

New Jersey Hospital Maternity Care Report Card 2024

Measure Algorithms



Healthcare Quality and Informatics

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Measure Algorithms

The notes below pertain to the measure algorithms listed in this document. For additional information about the data linkage process, please view the corresponding Methodology document.

Denominator Note: When the below denominator step is included in a measure algorithm, it means that all live electronic birth certificate (EBC) records were included, and those records may or may not be linked to inpatient hospital discharge records.

All deliveries with live electronic birth certificate which may or may not have linked inpatient hospital discharge record

Denominator Note: When the below denominator step is included in a measure algorithm, it means that live EBC records that were linked to inpatient hospital discharge records were included.

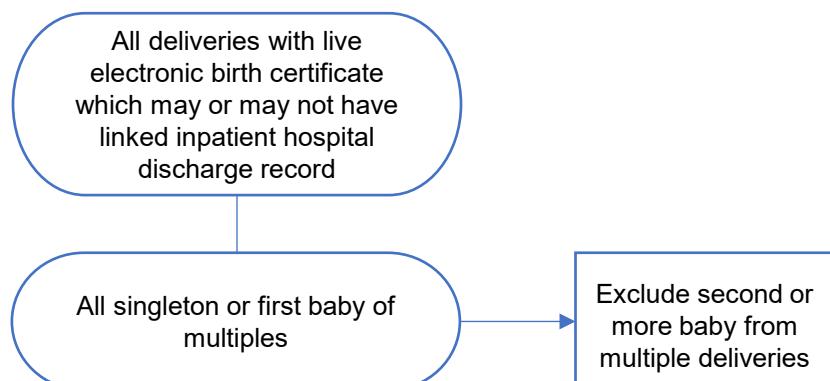
All deliveries with live electronic birth certificate and linked inpatient hospital discharge record

Numerator Note: To determine the numerator for all measures, unlinked records use live EBC records only and linked records may use EBC records and/or inpatient hospital discharge records, depending on the measure. If a primary data source (i.e., EBC or inpatient hospital discharge) is used for a measure, that primary data source is indicated with an asterisk (*) within the measure algorithm.

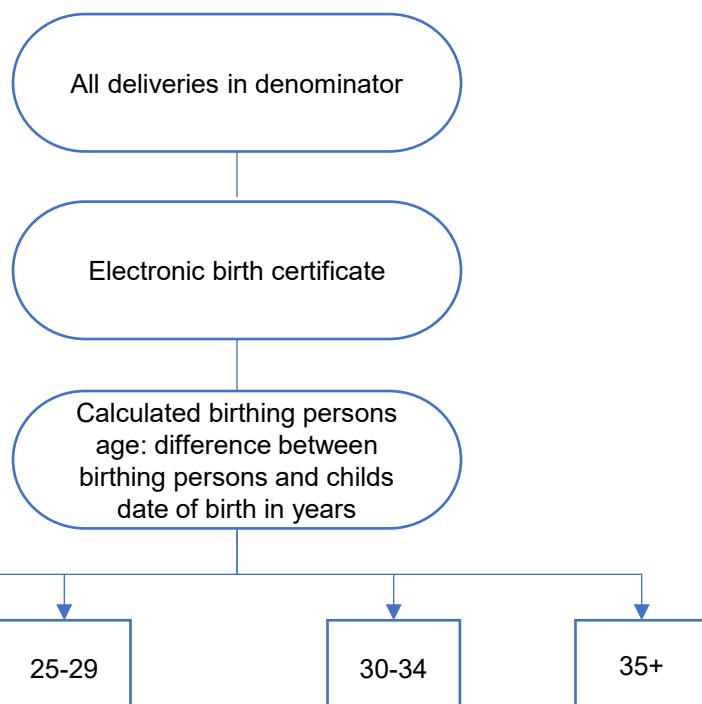
Age Category

Description: Age of birthing person in year categories.

Denominator:



Numerator:

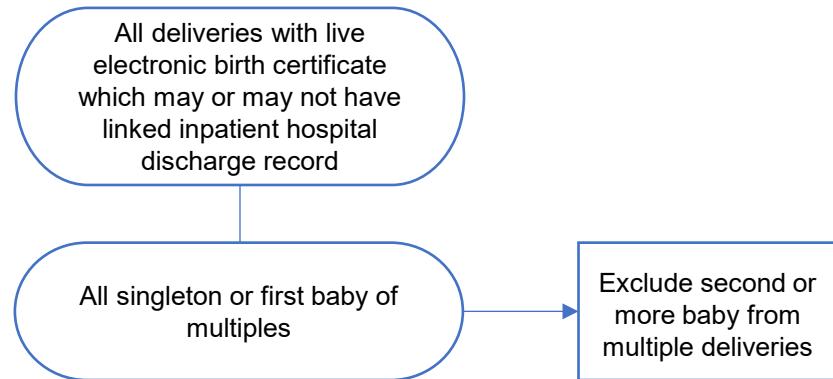


Category	Criteria
<u>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</u> Primary Section: Demographics Subsection: Mother/Parent As Information Field: Date of Birth	Date of Birth
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Admission Field: Date of Birth	Date of Birth
<u>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</u> Field: Childs Date of Birth	Childs Date of Birth
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Labor & Delivery I Field: Date of Birth	Childs Date of Birth

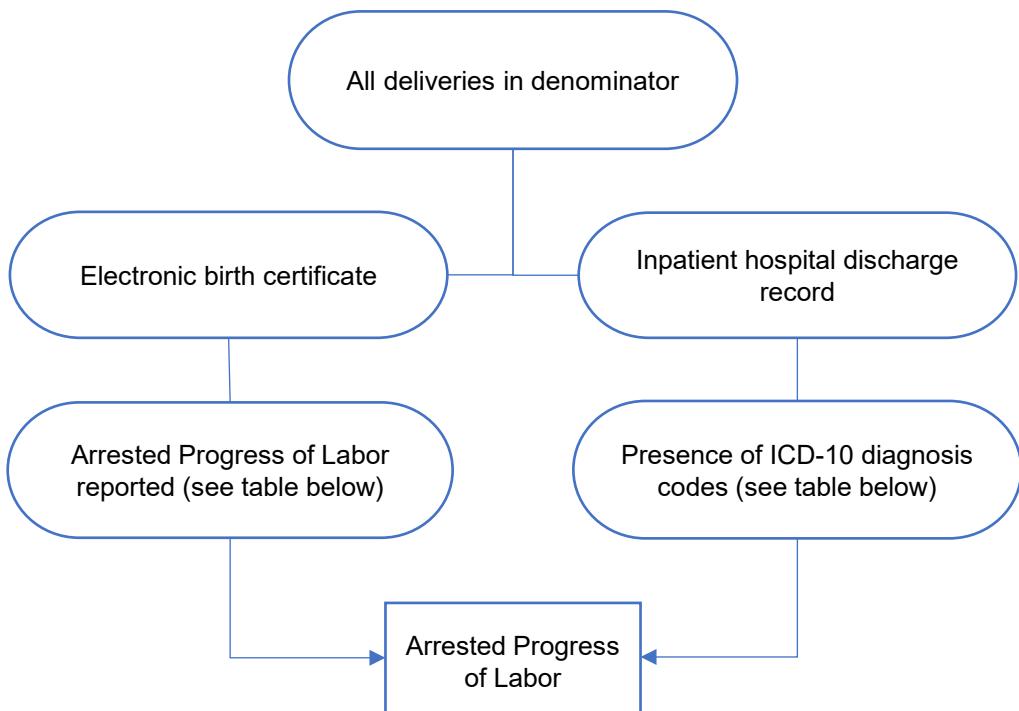
Arrested Progress of Labor

Description: A complete pause in labor progress.

Denominator:



Numerator:

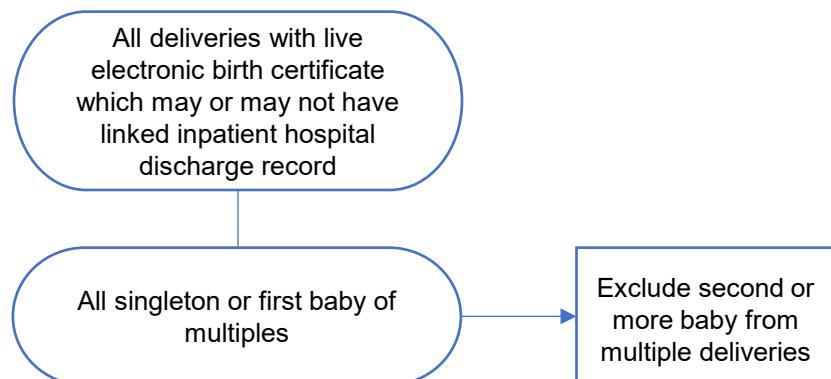


Category	Criteria
<u>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</u> Primary Section: Labor and Delivery Subsection: Labor Field: Characteristics of Labor and Delivery: (select all that apply)	Arrested Progress, 0-4 cm OR Arrested Progress, 5-10 cm OR Arrested Progress, 2 nd stage
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Labor and Delivery II Subsection: Field: Characteristics of Labor & Delivery – Other (check all that apply)	Arrested Progress, 0-4 cm OR Arrested Progress, 5-10 cm OR Arrested Progress, 2 nd stage
ICD-10 Diagnosis Codes for Arrested Progress of Labor	O62.0, O62.1, O62.2 - AND – Present on Admission marked No

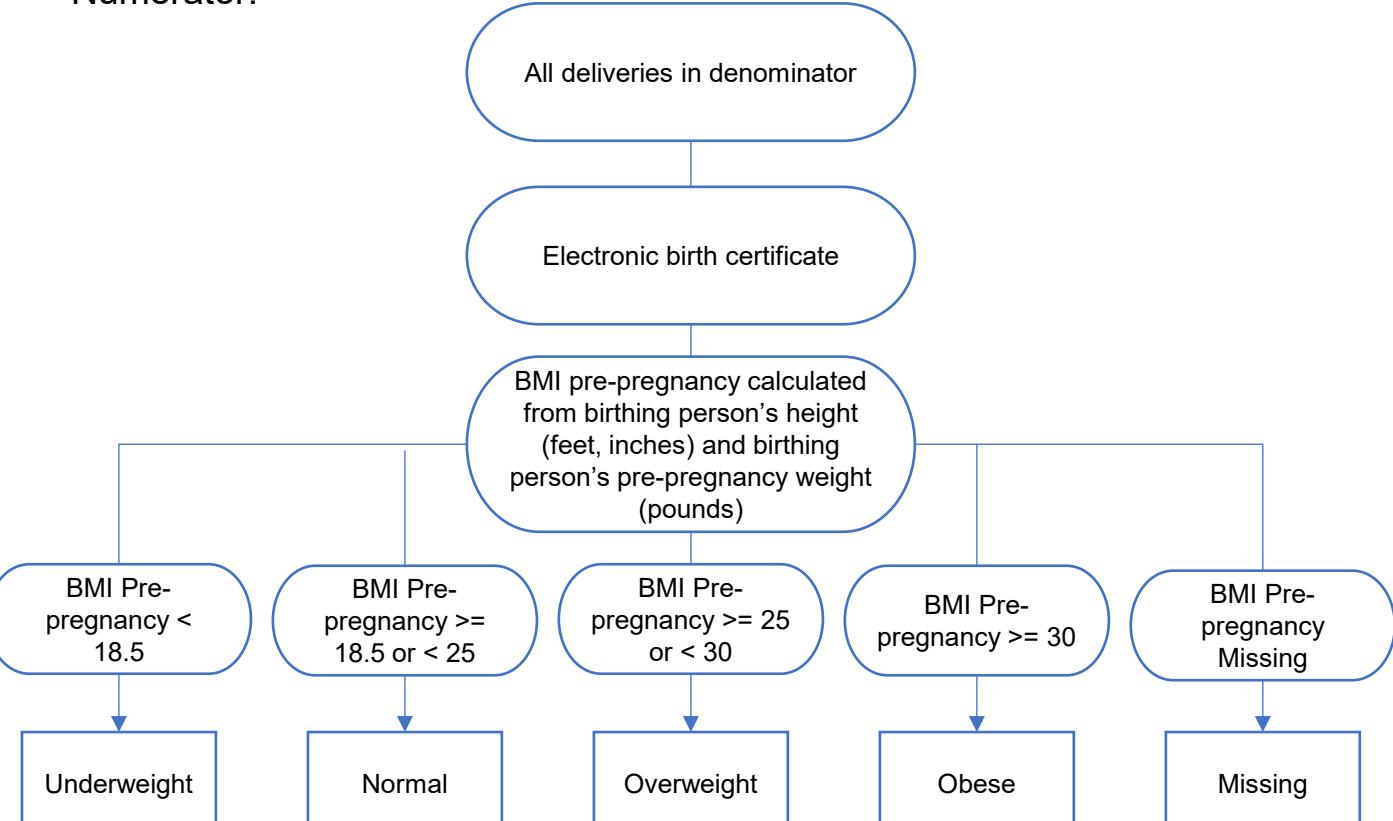
Body Mass Index (BMI) Pre-pregnancy

Description: A numerical value of a person's weight in relation to their height in categories.

Denominator:



Numerator:

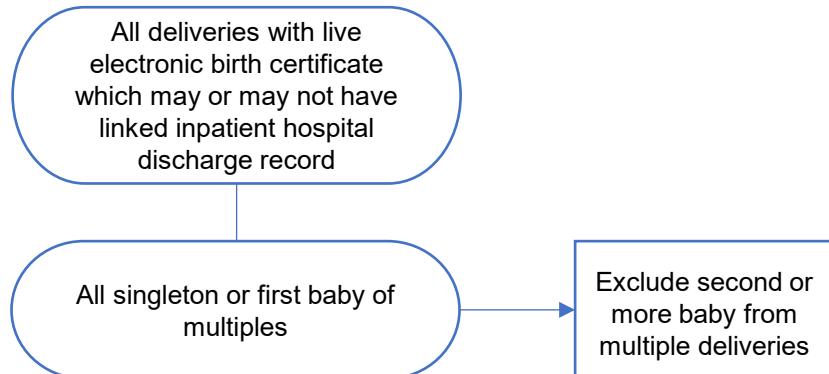


Category	Criteria
<u>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</u> Primary Section: Prenatal Care Subsection: Physical Assessments Field: Mother's Height	Height in feet and inches
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Prenatal I Field: Mother's height	Height in feet and inches
<u>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</u> Primary Section: Prenatal Care Subsection: Physical Assessments Field: Pre-Pregnancy Weight	Weight in pounds
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Prenatal I Field: Mother's Pre-Pregnancy weight (lbs)	Weight in pounds

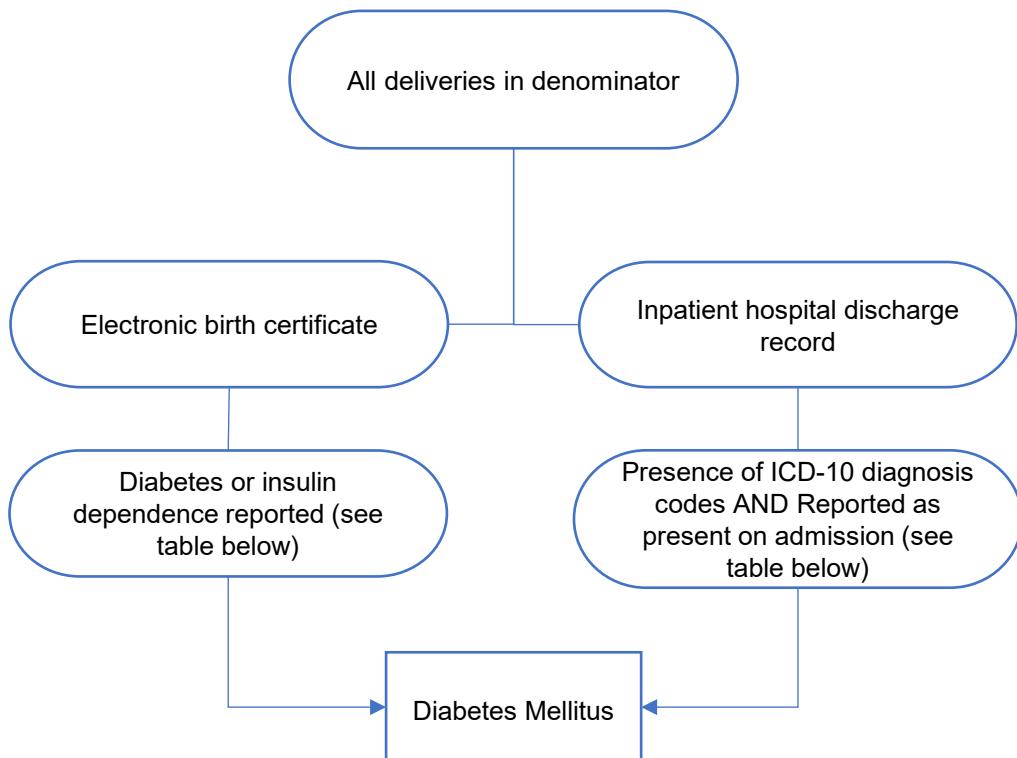
Diabetes Mellitus - Pre-existing and Gestational

Description: Diabetes that a birthing person has before getting pregnant (preexisting). Diabetes that is diagnosed for the first time during pregnancy (gestational).

Denominator:



Numerator:



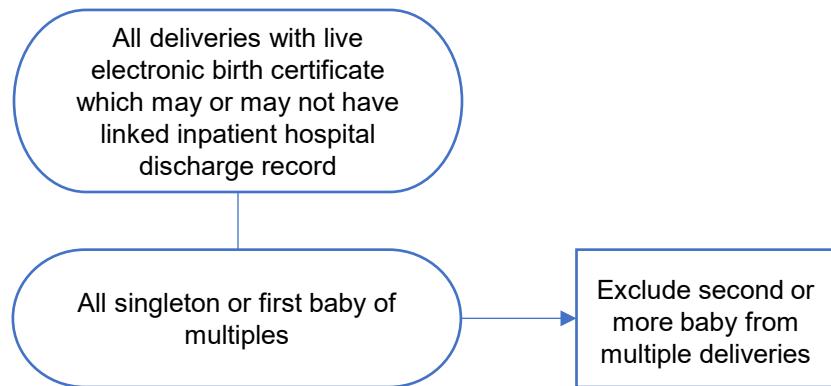
Diabetes Mellitus - Pre-existing and Gestational

Category	Criteria
<p>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</p> <p>Primary Section: Prenatal Care</p> <p>Subsection: Maternal Risk Factors During This Pregnancy</p> <p>Field: Select medical risk factors of mother during this pregnancy:</p>	Diabetes (gestational) OR Diabetes (pre-pregnancy)
<p>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</p> <p>Primary Section: Prenatal II</p> <p>Subsection: Maternal Risk Factors NCHS</p> <p>Field: Select all that apply:</p>	Diabetes OR Diabetes type: Pre-pregnancy (Insulin Dependent or Non-Insulin Dependent) OR Gestational (Insulin Dependent or Non-Insulin Dependent)
ICD-10 Diagnosis Codes for Diabetes Mellitus – Pre-existing and Gestational	E08.00, E08.01, E08.10, E08.11, E08.21, E08.22, E08.29, E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.352, E08.353, E08.354, E08.355, E08.359, E08.36, E08.37, E08.39, E08.40, E08.41, E08.42, E08.43, E08.44, E08.49, E08.51, E08.52, E08.59, E08.610, E08.618, E08.620, E08.621, E08.622, E08.628, E08.630, E08.638, E08.641, E08.649, E08.65, E08.69, E08.8, E08.9, E09.00, E09.01, E09.10, E09.11, E09.21, E09.22, E09.29, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.352, E09.353, E09.354, E09.355, E09.359, E09.36, E09.37, E09.39, E09.40, E09.41, E09.42, E09.43, E09.44, E09.49, E09.51, E09.52, E09.59, E09.610, E09.618, E09.620, E09.621, E09.622, E09.628, E09.630, E09.638, E09.641, E09.649, E09.65, E09.69, E09.8, E09.9, E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.352, E10.353, E10.354, E10.355, E10.359, E10.36, E10.37, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.352, E11.353, E11.354, E11.355, E11.359, E11.36, E11.37, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.352, E13.353, E13.354, E13.355, E13.359, E13.36, E13.37, E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65 E13.69, E13.8, E13.9, O24.0, O24.01, O24.011, O24.012, O24.013, O24.019, O24.02, O24.03, O24.1, O24.11, O24.111, O24.112, O24.113, O24.119, O24.12, O24.13, O24.410, O24.414, O24.419, O24.420, O24.424, O24.429, O24.430, O24.434, O24.439, O24.3, O24.31, O24.32, O24.33, O24.311, O24.312, O24.313, O24.319, O24.8, O24.81, O24.82, O24.83, O24.811, O24.812, O24.813, O24.819, O24.9 , O24.91, O24.92, O24.93, O24.911, O24.912, O24.913, O24.919, Z79.40 - AND – Present on Admission marked Yes

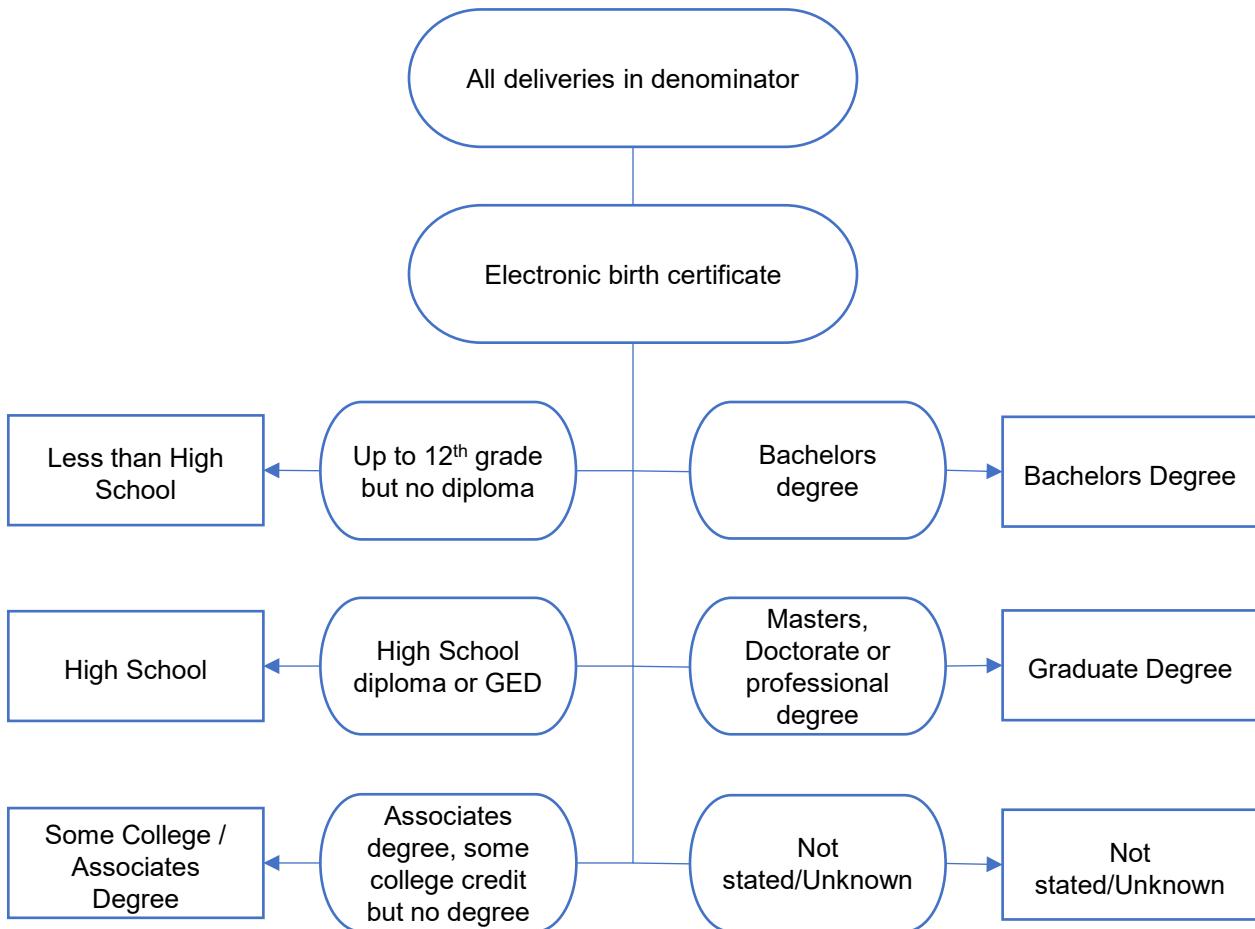
Educational Attainment

Description: Birthing persons educational attainment in categories.

Denominator:



Numerator:

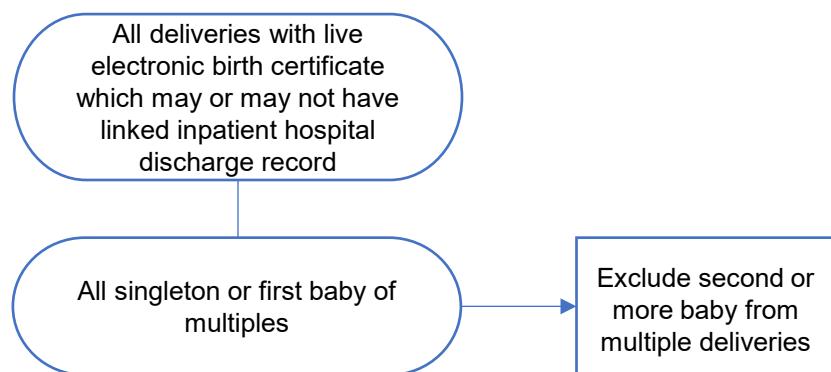


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Demographics Subsection: Mother/Parent As Demographics Field: Education	8 th grade or less OR 9 th -12 th grade; no diploma OR High school graduate or GED completed OR Some college credit, but not a degree OR Associate degree OR Bachelors degree OR Masters degree OR Doctorate or Professional degree
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Mother Demographic Subsection: Mothers Education and Employment Field: Describes the highest degree or level of school completed at the time of delivery	8 th grade or less OR 9 th -12 th grade; no diploma OR High school graduate or GED completed OR Some college credit, but not a degree OR Associate degree (e.g., AA, AS) OR Bachelors degree (e.g., BA, AB, BS) OR Masters degree (e.g., MA, MS, Meng, Med, MSW, MBA) OR Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DD) OR Not Stated/Unknown

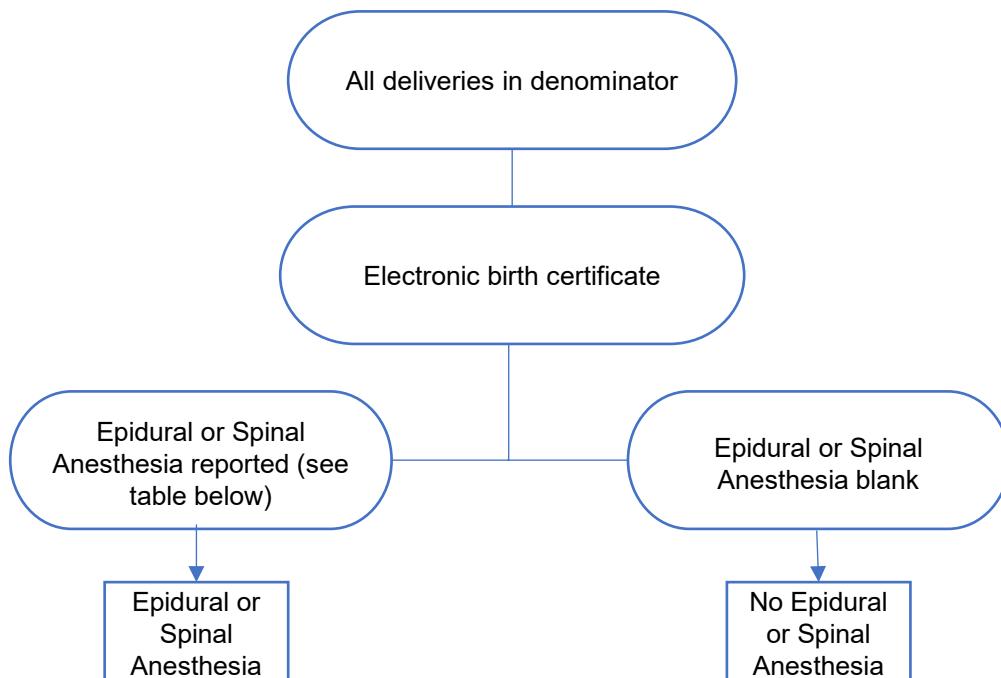
Epidural or Spinal Anesthesia

Description: Epidural or spinal anesthesia is an injection administered to relieve pain during childbirth.

Denominator:



Numerator:

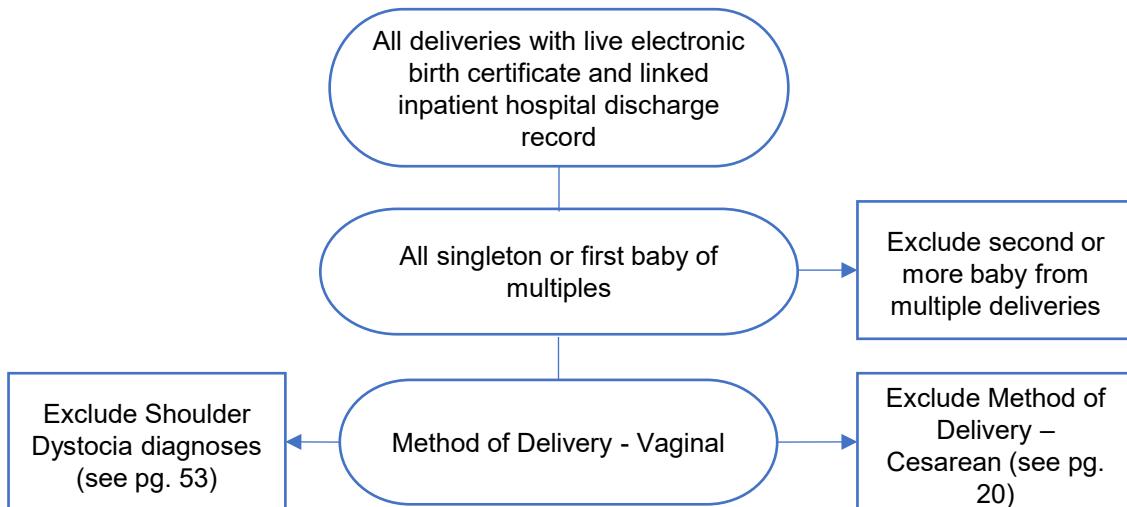


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Labor and Delivery Subsection: Labor Field: Characteristics of Labor and Delivery: (select all that apply)	Epidural or Spinal Anesthesia during labor
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Labor and Delivery II Subsection: Field: Characteristics of Labor & Delivery – NCHS (check all that apply)	Epidural or Spinal Anesthesia during labor

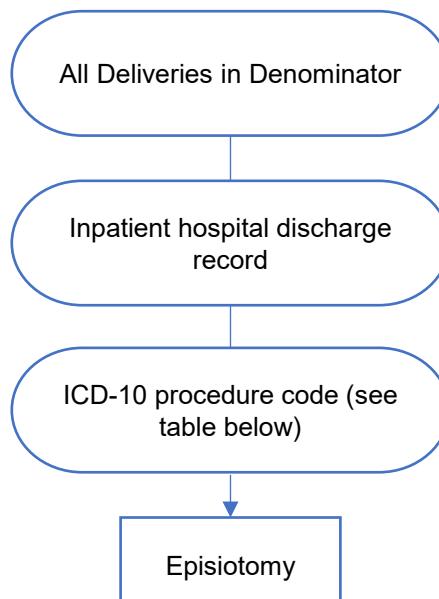
Episiotomy

Description: A surgical incision made at the opening of the vagina during childbirth, to aid a difficult delivery and prevent rupture of tissues.

Denominator:



Numerator:

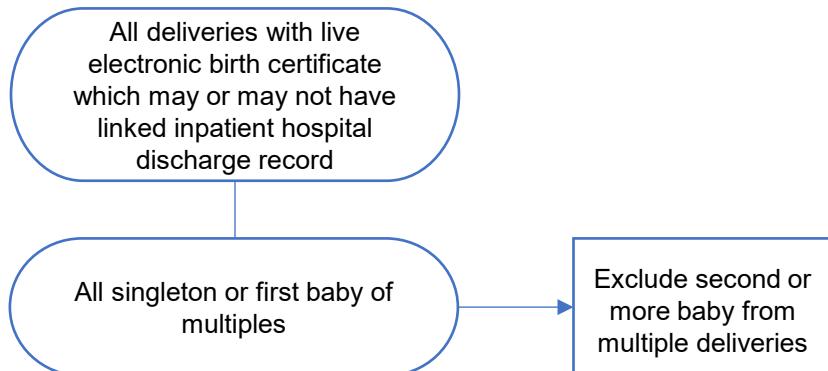


Category	Criteria
ICD-10 Procedure Code for Episiotomy	0W8NXZZ

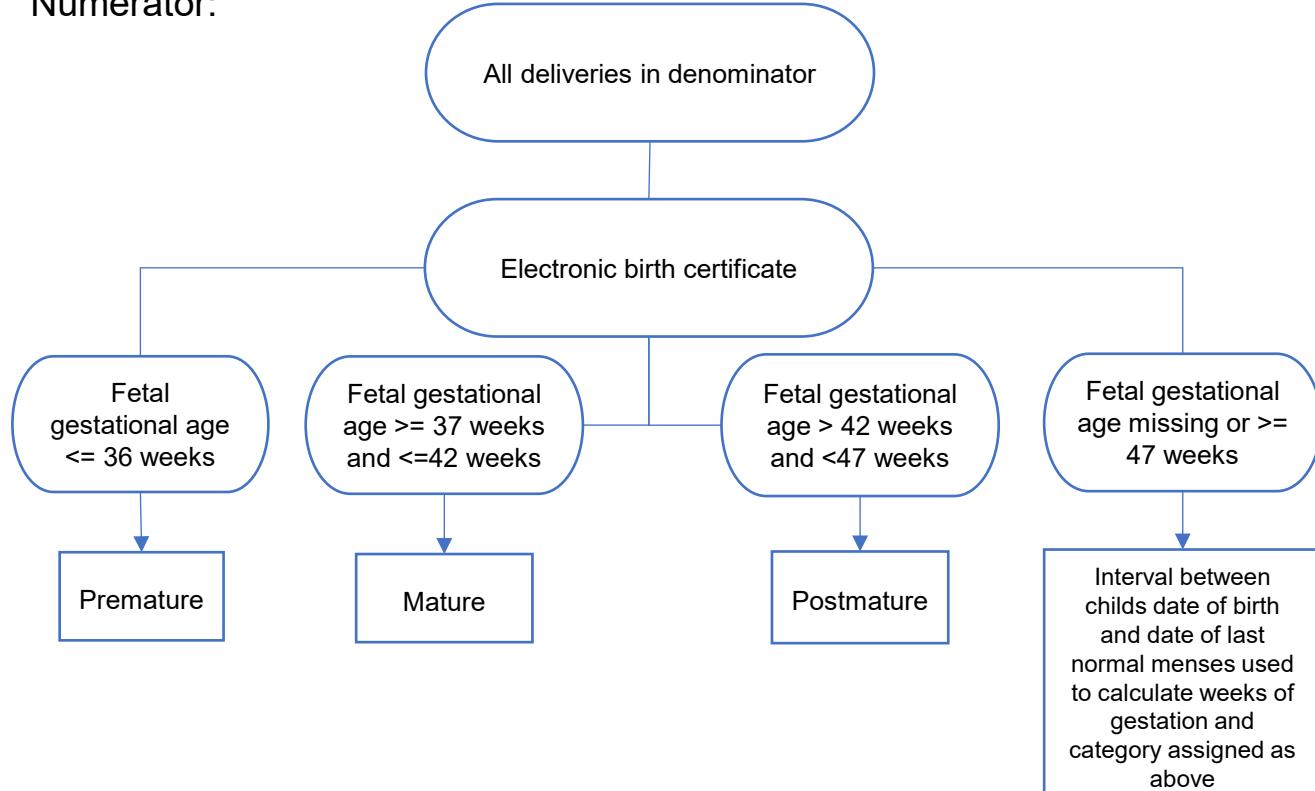
Gestational Age

Description: Term used during pregnancy to describe how far along the pregnancy is. It is measured in weeks +/- days, from the first day of the birthing persons last menstrual cycle to the delivery date.

Denominator:



Numerator:

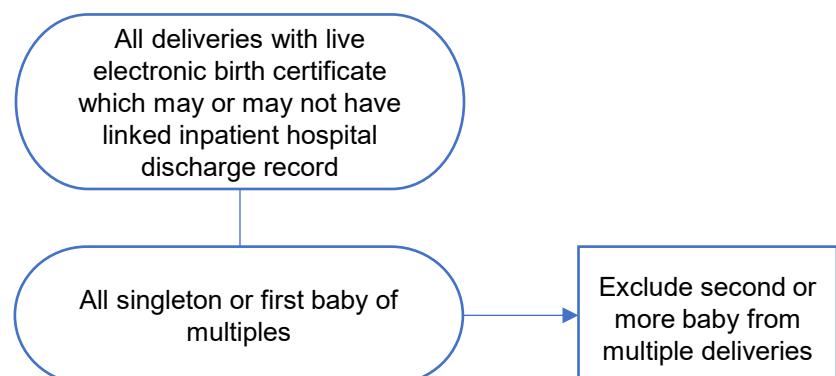


Category	Criteria
<u>Electronic birth certificate: Vital Events</u> <u>Registration and Information (VERI) – August 2021 forward</u> Primary Section: Labor and Delivery Subsection: Infant Delivery Details Field: Obstetric Estimate of Gestation:	Completed weeks and days
<u>Electronic birth certificate: Vital Information</u> <u>Platform (VIP) – up to August 2021</u> Primary Section: Labor & Delivery I Subsection: Delivery Information Field: Obstetric Estimate of Gestation	Weeks and days
<u>Electronic birth certificate: Vital Events</u> <u>Registration and Information (VERI) – August 2021 forward</u> Primary Section: Prenatal Care Subsection: Prenatal Care Info for this Pregnancy Field: Date of Last Normal Menses Began:	Date
<u>Electronic birth certificate: Vital Information</u> <u>Platform (VIP) – up to August 2021</u> Primary Section: Prenatal 1 Field: Date last normal menses began:	Date

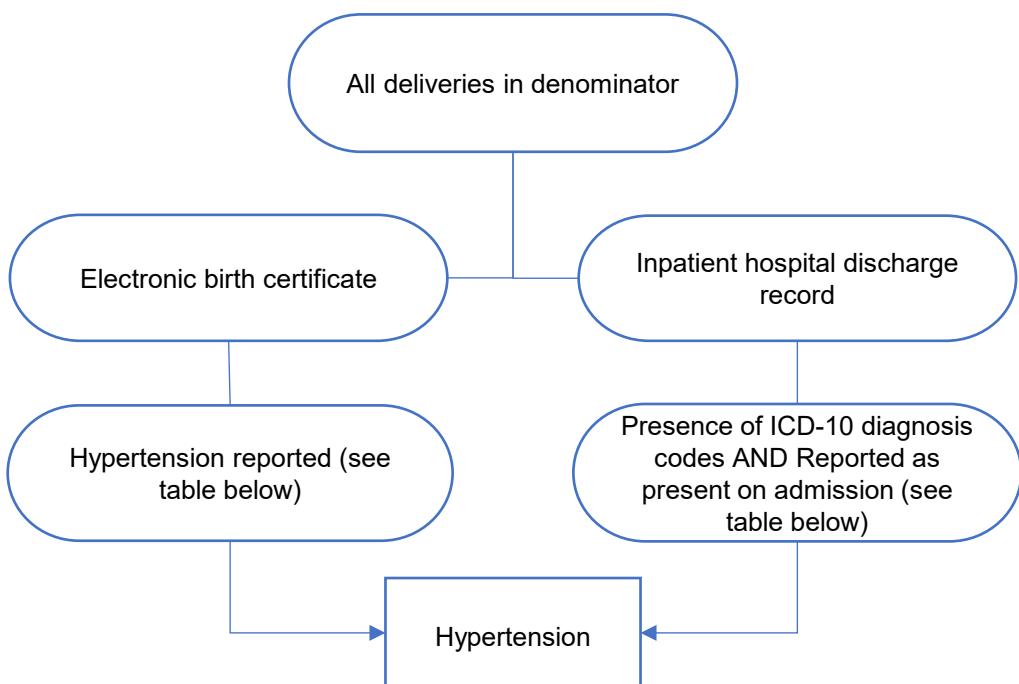
Hypertension - Pre-existing and Gestational

Description: High blood pressure that a birthing person has before getting pregnant or that develops in the first half of pregnancy, before 20 weeks (pre-existing). High blood pressure that first happens after 20 weeks of pregnancy (gestational).

Denominator:



Numerator:

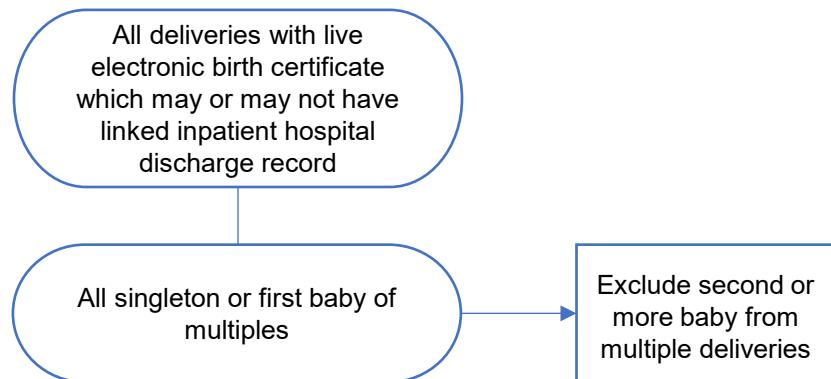


Category	Criteria
<u>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</u> Primary Section: Prenatal Care Subsection: Maternal Risk Factors During This Pregnancy Field: Select medical risk factors of mother during this pregnancy:	Hypertension (gestational) OR Hypertension (pre-pregnancy)
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Prenatal II Subsection: Maternal Risk Factors NCHS Field: Check all that apply:	Hypertension OR Hypertension – Pre-pregnancy (chronic) OR Hypertension – Gestational (PIH, preeclampsia)
ICD-10 Diagnosis Codes for Pre-existing and Gestational Hypertension	I10, I11.0, I11.9, I12.0, I12.9, I13.0, I13.10, I13.11, I13.2, I15.0, I15.1, I15.2, I15.8, I15.9, O10.011, O10.012, O10.013, O10.019, O10.02, O10.03, O10.111, O10.112, O10.113, O10.119, O10.12, O10.13, O10.211, O10.212, O10.213, O10.219, O10.22, O10.23, O10.311, O10.312, O10.313, O10.319, O10.32, O10.33, O10.411, O10.412, O10.413, O10.419, O10.42, O10.43, O10.911, O10.912, O10.913, O10.919, O10.92, O10.93, O11.1, O11.2, O11.3, O11.9, O13.1, O13.2, O13.3, O13.9 - AND – Present on Admission marked Yes

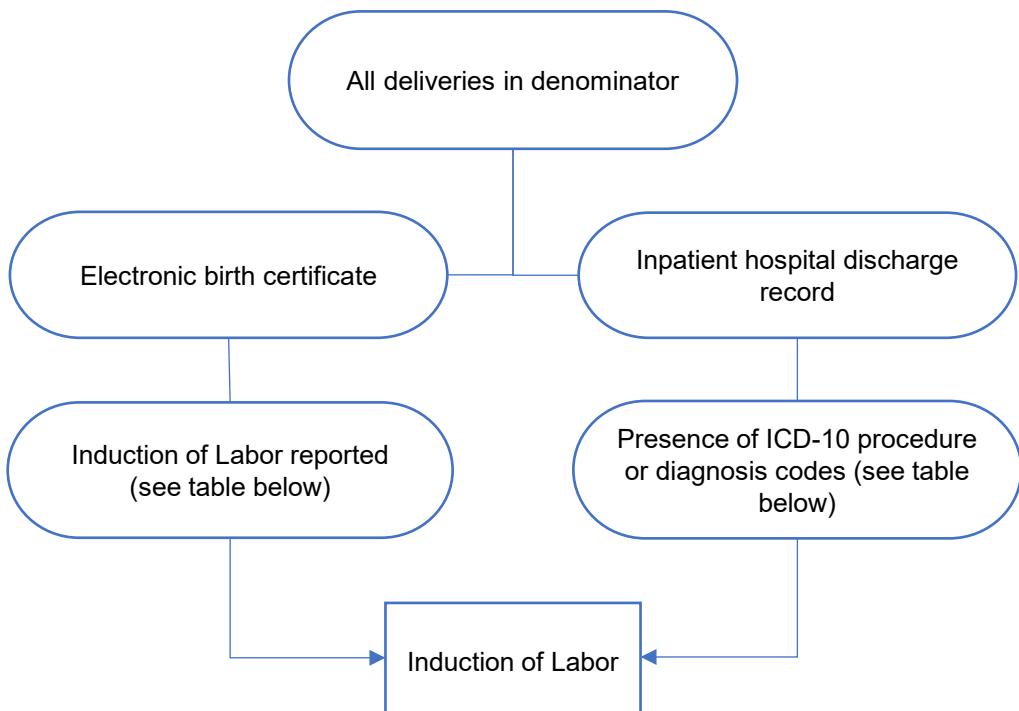
Induction of Labor

Description: A procedure that uses medications or other artificial methods to bring on (induce) labor.

Denominator:



Numerator:

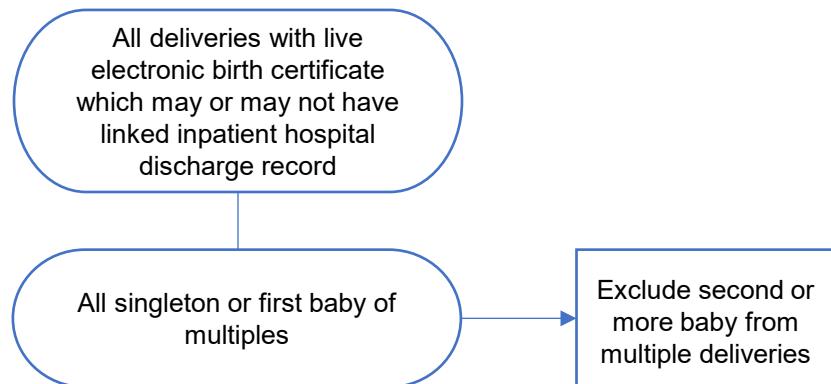


Category	Criteria
<u>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</u> Primary Section: Labor and Delivery Subsection: Labor Field: Characteristics of Labor and Delivery: (select all that apply)	Induction of Labor
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Labor and Delivery II Subsection: Field: Characteristics of Labor & Delivery – NCHS (check all that apply)	Induction of Labor
ICD-10 Procedure Codes for Induction of Labor	0U7C7ZZ, 0U7C7DZ, 3E033VJ, 3E0P7GC, 3E0P7VZ
ICD-10 Diagnosis Codes for Induction of Labor	O61.0, O61.1, O61.8, O61.9

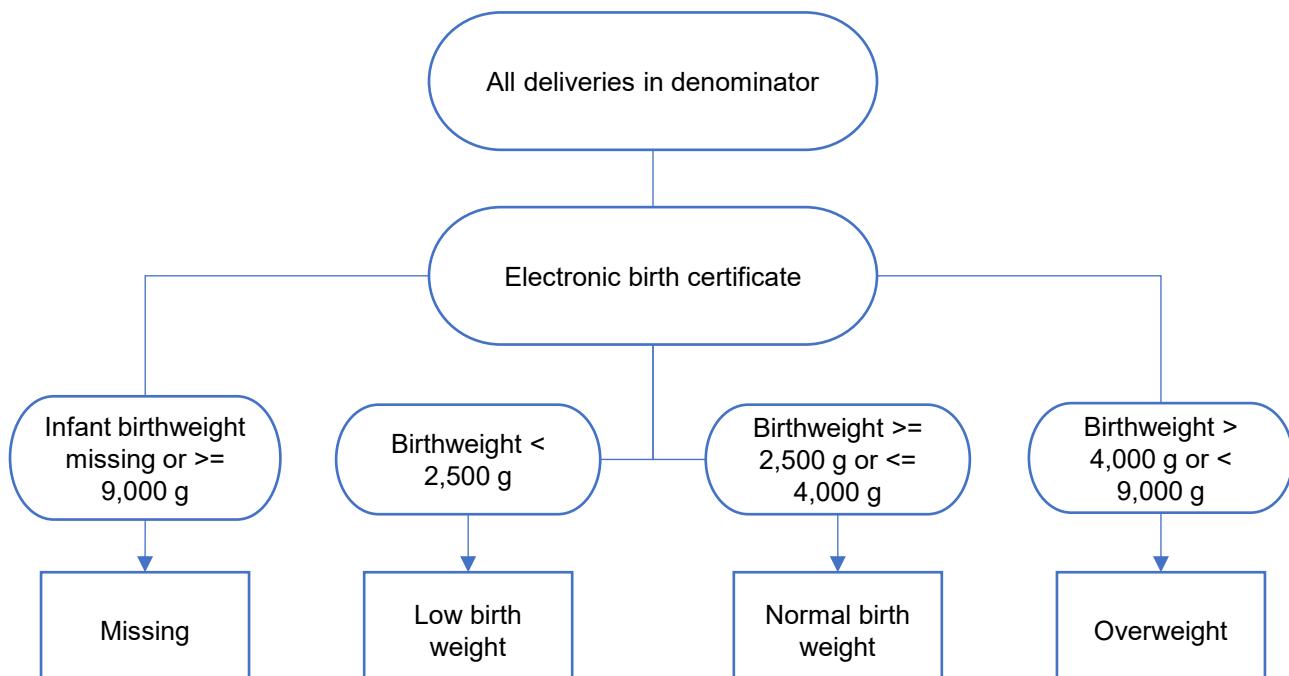
Infant Birth Weight

Description: Infant birth weight in grams reported in standard categories.

Denominator:



Numerator:

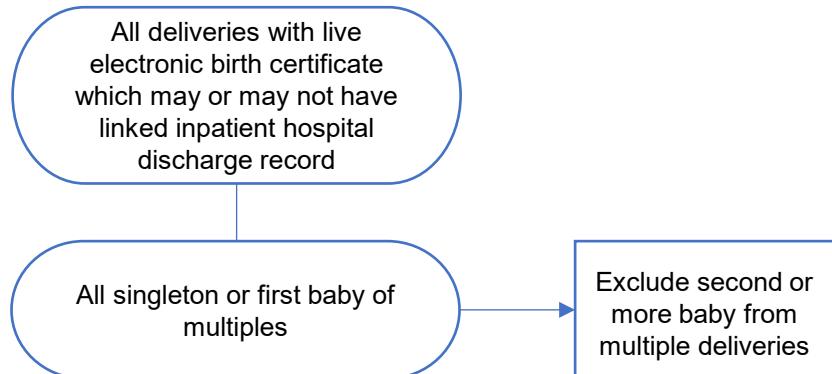


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Labor and Delivery Subsection: Infant Delivery Details Field: Birth Weight	Birth weight in grams
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Labor and Delivery I Field: Delivery Information	Birth weight in grams

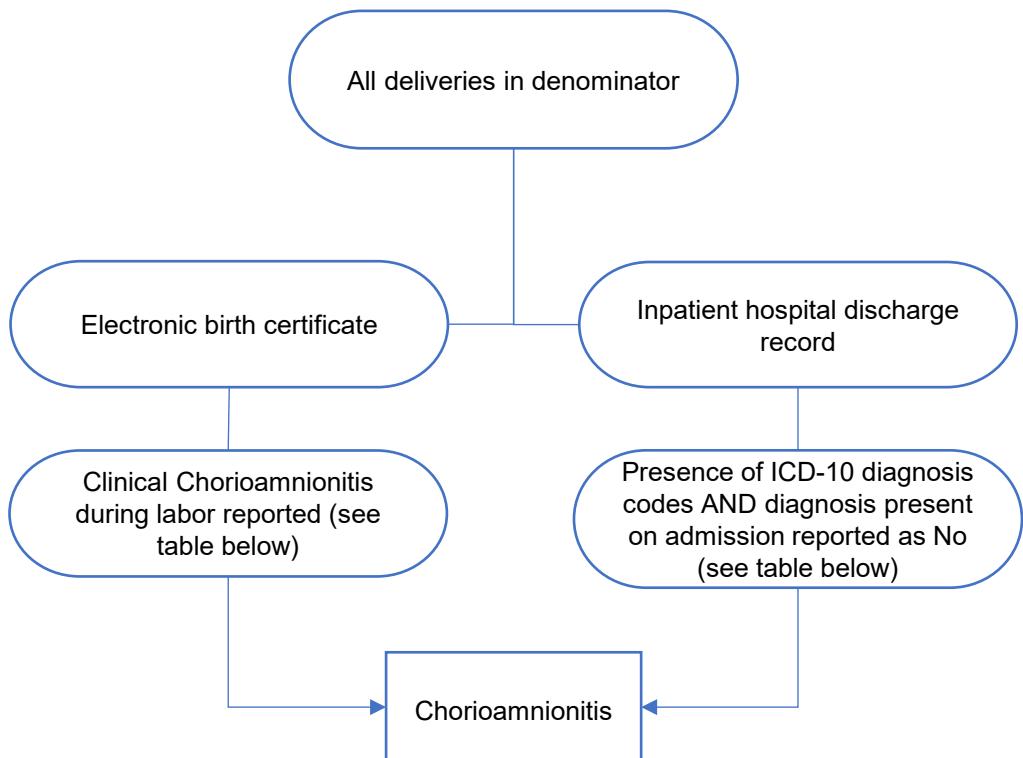
Infection – Chorioamnionitis Specific

Description: A serious condition in pregnancy when the membranes that surround the fetus and the amniotic fluid are infected by bacteria.

Denominator:



Numerator:



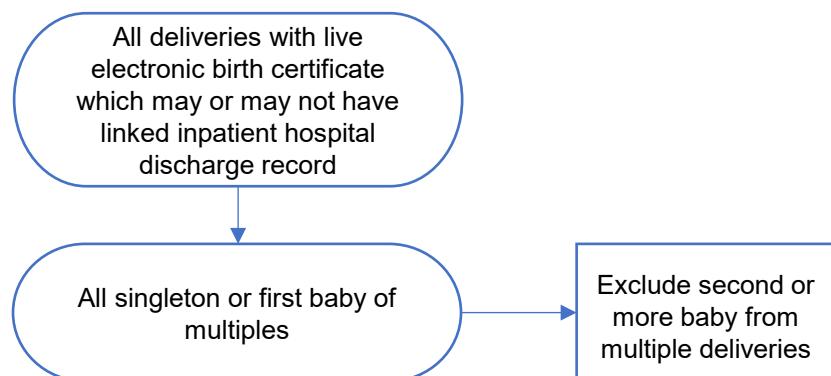
Infection – Chorioamnionitis Specific

Category	Criteria
<p>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</p> <p>Primary Section: Labor and Delivery</p> <p>Subsection: Infant Characteristics at Delivery</p> <p>Field: Select all that apply:</p>	Clinical Chorioamnionitis during labor
<p>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</p> <p>Primary Section: Labor and Delivery II</p> <p>Subsection: Characteristics of Labor & Delivery - NCHS</p> <p>Field: Select all that apply:</p>	Clinical Chorioamnionitis diagnosed during labor or maternal temperature is greater than or equal to 38oC(100.4oF)
ICD-10 Diagnosis Codes for Chorioamnionitis	O41.121, O41.1210, O41.1211, O41.1212, O41.1213, O41.1214, O41.1215, O41.1219, O41.122, O41.1220, O41.1221, O41.1222, O41.1223, O41.1224, O41.1225, O41.1229, O41.123, O41.1230, O41.1231, O41.1232, O41.1233, O41.1234, O41.1235, O41.129, O41.1239, O41.1290, O41.1291, O41.1292, O41.1293, O41.1294, O41.1295, O41.1299 - AND – Present on Admission marked No

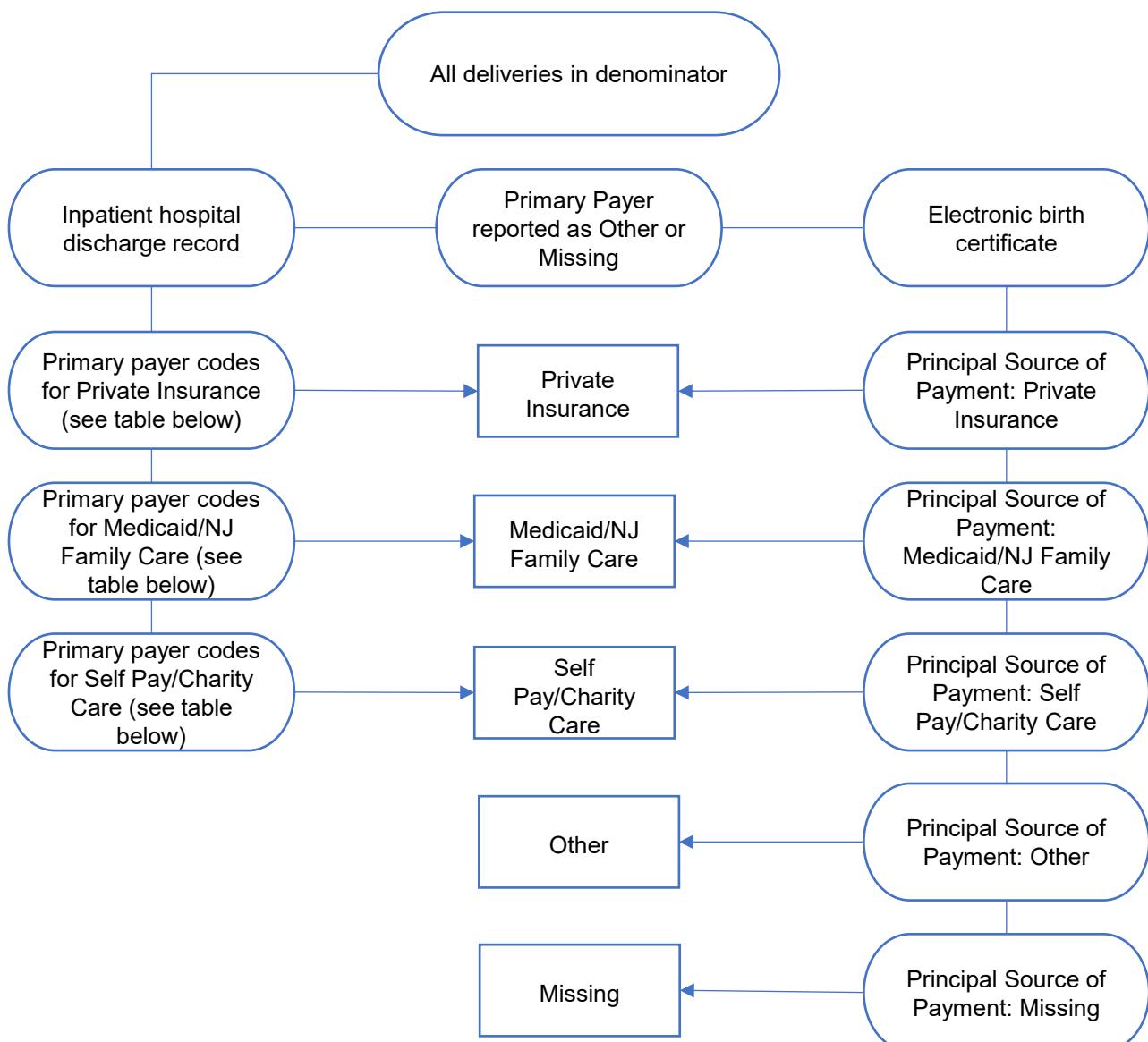
Insurance Coverage

Description: Type of insurance provider.

Denominator:



Numerator:



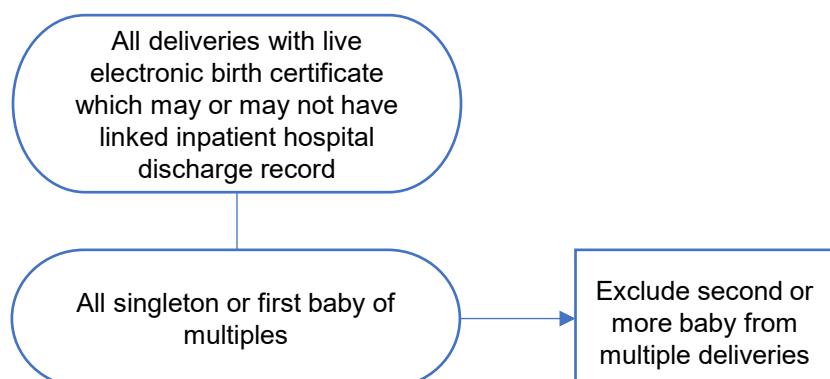
Insurance Coverage

Category	Criteria
<p><u>Electronic birth certificate: Vital Events</u> <u>Registration and Information (VERI) – August 2021 forward</u> Primary Section: Demographics Subsection: Insurance Information Field: Principal sour of Payment for this Pregnancy</p>	Private Insurance, Medicaid/NJ Family Care, Self-Pay, Other, Charity Care, Unknown
<p><u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Admission Subsection: Field: Principal Source of Payment</p>	Medicaid/NJ Family care, Other, Private Insurance, Self-Pay/Charity Care, Unknown
<p><u>PRIME (Primary payer) codes for Private Insurance</u>²</p>	590, 600, 610, 611, 612, 613, 614, 619, 621, 622, 623, 624, 383, 511, 710, 951, 199, 512, 513, 516, 517, 521, 529
<p><u>PRIME (Primary payer) codes for Medicaid</u>²</p>	200, 210, 211, 212, 213, 219, 220, 230, 250, 260, 290, 291, 299, 361
<p><u>PRIME (Primary payer) codes for Self-Pay/Charity Care</u>²</p>	039, 522, 810, 821

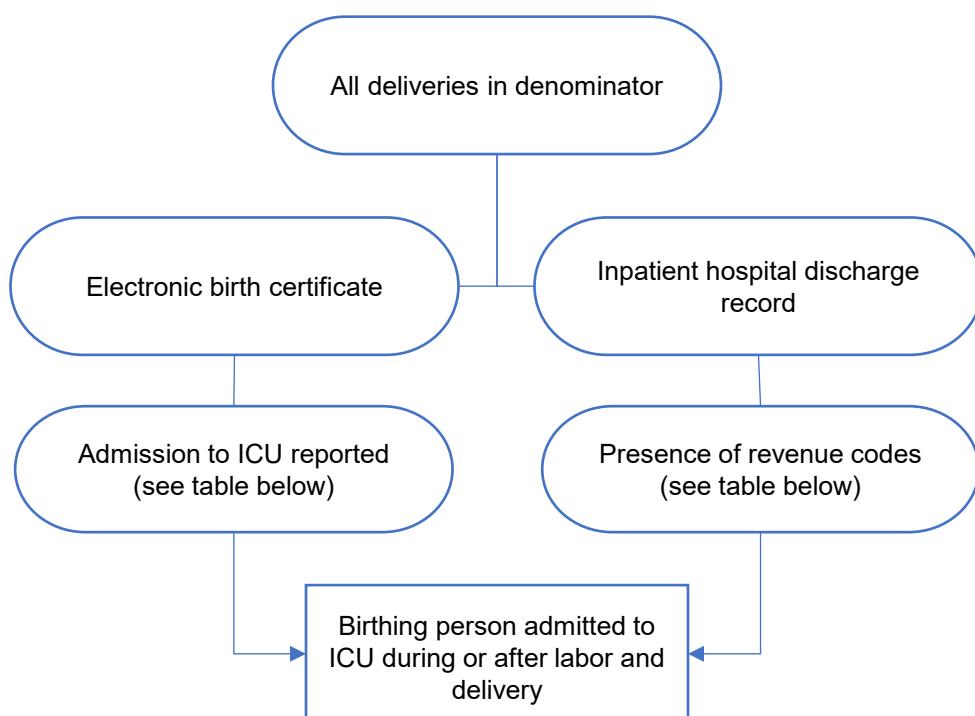
Intensive Care Unit (ICU) Admission

Description: Any admission, planned or unplanned, of the mother to a facility or unit designated as providing intensive or intermediate care during the hospitalization in which a live-born infant was delivered.

Denominator:



Numerator:

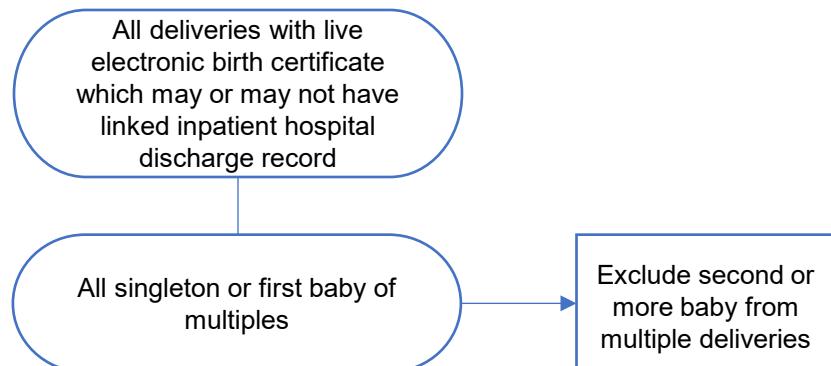


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Maternal PPD Subsection: Maternal Morbidity Field: Admission to intensive care unit	Yes
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Maternal Postpartum Subsection: Maternal Morbidity Field: Admission to intensive care unit	Yes
Revenue Codes for ICU Admission¹	0200, 0201, 0202, 0206, 0207, 0208, 0209, 0210, 0211, 0212, 0213, 0214, 0219

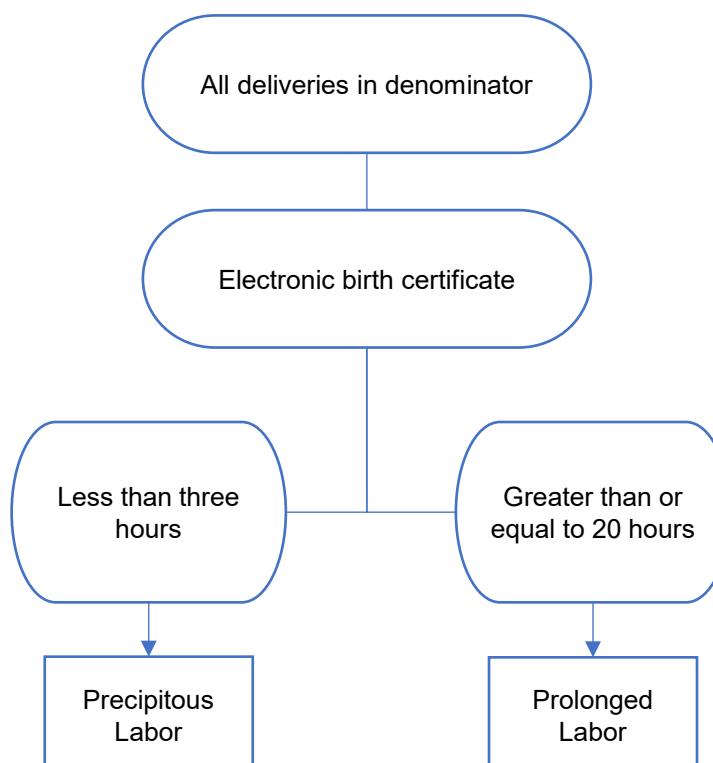
Length of Labor

Description: Categories of length of labor.

Denominator:



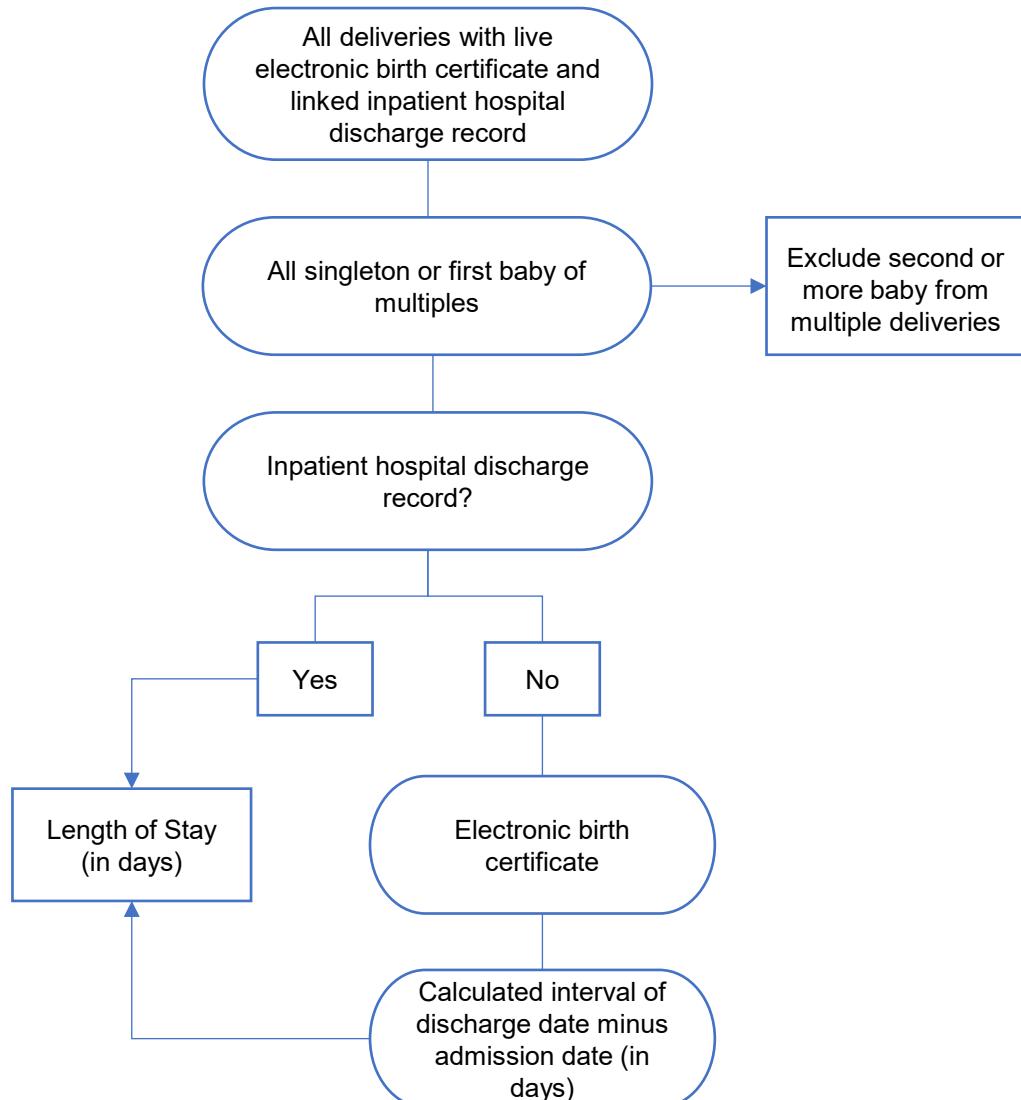
Numerator:



Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Labor and Delivery Subsection: Labor Field: Characteristics of Labor and Delivery: (select all that apply)	Precipitous Labor (less than 3 hours) OR Prolonged Labor (greater than or equal to 20 hours)
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Labor and Delivery I Field: Onset of Labor (check all that apply)	Precipitous Labor (less than 3 hours) OR Prolonged Labor (greater than or equal to 20 hours)

Length of Stay

Description: Number of days a birthing person admitted/stayed in a hospital (discharge date minus admission date).

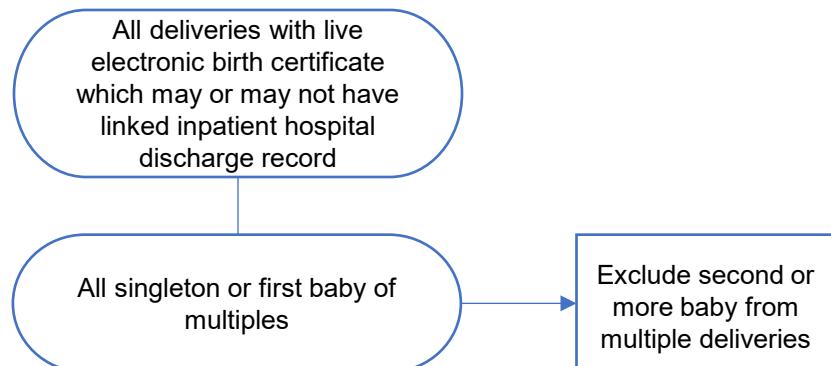


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Maternal PPD Subsection: Mothers Discharge Status Field: Discharge Date	Discharge Date
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Maternal Postpartum Field: Mothers Discharge Date	Discharge Date
Hospital Intake Form: Admission Information	Date Field for Mothers Date of Admission

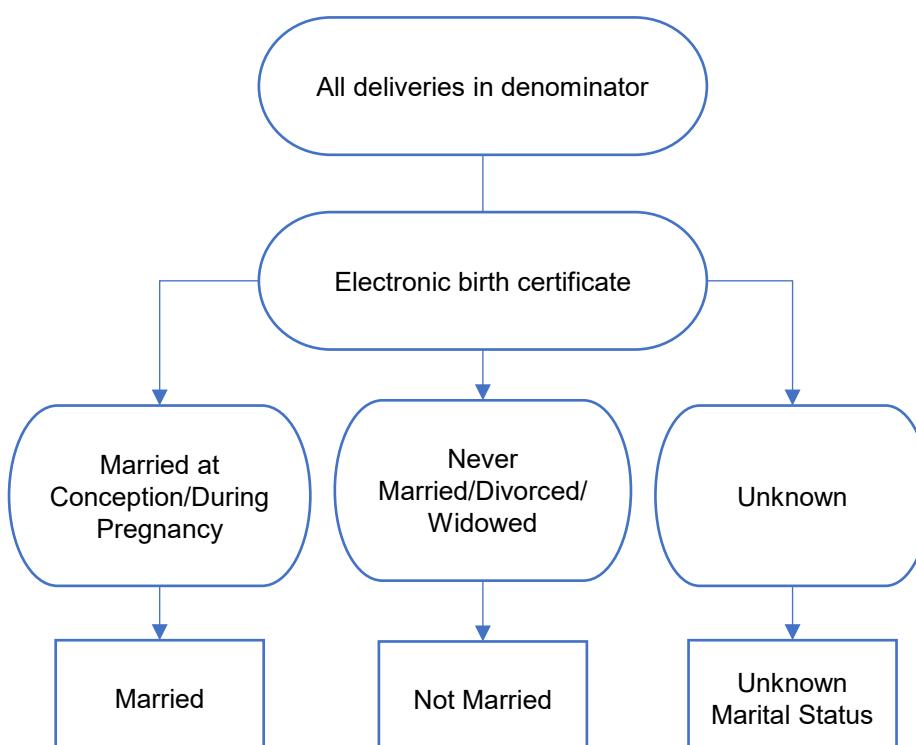
Marital Status

Description: Categories of marriage status.

Denominator:



Numerator:

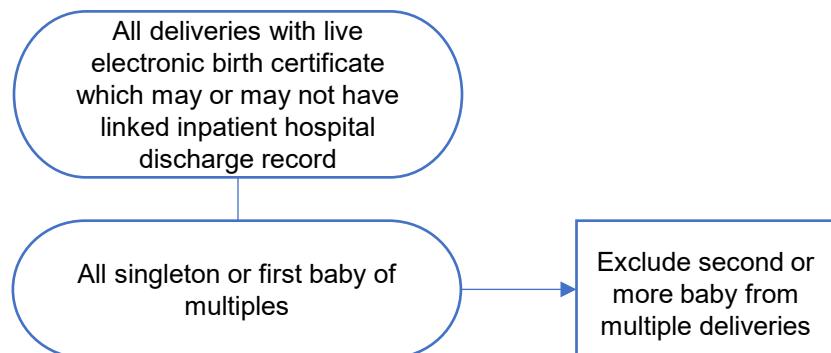


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Demographics Subsection: Mother/Parent As Marriage Information Field: Marital Status (if divorced or widowed less than 300 days, select married)	Married OR Never Married OR Divorced or Widowed
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Mother Demographic Subsection: Mothers Marriage Information Field: Marital Status	Married OR Never Married OR Married, Husband Info Refused OR Widowed, 300 Days or More OR Divorced, 300 Days or More OR Not Stated/Unknown

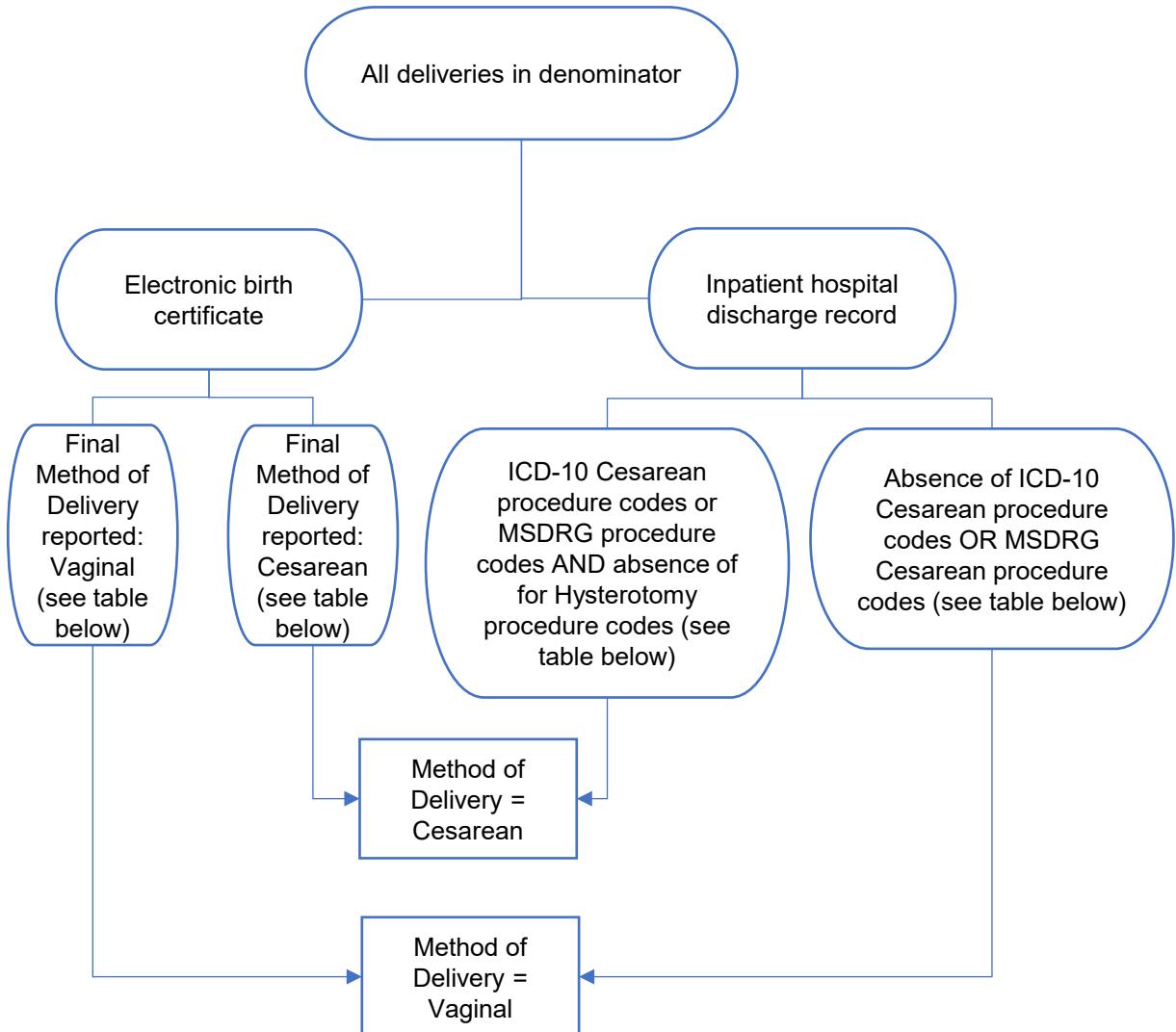
Method of Delivery

Description: A vaginal delivery is birth of the fetus(es) through the vagina. Cesarean birth is the delivery of a baby through incisions (surgical cuts) made in the belly and uterus.

Denominator:



Numerator:



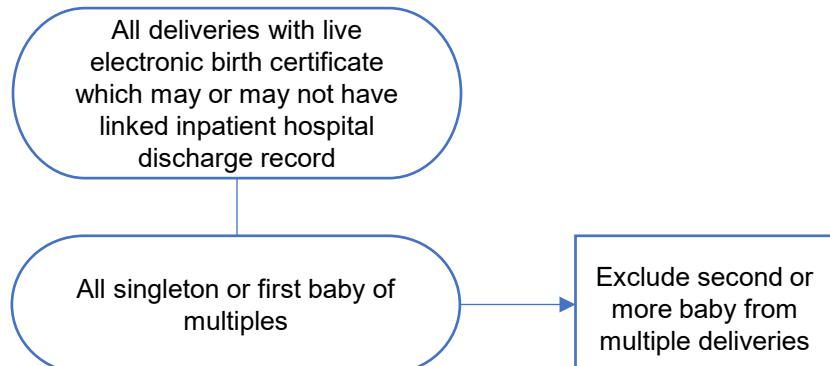
Method of Delivery

Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Labor and Delivery Subsection: Method of Delivery & Details Field: Final Method of Delivery:	Vaginal/Spontaneous OR Vaginal/Forceps OR Vaginal/Vacuum OR Cesarean with Trial of Labor OR Cesarean – NO Trial of Labor
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Labor & Delivery I Subsection: Method of Delivery Field: Final route & method of delivery?	Vaginal OR Cesarean
<u>ICD-10 Procedure codes for Cesarean delivery (based on criteria from AHRQ Quality Indicators)</u>³	10D00Z0,10D00Z1,10D00Z2
<u>Hysterotomy Procedure codes (based on criteria from AHRQ Quality Indicators)</u>³	10A00ZZ, 10A03ZZ, 10A04ZZ
MS-DRG Cesarean delivery codes	783-788

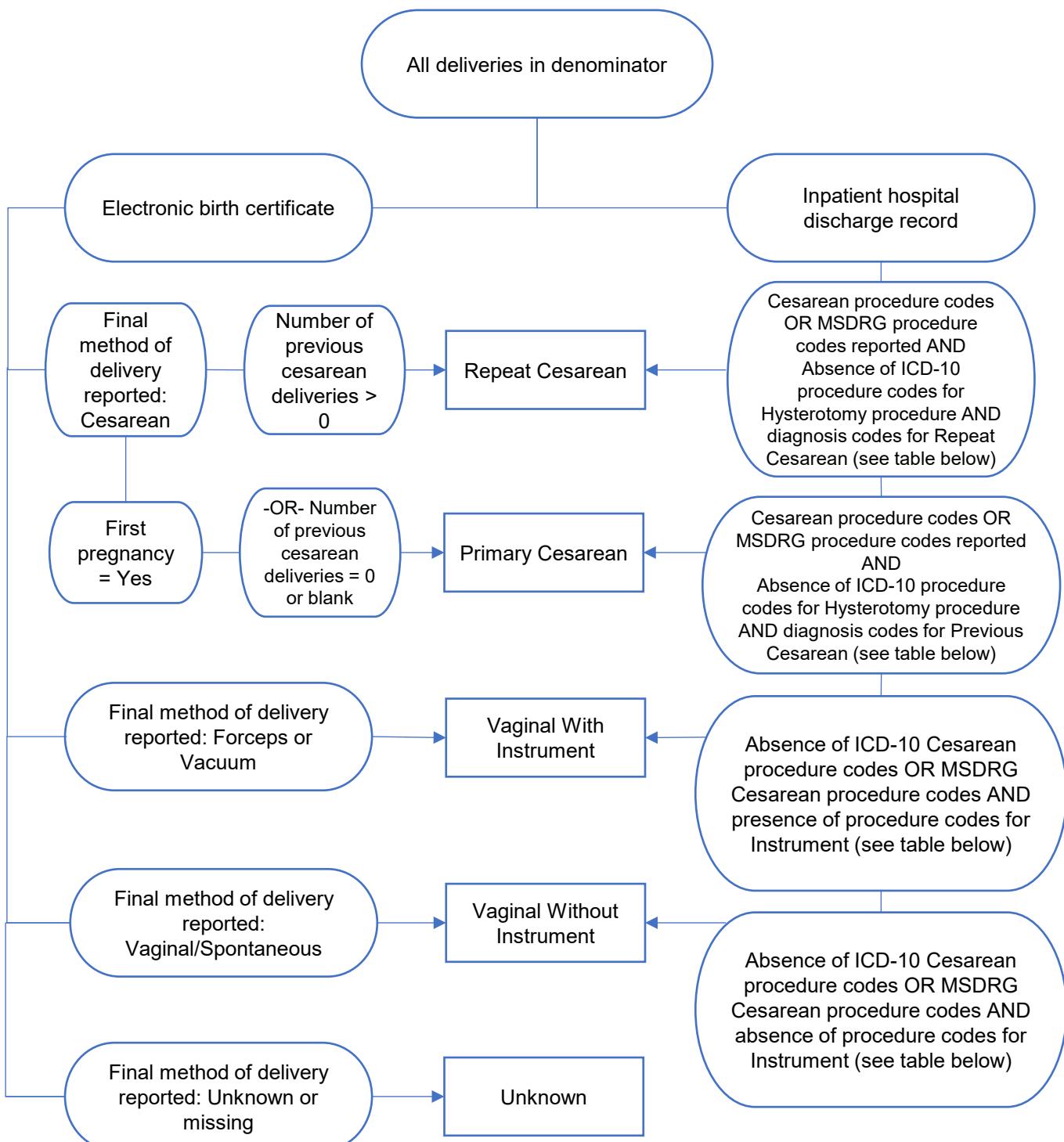
Method of Delivery Type

Description: Primary Cesarean is the delivery of a baby through incisions (surgical cuts) made in the belly and uterus in a birthing person without a prior cesarean birth. Repeat Cesarean is the delivery of a baby through incisions (surgical cuts) made in the belly and uterus in a birthing person with a prior cesarean birth. Vaginal with Instrument is a vaginal birth of a baby performed with the help of forceps or a vacuum device. Vaginal Without Instrument is a vaginal birth of a baby performed without the help of forceps or a vacuum device.

Denominator:



Numerator:



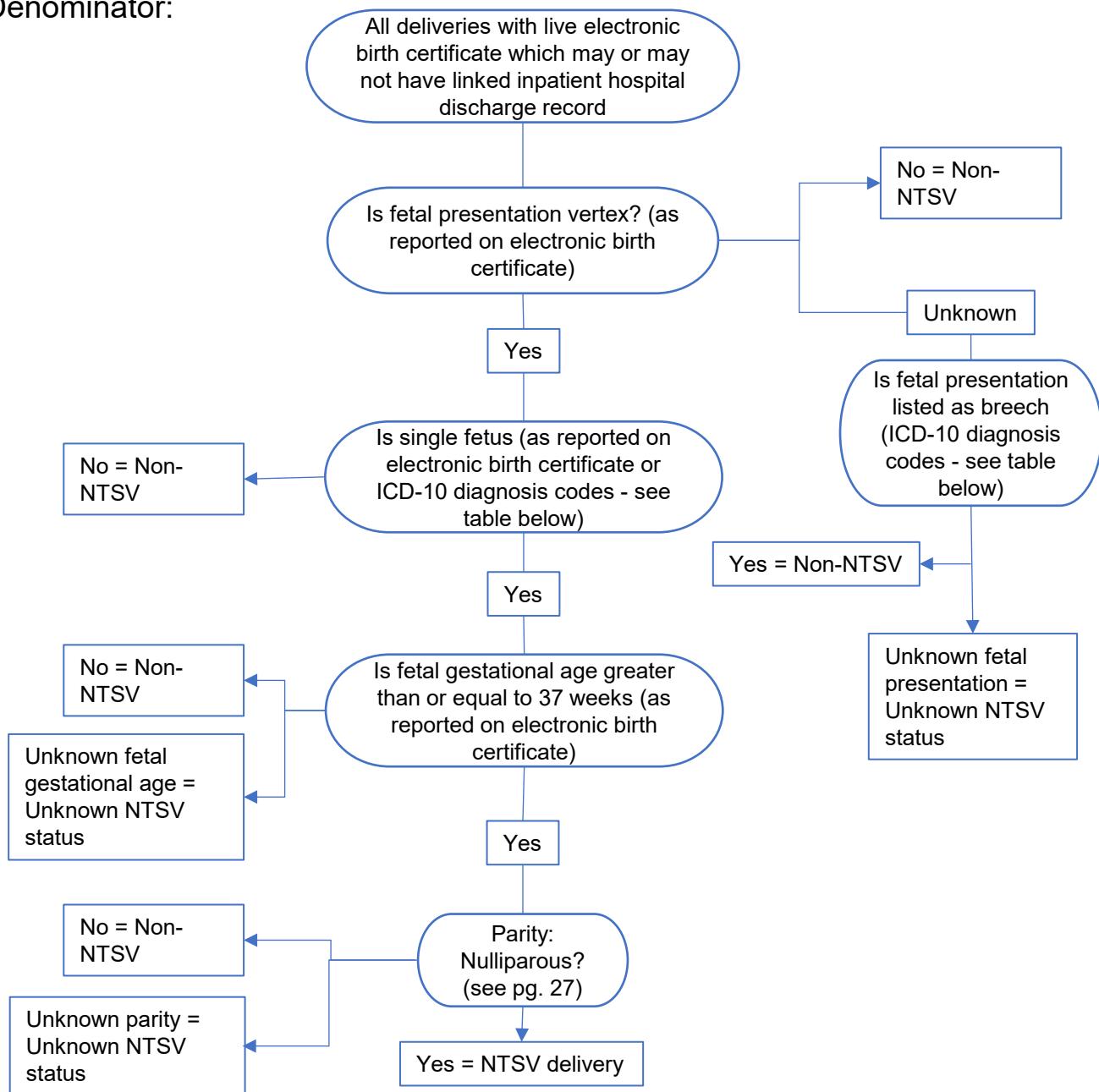
Method of Delivery Type

Category	Criteria
<p>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</p> <p>Primary Section: Labor and Delivery Subsection: Method of Delivery & Details Field: Final Method of Delivery: AND Primary Section: Prenatal Care Subsection: Pregnancy History Field: Is this Mothers first pregnancy? AND Primary Section: Prenatal Care Subsection: Pregnancy History Field: Number of Previous Cesareans:</p>	<p>Vaginal/Spontaneous, Vaginal/Forceps, Vaginal/Vacuum, Cesarean with Trial of Labor, or Cesarean – NO Trial of Labor</p> <p>Yes or No</p> <p># or Missing</p>
<p>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</p> <p>Primary Section: Labor & Delivery I Subsection: Method of Delivery Field: Final route & method of delivery? AND Primary Section: Prenatal I Subsection: Field: Is this mothers first pregnancy? AND Primary Section: Prenatal II Subsection: Maternal Risk Factors NCHS Field: Mother had a previous cesarean delivery, if yes, how many</p>	<p>Vaginal or Cesarean</p> <p>Yes or No</p> <p>Yes/No, #, or Missing</p>
ICD-10 Procedure codes for Cesarean delivery (based on criteria from AHRQ Quality Indicators)³	10D00Z0,10D00Z1,10D00Z2
MS-DRG Cesarean delivery codes	783-788
ICD-10 Diagnosis codes for Repeat/Previous Cesarean	O34.21, O34.211, O34.212, O34.219, O66.41
Hysterotomy Procedure codes (based on criteria from AHRQ Quality Indicators)³	10A00ZZ, 10A03ZZ, 10A04ZZ
Procedure codes for Instrument (based on criteria from AHRQ Patient Safety Indicators)⁴	10D07Z3, 10D07Z4, 10D07Z5, 10D07Z6, 10D07Z8

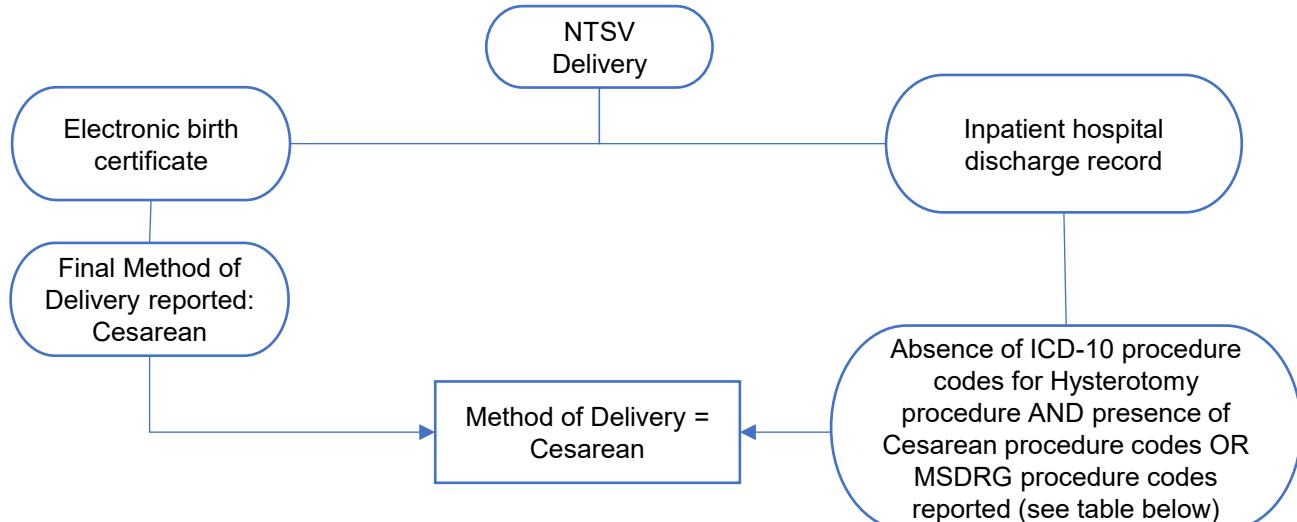
Nulliparous, Term, Singleton, Vertex (NTSV) Cesarean Delivery

Description: Nulliparous, Term, Singleton, Vertex (NTSV) births identifies the proportion of live babies born at or beyond 37.0 weeks gestation to women in their first pregnancy, that are singleton (no twins or beyond) and in the vertex presentation (no breech or transverse positions) delivered via cesarean birth.

Denominator:



Numerator:

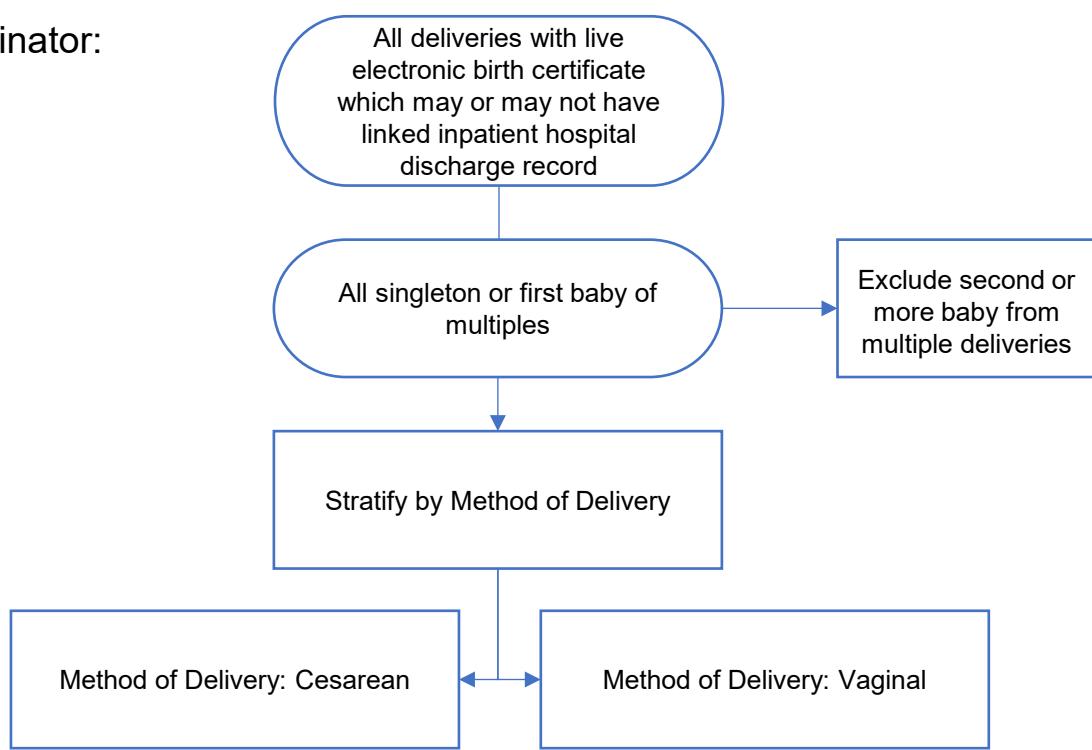


Nulliparous, Term, Singleton, Vertex (NTSV) Cesarean Delivery

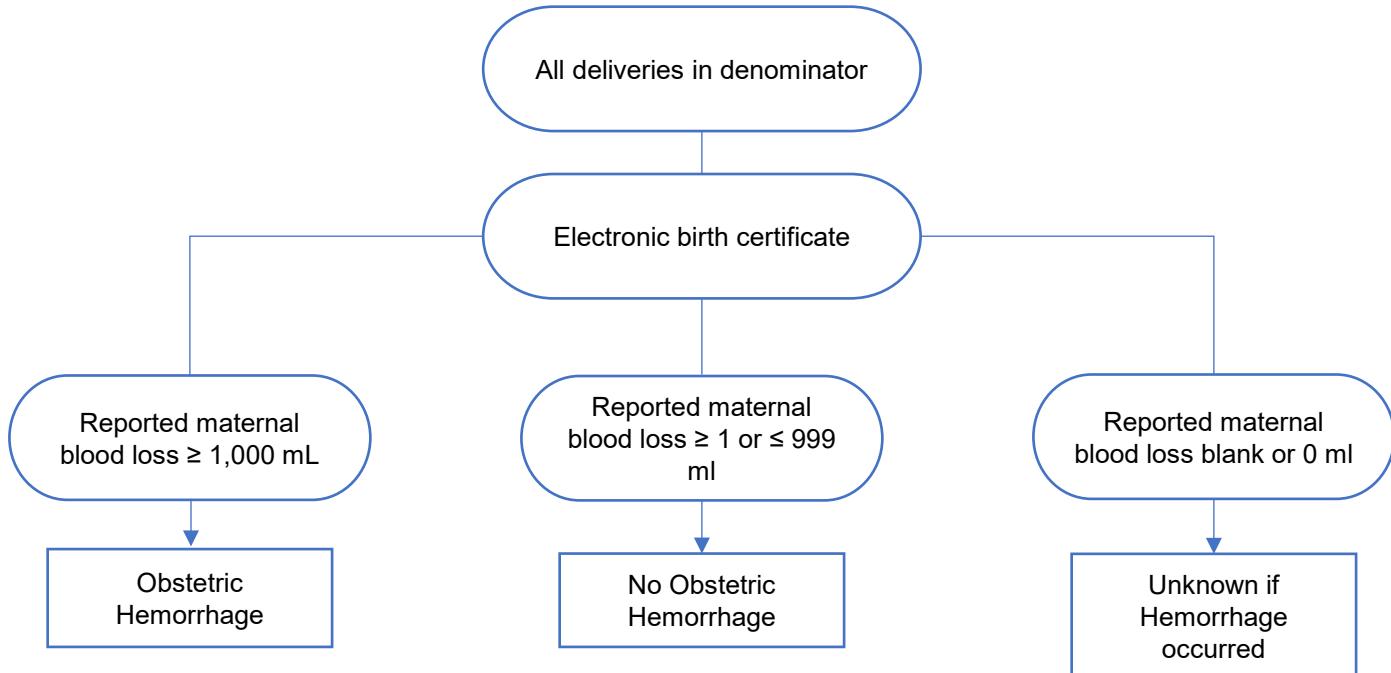
Obstetric Hemorrhage

Description: A cumulative blood loss greater than 1,000 mL regardless of the method of delivery (i.e., vaginal or cesarean birth).

Denominator:



Numerator:

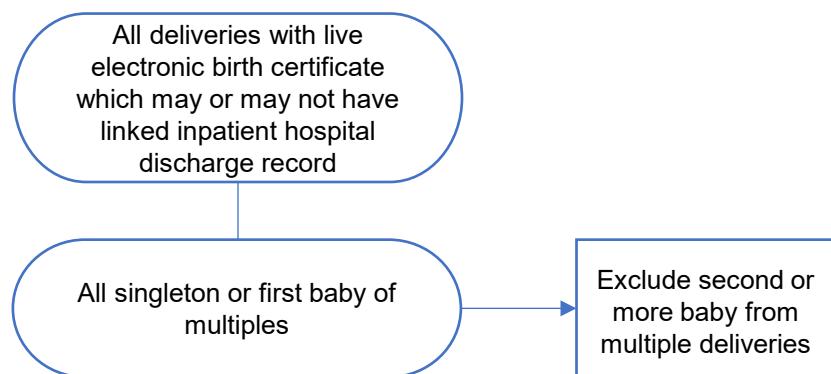


Category	Criteria
<u>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</u> Primary Section: Labor and Delivery Subsection: Method of Delivery & Details Field: Maternal Blood Loss: cc	≥ 1,000 cc
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Labor and Delivery I Subsection: Delivery Information Field: Maternal Blood Loss (cc)	≥ 1,000 cc

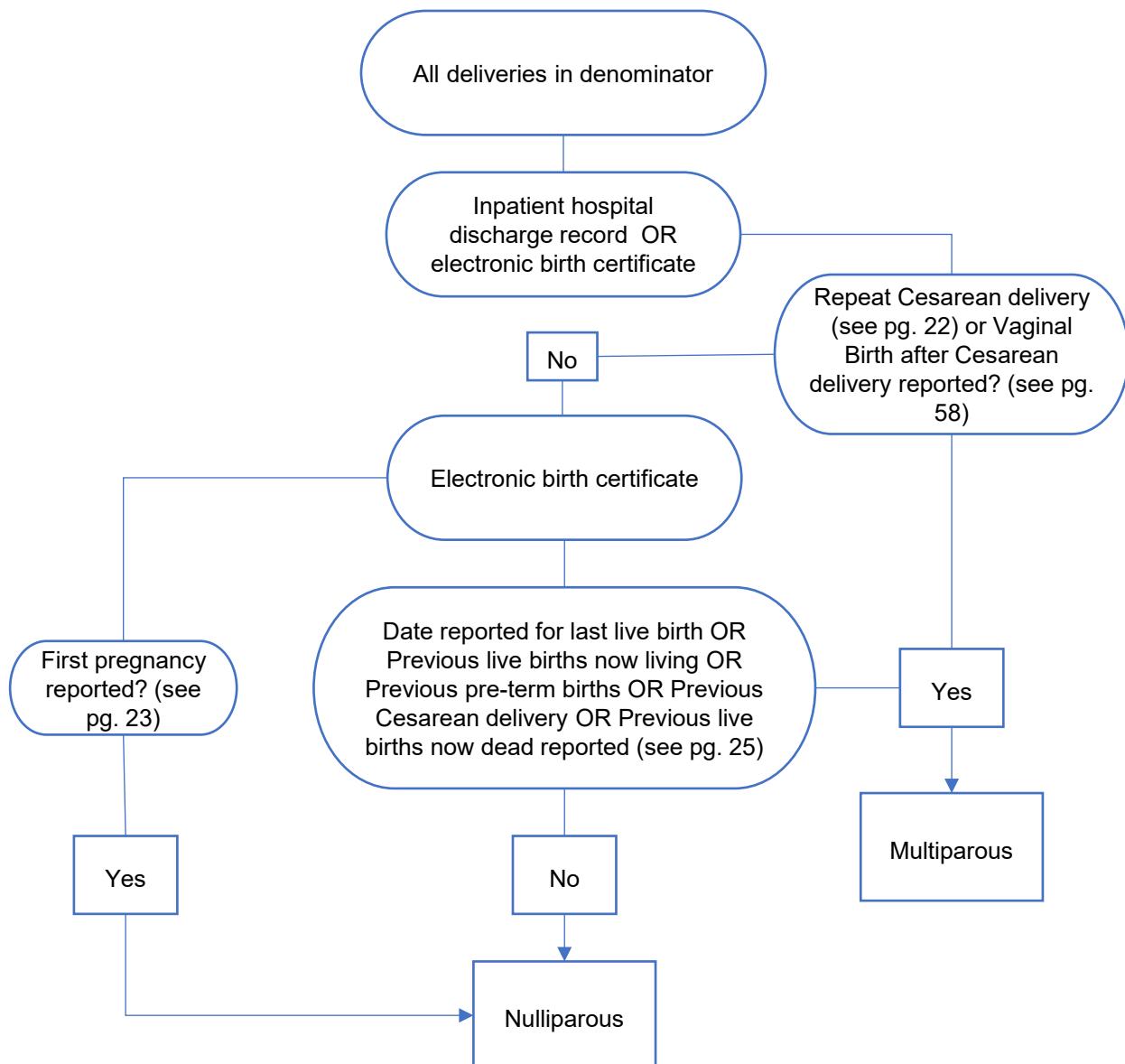
Parity

Description: The number of pregnancies reaching 20 weeks and 0 days of gestation or beyond, regardless of the number of fetuses or outcomes. **Nulliparous** - A birthing person with a parity of zero. **Multiparous** - A birthing person with a parity of \geq one.

Denominator:



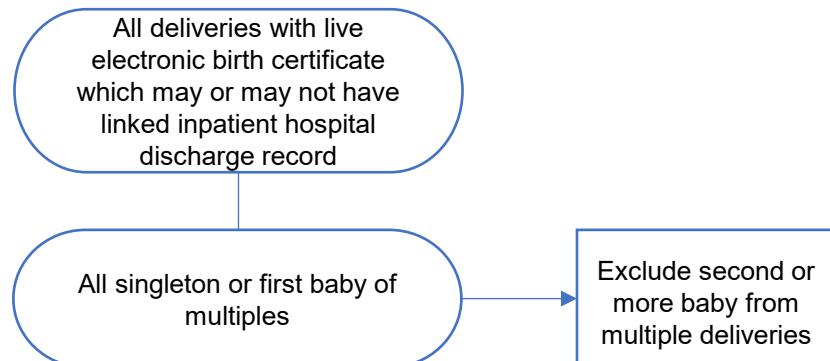
Numerator:



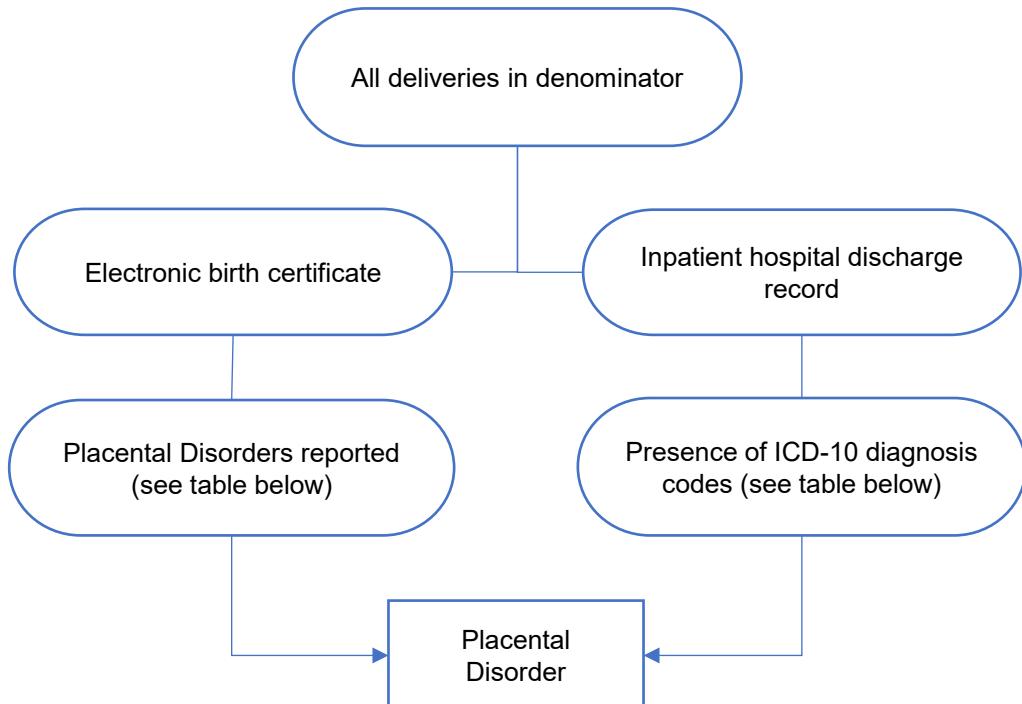
Placental Disorders

Description: Occurs during pregnancy when the placenta develops in the uterus in an unusual location or invades the wall of the uterus. Includes Placenta Previa, Placenta Abruption, and Placenta Accreta.

Denominator:



Numerator:



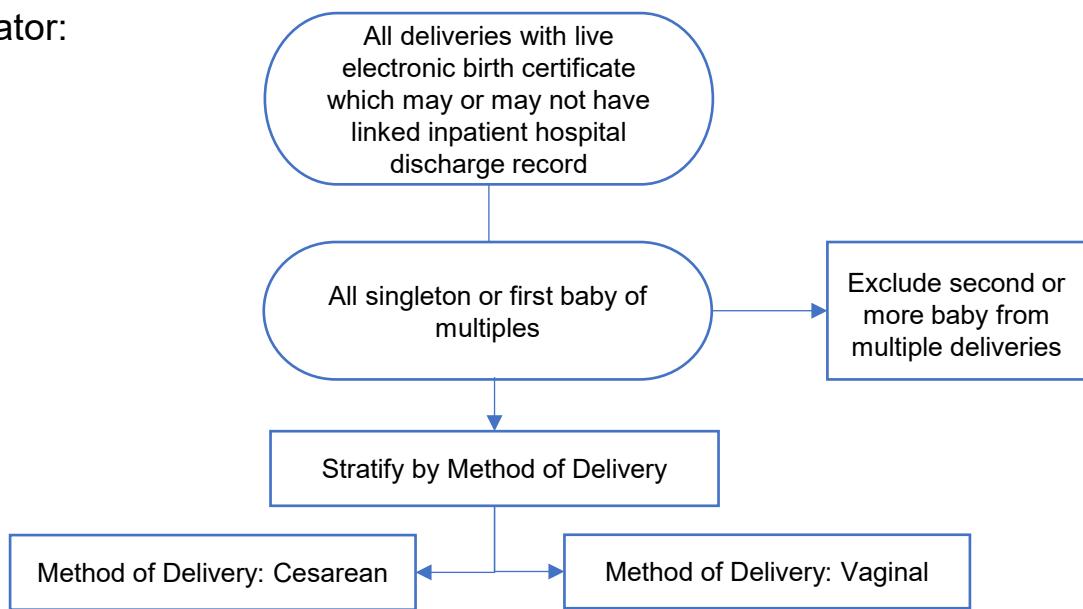
Placental Disorders

Category	Criteria
<p>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Labor and Delivery Subsection: Infant Characteristics at Delivery Field: Select all that apply OR Primary Section: Labor and Delivery Subsection: Infant Characteristics at Delivery Field: Select all that apply</p>	Placenta Accreta OR Placenta Previa
<p>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Labor & Delivery II Subsection: Characteristics of Labor & Delivery - Other Field: Select all that apply</p>	Placenta Abruptio OR Placenta Accreta OR Placenta Previa
ICD-10 Procedure codes for Placental Disorders	O42.321, O42.3211, O42.3212, O42.3213, O44.0, O44.00, O44.01, O44.02, O44.03, O44.2, O44.20, O44.21, O44.22, O44.23, O44.3, O44.30, O44.31, O44.32, O44.33, O45, O45.0, O45.00, O45.001, O45.002, O45.003, O45.009, O45.01, O45.01, O45.012, O45.013, O45.019, O45.02, O45.021, O45.022, O45.023, O45.029, O45.09, O45.091, O45.092, O45.093, O45.099, O43, O43.0, O43.01, O43.011, O43.012, O43.013, O43.019, O43.02, O43.021, O43.022, O43.023, O43.029, O43.1, O43.10, O43.101, O43.102, O43.103, O43.109, O43.11, O43.111, O43.112, O43.113, O43.119, O43.12, O43.121, O43.122, O43.123, O43.129, O43.19, O43.191, O43.192, O43.193, O43.199, O43.2, O43.22, O43.221, O43.222, O43.223, O43.229, O43.23, O43.231, O43.232, O43.233, O43.239, O43.8, O43.81, O43.811, O43.812, O43.813, O43.819, O43.89, O43.891, O43.892, O43.893, O43.899, O44.4, O44.40, O44.41, O44.42, O44.43, O44.5, O44.50, O44.51, O44.52, O44.53, O44.13

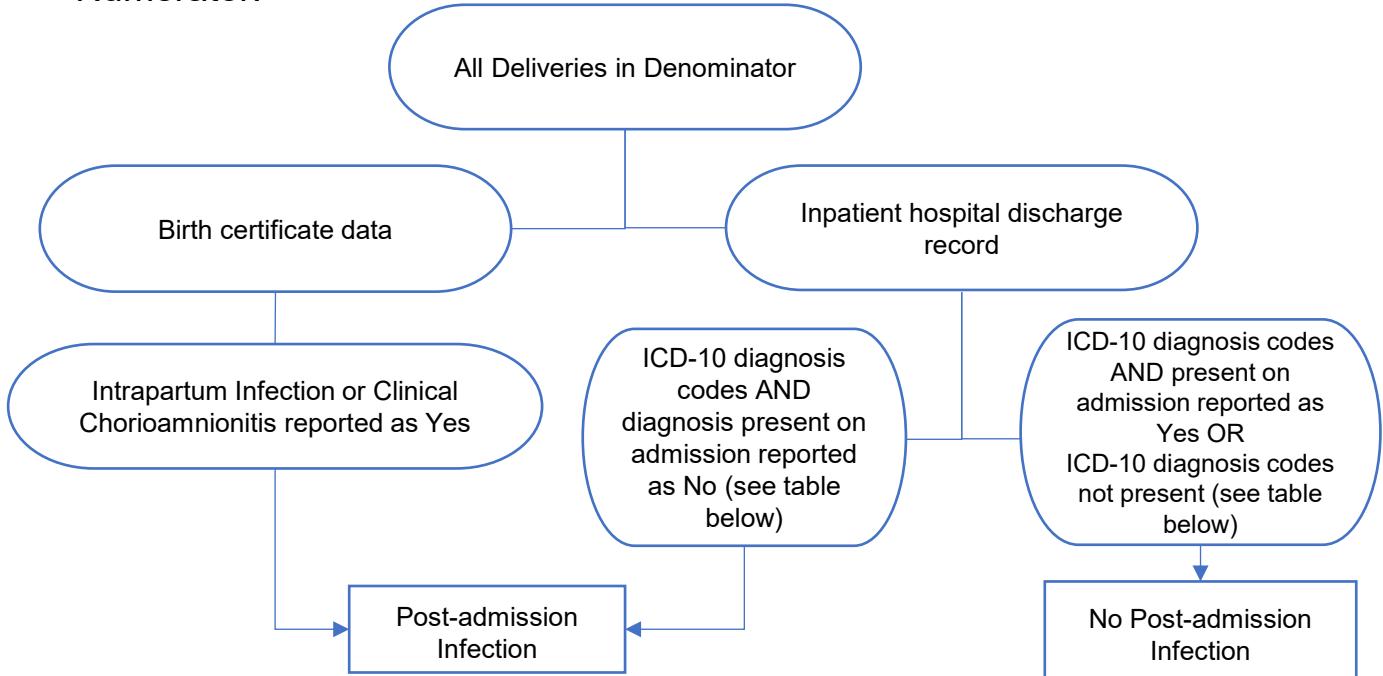
Post-admission Infection

Description: Infections that occur after admission for labor and delivery hospitalization.

Denominator:



Numerator:

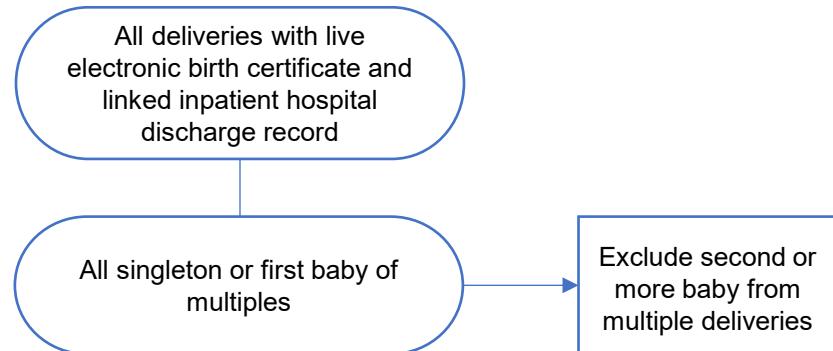


Category	Criteria
<u>Electronic birth certificate: Vital Events</u> <u>Registration and Information (VERI) – August 2021 forward</u> Primary Section: Labor and Delivery Subsection: Infant Characteristics at Delivery Field: Clinical Chorioamnionitis during labor	Yes
<u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Labor and Delivery II Subsection: Characteristics of Labor & Delivery Field: Clinical Chorioamnionitis diagnosed during labor or maternal temperature is greater than or equal to 38 °C (100.4 °F)	Yes
ICD-10 Diagnosis Codes for Infection	O86.0, O86.00, O86.01, O86.02, O86.03, O86.09, O86.12, O86.21, O86.81, O86.89, O41.121, O41.1210, O41.1211, O41.1212, O41.1213, O41.1214, O41.1215, O41.1219, O41.122, O41.1220, O41.1221, O41.1222, O41.1223, O41.1224, O41.1225, O41.1229, O41.123, O41.1230, O41.1231, O41.1232, O41.1233, O41.1234, O41.1235, O41.1239, O41.129, O41.1290, O41.1291, O41.1292, O41.1293, O41.1294, O41.1295, O41.1299 - AND – Present on Admission marked No

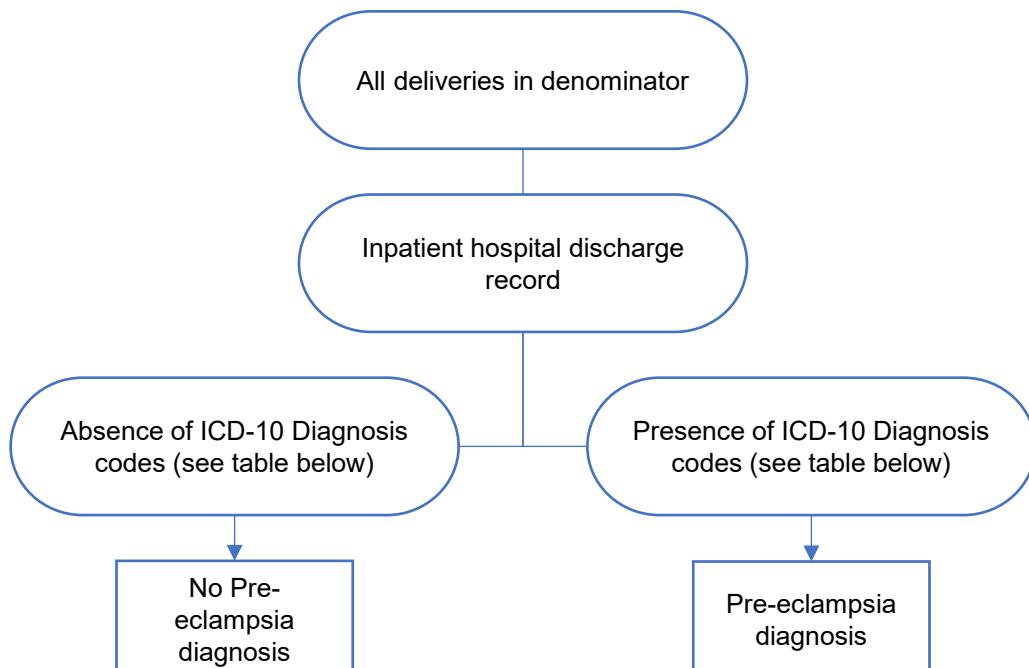
Pre-eclampsia

Description: When a birthing person who previously had normal blood pressure suddenly develops high blood pressure and protein in the urine or other problems after 20 weeks of pregnancy.

Denominator:



Numerator:

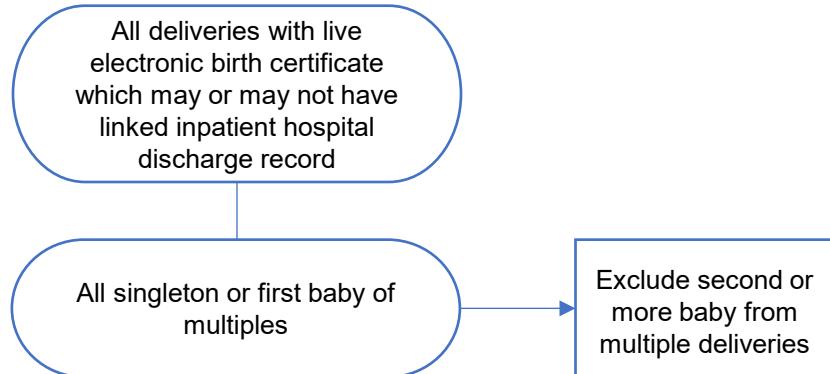


Category	Criteria
ICD-10 Diagnosis codes for Pre-eclampsia based on codes in the California Maternal Quality Care Collaborative (CMQCC) Severe Maternal Morbidity (SMM) Risk Scoring System⁵	O14.1, O14.10, O14.12, O14.13, O14.14, O14.15, O14.2, O14.20, O14.22, O14.23, O14.24, O14.25, O11, O11.1, O11.2, O11.3, O11.4, O11.5, O11.9, O14.0, O14.00, O14.02, O14.03, O14.04, O14.05, O14.9, O14.90, O14.92, O14.93, O14.94, O14.95, O13.1, O13.2, O13.3, O13.4, O13.5, O13.9

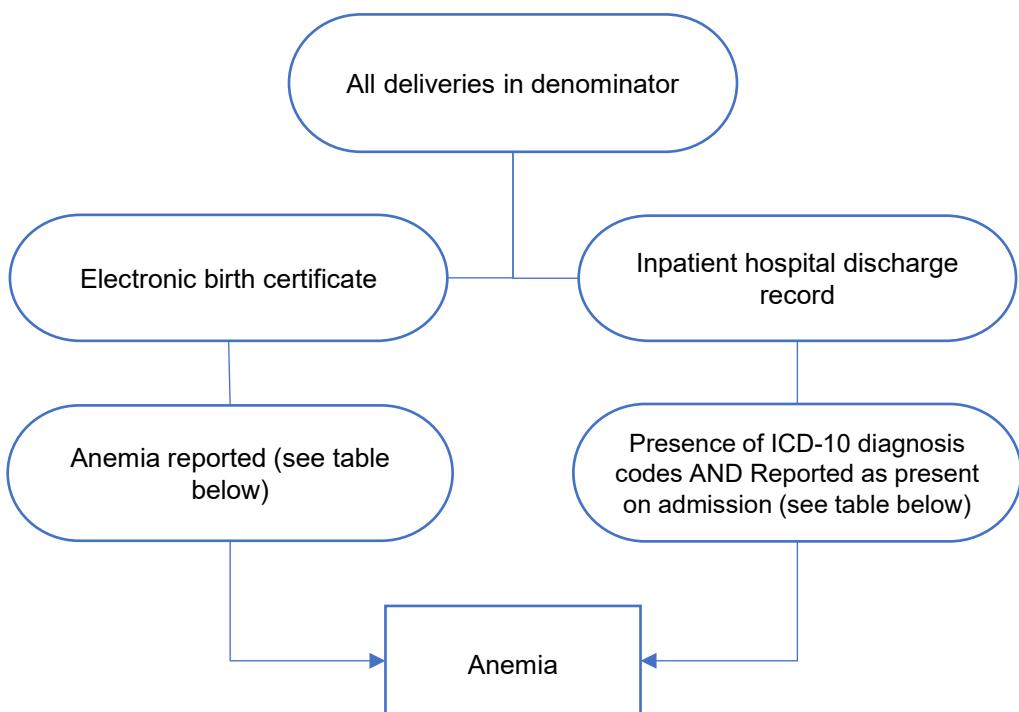
Pre-existing Anemia

Description: Having lower than the normal number of healthy red blood cells prior to delivery.

Denominator:



Numerator:

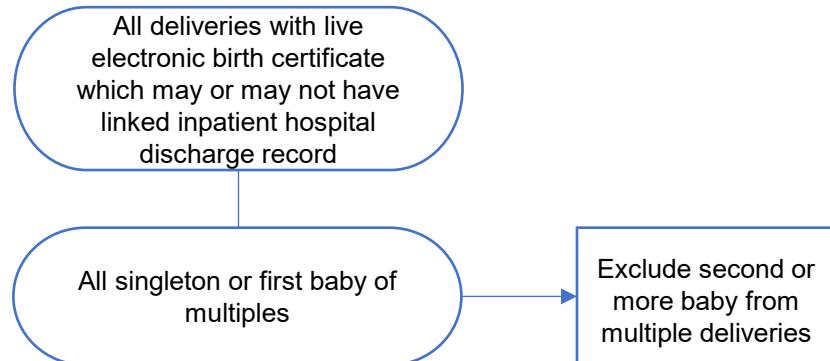


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Prenatal Care Subsection: Maternal Risk Factors During Pregnancy Field: Select medical risk factors of mother during this pregnancy	Anemia
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Prenatal II Subsection: Maternal Risk Factor Other Field: Check all that apply	Anemia (Hct <30/ Hgb <10Gm/dl)
ICD-10 Diagnosis codes for Pre-existing Anemia based on codes in the California Maternal Quality Care Collaborative (CMQCC) Severe Maternal Morbidity (SMM) Risk Scoring System⁷	O99.01, O99.02, D50, D55, D56, D58, D59, D57.1, D57.20, D57.3, D57.40, D57.80 - AND – Present on Admission marked Yes

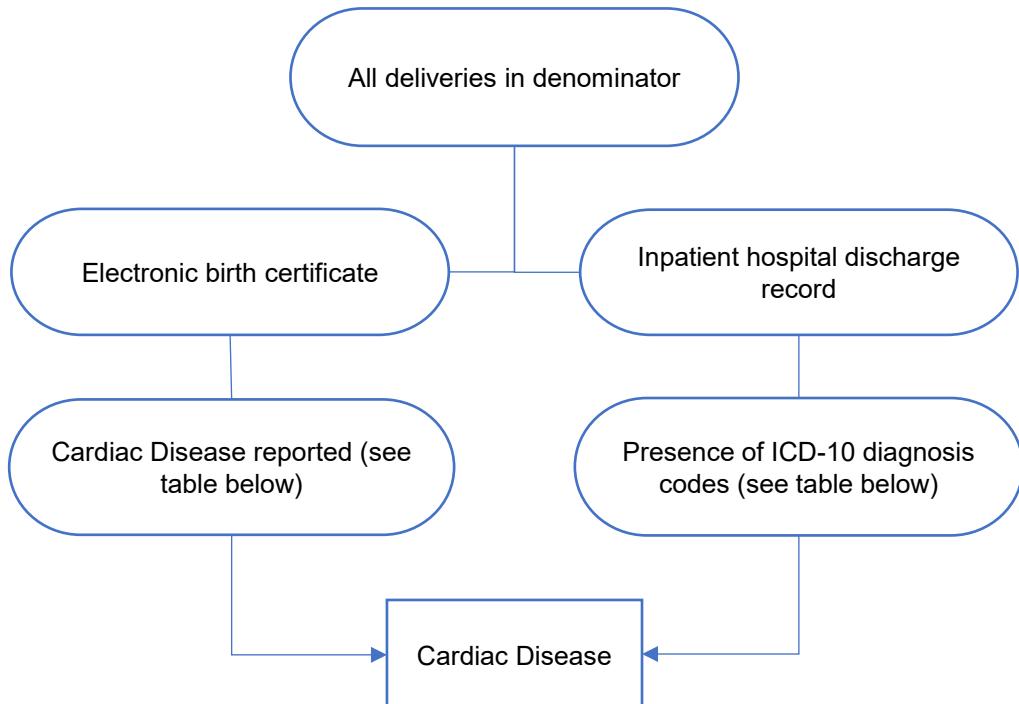
Pre-existing Cardiac Diseases

Description: Heart problems present before pregnancy, such as chronic valvular disease or heart failure.

Denominator:



Numerator:



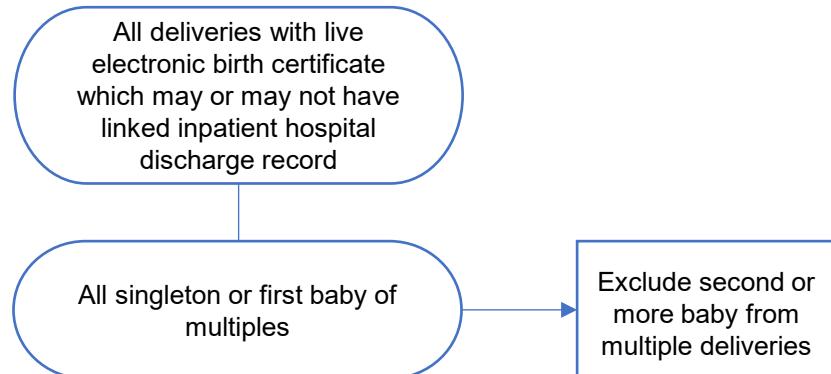
Pre-existing Cardiac Diseases

Category	Criteria
<p>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Prenatal Care Subsection: Maternal Risk Factors During This Pregnancy Field: Select medical risk factors of mother during this pregnancy</p>	Cardiac Disease
<p>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Prenatal II Subsection: Maternal Risk Factor Other Field: Select all that apply</p>	Cardiac Disease ('heart condition')
ICD-10 Diagnosis codes for Cardiac Disease	I25.2, I25.111, I25.118, I25.119, I25.110, I25.10, I25.711, I25.718, I25.719, I25.710, I25.731, I25.738, I25.739, I25.730, I25.721, I25.728, I25.729, I25.720, I25.791, I25.798, I25.799, I25.790, I25.810, I25.701, I25.708, I25.709, I25.700, I25.791, I25.798, I25.799, I25.790, I25.751, I25.758, I25.759, I25.750, I25.811, I25.761, I25.768, I25.769, I25.760, I25.812, I25.82, I25.83, I25.84, I25.42, I25.9, I25.5, I25.89, I25.6, I25.9, I05.0, I05.1, I05.2, I05.8, I06.0, I06.1, I06.2, I06.8, I08.0, I07.8, I07.1, I09.89, I08.3, I08.8, I09.1, I08.2, I08.1, I34.0, I34.1, I34.2, I34.8, I35.1, I35.0, I35.2, I35.8, I36.1, I36.0, I36.2, I36.8, I37.1, I37.0, I37.2, I37.8, M32.11, A18.84, I50.22, I50.23, I50.32, I50.33, I50.42, I50.43, I50.812, I50.1, I13.2, I21.9, I21.A1, I21.A9, I50.1, I50.20, I50.22, I50.23, I50.30, I50.32, I50.33, I50.40, I50.42, I50.43, I50.810, I50.812, I50.813, I50.814, I50.82, I50.83, I50.84, I50.89, I50.9, I27.9, I11.0, I11.9, O10.111, O10.112, O10.113, O10.119, O10.311, O10.312, O10.313, O10.319, O10.32, O10.33 AND – Present on Admission marked 'Yes'

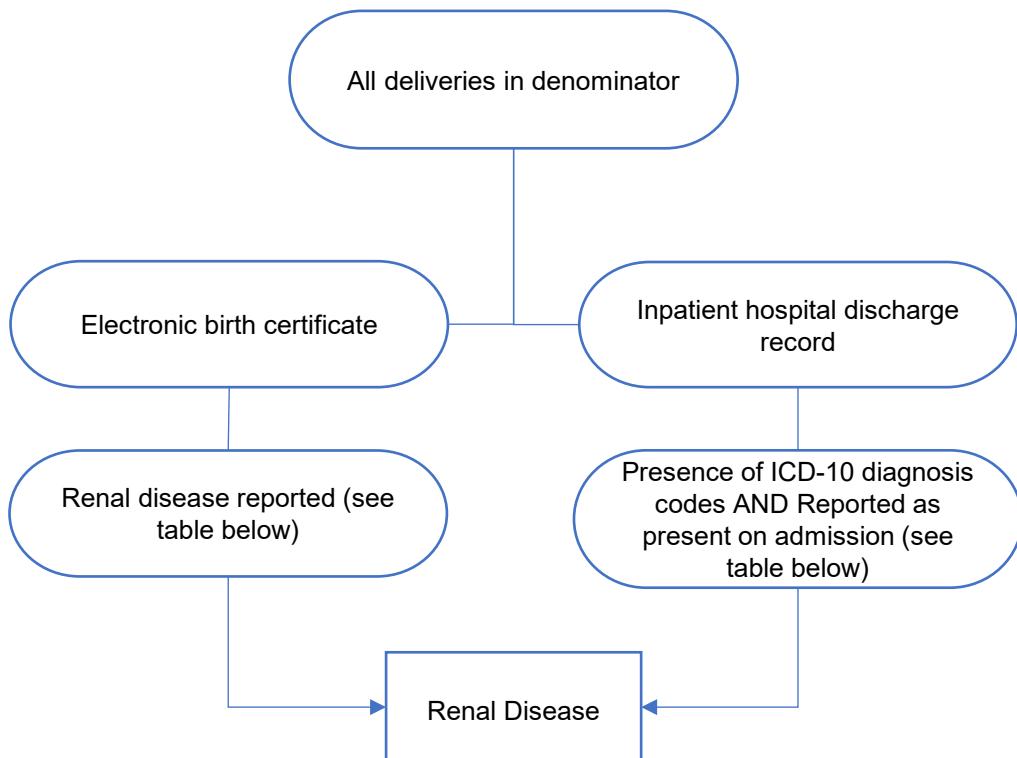
Pre-existing Renal Disease

Description: Disease of the kidneys.

Denominator:



Numerator:



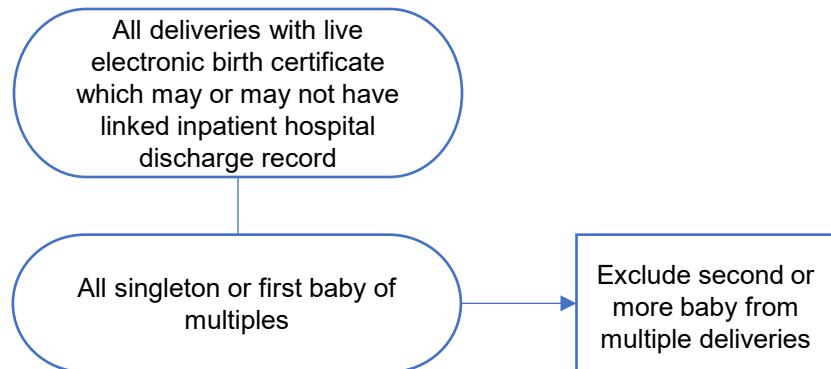
Pre-existing Renal Disease

Category	Criteria
<p>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</p> <p>Primary Section: Prenatal Care</p> <p>Subsection: Maternal Risk Factors During This Pregnancy</p> <p>Field: Select medical risk factors of mother during this pregnancy:</p>	Renal Disease
<p>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</p> <p>Primary Section: Prenatal II</p> <p>Subsection: Maternal Risk Factors Other</p> <p>Field: Select all that apply:</p>	Renal Disease
<p>ICD-10 Diagnosis Codes for Renal Disease— Pre-existing</p>	<p>N18.1, N18.2, N18.3, N18.4, N18.5, N18.6, N18.9, M32.14, 120, I12.0, I12.9, I13, I13.0, I13.1, I13.2, N03, N03.0, N03.1, N03.2, N03.3, N03.4, N03.5, N03.6, N03.7, N03.8, N04, N04.0, N04.1, N04.2, N04.3, N04.4, N04.6, N04.7, N04.8, N04.9, N05, N05.0, N05.1, N05.2, N05.3, N05.4, N05.5, N05.6, N05.7, N05.8, N05.9, N07.0, N07.1, N07.2, N07.3, N07.4, N07.5, N07.6, N07.7, N07.8, N07.9, N08, N11.1, N11.9, N11, N11.8, N11.0, N25.0, N25.81, N25.1, N25.89, N25, N25.9, N26.9, N26.1, N26.2 - AND – Present on Admission marked Yes</p>

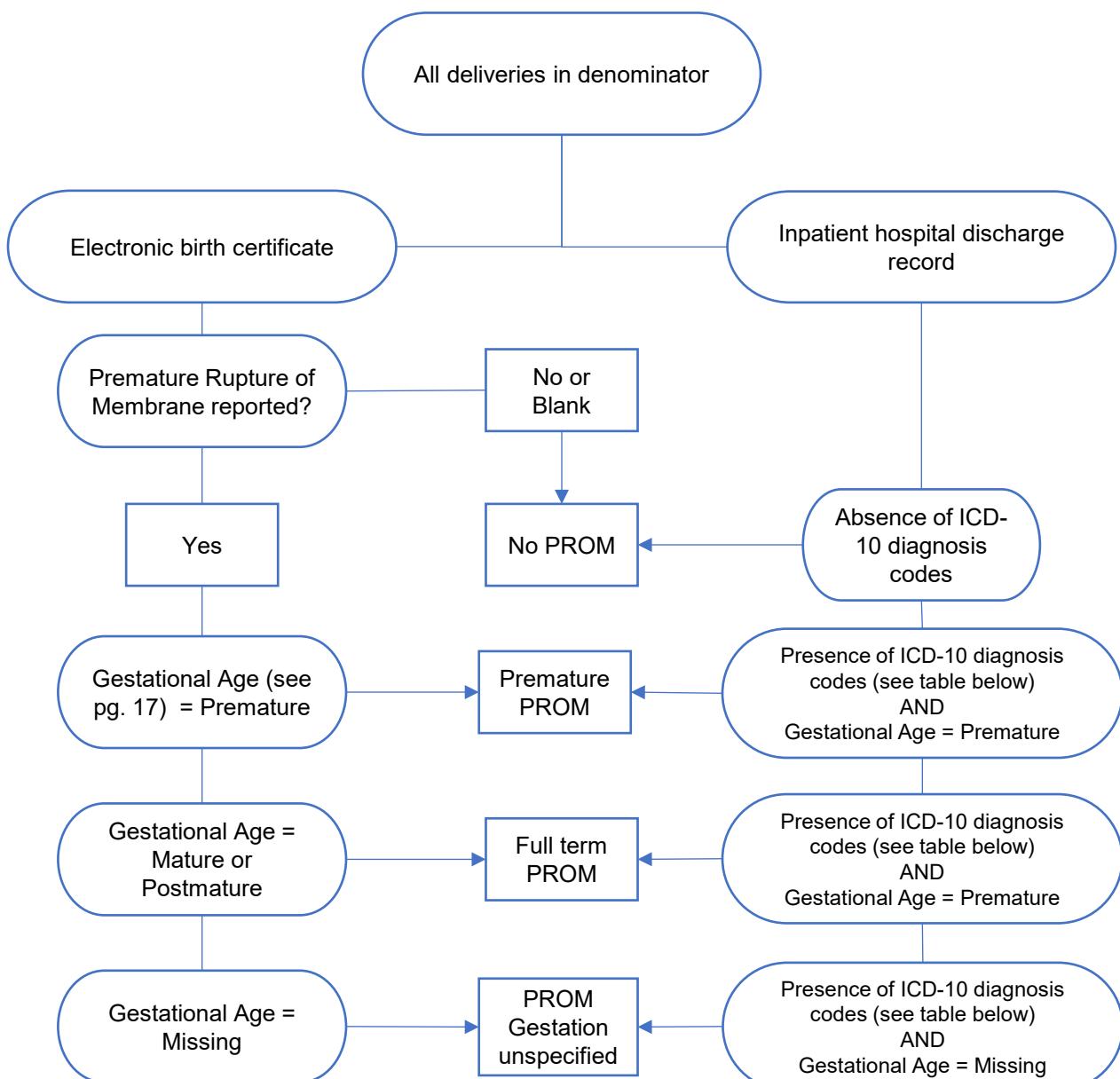
Premature Rupture of Membranes (PROM)

Description: Spontaneous rupture of membranes that occurs before the onset of labor

Denominator:



Numerator:



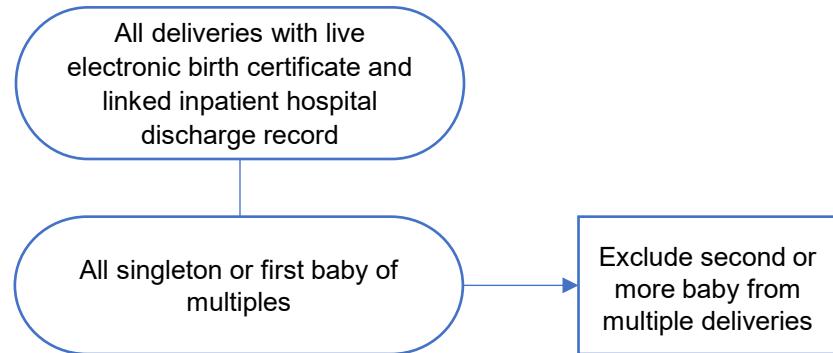
Premature Rupture of Membranes (PROM)

Category	Criteria
<p>Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward</p> <p>Primary Section: Labor and Delivery</p> <p>Subsection: Labor</p> <p>Field: Characteristics of Labor and Delivery: (select all that apply)</p>	Premature Rupture of Membranes (greater than or equal to 12 hours before labor begins)
<p>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</p> <p>Primary Section: Labor & Delivery I</p> <p>Subsection:</p> <p>Field: Onset of Labor (check all that apply)</p>	Premature rupture of membranes (>=12 hours before labor begins)
ICD-10 Diagnosis Codes for Premature Rupture of Membranes, Preterm Gestation	O42.01, O42.011, O42.012, O42.013, O42.019, O42.11, O42.111, O42.112, O42.113, O42.119, O42.91, O42.911, O42.912, O42.913, O42.919
ICD-10 Diagnosis Codes for Premature Rupture of Membranes, Term Gestation	O42, O42.0, O42.02, O42.1, O42.12, O42.92, O42.9
ICD-10 Diagnosis Codes for Premature Rupture of Membranes, Gestation Length Unspecified	O42.00, O42.10, O42.90

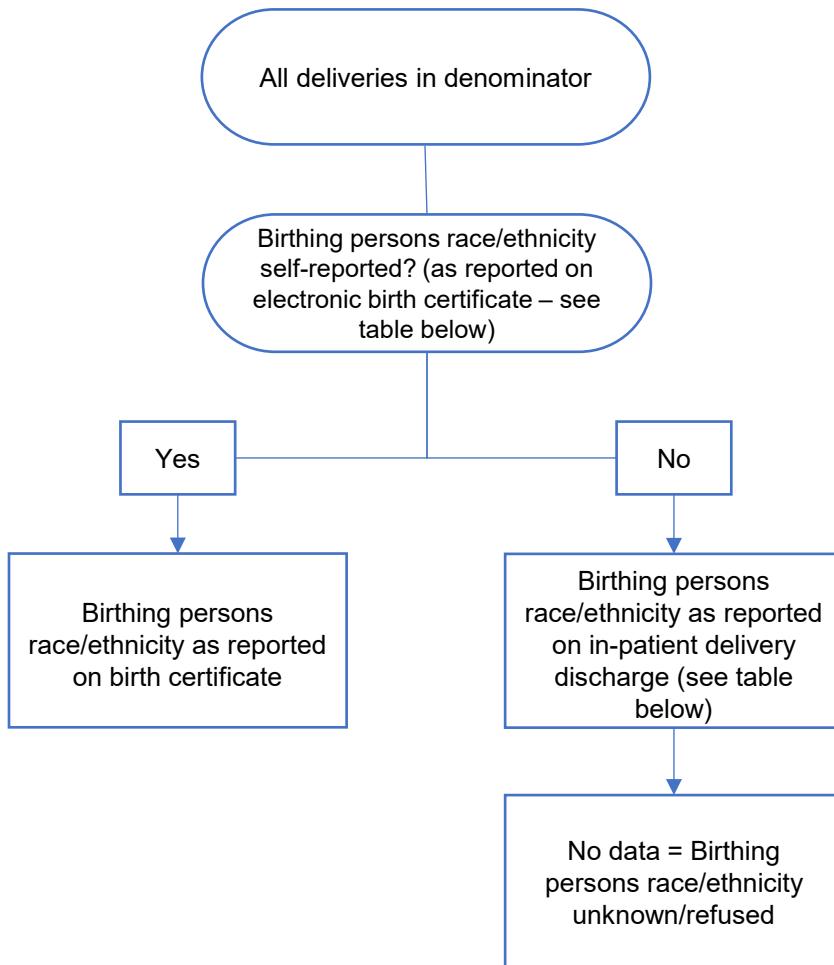
Race and Ethnicity

Description: Birthing persons race and ethnicity.

Denominator:



Numerator:



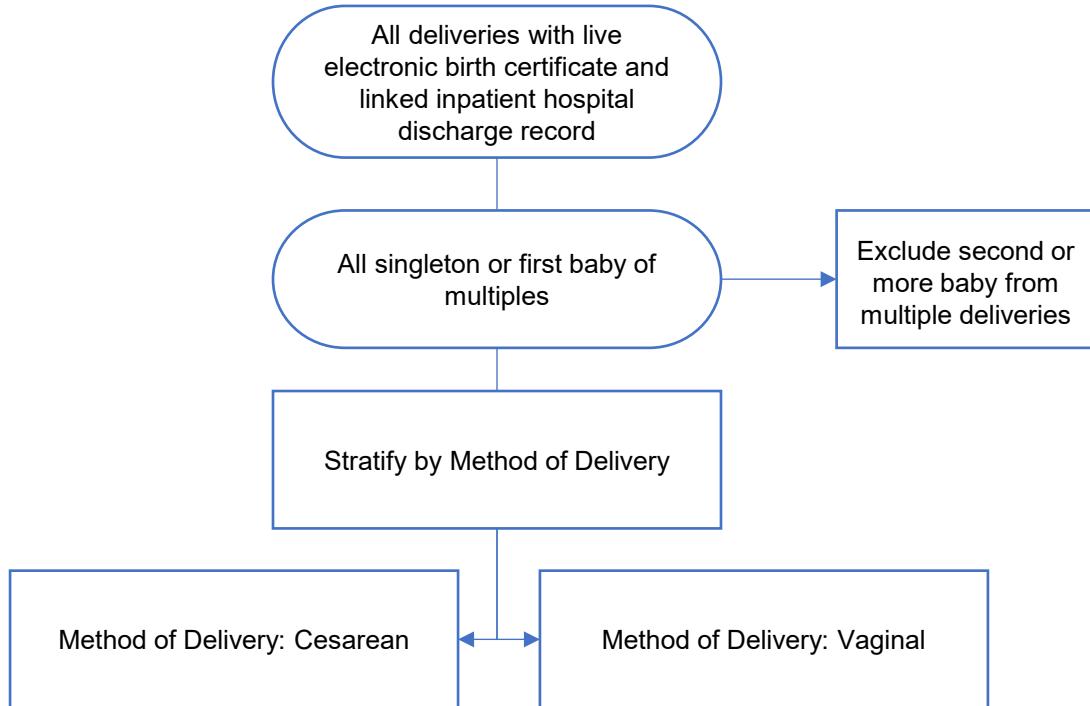
Race and Ethnicity

Category	Criteria
Office of Management and Budget (OMB) Race code for Non-Hispanic White²	White
OMB Race code for Non-Hispanic Black²	Black or African American
OMB Ethnicity code for Hispanic²	Mexican, Mexican American, Chicano, Puerto Rican, Cuban, Central or South American, Other Spanish/Hispanic/Latino
OMB Race codes for Asian²	Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian
OMB Race codes for Other/Multi-race (including NA/API)²	Native Hawaiian, Guamanian or Chamorro, Samoan, Other Pacific Islander, American Indian or Alaskan Native, Other Race, Multiracial: White and Black or African American, Multiracial: White and American Indian or Alaskan Native, Multiracial: White and Asian, Multiracial: Black or African American and American Indian or Alaskan Native
OMB Ethnicity codes for Unknown/Refused²	Declined to Answer, Unknown/Unavailable
OMB Race codes for Unknown/Refused²	Declined to Answer, Unknown/Unavailable
Electronic birth certificate reported race/ethnicity: Non-Hispanic White	White (no other races indicated)
Electronic birth certificate reported race/ethnicity: Non-Hispanic Black	Black or African American (no other races indicated)
Electronic birth certificate reported race/ethnicity: Hispanic	Mexican/Mexican American/Chicana, Puerto Rican, Cuban (regardless of reported race)
Electronic birth certificate reported race/ethnicity: Asian	Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian (no other races indicated)
Electronic birth certificate reported race/ethnicity: Other/Multi-race (including NA/API)	Other Pacific Islander, American Indian or Alaskan Native, Native Hawaiian, Guamanian or Chamorro, Samoan, Other; -or- any combination of race category
Electronic birth certificate reported race/ethnicity: Unk/refused	Hispanic Origin Unknown, Race Unknown

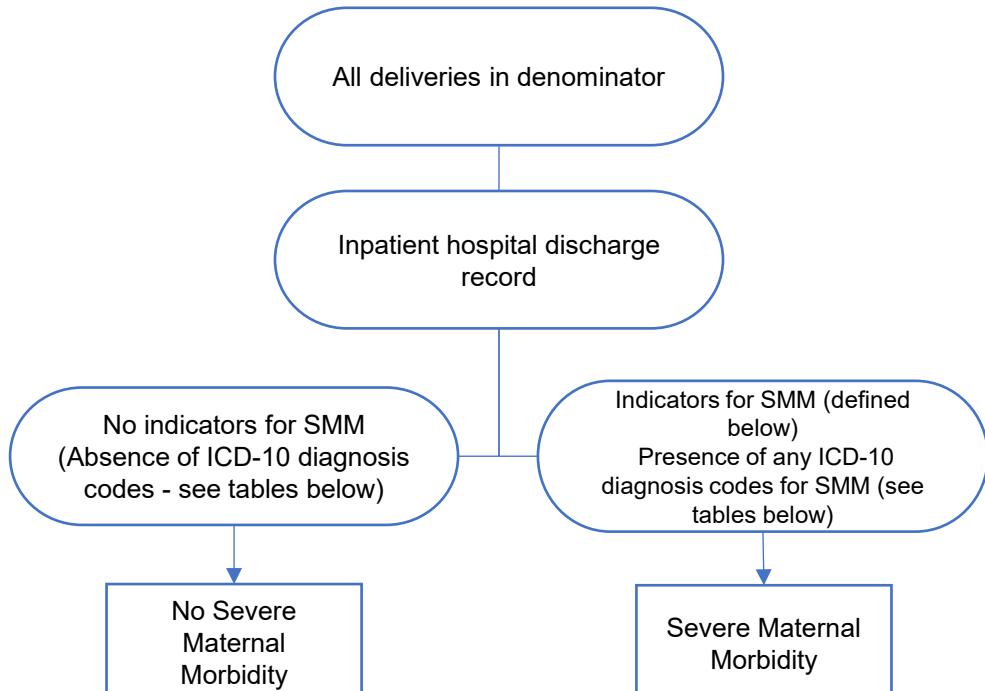
Severe Maternal Morbidity (SMM)

Description: Includes unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a birthing persons health.

Denominator:



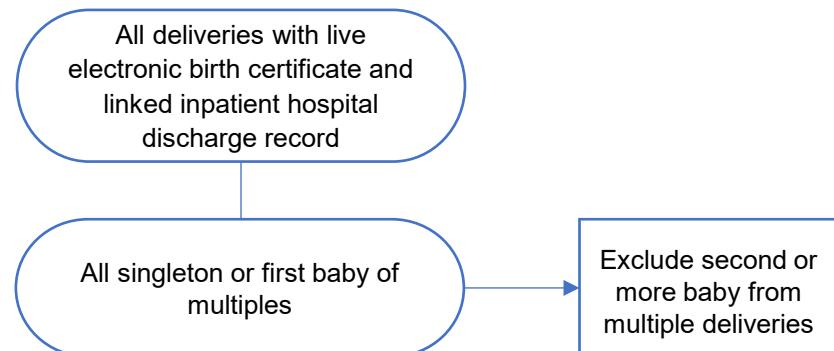
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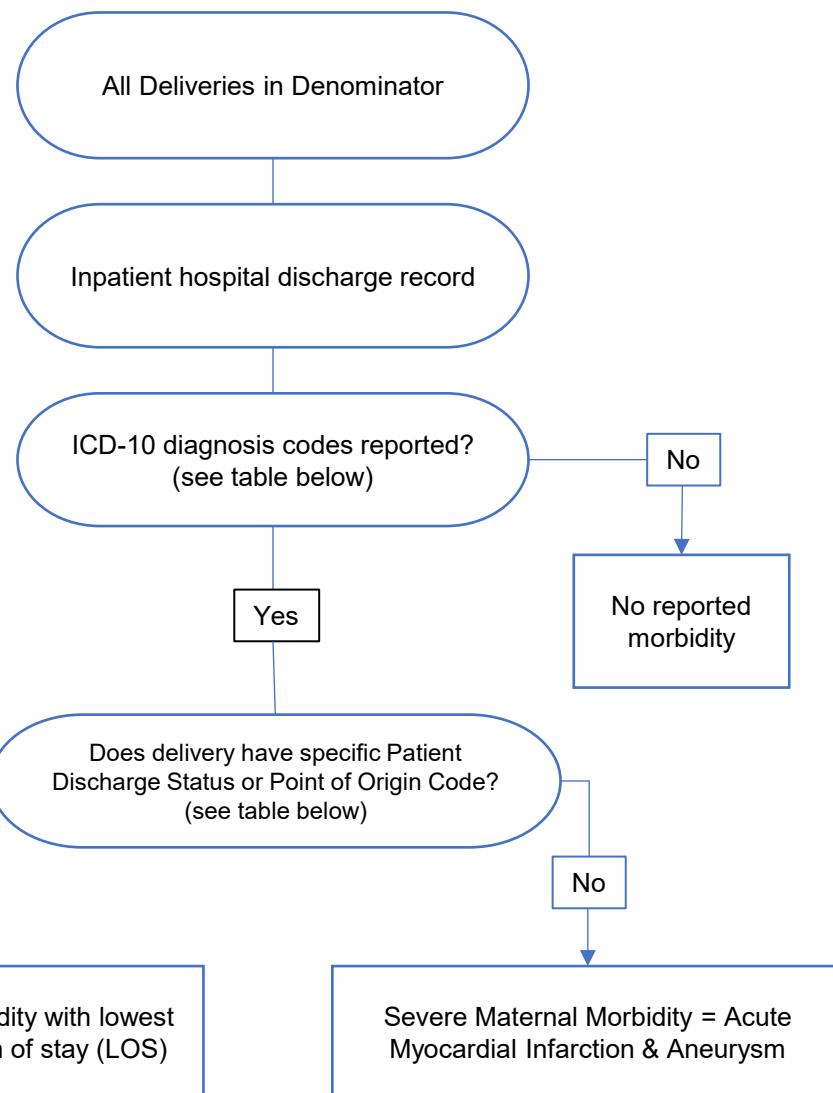
*The referenced coding schema for all ICD codes listed in Criteria categories for SMM was updated by the CDC in May of 2024 and was applied to the full year of 2024 (1/2024-12/2024) data for the purpose of this analysis. See the Methodology for more information.

Severe Maternal Morbidity (SMM): Acute Myocardial Infarction and Aneurysm

Denominator:



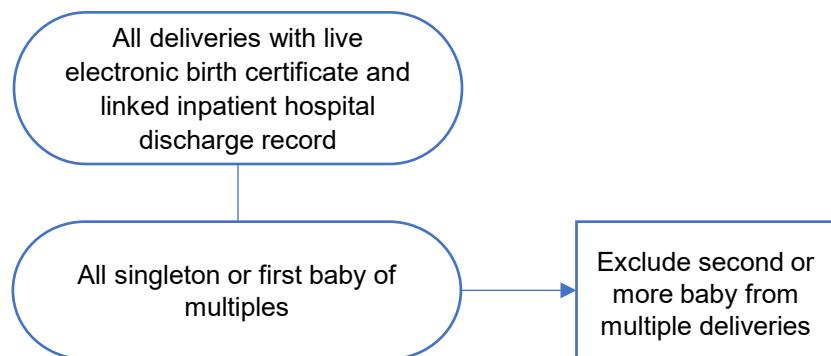
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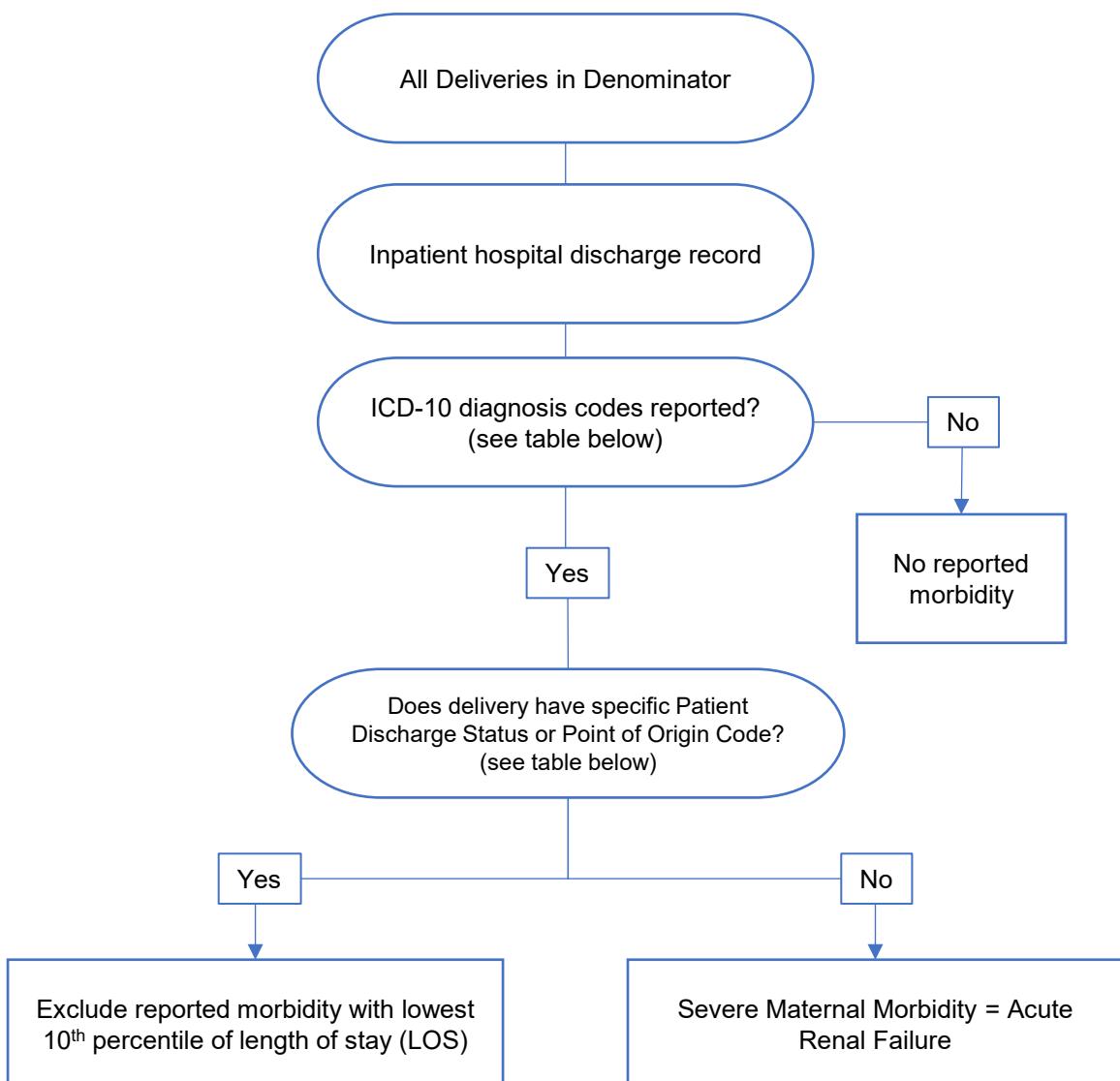
Category	Criteria
<u>Patient Discharge Status (Discharge [Patient] Status Code)¹</u>	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
<u>Point of Origin Code (Admission Source Type)¹</u>	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
<u>ICD-10 Diagnosis codes for Acute Myocardial Infarction & Aneurysm⁶</u>	I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I21.A1, I21.A9, I22.0, I22.1, I22.2, I22.8, I22.9, I71.00, I71.01, I71.02, I71.03, I71.1, I71.10, I71.11, I71.12, I71.13, I71.2, I71.20, I71.21, I71.22, I71.23, I71.3, I71.30, I71.31, I71.32, I71.33, I71.4, I71.40, I71.41, I71.42, I71.43, I71.5, I71.50, I71.51, I71.52, I71.6, I71.60, I71.61, I71.62, I71.8, I71.9, I79.0

Severe Maternal Morbidity (SMM): Acute Renal Failure

Denominator:



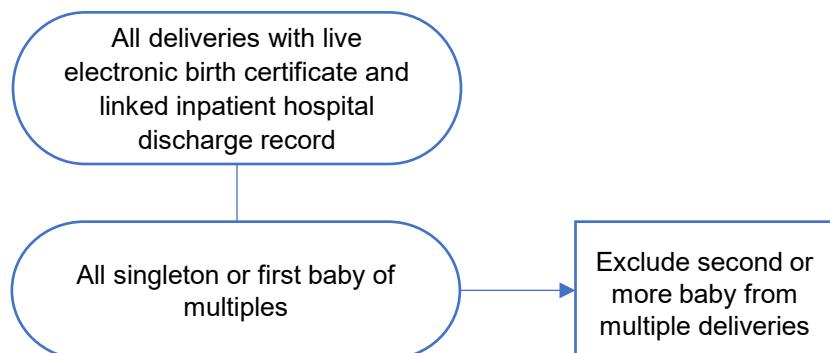
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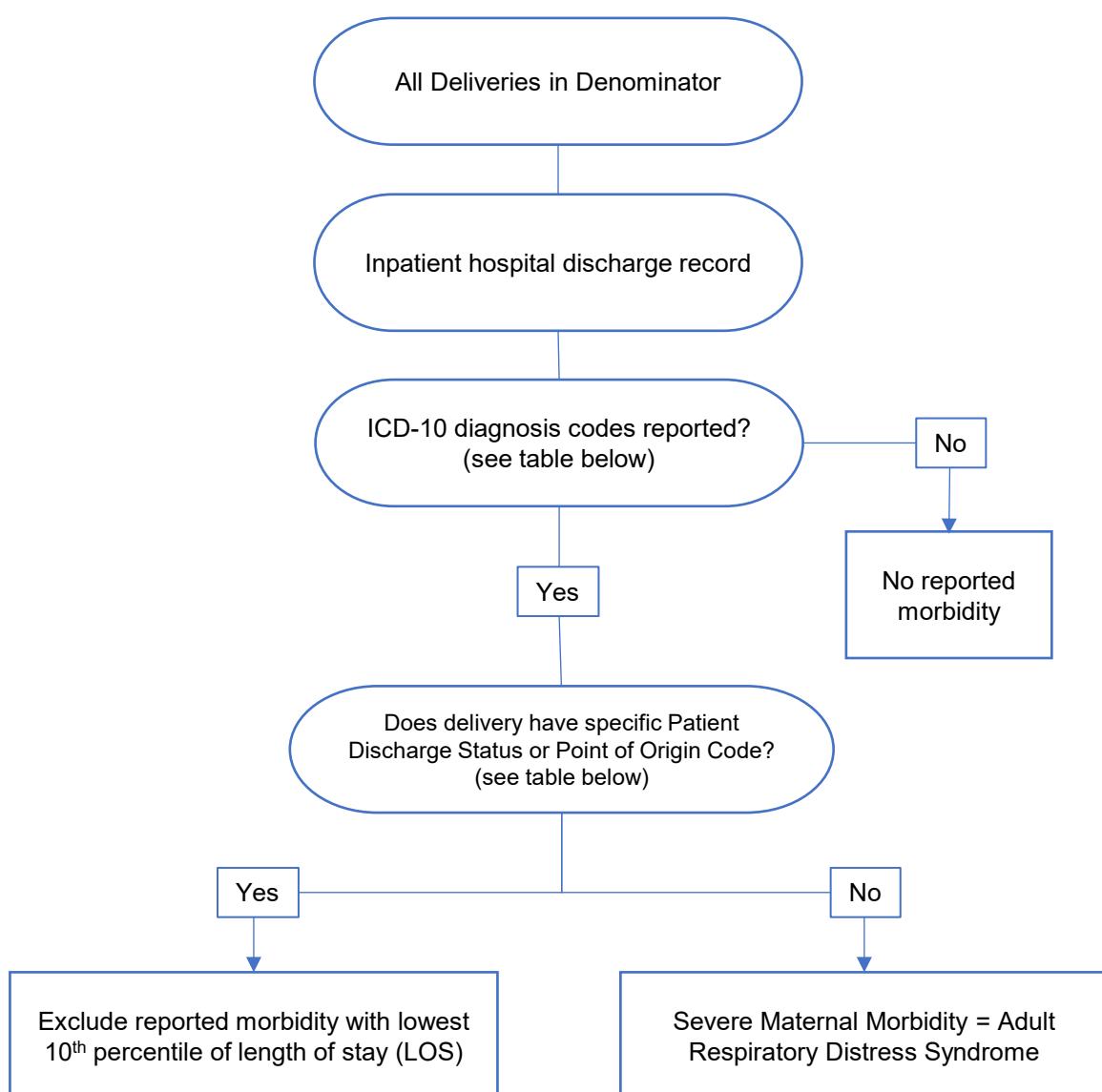
Category	Criteria
<u>Patient Discharge Status (Discharge [Patient] Status Code)¹</u>	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
<u>Point of Origin Code (Admission Source Type)¹</u>	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
<u>ICD-10 Diagnosis codes for Acute Renal Failure⁶</u>	N17.0, N17.1, N17.2, N17.8, N17.9, O90.4

Severe Maternal Morbidity (SMM): Adult Respiratory Distress Syndrome (ARDS)

Denominator:



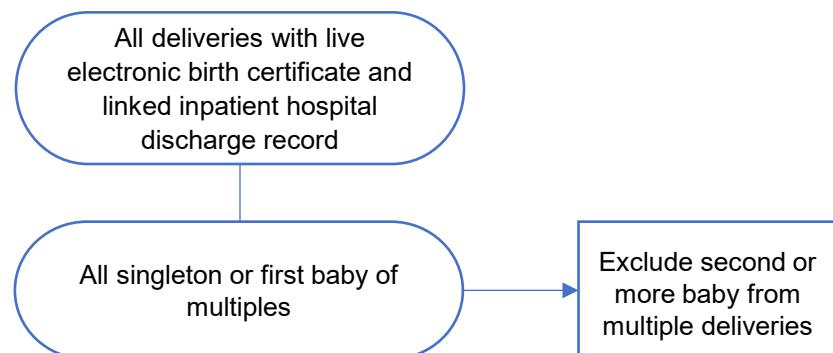
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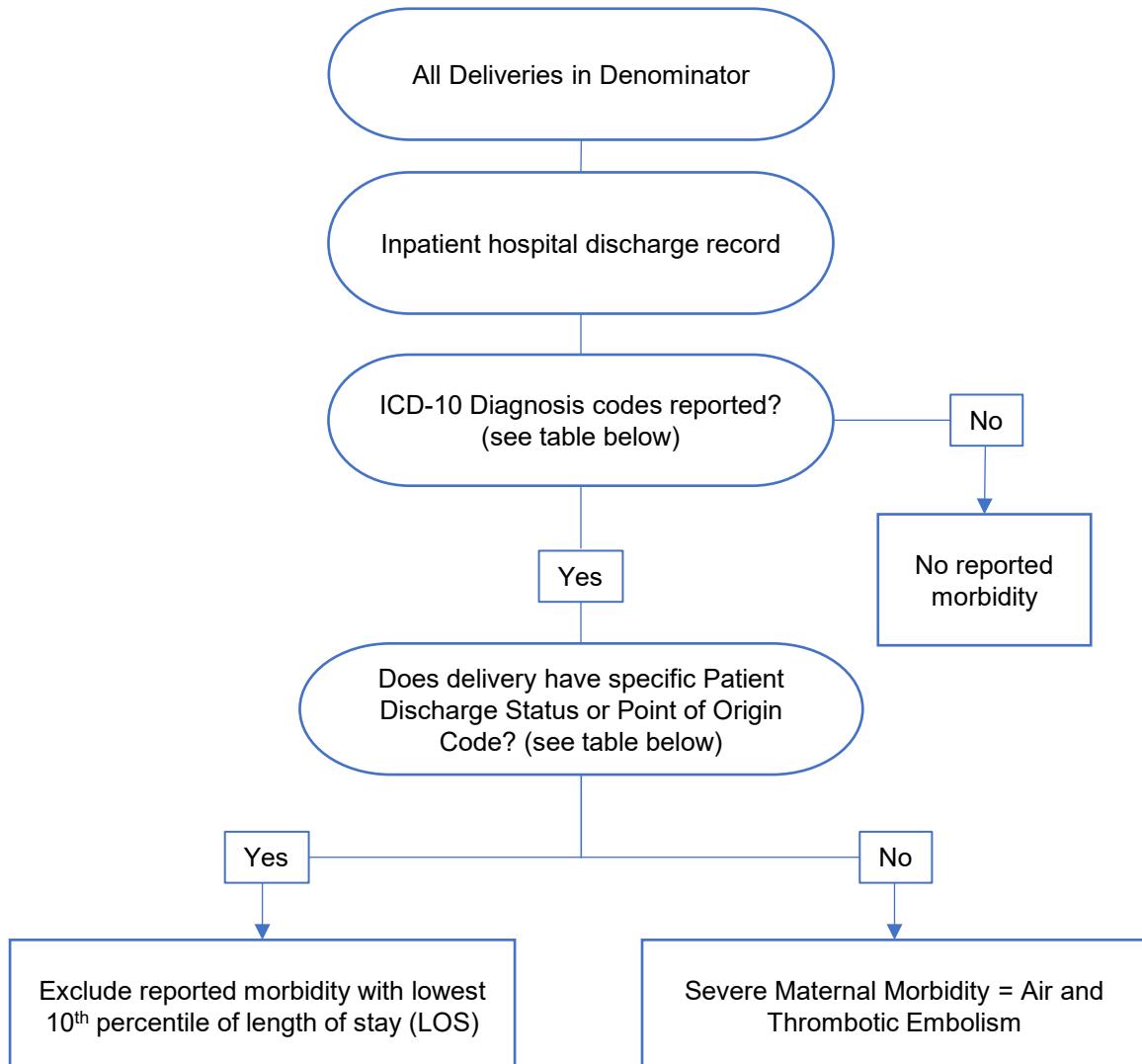
Category	Criteria
Patient Discharge Status (Discharge [Patient] Status Code)¹	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
Point of Origin Code (Admission Source Type)¹	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
ICD-10 Diagnosis codes for Adult Respiratory Distress Syndrome⁶	J80, J95.1, J95.2, J95.3, J95.821, J95.822, J96.00, J96.01, J96.02, J96.20, J96.21, J96.22, J96.9, J96.90, J96.91, J96.92, R06.03, R09.2

Severe Maternal Morbidity (SMM): Air and Thrombotic Embolism

Denominator:



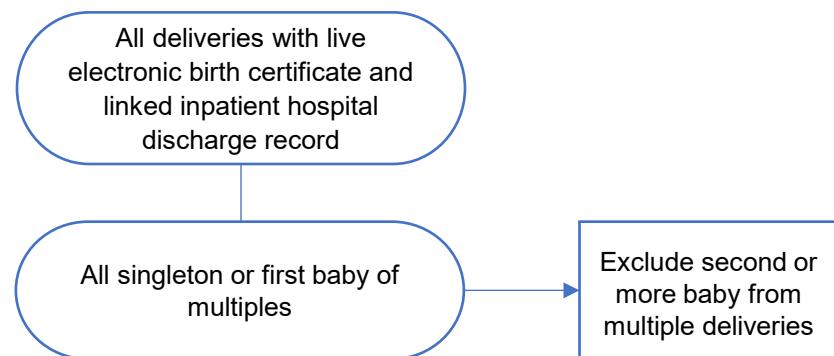
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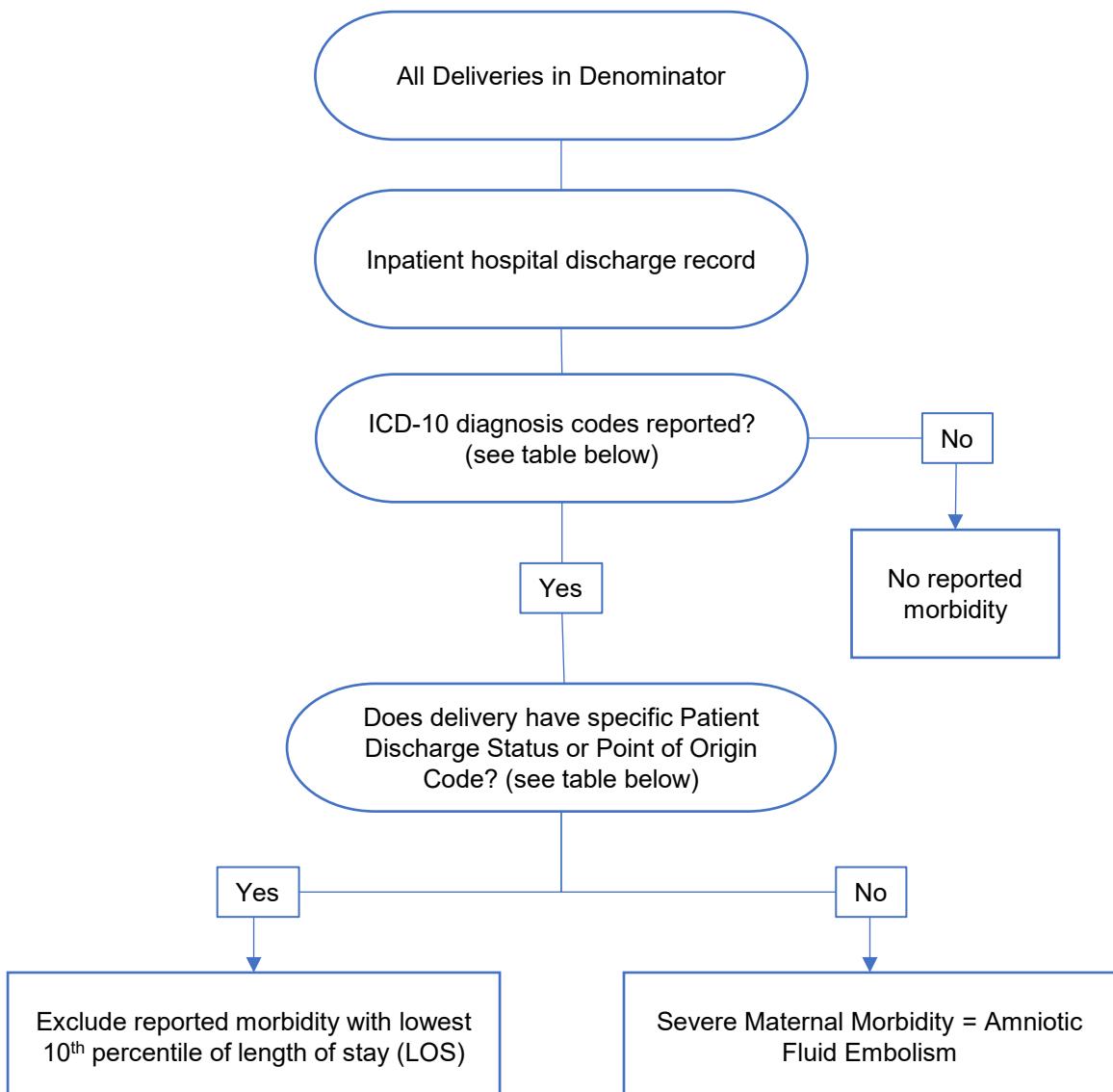
Category	Criteria
Patient Discharge Status (Discharge [Patient] Status Code)¹	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
Point of Origin Code (Admission Source Type)¹	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
ICD-10 Diagnosis codes for Air and Thrombotic Embolism⁶	I26.0, I26.01, I26.02, I26.09, I26.90, I26.92, I26.99, O88.012, O88.013, O88.019, O88.02, O88.03, O88.212, O88.213, O88.219, O88.22, O88.23, O88.312, O88.313, O88.319, O88.32, O88.33, O88.812, O88.813, O88.819, O88.82, O88.83, T80.0XXA

Severe Maternal Morbidity (SMM): Amniotic Fluid Embolism

Denominator:



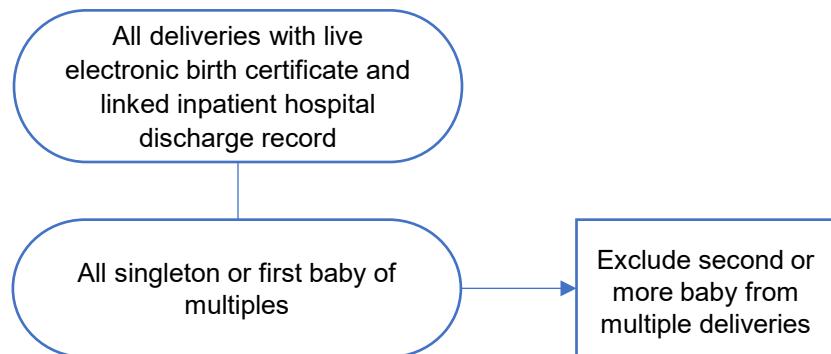
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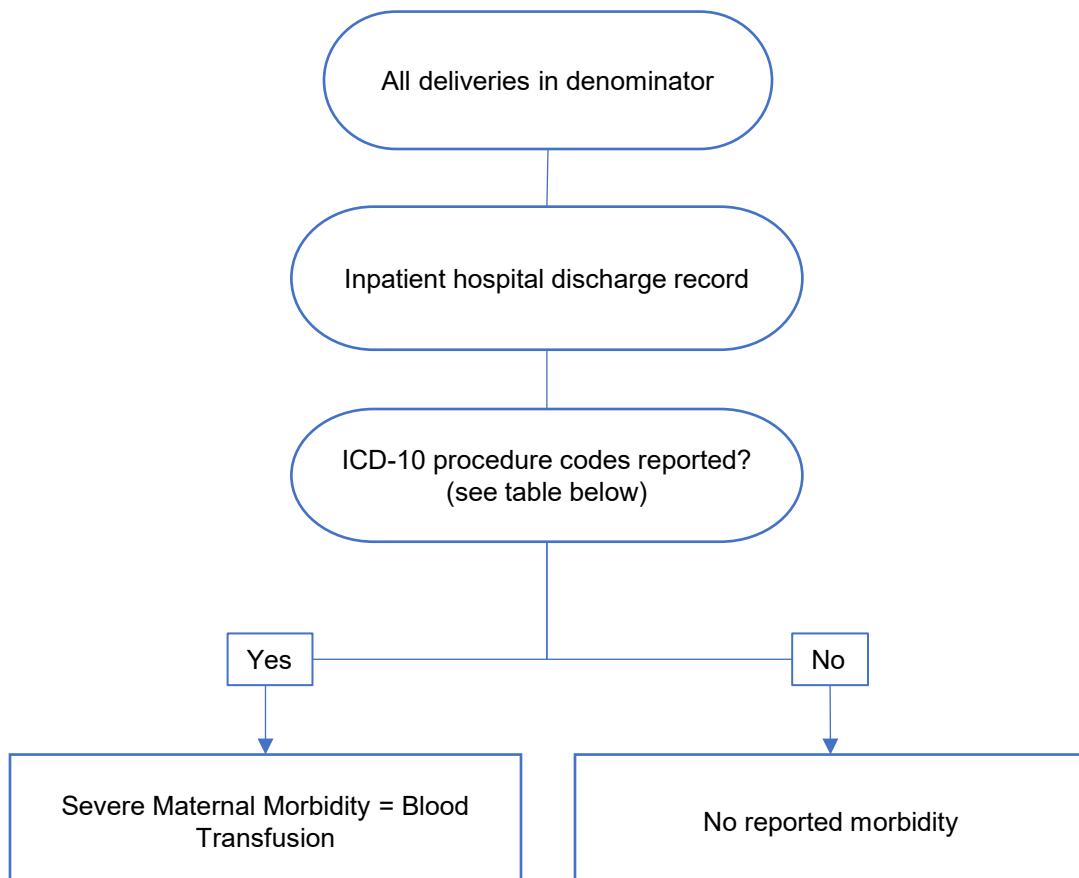
Category	Criteria
<u>Patient Discharge Status (Discharge [Patient] Status Code)¹</u>	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
<u>Point of Origin Code (Admission Source Type)¹</u>	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
<u>ICD-10 Diagnosis codes for Amniotic Fluid Embolism⁶</u>	O88.112, O88.113, O88.119, O88.12, O88.13

Severe Maternal Morbidity (SMM): Blood Transfusion

Denominator:



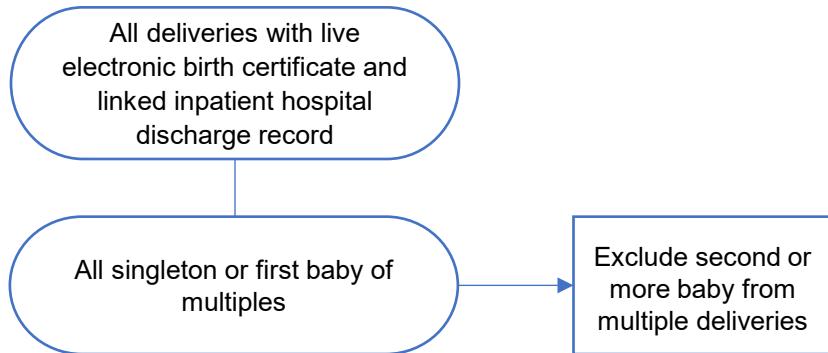
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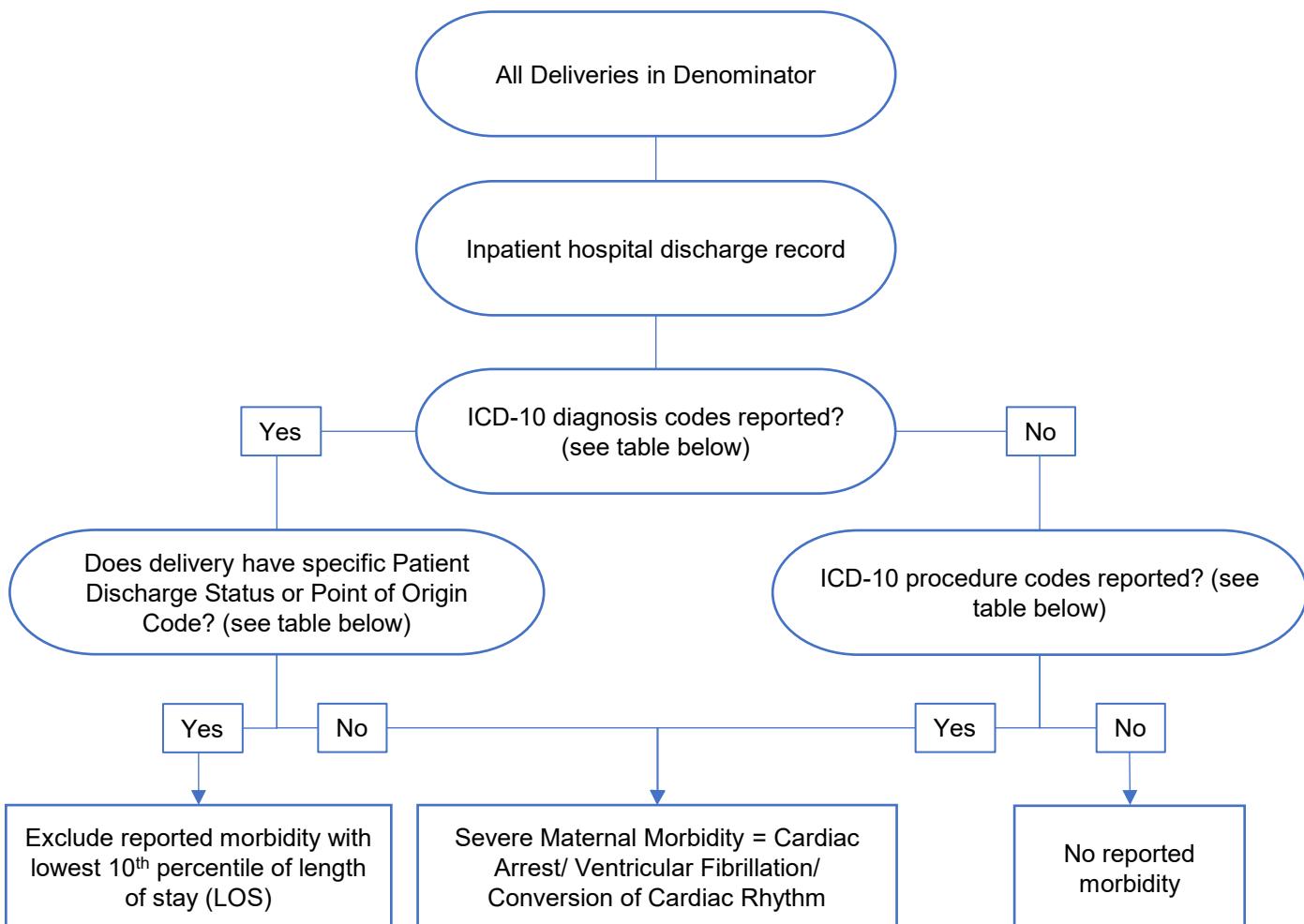
Category	Criteria
ICD-10 Procedure codes for Blood Transfusion⁶	30230H0, 30230K0, 30230L0, 30230M0, 30230N0, 30230P0, 30230R0, 30230T0, 30230H1, 30230K1, 30230L1, 30230M1, 30230N1, 30230P1, 30230R1, 30230T1, 30233H0, 30233K0, 30233L0, 30233M0, 30233N0, 30233P0, 30233R0, 30233T0, 30233H1, 30233K1, 30233L1, 30233M1, 30233N1, 30233P1, 30233R1, 30233T1, 30240H0, 30240K0, 30240L0, 30240M0, 30240N0, 30240P0, 30240R0, 30240T0, 30240H1, 30240K1, 30240L1, 30240M1, 30240N1, 30240P1, 30240R1, 30240T1, 30243H0, 30243K0, 30243L0, 30243M0, 30243N0, 30243P0, 30243R0, 30243T0, 30243H1, 30243K1, 30243L1, 30243M1, 30243N1, 30243P1, 30243R1, 30243T1

Severe Maternal Morbidity (SMM): Cardiac Arrest/Ventricular Fibrillation/Conversion of Cardiac Rhythm

Denominator:



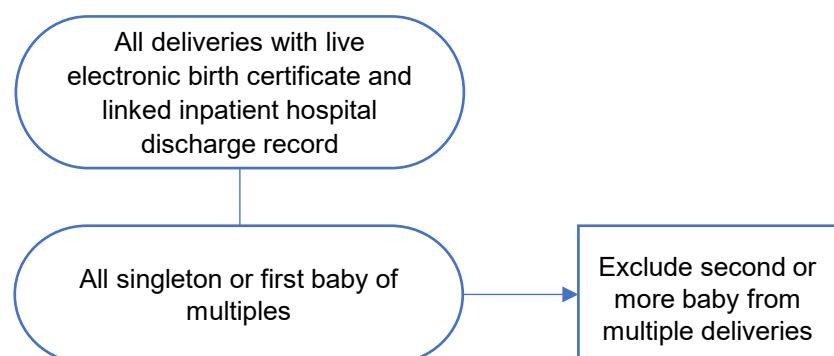
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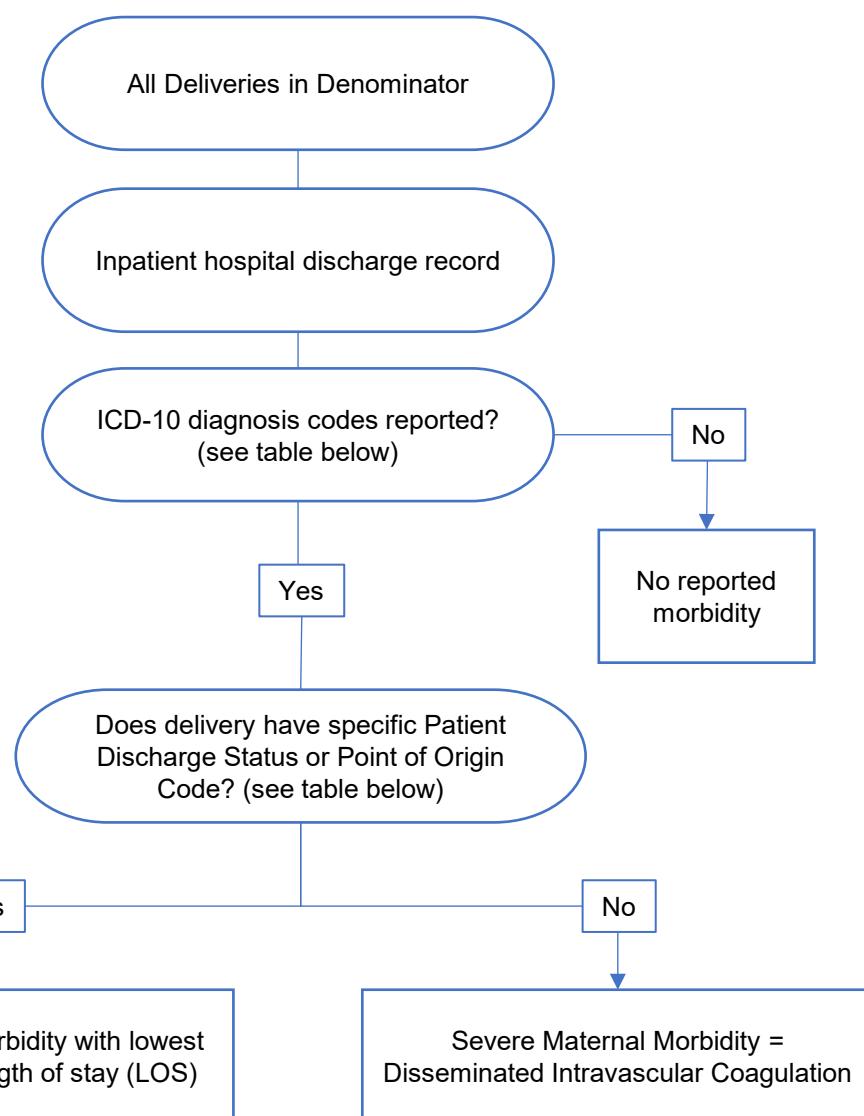
Category	Criteria
<u>Patient Discharge Status (Discharge [Patient] Status Code)¹</u>	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
<u>Point of Origin Code (Admission Source Type)¹</u>	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
<u>ICD-10 Diagnosis codes for Cardiac Arrest/ Ventricular Fibrillation⁶</u>	I46.2, I46.8, I46.9, I49.01, I49.02
<u>ICD-10 Procedure codes for Conversion of Cardiac Rhythm⁶</u>	5A2204Z, 5A12012

Severe Maternal Morbidity (SMM): Disseminated Intravascular Coagulation (DIC)

Denominator:



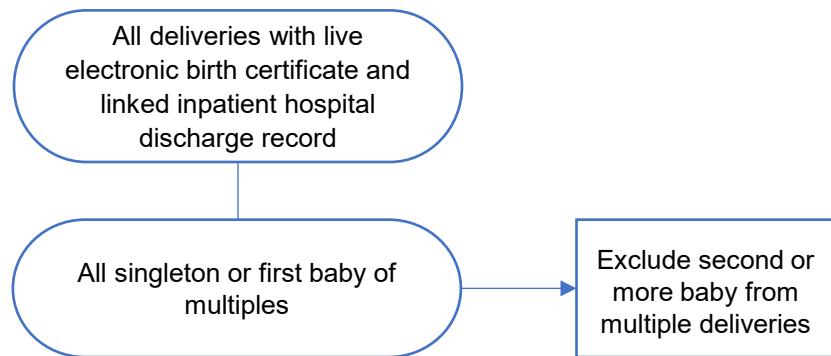
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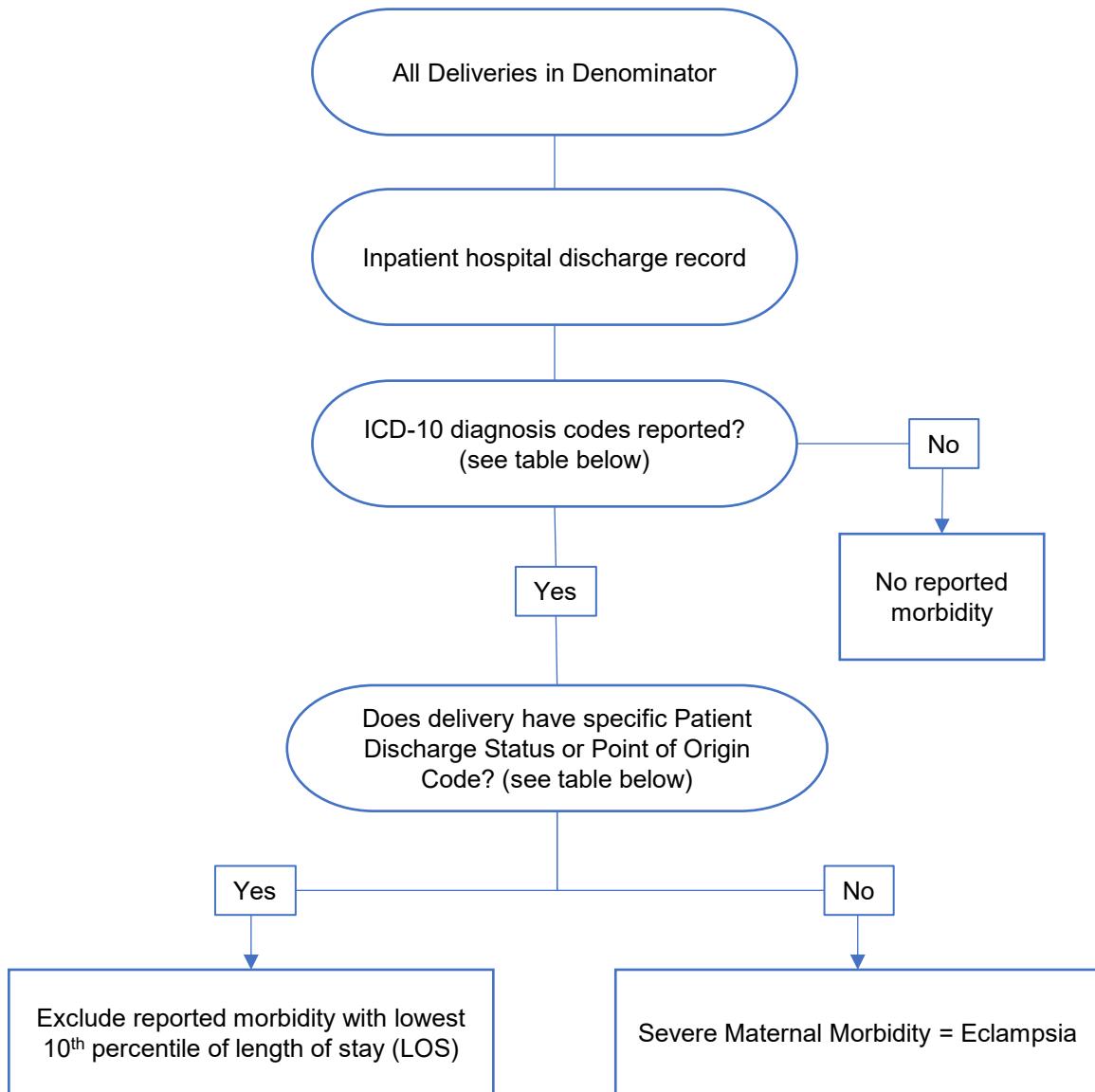
Category	Criteria
Patient Discharge Status (Discharge [Patient] Status Code)¹	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
Point of Origin Code (Admission Source Type)¹	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
ICD-10 Diagnosis codes for Disseminated Intravascular Coagulation⁶	D65, D68.8, D68.9, O45.002, O45.003, O45.009, O45.012, O45.013, O45.019, O45.022, O45.023, O45.029, O45.092, O45.093, O45.099, O46.002, O46.003, O46.009, O46.012, O46.013, O46.019, O46.022, O46.023, O46.029, O46.092, O46.093, O46.099, O67.0, O72.3

Severe Maternal Morbidity (SMM): Eclampsia

Denominator:



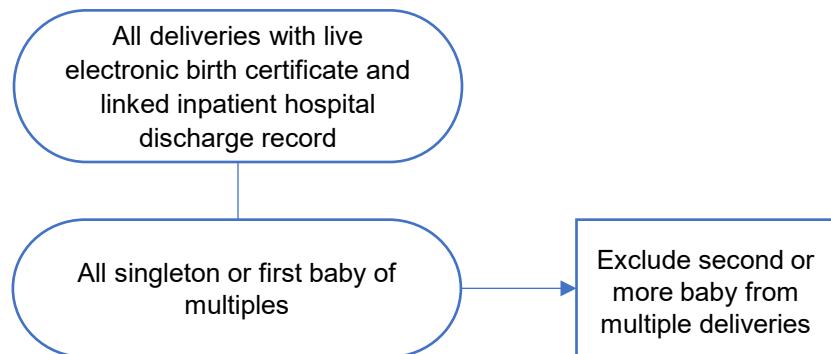
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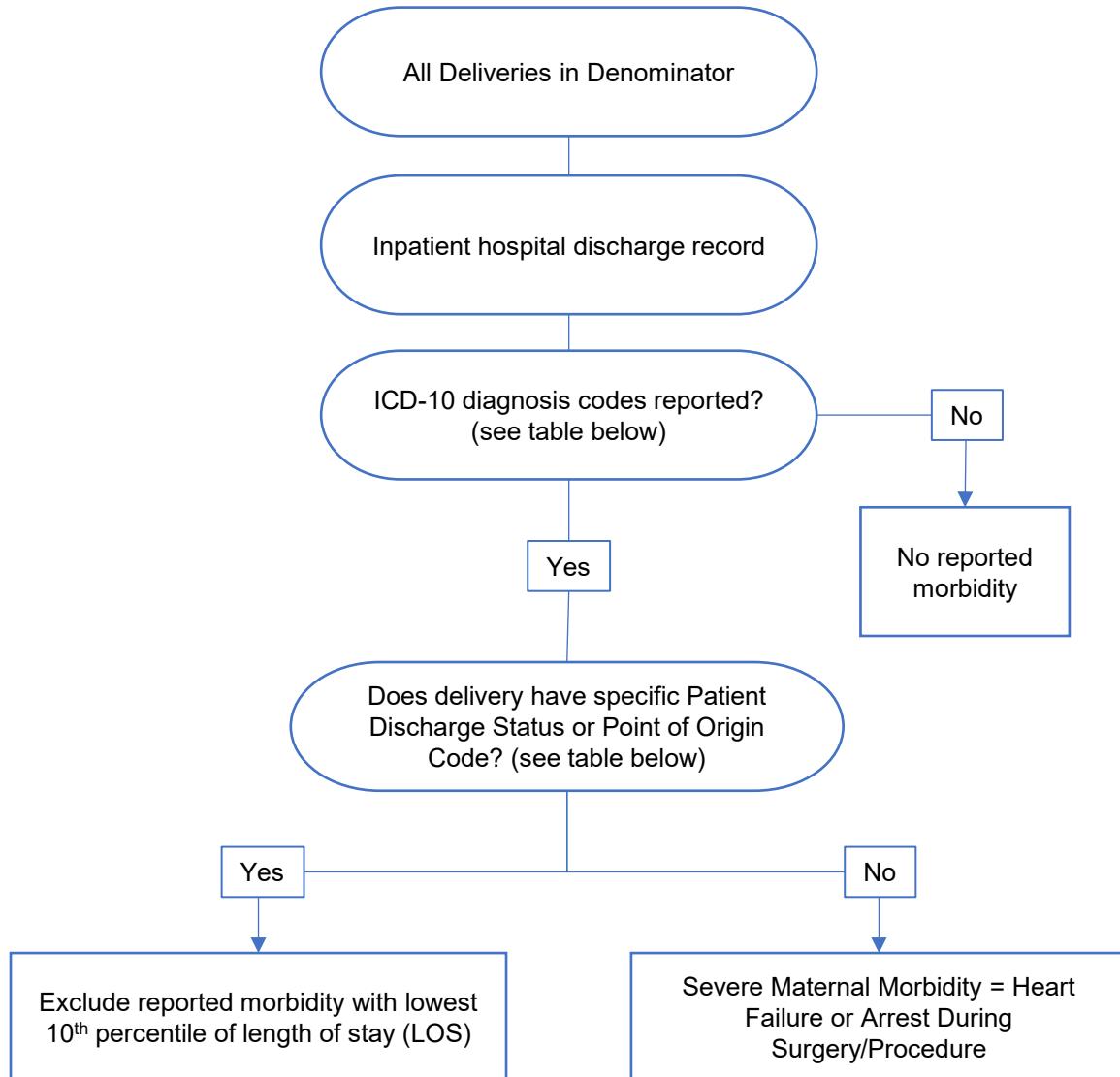
Category	Criteria
Patient Discharge Status (Discharge [Patient] Status Code)¹	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
Point of Origin Code (Admission Source Type)¹	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
ICD-10 Diagnosis codes for Eclampsia⁶	O15.00, O15.02, O15.03, O15.1, O15.2, O15.9

Severe Maternal Morbidity (SMM): Heart Failure or Arrest During Surgery/Procedure

Denominator:



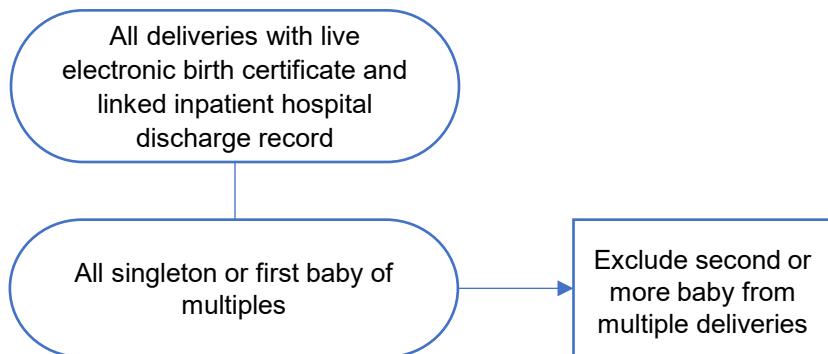
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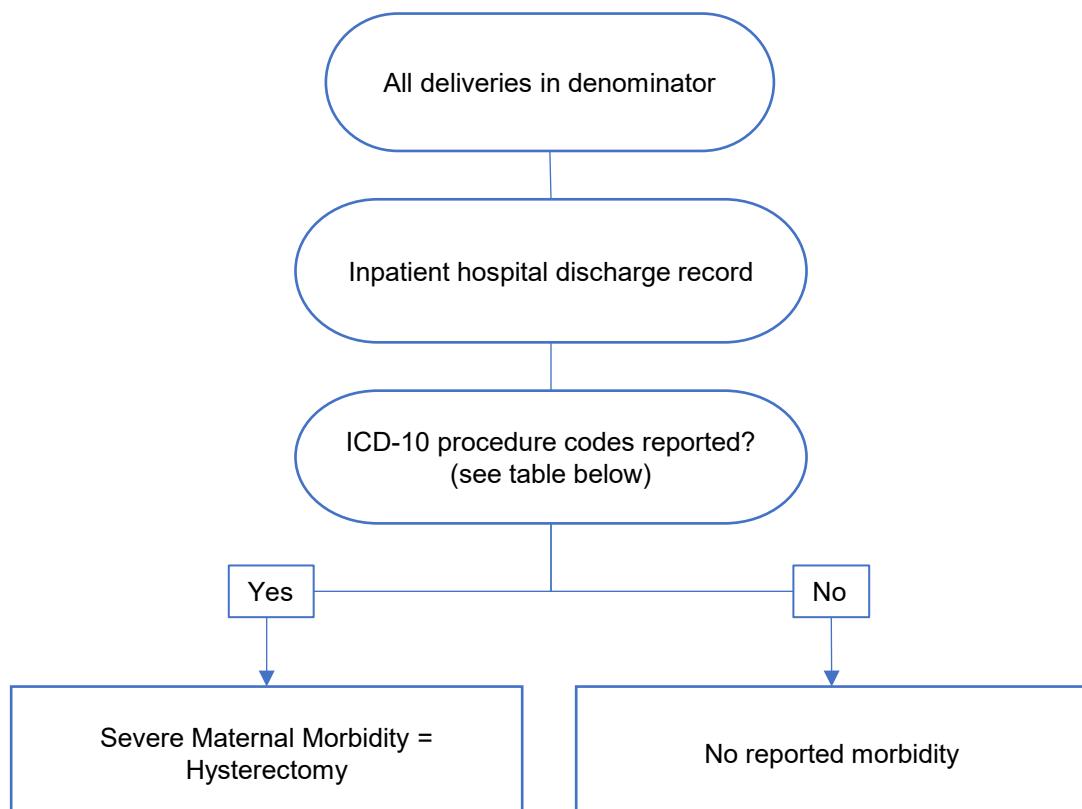
Category	Criteria
<u>Patient Discharge Status (Discharge [Patient] Status Code)¹</u>	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
<u>Point of Origin Code (Admission Source Type)¹</u>	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
<u>ICD-10 Diagnosis codes for Heart Failure or Arrest During Surgery/Procedure⁶</u>	I97.120, I97.121, I97.130, I97.131, I97.710, I97.711

Severe Maternal Morbidity (SMM): Hysterectomy

Denominator:



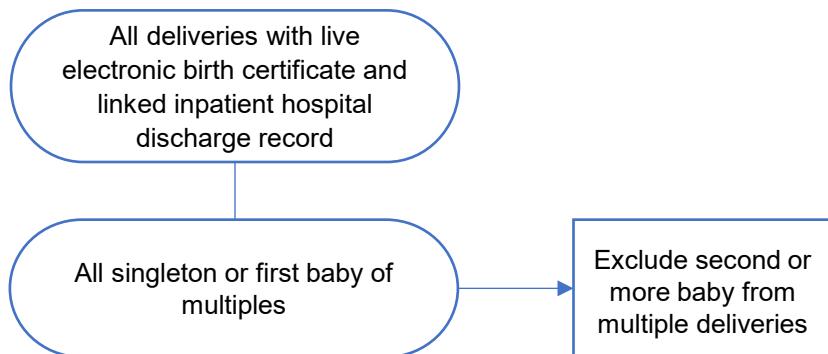
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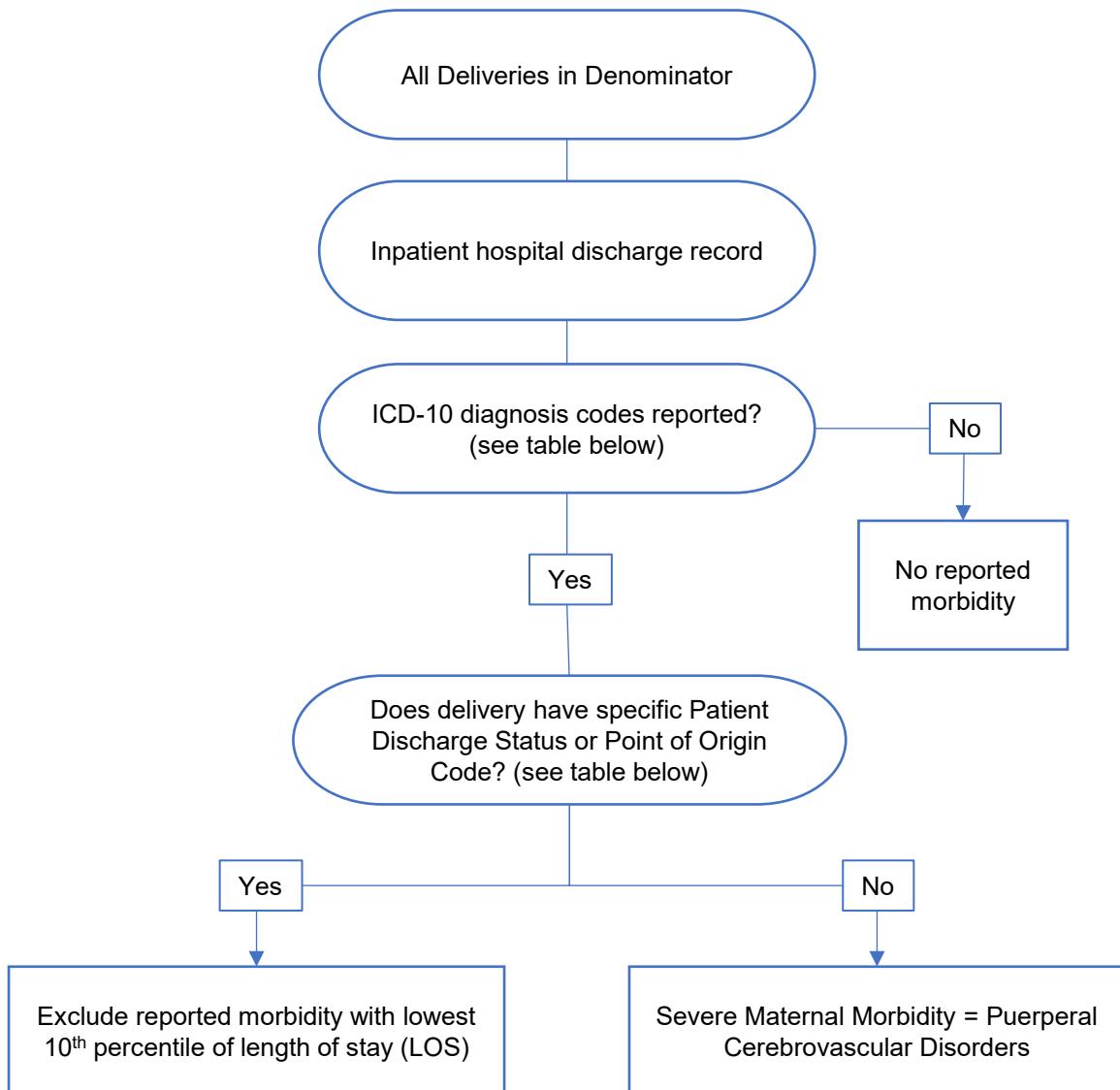
Category	Criteria
ICD-10 Procedure codes for Hysterectomy⁶	0UT90ZL, 0UT90ZZ, 0UT97ZL, 0UT97ZZ

Severe Maternal Morbidity (SMM): Puerperal Cerebrovascular Disorders

Denominator:



Numerator:

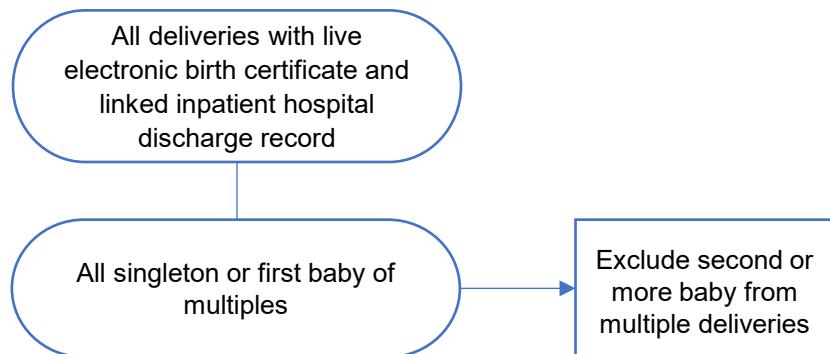


Severe Maternal Morbidity (SMM): Puerperal Cerebrovascular Disorders

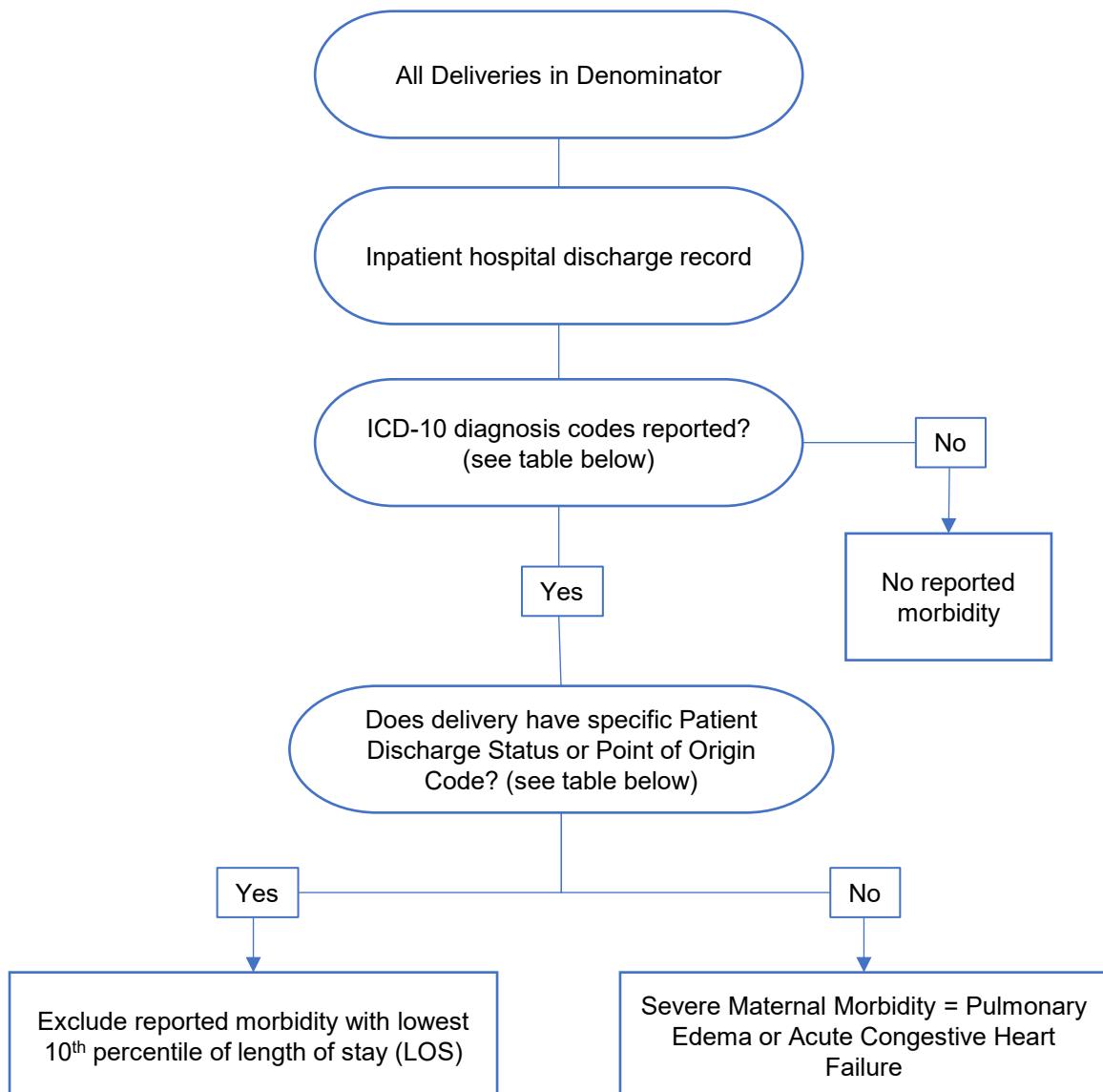
Category	Criteria
<u>Patient Discharge Status (Discharge [Patient] Status Code)¹</u>	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
<u>Point of Origin Code (Admission Source Type)¹</u>	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
<u>ICD-10 Diagnosis codes for Puerperal Cerebrovascular Disorders⁶</u>	A81.2, G45.0, G45.1, G45.2, G45.3, G45.4, G45.8, G45.9, G46.0, G46.1, G46.2, G46.3, G46.4, G46.5, G46.6, G46.7, G46.8, G93.49, H34.0, H34.00, H34.01, H34.02, H34.03, I60.0, I60.01, I60.02, I60.1, I60.10, I60.11, I60.12, I60.2, I60.3, I60.30, I60.31, I60.32, I60.4, I60.5, I60.50, I60.51, I60.52, I60.6, I60.7, I60.8, I60.9, I61.1, I61.2, I61.3, I61.4, I61.5, I61.6, I61.8, I61.9, I62.0, I62.00, I62.01, I62.02, I62.03, I62.1, I62.9, I63.00, I63.011, I63.012, I63.013, I63.019, I63.03, I63.031, I63.032, I63.033, I63.039, I63.09, I63.1, I63.10, I63.11, I63.111, I63.112, I63.113, I63.119, I63.12, I63.13, I63.131, I63.132, I63.133, I63.139, I63.19, I63.2, I63.20, I63.21, I63.211, I63.212, I63.213, I63.219, I63.22, I63.23, I63.231, I63.232, I63.233, I63.239, I63.29, I63.30, I63.31, I63.311, I63.312, I63.313, I63.319, I63.32, I63.321, I63.322, I63.323, I63.329, I63.33, I63.331, I63.332, I63.333, I63.339, I63.34, I63.341, I63.342, I63.343, I63.349, I63.39, I63.40, I63.41, I63.411, I63.412, I63.413, I63.419, I63.42, I63.421, I63.422, I63.423, I63.429, I63.43, I63.431, I63.432, I63.433, I63.439, I63.44, I63.441, I63.442, I63.443, I63.449, I63.49, I63.50, I63.51, I63.511, I63.512, I63.513, I63.519, I63.52, I63.521, I63.522, I63.523, I63.529, I63.53, I63.531, I63.532, I63.533, I63.539, I63.54, I63.541, I63.542, I63.543, I63.549, I63.59, I63.6, I63.8, I63.81, I63.89, I63.9, I65.0, I65.01, I65.02, I65.03, I65.09, I65.1, I65.2, I65.21, I65.22, I65.23, I65.29, I65.8, I65.9, I66.0, I66.01, I66.02, I66.03, I66.09, I66.1, I66.11, I66.12, I66.13, I66.19, I66.2, I66.21, I66.22, I66.23, I66.29, I66.3, I66.8, I66.9, I67.0, I67.1, I67.2, I67.3, I67.4, I67.5, I67.6, I67.7, I67.8, I67.81, I67.82, I67.83, I67.841, I67.848, I67.850, I67.858, I67.89, I67.9, I68.0, I68.2, I68.8, O22.50, O22.52, O22.53, I97.810, I97.811, I97.820, I97.821, O87.3

Severe Maternal Morbidity (SMM): Pulmonary Edema or Acute Congestive Heart Failure

Denominator:



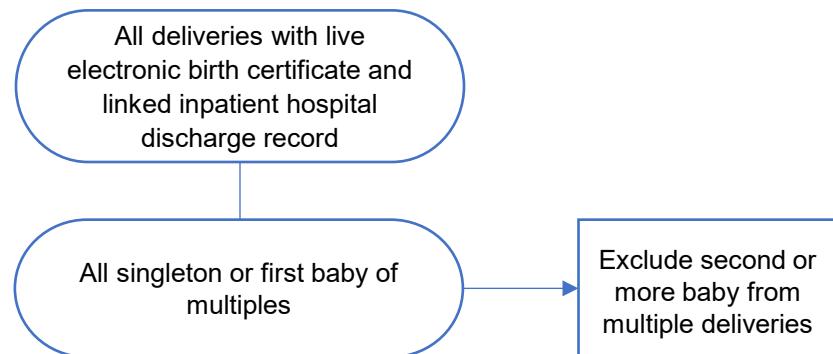
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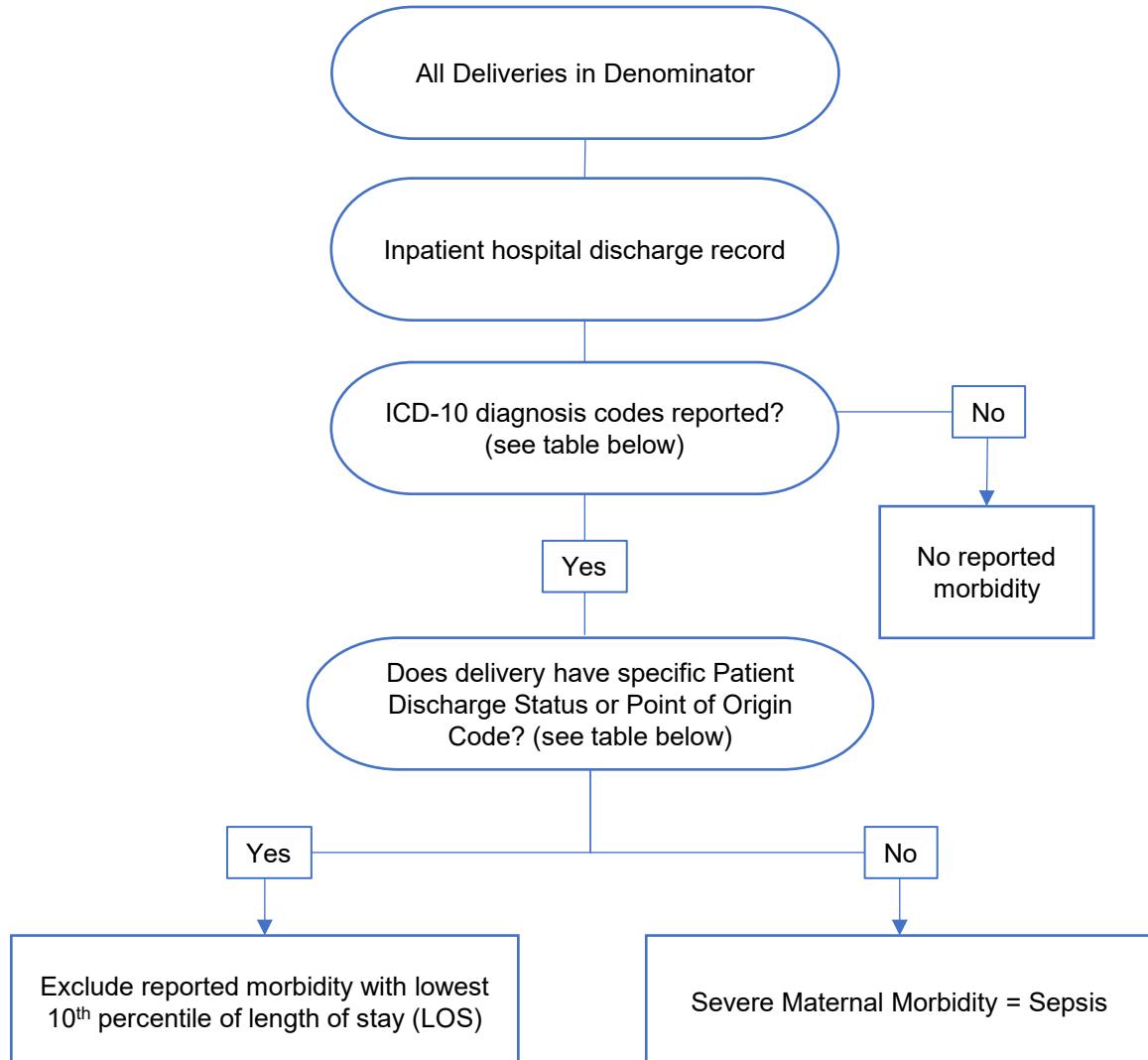
Category	Criteria
Patient Discharge Status (Discharge [Patient] Status Code)¹	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
Point of Origin Code (Admission Source Type)¹	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
ICD-10 Diagnosis codes for Pulmonary Edema⁶	J81.0, I50.1, I50.20, I50.21, I50.23, I50.30, I50.31, I50.33, I50.40, I50.41, I50.43, I50.810, I50.811, I50.813, I50.814, I50.82, I50.83, I50.84, I50.89, I50.9

Severe Maternal Morbidity (SMM): Sepsis

Denominator:



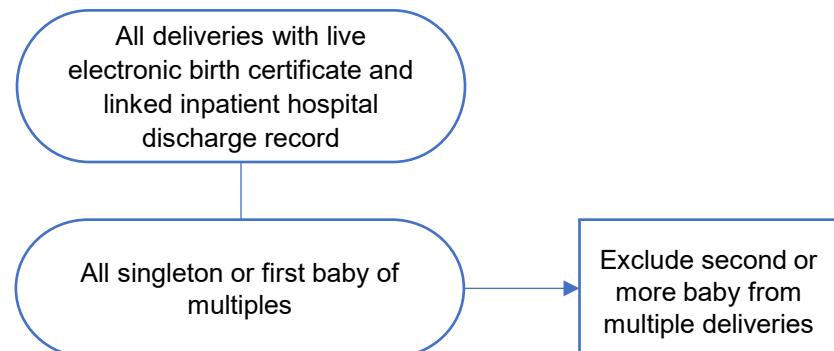
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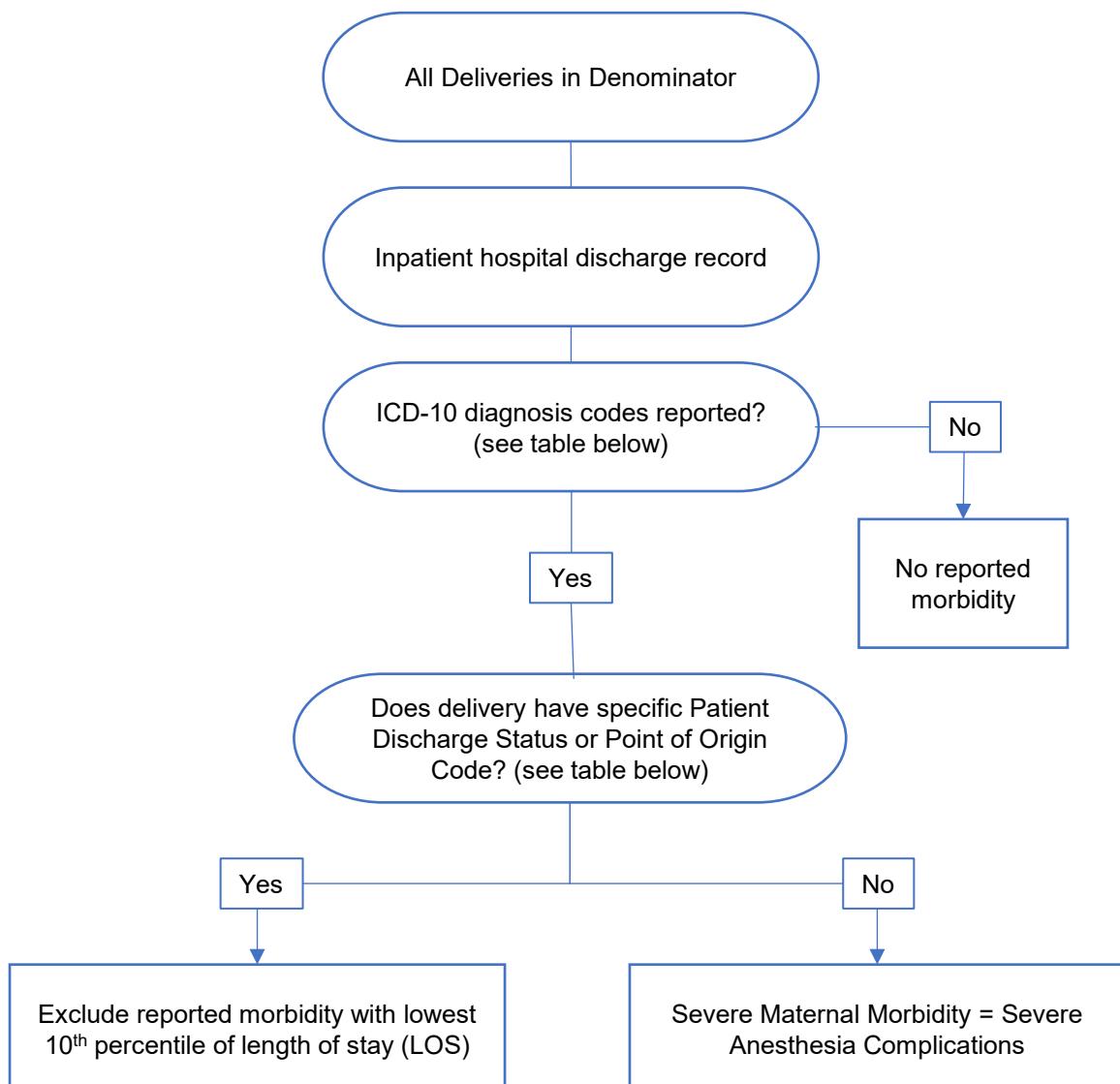
Category	Criteria
Patient Discharge Status (Discharge [Patient] Status Code)¹	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
Point of Origin Code (Admission Source Type)¹	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
ICD-10 Diagnosis codes for Sepsis⁶	O85, O86.04, T81.12XA, T81.44XA, R65.20, R65.21, A40.0, A40.1, A40.3, A40.8, A40.9, A41.01, A41.02, A41.1, A41.2, A41.3, A41.4, A41.50, A41.51, A41.52, A41.53, A41.59, A41.81, A41.89, A41.9, A32.7, I76

Severe Maternal Morbidity (SMM): Severe Anesthesia Complications

Denominator:



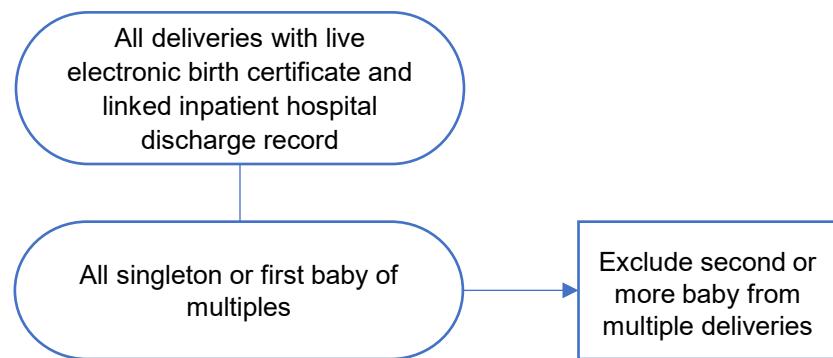
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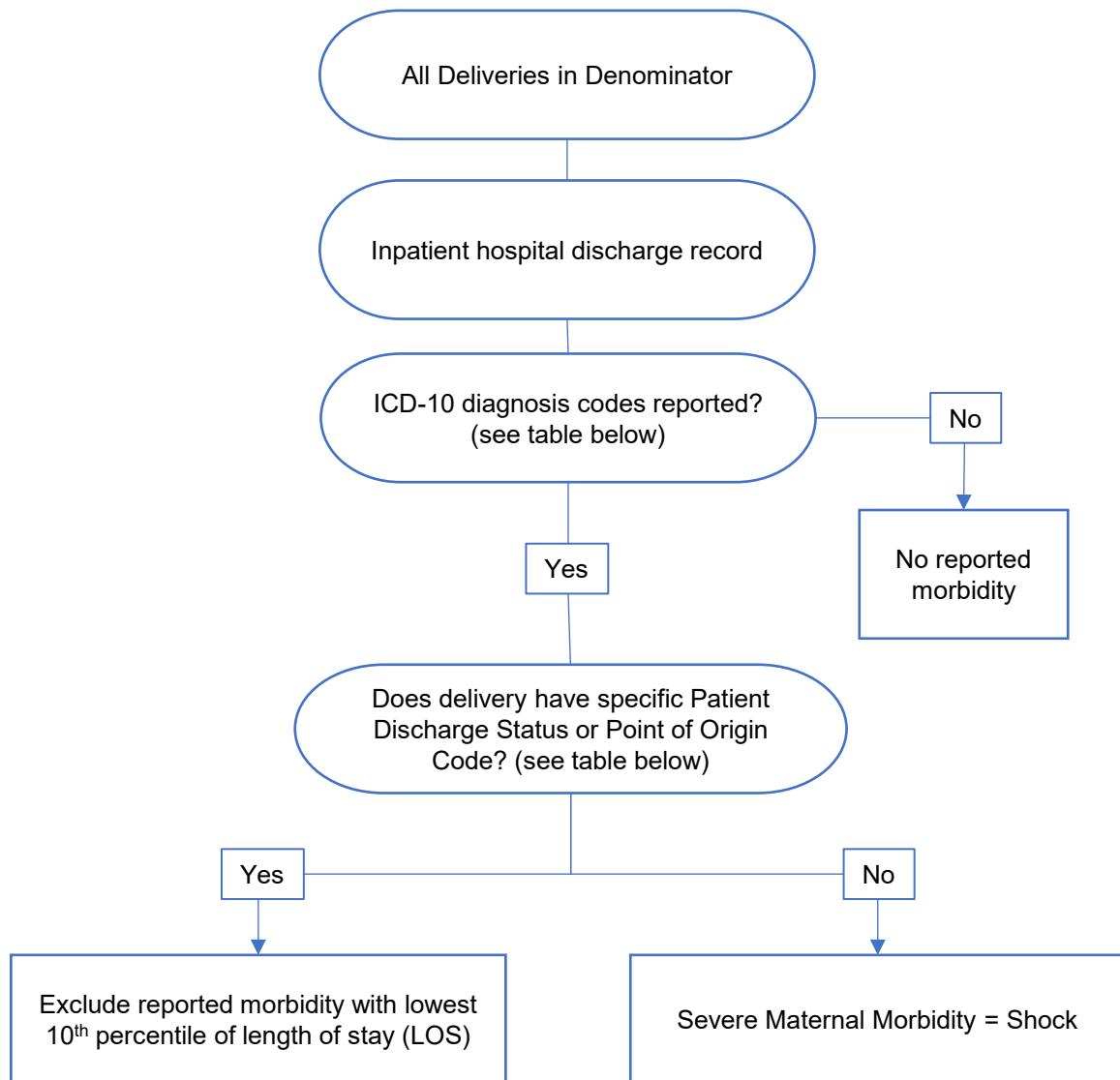
Category	Criteria
Patient Discharge Status (Discharge [Patient] Status Code)¹	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
Point of Origin Code (Admission Source Type)¹	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
ICD-10 Diagnosis codes for Severe Anesthesia Complications⁶	O29.112, O29.113, O29.119, O29.122, O29.123, O29.129, O29.192, O29.193, O29.199, O29.212, O29.213, O29.219, O29.292, O29.293, O29.299, O74.0, O74.1, O74.2, O74.3, O89.0, O89.01, O89.09, O89.1, O89.2, T88.2XXA, T88.3XXA

Severe Maternal Morbidity (SMM): Shock

Denominator:



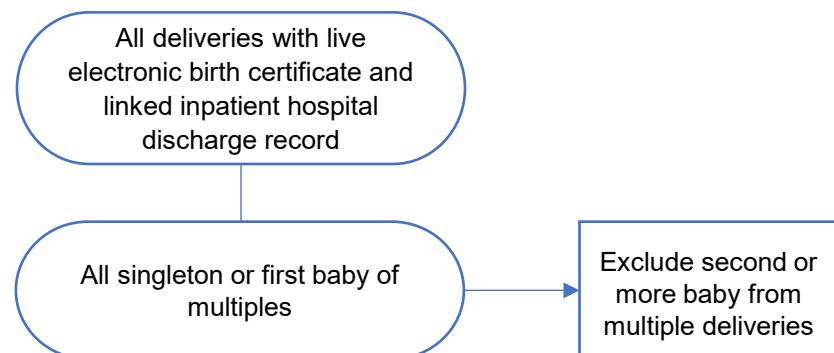
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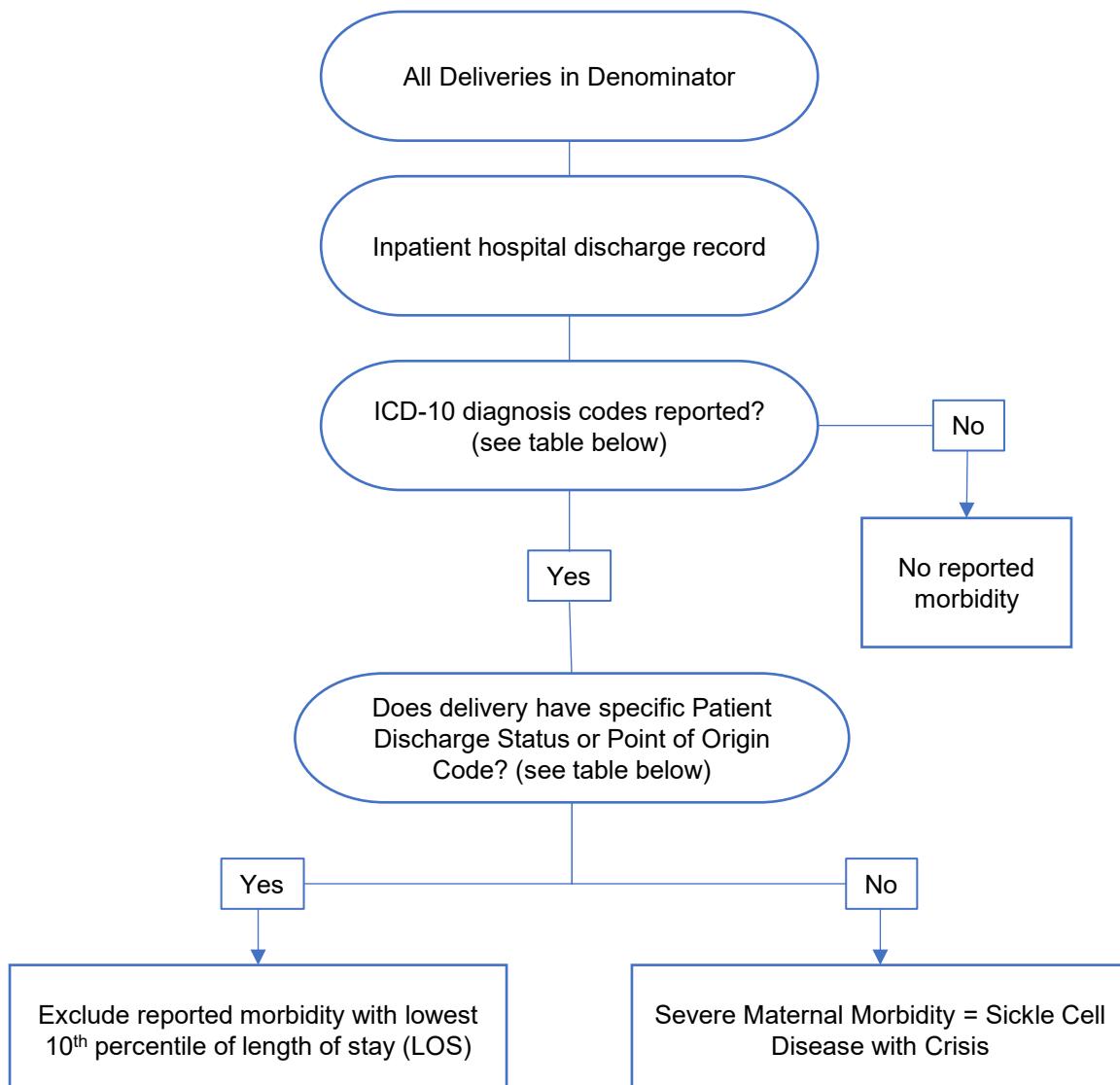
Category	Criteria
Patient Discharge Status (Discharge [Patient] Status Code)¹	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
Point of Origin Code (Admission Source Type)¹	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
ICD-10 Diagnosis codes for Shock⁶	O75.1, R57.0, R57.1, R57.8, R57.9, T78.2XXA, T88.6XXA, T81.10XA, T81.11XA, T81.19XA

Severe Maternal Morbidity (SMM): Sickle Cell Disease with Crisis

Denominator:



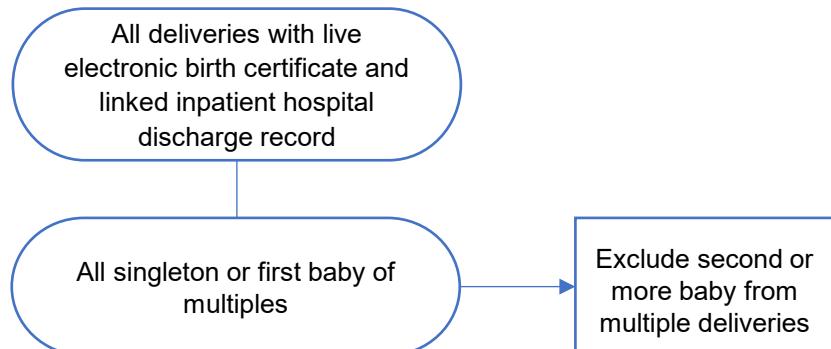
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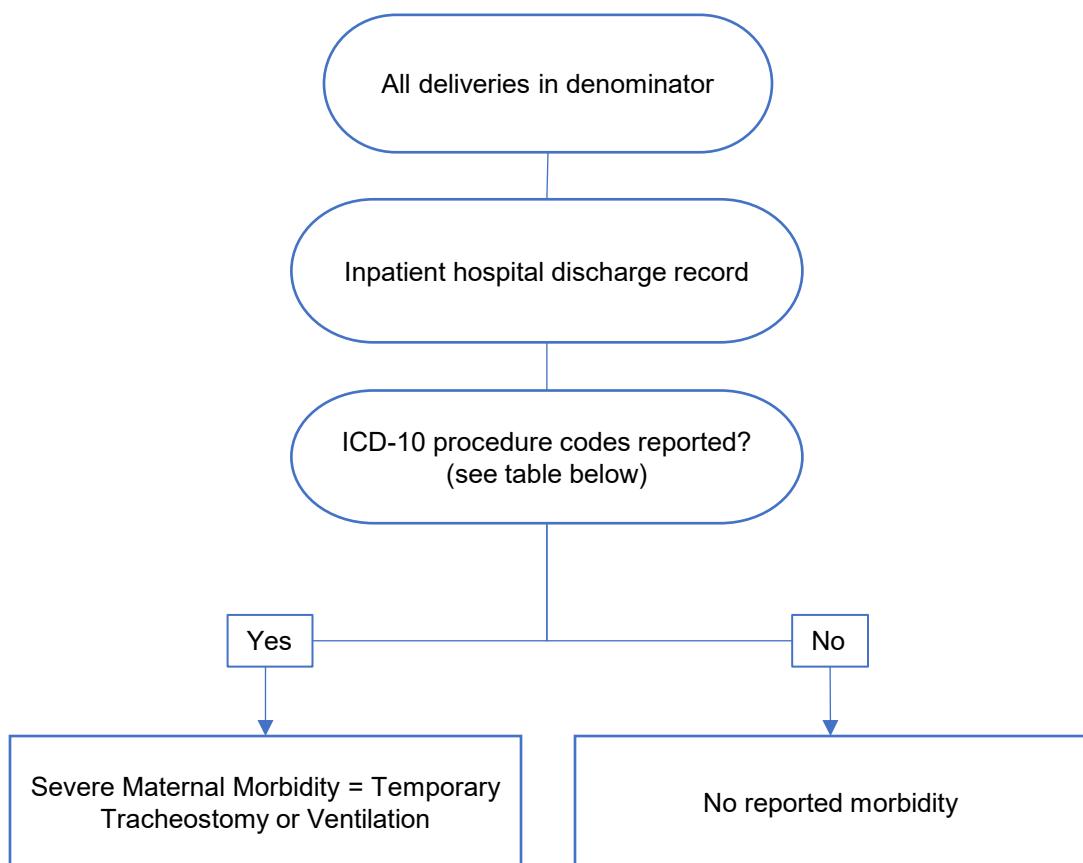
Category	Criteria
<u>Patient Discharge Status (Discharge [Patient] Status Code)¹</u>	Discharged/Transferred to home/self-care (routine discharge), Discharged to home under care of organized home health service provider, Left against medical advice, Discharged/Transferred to Court/Law Enforcement, Discharged to home or self-care with a planned acute care hospital inpatient readmission
<u>Point of Origin Code (Admission Source Type)¹</u>	Non-Health Care Facility Point of Origin, Clinic or Physicians Office, Court Law Enforcement
<u>ICD-10 Diagnosis codes for Sickle Cell Disease with Crisis⁶</u>	D57.00, D57.01, D57.02, D57.211, D57.212, D57.219, D57.411, D57.412, D57.419, D57.811, D57.812, D57.819

Severe Maternal Morbidity (SMM): Temporary Tracheostomy or Ventilation

Denominator:



Numerator:

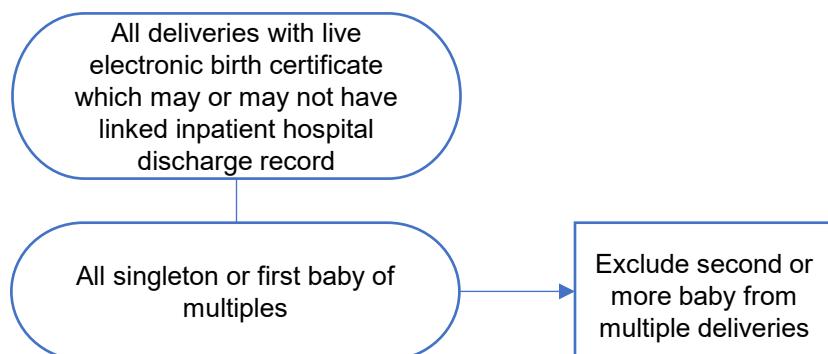


Category	Criteria
ICD-10 Procedure codes for Temporary Tracheostomy or Ventilation⁶	0B110F4, 0B113F4, 0B114F4, 5A1935Z, 5A1945Z, 5A1955Z

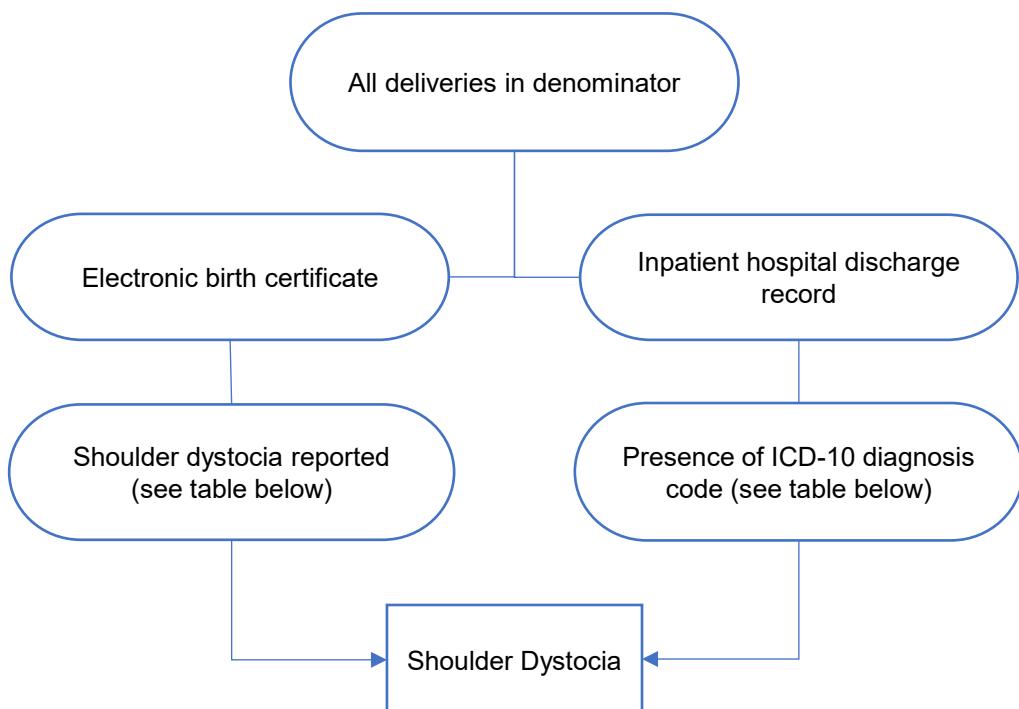
Shoulder Dystocia

Description: A condition in which one or both of a baby's shoulders get stuck during childbirth.

Denominator:



Numerator:

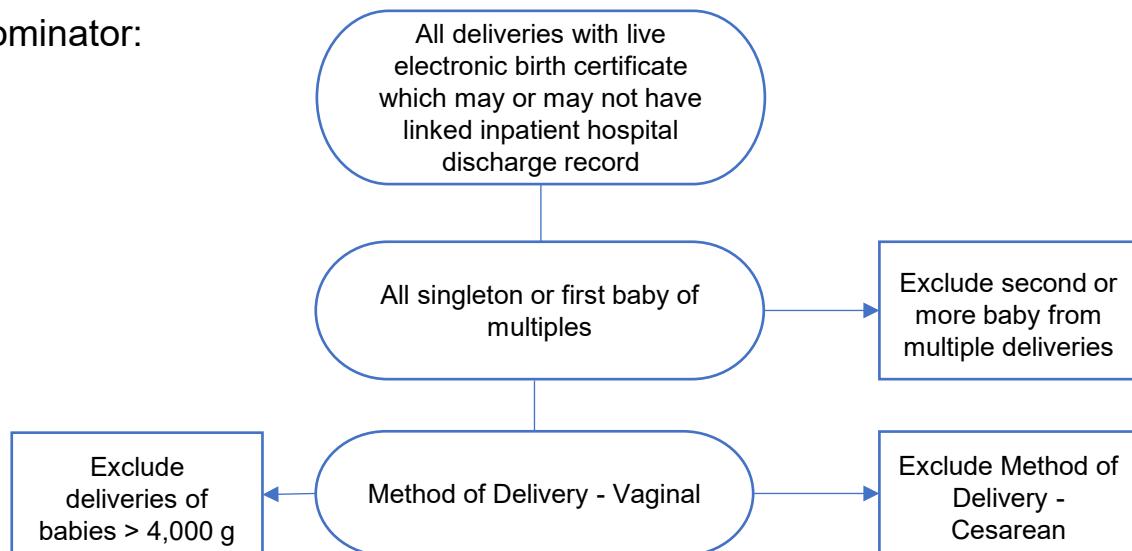


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Labor and Delivery Subsection: Infant Characteristics at Delivery Field: Select all that apply	Shoulder Dystocia
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Labor & Delivery II Subsection: Field: Characteristics of Labor & Delivery – Other (check all that apply)	Shoulder Dystocia
ICD-10 Diagnosis Code for Shoulder Dystocia	O66.0

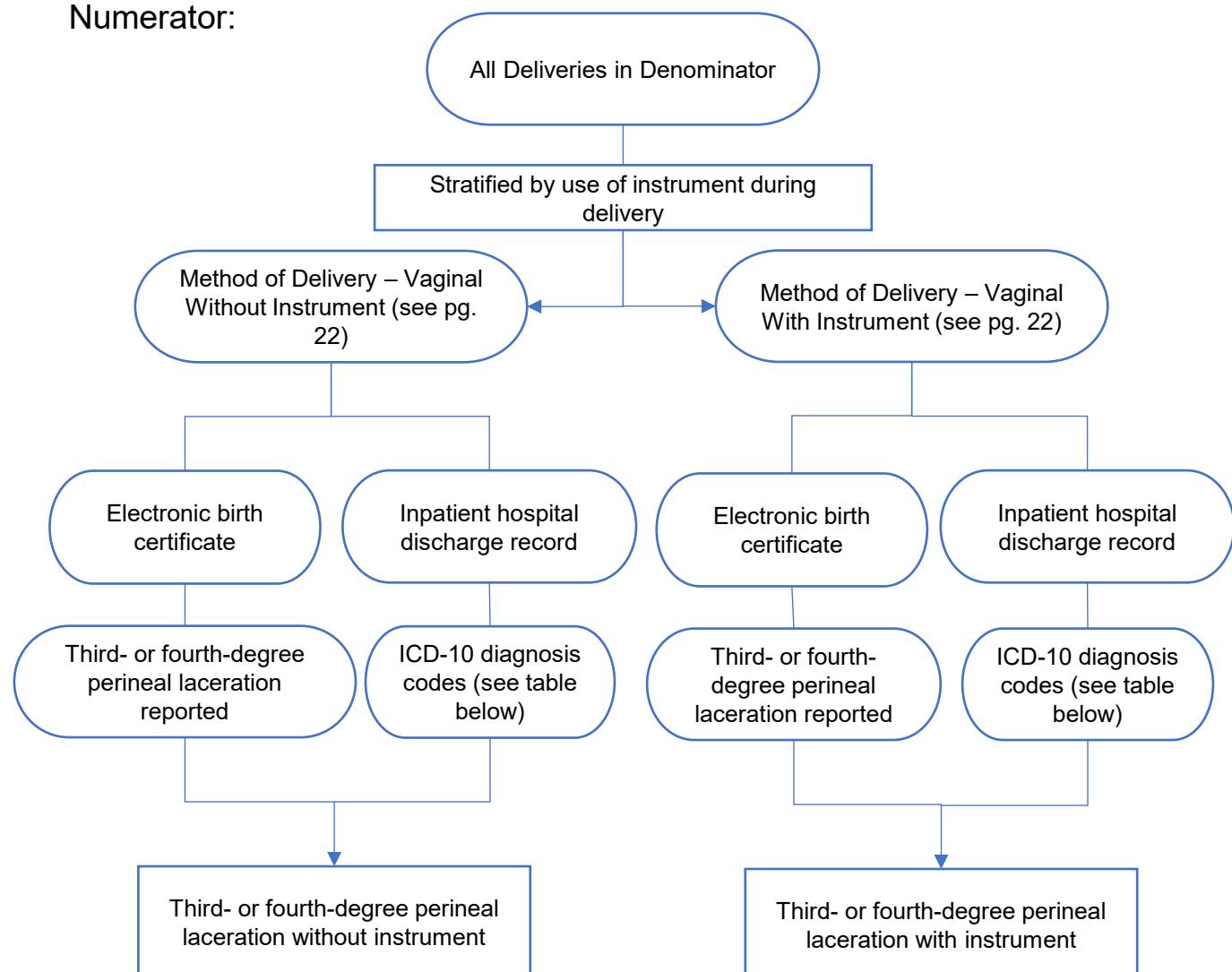
Third- and Fourth-Degree Perineal Lacerations

Description: Third- and fourth-degree perineal lacerations are severe tears of the vagina and perineum that also may involve tissues of the anus.

Denominator:



Numerator:



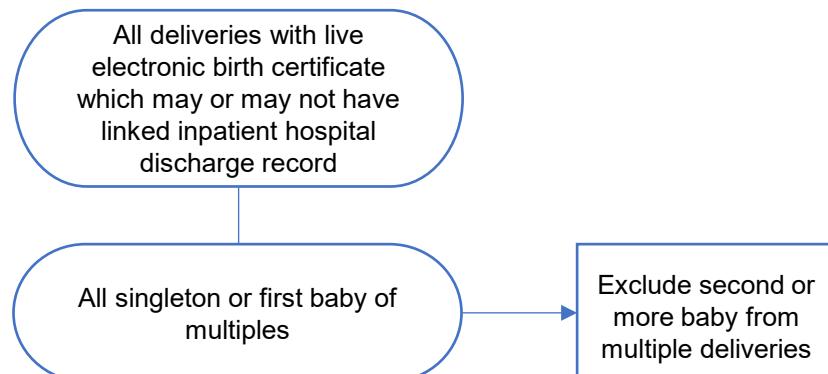
Third- and Fourth-Degree Perineal Laceration

Category	Criteria
<p><u>Electronic birth certificate: Vital Events</u> <u>Registration and Information (VERI) – August 2021 forward</u> Primary Section: Maternal PPD Subsection: Maternal Morbidity Field: Select all that apply:</p>	3 rd or 4 th degree perineal laceration
<p><u>Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021</u> Primary Section: Maternal Postpartum Subsection: Maternal Morbidity Field: Select all that apply:</p>	Third or fourth degree perineal laceration
<p>Procedure codes for Instrument (based on criteria from AHRQ Quality indicators PSI 18)</p>	10D07Z3, 10D07Z4, 10D07Z5, 10D07Z6, 10D07Z8
<p>ICD-10 Diagnosis codes for Third- or Fourth-Degree Perineal Laceration</p>	O70.2, O70.20, O70.21, O70.22, O70.23, O70.3

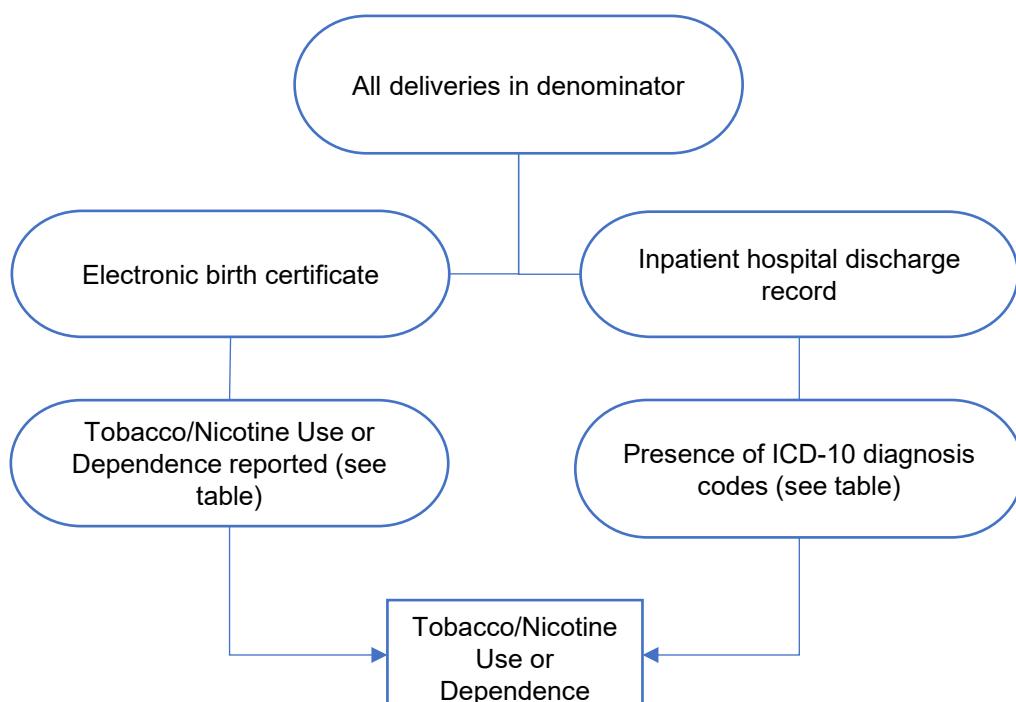
Tobacco/Nicotine Use

Description: Includes tobacco/nicotine use or dependence.

Denominator:



Numerator:

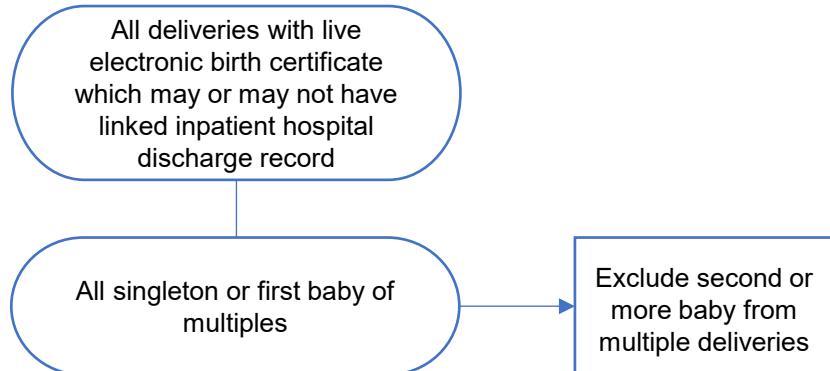


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Prenatal Care Subsection: Prenatal Exposure Field: For each selected time period enter the average number of cigarettes smoked per day.	First Trimester of Pregnancy OR Second Trimester of Pregnancy OR Third Trimester of Pregnancy
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Prenatal V Subsection: Tobacco Use Field: # of cigarettes per day	First Trimester of Pregnancy OR Second Trimester of Pregnancy OR Third Trimester of Pregnancy
Diagnosis Codes for Tobacco/Nicotine Use or Dependence	O99.330, O99.331, O99.332, O99.333, O99.334, O99.335, F17.2, F17.20, F17.200, F17.203, F17.208, F17.209, F17.21, F17.210, F17.213, F17.218, F17.219, F17.22, F17.220, F17.223, F17.228, F17.229, F17.29, F17.290, F17.293, F17.298, F17.299

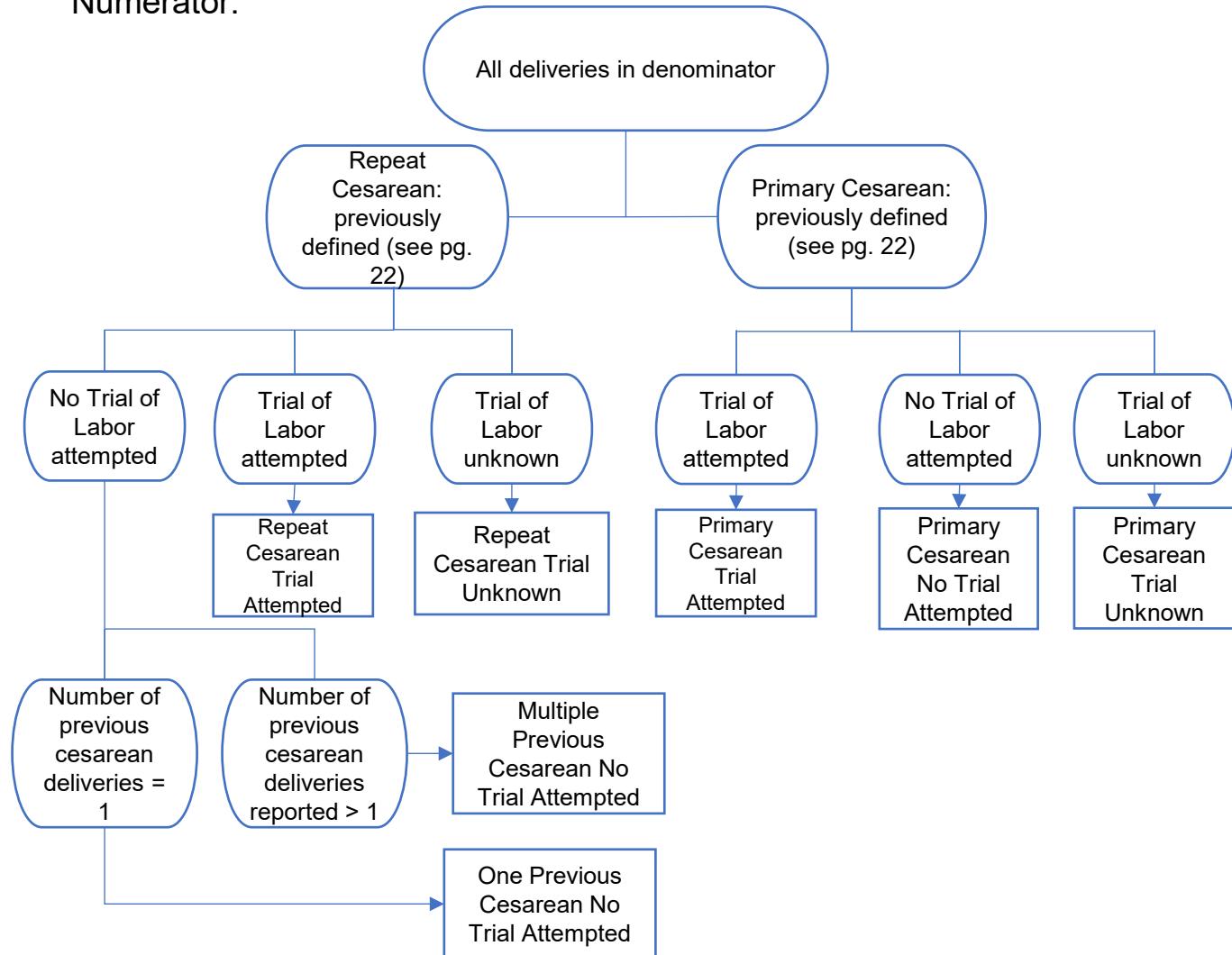
Trial of Labor

Description: An attempt was made to deliver vaginally.

Denominator:



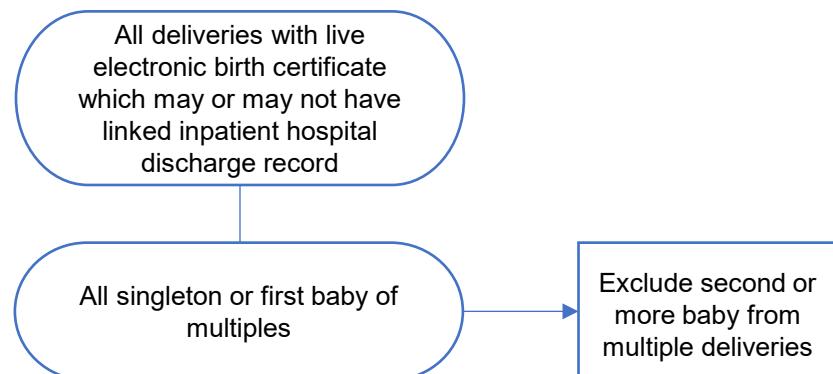
Numerator:



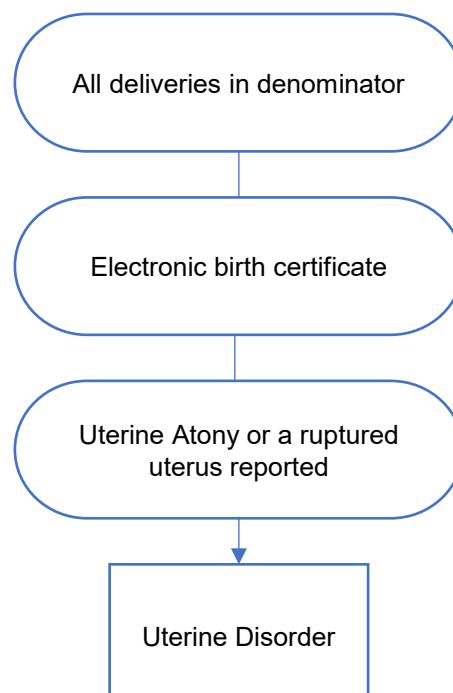
Uterine Disorders

Description: Conditions that affect the uterus, such as a soft and weak uterus after childbirth (Uterine Atony) and/or Uterine Rupture.

Denominator:



Numerator:

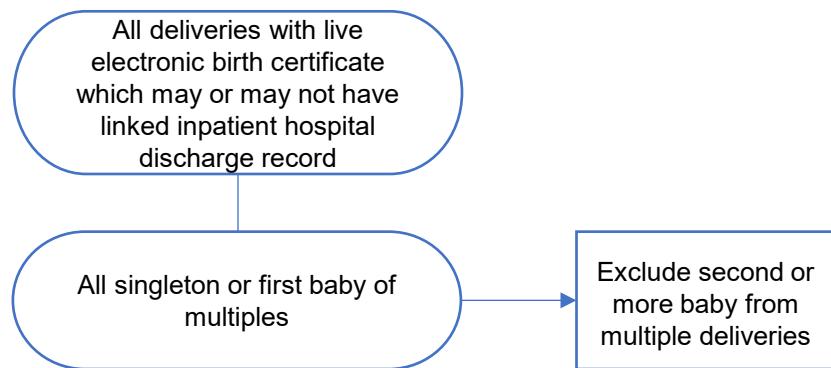


Category	Criteria
Electronic birth certificate: Vital Events Registration and Information (VERI) – August 2021 forward Primary Section: Labor and Delivery Subsection: Maternal Characteristics at Delivery Field: Select all that apply OR Primary Section: Maternal PPD Subsection: Maternal Morbidity Field: Select all that apply	Uterine Atony Ruptured Uterus
Electronic birth certificate: Vital Information Platform (VIP) – up to August 2021 Primary Section: Labor and Delivery II Subsection: Characteristics of Labor & Delivery - Other Field: Check all that apply OR Primary Section: Maternal Postpartum Subsection: Maternal Morbidity Field: Check all that apply	Uterine Atony Ruptured Uterus

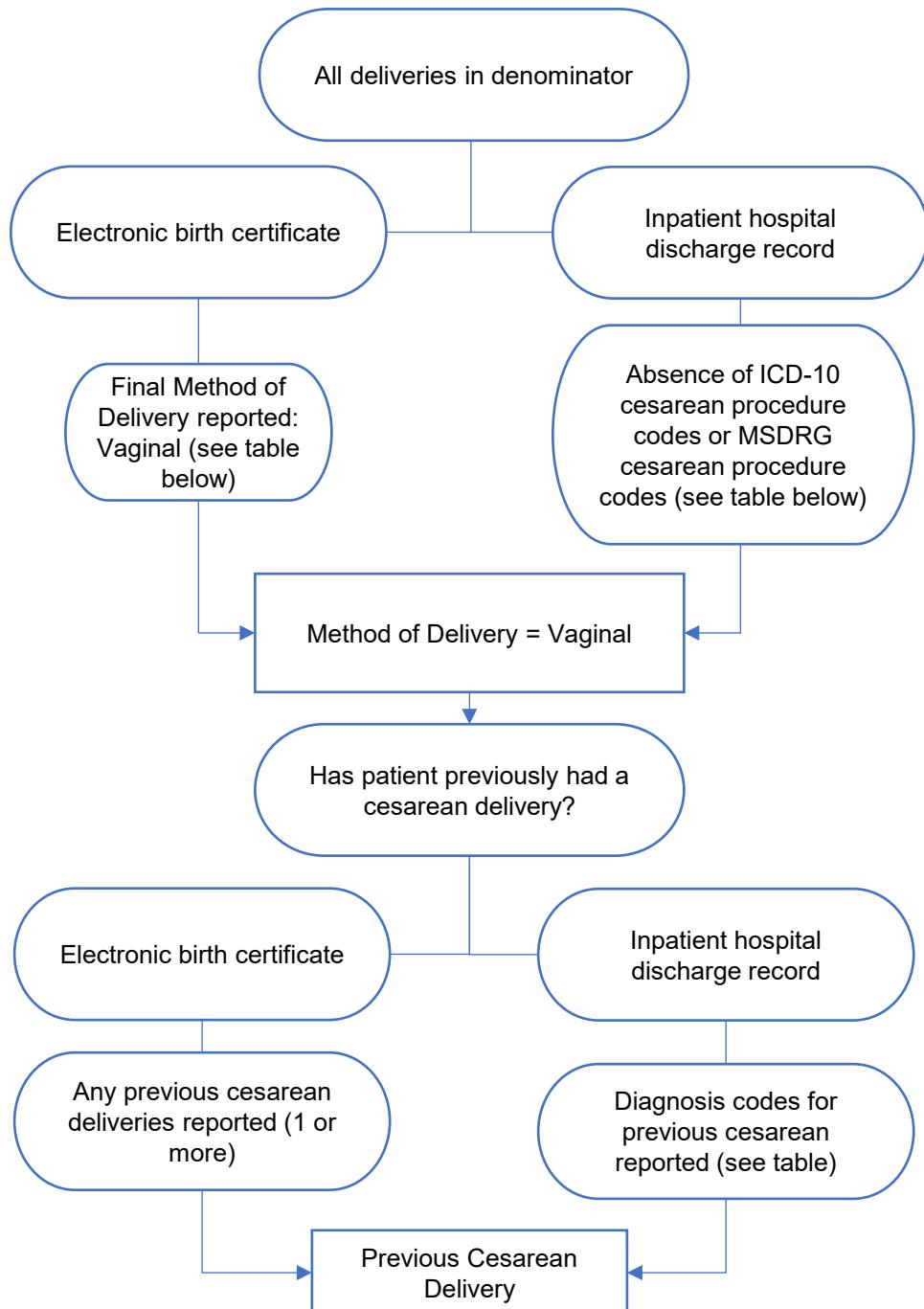
Vaginal Birth After Cesarean (VBAC)

Description: Vaginal delivery of a baby after a previous pregnancy was delivered by cesarean delivery.

Denominator:



Numerator:



Vaginal Birth After Cesarean (VBAC)

Category	Criteria
<p>Electronic birth certificate: VERI</p> <p>Primary Section: Labor and Delivery</p> <p>Subsection: Method of Delivery & Details</p> <p>Field: Final Method of Delivery: AND</p> <p>Primary Section: Prenatal Care</p> <p>Subsection: Pregnancy History</p> <p>Field: Is this Mothers first pregnancy? AND</p> <p>Primary Section: Prenatal Care</p> <p>Subsection: Pregnancy History</p> <p>Field: Number of Previous Cesareans:</p>	<p>Vaginal/Spontaneous OR Vaginal/Forceps OR Vaginal/Vacuum</p> <p>No</p> <p>1 or more</p>
<p>Electronic birth certificate: VIP</p> <p>Primary Section: Labor & Delivery I</p> <p>Subsection: Method of Delivery</p> <p>Field: Final route & method of delivery? AND</p> <p>Primary Section: Prenatal I</p> <p>Subsection:</p> <p>Field: Is this mothers first pregnancy? AND</p> <p>Primary Section: Prenatal II</p> <p>Subsection: Maternal Risk Factors NCHS</p> <p>Field: Mother had a previous cesarean delivery, if yes, how many</p>	<p>Cesarean</p> <p>No</p> <p>Yes, >0, or not Missing</p>
ICD-10 Procedure codes for Cesarean delivery	10D00Z0,10D00Z1,10D00Z2
MS-DRG Cesarean delivery codes	783-788
Diagnosis codes for Previous Cesarean delivery	O34.21, O34.211, O34.212, O34.219, O66.41

¹Nuance. (July 1, 2017). *New Jersey Discharge Data Collection System (NJDDCS) Version 2 Data Dictionary and Data Extract File Layout Version 17.3.*
https://www.nj.gov/health/healthcarequality/documents/njddcs_v17-3.pdf

²Public Consulting Group. (November 7, 2022). *NJ HealthCAP Data Dictionary and Extract File Layout Release 3.0.* https://www.nj.gov/health/healthcarequality/documents/Appendix%20C%20%20NJ%20HealthCAP%20Data%20Dictionary%20and%20Extract%20File%20Layout_v3.0.pdf

³Agency for Healthcare Research and Quality. U.S. Department of Health and Human Services. (2022). *Inpatient Quality Indicator 21 (IQI 21) Cesarean Delivery Rate, Uncomplicated.*
https://qualityindicators.ahrq.gov/Downloads/Modules/IQI/V2022/TechSpecs/IQI_21_Cesarean_Delivery_Rate_Uncomplicated.pdf

⁴Agency for Healthcare Research and Quality. U.S. Department of Health and Human Services. (2018). *Patient Safety Indicators 18 (PSI 18) Obstetric Trauma Rate – Vaginal Delivery with Instrument.*
https://qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2018/TechSpecs/PSI_18_Obstetric_Trauma_Rate-Vaginal_Delivery_With_Instrument.pdf

⁵California Maternal Quality Care Collaborative. *Obstetric Comorbidity Scoring System.*
<https://www.cmqcc.org/es/research/severe-maternal-morbidity/obstetric-comorbidity-scoring-system>

⁶U.S. Centers for Disease Control and Prevention. (2024). *Identifying Severe Maternal Morbidity (SMM).*
https://www.cdc.gov/maternal-infant-health/php/severe-maternal-morbidity/icd.html?CDC_AAref_Val=https://www.cdc.gov/reproductivehealth/maternalinfanthealth/smm/severe-morbidity-ICD.htm

⁷Leonard, S. A., Main, E. K., Lyell, D. J., Carmichael, S. L., Kennedy, C. J., Johnson, C., & Mujahid, M.S. (2022). Obstetric comorbidity scores and disparities in severe maternal morbidity across marginalized groups. *Am J Obstet Gynecol MFM*, 4(2), 100530. doi: 10.1016/j.ajogmf.2021.100530.