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Massachusetts Statewide Quality Advisory Committee

Summary of Research and Stakeholders' Perspectives on Quality Measurement and Reporting of Obstetric Care in the Commonwealth



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BACKGROUND

The Massachusetts Statewide Quality Advisory Committee (SQAC) comprises a diverse group of health care experts, industry stakeholders, and consumer advocates, and is chaired by the Executive Director of the Center for Health Information and Analysis (CHIA).

To begin an assessment around incorporating quality measures for physician specialties in to the Commonwealth's Standard Quality Measure Set (SQMS), the Committee chose to evaluate the feasibility of reporting on measures of obstetrical and maternity care. Obstetrics was selected for several reasons: measures in the field have been tested, are generally considered valid and are widely used; recent reductions in early elective deliveries in Massachusetts demonstrate effective stakeholder engagement in quality improvement; and public reporting of quality data has the potential to provide consumers with relevant and actionable information as they consider their obstetric care options.

This study included a survey of available obstetrical and maternity care quality measures, stakeholder outreach, and key informant interviews. See Appendices A and B for details on study approach and a full list of interview participants.

STAKEHOLDER FEEDBACK

Quality Concerns in Maternity Care

The high rate of cesarean sections (C-sections) nationwide and in Massachusetts was cited as a major quality concern. Rates in Massachusetts are consistent with the nation, with about one-third of deliveries in the Commonwealth being performed by C-section.¹ There was nearly unanimous agreement that reducing the high rate of C-sections was a top priority. Related to this concern is the low rate of women having a vaginal birth after cesarean (VBAC). Interviewees felt that VBACs could reduce the risk of complications related to C-sections and improve patient experience. They expressed that providers can share information with patients to better inform their choices and engage patients in their care, which could result in lower costs and higher quality care. Some advocacy organizations viewed these issues as the result of an over-medicalization of pregnancy and delivery, meaning potentially unnecessary operations, tests and treatments may be administered, which can introduce new risks for patients. Patient education was considered an important way for expecting mothers to have more meaningful discussions with their obstetricians about their need for medical interventions. Interviewees also voiced continuing concerns about the rate of early elective deliveries in Massachusetts. Although hospitals and providers in Massachusetts have been actively focused on this issue and have reduced early elective deliveries, stakeholders advocated for continued attention.

Another quality concern noted by interviewees related to fertility treatments. According to interviewees, patients may undergo many rounds of costly treatment without being informed about the

¹ "Massachusetts Births 2010," Massachusetts Department of Public Health, March 2013. Available at <http://www.mass.gov/eohhs/docs/dph/research-epi/birth-report-2010.pdf> (Accessed May 26, 2015)

likelihood of success, potential risks associated with later-in-life pregnancies, and the potential complications related to carrying and delivering multiples. Better treatment and genetic counseling was mentioned as necessary for this patient population. Another concern was the lack of information for all stakeholders on fertility treatment outcomes, including whether treatment resulted in pregnancy and whether the pregnancy was followed by healthy outcomes for mother and newborn.

Other quality improvement opportunities cited by interviewees included: infant mortality; maternal morbidity; screening to identify drug-addicted babies; support for and information on breastfeeding; and the use of antenatal steroids for women at risk of preterm birth, to reduce the risks of complications related to prematurity. Additionally, interviewees cited transitions in care – for the mother from obstetrical care to primary care and for the newborn from hospital care to pediatric care – as an area of needed focus, but acknowledged the challenges of assigning accountability for these transitions.

Measuring Maternity Care Quality

Quality Data and Measures Currently Used by Stakeholders

Interviewees were asked what obstetrical quality measures are used by their organizations. Most interviewees reported that they use primarily measures that are required by or align with national programs of the Centers for Medicare and Medicaid Services (CMS) and The Joint Commission. MassHealth, as a large public payer, described a more in-depth measure selection process for their pay-for-performance initiatives; measures are selected based on the volume and cost of services and whether they are useful for identifying disparities in care. Interviewees were also asked what quality data their organizations currently provide to other agencies or organizations. Among the providers interviewed, their organizations submit data on births and delivery outcomes to the Massachusetts Department of Public Health, The Leapfrog Group, The Joint Commission and, for participating providers, the Vermont Oxford Network, a non-profit collaborative that supports neonatal quality improvement initiatives.

As described in the Approach section, interviewees were also asked to review a list of 63 obstetrical measures, flag the measures their organization currently uses, and provide their perceptions on the usefulness of the measures. Of the 63 measures presented to interviewees, 14 were flagged as most frequently used and appropriate for multiple uses. Those measures are ranked below by frequency of use and number of cited uses.

Obstetric Measures

1. PC-01 Elective Delivery (elective vaginal deliveries or elective cesarean sections at ≥ 37 and < 39 weeks of gestation completed)²
2. PC-02 Cesarean Section: percentage of nulliparous (first-time pregnancy) women with a term, singleton baby in a vertex position delivered by cesarean section^{3,2}

² The Massachusetts affiliate of ACOG endorsed these measures as appropriate for measuring obstetrical care.

³ Measure is included in the SQMS

3. Appropriate Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision – Cesarean section
4. Maternity care: vaginal birth after Cesarean (VBAC) delivery rate, uncomplicated.
5. Obstetric Trauma Rate - Vaginal Delivery with Instrument: 3rd and 4th degree obstetric lacerations: rate per 1,000 instrument-assisted vaginal deliveries (PSI 18)³
6. Obstetric Trauma Rate - Vaginal Delivery with Instrument: 3rd and 4th degree obstetric lacerations: rate per 1,000 vaginal deliveries without instrument assistance (PSI 19)³
7. Rate of early elective deliveries between 37 and 39 completed weeks of gestation^{3,4}
8. Under 1500g infant Not Delivered at Appropriate Level of Care : The number per 1,000 live births weighing less than 1500g delivered at hospitals not appropriate for that size infant
9. PC-03 Antenatal Steroids: Patients at risk of preterm delivery at ≥ 24 and < 34 weeks gestation receiving antenatal steroids prior to delivering preterm newborns³
10. Appropriate DVT prophylaxis in women undergoing cesarean delivery^{2,3}
11. Maternity care: vaginal birth after Cesarean (VBAC) delivery rate, all
12. Maternity care: Cesarean delivery rate

Neonatal Measures

1. PC-05 Exclusive Breast Milk Feeding: number of newborns exclusively fed breast milk during the newborn's entire hospitalization and the subset measure PC-05a Exclusive Breast Milk Feeding Considering Mother's Choice: includes only those newborns whose mothers chose to exclusively feed breast milk²
2. PC-04 Health Care-Associated Bloodstream Infections in Newborns

Most commonly, interviewees advocated use of these measures for internal quality improvement. Some also advocated public reporting of provider performance on these measures, while others found some measures useful for contracting, including incentives and tiering. Of the 63 measures presented to interviewees for evaluation, 12 are in the SQMS; six of the 14 measures that were identified as having a broad range of uses are SQMS measures, including two of the Agency for Healthcare Research and Quality's (AHRQ) Patient Safety Indicators and two of the Perinatal Care (PC) measures developed by The Joint Commission.

Need for Additional Measurement and Reporting

Interviewees noted that, while many important aspects of maternity care are addressed by well-established measures, existing measures do not cover the full spectrum of quality concerns in obstetrical and neonatal care. The following gaps in measurement were identified:

- Care for drug-exposed babies
- Maternal and neonatal outcomes after fertility treatment
- Patient experience
- Care transitions
- Postpartum morbidity
- Evidence-based processes for labor and delivery (e.g., application of standardized admissions criteria)

⁴ This measure is collected by The Leapfrog Group and distinct from PC-01: Elective Delivery (rate of elective deliveries between 37 and 39 weeks).

The most widely-used measures reflect care related to delivery and provided in the hospital, not in the ambulatory setting where important prenatal care and patient education occur, indicating a need for more obstetrical measures of outpatient care. Another opportunity exists in developing evidence-based obstetric process measures. Significant research has been published on best practices for maternity care and interviewees noted that these standards are not uniformly followed by obstetricians and some differences in quality performance can be attributed to practice variation. More evidence-based process of care measures would help to identify unnecessary practice variation.

Barriers to Reporting Existing Measures

Although the overall consensus among interviewees was that established and commonly used measures capture some important aspects of the quality of care well, they also highlighted barriers to reporting these measures. Interviewees identified data collection, data quality and provider attribution as obstacles to effective quality measurement and improvement practices.

Data Collection

While some measures of maternity care quality rely exclusively on claims data, most require at least some data from patient medical records and a few rely on patient-reported data. The primary barrier cited by interviewees related to the availability of data for quality measurement and improvement. This issue varied depending on the interviewees' role in the health care system. Interviewees representing a health plan perspective noted the difficulty in receiving medical record data from providers. Providers must have the IT infrastructure to transfer data from records or the health plan may administer their own record review process, but that is costly and labor-intensive. There are also legal and IT security implications for organizations that handle confidential and sensitive data. Provider interviewees or interviewees representing providers, on the other hand, noted that they can more easily access data from medical records, but have limited access to data from other sources, for example vital statistics and birth certificate data, to answer more complex questions about maternity and neonatal outcomes and inform their quality improvement initiatives. Further, small hospitals often lack the IT resources and technical skills to extract data medical records and calculate complex measures even for internal use.

Data Quality

Interviewees also cited data quality as a barrier to calculating performance on current measures. The data quality issues noted were coding errors when translating clinical information to a claim, missing or inaccurate information in medical records, and the potential for errors in automated data feeds from providers to other organizations.

Provider Attribution

The potential for inaccurate attribution of a patient and his/her care to a specific physician was also a noted barrier. For example, the attending physician may be named in a medical record or claim, rather than the delivering obstetrician, which may have implications for physician-level quality performance and outcomes data. Accurate attribution of patient care to providers is a broadly expressed concern regarding quality measurement in general, and SQAC staff will seek further information and understanding of this complex issue.

Accountability for Maternity Care

SQAC staff asked interviewees to comment on the maternity and post-partum outcomes obstetricians should be held accountable. Interviewees noted that individual providers should be held accountable for upholding a high standard of care and applying the processes of care that have been well-researched and are demonstrably beneficial to patients. These include following postpartum hemorrhage protocols, supporting exclusive breastfeeding, following prematurity prevention guidelines, and providing and following up on maternal depression screening.

Many interviewees identified the following as important areas for obstetrician accountability:

- C-section rates
- Vaginal births after C-sections
- Early elective delivery rates
- Patient experience
- Post-delivery maternal morbidity
- Birth trauma
- Newborn outcomes
- Neonatal readmissions

Interviewees said that these outcomes were important for both monitoring and improving provider quality over time and for providing information to support consumer decision-making. Given the concerns about attribution, some interviewees felt that it is unfair to hold obstetricians accountable for certain outcomes. For instance, obstetrical providers raised concerns about unavoidable problems that are counted as negative outcomes in the AHRQ Patient Safety Indicators (PSIs) and which are currently included in the SQMS (delivery related lacerations and injuries to neonate).⁵

Obstetricians generally view neonatal quality measures as the responsibility of pediatricians and pediatric sub-specialists. Other interviewees noted there is a lack of clarity on when a neonate becomes the responsibility of the obstetrical provider or the pediatric provider, underscoring the need for agreement on the measures appropriate for different provider types.

Advancing Maternity Care Quality

Interviewees expressed that the state can support quality measurement and improvement in obstetrical care by aligning measures across plans and programs, making more current maternity care data available, and publicly reporting provider performance on certain measures. Two interviewees named specific recommendations for action that state agencies could take to improve obstetrical care quality in Massachusetts. The first was that the state could create a special task force to examine data and advise hospitals on the implementation of specific improvement strategies. The second recommendation was that state government publish standard metrics and data for all hospitals to highlight high performing hospitals and steer patients and families toward high quality providers.

⁵ AHRQ guidance on these measures is that the benchmark for these rates is not zero, due to unavoidable injuries.

CONCLUSION

The SQAC evaluated quality measurement in obstetrics in order to better understand whether and how specialist measures should be added to the SQMS. Overall, staff found that providers and experts were highly engaged and willing to discuss the current opportunities and challenges in measuring obstetrical and maternity care quality. Additionally, staff found 63 measures of obstetrical, maternity and neonatal care that are well-tested and well-established, 14 of which are widely supported by providers and experts and appropriate for a variety of measurement uses.

Based on this research, SQAC staff concluded that collecting and reporting some **hospital-specific** data for available measures is feasible and is being done currently by CHIA, but that collecting and reporting data at the **individual obstetrician** level is currently not feasible. For this reason, it may not be appropriate to include additional obstetrical measures for individual providers in the SQMS at this time.

Three specific issues related to collecting and reporting individual obstetrician performance data were uncovered in this research:

1. The limited availability of the clinical data necessary to calculate performance on many available quality measures. As data availability improves through provider engagement and technology, individual physician reporting will become increasingly feasible. In the meantime, CHIA will continue to publicly report on maternity care at the hospital level.
2. The potential for inaccurate attribution of care and outcomes to physicians using current data sources and measures. Stakeholders can be further engaged to address this challenge, as reporting of individual physician performance is developed.
3. The most well-established measures in this field capture care provided in hospitals and not ambulatory care settings, thus limiting the scope of maternity care measurement. Other medical specialists and types of providers such as nurse practitioners, genetic counselors, breastfeeding consultants, and others influence maternal and newborn quality of care. To fully capture patient experience and maternity care quality, measurement should go beyond hospital-based obstetrical care.

While these findings relate to obstetrical and maternity care, staff conclude that the barriers and limitations uncovered in this study apply to measurement of specialty care more broadly. In addition, this study showed that learning about the specific quality measures, data, and the unique challenges inherent in any particular specialty can be complex and time-intensive. As the SQAC explore these topics in the future, staff can build on what was learned about the process of conducting this study: the importance of engaging experts from a variety of positions in the specialty, to learn about opportunities and challenges from multiple perspectives; that the specialty organization must be involved, as those stakeholder groups can provide important context for issues and interests in the field; and the value in receiving feedback on specific measures from those who work directly with those measures.

Appendix A: Methods

Study Approach

To inform the SQAC's decision about whether adding obstetric measures to the SQMS would be feasible and desirable, SQAC staff researched the following topics:

- Areas of quality concern in the field of obstetrics
- Use of current obstetrical quality measures
- Perceptions of appropriate uses of the measures
- Obstetrician accountability for quality
- Challenges to measuring and reporting obstetrical and maternity care quality

This study included a survey of available obstetrical care quality measures, stakeholder outreach, and key informant interviews.

Quality Measures Research

SQAC staff conducted a literature review and compiled a list of available obstetrical care quality measures based on a review of both the National Quality Forum and the National Quality Measures Clearinghouse databases. In their review, staff applied a broad interpretation of obstetrical care and included measures of prenatal and postpartum obstetrical and maternal care. Available measures of neonatal care were also included, as these measures are sometimes paired with obstetric and maternal care. Staff identified 63 obstetric quality measures, 12 of which are already part of the SQMS hospital measures set (see Appendix C).

Stakeholder Outreach

In preparing for stakeholder outreach, staff compiled a list of potential interviewees by asking for input from the SQAC and other stakeholders on individuals, programs, and organizations that should be included in the process. A variety of organizations with an interest in obstetrical and neonatal care were identified, including in both public and private sectors and representing providers, health plans, patient advocates, quality improvement organizations, and professional associations.

Appendix B: Key Informant Interviews

SQAC staff conducted telephone interviews with representatives from 14 organizations. Prior to conducting telephone interviews, SQAC staff distributed to all interviewees a worksheet outlining the 63 obstetrical and neonatal quality measures identified in their research. Staff asked interviewees to flag the measures currently used by their organization and to note the potential uses for each measure. Interviewees could select from the following measure uses: public reporting, tiering, quality improvement, and incentives.

SQAC staff requested that worksheets be returned before the interview, which helped to frame a discussion of the quality measures currently used by the organizations and the interviewees' opinions on the appropriate uses of each measure.

Each interviewee was also asked questions on the following topics:

1. What are the primary quality and measurement concerns in obstetrics?
2. For what outcomes should obstetricians be held accountable?
3. What do consumers want to know about obstetrical care quality?
4. What can the state do to support quality measurement and improvement in these fields?
5. What are the potential barriers to measuring obstetrical care quality?

In addition to interviewees, the Massachusetts affiliate of the American Congress of Obstetricians and Gynecologists (ACOG) held a large meeting with providers and representatives to address the questions outlined above. The meeting included OB/GYNs, nurse midwives, labor nurses, Maternal and Fetal Medicine (MFM) specialists, obstetric department chairs or designees, representatives from the Massachusetts Medical Society's Obstetrics/Maternal Fetal Medicine staff, and Family Medicine and Pediatric provider representatives.

Key Informant Interviewees

We would like to thank the following individuals for their contributions.

Karin Downs, Director of Massachusetts Department of Public Health's Pregnancy, Infancy, and Early Childhood Division, Bureau of Family Health and Nutrition

Beth Foley, Vice President, Quality and Clinical Operations, Fallon Community Health Plan

Becky Wimmer, Executive Director, Massachusetts Academy of Family Physicians

Bonnell Glass, Chair, Massachusetts Perinatal Quality Collaborative

Lauren Porter, Project Manager, Massachusetts Health Quality Partners

Jan Singer, Vice President of Programs and Operations, Massachusetts Health Quality Partners

Karen Smith, Executive Director, Massachusetts Child Health Quality Coalition, Massachusetts Health Quality Partners

Carol Sakala, Director, Childbirth Connections, National Partnership for Women and Families

Jean Spitz, Executive Director, Perinatal Quality Foundation

Kathleen Pietrowski, Senior Clinical Consultant, Harvard Pilgrim Health Care

Iris Garcia, MassHealth Office of Providers & Plans

MaryAnne Bombaugh, Chair, Massachusetts Affiliate of the American Congress of Obstetricians and Gynecologists

Lorna Wilkerson, Tufts Health Plan

Julie Paul, Vice President, Massachusetts Affiliate of the American College of Nurse-Midwives

Alan Picarillo, Neonatal Quality Improvement Collaborative of Massachusetts

Munish Gupta, Neonatal Quality Improvement Collaborative of Massachusetts

Melissa Danforth, Senior Director, Hospital Ratings, The Leapfrog Group

MA-ACOG Provider Meeting:

Approximately 25 provider representatives participated. Dr. Maryanne Bombaugh, the Massachusetts Chapter's Chairperson, provided the collective provider response.

Institutional representation included: Baystate Medical Center, Brigham & Women's Hospital, Cape Cod Healthcare, Heywood Hospital, Massachusetts General Hospital, St. Elizabeth's Hospital, South Shore Hospital, and UMass Medical Center.

Interview Guide

Current Uses of Obstetrical Quality Measures

1. You have told us which measures your organization uses. How did you choose these measures?
 - a. Overall, on a scale of 1 to 5, how well are they working for you? With 1 being "not well at all" and 5 being "extremely well"
 - b. In the preparation materials, we asked about measures being used for public reporting, tiering, quality improvement, and incentives. Do you use quality measures for any other purposes?

2. Can you comment generally on the relative strengths and weaknesses of the obstetrical measures your organization uses?
3. What are the primary data sources for your quality metrics?
4. What data related to obstetrical care do you currently report to other organizations (e.g., health plans, regulatory bodies, the Leapfrog Group, etc.)?
 - a. How do you transfer those data? Internet portal? Direct feed? On site chart reviews?

Quality & Measurement Concerns in Obstetrics

5. Thinking broadly about health care in Massachusetts, what are the most pressing quality concerns related to maternity and obstetrical care? Are these also important issues nationwide?
 - a. Are there quality measures available that address these areas? If so, are you using them?
 - b. What can state government do to support measurement of these important aspects of care?
6. Are there existing measures that you want to use but can't for some reason? If so, what barriers are you facing? Do you think that a state agency would face similar barriers to using these measures?
7. Is there an area you'd like to see measured for which measures haven't been developed yet?
 - a. Do you know about the barriers to measuring this?
 - b. Is anyone developing a measure for this?
8. Thinking broadly about OB care: On a scale of 1 to 5, how accurately do existing measures reflect the quality of obstetrical care?
 - a. Are there any measures that are particularly good at reflecting OB care quality that you would recommend for quality reporting?
 - b. Are there measures that are widely used that are particularly bad at reflecting quality of OB care?

Use of Obstetrical Care Quality Data

9. Is there a value to your organization of the state measuring OB quality and publicly reporting performance?

10. Thinking broadly about the field, for what outcomes do you think obstetricians should be held accountable through contracting and incentives?

11. What do you think consumers want to know about OB quality?

Closing thoughts?

Thank you.

Appendix C: Obstetric and Neonatal Quality Measures

Prior to phone interviews, CHIA asked respondents to indicate, for each of the measures below, whether their organizations currently used the measure and for their perception of the best uses for the measure. The table below indicates how many organizations responded that it uses the measure or sees a potential use. The table represents feedback from 8 organizations.

In addition to the 8 responding organizations represented in the table, MA-ACOG endorsed the use of the following 8 measures:

1. PC-01 Elective Delivery (rate of deliveries between 37 and 39 weeks)
2. PC-02 Cesarean Section: percentage of nulliparous women with a term, singleton baby in a vertex position delivered by cesarean section.
3. PC-03 Antenatal Steroids
4. PC-05 Exclusive Breast Milk Feeding and the subset measure PC-05a Exclusive Breast Milk Feeding Considering Mother's Choice
5. Rate of Babies Electively Delivered Before Full-Term
6. Incidence of Episiotomy
7. Appropriate DVT prophylaxis in women undergoing cesarean delivery
8. Maternal Depression Screening

<i>Obstetric Measures</i>							
NQF #	Measure	In the SQMS	Currently Used by Org.	Perceived as Useful Measures for These Purposes			
				Public Reporting	Tiering	Quality Improvement	Incentives
469	PC-01 Elective Delivery (rate of deliveries between 37 and 39 weeks)		3	5	3	5	4
471	PC-02 Cesarean Section: percentage of nulliparous women with a term, singleton baby in a vertex position delivered by cesarean section.	✓	2	5	3	4	2
472	Appropriate Prophylactic Antibiotic Received Within One Hour Prior to Surgical		2	4	1	4	2

	Incision – Cesarean section						
	Maternity care: vaginal birth after Cesarean (VBAC) delivery rate, uncomplicated.		2	5	2	3	1
	Obstetric trauma (3rd or 4th degree lacerations): rate per 1,000 instrument-assisted vaginal deliveries. (PSI 18)	✓	3	3	1	4	0
	Obstetric trauma (3rd or 4th degree lacerations): rate per 1,000 vaginal deliveries without instrument assistance (PSI 19)	✓	3	3	1	4	0
	Rate of Babies Electively Delivered Before Full-Term	✓	1	4	1	3	2
477	Under 1500g infant Not Delivered at Appropriate Level of Care		1	4	1	3	1
476	PC-03 Antenatal Steroids	✓	2	1	0	4	3
473	Appropriate DVT prophylaxis in women undergoing cesarean delivery	✓	1	3	1	3	2
	Maternity care: vaginal birth after Cesarean (VBAC) delivery rate, all		3	4	1	2	0
	Maternity care: Cesarean delivery rate		1	3	1	3	1

1746	Intrapartum Antibiotic Prophylaxis for Group B Streptococcus (GBS)		1	3	0	3	1
470	Incidence of Episiotomy	✓	1	4	0	2	1
	Risk-adjusted rate of urgent readmission for obstetric patients within 30 days of discharge		1	2	1	4	0
	Foreign object retention: percentage of vaginal deliveries where a final count was conducted.		1	1	1	4	1
1517	Timeliness of prenatal care: percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization.	✓	2	1	1	3	0
	Foreign object retention: percentage of vaginal deliveries where a baseline count was conducted.		0	1	1	4	1
	Rh Immunoglobulin (Rhogam) for Rh-Negative Pregnant Women at Risk of Fetal Blood Exposure		1	3	1	2	0
1401	Maternal		1	2	1	2	0

	Depression Screening						
1391	Frequency of Ongoing Prenatal Care (FPC)	✓	2	2	0	2	0
716	Healthy Term Newborn		1	2	1	1	1
	Adverse Outcome Index: Includes - Five Minute APGAR Less Than 7; Birth Trauma; In-hospital Maternal Deaths; Uterine Rupture During Labor; Unplanned maternal admission to the ICU; In-hospital Neonatal Death; Admission to NICU at Term; Third or Fourth Degree Perineal Laceration; Unanticipated Operative Procedure and Maternal blood transfusion		0	3	0	3	0
	Pregnant women that had syphilis screening		1	1	1	3	0
	Prenatal Blood Group Antibody Testing		1	2	1	2	0
651	Ultrasound determination of pregnancy location for pregnant patients with abdominal pain		1	1	1	2	0
	Birth Trauma – Injury to Neonate (PSI 17)	✓	1	2	0	2	0

Routine prenatal care: percentage of patients planning a pregnancy who receive counseling and education before pregnancy according to the guideline.		1	0	1	3	0
Routine prenatal care: percentage of patients who have had identified preterm birth (PTB) modifiable risk factors who receive an intervention		0	0	1	4	0
Pregnant women that had HIV testing.		0	1	1	3	0
Pregnancy test for female abdominal pain patients		1	1	1	2	0
Prenatal Anti-D Immune Globulin		1	1	1	2	0
Percentage of pregnant patients who receive counseling about aneuploidy screening in the first trimester		1	1	1	2	0
Percentage of pregnant patients who have an initial risk assessment completed within two visits of initiation of prenatal care		0	0	0	3	1
Percentage of patients, regardless of age, who gave birth during a 12-month period who were screened for		0	1	1	2	0

	HIV infection during the first or second prenatal care visit						
	Severity-Standardized ALOS - Deliveries		1	1	0	1	0
	Routine prenatal care: percentage of patients planning pregnancy who have preconception risk assessment/counseling		0	0	1	2	0
	Pregnant women that had HBsAg testing.		0	0	0	2	0
1814	Counseling for Women of Childbearing Potential with Epilepsy		0	1	0	0	0
	Diabetes and Pregnancy: Avoidance of Oral Hypoglycemic Agents		0	0	0	1	0
	Percentage of pregnant patients who receive counseling and education at each visit as outlined in the guideline		0	0	0	1	0
	Percentage of VBAC-eligible pregnant patients who have a collaborative conversation with their clinician about the risks and benefits of VBAC		0	0	0	1	0

Neonatal Measures							
NQF #	Measure	In the SQMS	Currently Used by Org.	Perceived as Useful Measures for These Purposes			
				Public Reporting	Tiering	Quality Improvement	Incentives
480	PC-05 Exclusive Breast Milk Feeding and the subset measure PC-05a Exclusive Breast Milk Feeding Considering Mother's Choice		3	3	1	2	2
1731	PC-04 Health Care-Associated Bloodstream Infections in Newborns		3	3	0	1	2
477	Under 1500g infant Not Delivered at Appropriate Level of Care		2	2	1	2	1
716	Healthy Term Newborn		1	2	1	1	1
304	Late sepsis or meningitis in Very Low Birth Weight (VLBW) neonates (risk-adjusted)		2	2	0	1	0
	Proportion of infants covered by Newborn Bloodspot Screening (NBS)		1	1	1	2	0
	Neonatal Immunization		1	2	1	1	0
1382	Percentage of low birth weight births		3	0	0	1	0
1354	Hearing screening prior to hospital discharge		1	1	1	1	0
714	Standardized mortality ratio for neonates undergoing non-cardiac surgery		2	1	0	1	0

483	Proportion of infants 22 to 29 weeks gestation screened for retinopathy of prematurity		1	2	0	1	0
478	Neonatal Blood Stream Infection Rate (NQI #3)		1	2	0	0	1
	Birth Trauma – Injury to Neonate (PSI 17)	✓	2	1	0	1	0
	Late sepsis or meningitis in neonates (risk-adjusted)		1	2	0	1	0
	Percentage of newborns delivered from mothers who tested positive for hepatitis B surface antigen (HBsAg) during pregnancy who receive birth doses of hepatitis B virus (HBV) vaccine and hepatitis B immune globulin (HBIG) within 12 hours of delivery		0	2	1	1	0
	First NICU Temperature < 36 degrees Centigrade		1	1	0	1	0
	First temperature measured within one hour of admission to the NICU		1	1	0	1	0
	Proportion of infants 22 to 29 weeks gestation treated with surfactant who are treated within 2 hours of birth		1	1	0	1	0

	Birth dose of hepatitis B vaccine and hepatitis B immune globulin for newborns of hepatitis B surface antigen (HBsAg) positive mothers		0	1	1	1	0
278	Low Birth Weight Rate (PQI 9)	✓	1	1	0	0	0
475	Hepatitis B Vaccine Coverage Among All Live Newborn Infants Prior to Hospital or Birthing Facility Discharge		0	0	0	0	0