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Society for Maternal-Fetal Medicine Special Statement: Clinical quality measures in obstetrics

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This article provides an updated overview and critique of clinical quality measures relevant to obstetrical care. The history of the quality movement in the United States and the proliferation of quality metrics over the past quarter-century are reviewed. Common uses of quality measures are summarized: payment programs, accreditation, public reporting, and quality improvement projects. We present listings of metrics that are reported by physicians or hospitals, either voluntarily or by mandate, to government agencies, payers, "watchdog" ratings organizations, and other entities. The costs and other burdens of extracting data and reporting metrics are summarized. The potential for unintended adverse consequences of the use of quality metrics is discussed along with approaches to mitigating adverse consequences. Finally, some recent attempts to develop simplified core measure sets are presented, with the promise that the complex and burdensome quality-metric enterprise may improve in the near future.

Key words: alternative payment models, Merit-based Incentive Payment System (MIPS), metrics, pay-for-performance, value, value-based care

Introduction

As consumers, we are bombarded by requests to provide feedback to companies that want to know "How did we do?" for seemingly every transaction from ordering a pizza to buying a car. Companies spend untold millions of dollars to obtain this feedback because they want to know if there is anything they can do to improve their products or their customer service.

As health care providers, we want to provide the best care to achieve the best possible outcomes and the best patient experience. However, we are often indignant at the suggestion that the quality of our care should be measured. In part, our negative reaction is due to past and current efforts by payers to impose financial penalties or rewards based on poorly conceived, misleading, or oversimplified measures of quality. Furthermore, it is in part due to our fundamental belief that we are already doing the best that we can, so the notion that our performance needs to be assessed seems insulting and threatens our professional pride. Nonetheless, if we do not seek feedback on the care we provide, we may miss important opportunities to improve it. Clinical quality measures (CQMs) provide a structured, quantitative means to obtain that feedback.

The goal of this article is to provide an overview and critique of CQMs relevant for the evaluation of obstetrical care in the United States. The article is an update to the 2016 Society for Maternal-Fetal Medicine (SMFM) Special Report on the same topic.[1] A glossary of acronyms and terminology used in this review is provided in the Box.

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The quality movement

The year 2024 is the 25th anniversary of 3 milestones in patient safety and quality that occurred in 1999, marking the unofficial inception of the modern health care quality movement in the United States. In May 1999, the National Quality Forum (NQF) was established after a Presidential Advisory Commission concluded that an organization was needed to measure and publicly report on health care quality.[2] In November 1999, the Institute of Medicine published the landmark report "To Err is Human: Building a Safer Health System", which concluded that 44,000 to 98,000 people die annually in the United States from preventable medical errors.[3] In December 1999, the Healthcare Research and Quality Act was enacted,[4] establishing the Agency for Healthcare Research and Quality (AHRQ) as the new and enduring name for a federal agency that had undergone several reorganizations and name changes over the previous 30 years.

The ensuing quarter-century has brought the development of what might be dubbed a "quality-industrial complex",[5] the proliferation of public and private organizations involved in the measurement, reporting, and certification of clinical quality and safety. Dozens of such organizations are relevant to maternal health care.[6]

BOX

Glossary of acronyms and terminology

AHRQ — Agency for Healthcare Research and Quality. A US federal government agency charged with improving the safety and quality of the nation's healthcare system.

APM — Alternative Payment Model. An incentive payment program that provides financial rewards or penalties based on performance on CQMs. Contrasts with traditional fee-for-service model.

Benchmark — A standard or point of reference against which a metric can be compared. For quality metrics, a benchmark is the "ideal" or target rate. Metrics with a benchmark close to 100% are usually "quality" metrics and with benchmark close to 0% are usually "safety" metrics. However, there are exceptions; for example, the current benchmark for NTSV cesarean delivery rate is 23.6%, and rates that are either much higher or much lower may signal a significant safety or quality concern.

CQM — clinical quality measure (or metric). A precisely defined, standardized statistic that measures some aspect of healthcare quality or safety. Most metrics are ratios expressed as percentages (or per 1000 or per 100,000), with a defined denominator population and a numerator that counts the number of cases in the denominator that meet a specified criterion. The acronym CQM was coined by CMS for the measures used in its payment programs, but we use it as an abbreviation broadly applicable to all metrics, whether or not they are used by CMS.

CQMC — Core Quality Measures Collaborative. A diverse coalition of private and governmental payers, purchasers, consumer groups, medical associations (including SMFM), and NQF established by AHIP (formerly America's Health Insurance Plans) and CMS.

CMS — Centers for Medicare & Medicaid Services. A US federal government agency that oversees and sets regulations for the Medicare program and works with state governments to administer Medicaid and other federal health-related programs. CMS is the single largest payer for healthcare services in the United States.

eCQM — electronic clinical quality measure. A CQM that can be extracted automatically from entries in electronic health records. An eCQM may appear superficially similar to an analogous traditional CQM but specification details may be very different.

HCAHPS — Hospital Consumer Assessment of Healthcare Providers and Systems patient experience survey. Developed and maintained by AHRQ in partnership with CMS.

HEDIS — Healthcare Effectiveness Data and Information Set. Propriety metrics developed and maintained by the National Committee for Quality Assurance.

HRRP — Hospital Readmissions Reduction Program. A CMS program that tracks readmission metrics for hospitals that receive Medicare payments. Part of IPPS.

ID — identifier used by CMS to number metrics since spring 2023.

IHI — Institute for Healthcare Improvement. An independent not-for-profit organization whose mission is to improve health and healthcare worldwide.

IPPS — Inpatient Prospective Payment System. A CMS incentive payment system for hospitals.

IQR — Inpatient Quality Reporting program. A CMS program specifying metrics that hospitals must report if they receive Medicare payments. A part of IPPS.

KPI — key performance indicators. Statistics used to gauge progress toward a specific objective. Although CQMs technically fulfill this definition, KPIs in the context of medical practice are typically used to measure business performance (e.g., accounts receivable, cycle time for revenue collection, denials of payment) rather than clinical performance. Business KPIs are outside the scope of this review.

Leapfrog Group — A private, nonprofit organization founded by large employers and other healthcare purchasers to collect and report performance data from facilities. Hospitals that participate voluntarily submit survey answers annually and results are publicly reported.

MACS — Medicaid Adult Core Set. CQMs designated to be reported annually to CMS by state Medicaid programs.

MIPS — Merit-Based Incentive Payment System. A CMS program that requires individual providers and provider groups to report CQMs if they provide $\geq$200 services per year to Medicare recipients.

NCQA — National Committee for Quality Assurance. Independent, not-for-profit organization providing accreditation, certification, and recognition programs for health plans, healthcare providers, and healthcare organizations.

NQF — National Quality Forum. A coalition of over 300 public and private organizations and institutions working to catalyze improvements in healthcare by setting standards, recommending metrics for use in payment and public reporting programs, advancing electronic measurement, and providing information and tools to help healthcare decision-makers.

NTSV — birth to a nulliparous person at term with a singleton fetus in vertex presentation.

Reliability — The concept that a quality metric will produce the same result every time it is applied to the same aspect of care. Formal statistical tests exist to assess reliability and generally require expert statistical consultation.

SDOH — social determinants of health. Conditions in places where people live, learn, work, and play that can affect health outcomes. Includes conditions related to neighborhood and built environment, social and community context, economics and economic stability, education access and quality, and healthcare access and quality.

Specification — A detailed set of instructions for calculating a quality metric, including inclusion and exclusion criteria for the numerator and denominator, the measurement period, and the statistical methodology for risk adjustment, if any.

Stakeholders — Any persons, groups, or entities with an interest in the outcome or process of healthcare, including patients, patient families, physicians, nurses, hospitals, payers, state and federal governments, and the community at large.

Value in healthcare — Outcomes achieved relative to cost of care. The "value proposition" or "value equation" states that value equals outcome per dollar spent. This simple model is based on the dubious assumption that outcome can be expressed as a number.

Validity — The concept that a quality metric is reliable and accurately reflects what it purports to measure. Formal statistical tests exist to assess validity and generally require expert statistical consultation.

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A plethora of metrics

Efforts to improve quality and safety depend on the ability to measure quality.[7] Thus, it is not surprising that, along with the proliferation of organizations, there has been a parallel proliferation of CQMs. By 2019, over 2200 CQMs were inventoried by the Centers for Medicare & Medicaid Services (CMS),[8] a number that is constantly in flux as new measures are introduced and others are retired. In maternity care specifically, approximately 290 outcome quality indicators in 96 clinical categories have been published.[7] For some of these, a single indicator may have multiple definitions; for example, there are 18 different definitions of postpartum hemorrhage in guidelines from professional societies in 4 English-speaking countries.[7]

Adding to the complexity created by the sheer number of CQMs, different organizations use different numbering schemes to describe the same or similar metrics. For example, the cesarean delivery rate for nulliparous patients at term with singleton fetus in vertex presentation (NTSV) is NQF metric #047, The Joint Commission (TJC) Perinatal Care (PC) measure PC-02, Healthy People 2030 measure MICH-06, and CMS identifier (ID) 508. Further, CMS ID 508 is not a single metric, but a family of 5 variant metrics, most with subvariants, each unique to a specific payment program. Moreover, CMS completely renumbered its entire inventory of metrics in Spring 2023 after it terminated its contract with NQF as its "consensus-based entity" for performance measurement, and contracted instead with Battelle, a nongovernmental not-for-profit entity.

Further complexity is created when there are multiple metrics that measure the same broad topic but that differ in target populations or other details. For example, the Healthcare Effectiveness Data and Information Set (HEDIS) from the National Committee for Quality Assurance (NCQA) has 5 metrics on depression screening and follow-up: one for prenatal patients, one for postpartum patients, and 3 for general adult care.

Clearly, it can be challenging to keep up with the current roster of metrics. There is a need for simplification and harmonization.

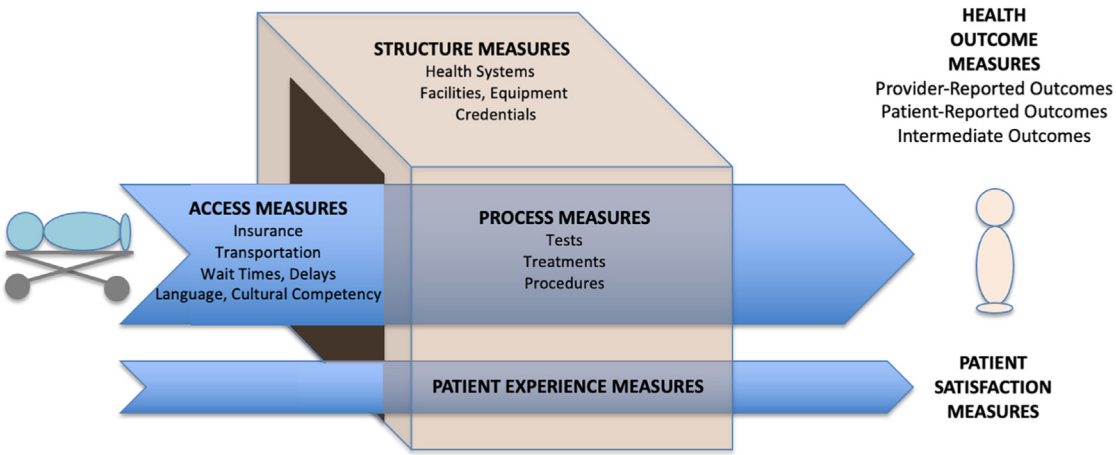
Types of metrics

The classical Donabedian model categorizes quality using the triad of structure, process, and outcome.[9] "Structure" refers to the settings, qualifications of providers, and administrative systems through which care takes place, "process" refers to the components of care delivered, and "outcome" refers to recovery, restoration of function, and survival.[10] This model was introduced in 1966[9] and has dominated the field for almost 60 years.

As illustrated in the Figure, virtually every step in a patient encounter can be measured, from the ability to obtain a timely appointment (access), to the tests and procedures performed (processes, patient experience) as the patient passes through the system (structure), and to the ultimate outcomes (health outcome, patient-reported outcome, patient satisfaction). Many of the components of care do not fit neatly within the Donabedian model, such as those related to access, patient experience, and patient satisfaction. Furthermore, although outcome may seem like a straightforward concept, it has several nuanced subtypes.

Perhaps the most unequivocal health outcome in obstetrics is maternal death. However, this seemingly straightforward outcome has different definitions used by the National Vital Statistics System and the Pregnancy Mortality Surveillance System, the main programs of the

FIGURE
Types of clinical quality metrics



Modified from SMFM et al.[1] Current approaches to measuring quality of care in obstetrics.

SMFM, Society for Maternal-Fetal Medicine.

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TABLE 1
Definitions of maternal death and ratios

Term	Definition	Used by
Maternal death	Death while pregnant or within 42 d of the end of pregnancy, irrespective of the duration and site of pregnancy, of any cause related to or aggravated by pregnancy or its management but not of accidental or incidental causes.	NVSS, WHO
Maternal Mortality Ratio (MMR)	Maternal deaths per 100,000 live births	NVSS, WHO
Pregnancy-related death	Death while pregnant or within 1 y of the end of pregnancy (regardless of the duration or site of pregnancy), which may be caused by a pregnancy complication, a chain of medical events initiated by the pregnancy, the worsening of an unrelated condition because of the pregnancy, or other factors, but not by accidental or incidental causes.	PMSS
Pregnancy-related mortality ratio	Pregnancy-related deaths per 100,000 live births	PMSS
Pregnancy-associated death	Death while pregnant or within 1 y of the end of pregnancy, regardless of cause	MMRCs
Pregnancy-associated but not pregnancy-related death	Pregnancy-associated death not meeting criteria for pregnancy-related death	MMRCs

Source: National Quality Forum. Maternal morbidity and mortality measurement recommendation report.[11]

MMRCs, selected state-level maternal mortality review committees; *NVSS*, National Vital Statistics System; *PMSS*, Pregnancy Mortality Surveillance System; *WHO*, World Health Organization.

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Centers for Disease Control and Prevention (CDC) that report maternal mortality rates (Table 1).[11] The differences depend on whether a death occurs within 6 weeks vs 1 year after delivery and whether a death is judged to have a pregnancy-related cause vs an incidental or accidental cause.

Patient-reported outcome measures (PROMs) are defined metrics intended to assess self-reported patient data such as health-related quality of life, functional status, symptom burden (e.g., pain, fatigue), and health behaviors (e.g., smoking, diet, exercise).[12] Suites of PROMs include the Patient-Reported Outcomes Measurement Information System (PROMIS), the Medicare Health Outcomes Survey (HOS), and Focus on Therapeutic Outcomes (FOTO), all of which can be accessed via links in the CMS website.[12] None appear to be specific to pregnancy.

Intermediate outcomes are defined by CMS as changes produced by a health care intervention that lead to a long-term outcome. Examples include control of blood pressure, reduction of hemoglobin A1c, and readmission to hospital after discharge postpartum. These are not health outcomes themselves but markers of risk for adverse outcomes.

Patient experience, as defined by AHRQ, is different from patient satisfaction.[13] Patient experience encompasses the range of interactions that patients have with the health care system, and is commonly assessed by surveys such as the Consumer Assessment of Healthcare Providers and Systems (CAHPS). The CAHPS surveys include questions about processes such as "Did your most recent visit start on time?" and "Did someone from the provider's office follow up to give you test results?" Patient satisfaction, in contrast, reflects whether a patient's *expectations* have been met. Two people who receive identical care but who have different expectations may have different levels of satisfaction. For example, a patient whose highest priority is a vaginal birth may be extremely dissatisfied if they require an emergency cesarean delivery, whereas a patient whose priority is long-term health of the child may be quite satisfied. We are not aware of any endorsed, standardized CQMs for patient satisfaction.[14] Several maternity patient experience measures have been described, but these were poorly supported by a formal analysis of content validity, psychometric properties, and risk of bias.[14]

Assessment of either experience or satisfaction requires solicitation of feedback from patients, but response rates to surveys are notoriously low and responses are often skewed toward the negative. As a result, it is usually not appropriate to use these assessments to compare facilities or providers but rather to track progress toward improvement within an organization or practice.

Quality is multidimensional

No single metric can adequately summarize the quality of even a single type of service, let alone the quality of an entire practice or facility. By analogy, when looking for a restaurant, consumers can consult various online consumer-driven rating services that assign "star" ratings to

restaurants. However, relying solely on the number of stars can be misleading. A more thorough picture is provided if there are separate ratings for the food, the service, and the ambience. An even more detailed picture is provided by the narrative comments in individual reviews.

Similarly, healthcare quality is multidimensional, involving several components of care, from access, through process and experience, to outcomes. If time is added as a dimension, we can view quality assessment as a dynamic process as improvements are made and outcomes change. It has been suggested that we speak not of "the quality of care" but rather of "qualities of care".[15] Thus, the assessment of quality typically relies not upon a single metric but upon sets of CQMs chosen to reflect various aspects of the healthcare enterprise.

Different stakeholders have different priorities: providers seek to optimize clinical outcomes; patients seek to optimize their experience and satisfaction, sometimes making choices based on personal values that may conflict with optimal clinical outcomes; hospitals seek to improve outcomes through a focus on structures and processes; payers seek to maximize value, defined as the outcomes achieved divided by the dollars spent.[16]

Measuring outcome vs process or structure

Although the ultimate goal of healthcare is to improve health outcomes, measurement of outcome is not always sufficiently sensitive to detect underlying quality issues or to demonstrate improvements made. For example, the maternal mortality ratio in the United States is approximately 30 per 100,000.[17] At this rate, a hospital performing 2000 deliveries per year will have one pregnancy-related death every 20 months, on average. If the hospital implements safety bundles for hemorrhage and hypertension that reduce the mortality rate by 50%, it will have one death every 40 months, on average. To have 80% statistical power to show that the difference in rates is significant at $P<.05$, the hospital will need to collect follow-up data for over 75 years. In other words, measurement of the mortality rate outcome would be very insensitive to even a dramatic improvement.

Because of the insensitivity of measuring uncommon outcomes such as mortality, preference is often given to measuring process and structural metrics instead. In other words, rather than asking, "Do we get good results?", we often ask, "Do we do the right things?" and "Do we have the appropriate equipment, personnel, and systems in place?" Of 788 CQMs finalized or implemented in CMS programs, 52% were process metrics, 30% were outcome metrics, and the remainder were divided among PROMs, intermediate outcomes, patient experience, and other metrics.[8]

Structures and processes contribute to outcomes, so it is appropriate to an extent to measure them rather than measuring outcomes. Using the language of the Model for Improvement promoted by the Institute for Healthcare Improvement, structures and processes may be considered as "drivers" of outcomes.[18] Importantly, structures and processes are within the direct control of facilities and providers, whereas outcomes are not necessarily so. However, there is not always a direct correlation between structure, process, and outcome. There have been instances where high rates of adverse outcomes have been documented at facilities that reported favorable structure and process metrics.[7]

It has been suggested that the assessment of value in healthcare must be based on outcomes, not processes: "Process measurement and improvement are important tactics, but are no substitute for measuring outcomes."[16] Conversely, outcomes depend on social determinants of health and clinical risk factors that are not within the control of providers. For this reason, outcome metrics must be thoughtfully risk-adjusted to avoid unfair stigmatization or other penalties for providers or facilities that serve high-risk populations.[19,20]

Use of clinical quality measures in incentive payment programs

Payers have many programs involving financial incentives (rewards or penalties) based on performance on CQMs or even simply reporting of CQMs. Such programs are known by names such as Alternative Payment Models (APMs), pay-for-performance (P4P), pay-for-reporting, and value-based contracting. Herein, we refer to all of them as incentive payment programs, ignoring the differences between them.

CMS has several specific incentive payment programs, some applicable to providers or provider groups, and others applicable to hospitals and other facilities. Mandatory reporting of certain metrics to CMS is required for most providers and facilities that receive payments from Medicare. CMS has hundreds of current CQMs for use in various programs; an online tool listing these can be found at cmit.cms.gov.[21] Given that the details of these programs change annually, providers should consult with experts when participating in these programs. A synopsis of current CMS metrics relevant for obstetrical care is provided in Table 2.

Medicare requires physicians or clinical practices that bill a threshold volume of Medicare services to report CQMs as part of the Merit-Based Incentive Payment System (MIPS), unless they participate in a CMS APM, which also typically requires CQM reporting.[22] Most MIPS metrics concern outpatient care processes or outcomes, as opposed to other CMS programs that target inpatient care. Maternal–fetal medicine (MFM) physicians and obstetrics-only practices are unlikely to reach the threshold of 200 Medicare services per year because few reproductive-aged women have Medicare coverage; no reporting is required if the provider or practice is below the threshold. Combined obstetrics and gynecology practices are more likely to reach the threshold and be required to report. Providers participating in MIPS are required to report on 6 metrics including at least one outcome measure, and are compared with national benchmarks. In addition to metric reporting, MIPS requires attestation that a certified electronic health record

TABLE 2
Metrics directly related to obstetrical care or appropriate for pregnant persons in Medicare programs

Program	CMS ID	Brief title	Synopsis	Type of metric	Level of assessment
MIPS IQR Star	419	Elective early term delivery	Percentage of early term births (≥37 to <39 wk) without an indication for early term delivery.	Outcome[a] Process[a]	Provider Facility
MIPS	420	Postpartum follow-up and care coordination	Percentage of patients who gave birth who were seen for postpartum care within 12 wk and had breastfeeding evaluation and education, depression screening, family and contraceptive planning, counseling, tobacco use screening and cessation education, healthy lifestyle behavioral advice, immunization review and update, and glucose screening (if patient had gestational diabetes).	Process	Provider
IQR	508	NTSV cesarean rate	Cesarean deliveries as a percentage of nulliparas with term, singleton, vertex deliveries.	Process, intermediate outcome	Facility
IQR Star	418[b]	Maternal morbidity structural measure	Yes or no attestation: "Does hospital participate in a statewide or national perinatal quality improvement collaborative program aimed at improving maternal outcomes?" and "Does hospital implement safety bundles or practices as part of these initiatives?"	Structure	Facility
IQR	1633[b]	Severe obstetric complications	Percentage of deliveries complicated by any of 21 listed morbidities or by maternal death	Outcome	Facility
IQR	251	Exclusive breast milk feeding	Percentage of singleton term newborns who were fed only breast milk during entire hospitalization.	Process	Facility
IQR	1660[b]	Hospital commitment to health equity	Yes or no attestation: "Does hospital commit to engage in all 5 of these domains regarding health equity: strategic priority, data collection, data analysis, quality improvement, leadership engagement?"	Structure[b]	Facility
IQR	1664[b]	Social drivers of health, screening	Percentage of patients screened for 5 social drivers of health: food insecurity, housing instability, transportation needs, utility difficulty, interpersonal safety.	Structure[b]	Facility
IQR	1662[b]	Social drivers of health, screen-positive rate	Percentage of patients screened positive for any of the social drivers of health	Structure[b]	Facility
IQR Star	338	Patient experience survey	Hospital Consumer Assessment of Healthcare Providers and Systems survey responses	Patient experience	Facility
MIPS	167	Controlling high blood pressure	Percentage of patients with essential hypertension whose most recent blood pressure was adequately controlled (<140/90)	Intermediate outcome	Provider
MIPS Star	595	Hypertension screening	Percentage of visits in which blood pressure is measured and, if elevated, a recommended follow-up plan is documented	Process	Provider
MIPS Star	259	Influenza immunization	Percentage of patients seen from October 1 through March 31 who received influenza immunization or who reported previous receipt of influenza immunization	Process	Provider
MIPS	219	Documentation of current medications	Percentage of visits for which clinician attests to documenting a list of current medications using all resources available on date of encounter	Process	Provider
MIPS	596	Tobacco screening and intervention	Percentage of patients screened at least once for tobacco use and, if identified as a tobacco user, received a tobacco cessation intervention	Process	Provider
MIPS Star	133	Receipt of specialist report	Percentage of patients with referrals for which the referring provider receives a report from the provider to whom the patient was referred	Process	Provider

Source: CMS Measures inventory tool.[21]

CMS, Centers for Medicare & Medicaid Services; *IQR*, Inpatient Quality Reporting program; *MIPS*, Merit-based Incentive Payment System; *NTSV*, nulliparous, term, singleton, vertex; *Star*, Medicare Five-Star Quality Rating System at medicare.gov/care-compare.

[a] CMS classifies this as an outcome for MIPS and a process for IQR; [b] No metric specification on CMS website as of this writing (November 1, 2023). Synopsis based on descriptions in CMS press releases and fact sheets.

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technology is in use, and completion of 2 to 4 improvement activities from a prescribed list.

Acute care hospitals that receive payments from Medicare must, with certain exceptions, report CQMs to CMS through the Inpatient Quality Reporting (IQR) program and the Hospital Readmissions Reduction Program (HRRP), both parts of the Inpatient Prospective Payment System (IPPS).[23] Although such reporting is the responsibility of the hospital, not of individual physicians, it is important for physicians to be aware of the CQMs that their hospital is reporting because hospitals will often encourage physicians to change their behavior to help the hospital avoid penalties. Metrics in the IQR program relevant for obstetrics are summarized in Table 2. The HRRP was critiqued in a previous SMFM statement[24]; few obstetrical patients are included in HRRP, and SMFM does not endorse the use of postpartum hospital readmission rate as a metric for incentive payment programs.

CMS recently added several new structural metrics to the IPPS: maternal morbidity, hospital commitment to health equity, and screening for social drivers of health (SDOH). CMS will award a public-facing "Birthing-Friendly" designation to hospitals that attest to meeting the maternal morbidity metric.[25]

Medicaid quality programs, in contrast to Medicare programs, are often relevant to MFM and obstetrical providers because over 40% of pregnancies in the United States are covered by Medicaid. CMS has designated 9 CQMs as the Maternity Core Set for Medicaid, including timely initiation of prenatal care, timely postpartum care, NTSV cesarean delivery rate, rate of low-birthweight births, well-child visits through 30 months of age, and 4 measures of contraceptive care.[26] Each state is asked to report state-level data on these metrics annually to CMS, although most states do not report the complete set.[27] At the provider or group level, some Medicaid programs have incentive payment programs, some of which are similar to the Medicare MIPS and IPPS programs, and others that differ dramatically. The details of such programs vary between states and between specific plans within a state; thus, providers should consult with local experts when participating in these programs.

Private payers may negotiate incentive payment contracts with providers, provider groups, or hospitals. Hospitals may negotiate similar contracts with providers or provider groups. Often, these programs use the metrics listed in Table 2 or elsewhere in this article. Payers often prefer claims-based metrics such as NCQA HEDIS measures. There are a few HEDIS measures specific to obstetrical care (e.g., timely initiation of prenatal care and timely postpartum visits, prenatal and postpartum depression screening, and prenatal immunization status) and some general adult metrics relevant to obstetrical patients (e.g., blood pressure control, hemoglobin A1c in patients with diabetes).

Before entering into individualized contracts with payers or hospitals, providers should carefully scrutinize them to be sure that any performance expectations are reasonably achievable and that the contracts clearly specify who will be responsible for data extraction, data integrity, metric calculation, and accountability. For contracts that include outcome metrics, there should be a plan for appropriate risk adjustment.

Use of clinical quality measures in accreditation

Almost 80% of US hospitals are accredited by TJC. Accreditation requires reporting of specified CQMs, among other expectations. Table 3 summarizes TJC's 5 current PC metrics.[28] In addition, TJC introduced the leadership standard LD.04.03.08 (effective January 1, 2023),[29] which in essence requires the hospital leadership to embrace the CMS Hospital Commitment to Health Equity standard and to track the 2 CMS SDOH metrics listed in Table 2. The new TJC standard also requires that hospitals develop a written action plan describing how they will address disparities identified by the screening metrics.

Two previous TJC PC metrics have been retired: PC-03 (antenatal corticosteroids before early preterm birth) and PC-04 (healthcare-associated bloodstream infection in newborns). Although TJC did not provide specific reasons, it is likely that these metrics were retired because they had "topped out", that is, performance had improved to the point that further progress was unlikely.

Hospitals and birthing centers that are not accredited by TJC may be accredited by various other agencies.[6,30] Providers who practice at these facilities should familiarize themselves with the quality metrics reported to their accrediting bodies.

Public reporting of clinical quality measures

The CMS Five-Star Quality Rating System is designed to help consumers locate and compare nearby providers, and is based on a subset of MIPS metrics. The search tool is available online to the public at medicare.gov/care-compare.[31]

The tool for comparing Medicare providers shows some basic structural data (e.g., office location, training, board certification, participation in APMs). Selecting an individual provider brings up an option to click on "Performance information available", which opens a screen showing provider ratings from 0 to 5 stars on several specific CQMs. The maternity CQMs reported in the Star system are included in Table 2. Several other metrics not related to obstetrics are also rated in this system.

The CMS Five-Star system also has a tool to compare hospitals on the basis of a subset of IQR metrics reported by facilities. Each selected hospital is displayed with an Overall rating from 0 to 5 stars and a Patient Survey rating from 0 to 5 stars. Drilling down in the Compare tool shows results on several CQMs, including 2 obstetrics metrics (elective delivery, maternal morbidity), and results on several patient experience measures from the Hospital CAHPS survey.

TABLE 3
The Joint Commission Perinatal Care (PC) metrics

Source and number	Brief title	Synopsis	Type of metric	Level of assessment
TJC PC-01 TJC ePC-01	Elective delivery	Percentage of early term births (≥37 to <39 wk) without an indication for early term delivery	Process	Facility
TJC PC-02 TJC ePC-02	NTSV cesarean delivery rate	Cesarean deliveries as a percentage of nulliparas with term, singleton, vertex deliveries	Process, intermediate outcome	Facility
TJC PC-03	Antenatal corticosteroids	Measure retired effective 2020	Process	Facility
TJC PC-04	Healthcare–associated newborn bloodstream infection	Measure retired effective 2020	Intermediate outcome	Facility
TJC PC-05 TCJ ePC-05	Exclusive breast milk feeding	Percentage of singleton term newborns who were fed only breast milk during entire hospitalization	Process	Facility
TJC PC-06 TJC ePC-06	Unexpected complications in term newborns	Percentage of term newborns with specified moderate or severe complications, excluding multifetal pregnancies, low birthweight, congenital anomalies, genetic conditions, fetal growth restriction, maternal drug use, certain other conditions	Outcome	Facility
TJC ePC-07	Severe obstetrical complications	Percentage of deliveries complicated by any of 21 listed morbidities or by maternal death	Outcome	Facility

Source: The Joint Commission. Perinatal care measures.[28]

NTSV, nulliparous, term, singleton, vertex; *PC*, Perinatal Care; *TJC*, The Joint Commission.

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The Leapfrog Group also has a hospital comparison tool on its website.[32] The group collects data on specified CQMs from hospitals that volunteer to participate. Each metric is compared with prespecified benchmarks and rated from 0 to 4 bars. Table 4 summarizes Leapfrog Group metrics for maternity care.

The U.S. News & World Report publishes rankings and ratings of hospitals that submit various quality, safety, and patient experience data. For obstetrics and gynecology, the "top 50" hospitals are ranked from 1 to 50 on the basis of publicly reported Medicare data and other sources.[33] For maternity care, hospitals in the "top 10%" are rated as "best hospitals" on the basis of a voluntarily submitted Maternity Services Survey that includes patient volumes, rates of episiotomy and NTSV cesarean deliveries, and services offered (e.g., midwifery, doulas, vaginal birth after cesarean delivery), with stratification by maternal race and ethnicity.[34] The emphasis on ranking of facilities has been criticized for its somewhat opaque ranking process, the lack of risk-adjustment for social drivers of health, and the possibility that it may create perverse incentives for hospitals to engage in strategies to improve their rankings without regard to whether those strategies improve care or outcomes.[35]

Use of clinical quality measures in quality improvement

Quality metrics are used in quality improvement (QI) projects to establish a baseline showing need for improvement, to set a target, to document changes over time, and to monitor the maintenance phase at project completion.

Many QI projects can be based on the standard CQMs listed in our Tables. However, many of the obstetrical CQMs in common use reflect hospital care rather than ambulatory care that is the core of many MFM practices. Recognizing the need for metrics focused on high-risk pregnancy, SMFM convened a multistakeholder workshop in 2016 and recommended that several new metrics be developed.[36] The SMFM Patient Safety and Quality Committee has presented specifications for many of these,[37] as summarized in Table 5.

Many QI projects are aimed at improving processes that are not covered by standard CQMs. For these projects, custom metrics must be developed to measure the end point and track progress. AHRQ has a "Develop your own" toolkit with guidance for developing custom quality metrics.[38] The toolkit starts with a series of questions to consider at the outset and then provides detailed guidance on drafting measure specifications, addressing data and sampling issues, assessing reliability and validity, and field testing. A "reliable" measure will produce the same result every time it is applied. A "valid" metric must measure the aspect of care that it is intended to measure and must also be reliable. The toolkit encourages users to consider modifying or customizing an existing CQM to fit a project's needs rather than building an entirely new metric.

TABLE 4
Leapfrog Group metrics for maternity care

Source and number	Brief title	Synopsis	Type of metric	Benchmark	Level of assessment
TJC PC-02	NTSV Cesarean Rate	Cesarean deliveries as a percentage of nulliparas with term, singleton, vertex deliveries	Intermediate outcome	<23.6%	Facility
TJC PC-01	Elective delivery	Percentage of early term births (≥37 to <39 wk) without an indication for early term delivery	Process	<5%	Facility
NQF 0470	Incidence of episiotomy	Percentage of vaginal births during which an episiotomy is performed, excluding those with shoulder dystocia	Process	<5%	Facility
NQF 0473	Venous thromboembolism prophylaxis for cesarean	Percentage of participants with cesarean deliveries who received pneumatic compression devices or fractionated or unfractionated heparin before surgery	Process	>90%	Facility
—	High-risk deliveries	Facility may report either the number of newborns admitted to NICU or the Vermont Oxford Network National Performance Measure	Mixed	—	Facility
—	Services offered	Does hospital offer each of these services (5 yes-no questions): certified nurse-midwives for delivery, doulas for labor and delivery, breastfeeding/lactation services, vaginal birth after cesarean delivery, postpartum tubal ligation during delivery admission	Structure	—	Facility
Providence Health	Newborn Bilirubin Screening	Percentage of normal newborns born at ≥35 wk who have bilirubin screening before discharge	Process	>90%	Facility

Source: The Leapfrog Group. Leapfrog ratings.[32]

NICU, neonatal intensive care unit; *NQF*, National Quality Forum; *NTSV*, nulliparous, term, singleton, vertex; *PC*, Perinatal Care; *TJC*, The Joint Commission.

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Quality metrics and health equity

"There can be no quality without equity" is a rallying cry of the contemporary quality and safety field.[39,40] The CDC Office of Health Equity defines health equity as "the state in which everyone has a fair and just opportunity to attain their highest level of health."[41] In simple terms, if care is improved for some groups but not others, there is an equity gap and room for further improvement.

SMFM recognizes that there are glaring disparities in the rates of maternal and perinatal mortality, severe maternal morbidity, and other adverse obstetrical outcomes, and that these are driven by systemic racism and other inequities in SDOH. In response, SMFM has issued a series of articles alerting providers to the magnitude of the problem and suggesting best practices to improve equity.[42–44]

Only a few standardized CQMs directly address health equity or disparities. In 2023, CMS introduced a structural measure on health equity (Table 2, ID 1660) that simply requires hospitals to attest whether they have a commitment to address and improve equity. CMS also recently introduced process metrics that measure the percentage of patients who were screened for SDOH (ID 1664) and the percentage who screened positive (ID 1662). Furthermore, also in 2023, NCQA introduced a HEDIS measure on social need screening and intervention,[45] which is distinct from SDOH screening and arguably more important.[46]

The Core Quality Measures Collaborative (CQMC) scrutinized the 150 CQMs in its 10 core measure sets and concluded that 137 of them were "disparities-sensitive", meaning that the denominator included patients disproportionately affected by social risks relative to the general population.[47] For the 13 measures not deemed disparities-sensitive, the group recognized that disparities likely exist at some level for all measures but additional study is needed to assess their impact.

Despite the paucity of dedicated CQMs to measure equity or disparity, it is recommended that QI work should virtually always evaluate data stratified by race, ethnicity, and SDOH, even if this is not required by measure specifications. If data are not stratified or otherwise disaggregated, equity gaps will not be recognized. The need for disaggregated data applies at every level, from small single-facility QI projects to state-level collaboratives and nationwide programs.

NCQA and the California Health Care Foundation have issued a white paper with suggestions for developing a framework for quality measurement with a health equity perspective.[48] Although this document is targeted at state-level Medicaid programs, many of the tools are equally applicable for projects at other levels.

TABLE 5
Society for Maternal-Fetal Medicine quality metrics

Brief title	Synopsis	Type of metric	Level of assessment	Who can assess	Critique
Congenital heart defects, prenatal detection	Percentage of newborns with congenital heart defect in which the defect was detected prenatally	Process	Facility, provider	Payer	Needs new diagnosis codes for fetal anomalies and better integration of maternal and newborn records
Severe hypertension, timely treatment	Percentage of patients with first episode of severe hypertension who received appropriate treatment in <60 min	Process	Facility	Facility	—
Hospital readmission postpartum	Percentage of discharges from delivery hospitalization readmitted to hospital within specified number of d	Intermediate outcome	Facility	Payer, facility	Not standardized. Not recommended for incentive payment programs
Severe hypertension, timely postpartum follow-up	Percentage of patients with severe hypertension during delivery hospitalization who have follow-up visit within 3 d	Process	Facility	Payer	—
Antenatal corticosteroids (ACS), appropriate timing	Percentage of births <34 wk in which ACS were given between 6 h and 7 d before birth. Balancing metric: percentage of persons given ACS who delivered at term	Process	Facility	Facility	—
Gestational diabetes, postpartum screening	Percentage of persons with gestational diabetes who had a glucose tolerance test within 12 wk after delivery	Process	Facility, provider	Payer	—

Source: SMFM. Patient safety and quality resources.[37]

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Burdens of clinical quality measure reporting

Tracking and reporting of metrics places substantial burdens on providers and hospitals.

At the provider level, a survey study found that the time each week to extract and enter data for quality reporting averaged 2.6 hours for physicians and 12.5 hours for staff, a total of 785 hours at a cost of over $40,000 per physician per year, projecting to over $15 billion per year nationwide.[49] Time spent on quality reporting detracts from time for direct patient care and may contribute to physician burnout.[50] Physician burnout, in turn, is associated with lower-quality care,[51,52] so it is possible that the effort invested in measuring quality may itself worsen quality and safety.

At the hospital level, a detailed analysis at one hospital identified 162 unique metrics that were reported to various entities at a cost of over $5.6 million for personnel time and vendor fees to prepare and report the data.[53]

Are clinical quality measures valid?

Despite the large and growing number of metrics, there is widespread skepticism on whether the effort to measure performance is meaningful, effective, or safe.

Most physicians believe that the quality of their care is not accurately reflected by the measures that they are required to report.[49] In other words, clinicians doubt that the overall quality enterprise has validity even if individual CQMs may be valid for the specific aspect of care that they measure. In addition, many CQMs themselves lack validity; an analysis of 86 MIPS metrics relevant to ambulatory internal medicine concluded that 35% were not valid, 28% had uncertain validity, and only 37% were deemed valid.[54]

Is measurement of clinical quality measures effective at improving quality?

Meta-analyses have found little evidence that incentive payment programs improve health outcomes in either inpatient or outpatient settings, and low-certainty evidence that they may improve care processes in ambulatory settings.[55–58] The effectiveness of the CMS IPPS was called into question by a 2022 report from the Office of Inspector General, which found that the rate of preventable adverse events in hospitalized Medicare recipients had not improved over the 8 years from 2010 to 2018.[59] In maternity care, there are diverse models for incentive payment programs,[60] but we do not know of any reports that systematically review their effectiveness.

The NTSV cesarean delivery rate provides an example of the questionable effectiveness of setting national benchmarks for CQMs. Noting a baseline NTSV cesarean delivery rate of 18% in 1998, Healthy People 2010 set a target of 15% by 2010. By 2007, the NTSV cesarean delivery rate had increased to 27.4%, and Healthy People 2020 set a new target at 24.7%. By 2018, the rate was 25.9%, and Healthy People 2030 set a new target at 23.6%. Their most recent data (from 2021) show a rising rate at 26.3%, which Healthy People 2030 characterizes as "getting worse".[61] These observations show that simply defining a metric and setting a benchmark is not sufficient to drive change on a national scale. Conversely, hospital-level initiatives and state-level collaboratives may be effective.[62]

Similarly, as assessed by HEDIS metrics, the percentage of patients with timely initiation of prenatal care (75%–85%, depending on payer) and the percentage with a postpartum visit within 12 weeks (60%–80%) have changed little since 2001 for patients covered by either Medicaid or commercial plans.[63]

Is measurement of clinical quality measures safe?

Efforts to improve performance on a CQM may have unintended adverse consequences. Intentional or unintentional "gaming" of metrics might occur, that is, the use of strategies to improve the metric without improving the underlying care or clinical outcomes.[20] Such gaming could lead to worse outcomes. For example, several investigators reported an increase in mortality after the IPPS adopted a CQM on the rate of readmission after a hospitalization for heart failure.[64–67]

In perinatal care, the potential for unintended adverse consequences is raised whenever maternal benefit conflicts with fetal/neonatal benefit. For example, a provider who feels pressured to decrease their NTSV cesarean delivery rate may be reluctant to perform a cesarean delivery although fetal heart rate monitoring clearly indicates the need for it. Similarly, a provider who misinterprets the TJC metric PC-01 to mean that labor should never be induced before 39 weeks of gestation may opt to manage preeclampsia expectantly at 37 or 38 weeks, although early term delivery is medically indicated for nonsevere preeclampsia and late preterm delivery indicated for severe preeclampsia.

Potential for adverse consequences is also raised by the trade-offs between vaginal and cesarean delivery. For example, a provider who wants to lower their rate of anal sphincter lacerations (AHRQ measures Patient Safety Indicator [PSI] 18 and PSI 19) may be prone to avoid vaginal births by increasing their cesarean delivery rate instead.[68]

Balancing metrics provide an approach toward minimizing these potential adverse consequences. For example, the rate of unexpected newborn complications (TJC metrics PC-06 and ePC-06) can be used as a balancing metric against both the early-term elective delivery rate and the NTSV cesarean delivery rate; if providers attempt to lower their rates by avoiding these procedures when they are indicated, any unfavorable results may be reflected in the newborn complication rates. Similarly, the NTSV cesarean delivery rate can be used as a balancing metric against the rate of anal sphincter injuries.

Potential for adverse consequences is also raised whenever a CQM measures a process that is a both a marker for morbidity and a treatment for that morbidity. For example, blood transfusion is one defining criterion of the TJC metric for severe obstetrical complications (ePC-07). Transfusion is often an indicator of a severe obstetrical hemorrhage. However, if providers feel pressure to lower the ePC-07 severe complication rate, they may be reluctant to order transfusion when it is indicated. Similarly, the percentage of obstetrical patients transferred to the intensive care unit may provide a rough measure of the quality of obstetrical care, but it would be inappropriate to avoid a needed transfer simply to keep the percentage low.

To minimize these types of adverse consequences, it would be best to avoid using CQMs where this potential is recognized. An alternative approach is to define subsets of metrics to address the problem. For example, TJC ePC-07 has a submetric that measures the severe obstetrical complication rate while excluding transfusion from the definition.

Level of assessment, individual accountability, and preventability

CQMs are generally designed to be assessed at a specified level. For example, Medicaid Adult Core Set (MACS) metrics are reported at the state level, IPPS metrics at the hospital level, and MIPS metrics at the level of individual providers or provider groups. TJC and Leapfrog Group metrics are reported at the hospital level. A few metrics are assessed at multiple levels; for example, the NTSV cesarean delivery rate is assessed at a national level by the Healthy People 2030 measure MICH-06, at the state level by the National Vital Statistics System,[69] and at the facility level by TJC metric PC-02.

Individual providers should not be expected or required to meet the same benchmarks as those set for wider levels. For example, to reach the national benchmark NTSV cesarean delivery rate of 23.6% set by Healthy People 2030, it is only necessary that the *average* rate of states, hospitals, and providers be 23.6%, and it is not necessary for *every* state, hospital, and provider to meet that target. If every state, hospital, and provider met the benchmark, then the national rate would dip far below the benchmark. There is concern that lowering the NTSV rate too much might not be safe.

If a hospital is conducting a QI project to improve its performance on a given metric, it is often useful to "drill down" to the level of the individual provider to identify variances in practice and opportunities for improvement. However, it is usually inappropriate to place sanctions on individuals whose performance appears to deviate from the

TABLE 6
Core Quality Measures Collaborative (CQMC) list of core metrics for maternal and perinatal health

Source and number	Brief title	Synopsis	Level of assessment
NQF 0469 NQF 0469e	PC-01 Elective delivery	Percentage of early term births (≥37 to <39 wk) without an indication for early term delivery	Facility
NQF 0471 NQF 0471e	PC-02 Cesarean birth	Cesarean deliveries as a percentage of nulliparas with term, singleton, vertex deliveries	Facility
NQF 0470	Incidence of episiotomy	Percentage of vaginal births during which an episiotomy is performed, excluding those with shoulder dystocia	Facility
NQF 0716	Unexpected complications in term newborns	Percentage of term newborns with specified moderate or severe complications, excluding multifetal pregnancies, low birthweight, congenital anomalies, genetic conditions, fetal growth restriction, maternal drug use, certain other conditions	Facility or population
CMS ID 420	Postpartum follow-up and care coordination	Percentage of patients who had postpartum care within 8 wk of birth, including breastfeeding evaluation, depression screening, contraceptive planning, and glucose screening (if patient had gestational diabetes)	Provider or provider group
NQF 3484	Prenatal immunization	Percentage of patients delivered who received both influenza and Tdap vaccination during pregnancy	Health plan
NCQA	Postpartum depression screening and follow-up[a]	Percentage of patients who had depression screening using a validated instrument at postpartum visit and, if screen positive, had a documented follow-up plan	Health plan

Source: Core Quality Measures Collaborative. CQMC core sets.[77]

MIPS, Merit-based Incentive Payment System; *NCQA*, National Committee for Quality Assurance; *NQF*, National Quality Forum; *PC*, Perinatal Care; *Tdap*, tetanus, diphtheria, acellular pertussis.

[a] Part of the CQMC Obstetrics and Gynecology Core Set but not the Maternal and Perinatal Health Core Set.

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mean. Some providers may care for patients with different risk profiles based on comorbidities and SDOH; hospitals generally lack the ability to perform proper statistical risk adjustment. Conversely, the QI project team may develop useful insights by interviewing providers whose metric performance is exceptionally good or exceptionally poor. These insights may suggest strategies for department-wide performance improvement.

It must be clearly communicated to providers that meeting quality metrics should never be a higher priority than providing the best care for each patient. It is inappropriate and potentially dangerous to withhold indicated care simply to satisfy quality metrics. Situations where providers might be tempted to withhold care include inducing labor in the early term period for a patient with an indication that is not on the list specified by TJC PC-01[70]; performing an NTSV cesarean delivery for a patient with category 3 fetal heart tracing; performing a mediolateral episiotomy to facilitate an operative vaginal delivery[71]; transfusing a patient with severe, symptomatic, postpartum anemia; or readmitting a patient to hospital for severe postpartum hypertension.[24] None of the metrics relevant to these examples have a benchmark rate of 0% because it is recognized that exceptions may occur in occasional cases. Providers should not be fearful that good medical decision-making will result in a reprimand from the "quality police."

"Zero-harm" is a concept that is gaining momentum in the patient safety field.[72,73] The goal of the zero-harm movement is to avoid all preventable harm in health care. The challenge in applying this concept to quality measurement and quality review is that there is some subjectivity in determining whether or not an adverse event was preventable. For maternal deaths, the CDC provides some guidance in making this determination.[74] For the other CQMs listed in our tables, the metrics make no attempt to assess preventability but simply summarize overall rates. Nonetheless, a quality review committee or QI project team should attempt to evaluate preventability before embarking on an extensive QI project. If a metric identifies adverse outcomes that are mostly unpreventable, QI efforts would probably be futile.

The next era: simplification and consolidation

Given the burdens, costs, and uncertain effectiveness of the burgeoning quality-measurement enterprise, experts have called for steps to simplify or overhaul the system.[50,54,75,76] Although the first quarter-century of the modern quality movement was characterized by the uncontrolled proliferation of quality organizations and metrics, it appears that the next quarter-century is starting with attempts to simplify and consolidate.

One approach toward simplification is development of electronic CQMs (eCQMs) that can be calculated

TABLE 7
Adult metrics in the Centers for Medicare & Medicaid Services Universal Foundation

CMS ID[a]	Brief title	Synopsis	Type of metric
139	Colorectal cancer screening	Percentage of patients aged 45–75 y who had appropriate screening for colorectal cancer	Process
93	Breast cancer screening	Percentage of women aged 50–74 y who had a mammogram in previous 27 mo	Process
26	Adult immunization status	Percentage of patients aged ≥19 y who are up-to-date on recommended routine vaccinations for influenza, zoster, pneumococcus, and tetanus and diphtheria or tetanus, diphtheria, and acellular pertussis	Process
167	Controlling high blood pressure	Percentage of patients with essential hypertension whose most recent blood pressure was adequately controlled (<140/90)	Intermediate outcome
204	Hemoglobin A1c poor control	Percentage of patients aged 18–75 y with diabetes who had hemoglobin A1c >9.0% during measurement period	Intermediate outcome
672	Depression screening and follow-up	Percentage of patients aged ≥12 y screened for depression AND if positive, a follow-up plan is documented	Process
394	Substance use disorder treatment	Percentage of patients aged ≥13 y with new episode of alcohol or drug abuse or dependence who received an intervention or medication and, reported separately, the percentage engaged in ongoing treatment	Process
561 or 44	All-cause readmissions	Percentage of discharges from inpatient or observation stays that were followed by unplanned acute readmission within 30 d	Intermediate outcome
158	CAHPS	Survey responses on Consumer Assessment of Healthcare Providers and Systems	Patient experience
1664	Equity, screening for social drivers of health	Percentage of patients screened for social drivers of health. Measure specification not provided on CMS website as of this writing (June 2023)	Process

Source: Jacobs et al. Aligning quality measures across CMS — the Universal Foundation.[78]

CAHPS, Consumer Assessment of Healthcare Providers and Systems survey; *CMS ID*, Centers for Medicare & Medicaid Services identification number.

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automatically from structured data in the electronic health record and do not depend on extraction of data by manual chart review. Although an eCQM may superficially seem similar to a preexisting CQM, the detailed measure specifications for the 2 types of measures may be very different. The advantage of eCQMs was highlighted by a recent report that found that the average annual cost to prepare and report an eCQM was approximately $1900, much lower than the costs associated with traditional CQMs based on claims data ($37,554) or chart abstraction ($33,871).[53]

Another approach toward simplification is the development of core measure sets, carefully curated lists of CQMs that are selected for their potential to yield high-value, evidence-based, clinically meaningful information while minimizing administrative burden to collect and report the data. Core measure sets in several specialties are published by CQMC.[77] Table 6 summarizes the CQMC core set on maternal and perinatal health.

In early 2023, recognizing that the proliferation of CQMs has caused confusion, burden, and a misalignment of approaches for common clinical scenarios, CMS announced a move toward more parsimonious measure sets called the "Universal Foundation".[78] The initial proposal lists 10 metrics for adult care and 13 for pediatric care. The adult measures are summarized in Table 7. Although many of these are relevant for obstetrical patients, none are specific to obstetrical care or outcomes. CMS plans to append an add-on set of maternity metrics by late 2023. Although a specific maternity measure set will likely provide a more complete picture of the quality of obstetrical care, the need for such a set also demonstrates that a "universal" set applicable to all patients will not necessarily be sufficient for specific types of patients.

In spring 2023, NQF announced an Aligned Innovation initiative to advance the next generation of outcome measures for maternal health outcomes and behavioral health.[79] The program intends to support rapid-cycle development of new metrics on severe maternal morbidity that are outcome-oriented, fill high-priority measurement gaps, and are meaningful to patients and clinicians.

In the same spirit of simplification, TJC consolidated or eliminated >200 standards and requirements effective

August 2023, with the goal of making accreditation more efficient and impactful for patient safety and quality.[80] The changes involve hospital care, ambulatory care, home care, and related services.

Another trend for the future may be the development of alliances between entities concerned with clinical quality. For example, in mid-2023, NQF and TJC announced a new "strategic affiliation" intended to accelerate improvements in quality, safety, equity, and value.[81]

Conclusions

We have summarized key aspects of quality metrics in obstetrical care, including their uses and some of their drawbacks. The first step in QI is to identify gaps in quality by assessing quality metrics. Subsequent steps use metrics to measure progress as efforts are made to close those gaps.

Although there is currently a plethora of constantly shifting metrics intended to measure quality of care, there are ongoing attempts to reduce these to core sets of evidence-based metrics with high potential value. In the meantime, it is important for providers to be aware of the metrics currently used in their field and the metrics that are being reported by their facilities and their practices.

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