Perinatal Metrics Reported on Cal Hospital Compare

On October 23, 2018, hospital-level perinatal performance measures for calendar year 2017 will be publicly released on www.CalHospitalCompare.org — a healthcare consumer website governed by a diverse set of stakeholders including consumers, purchasers, health plans and hospitals. Given the heightened statewide interest in perinatal quality, the release may receive significant press attention.

In addition, California's Health and Human Services Agency will acknowledge hospitals that have met or surpassed the 23.9% Healthy People 2020 NTSV C-Section Target Rate on behalf of Smart Care California. Details will be announced across multiple channels, including the California Hospital Association's electronic daily, *CHA News*. A certificate of acknowledgement will be mailed to hospital CEOs.

FAQS

How will my hospital be represented?
Performance scores for all California hospitals currently offering maternity services were emailed to hospital contacts via the Hospital Quality Institute, including CEOs. Your hospital can be found by searching on hospital name or facility OSHPD ID.

Which measures are being reported?
The measures are based on nationally-endorsed specifications and include:

- Cesarean Birth Rate among Low-Risk First Births—Nulliparous, Term, Singleton, Vertex (NTSV)
- Episiotomy Rate
- Vaginal Birth After Cesarean (VBAC) Rate
- VBAC Routinely Available (a self-reported survey indicator)

Where does the data come from?
The rates are based on publicly-available data for calendar year 2017 from the Office of Statewide Health Planning and Development (OSHPD) and the California Department of Public Health-Vital Records. The California Maternal Quality Care Collaborative (CMQCC) linked and reviewed these state data sets for completeness and calculated the measures based on nationally-endorsed measure specifications. The performance categories are based on scoring algorithms developed by Cal Hospital Compare (formerly, the California Hospital Assessment Reporting Taskforce) with methodological and analytic support from Watson Health. For more information, see the Measures and Methods sections below for details.

Why publicly report perinatal measures?
Consumers and stakeholders statewide have observed concerning trends in maternity services, including rising rates of maternal morbidity, ever increasing utilization of the cesarean procedure, and dramatic variation in obstetric practices across hospitals. For example, low-risk, first birth C-section rates vary from 12% to 71% across California hospitals. In a state with approximately half a million births annually, collaborating stakeholders seek to reverse these trends and optimize the quality of care provided to mothers and newborns.

Who is involved?
Collaborating stakeholders include quality improvement organizations, purchasers and foundations. See the full list on the following page.

Collaborating Stakeholders

Cal Hospital Compare: Cal Hospital Compare (formerly the California Hospital Assessment and Reporting Taskforce) strives to improve the quality of care delivered in California by objectively reporting the performance of California hospitals. As a non-profit organization governed by a diverse set of stakeholders including consumers, purchasers, health plans and hospitals and working with Watson Health, to analyze complex data, Cal Hospital Compare supports consumer choice and public accountability. *www.calhospitalcompare.org*

California HealthCare Foundation (CHCF): CHCF is leading the way to better care for all Californians, particularly those whose needs are not well served by the status quo. We work to ensure that people have access to the care they need, when they need it, at a price they can afford. *www.chcf.org*

California Maternal Quality Care Collaborative (CMQCC): CMQCC is a not-for-profit, multi-stakeholder collaborative dedicated to reducing preventable morbidity, mortality and racial disparities in California maternity care using data-driven, evidence-based approaches. CMQCC's stakeholders include representatives across California's provider, payer and public health communities, including American College of Obstetricians and Gynecologists District IX, the California Hospital Association and the California Department of Public Health. CMQCC is based at Stanford University School of Medicine. *www.cmqcc.org*

California Perinatal Quality Care Collaborative (CPQCC): CPQCC's 130 member hospitals care for over 90 percent of California neonates requiring neonatal intensive care. CPQCC is committed to improving the quality of care to California's mothers and our most vulnerable infants. An action arm of the California Association of Neonatologists and a regional member of the Vermont-Oxford Network, CPQCC thrives as a result of the commitment and input of its diverse stakeholders, including the California Children's Services and the California Division of Maternal, Child, and Adolescent Health. Its highly effective perinatal outcomes reports and quality improvement activities have provided a national model for regional perinatal quality improvement. *www.cpqcc.org*

Hospital Quality Institute (HQI): The Hospital Quality Institute (HQI) is the patient safety and improvement organization, created by California Hospital Association and regional hospital associations, that strategically aligns measures and initiatives to eliminate defects in care to achieve zero harm, optimize clinical effectiveness, and improve the experience of care for each person and for populations served. It operates the nation's largest Patient Safety Organization (PSO) and the California Hospital Improvement Innovation Network in partnership with Healthcare Services Advisory Group (HSAG). HQI is a trusted source for data management and reporting. *www.hqinstitute.org*

Pacific Business Group on Health (PBGH): PBGH is a non-profit business coalition focused on improving the quality and affordability of health care. The group represents 60 large health care purchaser members with more than 10 million employees, retirees and dependents in California. PBGH's approach is to use the influence and concentrated power of our Member organizations to test and scale healthcare innovation across the U.S. *www.pbgh.org*

Smart Care California: Smart Care California is a public-private partnership working to promote safe, affordable health care in California. The group currently focuses on three issues: C-sections, opioid overuse and low back pain. Collectively, Smart Care California participants purchase or manage care for more than 16 million Californians—or 40 percent of the state. Smart Care California is co-chaired by the state's leading health care purchasers: DHCS, which administers Medi-Cal; Covered California, the state's health insurance marketplace; and CalPERS. The Integrated Healthcare Association convenes and coordinates the partnership with funding from CHCF. *http://www.iha.org/our-work/insights/smart-care-california*

Measures

Measure specifications

NTSV C-Section Rate
NTSV C-Section Rate: The number of nulliparous women with a term, singleton baby in a vertex position delivered by cesarean. **CalHospitalCompare.org Description:** The percentage of Cesarean section deliveries among mothers whose pregnancies were nulliparous, term, singleton and vertex (NTSV) — which means the delivery of a single baby [versus twins or triplets] in a head-down position after 37 weeks gestational age to mothers having their first baby. In such "low-risk" pregnancies, C-sections should be avoided to reduce post-surgical infections and other complications and improve overall health outcomes for both mother and baby. A lower percentage is usually better and hospitals with an NTSV C-section rate above 23.9% are performing Cesareans outside the target goal set by Healthy People 2020. Hospitals that serve as referral centers for high-risk pregnancies, those with intensive care units for very sick babies, and those serving mothers who have not had the benefit of prenatal care may appropriately have higher C-section rates. A woman who prefers a vaginal birth should look for a hospital with a low C-section rate. She should discuss this concern with her maternity care provider. **Data Source:** Inpatient Discharge Data from Office of Statewide Health Planning and Development (OSHPD), 2017 linked to Birth Certificate Data from California Department of Public Health-Vital Records, 2017 **Denominator Statement:** Nulliparous patients delivered of a live term singleton newborn in vertex position, excluding those with: ▪ ICD-9/-10 Diagnosis Codes for multiple gestations and other presentation, as defined in Joint Commission Specifications Manual (v2016A) Appendix A: Table 11.09. ▪ Gestational Age < 37 weeks (Birth Certificate) ▪ Any prior births over 20 weeks gestation (Birth Certificate) **Numerator Statement:** Denominator cases with ICD-9/-10 code for cesarean section as defined in Joint Commission Specifications Manual (v2016A): Appendix A, Table 11.06. **Measure Sets/Endorsers**: National Quality Forum (0471), the Joint Commission (PC-02), Healthy People 2020.

Episiotomy Rate
Episiotomy Rate: Percentage of vaginal births (excluding those with shoulder dystocia) in which an episiotomy is performed. **CalHospitalCompare.org Description:** An episiotomy is a surgical cut in the vaginal opening to make more space for the birth of a baby. It was once a routine procedure; however, many recent studies show that this cut does not make the birth easier and may lead to more frequent and worse tears and may result in short- and long-term harm in women. Providers and hospitals aim to do fewer episiotomies. In general, a lower rate is better. **Data Source:** Inpatient Discharge Data from Office of Statewide Health Planning and Development (OSHPD), 2017 linked to Birth Certificate Data from California Department of Public Health-Vital

Episiotomy Rate

Records, 2017.

Denominator Statement: All vaginal births excluding those with an ICD-9/-10 code for shoulder dystocia.

Numerator Statement: Denominator cases with episiotomy procedures (as defined by ICD-9/-10 codes within the National Quality Forum specifications).

Measure Sets/Endorsers: National Quality Forum (NQF 0470).

Vaginal Birth After Cesarean (VBAC) Rate

Vaginal Birth After Cesarean (VBAC) Rate: Vaginal births per 1,000 deliveries among women with one or more previous Cesarean deliveries.

CalHospitalCompare.org Description: A vaginal birth after Cesarean section (VBAC) occurs when a woman who has had a prior C-section gives birth to a new baby vaginally (that is, without needing a C-section). Maternity providers have found that many women who have had a prior C-section do not need to deliver all future babies by C-section. This measure shows how often vaginal births among women with a prior C-section occur at this facility.

Data Source: Inpatient Discharge Data from Office of Statewide Health Planning and Development (OSHPD), 2017 linked to Birth Certificate Data from California Department of Public Health-Vital Records, 2017.

Denominator Statement: All deliveries with ICD-9/-10 diagnosis codes for previous Cesarean delivery.

Numerator Statement: Denominator cases delivered vaginally in current delivery.

Measure Sets/Endorsers: Agency for HealthCare Research and Quality: Inpatient Quality Indicators #34 (IQI #34).

VBAC Routinely Available

Data Source: Hospital Quality Institute Survey

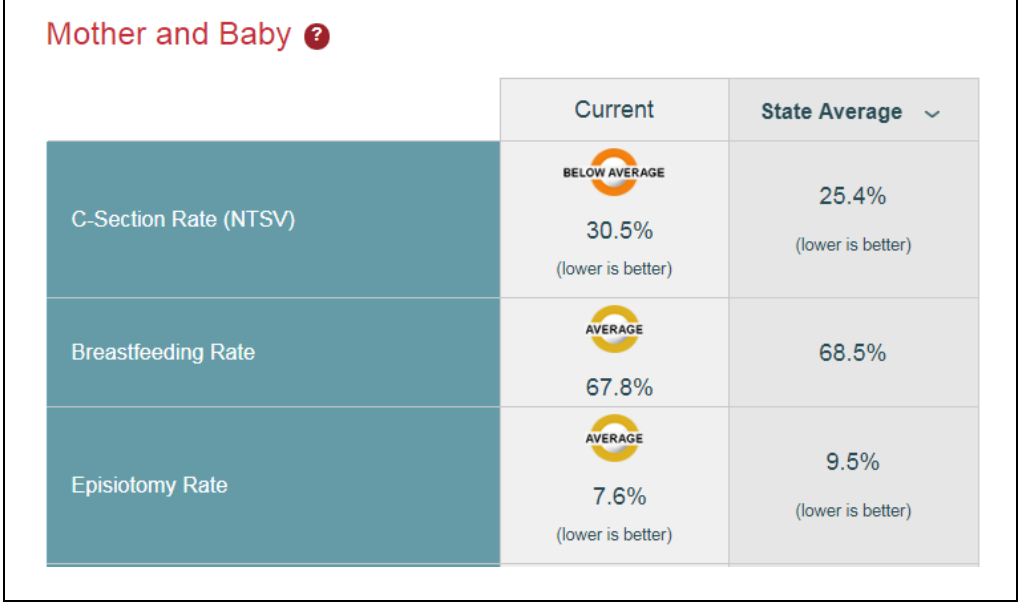
CalHospitalCompare.org Description: Some hospitals will not provide “vaginal birth after C-section” (VBAC), usually because they do not have the necessary medical personnel needed to respond immediately for an emergent C-section, according to ACOG guidelines. This measure, collected from a survey by the Hospital Quality Institute, can help consumers understand whether a facility routinely offers a trial of labor for vaginal birth after prior C-section.

Measurement period
NTSV C-Section, Episiotomy, and VBAC Rates are for calendar year 2017: **January 1, 2017 - December 31, 2017**. The "VBAC Routinely Available Survey" was conducted by the HQI in the fall of 2017. These measurement periods will be posted to www.CalHospitalCompare.org on October 23, 2018.

The Cal Hospital Compare website provides the measurement period associated at the measure level. To view measure detail, such as measure specifications and measurement periods, please:

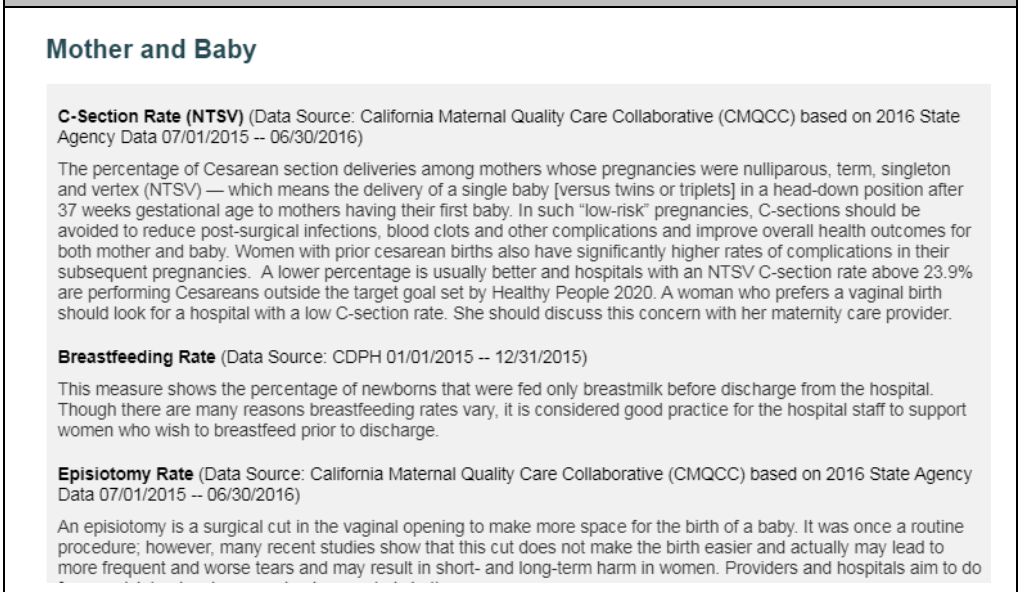
1. Click the question mark in the red circle next to the measure topic (see sample hospital shown below):

SAMPLE HOSPITAL "MOTHER AND BABY" DISPLAY



2. A pop-up box with the measure details will appear (be sure to scroll down within the box to view full details):

SAMPLE MEASURE DETAIL DISPLAY



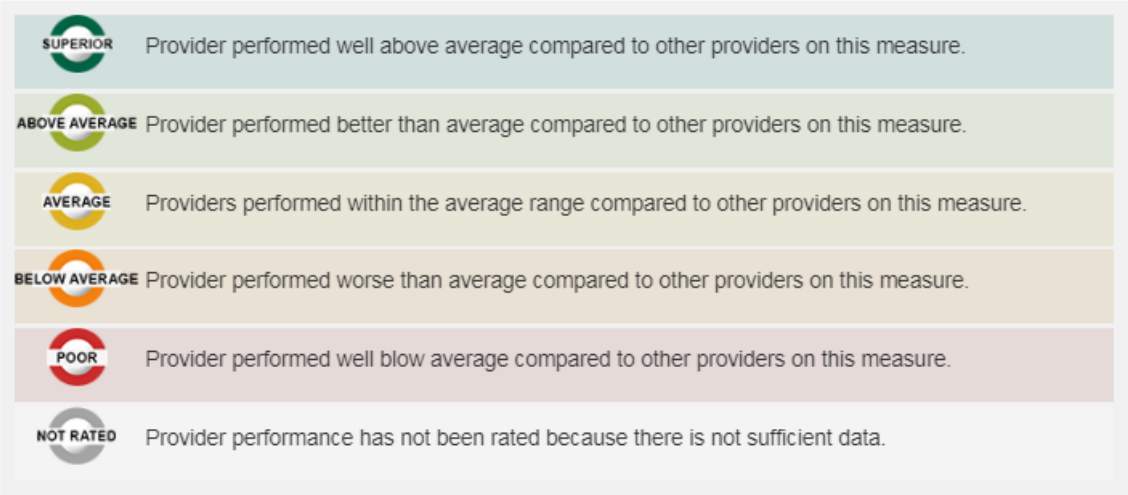
Methods

What are performance scores?
Cal Hospital Compare classifies hospital measures into five performance categories: Superior, Above Average, Average, Below Average, and Poor (Figure 1). For some measures, it is difficult to discriminate the top two categories from the bottom two categories. For those measures (including VBACs), Cal Hospital Compare uses a three-category classification: Above Average, Average, and Below Average. The five performance categories are defined by scoring thresholds set as the 10th, 25th, 75th, and 90th percentiles.

How is the performance score calculated?
The performance scores are calculated using a relative performance approach to indicate how well a hospital performed compared to other California hospitals. A hospital's "true" score is the score that we would observe based on a very large (infinite) patient sample. The distribution of true scores is estimated statistically using the distribution of observed hospital scores and accounting for the imprecision of these scores because they are estimated from relatively small samples. Finally, for each hospital, Cal Hospital Compare estimates a distribution of possible "true" scores for that hospital. Cal Hospital Compare classifies each hospital based on the median "true" score estimated for that hospital. This ensures that the estimated probability is less than 50% that a hospital's "true" rate falls into a higher or lower performance category than the one to which it is assigned. There are no pre-determined or absolute targets used in the scoring process; Cal Hospital Compare's categories show how a hospital compares against its California peers.

How do I interpret my score?
First, it is important to note that a percentage is different than a percentile (Cal Hospital Compare uses percentiles). A percentage is a representation of a proportion out of 100. A percentile is a statistical measure of distribution. For a given set of data, it is the level below which a certain percentage of the data falls. For example, Cal Hospital Compare's "Superior" score means the hospital in 90-100th percentile - the top 10th percentile compared to other California hospitals (which is excellent)!

Figure 1. Cal Hospital Compare Five Category Rating Key



Percentile scores that correspond to Cal Hospital Compare's performance rating categories are as follows:

Rating Category	Poor	Below Average	Average	Above Average	Superior
Percentile Category	0-10%	10-25%	25-75%	75-90%	90-100%