NETWORK Version 1.0 (Beta)

[Client Name] Obstetrics Report for Measurement Period: [Startdate] to [Enddate]

Prepared on [Rundate]

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INTRODUCTION

Regular obstetrics reporting allows health plans to understand the populations served and the resources required to manage childbirth. Over time, the content should allow users to observe shifting population needs and develop adaptive care management programs to align with changing demands. In addition to childbirth, the following report attempts to survey populations and measure costs for the events leading up to delivery. Thus, the report is broken into two sections: (1) Pregnancy and (2) Delivery.

The Pregnancy section focuses on the events from conception up to but excluding delivery. Mothers are profiled for age, risk, and quality metrics for prenatal care. Costs are also quantified for select risk factors and attributable primary care providers. These reports will help plans understand the expenditures required to manage prenatal care, identify opportunities to standardize care, and detect savings opportunities should sufficient opportunity exist.

The Delivery section turns its attention to childbirth. This section will identify the various delivery methods, birthweights, birth events, risks, and costs associated with childbirth. Abnormally high complication rates or overutilized procedures offer the potential for costs savings and improved outcomes. Similarly, identifying high-cost facilities may signal the plan to direct more deliveries to facilities with better rates.

The data is entirely based on claims and eligibility during the predefined measurement period. This report compares the key metrics from the current measurement period to the prior measurement period to benchmark the client's population overtime.

Due to the large amount of clinical content, we have provided documentation in the Appendix of the report to define each event. These definitions provide explicit event detail including eligibility, diagnostic, and procedural requirements. Definitions were obtained from nationally recognized quality organizations when possible and were additionally examined by our medical staff.

This report is automatically generated by Passport Health Plan. We recognize that health plans may desire customized analytics or modifications not supported by the current report. Should you require additional analyses or support not included within the existing content, please reach out to your account representative to discuss your interests in more detail. We would be happy to supplement your obstetrics analysis with custom reports specific to your needs.

EXECUTIVE SUMMARY

The purpose of this short section is to provide perspective on the pregnancies and deliveries described in this report. The following table reports the total number of pregnancies and deliveries and the total costs associated with each during the measurement period and the prior period.

	Current	Prior
# of Pregnancies	0	0
Total Pregnancy Allowed	$0	$0
# of Deliveries	0	0
Total Delivery Allowed	$0	$0

PREGNANCY

The first major section focuses on the events from conception up to but excluding childbirth, which is covered in the next section. The section includes subsections for prevalence, quality, cost, and select utilization measures dedicated entirely to the mother. Pregnancies are identified using diagnoses from claims for eligible females above the age of 12 during the measurement period. A member can have more than one pregnancy in the measurement period should multiple deliveries or pregnancy terminations exist. For a complete definition of a pregnancy event, see the Appendix.

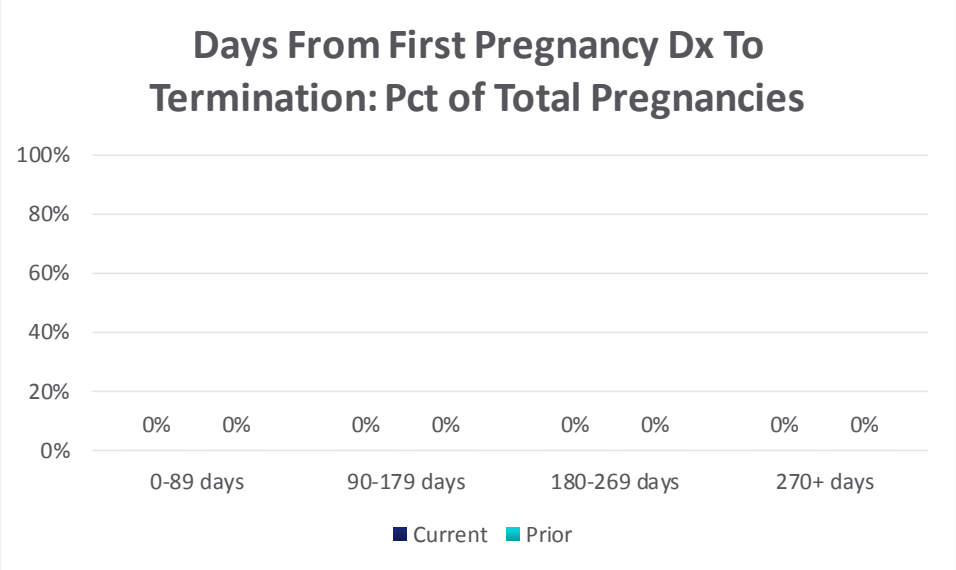
Prevalence

The following charts depict pregnancy-related prevalence rates expressed as per thousand member months in the measurement period. Rates are calculated as 12,000 x [number of events / number of member months]. This section includes two additional subsections for (1) Reported Pregnancies and (2) Disease and Risk.

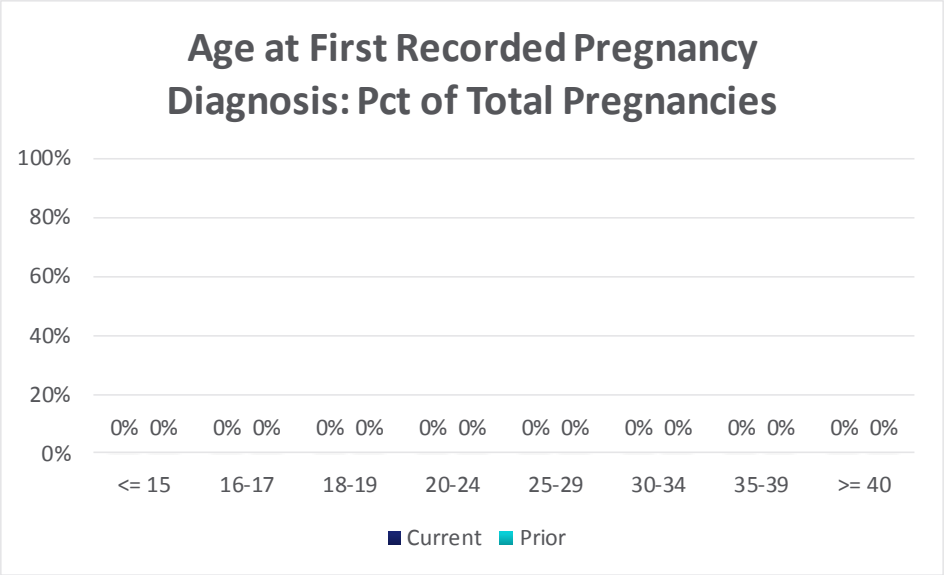
Reported Pregnancies

Pregnancy prevalence displays the plan's total pregnancies identified during the measurement period. These rates include all delivered or terminated pregnancies.

The following chart presents the time from the first pregnancy diagnosis to the end of the pregnancy. If no pregnancy diagnosis is found for a delivery, it is classified as “Unknown.” This does not necessarily measure the length of the pregnancy.



The final chart in this subsection identifies the age at first recorded pregnancy diagnosis. Higher than expected concentrations in younger or older age groups could indicate higher risk for pregnancy complications. If no pregnancy diagnosis is found for a delivery, the age at first diagnosis is classified as “Unknown”.



Disease and Risk

High risk pregnancies are indicated by a diverse list of diagnosis codes that were provided by our clinical team. For a complete definition of the risk factors, refer to the appendix. These pregnancies should be closely monitored to ensure the risk is properly managed and does not escalate. If available, these pregnancies are candidates for case management.

The chart below reports the prevalence of high risk pregnancies during the measurement period. These rates include high risk prevalence for all delivered or terminated pregnancies.

Additional risk factor detail is presented below with costs based on services rendered up to but excluding delivery. For each client's population, the top five risk factors are identified by

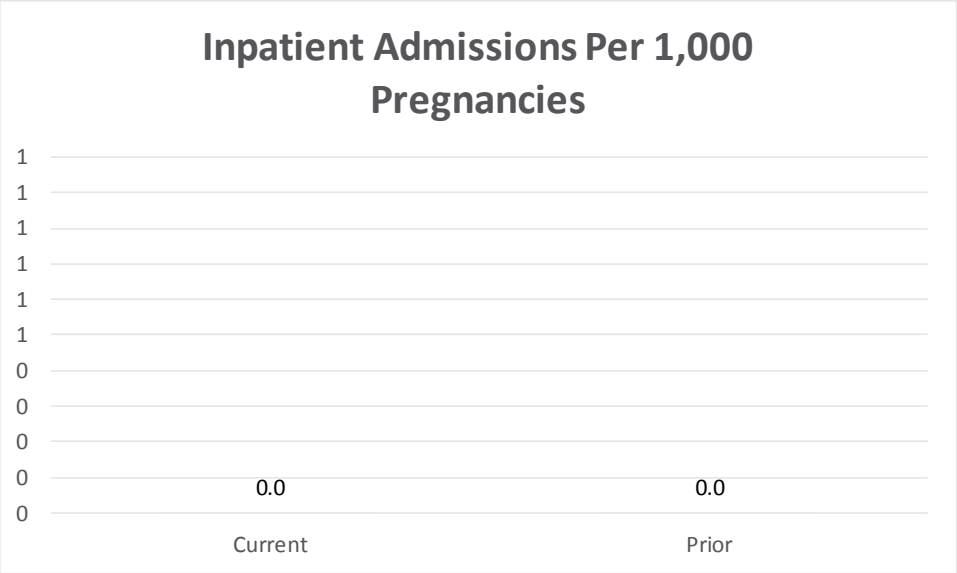
prevalence in the following table, and all other risk factors are grouped into 'Other'. These risk factors are known to directly affect pregnancy outcomes and should be identified as early as possible. Significant differences in cost profiles between current and prior measurement periods should be investigated to ensure that resources are properly aligned to manage high risk mothers. Risk adjusted cost profiles are also provided to standardize costs and account for mothers with different risk profiles across unique populations.

Risk Factor[1]	Current			Prior		
	Prevalence per K[2]	Allow PMPM[3]	Risk Adjusted Allow PMPM[3,4]	Prevalence per K[2]	Allow PMPM[3]	Risk Adjusted Allow PMPM[3,4]
No Risk Factors	0.0	$0	$0	0.0	$0	$0
Risk Factor 1	0.0	$0	$0	0.0	$0	$0
Risk Factor 2	0.0	$0	$0	0.0	$0	$0
Risk Factor 3	0.0	$0	$0	0.0	$0	$0
Risk Factor 4	0.0	$0	$0	0.0	$0	$0
Risk Factor 5	0.0	$0	$0	0.0	$0	$0
Other Risk Factors	0.0	$0	$0	0.0	$0	$0

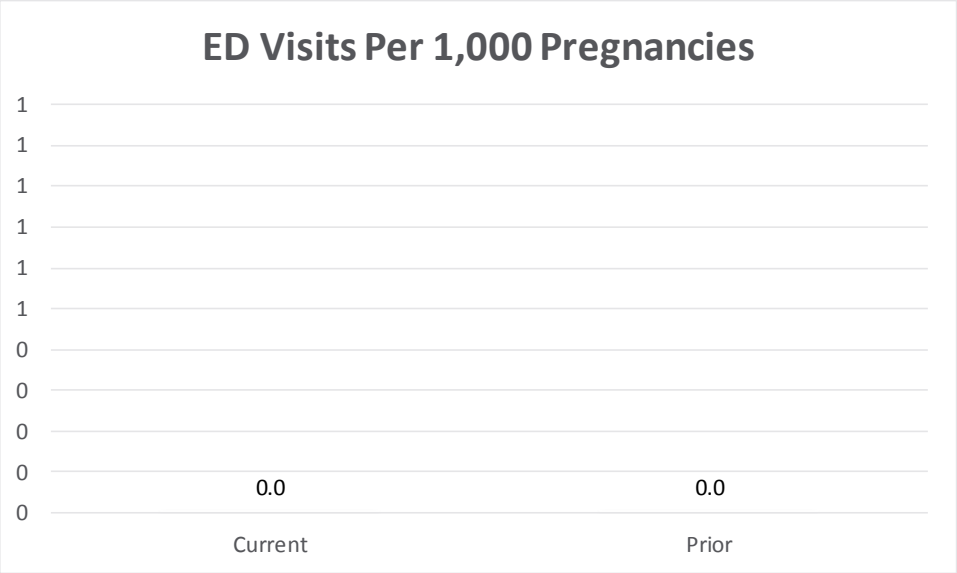
1. The top five risk factors in the current measurement period are identified, with all other risk factors grouped into 'Other Risk Factors'
2. Top 5 risk factors are not mutually exclusive, but pregnancies in the 'Other' category have none of the top 5 risk factors
3. Based on costs prior up to but excluding delivery
4. Risk adjustment provides a way to standardize costs for comorbidities, i.e., adjust for sicker populations

Furthermore, inpatient admissions and emergency department admissions during pregnancy can identify a high-risk pregnancy that isn't being well managed. These pregnancies should be investigated as a candidate for case management. These charts are expressed as rates per thousand pregnancies rather than total member months to control for differences in childbearing populations.

The chart below shows the prevalence of inpatient admissions per thousand pregnancies during the measurement period.



The last chart in this section depicts the prevalence of emergency department admissions per thousand pregnancies during the measurement period.

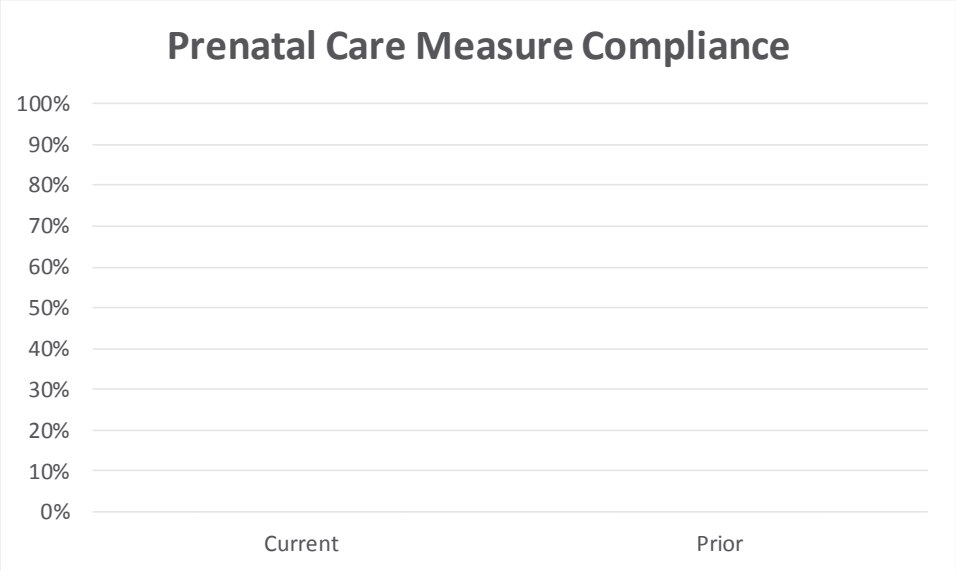


Quality

The National Committee for Quality Assurance (NCQA) creates measures of quality, known as the Healthcare Effectiveness Data and Information Set (HEDIS). Per http://www.ncqa.org, HEDIS is a tool used by more than 90 percent of America's health plans to measure performance on important dimensions of care and service. One such HEDIS measure is Prenatal and Postpartum Care (PPC), which measures two things:

- The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester, on the enrollment start date or within 42 days of enrollment in the organization, and
- The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.

Passport Health Plan estimates compliance for the prenatal care measure using the 2017 measure logic. The following chart displays plan compliance for prenatal care.

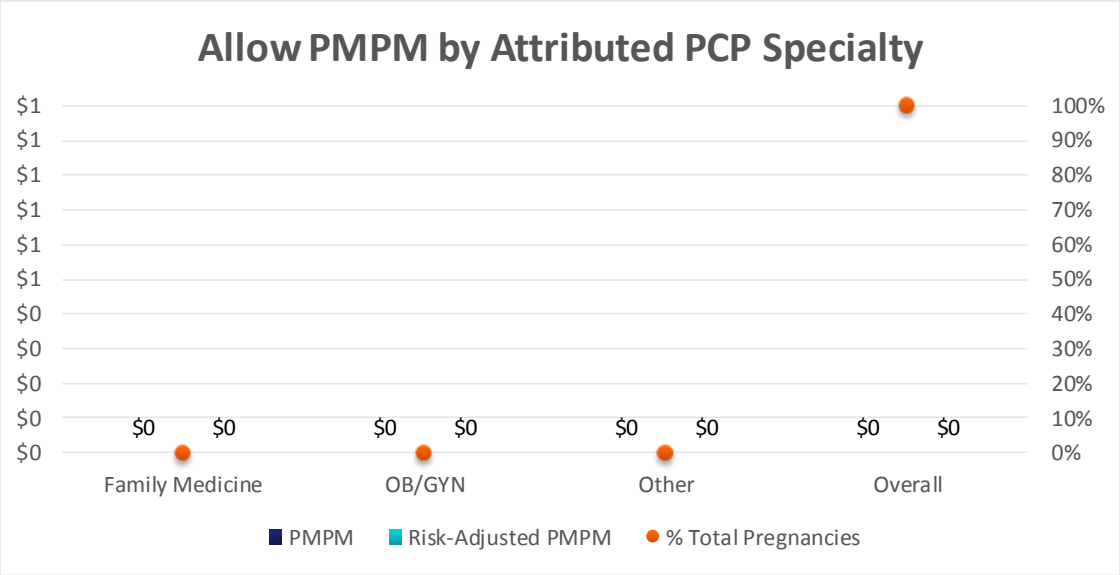


Cost

Pregnancy costs are defined by allowable amounts up to but excluding deliveries. Costs related to deliveries are excluded and will be presented independently in the Delivery section. In this subsection, current period vs. prior period comparisons are omitted in favor of risk adjusted costs to offer a standardized measure to evaluate performance. Recall risk adjustment offers a way to account for different risk profiles and evaluate separate populations fairly.

Specialty

The following chart depicts pregnant women PMPM amounts by attributed PCP specialty. Significant differences in risk adjusted allowed amounts would imply some specialties manage pregnancy costs better than others.



Attributed PCP

The following table presents the top 10 PCPs by attributed pregnant member months during the measurement period. PCPs with severely disproportionate costs for both unadjusted and risk adjusted amounts should be investigated further to ensure the PCP is most appropriately managing patient costs. Since these PCPs are responsible for the greatest number of pregnant women, improving cost and quality starts with the list of providers below.

PCP	Specialty	Attributed Pregnancy Member Months[1]	Allow PMPM[2]	Risk-Adjusted Allow PMPM[2,3]
Pcp 1	Specialty	0	$0	$0
Pcp 2	Specialty	0	$0	$0
Pcp 3	Specialty	0	$0	$0
Pcp 4	Specialty	0	$0	$0
Pcp 5	Specialty	0	$0	$0
Pcp 6	Specialty	0	$0	$0
Pcp 7	Specialty	0	$0	$0
Pcp 8	Specialty	0	$0	$0
Pcp 9	Specialty	0	$0	$0
Pcp 10	Specialty	0	$0	$0

1. Based on members meeting pregnancy definition during current measurement period
2. Based on costs up to but not including delivery
3. Risk adjustment provides a way to standardize costs for comorbidities, i.e., adjust for sicker populations

Attributed OB

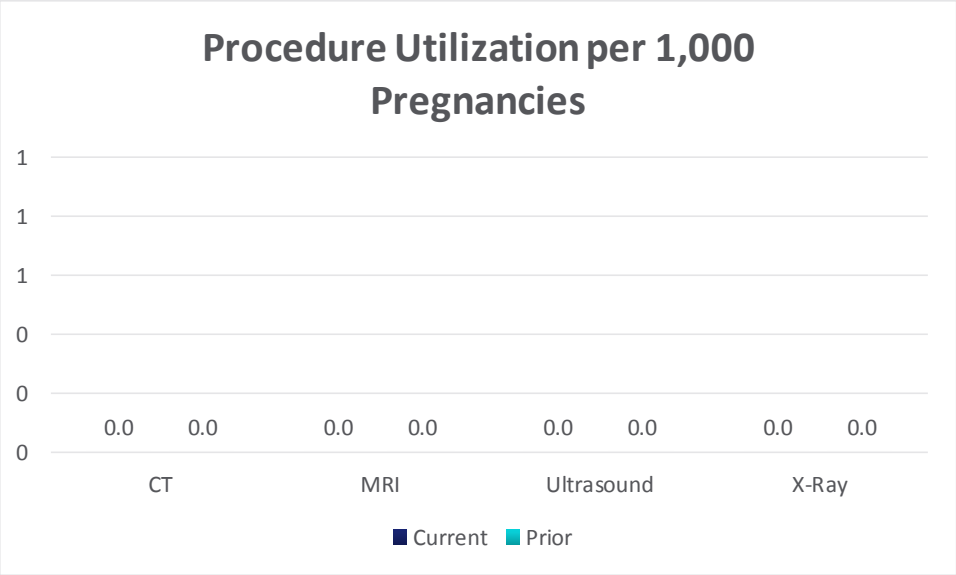
The following table presents to top 10 obstetricians by attributed pregnant member months during the measurement period. These doctors are not officially attributed to patients, so this report attributes each pregnancy to an OB based on the highest number of visits during the pregnancy. OB's with severely disproportionate costs for both unadjusted and risk adjusted amounts or quality metrics should be investigated further to ensure the OB is most appropriately managing patient costs. Since these OB's are responsible for the greatest number of pregnant women, improving cost and quality starts with the list of providers below.

Attributed OB	Attributed Pregnancy Member Months[1]	Allow PMPM[2]	Risk-Adjusted Allow PMPM[2,3]	Deliveries w/ Complications	C-Section Deliveries	Normal Birth Weights	NICU Admissions	Prenatal Compliance	Postpartum Compliance
Ob 1	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 2	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 3	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 4	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 5	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 6	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 7	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 8	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 9	0	$0	$0	0%	0%	0%	0%	0%	0%
Ob 10	0	$0	$0	0%	0%	0%	0%	0%	0%

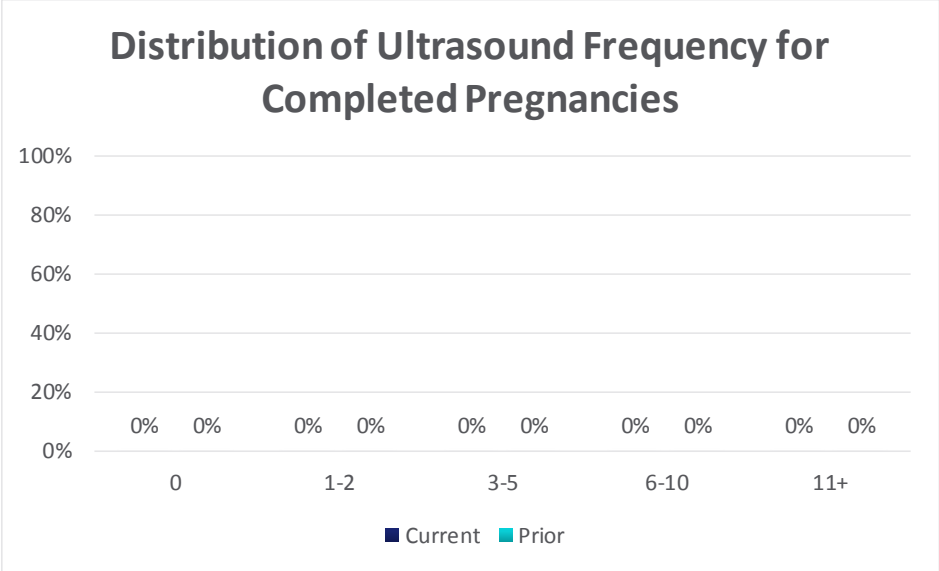
1. Based on members meeting pregnancy definition during current measurement period
2. Based on costs up to but not including delivery
3. Risk adjustment provides a way to standardize costs for comorbidities, i.e., adjust for sicker populations

Utilization

The following chart covers utilization rates for select procedures related to pregnancy. While lower utilization typically implies lower total costs, properly administered utilization can also be an indicator of quality. The following utilization should be simultaneously interpreted relative to the prior period and considered relative to quality care measures.



The final chart in this section covers the distribution of ultrasound procedures during pregnancy. This chart only includes completed pregnancies to get a fair comparison of ultrasound utilization.



DELIVERY

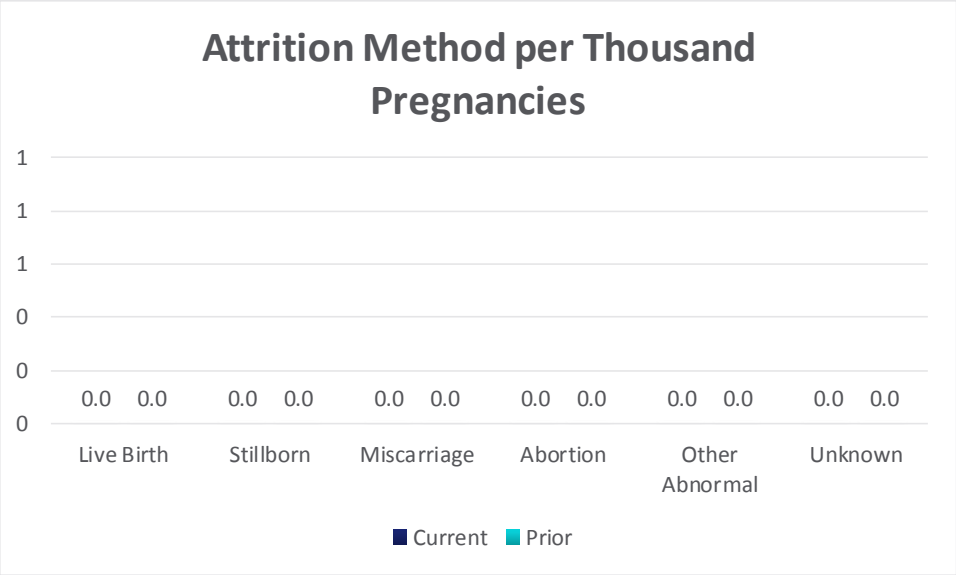
Unlike the previous section, this section isolates on events associated with delivery or events immediately following delivery. Deliveries are identified primarily via Diagnosis Related Groups (DRGs) as well as select diagnosis and procedure code combinations. A member can have more than one deliveries or pregnancy terminations in the measurement period. For a complete definition of a delivery or termination event, see the Appendix.

Prevalence

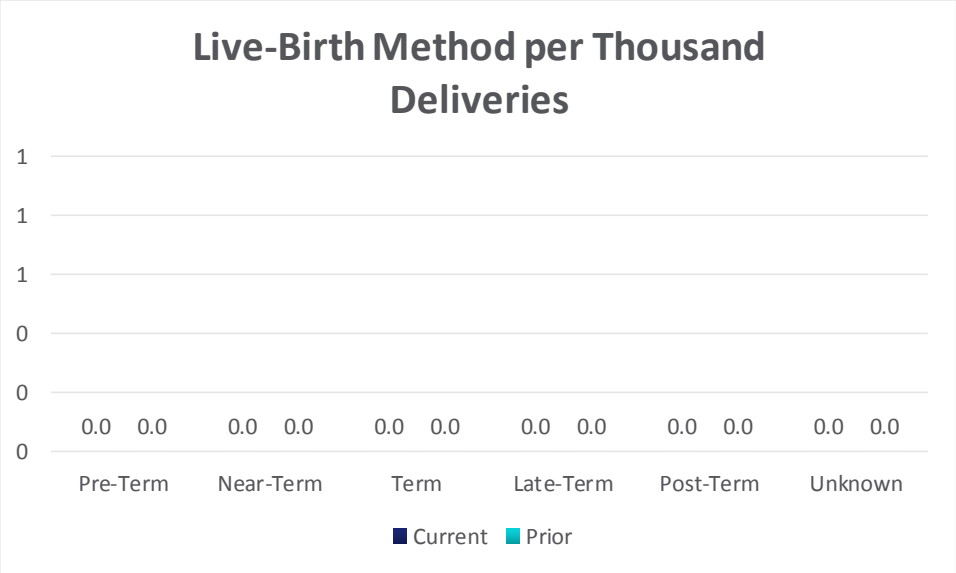
Prevalence will be defined differently in the Delivery section by expressing rates per thousand pregnancies instead of using member months in the prior section. Expressing the rates using pregnancies is more relevant because it accounts for differences in childbearing populations. Thus, prevalence rates are expressed as 1,000 x [number of events / number of pregnancies]. This section includes four additional subsections for (1) Reported Deliveries, (2) Utilization, (3) NICU admissions and (4) Complications.

Reported Deliveries

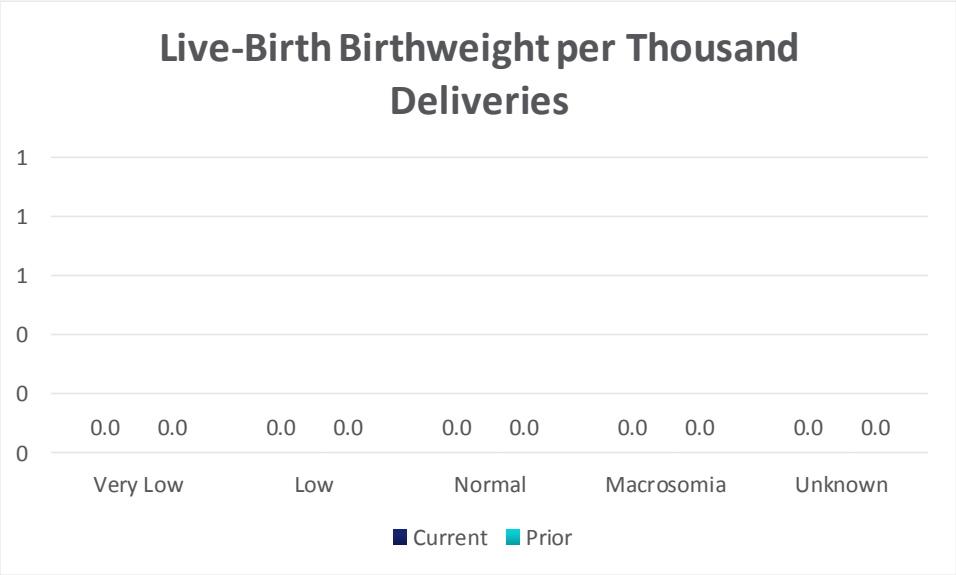
The first chart in this section depicts the manner in which pregnancies ended during the measurement period compared to the prior period. We would expect the largest share of pregnancies to end in live-births, but stillborn and miscarriage / spontaneous abortion differences greatly exceeding the prior period could signify population and environmental risks.



Premature babies have a significantly increased risk of health problems that could affect their entire lives. Numerous developmental and health problems such as apnea, respiratory distress syndrome, intraventricular hemorrhage, patent ductus arteriosis, and many other conditions are at increased risk. Therefore, while other factors play a role in gestation to term such a mother risk profile, it is a critical measure in evaluating plan risk.

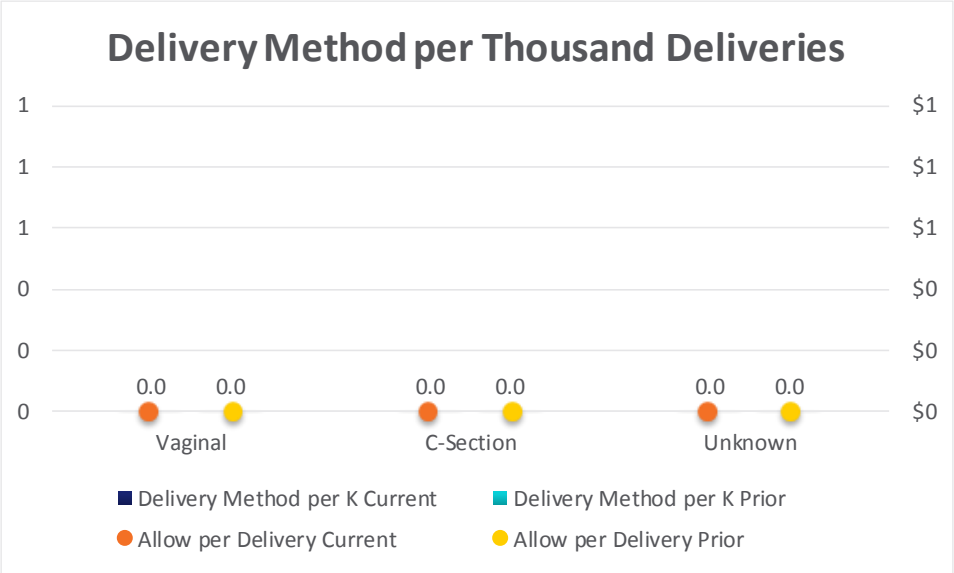


Birthweight is another critical component in evaluating baby risk and is strongly related to the previous chart on live-birth methods. Underweight babies are primarily due to prematurity and are susceptible to the same risk factors. However, additional mother risk factors such as malnutrition, socioeconomic conditions, and age are contributing factors to low birthweight. Thus, below normal birthweights exceeding the prior year should be considered carefully and researched further to understand cause and effect.



Utilization

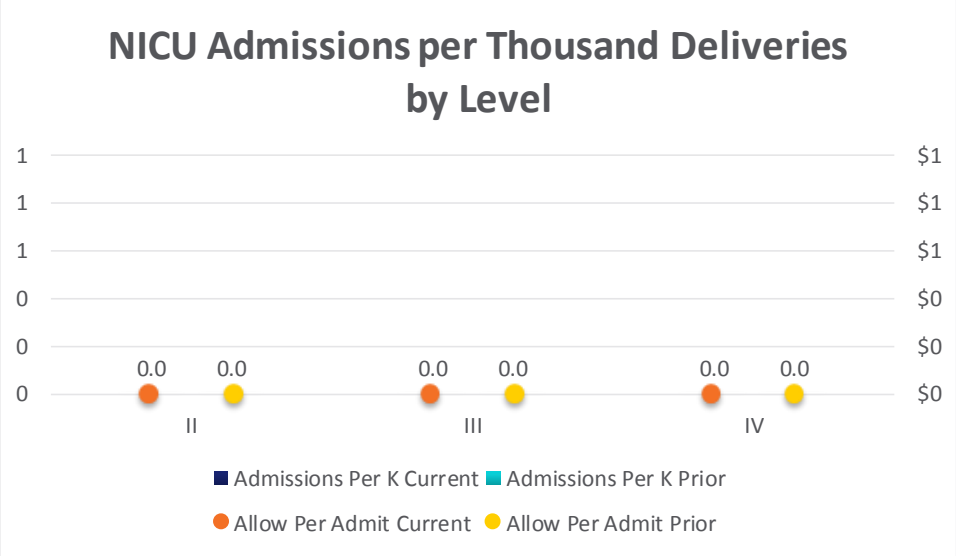
C-sections pose further risks to mother and baby, are typically at least twice as costly, and typically require at least an extra day of inpatient care compared to vaginal births. In addition to surgical risks and added costs, research studies have suggested C-section babies may be more prone to respiratory problems. Elevated cesarean rates compared to the prior period should be fully understood to ensure these procedures are being properly recommended and utilized by rendering providers.



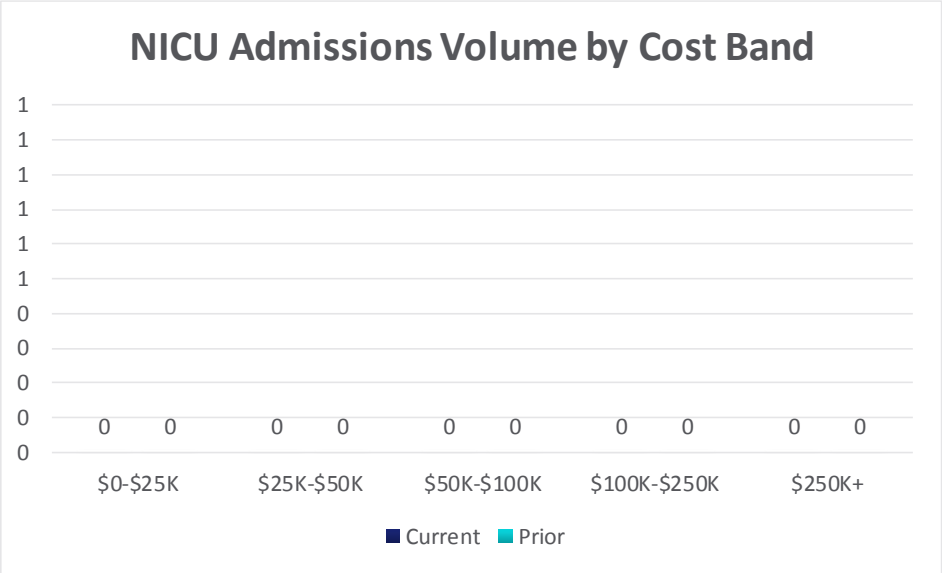
NICU Admissions

The next subsection reviews newborn intensive care unit (NICU) admissions and costs. Premature and other very sick babies require heavy resources that only the NICU can provide. These resources are quite expensive and may not be preventable but should be evaluated regardless to ensure resources are being used efficiently.

The chart below reports the prevalence of admission and the inpatient costs associated with the admission for the three highest levels of NICU care. The different levels of NICU care can have very different distributions of incidence and cost and therefore are presented separately in the chart below.



The next chart shows the number of NICU admissions by the associated inpatient cost levels.

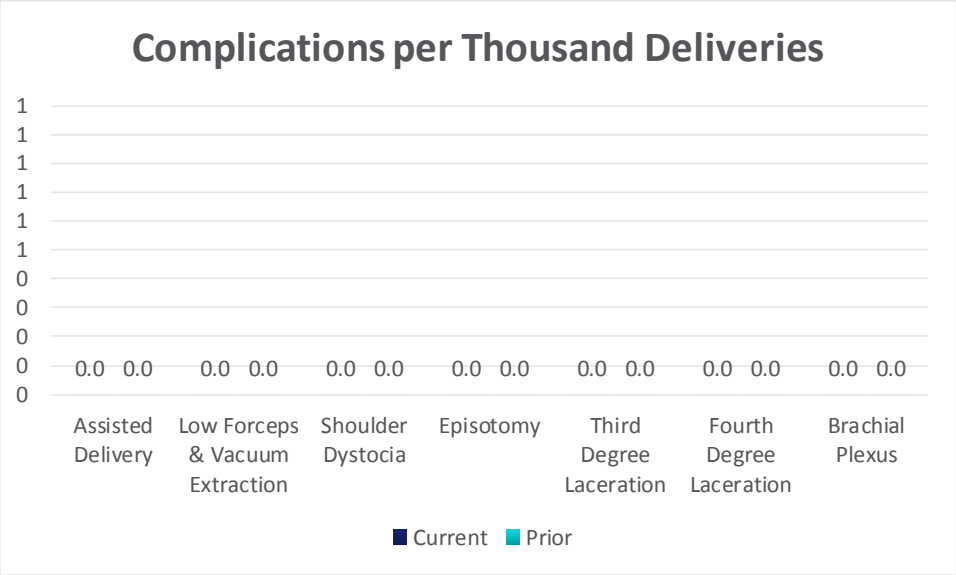


The final table relating to NICU admissions reports the prevalence of admission and the inpatient costs associated with the NICU admission by NICU level of care and delivery method. The allowed amounts include only the inpatient costs incurred during NICU admissions.

	Current Period						Prior Period					
	Vaginal		C-Section		Unknown		Vaginal		C-Section		Unknown	
NICU Level	Admits/ 1000	Allow/ Admits	Admits/ 1000	Allow/ Admits	Admits/ 1000	Allow/ Admits	Admits/ 1000	Allow/ Admits	Admits/ 1000	Allow/ Admits	Admits/ 1000	Allow/ Admits
II	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
III	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
IV	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0

Complications

Complication prevalence is the final chart in the subsection. These events should be minimized and significant deviations above the prior year values should be carefully considered for remediation strategies.



Quality

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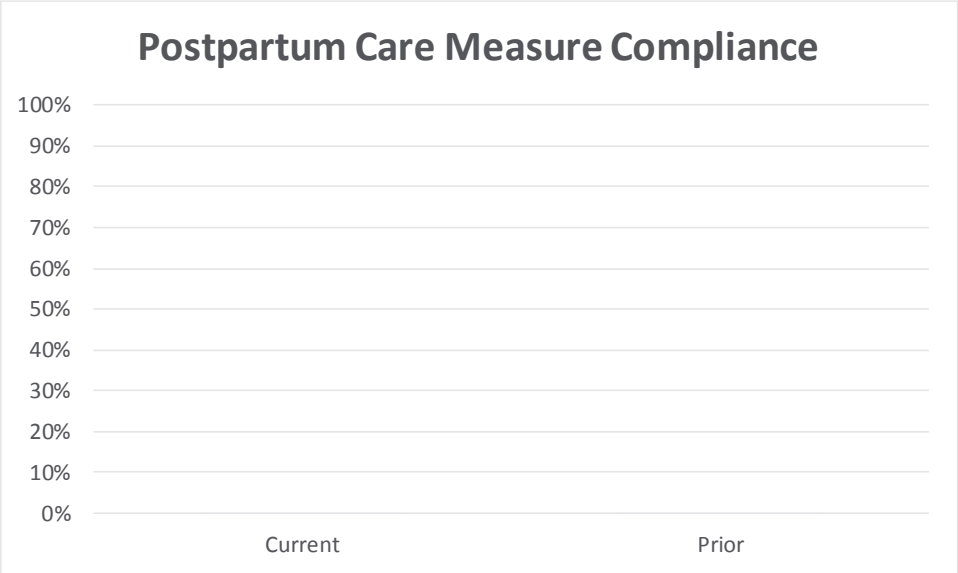
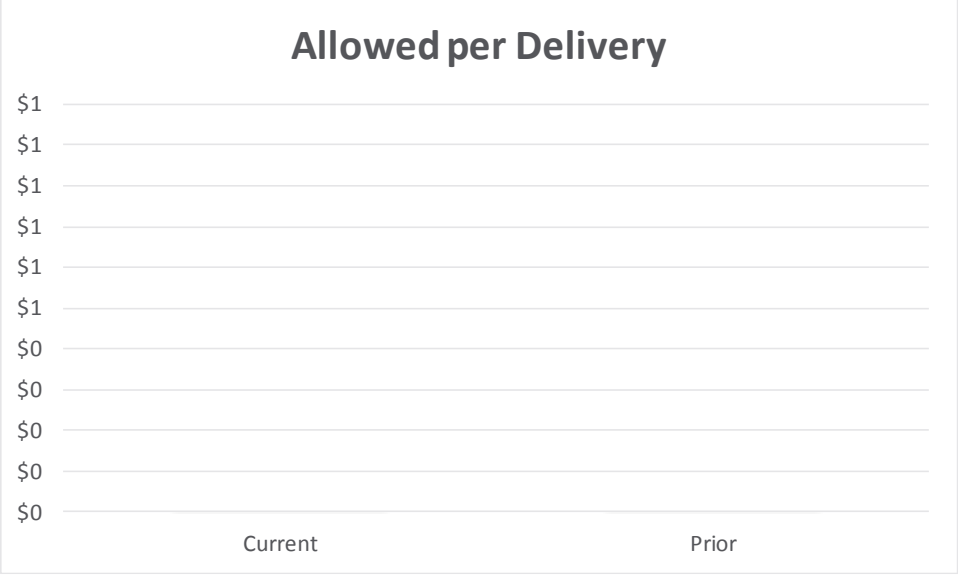
- The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester, on the enrollment start date or within 42 days of enrollment in the organization, and
- The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.

Passport Health Plan estimates compliance for the prenatal care measure using the 2017 measure logic. The following chart displays plan compliance for postpartum care.



Cost

The following chart illustrates average allowed per delivery amounts during the measurement period. These costs are simply the total allowed amounts divided by total deliveries. These amounts do not control for population risks.



The table below summarizes the cost and utilization profiles of the top 10 facilities by total deliveries. Facilities may be more costly than others for various reasons and the plan may want to direct deliveries to facilities with the best rates to minimize costs. Again, neither mother nor baby risk is factored into cost amounts. Since certain facilities may attract higher risk

pregnancies, significantly higher delivery costs should be interpreted relative to the populations which they serve.

Delivering Facility	TIN	Deliveries / K Pregnancies	Allow per Delivery
Hospital #1	111111111	0.0	$0
Hospital #2	111111112	0.0	$0
Hospital #3	111111113	0.0	$0
Hospital #4	111111114	0.0	$0
Hospital #5	111111115	0.0	$0
Hospital #6	111111116	0.0	$0
Hospital #7	111111117	0.0	$0
Hospital #8	111111118	0.0	$0
Hospital #9	111111119	0.0	$0
Hospital #10	111111120	0.0	$0

CONCLUSIONS

Mothers and babies require unique reporting that we have captured using various prevalence, quality, cost, and utilization metrics. Prevalence rates describe the population and the events that surround them. Quality metrics demonstrate adherence to clinical protocols and standards of care. Cost and utilization reporting can identify opportunities to reduce resource variance and promote savings opportunities. When combined, these metrics help health plans survey their overall obstetrics performance.

Both Pregnancy and Delivery sections offer prior year comparisons to help plans determine how they compare to previous years. Should the analysis identify areas that you would like to explore further, we encourage you to reach out to your account executive to discuss your analytics needs.

APPENDIX

Assumptions and Definitions

- Delivery events are identified by either a DRG or CPT procedure code
    - MS-DRG's: 765, 766, 767, 768, 774, 775, 795
    - CPT codes: 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620, 59622
- Delivery Attrition:
    - Live-birth
        - ICD-9 diagnoses: V27.0, V27.2, V27.3, V27.6, V30, V31, V33, V34, V36, V37, V39
        - ICD-10 diagnoses: Z37.0, Z37.2, Z37.3, Z37.5
    - Stillborn
        - ICD-9 diagnoses: V27.1, V27.3, V27.6, V27.4, V27.7, V32, V35
        - ICD-10 diagnoses: Z37.1, Z37.3, Z37.4, Z37.60
    - Miscarriage
        - ICD-9 diagnoses: 634, 637
        - ICD-10 diagnoses: O03
    - Ectopic
        - ICD-9 diagnoses: 633
        - ICD-10 diagnoses: O00
    - Molar
        - ICD-9 diagnoses: 630
        - ICD-10 diagnoses: O01, D39.2
    - Other Abnormal
        - ICD-9 diagnoses: 631, 632
        - ICD-10 diagnoses: O02
    - Abortion
        - ICD-9 diagnoses: 635, 636
        - ICD-10 diagnoses: Z33.2
- Delivery Window
    - For each live birth or stillborn delivery event, we are identifying the delivery window as the period during the inpatient admission that is identified within one day of the delivery or live birth/stillborn attrition code. Starting on the admission date through the discharge date, we are summing the allowed amount for all claims during that window as the delivery allowed amount.
        - Note: if a delivery does not have an inpatient admission within one day of a delivery event we are still counting the delivery just not the delivery cost.
    - For each termination event (i.e. miscarriage, abortion), we are only including the day of the event.
    - Note: only pregnancies that include a delivery or attrition event during the measurement period are included in the report.

- Counting Distinct Termination Events:
    - Each delivery date must be at least 180 days apart
    - Each termination event must be at least 60 days apart
- Pregnancy diagnoses are identified by either a diagnosis code or CPT procedure code
    - Diagnosis codes: identified using the “Passport Health Plan-Pregnancy Diagnosis-2017” value set from Boson.
    - CPT codes: 76801, 76802, 76805
    - To identify the first pregnancy diagnosis for each delivery or termination event
    - Keep all pregnancy claims (defined above) up to 273 days prior to the delivery or termination event
    - The earliest claim within this subset will be identified as the first pregnancy diagnosis
    - If a member has multiple delivery or termination events during the reporting period, for the second event we look for the first pregnancy diagnosis after the end of the delivery window or one day after the termination day to account for the delivery window.
    - Note: a first pregnancy diagnosis will not be found for each delivery or termination event
- Delivery Method
    - Cesarean
        - ICD-9 procedure codes: 74.0, 74.1, 74.2, 74.4, 74.99
        - ICD-10 procedure codes: 10D00Z0, 10D00Z1, 10D00Z2
        - MS-DRG codes: 765, 766
        - CPT codes: 59510, 59514, 59515, 59618, 59620, 59622
    - Vaginal
        - ICD-10 procedure codes: 10D07Z3, 10D07Z4, 10D07Z5, 10D07Z6, 10D07Z7, 10D07Z8
        - MS-DRG codes: 767, 768, 774, 775
        - CPT codes: 59400, 59409, 59410, 59610, 59612, 59614
- High-Risk Pregnancy
    - The high-risk pregnancy codes are too numerous to be included in this report. Please contact the Data Science and Development team for the full list.
- Prenatal Care Measure
    - See HEDIS Prenatal and Postpartum Care Effectiveness of Care Measure
    - We are excluding LOINC codes from the numerator of the prenatal care measure because not all clients’ data includes these codes.
    - Note: the 2016 value set is used to allow for both ICD-9 and ICD-10 diagnosis and procedure codes.
- Birth Procedure Utilization Measures
    - CT scan: 74177, 74178, 74176, 74160, 74150, 74170, 72193, 72192, 72194
    - MRI: 74181, 74183, 72195, 72197
    - X Ray: 74020, 74000, 72170
    - Ultrasound: 76700, 76705, 76802, 76805, 76801, 76817, 76856, 76830
    - For procedure utilization, we count the distinct days on which a procedure occurred between the first pregnancy diagnosis date and the termination date.

- Gestational term at delivery
    - Categories: Pre-Term [0,34], Near-Term (34,37), Term [37,41), Late-Term [41,42), Post-Term [42,∞), Unknown (not classified)
    - Newborn gestational term at delivery is identified using diagnosis codes, MS-DRG codes, or CPT codes using the newborn and mom claims.
    - If the client has a newborn log, this information is also available in that data file and is used to populate the gestational term first, before using the below codes
    - Pre-Term:
        - Newborn Claims:
            - ICD-9 diagnosis codes: 765.20, 765.21, 765.22, 765.23, 765.24, 765.25, 765.26, 765.27
            - ICD-10 diagnosis codes: P07.20, P07.21, P07.22, P07.23, P07.24, P07.25, P07.26, P07.31, P07.32, P07.33, P07.34, P07.35, P07.36, P07.37
            - MS-DRG codes: 789, 790
        - Mom Claims:
            - ICD-9 diagnosis codes: 644.20, 644.21
            - ICD-10 diagnosis codes: O60.10X0, O60.10X1, O60.10X2, O60.10X3 O60.10X4, O60.10X5, O60.10X9, O60.12X0, O60.12X1, O60.12X2, O60.12X3, O60.12X4, O60.12X5, O60.12X9, O60.13X0, O60.13X1, O60.13X2, O60.13X3, O60.13X4, O60.13X5, O60.13X9, O60.14X0, O60.14X1, O60.14X2, O60.14X3, O60.14X4, O60.14X5, O60.14X9
    - Near-Term:
        - Newborn Claims:
            - ICD-9 diagnosis codes: 765.20, 765.28
            - ICD-10 diagnosis codes: P07.30, P07.38, P07.39
            - MS-DRG codes: 791, 792
            - CPT codes: 49491, 49492
    - Term:
        - Newborn Claims:
            - MS-DRG codes: 793
    - Late-Term:
        - Newborn Claims:
            - ICD-9 diagnosis codes: 766.21
            - ICD-10 diagnosis codes: P08.21
        - Mom Claims:
            - ICD-9 diagnosis codes: 645.10, 645.23
            - ICD-10 diagnosis codes: O48.0, O48.1
    - Post-Term:
        - Newborn Claims:
            - ICD-9 diagnosis codes: 766.22
            - ICD-10 diagnosis codes: P08.22
    - Unknown:
        - If the gestational term is unknown

        - Note: Due to the limited number of diagnosis codes that identify a baby born at “term”, the large “unknown” prevalence likely includes mostly newborns born at term.

    - Additionally, the mother’s claims will include pregnancy diagnosis codes that begin with Z3A, with modifiers that identify the number of weeks gestation at the service date. We can use these codes to back out the gestational age at delivery by keeping the last claim with this diagnosis code before delivery.
- Birthweight at delivery
    - Categories: Very Low [0,1500), Low [1500,2499), Normal [2500,3999), Macrosomia [4000, ∞), Unknown (not classified)
    - Newborn birthweight is identified using diagnosis codes, CPT codes or HCC’s using the newborn claims
    - If the client has a newborn log, this information is also available in that data file and is used to populate the birthweight first before using the codes below
    - Very Low:
        - ICD-9 diagnosis codes: 764.01, 764.02, 764.03, 764.04, 764.05, 764.11, 764.12, 764.13, 764.14, 764.15, 765.00, 765.01, 765.02, 765.03, 765.14, 765.15
        - ICD-10 diagnosis codes: P05.01, P05.02, P05.03, P05.04, P05.05, P05.11, P05.12, P05.13, P05.14, P05.15, P07.00, P07.01, P07.02, P07.03, P07.14, P07.15
        - HCC codes: 242, 243, 244, 245
        - CPT codes: 99478
    - Low:
        - ICD-9 diagnosis codes: 764.00, 764.06, 764.07, 764.08, 764.10, 764.16, 764.17, 764.18, 765.10, 765.16, 765.17, 765.18
        - ICD-10 diagnosis codes: P05.00, P05.06, P05.07, P05.08, P05.10, P05.16, P05.17, P05.18, P07.10, P07.16, P07.17, P07.18
        - HCC codes: 246, 247
        - CPT codes: 99479
    - Normal:
        - ICD-9 diagnosis codes: 764.20
        - ICD-10 diagnosis codes: P05.2
        - HCC codes: 249 if not classified by other categories
        - CPT codes: 99480
    - Macrosomia:
        - ICD-9 diagnosis codes: 766.0, 766.1
        - ICD-10 diagnosis codes: P08.0, P08.1
    - Unknown:
        - If birthweight is unknown
        - Note: Due to the limited number of diagnosis codes that identify a baby born within the “normal” weight range, the large “unknown” prevalence likely includes mostly newborns born within the “normal” weight range.
- NICU Admission

    - NICU admission is identified by the revenue code 172, 173, or 174 in the finclaims data
    - If multiple revenue codes are reported for a given baby, we will identify the NICU admission as the most severe revenue code (highest level)
- Delivery Complications:
    - Other Assisted Delivery
        - Delivery with one of the following procedure codes within 2 days of delivery date:
            - ICD-9 procedure codes: 72.2, 72.3, 72.4, 72.5, 72.6, 72.8, 72.9
            - ICD-10 procedure codes: 10D07Z4, 10D07Z5, 10S07ZZ, 10D07Z8
    - Low forceps
        - Delivery with one of the following procedure codes within 2 days of delivery date:
            - ICD-9 procedure codes: 72.0, 72.1, 72.7
            - ICD-10 procedure codes: 10D07Z3 10D07Z6
    - Shoulder Dystocia
        - Vaginal delivery with one of the following diagnosis codes within 2 days of delivery date:
            - ICD-9 diagnosis codes: 660.41
            - ICD-10 diagnosis codes: O66.0
    - Episiotomy
        - Vaginal delivery with one of the following procedure codes within 2 days of delivery date:
            - ICD-9 procedure codes: 73.6
            - ICD-10 procedure codes: 0W8NXZZ
    - Third Degree Laceration
        - Vaginal delivery with one of the following diagnosis codes within 2 days of delivery date and does not also have fourth-degree laceration:
            - ICD-9 diagnosis codes: 664.2
            - ICD-10 diagnosis codes: O70.2
    - Fourth Degree Laceration
        - Vaginal delivery with one of the following diagnosis codes within 2 days of delivery date:
            - ICD-9 diagnosis codes: 664.30, 664.31, 664.34
            - ICD-10 diagnosis codes: O70.3
    - Birth Trauma:
        - Delivery with one of the following diagnosis codes within 2 days of delivery date:
            - ICD-9 diagnosis codes: 767.0, 767.11, 767.3, 767.4, 767.5, 767.7, 767.8
            - ICD-10 diagnosis codes: P10.0, P10.1, P10.4, P52.4, P12.2, P13.0, P13.2, P13.3, P13.8, P11.5, P11.3, P11.4, P14.2, P14.8, P15.0, P15.1, P15.2, P15.3, P15.5, P15.8

        - But doesn't include one of the following diagnosis codes within 2 days of delivery date:
            - ICD-9 diagnosis codes: 765.00, 767.01, 765.02, 765.03, 765.04, 765.05, 765.06, 765.07, 765.11, 765.12, 765.13, 765.14, 765.15, 765.16, 765.17, 767.6, 756.51
            - ICD-10 diagnosis codes: P07.00, P07.10, P07.02, P07.03, P07.14, P07.15, P07.16, P07.17, P07.01, P14.0, P14.1, P14.3, Q78.0
- Postpartum Care Measure
    - See HEDIS Prenatal and Postpartum Care Effectiveness of Care Measure
    - We are excluding LOINC codes from the numerator of the postpartum care measure because not all clients' data includes these codes.
    - Note: the 2016 value set is used to allow for both ICD-9 and ICD-10 diagnosis procedure codes.