	Low lying placenta NOS or without hemorrhage, first trimester	DX	10	6	308	70	MARKER
O4451	Low lying placenta with hemorrhage, first trimester	DX	10	6	309	70	MARKER
O45001	Premature separation of placenta with coagulation defect, unspecified, first trimester	DX	10	6	310	70	MARKER
O45011	Premature separation of placenta with afibrinogenemia, first trimester	DX	10	6	311	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O45021	Premature separation of placenta with disseminated intravascular coagulation, first trimester	DX	10	6	312	70	MARKER
O45091	Premature separation of placenta with other coagulation defect, first trimester	DX	10	6	313	70	MARKER
O458X1	Other premature separation of placenta, first trimester	DX	10	6	314	70	MARKER
O4591	Premature separation of placenta, unspecified, first trimester	DX	10	6	315	70	MARKER
O46001	Antepartum hemorrhage with coagulation defect, unspecified, first trimester	DX	10	6	316	70	MARKER
O46011	Antepartum hemorrhage with afibrinogenemia, first trimester	DX	10	6	317	70	MARKER
O46021	Antepartum hemorrhage with disseminated intravascular coagulation, first trimester	DX	10	6	318	70	MARKER
O46091	Antepartum hemorrhage with other coagulation defect, first trimester	DX	10	6	319	70	MARKER
O468X1	Other antepartum hemorrhage, first trimester	DX	10	6	320	70	MARKER
O4691	Antepartum hemorrhage, unspecified, first trimester	DX	10	6	321	70	MARKER
O88011	Air embolism in pregnancy, first trimester	DX	10	6	322	70	MARKER
O88111	Amniotic fluid embolism in pregnancy, first trimester	DX	10	6	323	70	MARKER
O88211	Thromboembolism in pregnancy, first trimester	DX	10	6	324	70	MARKER
O88311	Pyemic and septic embolism in pregnancy, first trimester	DX	10	6	325	70	MARKER
O88811	Other embolism in pregnancy, first trimester	DX	10	6	326	70	MARKER
O91011	Infection of nipple associated with pregnancy, first trimester	DX	10	6	327	70	MARKER
O91111	Abscess of breast associated with pregnancy, first trimester	DX	10	6	328	70	MARKER
O91211	Nonpurulent mastitis associated with pregnancy, first trimester	DX	10	6	329	70	MARKER
O92011	Retracted nipple associated with pregnancy, first trimester	DX	10	6	330	70	MARKER
O92111	Cracked nipple associated with pregnancy, first trimester	DX	10	6	331	70	MARKER

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O98011	Tuberculosis complicating pregnancy, first trimester	DX	10	6	332	70	MARKER
O98111	Syphilis complicating pregnancy, first trimester	DX	10	6	333	70	MARKER
O98211	Gonorrhea complicating pregnancy, first trimester	DX	10	6	334	70	MARKER
O98311	Other infections with a predominantly sexual mode of transmission complicating pregnancy, first trimester	DX	10	6	335	70	MARKER
O98411	Viral hepatitis complicating pregnancy, first trimester	DX	10	6	336	70	MARKER
O98511	Other viral diseases complicating pregnancy, first trimester	DX	10	6	337	70	MARKER
O98611	Protozoal diseases complicating pregnancy, first trimester	DX	10	6	338	70	MARKER
O98711	Human immunodeficiency virus [HIV] disease complicating pregnancy, first trimester	DX	10	6	339	70	MARKER
O98811	Other maternal infectious and parasitic diseases complicating pregnancy, first trimester	DX	10	6	340	70	MARKER
O98911	Unspecified maternal infectious and parasitic disease complicating pregnancy, first trimester	DX	10	6	341	70	MARKER
O99011	Anemia complicating pregnancy, first trimester	DX	10	6	342	70	MARKER
O99111	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism complicating pregnancy, first trimester	DX	10	6	343	70	MARKER
O99211	Obesity complicating pregnancy, first trimester	DX	10	6	344	70	MARKER
O99281	Endocrine, nutritional and metabolic diseases complicating pregnancy, first trimester	DX	10	6	345	70	MARKER
O99311	Alcohol use complicating pregnancy, first trimester	DX	10	6	346	70	MARKER
O99321	Drug use complicating pregnancy, first trimester	DX	10	6	347	70	MARKER
O99331	Smoking (tobacco) complicating pregnancy, first trimester	DX	10	6	348	70	MARKER
O99341	Other mental disorders complicating pregnancy, first trimester	DX	10	6	349	70	MARKER

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Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O99351	Diseases of the nervous system complicating pregnancy, first trimester	DX	10	6	350	70	MARKER
O99411	Diseases of the circulatory system complicating pregnancy, first trimester	DX	10	6	351	70	MARKER
O99511	Diseases of the respiratory system complicating pregnancy, first trimester	DX	10	6	352	70	MARKER
O99611	Diseases of the digestive system complicating pregnancy, first trimester	DX	10	6	353	70	MARKER
O99711	Diseases of the skin and subcutaneous tissue complicating pregnancy, first trimester	DX	10	6	354	70	MARKER
O99841	Bariatric surgery status complicating pregnancy, first trimester	DX	10	6	355	70	MARKER
O9A111	Malignant neoplasm complicating pregnancy, first trimester	DX	10	6	356	70	MARKER
O9A211	Injury, poisoning and certain other consequences of external causes complicating pregnancy, first trimester	DX	10	6	357	70	MARKER
O9A311	Physical abuse complicating pregnancy, first trimester	DX	10	6	358	70	MARKER
O9A411	Sexual abuse complicating pregnancy, first trimester	DX	10	6	359	70	MARKER
O9A511	Psychological abuse complicating pregnancy, first trimester	DX	10	6	360	70	MARKER
Z3401	Encounter for supervision of normal first pregnancy, first trimester	DX	10	6	361	70	MARKER
Z3481	Encounter for supervision of other normal pregnancy, first trimester	DX	10	6	362	70	MARKER
Z3491	Encounter for supervision of normal pregnancy, unspecified, first trimester	DX	10	6	363	70	MARKER
O6010X0	Preterm labor with preterm delivery, unspecified trimester, not applicable or unspecified	DX	10	7	1	245	OUTCOME
O6010X1	Preterm labor with preterm delivery, unspecified trimester, fetus 1	DX	10	7	2	245	OUTCOME
O6010X2	Preterm labor with preterm delivery, unspecified trimester, fetus 2	DX	10	7	3	245	OUTCOME
O6010X3	Preterm labor with preterm delivery, unspecified trimester, fetus 3	DX	10	7	4	245	OUTCOME

Appendix B. International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Healthcare Common Procedure Coding System (HCPCS) Used in the Gestational Age Algorithm

Code	Description	Code Category	ICD Code Type	Priority 1	Priority 2	Pregnancy Duration	durationanchor
O6010X4	Preterm labor with preterm delivery, unspecified trimester, fetus 4	DX	10	7	5	245	OUTCOME
O6010X5	Preterm labor with preterm delivery, unspecified trimester, fetus 5	DX	10	7	6	245	OUTCOME
O6010X9	Preterm labor with preterm delivery, unspecified trimester, other fetus	DX	10	7	7	245	OUTCOME
O42019	Preterm premature rupture of membranes, onset of labor within 24 hours of rupture, unspecified trimester	DX	10	7	8	245	OUTCOME
O42119	Preterm premature rupture of membranes, onset of labor more than 24 hours following rupture, unspecified trimester	DX	10	7	9	245	OUTCOME
O42919	Preterm premature rupture of membranes, unspecified as to length of time between rupture and onset of labor, unspecified trimester	DX	10	7	10	245	OUTCOME
P0718	Other low birth weight newborn, 2000-2499 grams	DX	10	8	1	238	OUTCOME
P0717	Other low birth weight newborn, 1750-1999 grams	DX	10	8	2	224	OUTCOME
P0716	Other low birth weight newborn, 1500-1749 grams	DX	10	8	3	217	OUTCOME
P0715	Other low birth weight newborn, 1250-1499 grams	DX	10	8	4	210	OUTCOME
P0714	Other low birth weight newborn, 1000-1249 grams	DX	10	8	5	203	OUTCOME
P0710	Other low birth weight newborn, unspecified weight	DX	10	8	6	154	OUTCOME
P0703	Extremely low birth weight newborn, 750-999 grams	DX	10	8	7	189	OUTCOME
P0702	Extremely low birth weight newborn, 500-749 grams	DX	10	8	8	175	OUTCOME
P0700	Extremely low birth weight newborn, unspecified weight	DX	10	8	9	154	OUTCOME
P0701	Extremely low birth weight newborn, less than 500 grams	DX	10	8	9	154	OUTCOME

Appendix C. International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Live Birth Pregnancies.

Code	Description	Code Category	ICD Code Type	Inpatient Principal DX Any position
O80	Encounter for full-term uncomplicated delivery	DX	10	IP*
Z370	Single live birth	DX	10	IP*
Z372	Twins, both liveborn	DX	10	IP*
Z3750	Multiple births, unspecified, all liveborn	DX	10	IP*
Z3751	Triplets, all liveborn	DX	10	IP*
Z3752	Quadruplets, all liveborn	DX	10	IP*
Z3753	Quintuplets, all liveborn	DX	10	IP*
Z3754	Sextuplets, all liveborn	DX	10	IP*
Z3759	Other multiple births, all liveborn	DX	10	IP*
Z3800	Single liveborn infant, delivered vaginally	DX	10	IP*
Z3801	Single liveborn infant, delivered by cesarean	DX	10	IP*
Z381	Single liveborn infant, born outside hospital	DX	10	IP*
Z382	Single liveborn infant, unspecified as to place of birth	DX	10	IP*
Z3830	Twin liveborn infant, delivered vaginally	DX	10	IP*
Z3831	Twin liveborn infant, delivered by cesarean	DX	10	IP*
Z384	Twin liveborn infant, born outside hospital	DX	10	IP*
Z385	Twin liveborn infant, unspecified as to place of birth	DX	10	IP*
Z3861	Triplet liveborn infant, delivered vaginally	DX	10	IP*
Z3862	Triplet liveborn infant, delivered by cesarean	DX	10	IP*
Z3863	Quadruplet liveborn infant, delivered vaginally	DX	10	IP*
Z3864	Quadruplet liveborn infant, delivered by cesarean	DX	10	IP*
Z3865	Quintuplet liveborn infant, delivered vaginally	DX	10	IP*
Z3866	Quintuplet liveborn infant, delivered by cesarean	DX	10	IP*
Z3868	Other multiple liveborn infant, delivered vaginally	DX	10	IP*
Z3869	Other multiple liveborn infant, delivered by cesarean	DX	10	IP*
Z387	Other multiple liveborn infant, born outside hospital	DX	10	IP*
Z388	Other multiple liveborn infant, unspecified as to place of birth	DX	10	IP*
650	Normal delivery	DX	09	IP*
V270	Outcome of delivery, single liveborn	DX	09	IP*
V272	Outcome of delivery, twins, both liveborn	DX	09	IP*
V275	Outcome of delivery, other multiple birth, all liveborn	DX	09	IP*
V30	Single liveborn	DX	09	IP*
V300	Single liveborn, born in hospital	DX	09	IP*
	Single liveborn, born in hospital, delivered without mention of cesarean			
V3000	delivery	DX	09	IP*
V3001	Single liveborn, born in hospital, delivered by cesarean delivery	DX	09	IP*
V301	Single liveborn, born before admission to hospital	DX	09	IP*
V302	Single liveborn, born outside hospital and not hospitalized	DX	09	IP*
V31	Twin birth, mate liveborn	DX	09	IP*
V310	Twin, mate liveborn, born in hospital	DX	09	IP*
	Twin, mate liveborn, born in hospital, delivered without mention of			
V3100	cesarean delivery	DX	09	IP*
V3101	Twin, mate liveborn, born in hospital, delivered by cesarean delivery	DX	09	IP*
V311	Twin birth, mate liveborn, born before admission to hospital	DX	09	IP*
V312	Twin birth, mate liveborn, born outside hospital and not hospitalized	DX	09	IP*

Appendix C. International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Live Birth Pregnancies.

Code	Description	Code Category	ICD Code Type	Inpatient Principal DX Any position
V34	Other multiple birth (three or more), mates all liveborn	DX	09	IP*
V340	Other multiple, mates all liveborn, born in hospital	DX	09	IP*
V3400	Other multiple, mates all liveborn, born in hospital, delivered without mention of cesarean delivery	DX	09	IP*
V3401	Other multiple, mates all liveborn, born in hospital, delivered by cesarean delivery	DX	09	IP*
V341	Other multiple birth (three or more), mates all liveborn, born before admission to hospital	DX	09	IP*
V342	Other multiple birth (three or more), mates all liveborn, born outside hospital and not hospitalized	DX	09	IP*
V39	Liveborn, unspecified whether single, twin, or multiple	DX	09	IP*
V390	Other liveborn, unspecified whether single, twin, or multiple, born in hospital	DX	09	IP*
V3900	Liveborn infant, unspecified whether single, twin, or multiple, born in hospital, delivered without mention of cesarean delivery	DX	09	IP*
V3901	Liveborn infant, unspecified whether single, twin, or multiple, born in hospital, delivered by cesarean	DX	09	IP*
V391	Liveborn, unspecified whether single, twin or multiple, born before admission to hospital	DX	09	IP*
V392	Liveborn, unspecified whether single, twin or multiple, born outside hospital and not hospitalized	DX	09	IP*

Appendix D. List of Healthcare Common Procedure Coding System (HCPCS) Used to Define Syphilis Testing

Code	Description	Code Category	Procedure Code Type
80055	Obstetric panel This panel must include the following: Blood count, complete (CBC), automated and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) Antibody, rubella (86762) Syphilis test, non-treponemal antibody; qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)	PX	C4
G0450	Screening for sexually transmitted infections, includes laboratory tests for chlamydia, gonorrhea, syphilis and hepatitis B	PX	HC
3512F	Syphilis screening documented as performed (HIV)	PX	C2
86592	Syphilis test, non-treponemal antibody; qualitative (eg, VDRL, RPR, ART)	PX	C4
86593	Syphilis test, non-treponemal antibody; quantitative	PX	C4
0065U	Syphilis test, non-treponemal antibody, immunoassay, qualitative (RPR)	PX	C4
0210U	Syphilis test, non-treponemal antibody, immunoassay, quantitative (RPR)	PX	C4
86780	Antibody; Treponema pallidum	PX	C4
86781	Antibody; treponema pallidum	PX	C4
87285	Infectious agent antigen detection by immunofluorescent technique; Treponema pallidum Antibody, Treponema pallidum, total and rapid plasma reagin (RPR), immunoassay,	PX	C4
0064U	qualitative	PX	C4
80081	Obstetric panel (includes HIV testing) This panel must include the following: Blood count, complete (CBC), and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Hepatitis B surface antigen (HBsAg) (87340) HIV-1 antigen(s), with HIV-1 and HIV-2 antibodies, single result (87389) Antibody, rubella (86762) Syphilis test, non-treponemal antibody; qualitative (eg, VDRL, RPR, ART) (86592) Antibody screen, RBC, each serum technique (86850) Blood typing, ABO (86900) AND Blood typing, Rh (D) (86901)	PX	C4

Appendix E. International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Syphilis Diagnosis.

Code	Description	Diagnosis	
		Code Category	Code Type
090.40	Unspecified juvenile neurosyphilis	DX	09
090.49	Other juvenile neurosyphilis	DX	09
091.0	Genital syphilis (primary)	DX	09
091.1	Primary anal syphilis	DX	09
091.2	Other primary syphilis	DX	09
091.3	Secondary syphilis of skin or mucous membranes	DX	09
092.0	Early syphilis, latent, serological relapse after treatment	DX	09
092.9	Early syphilis, latent, unspecified	DX	09
093.89	Other specified cardiovascular syphilis	DX	09
093.9	Unspecified cardiovascular syphilis	DX	09
094.3	Asymptomatic neurosyphilis	DX	09
094.82	Syphilitic Parkinsonism	DX	09
094.83	Syphilitic disseminated retinochoroiditis	DX	09
094.87	Syphilitic ruptured cerebral aneurysm	DX	09
094.89	Other specified neurosyphilis	DX	09
094.9	Unspecified neurosyphilis	DX	09
095.1	Syphilis of lung	DX	09
095.2	Syphilitic peritonitis	DX	09
095.3	Syphilis of liver	DX	09
095.4	Syphilis of kidney	DX	09
095.5	Syphilis of bone	DX	09
095.6	Syphilis of muscle	DX	09
095.7	Syphilis of synovium, tendon, and bursa	DX	09
095.8	Other specified forms of late symptomatic syphilis	DX	09
095.9	Unspecified late symptomatic syphilis	DX	09
096	Late syphilis, latent	DX	09
097.0	Unspecified late syphilis	DX	09
097.1	Unspecified latent syphilis	DX	09
097.9	Unspecified syphilis	DX	09
104.0	Nonvenereal endemic syphilis	DX	09
647.00	Maternal syphilis, complicating pregnancy, childbirth, or the puerperium, unspecified as to episode	DX	09
647.01	Maternal syphilis, complicating pregnancy, with delivery	DX	09
647.02	Maternal syphilis, complicating pregnancy, with delivery, with current postpartum complication	DX	09
647.03	Maternal syphilis, antepartum	DX	09
647.04	Maternal syphilis complicating pregnancy, childbirth, or the puerperium, postpartum condition or episode	DX	09
A51	Early syphilis	DX	10
A51.0	Primary genital syphilis	DX	10
A51.1	Primary anal syphilis	DX	10
A51.2	Primary syphilis of other sites	DX	10
A51.3	Secondary syphilis of skin and mucous membranes	DX	10

Appendix E. International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Syphilis Diagnosis.

Code	Description	Diagnosis	
		Code Category	Code Type
A51.39	Other secondary syphilis of skin	DX	10
A51.4	Other secondary syphilis	DX	10
A51.5	Early syphilis, latent	DX	10
A51.9	Early syphilis, unspecified	DX	10
A52	Late syphilis	DX	10
A52.0	Cardiovascular and cerebrovascular syphilis	DX	10
A52.00	Cardiovascular syphilis, unspecified	DX	10
A52.05	Other cerebrovascular syphilis	DX	10
A52.09	Other cardiovascular syphilis	DX	10
A52.1	Symptomatic neurosyphilis	DX	10
A52.10	Symptomatic neurosyphilis, unspecified	DX	10
A52.12	Other cerebrospinal syphilis	DX	10
A52.19	Other symptomatic neurosyphilis	DX	10
A52.2	Asymptomatic neurosyphilis	DX	10
A52.3	Neurosyphilis, unspecified	DX	10
A52.7	Other symptomatic late syphilis	DX	10
A52.72	Syphilis of lung and bronchus	DX	10
A52.73	Symptomatic late syphilis of other respiratory organs	DX	10
A52.74	Syphilis of liver and other viscera	DX	10
A52.75	Syphilis of kidney and ureter	DX	10
A52.76	Other genitourinary symptomatic late syphilis	DX	10
A52.77	Syphilis of bone and joint	DX	10
A52.78	Syphilis of other musculoskeletal tissue	DX	10
A52.79	Other symptomatic late syphilis	DX	10
A52.8	Late syphilis, latent	DX	10
A52.9	Late syphilis, unspecified	DX	10
A53	Other and unspecified syphilis	DX	10
A53.0	Latent syphilis, unspecified as early or late	DX	10
A53.9	Syphilis, unspecified	DX	10
A65	Nonvenereal syphilis	DX	10
O98.1	Syphilis complicating pregnancy, childbirth and the puerperium	DX	10
O98.11	Syphilis complicating pregnancy	DX	10
O98.111	Syphilis complicating pregnancy, first trimester	DX	10
O98.112	Syphilis complicating pregnancy, second trimester	DX	10
O98.113	Syphilis complicating pregnancy, third trimester	DX	10
O98.119	Syphilis complicating pregnancy, unspecified trimester	DX	10
O98.12	Syphilis complicating childbirth	DX	10
O98.13	Syphilis complicating the puerperium	DX	10
O90.0	Early congenital syphilis, symptomatic	DX	09
O90.1	Early congenital syphilis, latent	DX	09

Appendix E. International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Syphilis Diagnosis.

Code	Description	Diagnosis	
		Code Category	Code Type
090.2	Early congenital syphilis, unspecified	DX	09
090.3	Syphilitic interstitial keratitis	DX	09
090.41	Congenital syphilitic encephalitis	DX	09
090.42	Congenital syphilitic meningitis	DX	09
090.5	Other late congenital syphilis, symptomatic	DX	09
090.6	Late congenital syphilis, latent	DX	09
090.7	Late congenital syphilis, unspecified	DX	09
090.9	Congenital syphilis, unspecified	DX	09
091.4	Adenopathy due to secondary syphilis	DX	09
091.50	Syphilitic uveitis, unspecified	DX	09
091.51	Syphilitic chorioretinitis (secondary)	DX	09
091.52	Syphilitic iridocyclitis (secondary)	DX	09
091.61	Secondary syphilitic periostitis	DX	09
091.62	Secondary syphilitic hepatitis	DX	09
091.69	Secondary syphilis of other viscera	DX	09
091.7	Secondary syphilis, relapse	DX	09
091.81	Acute syphilitic meningitis (secondary)	DX	09
091.82	Syphilitic alopecia	DX	09
091.89	Other forms of secondary syphilis	DX	09
091.9	Unspecified secondary syphilis	DX	09
093.0	Aneurysm of aorta, specified as syphilitic	DX	09
093.1	Syphilitic aortitis	DX	09
093.20	Syphilitic endocarditis of valve, unspecified	DX	09
093.21	Syphilitic endocarditis of mitral valve	DX	09
093.22	Syphilitic endocarditis of aortic valve	DX	09
093.23	Syphilitic endocarditis of tricuspid valve	DX	09
093.24	Syphilitic endocarditis of pulmonary valve	DX	09
093.81	Syphilitic pericarditis	DX	09
093.82	Syphilitic myocarditis	DX	09
094.0	Tabes dorsalis	DX	09
094.1	General paresis	DX	09
094.2	Syphilitic meningitis	DX	09
094.81	Syphilitic encephalitis	DX	09
094.84	Syphilitic optic atrophy	DX	09
094.85	Syphilitic retrobulbar neuritis	DX	09
094.86	Syphilitic acoustic neuritis	DX	09
095.0	Syphilitic episcleritis	DX	09
A50.01	Early congenital syphilitic oculopathy	DX	10
A50.02	Early congenital syphilitic osteochondropathy	DX	10
A50.03	Early congenital syphilitic pharyngitis	DX	10

Appendix E. International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Syphilis Diagnosis.

Code	Description	Diagnosis	
		Code Category	Code Type
A50.04	Early congenital syphilitic pneumonia	DX	10
A50.05	Early congenital syphilitic rhinitis	DX	10
A50.06	Early cutaneous congenital syphilis	DX	10
A50.07	Early mucocutaneous congenital syphilis	DX	10
A50.08	Early visceral congenital syphilis	DX	10
A50.09	Other early congenital syphilis, symptomatic	DX	10
A50.1	Early congenital syphilis, latent	DX	10
A50.2	Early congenital syphilis, unspecified	DX	10
A50.30	Late congenital syphilitic oculopathy, unspecified	DX	10
A50.31	Late congenital syphilitic interstitial keratitis	DX	10
A50.32	Late congenital syphilitic chorioretinitis	DX	10
A50.39	Other late congenital syphilitic oculopathy	DX	10
A50.40	Late congenital neurosyphilis, unspecified	DX	10
A50.41	Late congenital syphilitic meningitis	DX	10
A50.42	Late congenital syphilitic encephalitis	DX	10
A50.43	Late congenital syphilitic polyneuropathy	DX	10
A50.44	Late congenital syphilitic optic nerve atrophy	DX	10
A50.45	Juvenile general paresis	DX	10
A50.49	Other late congenital neurosyphilis	DX	10
A50.51	Clutton's joints	DX	10
A50.52	Hutchinson's teeth	DX	10
A50.53	Hutchinson's triad	DX	10
A50.54	Late congenital cardiovascular syphilis	DX	10
A50.55	Late congenital syphilitic arthropathy	DX	10
A50.56	Late congenital syphilitic osteochondropathy	DX	10
A50.57	Syphilitic saddle nose	DX	10
A50.59	Other late congenital syphilis, symptomatic	DX	10
A50.6	Late congenital syphilis, latent	DX	10
A50.7	Late congenital syphilis, unspecified	DX	10
A50.9	Congenital syphilis, unspecified	DX	10
A51.31	Condyloma latum	DX	10
A51.32	Syphilitic alopecia	DX	10
A51.41	Secondary syphilitic meningitis	DX	10
A51.42	Secondary syphilitic female pelvic disease	DX	10
A51.43	Secondary syphilitic oculopathy	DX	10
A51.44	Secondary syphilitic nephritis	DX	10
A51.45	Secondary syphilitic hepatitis	DX	10
A51.46	Secondary syphilitic osteopathy	DX	10
A51.49	Other secondary syphilitic conditions	DX	10
A52.01	Syphilitic aneurysm of aorta	DX	10

Appendix E. International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Codes Used to Define Syphilis Diagnosis.

Code	Description	Diagnosis	
		Code Category	Code Type
A52.02	Syphilitic aortitis	DX	10
A52.03	Syphilitic endocarditis	DX	10
A52.04	Syphilitic cerebral arteritis	DX	10
A52.06	Other syphilitic heart involvement	DX	10
A52.11	Tabes dorsalis	DX	10
A52.13	Late syphilitic meningitis	DX	10
A52.14	Late syphilitic encephalitis	DX	10
A52.15	Late syphilitic neuropathy	DX	10
A52.16	Charcot's arthropathy (tabetic)	DX	10
A52.17	General paresis	DX	10

Appendix F. List of Healthcare Common Procedure Coding System (HCPCS) Used to Define Syphilis Treatment for Infants in this Request

Code	Description	Code Category	Code Type
J0558	Injection, penicillin G benzathine and penicillin G procaine, 100,000 units	PX	HC
J0560	Injection, penicillin G benzathine, up to 600,000 units	PX	HC
J0540	Injection, penicillin G benzathine and penicillin G procaine, up to 1,200,000 units	PX	HC
J0550	Injection, penicillin G benzathine and penicillin G procaine, up to 2,400,000 units	PX	HC
J0530	Injection, penicillin G benzathine and penicillin G procaine, up to 600,000 units	PX	HC
J0559	Injection, penicillin G benzathine and penicillin G procaine, 2500 units	PX	HC
J0580	Injection, penicillin G benzathine, up to 2,400,000 units	PX	HC
J2510	Injection, penicillin G procaine, aqueous, up to 600,000 units	PX	HC
J0561	Injection, penicillin G benzathine, 100,000 units	PX	HC
J2540	Injection, penicillin G potassium, up to 600,000 units	PX	HC

Appendix G List of National Drug Codes (NDCs) and Healthcare Common Procedure Coding System (HCPCS) Codes Used to Define Standard Syphilis Treatment for Pregnant Individuals

Code	Description	Code Category	Code Type
J0580	Injection, penicillin G benzathine, up to 2,400,000 units	PX	HC
J0560	Injection, penicillin G benzathine, up to 600,000 units	PX	HC
J0561	Injection, penicillin G benzathine, 100,000 units	PX	HC
50090101600	penicillin G benzathine	RX	ND
50090101601	penicillin G benzathine	RX	ND
54569587701	penicillin G benzathine	RX	ND
60793070001	penicillin G benzathine	RX	ND
60793070010	penicillin G benzathine	RX	ND
60793070102	penicillin G benzathine	RX	ND
60793070110	penicillin G benzathine	RX	ND
60793070204	penicillin G benzathine	RX	ND
60793070210	penicillin G benzathine	RX	ND
54868075301	penicillin G benzathine	RX	ND
50090101600	penicillin G benzathine	PX	ND
50090101601	penicillin G benzathine	PX	ND
54569587701	penicillin G benzathine	PX	ND
60793070001	penicillin G benzathine	PX	ND
60793070010	penicillin G benzathine	PX	ND
60793070102	penicillin G benzathine	PX	ND
60793070110	penicillin G benzathine	PX	ND
60793070204	penicillin G benzathine	PX	ND
60793070210	penicillin G benzathine	PX	ND
54868075301	penicillin G benzathine	PX	ND

Appendix H. List of Healthcare Common Procedure Coding System (HCPCS) Codes Used to Define Non-Standard Syphilis Treatment

Code	Description	Code Category	Code Type
J0540	Injection, penicillin G benzathine and penicillin G procaine, up to 1,200,000 units	PX	HC
J0530	Injection, penicillin G benzathine and penicillin G procaine, up to 600,000 units	PX	HC
J0550	Injection, penicillin G benzathine and penicillin G procaine, up to 2,400,000 units	PX	HC
J0559	Injection, penicillin G benzathine and penicillin G procaine, 2500 units	PX	HC
J0558	Injection, penicillin G benzathine and penicillin G procaine, 100,000 units	PX	HC
J2510	Injection, penicillin G procaine, aqueous, up to 600,000 units	PX	HC
J0696	Injection, ceftriaxone sodium, per 250 mg	PX	HC

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Query period (bound by the ADate for pregnancy outcome): 01/01/2010-12/31/2023

Coverage requirement: Medical & Drug Coverage

Required maternal enrollment in relation to estimated pregnancy start date: LMP

Requirement maternal enrollment (and linked infants if applicable) post-pregnancy outcome: Birth + 30 days

Enrollment gap: 45

Age groups (bound by the ADate for pregnancy outcome): 10-19, 20-29, 30-39, 40-54 years

Sex: Female only

Stratifications: Age group, Calendar year, Race, Ethnicity, and cross-stratifications

Output by gestational week: Yes

Restrictions: None

Envelope macro: Reclassify encounters during inpatient stay as inpatient

Freeze data: No

Pregnancy Episode Creation

Scenario	Inclusion/Exclusion	Pregnancy Outcome Definition	Pregnancy Cohort Definition	Care Setting for Pregnancy Outcome	Mother-Infant Linkage Records to Identify Live Births
#	Inclusion/Exclusion criteria - see inclusion_exclusion tab for details	<p>See <u>Pregnancy Codes</u> :</p> <p>LB: Live birth delivery</p> <p>MIL: Mother-Infant Linkage table live birth delivery</p> <p>SB: Stillbirth delivery</p> <p>ECT: Ectopic pregnancy</p> <p>SA: Spontaneous abortion</p> <p>AB: Elective abortion</p> <p>TRO: Trophoblastic disease</p> <p>UNC: Unclassified delivery</p> <p>MIX: Mixed delivery</p>	02: Cohort includes all valid pregnancy episodes during the query period	<p>*If LB or UNC: Inpatient hospital stay, any diagnosis position;</p> <p>*If any other pregnancy outcome: Any care setting</p>	<p>0: unspecified number of live births</p> <p>1: one live birth</p> <p>2: two live births</p> <p>3: three live births</p> <p>4: four live births</p> <p>5: five live births</p> <p>8: multiple live births, unspecified number</p> <p>9: conflicting code(s) for number of live births</p>

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Scenario	Inclusion/Exclusion	Pregnancy Outcome Definition	Pregnancy Cohort Definition	Care Setting for Pregnancy Outcome	Mother-Infant Linkage Records to Identify Live Births
r01-2	Inc: Mothers diagnosed with syphilis in pregnancy - 1 diagnosis code	Infant screening	MIL	02	IP* 1: one live birth
r01-3	Inc: Mothers diagnosed with syphilis in pregnancy - 1 diagnosis code	Infant screening	MIL	02	IP* 1: one live birth
r01-4	Inc: Mothers diagnosed with syphilis in pregnancy - 2 diagnosis codes	Infant treatment	MIL	02	IP* 1: one live birth
r01-5	Inc: Mothers diagnosed with syphilis in pregnancy - 2 diagnosis codes	Infant treatment	MIL	02	IP* 1: one live birth
r02-2	Inc: Mothers diagnosed with syphilis in pregnancy - 1 diagnosis code	Infant screening	MIL	02	IP* 1: one live birth
r02-3	Inc: Mothers diagnosed with syphilis in pregnancy - 1 diagnosis code	Infant screening	MIL	02	IP* 1: one live birth

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

r02-4	Inc: Mothers diagnosed with syphilis in pregnancy - 2 diagnosis codes	Infant treatment	MIL	02	IP*	1: one live birth
r02-5	Inc: Mothers diagnosed with syphilis in pregnancy - 2 diagnosis codes	Infant treatment	MIL	02	IP*	1: one live birth

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Query period (*bound by the ADate for pregnancy outcome*) : 01/01/2010-12/31/2023

Coverage requirement: Medical & Drug Coverage

Required maternal enrollment in relation to estimated pregnancy start date: LMP

Requirement maternal enrollment (and linked infants if applicable) post-pregnancy outcome: Birth + 30 days

Enrollment gap: 45

Age groups (*bound by the ADate for pregnancy outcome*) : 10-19,20-29, 30-39, 40-54 years

Sex: Female only

Stratifications: Age group, Calendar year, Race, Ethnicity, and cross-stratifications

Output by gestational week: Yes

Restrictions: None

Envelope macro: Reclassify encounters during inpatient stay as inpatient

Freeze data: No

Pregnancy Episode Creation

Mother-Infant Linkage Status	Number of Days for Infant	of Days between Infant Birth Date and Delivery Date	Create Baseline Table?	Pregnancy Duration Definition	Pregnancy Marker Evaluation Window Relative to Pregnancy Outcome Date
A: include all mothers from the MIL table					
L: only include linked mothers from the MIL table	Days specified	Days specified	Y: baseline table will be produced for corresponding COHORTGRP	See <u>Pregnancy Duration</u>	See <u>Pregnancy Meta</u>
U: only include unlinked mothers from the MIL table (LINKAGESTATUS)			N: baseline table will NOT be produced for corresponding COHORTGRP		

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Mother-Infant Linkage Status	Maximum Number of Days for Infant Grace Period	Allowable Number of Days between Infant Birth Date and Delivery Date	Create Baseline Table?	Pregnancy Duration Definition	Pregnancy Marker Evaluation Window Relative to Pregnancy Outcome Date
L: Linked Mothers	7	7	Yes	Gestational Age Algorithm	7
L: Linked Mothers	7	7	Yes	Gestational Age Algorithm	7
L: Linked Mothers	7	7	Yes	Gestational Age Algorithm	7
L: Linked Mothers	7	7	Yes	Gestational Age Algorithm	7
L: Linked Mothers	0	7	Yes	Gestational Age Algorithm	7
L: Linked Mothers	0	7	Yes	Gestational Age Algorithm	7
L: Linked Mothers	0	7	Yes	Gestational Age Algorithm	7
L: Linked Mothers	0	7	Yes	Gestational Age Algorithm	7

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Query period (*bound by the ADate for pregnancy outcome*) : 01/01/2010-12/31/2023

Coverage requirement: Medical & Drug Coverage

Required maternal enrollment in relation to estimated pregnancy start date: LMP

Requirement maternal enrollment (and linked infants if applicable) post-pregnancy outcome: Birth + 30 days

Enrollment gap: 45

Age groups (*bound by the ADate for pregnancy outcome*) : 10-19,20-29, 30-39, 40-54 years

Sex: Female only

Stratifications: Age group, Calendar year, Race, Ethnicity, and cross-stratifications

Output by gestational week: Yes

Restrictions: None

Envelope macro: Reclassify encounters during inpatient stay as inpatient

Freeze data: No

Medical Product of Interest (MOI) Exposure Episode Creation

Pregnancy Duration in Absence of Pre/Post-Term Codes (ITT Days)	Exposure	Cohort Definition	Pre-Pregnancy Exposure Evaluation Period	Post-Pregnancy Exposure Evaluation	Incident Exposure Washout Period	Build Episodes on Point Exposure?
See Pregnancy Meta	MOI	*First valid MOI exposure episode during pregnancy episode; *All valid MOI exposure episodes during pregnancy episode; *Last valid MOI exposure episode during pregnancy episode	Days specified	Days specified	Days specified	*Yes *No

Appendix I. Specifications for This Request						
Pregnancy Duration in Absence of Pre/Post-Term Codes (ITT Days)	Exposure	Cohort Definition	Pre-Pregnancy Exposure Evaluation Period	Post-Pregnancy Exposure Evaluation	Incident Exposure Washout Period	Build Episodes on Point Exposure?
273	MP2	All valid MOI exposure episodes during pregnancy episode	0	.	0	No
273	MP2	All valid MOI exposure episodes during pregnancy episode	0	.	0	No
273	MP2	All valid MOI exposure episodes during pregnancy episode	0	.	0	No
273	MP2	All valid MOI exposure episodes during pregnancy episode	0	.	0	No
273	MP2	All valid MOI exposure episodes during pregnancy episode	0	.	0	No
273	MP2	All valid MOI exposure episodes during pregnancy episode	0	.	0	No
273	MP2	All valid MOI exposure episodes during pregnancy episode	0	.	0	No
273	MP2	All valid MOI exposure episodes during pregnancy episode	0	.	0	No

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Query period (bound by the ADate for pregnancy outcome): 01/01/2010-12/31/2023

Coverage requirement: Medical & Drug Coverage

Required maternal enrollment in relation to estimated pregnancy start date: LMP

Requirement maternal enrollment (and linked infants if applicable) post-pregnancy outcome: Birth + 30 days

Enrollment gap: 45

Age groups (bound by the ADate for pregnancy outcome): 10-19,20-29, 30-39, 40-54 years

Sex: Female only

Stratifications: Age group, Calendar year, Race, Ethnicity, and cross-stratifications

Output by gestational week: Yes

Restrictions: None

Envelope macro: Reclassify encounters during inpatient stay as inpatient

Freeze data: No

Pregnancy Episode Creation

Exposure		Blackout Period Relative to Pregnancy Start Date	Maximum Exposure Episode Duration	Remove MOI Exposure on Pregnancy Outcome Date	Care Setting	Principal Diagnosis Position	Event
Episode Length	Treatment episode gap						
Days specified	*X days *X% of prior dispensing's days supplied	Range of days specified to exclude MOI exposure	Days specified	*Exclude MOIs with Adate equivalent to pregnancy delivery date; *Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	<i>Only applicable for Inpatient and Institutional stays:</i> *Any *Principal *Secondary *Unknown	Health outcome of interest

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Exposure Episode Length	Treatment episode gap	Blackout Period Relative to Pregnancy Start Date	Maximum Exposure Episode Duration	Remove MOI Exposure on Pregnancy Outcome Date	Care Setting	Principal Diagnosis Position	Event
0	0	.	1	Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	Any	Infant Congenital Syphilis Screening
0	0	.	1	Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	Any	Infant Congenital Syphilis Screening
0	0	.	1	Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	Any	Infant Congenital Syphilis Treatment
0	0	.	1	Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	Any	Infant Congenital Syphilis Treatment
0	0	.	1	Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	Any	Infant Congenital Syphilis Screening

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Exposure Episode Length	Treatment episode gap	Blackout Period Relative to Pregnancy Start Date	Maximum Exposure Episode Duration	Remove MOI Exposure on Pregnancy Outcome Date	Care Setting	Principal Diagnosis Position	Event
0	0	.	1	Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	Any	Infant Congenital Syphilis Screening
0	0	.	1	Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	Any	Infant Congenital Syphilis Treatment
0	0	.	1	Do not exclude MOIs with Adate equivalent to pregnancy delivery date	Any caresetting	Any	Infant Congenital Syphilis Treatment

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Query period (bound by the ADate for pregnancy outcome): 01/01/2010-12/31/2023

Coverage requirement: Medical & Drug Coverage

Required maternal enrollment in relation to estimated pregnancy start date: LMP

Requirement maternal enrollment (and linked infants if applicable) post-pregnancy outcome: Birth + 30 days

Enrollment gap: 45

Age groups (bound by the ADate for pregnancy outcome): 10-19,20-29, 30-39, 40-54 years

Sex: Female only

Stratifications: Age group, Calendar year, Race, Ethnicity, and cross-stratifications

Output by gestational week: Yes

Restrictions: None

Envelope macro: Reclassify encounters during inpatient stay as inpatient

Freeze data: No

Event Outcome

Outcome Population	Index Date for Maternal Age and Other Variables	Anchor Date to Start Outcome Follow-Up	Anchor Date to End Outcome Follow-Up	Outcome Period Start	Outcome Period End	Produce Baseline Table	Incident Event Washout	Care Setting
M: indicates should look in mother claims only. I: indicates should look in infant claims only. MI: indicates should look in mother and infant claims.	INDEXDT: Index date of pregnancy start. INDEXDT_EXP: First date of dispensing or procedure code of drug or comparator of interest/exposure. INDEXDT_DELIV: Index date of delivery admission date (or infant birth date for a matched infant cohort).	INDEXDT: Index date of pregnancy start INDEXDT_EXP: First date of dispensing or procedure code of drug or comparator of interest/exposure INDEXDT_DELIV: Index date of delivery admission date	INDEXDT: Index date of pregnancy start INDEXDT_EXP: First date of dispensing or procedure code of drug or comparator of interest/exposure INDEXDT_DELIV: Index date of delivery admission date (or infant birth date for a matched infant cohort)	"days from OUTCOME-FROMANCHOR"	"days from OUTCOME-TOANCHOR"	Y: baseline table will be produced for corresponding MILGRP N: baseline table will NOT be produced for corresponding MILGRP	Days specified	*Inpatient hospital stay; *Non-acute institutional stay; *Emergency department encounter; *Ambulatory visit; *Other ambulatory visit; *Any care setting

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

Outcome Population	Index Date for Maternal Age and Other Variables	Anchor Date to Start Outcome Follow-Up	Anchor Date to End Outcome Follow-Up	Outcome Period Start	Outcome Period End	Produce Baseline Table	Incident Event Washout Period	Care Setting
I: indicates should look in infant claims only.	INDEXDT	INDEXDT_DELIV	INDEXDT_DELIV	0	+30	Yes	0	IP*
I: indicates should look in infant claims only.	INDEXDT	INDEXDT_DELIV	INDEXDT_DELIV	0	+30	Yes	0	IP*
I: indicates should look in infant claims only.	INDEXDT	INDEXDT_DELIV	INDEXDT_DELIV	0	+30	Yes	e	IP*
I: indicates should look in infant claims only.	INDEXDT	INDEXDT_DELIV	INDEXDT_DELIV	0	+30	Yes	0	IP*
I: indicates should look in infant claims only.	INDEXDT	INDEXDT_DELIV	INDEXDT_DELIV	0	+30	Yes	0	IP*
I: indicates should look in infant claims only.	INDEXDT	INDEXDT_DELIV	INDEXDT_DELIV	0	+30	Yes	0	IP*

Appendix I. Specifications for This Request

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) Pregnancy tool version 13.1.2 to estimate the proportion of infants tested for syphilis or treated with penicillin among those born to pregnant women with syphilis testing and diagnosis in pregnancy in the Sentinel Distributed Database (SDD).

I: indicates should look in infant claims only.	INDEXDT	INDEXDT_DELIV	INDEXDT_DELIV	0	+30	Yes	0	IP*
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I: indicates should look in infant claims only.	INDEXDT	INDEXDT_DELIV	INDEXDT_DELIV	0	+30	Yes	0	IP*
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ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360.

NDC codes are checked against First Data Bank's FDB MedKnowledge®.

Appendix J. Baseline Covariate Groups Evaluated in this Request

Baseline Characteristics											
Covariate Name	Covariate Number	Code Category	Care setting	Principal Diagnosis Position	Covariate Evaluation Period Start	Covariate Evaluation Period End	Number of Instances the Covariate Should be Found in Evaluation Period	Forced Supply to Attach to a Code (only applies to RX codes)	Mother and/or Infant, for which Code Applies	Anchor Date on which Start Covariate Evaluation	Anchor Date on which End Covariate Evaluation
Name of covariate specified	Numeric indicator for each covariate	RX: Drug code	IP: inpatient hospital stays	<i>Only applicable for Inpatient and Institutional stays:</i> *Any *Principal *Secondary *Unknown Blank: Any caresetting	Numeric specified	Numeric specified	Numeric specified	Numeric specified	<i>Applies only to Type 4 with Mother-Infant pregnanct cohort(s)</i> M: Indicates should look in mother claims only I: Indicates should look in infant claims only MI: Indicates should look in mother or infant claims blank: Not relevant to query	INDEXDT: Anchor on estimated date of pregnancy start. INDEXDT_EXP: Anchor on first date of dispensing or diagnosis or procedure code of drug or comparator of interest. EPISODEENDDT: Anchor on date of pregnancy outcome. blank: COVFROMANCHOR should be left blank for queries other than Type 4.	INDEXDT: Anchor on estimated date of pregnancy start. INDEXDT_EXP: Anchor on first date of dispensing or diagnosis or procedure code of drug or comparator of interest. EPISODEENDDT: Anchor on date of pregnancy outcome. blank: COVTOANCHOR should be left blank for queries other than Type 4.
		DX: Diagnosis code	IS: non-acute								
		PX: Procedure code	institutional stays								
		CC: Combination of multiple COVARNUM values to define a covariate	ED: emergency department encounters								
		EN: Encounter	AV: ambulatory visits								
		LB: Lab Code	OA: other ambulatory visits								
	Year	Any care setting	Any	Any					M		
	Agegroup	Any care setting	Any	Any					M		
	Race	Any care setting	Any	Any					M		
	Hispanic Ethnicity	Any care setting	Any	Any					M		
1	Prenatal Care Visit in First Trimester	Any care setting	Any	Any	LMP	LMP+97	1		M	INDEXDT	INDEXDT
2	Treated with standard syphilis antibiotics	Any care setting	Any	Any	0	30	1		M	INDEXDT_EXP	INDEXDT_EXP
3	Treated with non-standard syphilis antibiotics	Any care setting	Any	Any	0	30	1		M	INDEXDT_EXP	INDEXDT_EXP
4	Treated only with non-standard syphilis antibiotics	Any care setting	Any	Any	0	30	1		M	INDEXDT_EXP	EPISODEENDDT

Appendix J. Baseline Covariate Groups Evaluated in this Request

Baseline Characteristics											
Covariate Name	Covariate Number	Code Category	Care setting	Principal Diagnosis Position	Covariate Evaluation Period Start	Covariate Evaluation Period End	Number of Instances the Covariate Should be Found in Evaluation Period	Forced Supply to Attach to a Code (<i>only applies to RX codes</i>)	Mother and/or Infant, for which Code Applies	Anchor Date on which Start Covariate Evaluation	Anchor Date on which End Covariate Evaluation
Name of covariate specified	Numeric indicator for each covariate	RX: Drug code DX: Diagnosis code PX: Procedure code CC: Combination of multiple COVARNUM values to define a covariate EN: Encounter LB: Lab Code	IP: inpatient hospital stays IS: non-acute institutional stays ED: emergency department encounters AV: ambulatory visits OA: other ambulatory visits Blank: Any caresetting	<i>Only applicable for Inpatient and Institutional stays:</i> *Any *Principal *Secondary *Unknown	Numeric specified	Numeric specified	Numeric specified	Numeric specified	<i>Applies only to Type 4 with Mother-Infant pregnanct cohort(s)</i> M: Indicates should look in mother claims only I: Indicates should look in infant claims only MI: Indicates should look in mother or infant claims blank: Not relevant to query	INDEXDT: Anchor on estimated date of pregnancy start. INDEXDT_EXP: Anchor on first date of dispensing or diagnosis or procedure code of drug or comparator of interest. EPISODEENDDT: Anchor on date of pregnancy outcome. blank: COVFROMANCHOR should be left blank for queries other than Type 4.	INDEXDT: Anchor on estimated date of pregnancy start. INDEXDT_EXP: Anchor on first date of dispensing or diagnosis or procedure code of drug or comparator of interest. EPISODEENDDT: Anchor on date of pregnancy outcome. blank: COVTOANCHOR should be left blank for queries other than Type 4.
5	Treated with standard syphilis antibiotics <=30	Any care setting	Any	Any	-30	7	1		M	EPISODEENDDT	EPISODEENDDT
6	Treated with standard syphilis antibiotics >30	Any care setting	Any	Any	0	31	1		M	INDEXDT	EPISODEENDDT
7	Preterm Birth	Any care setting	Any	Any	Birth Outcome-7	Birth Outcome+7	36W+6DAYS		M		
8	Treated only with standard syph antibiotics <=30	Any care setting	Any	Any	-30	7	1		M	INDEXDT_EXP	EPISODEENDDT

Appendix K. Design Diagram for Infant Analysis

Question 3

