Obstetrical Care Outcomes Assessment Program: A White Paper in Three Parts

Part III: Creating Sustainable, Person-Centered Improvement Processes

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Data Infrastructure and Feedback

OB COAP meaningfully and sustainably improves patient care and experience in partnership with member delivery sites and clinicians by providing the **right data**, **precise reporting**, and **actionable analytics**. A continuous data feedback loop informs program-wide and delivery system specific improvement and understanding of intended and unintended impacts of initiatives. OB COAP improves care across birth settings by serving as an external resource due to variation in site-level resourcing, staff expertise, and administrative support to evaluate and improve care.

OB COAP provides **the right data**: timely, accurate data that thoroughly describes the course of labor and birth (e.g., whether a patient admitted in spontaneous labor attempts a vaginal birth or is taken directly to cesarean section). Clinical data reflects details documented in a medical record and accurately reflects clinical actions compared to administrative claims or coding data used to optimize payment.

OB COAP provides **precise reporting** at the system, site, practitioner, and pregnant person level that attributes care appropriately and sets benchmarks for performance. Quality improvement requires engagement by clinicians at the bedside and their confidence that information is accurate and reflective of the full patient care trajectory. Labor and delivery are managed by a variety of practitioners with variation in scope of practice (e.g., manage labor but transfer care to another clinician if an operative delivery is required) which causes C-section rate from administrative to inaccurately be zero even the provider who managed labor contributed to the need for a C-section. Similarly, practitioners performing operative deliveries following labor management by another practitioner will have inaccurate higher operative delivery rates. Further, as many people labor over several days, multiple health care providers can manage the labor of one person, another factor lost in administrative data. Accounting for consultation, call, and coverage by knowing who admitted the patient, who provided most of the labor management, and who performed the delivery allows for appropriate attribution of outcomes and for change management initiatives to occur if needed.

OB COAP provides **actionable analytics** including stratification of metrics including by race and ethnicity, socioeconomic factors, type of practitioner, existence of certain practices (e.g., Team Birth huddles, support from doulas), and timeline of care (e.g., length of second stage of labor). This allows for analysis and understanding of where clinical processes result in poor outcomes and where a person's underlying social deprivation may be contributing to poor outcomes. Early research indicates that adjusting for a person's social risk may be more equitable in adjusting payment within a value-based reimbursement context than other patient-level factors due to having a higher impact on outcomes.[1] Social needs and social deprivation are especially impactful on perinatal outcomes. Stratifying process and outcome metrics is how Washington State can effectively develop improvement initiatives and see impact.

Use Case: Improvement in Timely Treatment of Acute Severe Hypertension

Episodes of intra or post-partum acute severe hypertension must be treated within 60 minutes of diagnosis. After OB COAP began reporting this process metric, Hospital A was able to see their comparatively low hypertension treatment rates and initiated an intervention of providing individual reports to clinicians responsible for labor management. After the intervention, Hospital A went from less than 30% cases treated per guidelines to almost 80%, which has been maintained to the present.

Foundation for Health Care Quality. November 2022.

Patient Engagement and Outcomes

OB COAP is working to incorporate patient-reported outcome and experience metrics. While the patient is often framed as being at the heart of care, this is often not true in health care data. For patient-centered care to be actualized, patient engagement and perspective must be actively sought, incorporated, and acted upon. Patient reported outcomes depict an individual's input on health status (e.g., pain), condition, or behavior (e.g., screening for depression).[2,3] Results come directly from the individual who received an intervention without clinical interpretation.[2] Tools include patient reported outcome measures (PROM) and patient reported experience measures (PREM), both of which provide valuable information to positively address health outcomes of birthing people and babies.[2,3] Similar to a patient's social need data, patient reported outcomes are better able to support equitable value-based reimbursement than many other types of patient-specific information.[4]

Many organizations have developed evidence-informed patient reported outcomes tools (e.g., the International Consortium for Health Outcomes Measurement core set of patient-centered outcome measures for pregnancy and childbirth) or have developed processes to gather patient input to change clinical practice.[4] Community-based participatory research and Experience-Based Co-Design both involve those with lived experience as a patient in a clinical service to inform the process of improvement through research, questionnaire development, or quality improvement initiative design.[5] The Giving Voice to Mothers Study is often used as a reference by birthing sites to more fully understand mistreatment during perinatal care.[6] In the study, people of color, of low socioeconomic status, those aged 24 and younger, and/or those who gave birth in a hospital were more likely to experience mistreatment.[6] Several new patient-designed indicators of mistreatment, (e.g., being ignored) were developed for broad use. Experience-Based Co-Design adds the perspective of family and staff and the video interview capture of positive and negative experiences. Staff, patients, and family, watch the videos, discuss, and work in partnership to co-design quality improvement solutions. These processes can result in care workflows with a higher likelihood of positive outcomes by involving all the voices of those impacted.

Smooth Transitions, a program housed at the Foundation for Health Care Quality, improves quality of care for families choosing to give birth at home or in a freestanding birth center whose plans change, resulting in a transition to the hospital for labor management and delivery or postpartum care for themselves or the newborn. While adverse outcome rates are low for planned community births overall, transitioning to a higher level of care can be stressful to those involved, which in and of itself can increase the potential for poor outcomes.[7,8,9] Smooth Transitions collects patient reported outcome data through patient surveys and information from receiving clinician(s), nursing staff, emergency medical services (if used), and the transferring midwife. Data informs quality improvement initiatives as deficits in collaboration or processes are discovered, which increases patient safety and satisfaction with care.

From a clinician at a participating hospital: "*…the healthy relationship I have with the patient's midwives helped this patient have an optimal outcome. The midwife continued to be bedside and help with discussion of care options which lead to an uncomplicated non-instrumented vaginal delivery*."

Action Item: Read the Giving Voices to Mothers study here.
Action Item: Advocate for your delivery site to join Smooth Transitions.

Foundation for Health Care Quality. November 2022.

Seeing the Forest and the Trees

Population health trends are driven by individual delivery system workflows and culture and within those, individual clinician decisions. OB COAP is an efficient mechanism to bring together multidisciplinary clinical leaders to drive evidence-informed processes of care that benefit people, clinicians, health care purchasers, and health plans. High-quality clinical and social care for birthing people is not only ethical, but also represents great potential for downstream cost savings through reduced health service utilization.

The Michigan Collaborative Quality Initiative, housed at the University of Michigan and funded by Blue Cross Blue Shield of Michigan, is focused on 23 health services using clinical data to drive collaborative quality improvement, including an obstetrics initiative directed at patients delivering for the first time who are carrying a single, head-down, more than 37-week gestation (i.e., at term) baby. [10] The initiatives have seen consistent cost savings and improved quality outcomes.[11] The Cardiac Care Outcomes Assessment Program, a similar quality improvement entity of which all delivery sites that perform cardiac intervention (PCI and CABG) in Washington State are members, has demonstrated long-term cost savings.[12] A retrospective cohort study comparing downstream Medicare administrative and claims data for patients who received cardiac intervention in Washington State to a random sample of those who received cardiac intervention in other states, found total five-year downstream costs to be almost $4,000 lower (95% CI = $1,794 to $5,741), adjusting for demographic and comorbidity. Similar impacts of a clinical data quality improvement collaborative have been seen in Virginia on patients with acute myocardial infarction and heart failure.[13]

Investing in quality improvement for labor and delivery has the potential to reduce downstream costs for the birthing person and for the child(ren) born, as has been demonstrated through the Cardiac COAP program and in Michigan and Virginia.[14] The Commonwealth Fund projects total cost, medical and nonmedical, from maternal morbidity on the child(ren) until age five to be 32.3 billion dollars.[15] For the child(ren), the most costly complications are preterm birth, developmental disorders, and respiratory distress; for the birthing person, lost productivity, having a C-section, and increasing hospital length of stay are the most costly.[13] Perinatal vascular, metabolic, or inflammatory complications are linked to increased risk of vascular disease over a lifetime.[16] However, long term outcomes for pregnant people and their babies are lacking. While claims and administrative data are helpful in informing cost implications of interventions and are easily tracked over time through multiple payors, clinical data are needed to change practice and to monitor improvements in the processes of care that lead to these cost savings. Potential next steps will be to link OB COAP clinical data with claims data, including that from Medicaid, for up to five years following birth.

This three-part series of white papers outlines why clinical data are necessary for monitoring and improving obstetrical care and how OB COAP can transform perinatal care in all delivery settings through inclusion, transparency, and accountability. This model of quality improvement replaces competition and siloed efforts with collaboration and transparency, improving the health of birthing parents and babies. The series gives an overview of the current state of obstetrics care in our region, reviewing the current state of perinatal care and outcomes in **Part I**, outlining the impact of social determinants of health in **Part II**, and the creation of a sustainable, person-centered improvement process in **Part III**. Clinical data, transparency, inclusion, mutual support, and mutual accountability taking place within a neutral, unbiased framework, are proven to increase quality and outcomes of care and best obstetrical practice.

Action Item: Join and be an active participant in OB COAP.

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