



# SMFM Special Statement: Who's who in patient safety and quality for maternal healthcare in the United States

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There are many organizations in the United States concerned with the improvement of patient safety and healthcare quality. In this overview, we provide a synopsis of the major entities whose work is relevant to maternal healthcare. For each organization, we summarize its mission, vision, major programs, and relationships with other entities. We include 13 entities with broad scope covering all types of healthcare; 9 organizations whose focus is maternal-child health; 6 women's health professional organizations with committees on patient safety, quality, or both; 12 organizations that offer accreditation, certification, or special distinction based on quality; and 5 organizations that rate, rank, or report quality metrics.

**Key words:** healthcare quality, organizations, patient safety

## Introduction

The Institute of Medicine's (IOM) 1999 monograph *To Err is Human* was a call to action for healthcare providers, detailing the evidence that medical errors cause tens of thousands of deaths annually in the United States.<sup>1</sup> In response, dozens of professional organizations, private organizations, and governmental agencies have devoted extensive efforts toward improving patient safety and quality of care. Healthcare providers can easily be overwhelmed by the "alphabet soup" of acronyms and baffled by the complex web of interactions among organizations.

The goal of this overview is to present a brief synopsis of the major entities involved in patient safety and quality, both in general healthcare and in maternal health. **Tables 1 to 5** list the 45 organizations that we reviewed, subdivided by the scope of the organizations' activities. In the narrative that follows, we describe the focus and key activities of each organization based on information publicly available on its website. Our emphasis was on US organizations, but we list a few international entities that are especially influential.

We anticipate that this overview will serve as an orientation to and reference for the reader to understand these entities and their interrelationships. There is substantial overlap in the activities of the various organizations; therefore, it is likely that there will be changes over time as existing entities merge, change names or focus, or, in some cases, cease operations. A few examples of prominent organizations whose functions have recently been subsumed

under different organizations are given. Furthermore, because new organizations will likely emerge in the future, this overview is a "snapshot" in time and will likely need periodic updating.

## National or International Organizations With Broad Scope

### Agency for Healthcare Research and Quality

The Agency for Healthcare Research and Quality (AHRQ) is an operating division of the US Department of Health and Human Services (HHS). This agency "is the lead Federal agency charged with improving the safety and quality of America's health care system." Its mission is "[to] produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within the US HHS and with other partners to make sure that the evidence is understood and used." AHRQ offers numerous programs that have a variety of tools and resources to help practitioners and organizations in developing quality and safety improvement initiatives. These programs include the following:

- AHRQuality Indicators
- Comprehensive Unit-based Safety Program
- Consumer Assessment of Healthcare Providers and Systems (CAHPS)
- Diagnostic Safety Improvement Program
- Health Care Innovations Exchange
- Healthcare-Associated Infections Program
- Hospital-Acquired Conditions (HAC) Program
- National Healthcare Quality and Disparities Reports

**TABLE 1**  
**National or international organizations with broad scope**

Organization name	Acronym	Website
Agency for Healthcare Research & Quality	AHRQ	<a href="http://ahrq.gov">ahrq.gov</a>
Centers for Disease Control and Prevention	CDC	<a href="http://cdc.gov">cdc.gov</a>
Centers for Medicare & Medicaid Services	CMS	<a href="http://cms.gov">cms.gov</a>
Core Quality Measures Collaborative	CQMC	<a href="http://qualityforum.org/cqmc">qualityforum.org/cqmc</a>
Food and Drug Administration	FDA	<a href="http://fda.gov/">fda.gov/</a>
Health Resources and Services Administration	HRSA	<a href="http://hrsa.gov">hrsa.gov</a>
Healthy People 2030	—	<a href="http://healthypeople.gov">healthypeople.gov</a>
Institute for Healthcare Improvement	IHI	<a href="http://ihi.org">ihi.org</a>
Institute of Medicine	IOM	See NAM
National Academy of Medicine	NAM	<a href="http://nam.edu">nam.edu</a>
National Institute for Health and Care Excellence	NICE	<a href="http://nice.org.uk">nice.org.uk</a>
National Patient Safety Foundation	NPSF	See IHI
National Quality Forum	NQF	<a href="http://qualityforum.org">qualityforum.org</a>
National Quality Measures Clearinghouse	NQMC	<a href="http://qualitymeasures.ahrq.gov">qualitymeasures.ahrq.gov</a>
World Health Organization	WHO	<a href="http://who.int">who.int</a>

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- National Quality Measures Clearinghouse (NQMC; see below)
- National Quality Strategy
- Safety Program for Nursing Homes
- Patient and Family Engagement
- Patient Safety Network
- Patient Safety Organization Program
- Patient-Centered Medical Home (PCMH)
- Patient-Centered Outcomes Research
- Pediatric Quality Measures Program
- Quality Indicator
- Surveys on Patient Safety Culture
- TalkingQuality

### Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention (CDC) is an operating division of the HHS. Its mission statement is as follows:

CDC works 24/7 to protect America from health, safety and security threats, both foreign and in the U.S. Whether diseases start at home or abroad, are chronic or acute, curable or preventable, human error or deliberate attack, CDC fights disease and supports communities and citizens to do the same.

CDC initiatives on patient safety are focused largely on prevention of hospital-acquired infections (HAIs) and

include patient-oriented materials that encourage patients to be informed and proactive about vaccination, hand hygiene, signs and symptoms of infection, antibiotic stewardship, and antibiotic-associated diarrhea. It also provides funding for the National Network of Perinatal Quality Collaboratives (NNPQC; see National Network of Perinatal Quality Collaboratives section).

### Centers for Medicare & Medicaid Services

The Centers for Medicare & Medicaid Services (CMS) is another operating division within the HHS. It administers the Medicare program and works in partnership with state governments to administer Medicaid, the Children's Health Insurance Program (CHIP), and standards of the Health Insurance Portability and Accountability Act. Its mission is "[to] ensure that the voices and needs of the populations we represent are present as the agency is developing, implementing, and evaluating its policies," and its vision is that "All CMS beneficiaries have achieved their highest level of health, and disparities in health care quality and access have been eliminated."

The CMS performs numerous administrative, analytic, and quality improvement functions within HHS. Some of these functions are described below:

- Sets quality standards for long-term care facilities through its survey and certification process

**TABLE 2**  
**National or international organizations with focus on maternal-child health**

Organization name	Acronym	Website
Alliance for Innovation on Maternal Health	AIM	<a href="https://safehealthcareforeverywoman.org/aim-program/">safehealthcareforeverywoman.org/aim-program/</a>
Council on Patient Safety in Women's Healthcare	CPSWHC	<a href="https://safehealthcareforeverywoman.org">safehealthcareforeverywoman.org</a>
Fetal Medicine Foundation	FMF	<a href="https://fetalmedicine.org">fetalmedicine.org</a>
Institute for Perinatal Quality Improvement	IPQI	<a href="https://perinatalqi.org">perinatalqi.org</a>
Maternal Safety Foundation	MSF	<a href="https://maternalsafetyfoundation.org">maternalsafetyfoundation.org</a> <a href="https://cesareanrates.org">cesareanrates.org</a>
National Center for Fatality Review and Prevention	NCFRP	<a href="https://ncfrp.org">ncfrp.org</a>
National Network of Perinatal Quality Collaboratives	NNPQC	<a href="https://nichq.org/project/national-network-perinatal-quality-collaboratives">nichq.org/project/national-network-perinatal-quality-collaboratives</a>
National Partnership for Maternal Safety	NPMS	See text
National Perinatal Information Center	NPIC	<a href="https://npic.org">npic.org</a>
Perinatal Quality Foundation	PQF	<a href="https://perinatalquality.org">perinatalquality.org</a>

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- Establishes clinical laboratory quality standards under the 1988 Clinical Laboratory Improvement Amendments
- Provides oversight of [HealthCare.gov](https://www.healthcare.gov), the website for healthcare insurance coverage under the Affordable Care Act
- Partners with multiple other federal and state organizations to collect data and lead quality improvement initiatives, including programs that establish differential payments based on meeting-specified performance targets (eg, the Hospital Value-Based Purchasing [VBP] program, Hospital Readmission Reduction Program, and programs that evaluate HAIs, other HACs, and various patient safety indicators
- Sponsors an analytic support program that publishes *Quality of care for children and adults in Medicaid and CHIP*,<sup>2</sup> an annual quality report on perinatal care (PC) and outcomes, and existing initiatives that focus on improving postpartum care and coverage of lactation services and reducing early elective deliveries
- Participates in the Core Quality Measures Collaborative (CQMC, described below)

In collaboration with the AHRQ, the CMS also developed the CAHPS surveys, which are used in the VBP program. The Hospital CAHPS (HCAHPS) survey was the first national, standardized, publicly reported survey of patient experiences of hospital care. The Clinics and Groups CAHPS (CG-CAHPS) survey evaluates patient experiences in outpatient settings.

### Core Quality Measures Collaborative

The CQMC is a broad-based coalition of healthcare leaders working together to recommend core sets of metrics to assess the quality of healthcare in specific clinical areas. Members include the CMS, America's Health Insurance Plans, health insurance companies, medical associations, consumer groups, purchasers (such as employer groups), and other quality collaboratives. The group recognizes that the proliferation of performance measures has led to a substantial burden on providers, confusion among consumers and purchasers, and operational difficulties for payers. The CQMC aims to identify fundamental sets of high-value, high-impact, evidence-based measures that provide useful information and promote better outcomes while aligning those measures across public and private

**TABLE 3**  
**Women's health professional organizations with committees on patient safety or quality**

Organization name	Acronym	Website
American College of Obstetricians and Gynecologists	ACOG	<a href="https://acog.org">acog.org</a>
American College of Nurse-Midwives	ACNM	<a href="https://midwife.org">midwife.org</a>
American Institute of Ultrasound in Medicine	AIUM	<a href="https://aium.org">aium.org</a>
Association of Women's Health and Neonatal Nurses	AWHONN	<a href="https://awhonn.org">awhonn.org</a>
Society for Maternal-Fetal Medicine	SMFM	<a href="https://smfm.org">smfm.org</a>
Society for Obstetric Anesthesia and Perinatology	SOAP	<a href="https://soap.org">soap.org</a>
State-Specific Maternal Mortality Review Committees and Perinatal Quality Collaboratives	—	See text

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**TABLE 4**  
**Organizations offering accreditation, certification, or special distinction**

Organization name	Acronym	Website
American Board of Obstetrics and Gynecology	ABOG	<a href="http://abog.org">abog.org</a>
American Institute of Ultrasound in Medicine (offering ultrasound practice accreditation)	AIUM	<a href="http://aium.org/accreditation/accreditation.aspx">aium.org/accreditation/accreditation.aspx</a>
Baby-Friendly Hospital Initiative	BFHI	<a href="http://babyfriendlyusa.org">babyfriendlyusa.org</a>
Blue Distinction	—	<a href="http://bcbs.com/about-us/capabilities-initiatives/blue-distinction">bcbs.com/about-us/capabilities-initiatives/blue-distinction</a>
Commission for the Accreditation of Birth Centers	CABC	<a href="http://birthcenteraccreditation.org">birthcenteraccreditation.org</a>
Fetal Medicine Foundation (offering the Certificate of Competence)	FMF	<a href="http://fetalmedicine.org/fmf-certification/certificates-of-competence">fetalmedicine.org/fmf-certification/certificates-of-competence</a>
Institute for Healthcare Improvement (offering Certified Professional in Patient Safety IHI credentials)		<a href="http://ihi.org/education/cpps-certified-professional-in-patient-safety">ihi.org/education/cpps-certified-professional-in-patient-safety</a>
Joint Commission for Accreditation of Healthcare Organizations	JCAHO	See TJC
National Association for Healthcare Quality	NAHQ	<a href="http://nahq.org/certification">nahq.org/certification</a>
National Certification Corporation	NCC	<a href="http://nccwebsite.org">nccwebsite.org</a>
National Committee for Quality Assurance	NCQA	<a href="http://ncqa.org">ncqa.org</a>
Perinatal Quality Foundation (offering credentials for cervical length and fetal monitoring)	PQF	<a href="http://clear.perinatalquality.org">clear.perinatalquality.org</a> <a href="http://fmc.perinatalquality.org">fmc.perinatalquality.org</a>
The Joint Commission	TJC	<a href="http://jointcommission.org">jointcommission.org</a>

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payers and reducing the burden of measurement by eliminating low-value metrics, redundancies, and inconsistencies. The CQMC's core measure set for obstetrics and gynecology includes 6 metrics for the ambulatory care setting and 5 metrics for the hospital—acute care setting.

### US Food and Drug Administration

The US Food and Drug Administration (FDA) is an operating division of the HHS. Its mission includes “protecting the public health by ensuring the safety, efficacy, and security of human and veterinary drugs, biological products, and medical devices; and by ensuring the safety of our nation's food supply, cosmetics, and products that emit radiation.” It also regulates tobacco products. The FDA provides accurate, science-based information about these products to the public and requires manufacturers of pharmaceuticals and medical devices to adhere to its quality system regulations, which are centered on a set of standards known as Current Good Manufacturing Practices. Adherence is enforced by a system of inspections and audits. The agency is preparing to implement a program of standardized manufacturing quality metrics to monitor quality control systems and processes. The FDA also disseminates warnings and alerts about drug safety concerns via press releases, podcasts, and a dedicated page on its website for Drug Safety Communications; in the past few years, these alerts have been posted with an average frequency of about 1 per month.

### Health Resources and Services Administration

The Health Resources and Services Administration (HRSA) is an operating division of the HHS. This agency provides grants and scholarships supporting the healthcare workforce, including the National Health Service Corps and programs, to increase services in rural and underserved areas. The programs in women's health have 3 strategic priorities: improving women's health before, during, and beyond pregnancy and across their life course; improving

**TABLE 5**  
**Organizations that rate, rank, or report quality measures**

Organization name	Website
Healthgrades	<a href="http://healthgrades.com">healthgrades.com</a>
Hospital Compare	<a href="http://medicare.gov/hospitalcompare">medicare.gov/hospitalcompare</a>
Leapfrog Group	<a href="http://leapfroggroup.org">leapfroggroup.org</a>
US News & World Report	<a href="http://health.usnews.com">health.usnews.com</a>
Yelp	<a href="http://yelp.com">yelp.com</a>

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the quality and safety of maternity care; and improving systems of maternity care, including both clinical and public healthcare systems. HRSA provides funding for the Alliance for Innovation on Maternal Health (AIM; described below), the Healthy Start program, and Title V Maternal and Child Health Block Grant programs that provide services for the majority of pregnant women in the United States.

### Healthy People 2030

Healthy People 2030 is a program of the Office of Disease Prevention and Health Promotion under the Assistant Secretary of Health within the HHS. Its mission is “[to] promote, strengthen and evaluate the Nation’s efforts to improve the health and well-being of all people,” and its vision is “A society in which all people can achieve their full potential for health and well-being across the lifespan.” Healthy People sets health goals for the nation but does not have enforcement or regulatory authority. As of this writing, the Healthy People 2030 objectives have not been finalized. An advisory committee of the HHS staff and subject experts is currently evaluating a list of potential objectives based on rigorous selection criteria and public comments received in 2018 and 2019. The Healthy People 2020 objectives related to maternity care included the following:

- To reduce the rate of maternal mortality
- To reduce complications during delivery hospitalization
- To reduce nulliparous, term, singleton, vertex (NTSV) cesarean rate
- To reduce the rate of primary cesarean
- To reduce the rate of repeat cesarean
- To reduce low birth weight
- To reduce preterm births
- To increase the proportion of women who receive early and adequate prenatal care
- To increase abstinence from alcohol, cigarettes, and illicit drugs in pregnant women
- To increase intake of folic acid in pregnant women
- To increase the use of preconception care services
- To reduce the rate of impaired fecundity among women aged 18 to 44 years
- To increase the rate of postpartum care visits
- To decrease rate of postpartum relapse to smoking among women who quit smoking during pregnancy
- To decrease the rate of postpartum depression

### Institute for Healthcare Improvement

The Institute for Healthcare Improvement (IHI) is an independent not-for-profit organization whose mission is to “[improve] health and health care worldwide” and whose vision is “Everyone has the best care and health possible.” The IHI is perhaps best known for its “Triple Aim for Populations” initiative, which is described as the application of “integrated approaches to simultaneously improve care, improve population health, and reduce costs per capita.” Other major topic areas on its website are improvement

capability; person- and family-centered care; patient safety; and quality, cost, and value. The institute has an Open School and provides online and in-person training for groups and teams on topics related to patient safety and quality. The organization has a variety of tools available for free download, including general quality and safety tools (Quality Improvement Essentials Toolkit, Global Trigger Tool for Measuring Adverse Events, and SBAR [Situation-Background-Assessment-Recommendation] tool); improvement tools (driver diagram, Improvement Project Roadmap, and Seven Spreadly Sins); and safety tools (Ask Me 3: Good Questions for Your Good Health, Improving Root Cause Analyses and Actions to Prevent Harm, Optimizing a Business Case for Safe Health Care, and Medication Safety Best Practices).

### Institute of Medicine

For more information on the Institute of Medicine (IOM), see the section “National Academy of Medicine.” This organization has changed its name and is no longer using the name Institute of Medicine.

### National Academy of Medicine

The National Academy of Medicine (NAM), previously known as the Institute of Medicine, is an independent organization of eminent professionals in health, medicine, and natural, social, and behavioral sciences. On its website, NAM states that:

[it] serves alongside the National Academy of Sciences and the National Academy of Engineering as adviser to the nation and the international community. Through its domestic and global initiatives, the NAM works to address critical issues in health, medicine, and related policy and inspire positive action across sectors.

Notable contributions of the IOM to the quality and safety arena were the landmark monographs *To Err is Human*,<sup>1</sup> which focused national attention on medical errors as a frequent cause of hospital mortality, and *Crossing the Quality Chasm*,<sup>3</sup> which introduced strategies for building a safer healthcare system. Current NAM programs include Culture of Health, Public Health Case Challenge, Health Policy Fellowships, Innovation to Incubation, several leadership programs, and an annual health policy discussion symposium. Initiatives include the following: Action Collaborative on Clinician Well-Being and Resilience, Global Health Risk Framework, Grand Challenge for Healthy Longevity, Human Gene Editing, and Vital Directions for Health and Health Care.

### National Institute for Health and Care Excellence

The National Institute for Health and Care Excellence (NICE) is a nondepartmental public body in the United Kingdom, established by UK legislation but operationally independent of the UK government. Its charter establishes that it is



“responsible for providing evidence-based guidance on health and social care.” NICE publications include Guidance (best available evidence to develop recommendations that guide decisions in health, public health, and social care), NICE Advice (critical assessment of evidence to help users make decisions), Quality Standards (priority areas for quality improvement in health and social care), and NICE Pathways (interactive topic-based flowcharts that allow users to navigate recommendations). NICE guidelines are reviewed regularly, produced transparently, and are publicly available online. They include 82 documents on pregnancy, 43 on intrapartum care, and 52 on postnatal care. The NICE website includes information on how to develop, prioritize, use, and measure the uptake of quality standards. NICE collaborates with local and national organizations including the National Health Service (NHS) England, Care Quality Commission, Public Health England, NHS Improvement, and Health Education England.

### National Patient Safety Foundation

The National Patient Safety Foundation (NPSF) was an independent nonprofit organization whose mission was to engage key stakeholders to advance patient safety and healthcare workforce safety and to disseminate strategies to prevent harm. On May 2017, the organization merged with the IHI, and its essential functions and materials are found within the IHI website.

### National Quality Forum

The National Quality Forum (NQF) is a not-for-profit, nonpartisan, membership-based organization that works to catalyze improvements in healthcare. Its mission is “[to] be the trusted voice driving measurable health improvements using the values of Collaboration, Leadership, Passion, Excellence, and Integrity,” and its vision is “Every person experiences high value care and optimal health outcomes.” The NQF Board represents a range of leaders from the public and private sectors, including providers, purchasers, consumers, and representatives from the AHRQ, CDC, CMS, HRSA, and Veteran’s Administration. The NQF sets standards, recommends measures for use in payment and public reporting programs, identifies and accelerates quality improvement priorities, advances electronic measurement, and provides information and tools to help healthcare decision makers. It produces an interactive field guide with information on its measures and processes. The Forum does not develop measures itself but rather uses a rigorous, transparent, consensus-based endorsement process to add or remove measures. The measures in the Perinatal and Women’s Health Portfolio include episiotomy rate, percentage of low birth weight, chlamydia screening rate, 5 perinatal core measures from The Joint Commission (TJC; detailed below), 3 contraception measures, and 4 measures of newborn care or complications. Starting in 2020, the NQF convened an expert

multistakeholder committee on maternal morbidity and mortality with a 2-year goal to describe measurement frameworks for serious complications.

### National Quality Measures Clearinghouse

The NQMC was an online database of the evidence-based quality measures and measure sets approved by the AHRQ. Its mission was “[to] provide practitioners, health care providers, health plans, integrated delivery systems, purchasers, and others an accessible mechanism for obtaining detailed information on quality measures and to further their dissemination, implementation, and use in order to inform health care decisions.” The NQMC contained structured abstracts about measures and their development to allow for comparison between measures and contained links to complete summaries and expert commentaries. Due to lack of funding and changes in data dissemination from the AHRQ, the NQMC website was disabled on July 2018.

### World Health Organization

The World Health Organization (WHO) is a specialized agency of the United Nations (UN) that is concerned with international public health. Its mission is “[the] attainment by all people of the highest possible level of health,” and its vision is “A world where everyone can live healthy, productive lives by putting people first, placing health care at the center of the global agenda, and engaging countries and strengthening partnerships.” The WHO comprises 194 member states over 6 regions. Its current priorities include effects from diseases, nutrition and food security, environmental and occupational safety, and reproductive health. It is responsible for the World Health Report, the Worldwide Health Survey, and World Health Day. The organization focuses on the development of reporting, publications, and networking in global public health. The WHO’s primary role is to direct international health within the UN system and to lead partners in global health responses. Multiple programs at the WHO focus on maternal health and the reduction of maternal morbidity and mortality. The programs are carried out by the Department of Maternal, Newborn, Child, and Adolescent Health; Department of Reproductive Health and Research, which has a special program in research, development, and research training in human reproduction; and Partnership for Maternal, Newborn, & Child Health. Among WHO’s many important publications is *Standards for Improving Quality of Maternal and Newborn Care in Health Facilities*,<sup>4</sup> which details 8 quality domains in 6 strategic areas. The WHO works with governments, public health partnerships, and private organizations throughout the world. With the UN Children’s Emergency Fund (UNICEF), in 2018, the WHO launched the Network for Improving Quality of Care for Maternal, Newborn, and Child Health (Quality of Care Network) with a vision “that every pregnant woman

and newborn receives good-quality care throughout pregnancy, childbirth, and the postnatal period.” The Baby-Friendly Hospital Initiative (BFHI) program of the WHO and UNICEF is discussed in detail in a later section.

## National or International Organizations With Focus on Maternal and Child Health

### Alliance for Innovation on Maternal Health

AIM is a national data-driven maternal safety and quality improvement initiative based on proven implementation approaches. Its goal is “[to] eliminate preventable maternal mortality and severe morbidity across the United States.” The Alliance is funded by the Maternal and Child Health Bureau (MCHB) of the HRSA and is a program of the Council on Patient Safety in Women’s Health Care (CPSWHC; see section below). It comprises several medical and nursing professional societies, hospital organizations, patient advocacy organizations, health plans, and the March of Dimes. Its patient safety bundles include obstetric hemorrhage, severe hypertension in pregnancy, maternal venous thromboembolism prevention, postpartum care transition to postpartum visit and well-woman care, opioid use disorder, reduction of racial and ethnic disparities, and safe reduction of primary cesarean birth. AIM works with state teams and healthcare systems to align national-, state-, and hospital-level quality improvement efforts to improve maternal health outcomes. It provides partnership, tools, technical assistance, implementation training, and real-time data; builds on existing initiatives; and assists with bundle adoption. Enrollment is voluntary and has a rolling onboarding process.

### Council on Patient Safety in Women’s Health Care

The CPSWHC is a consortium of several medical, nursing, and patient advocacy organizations involved in women’s healthcare. Its mission is “[continually] improving patient safety in women’s health care through multidisciplinary collaboration that drives culture change,” and its vision is “Safe health care for every woman.” The Council promotes all the AIM patient safety bundles plus additional bundles on maternal depression and anxiety and prevention of retained vaginal sponges. In addition to the bundles, other safety tools on the CPSWHC website include a toolkit for implementing quality improvement projects and aids for maternal early warning signs and severe maternal morbidity review. Practicing for Patients is a program that provides guidance for simulation training. The CPSWHC Safety Action Series is a monthly series of interactive live webinars on diverse safety topics, archived and publicly accessible. The Voices of Impact video series are case presentations in the words of women and families after severe maternal events. The National Improvement Challenge and National Improvement Video Challenge are annual competitions that provide an opportunity for institutions to share their quality improvement efforts.

### Fetal Medicine Foundation

The Fetal Medicine Foundation (FMF) is a UK-registered charity that aims to improve the health of mothers and their babies through research and training in fetal medicine. The Foundation supports research and training in early diagnosis of fetal anomalies; screening for chromosomal defects; development of safer techniques for prenatal diagnosis and intrauterine fetal surgery; management of multiple gestations; and prediction and prevention of preeclampsia, preterm birth, stillbirth, and fetal growth restriction. The Foundation offers a free online training course and a Certificate of Competence in each of the following ultrasound subspecialty areas: 11- to 13-week scan (nuchal translucency, nasal bone, ductus venosus flow, tricuspid flow), preeclampsia screening, fetal abnormalities, fetal echocardiography, Doppler ultrasound, and cervical assessment.

### Institute for Perinatal Quality Improvement

The Institute for Perinatal Quality Improvement (IPQI) is an independent for-profit organization that provides in-person and online education and training in quality improvement methods and improvement science related to PC. Its mission is “[to] expand the use of quality improvement to eliminate preventable perinatal morbidity and mortality and ensure equity in perinatal outcomes.” In addition to education and training, the IPQI publishes on its website a variety of tools and resources on improvement science. The IPQI #SpeakUp campaign focuses on implicit and explicit bias and racial–ethnic inequities. Some IPQI materials are public; some require a basic no-fee subscription; and others require a paid subscription.

### Maternal Safety Foundation

The Maternal Safety Foundation (MSF) is an independent, nonprofit organization committed to patient safety, transparency, and education. Its mission is “[to] continuously improve the quality and safety of maternal health care in the United States,” and its vision is “Safe, accessible, risk-appropriate pregnancy and postpartum care for all and a goal of collaborating with the organizations and agencies working together to improve patient safety in maternity care.” On its satellite Cesarean Rates website [cesareanrates.org](https://cesareanrates.org), the MSF publishes dashboards showing each state’s progress toward reaching the Healthy People 2020 goal of reducing the NTSV cesarean rate to 23.9%. Another initiative is Safe Care for Patients With a Previous Cesarean, including the development of a bundle of interventions to improve access to and utilization of vaginal birth after cesarean delivery. In late 2019, the MSF launched its Maternal Centers of Excellence hospital certification program to reward and promote excellence in maternal health and safety for women with a prior cesarean birth.

### National Center for Fatality Review and Prevention

The National Center for Fatality Review and Prevention (NCFRP) is a resource and data center funded by the MCHB of HRSA focused on the review of fetal, infant, and child deaths. It “promotes, supports and enhances death review methodology and activities at the state, community, and national levels.” The Center provides leadership, training, coordination, and technical support to 1350 child death review teams and 173 fetal and infant death review programs around the country. It manages a national case reporting system that promotes accurate data collection, analysis, and dissemination. The Center builds partnerships with state and local teams to translate death review findings into recommendations and actions to improve systems and prevent death and serious injuries. It aligns with the MCHB in performance measures such as healthy pregnancy, child and infant mortality, injury prevention, and safe sleep.

### National Network of Perinatal Quality Collaboratives

The NNPQC is a consortium whose membership comprises state-based perinatal quality collaboratives (PQCs) from 43 US states. Its mission is “[to] support the development and enhance the ability of state perinatal quality collaboratives to make measurable improvements in statewide maternal and infant healthcare and health outcomes.” It is funded by the CDC and coordinated by the National Institute for Children’s Health Quality, an independent nonprofit organization (not affiliated with the National Institutes of Health) whose mission is to improve outcomes for children and their families. The Network provides resources and expertise to PQCs, including mentoring, coordination, and communication via an online virtual community. Targeted technical assistance, with a focus on quality improvement methods and tools, is provided to states that are in the early stages of developing a PQC. Coordination and support include mentoring and resources for PQCs to strengthen PQC leadership; dissemination of best practices for establishing and sustaining PQCs; and development of tools, training, and resources to foster and support a sustainable PQC infrastructure.

### National Partnership for Maternal Safety

The National Partnership for Maternal Safety (NPMS) is a consortium of professional societies, patient safety and quality organizations, hospital organizations, federal and regulatory agencies, and patient advocacy groups. It was formed to address “the need for action to reduce US maternal mortality and morbidity.”<sup>5</sup> This collaborative, broad-based initiative initially prioritized the implementation of 3 core maternal safety bundles: obstetric hemorrhage,<sup>6</sup> severe hypertension,<sup>7</sup> and venous thromboembolism.<sup>8</sup> Additional NPMS bundles include urgent maternal early warning criteria,<sup>9</sup> facility-level review of maternal morbidity and mortality, family and staff support after a severe

maternal event, safe reduction of primary cesarean birth,<sup>10</sup> and opioid use disorder.<sup>11</sup> The group does not have a public-facing website.

### National Perinatal Information Center

The National Perinatal Information Center (NPIC) is an independent nonprofit organization that offers membership to hospitals. Its mission is “[the] improvement of perinatal health through comparative data analysis, program evaluation, health services research and professional continuing education,” and its vision is “[to] be recognized as a national leader in comparative data analyses advancing value, quality, safety and best practice in perinatal health.” Member hospitals agree to provide perinatal process and outcome data. The Center analyzes the data and provides periodic reports, including an Adverse Outcome Index with comparative and trend data, a Perinatal Quality Dashboard with comparisons with state or regional peer groups, and PQC reports to hospitals that elect to participate in quality improvement projects or collaboratives. The NPIC also supports a variety of research activities for member hospitals that choose to participate in multicenter research. The Center is a measure steward of the NQF-endorsed metric on the incidence of episiotomy.

### Perinatal Quality Foundation

The Perinatal Quality Foundation (PQF) is an independent, nonprofit organization. Its mission is “[to] improve the quality of obstetrical medical services by providing state of the art educational programs, and evidence-based, statistically valid monitoring systems to evaluate current practices and facilitate the transition of emerging technologies into clinical care.” It disseminates consensus practice protocols and provides clinician and provider education, monitoring measures, and consensus discussions on emerging obstetrical technologies. The Foundation also supports research toward its mission to improve perinatal quality. The Nuchal Translucency Quality Review provides epidemiologic monitoring of individual practitioner nuchal translucency measurements to help improve measurement accuracy. The Cervical Length Education and Review program is an online training course with an optional credential recognizing competency in cervical length assessment. The Fetal Monitoring Credentialing program is an examination-based program recognizing competency in the interpretation and management of fetal heart rate monitoring. The web-based Genetic Education Modules provide patients and providers with videos and narrative information about genetic testing options.

### Women’s Health Professional Associations and Societies With Patient Safety or Quality Committees

In this section, we list several organizations that deal with women’s healthcare issues and whose websites provide information about their committees on quality or patient



safety. Several other organizations may have such committees, but we did not list them because we were unable to gather information about them from the publicly available pages of their websites.

### American College of Obstetricians and Gynecologists

The American College of Obstetricians and Gynecologists (ACOG) is an organization of obstetrician–gynecologists. Its mission is to be “a membership organization dedicated to the advancement of women’s health care and the professional and socioeconomic interest of its members through continuing medical education, practice, research, and advocacy,” and its vision is “[to] provide the highest quality education worldwide, continuously improve health care for women through practice and research, lead advocacy for women’s health care issues nationally and internationally, and provide excellent organization support and services for our members.” The ACOG Committee on Patient Safety and Quality Improvement monitors patient safety issues specific to obstetrics and gynecology and develops collaborative strategies to improve patient safety, quality, and outcomes. The committee sponsors a postgraduate course on quality and safety and publishes patient safety checklists and ACOG committee opinions. ACOG’s Birth Registry (formerly Maternal Quality Improvement Program) is a voluntary, hospital-based registry of labor and delivery processes and outcomes developed with an aim to improve maternal care and decrease maternal mortality by enabling providers to identify and address variations in care among facilities. ACOG is a core partner in AIM and a member of the CPSWHC.

### American College of Nurse-Midwives

The American College of Nurse-Midwives (ACNM) is an organization of nurse-midwives. Its mission is “to support midwives and to ultimately advance the practice of midwifery, achieving optimal health for all women throughout their lifespan,” and its vision is “A midwife for every woman.” The ACNM lists a Quality and Safety Committee on the Volunteers page of its website. Its position statement on creating a culture of safety in midwifery care enumerates 4 core principles: care should be based on scientific knowledge about best practice, interdisciplinary team communication is a fundamental aspect of patient care, active involvement of patients and their families contributes to safe care, and participation in quality management programs increases safety.

### American Institute of Ultrasound in Medicine

The American Institute of Ultrasound in Medicine (AIUM) is a multidisciplinary medical association. Its mission is “Advancing the safe and effective use of ultrasound in medicine,” and its vision is “Advancing its mission by providing education, fostering best practices, and facilitating research.” The AIUM Bioeffects Committee deals with

the biologic effects of ultrasound, especially as they relate to the safety of clinical ultrasound. The AIUM Clinical Standards Committee develops standards and guidelines for sonographic examinations. The AIUM Ultrasound Practice Accreditation Council seeks to encourage the practice of high-quality diagnostic ultrasound by establishing standards for practice accreditation (see below).

### Association of Women’s Health and Neonatal Nurses

The Association of Women’s Health and Neonatal Nurses (AWHONN) is a multidisciplinary nursing association. Its mission is “[to] empower and support nurses caring for women, newborns, and their families through research, education, and advocacy,” and its vision is “Making a difference in the lives of women and newborns.” An advisory panel of AWHONN has proposed a set of 9 Women’s Health and Perinatal Nursing Care Quality measures to assess the quality of care that registered nurses provide to women throughout their lives, before, during, and after childbirth, and to newborns. The AWHONN Educational Advisory Committee serves to engage nursing education experts in providing recommendations for products and programs, including the Obstetric Patient Safety (OPS) Program. The OPS Program offers live simulation courses on postpartum hemorrhage. Online education modules available to AWHONN members include postpartum hemorrhage, venous thromboembolism, severe hypertension, and obstetric critical care. The POST-BIRTH Warning Signs Education Program has tools for implementing an effective program to educate women to seek prompt care for warning signs after postpartum hospital discharge.

### Society for Maternal-Fetal Medicine (SMFM)

The Society for Maternal-Fetal Medicine (SMFM) is an international organization of maternal-fetal medicine (MFM) subspecialists. The Society “supports the clinical practice of maternal-fetal medicine by providing education, promoting research, and engaging in advocacy to optimize the health of pregnant women and their babies,” and its vision is “Optimal pregnancy outcomes for mothers and babies.” The SMFM Patient Safety and Quality Committee (PSQC) has 2 primary functions: (1) to establish metrics to evaluate quality and safety in MFM practice and (2) to develop materials to assist MFM subspecialists in providing leadership in quality and safety initiatives at hospital and organizational levels. The PSQC has published several checklists for the management of specific high-risk pregnancy conditions, posted on publicly accessible pages of the SMFM website. SMFM has membership in AIM, CPSWHC, CQMC, and NQF.

### Society for Obstetric Anesthesia and Perinatology

The Society for Obstetric Anesthesia and Perinatology (SOAP) is a multidisciplinary professional organization comprising

anesthesiologists, obstetricians, pediatricians, and basic scientists. It was founded to provide a forum for discussion of problems unique to the peripartum period. Its mission is “to improve the pregnancy-related outcomes of women and neonates through the support of obstetric anesthesiology research, the provision of education to its members, other providers, and pregnant women, and the promotion of excellence in clinical anesthetic care.” The SOAP Patient Safety Committee membership is listed on the SOAP website. On the website, a Patient Safety page provides access to materials about look-alike medications, adequate venous access and safe drug administration during transfer for emergency surgery, and other topics. The Society is a member of the CPSWHC.

### State-Specific Maternal Mortality Review Committees and Perinatal Quality Collaboratives

As of this writing, 43 US states plus the District of Columbia have a Maternal Mortality Review Committee (MMRC), and 45 states have a PQC. A list of the states with these committees is posted at [https://www.acog.org/-/media/project/acog/acogorg/files/pdfs/reports/mmrc\\_aim-state-fact-sheet-aug-2019.pdf](https://www.acog.org/-/media/project/acog/acogorg/files/pdfs/reports/mmrc_aim-state-fact-sheet-aug-2019.pdf) (all website addresses in this paragraph were accessed on May 14, 2020), and a map showing states with these resources is provided at <https://www.smfm.org/scorecard/2019>. Contact information for several state MMRCs can be found at [reviewtoaction.org/content/mmr-map](http://reviewtoaction.org/content/mmr-map). Links to the website addresses for several state Maternal and Perinatal Quality Collaboratives can be found at [cdc.gov/reproductivehealth/maternalinfanthealth/pqc-states.html](http://cdc.gov/reproductivehealth/maternalinfanthealth/pqc-states.html). Particularly noteworthy is the California Maternal Quality Care Collaborative [cmqcc.org](http://cmqcc.org). Its website has a variety of useful resources including toolkits to aid in the implementation of maternal safety bundles, downloadable PowerPoint slide sets, archived webinars, and other tools.

### Organizations Offering Accreditation, Certification, or Special Distinction

#### American Board of Obstetrics and Gynecology

The American Board of Obstetrics and Gynecology (ABOG) is a nonprofit organization and member of the American Board of Medical Specialties. ABOG offers board certification to obstetricians and gynecologists in the United States and Canada. Its mission is “to define specialty standards, certify obstetricians and gynecologists, and facilitate continuous learning to advance knowledge, practice, and professionalism in women’s health.” The ABOG includes mandatory readings in patient safety as part of its Maintenance of Certification program, required for obstetrician-gynecologists to maintain board-certified status. In addition, continuing certification requires completion

of Improvement in Medical Practice activities focused on safety and quality improvement.

#### American Institute of Ultrasound in Medicine: Ultrasound Practice Accreditation

The AIUM Ultrasound Practice Accreditation is a voluntary peer-review process that “allows practices to demonstrate that they meet or exceed nationally recognized standards in the performance and interpretation of diagnostic ultrasound examinations. The accreditation process encourages providers of diagnostic ultrasound services to assess their strengths and weaknesses and initiate changes to improve their practices. Ultrasound practices can be accredited in 1 or more categories relevant to women’s health, including breast, gynecology, urogynecology (female pelvic floor), obstetrics (trimester specific), detailed fetal anatomy, fetal echocardiography, and limited obstetrics for advanced clinical providers.

#### Baby-Friendly Hospital Initiative

The Baby-Friendly Hospital Initiative (BFHI) is a global program of the WHO and UNICEF that encourages the broad-scale implementation of the Ten Steps to Successful Breastfeeding and the International Code of Marketing of Breast-Milk Substitutes. According to the WHO, the primary objective of each country’s national BFHI should be to scale up to 100% coverage of the program. Baby-Friendly USA (BFUSA), a not-for-profit corporation, is the accrediting body and national authority for the BFHI in the United States. The BFUSA website has comprehensive resources and implementation guides for hospitals and birthing centers that seek to achieve the voluntary “baby-friendly” designation. The website also has a search tool for prospective parents to locate designated baby-friendly facilities in their area. As of 2019, more than 28% of babies in the United States were born at a designated baby-friendly facility, and more than 600 US hospitals and birthing centers were designated as baby friendly, which represents approximately 25% of the facilities providing maternity services.

#### Blue Distinction

Blue Distinction is a designation conferred by the Blue Cross Blue Shield Association, a federation of health insurance companies, to recognize doctors and facilities that meet certain criteria of healthcare quality. Blue Distinction Total Care is focused on primary care, recognizing doctors and facilities that treat “the whole patient,” emphasizing prevention and wellness, coordinated care, and management of chronic conditions. Blue Distinction Specialty Care recognizes facilities that excel in delivering safe, effective treatment in 11 distinct categories, including fertility and maternity care. In maternity care, the selection criteria for Blue Distinction Center (BDC) include accreditation by at least 1 national program such as the TJC; elective early-term delivery rate  $\leq 5\%$ ; NTSV cesarean rate  $\leq 27\%$  and

episiotomy rate  $\leq 15\%$ ; certain business criteria; and a minimum volume of births. A designation of BDC Plus (BDC+) is awarded to facilities that also meet specified cost-of-care criteria. The Blue Distinction website provides a search tool for patients to find BDC and BDC+ providers in their area.

### Commission for the Accreditation of Birth Centers

The Commission for the Accreditation of Birth Centers (CABC) is an independent, not-for-profit organization that accredits freestanding birth centers and affiliated maternity centers in the United States. The organization considers quality assurance to have 2 arms: licensure and accreditation. Accreditation by the CABC requires adherence to the American Association of Birth Centers' Standards for Birth Centers, which are uniformly applied to all accredited centers, thereby eliminating state and local inconsistency. Accreditation is voluntary and signifies that a center has a level of quality that often exceeds state licensure requirements. The CABC website has a search tool that allows consumers to locate an accredited center in their area. Along with several other organizations, the CABC has endorsed the ACOG–SMFM Obstetric Care Consensus document *Levels of Maternal Care*.<sup>12</sup>

### Fetal Medicine Foundation: Certificates of Competence

Certificate of Competence programs offered by the FMF are described in the Fetal Medicine Foundation Section.

### Institute for Healthcare Improvement: Certified Professional in Patient Safety

The IHI offers the Certified Professional in Patient Safety (CPPS) credential for professionals who have demonstrated a high level of proficiency in the core standards of patient safety. It is awarded through a standardized examination covering 5 patient safety domains: culture, leadership, patient safety risks and solutions, measuring and improving performance, and systems thinking and design/human factors. Intended candidates are any healthcare professionals who include patient safety practices as an integral component of existing or future professional responsibilities, such as physicians, nurses, pharmacists, patient safety and quality professionals, healthcare executives, and others. More than 2000 professionals have earned the CPPS credential, representing all 50 US states and 10 countries. Before 2017, this credential was awarded by the Certification Board for Professionals in Patient Safety, a function of the NPSF, which has since merged with the IHI.

### Joint Commission for Accreditation of Healthcare Organizations

The Joint Commission for Accreditation of Healthcare Organizations (JCAHO) has changed its name to The Joint Commission (see below).

### National Association for Healthcare Quality

The National Association for Healthcare Quality (NAHQ) is an independent organization of healthcare quality professionals. Its mission is “[to] prepare a coordinated, competent workforce to lead and advance healthcare quality across the continuum of healthcare,” and its vision is “The healthcare quality profession is recognized and valued as essential.” To promote excellence and professionalism, the NAHQ offers a Certified Professional in Healthcare Quality (CPHQ) credential, certifying “individuals who demonstrate their knowledge and expertise in this field by passing a written examination. The CPHQ designation provides the healthcare employer and the public with the assurance that certified individuals possess the necessary skills, knowledge, and experience in healthcare quality to perform competently.” Certification is achieved by passing a standardized test. Recertification is maintained by completing continuing education activities. More than 10,000 individuals (physicians, nurses, administrators) have been CPHQ certified since 1976.

### National Committee for Quality Assurance

The National Committee for Quality Assurance (NCQA) is an independent, not-for-profit organization that provides accreditation, certification, and recognition programs for health plans, healthcare providers, and healthcare organizations. Its mission is to “[improve] the quality of health care,” and its vision is “Better health care. Better choices. Better health.” This organization developed and maintains the Healthcare Effectiveness Data and Information Set, a collection of approximately 90 metrics derived from health plan claims data, the CAHPS, and other sources, reflecting 6 domains: effectiveness, access, patient experience, utilization and risk-adjusted utilization, plan descriptive information, and electronic clinical data systems metrics. Metrics in PC include the rate of timely initiation of prenatal care and the rate of completion of a postpartum visit at 3 to 8 weeks after delivery. Certification and recognition programs for healthcare providers and practices include several Patient-Centered Medical Home specialty designations, accreditation for Accountable Care Organizations, and recognition programs for Diabetes and Heart/Stroke.

### National Certification Corporation

The National Certification Corporation (NCC) is an independent not-for-profit corporation. Its missions include providing certification examinations, assessments of competence, and opportunities for healthcare professionals to validate their competence. Its vision is “promoting quality healthcare to women, neonates, and their families by providing credentialing, recognition, and educational programs for nurses and other health professionals.” The NCC provides national certification programs in obstetric, gynecologic, and neonatal specialties. Core nursing certifications include Inpatient Obstetric, Newborn, Neonatal, and Neonatal Intensive Care. Nurse practitioner certifications

include Neonatal and Women's Health. Subspecialty certifications offered for physicians, nurses, and other health-care workers include Electronic Fetal Monitoring and Pediatric Transport. Since 1975, the NCC has awarded certifications to more than 160,000 healthcare professionals.

### Perinatal Quality Foundation Credentialing

The PQF credentialing programs for cervical length assessment and fetal monitoring are described in a previous section.

### The Joint Commission

The TJC, formerly JCAHO, is an independent, not-for-profit accreditation and certification organization. Its mission is "[to] continuously improve health care for the public, in collaboration with other stakeholders, by evaluating health care organizations and inspiring them to excel in providing safe and effective care of the highest quality and value." Its vision is "All people always experience the safest, highest quality, best-value health care across all settings." TJC accredits and certifies nearly 21,000 healthcare organizations and programs in the United States. Certification is recognized nationwide as a reflection of an organization's commitment to meeting certain performance standards. TJC partners include the American College of Physicians, American College of Surgeons, American Dental Association, American Hospital Association, and American Medical Association. Accreditation programs are offered for hospitals, ambulatory care, nursing care, behavioral healthcare, home care, and laboratory services. Certifications are available for condition-specific care including PC, stroke, heart failure, palliative care, and total joint replacement. Accredited hospitals with 300 births per year or more are required to track and report 6 core measures for PC:

- PC-01: Rate of elective early-term delivery
- PC-02: NTSV cesarean rate
- PC-03: Rate of initiation of antenatal corticosteroids before birth of an infant at 24 weeks to 33 weeks and 6 days of gestation
- PC-04: Rate of septicemia or bacteremia in very low-birth-weight newborns
- PC-05: Rate of exclusive breast milk feeding during the newborn's entire hospitalization
- PC-06: Rate of unexpected moderate and severe complications in term newborns without preexisting conditions

### Organizations That Rate, Rank, or Report Quality Measures

In this section, we provide an overview of 5 major entities that provide ratings or rankings. Although it is not our primary purpose to critique the organizations, we believe it is noteworthy that a "rating of the raters" that evaluated 4 of 5 systems graded them from D+ to B on a scale of A (best) to F

(worst). The authors cited several problems, including limited data and measures, lack of robust data audits, composite measure development, measuring diverse hospital types together, and lack of formal peer review.<sup>13</sup>

### Healthgrades

Healthgrades is a private company that operates an online resource with rating information and consumer reviews about healthcare providers and facilities. Its mission is "to provide trusted information that helps consumers and providers make meaningful connections." Healthgrades rates hospital quality based on clinical outcomes, measuring hospital performance for the most common in-hospital procedures and conditions, risk adjusted for age, sex, medical conditions, and other factors. Data for these ratings come from the CMS Medicare Provider and Analysis Review files plus all-payer data from 15 states. Annual awards for Labor and Delivery Excellence, Gynecologic Surgery Excellence, and Obstetrics and Gynecology Excellence recognize the top 10% of hospitals in states that provide all-payer data. Healthgrades collects patient experience data using questions adapted from the CG-CAHPS survey to evaluate wait times, compassion, competence, and recommendations of providers. The company also posts narrative patient reviews of providers on its website.

### Hospital Compare

Hospital Compare is a consumer-oriented website operated by the CMS that provides information about how well hospitals provide recommended care to their patients. The site allows users to compare hospitals according to more than 100 metrics related to the quality of care. The only metric directly related to maternity care is the rate of elective delivery before 39 weeks. To summarize these measures in a way that is easy for consumers to interpret, hospitals are given an overall star rating of 1 to 5 stars based on a weighted aggregate of 64 metrics in 7 domains of quality and safety. Mortality, safety of care, readmission, and patient experience each contribute 22% of the score, and effectiveness of care, timeliness of care, and efficient use of medical imaging each contribute 4%. The precise weighting and aggregation methodology is undergoing evaluation and revision in response to criticism that the star ratings are insufficiently transparent, use inappropriate weighting, have poor face validity, and lack case-mix risk adjustment.<sup>13</sup>

### The Leapfrog Group

The Leapfrog Group is a nonprofit organization founded by large employers and other purchasers of healthcare to collect and report healthcare facility performance data. Its mission is "to trigger giant leaps forward in the safety, quality and affordability of US health care by using transparency to support informed health care decisions and promote high-value care," and its vision involves coordinated efforts of providers, consumers, health plans, and purchasers to seek the best value in healthcare. The



**Leapfrog Hospital Survey** is voluntarily completed by more than 2000 hospitals annually, with regional partners in 36 states. Survey results are publicly available on the Leapfrog website. For maternity care, the survey includes rates of NTSV cesareans, episiotomies, elective early-term delivery, and delivery of very low-birth-weight newborns. Other survey categories with relevance to women's health include safe practices, medication safety, and antibiotic stewardship. The Leapfrog Group issues a single-letter Hospital Safety Grade that is available to the public to allow consumers and purchasers to compare hospitals in their area. In 2019, the Group implemented a new voluntary survey for Ambulatory Surgery Centers and expanded the Hospital Survey to include hospital outpatient departments. The Group also has a Value-Based Purchasing Program that aims to help health plans, employers, and other large purchasers identify the highest value hospitals in individual markets, based on results of the Hospital Survey.

### US News & World Report

The US News & World Report is a privately owned news magazine that has released annual rankings of American hospitals since 1990. The purpose of these rankings is to “identify the best medical centers for the most difficult patients”—that is, those patients whose care is complicated by preexisting conditions or complex procedures. To be eligible, a hospital must fulfill one of the following requirements:

- Designation as a teaching hospital
- Affiliation with a medical school
- Have at least 200 patient beds
- Have a minimum of 100 beds and have 4 of the 8 advanced medical technologies considered necessary for the aforementioned patient population

The US News & World Report's rankings combine 4 quality domains in their score algorithm: outcome, structure, process, and patient safety. The majority of the measures that make up each domain are objective, such as patient volume, mortality rates, nursing intensity, and advanced technologies present; the process domain relies entirely on a physician survey regarding the reputation of the hospital. The Best Hospital rankings employ these domains to determine hospital rankings across 12 of 16 individual clinical specialties, whereas the subsequent 4 specialty rankings (psychiatry, ophthalmology, rehabilitation, and rheumatology) are determined by reputation alone based on US News surveys of physicians. To address patients in relatively low-acuity procedures and conditions, a new complementary set of ratings, “Best Hospitals for Common Care,” was introduced in 2015.

### Yelp

Yelp is a publicly owned business directory and crowdsourced review forum. Its mission is “to connect people with

great local businesses; along the way, we hope to enrich the lives of consumers and small business owners.” Yelp claims to be the most widely used, freely available, commercial website in the United States for hospital ratings. Yelp allows patients to rate healthcare providers through a 5-star rating system that can include narrative text reviews, employing an algorithm to prevent fraudulent, duplicative, or provider-generated reviews. The Yelp main page for many individual hospitals shows a synopsis of maternity care data, including cesarean rate (TJC, PC-02), breastfeeding rate (TJC, PC-05), episiotomy rate, and vaginal birth after cesarean delivery rate. Hospital Yelp scores correlate highly with HCAHPS survey scores.<sup>14</sup> Individual reviews address most of the domains covered by the HCAHPS and provide information about several topics not covered by the HCAHPS, including cost of hospital visit, insurance and billing, ancillary testing, facilities, amenities, scheduling, compassion of staff, family member care, quality of nursing, quality of staff, quality of technical aspects of care, and specific type of medical care, such as perioperative and labor and delivery care. In 2015, Yelp partnered with ProPublica, an independent, nonprofit, investigative journalism organization, to publish average wait times, readmission rates, and the quality of communication scores for more than 25,000 hospitals, nursing homes, and dialysis clinics. Yelp also provides crowdsourced reviews of individual physicians and midwives.

### Disclaimer

Our inclusion of an organization does not imply that SMFM endorses the organization or its programs. Conversely, the omission of an organization does not imply a negative judgment. In some cases, we were unable to find information online about an organization's safety or quality programs. In other cases, we may simply have been unaware of the organizations or their programs. ■

### REFERENCES

1. Institute of Medicine. Committee on Quality of Health Care in America. *To Err Is Human*. Washington, DC: National Academies Press; 2000.
2. Centers for Medicare and Medicaid Services. Quality of care for children and adults in Medicaid and CHIP: overview of findings from the 2017 child and adult core sets. Available at: <https://www.medicare.gov/medicaid/quality-of-care/downloads/performance-measurement/ffy-2017-core-set-reporting.pdf>. Accessed January 14, 2020.
3. Institute of Medicine. Committee on Quality of Health Care in America. *Crossing the Quality Chasm*. Washington, DC: National Academies Press; 2001.
4. World Health Organization. Standards for improving quality of maternal and newborn care in health facilities. Geneva, Switzerland: WHO; 2006.
5. D'Alton ME, Main EK, Menard MK, Levy BS. The national partnership for maternal safety. *Obstet Gynecol* 2014;123:973–7.
6. Main EK, Goffman D, Scavone BM, et al. National partnership for maternal safety: consensus bundle on obstetric hemorrhage. *Obstet Gynecol* 2015;126:155–62.
7. Bernstein PS, Martin JN Jr, Barton JR, et al. National partnership for maternal safety: consensus bundle on severe hypertension during pregnancy and the postpartum period. *Obstet Gynecol* 2017;130:347–57.



8. D'Alton ME, Friedman AM, Smiley RM, et al. National partnership for maternal safety: consensus bundle on venous thromboembolism. *Obstet Gynecol* 2016;128:688–98.
9. Mhyre JM, D'Oria R, Hameed AB, et al. The maternal early warning criteria: a proposal from the national partnership for maternal safety. *Obstet Gynecol* 2014;124:782–6.
10. Lagrew DC, Low LK, Brennan R, et al. National partnership for maternal safety: consensus bundle on safe reduction of primary cesarean births-supporting intended vaginal births. *Obstet Gynecol* 2018;131:503–13.
11. Krans EE, Campopiano M, Cleveland LM, et al. National partnership for maternal safety: consensus bundle on obstetric care for women with opioid use disorder. *Obstet Gynecol* 2019;134:365–75.
12. American College of Obstetricians & Gynecologists, Society for Maternal-Fetal Medicine, Kilpatrick SJ, et al. Obstetric care consensus #9: levels of maternal care. *Am J Obstet Gynecol* 2019;221:B19–30.
13. Bilimoria KY, Barnard C. The new CMS hospital quality star ratings: the stars are not aligned. *JAMA* 2016;316:1761–2.
14. Bardach NS, Asteria-Peñaloza R, Boscardin WJ, Dudley RA. The relationship between commercial website ratings and traditional hospital performance measures in the USA. *BMJ Qual Saf* 2013;22:194–202.

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Patient Safety and Quality Committee, Society for Maternal-Fetal Medicine

Reprints will not be available.

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This document has undergone an internal peer review through a multilevel committee process within SMFM. This review involves critique and feedback from the SMFM Publications and Document Review Committees and final approval by the SMFM Executive Committee. SMFM accepts sole responsibility for document content. SMFM publications do not undergo editorial and peer review by the *American Journal of Obstetrics and Gynecology*. Publications are reviewed 18 to 24 months and issues updates are issued as needed. Further details regarding SMFM publications can be found at [www.smfm.org/publications](http://www.smfm.org/publications).

SMFM has adopted the use of the word “woman” (and the pronouns “she” and “her”) to apply to individuals who are assigned female sex at birth, including individuals who identify as men as well as nonbinary individuals who identify as both sexes or neither sexes. As gender-neutral language continues to evolve in the scientific and medical communities, SMFM will reassess this usage and make appropriate adjustments as necessary.

All questions or comments regarding the document should be referred to the SMFM Patient Safety and Quality Committee at [smfm@smfm.org](mailto:smfm@smfm.org).