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2020 VISION FOR A HIGH-QUALITY, HIGH-VALUE MATERNITY CARE SYSTEM

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A concrete and useful way to create an action plan for improving the quality of maternity care in the United States is to start with a view of the desired result, a common definition and a shared vision for a high-quality, high-value maternity care system. In this paper, we present a long-term vision for the future of maternity care in the United States. We present overarching values and principles and specific attributes of a high-performing maternity care system. We put forth the "2020 Vision for a High-Quality, High-Value Maternity Care System" to serve as a positive starting place for a fruitful collaborative process to develop specific action steps for broad-based maternity care system improvement.

Introduction

A concrete and useful way to create an action plan for improving the quality of maternity care in the United States is to start with a view of the desired result, a common definition and a shared vision for a high-quality, high-value maternity care system. In this paper, we present a long-term vision for the future of maternity care in the United States. We present overarching values and principles and specific attributes of a high-performing maternity care system. We put forth the "2020 Vision for a High-Quality, High-Value Maternity Care System" to serve as a positive starting place for a fruitful collaborative process to develop specific action steps for broad-based maternity care system improvement.

In preparation for Childbirth Connection's *Transforming Maternity Care* symposium, this vision paper was provided to the members of five stakeholder workgroups, who were asked to develop sector-specific recommendations for moving toward the ideal model it describes (summaries of the stakeholder reports appear in the Symposium Proceedings included in the current special supplement issue; the full reports are available online at www.childbirthconnection.org/workgroups). These five stakeholder reports form the basis for a comprehensive "Blueprint for Action" that also appears in this issue.

2020 Vision Methodology

In April, 2008, Childbirth Connection convened a "Vision Team" of innovators in maternity care delivery and health systems design from diverse backgrounds to develop a definitional framework of fundamental values, principles, and goals for a high-quality, high-value maternity care system that could serve as a focal point to inspire improvement strategies. To benefit from of a broad range of expert perspectives and ensure the representation of essential viewpoints, we assembled contributors to this vision with a wide array of disciplinary expertise that includes childbirth education, community/public health consumer advocacy, employer perspectives, family medicine, general obstetrics and gynecology, health economics, health

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policy, health system administration, labor support, maternal-fetal medicine, maternity nursing, nurse-midwifery, and quality and measurement research in health care.

The team came together for a 1-day, intensive, creative planning conference held in San Francisco in April 2008. A skilled professional facilitator with extensive experience in strategic visioning for health care helped guide the proceedings. This meeting generated a rich graphic report and taped transcripts, which were refined into the Vision Paper through a process of group input and discussion via telephone and e-mail over a period of months. The final paper was peer reviewed by the Symposium Steering Committee and all Stakeholder Workgroup Chairs.

The "2020 Vision for a High-Quality, High-Value Maternity Care System" reflects the collaborative work and consensus viewpoints of the Vision Team. Consensus was defined as general agreement although not necessarily unanimity among team members, and was reached through a process of discussion to resolve individual concerns to the satisfaction of all participants.

Before the Vision Team meeting, all participants received pre-publication copies of "*Evidence-Based Maternity Care: What It Is and What It Can Achieve*" (Sakala & Corry, 2008), as well as Donald Berwick's *Health Affairs* article, "A User's Manual for the IOM's 'Quality Chasm' Report" (2002) and the "Sicily Statement on Evidence-based Practice" (Dawes et al., 2005). The latter provides a standard definition of evidence-based practice and the core critical appraisal skills and education necessary for health care providers.

The Vision Team also received a compendium of systematic reviews and better quality evidence of the effectiveness of different core elements of the maternity care system. This compendium was derived from the body of Childbirth Connection's work over the past decade to compile and disseminate systematic reviews on the effectiveness of all aspects of maternity care, through its online evidence-based maternity care resource directory and quarterly evidence columns published simultaneously in two peer-reviewed clinical care journals. The compendium provided to the Vision Team was composed of systematic reviews published through April 2008, focused on elements of the structure and organization of maternity care, which included various models for provision of maternity care, cadres of professionals who care for childbearing families, and settings where maternity care is provided, including the physical environment. On core topics for which no recent systematic review was available, high-quality substitutes were provided and noted as such. A bibliography of these sources is posted online at www.childbirthconnection.org/vision. These background resources were used to provide a general framework grounded in evidence-based maternity care to serve as a foundation for the ensuing vision.

The team worked together to generate a vision for the highest quality and value maternity care system under the assumption of no constraints. Consistent with the Institute of Medicine (IOM) definition, quality is defined as the degree to which maternity care services provided to individuals and populations increase the likelihood of optimal health outcomes and are consistent with current knowledge (IOM, 2001). Value is defined as the optimal cost to quality ratio in the delivery of maternity care services. In contrast, consideration of values and principles takes account of moral, ethical, and cultural issues important to consumers and other stakeholders.

Vision Structure and Content

The team developed a statement of general values and principles that apply across the continuum of maternity care. These values and principles present maternity care-specific definitions to describe critical dimensions of quality and value, using and elaborating on the framework put forward in the IOM's landmark report, *Crossing the Quality Chasm* (2001).

In 2002, Donald Berwick published a "user's manual" for the *Crossing the Quality Chasm* report. In it, he described the framework that its authors used to plan, discuss, and propose health system change and redesign. The Vision Team used Berwick's paradigm of four levels of care (labeled A through D) to achieve granularity and specificity in looking at maternity care system change. When applied to maternity care, the four levels are: A) the experience of women, their families and support networks, B) the clinical microsystems that provide direct maternity care, C) the hospitals and health care organizations that house and support clinical microsystems, and D) the environment of policy, payment, regulation, accreditation, litigation, and other macro-level factors that influence the delivery of maternity care. The group generated goals for each level of care. Features of care that apply across the continuum of maternity care were incorporated into the Values and Principles, and features specific to a particular phase of care were incorporated into the summary of goals for that phase.

For Care Levels A and B (women and their support networks, and the microsystems that provide direct care), the Vision Team divided maternity care into three phases: 1) care during pregnancy, 2) care around the time of birth, and 3) care after birth. For each phase of care, the group considered: 1) the woman's experience of care, 2) the key features of care, 3) the key participants involved, and 4) the settings and locations of care.

In keeping with the definition adopted by the Symposium Steering Committee for the overall symposium, the team defined the scope of maternity care as follows: *Care during pregnancy* begins with confirmation of pregnancy and continues until the onset of labor. *Care around the time of birth* comprises the care

that begins with labor and continues until mother and baby are stable at home. *Care after birth* is conceived as a continuum that includes all care delivered within the first 6 weeks of life of the newborn and extends forward across time, settings, and disciplines to anticipate and respond to continuing and new-onset mental, physical, and social needs of the mother, baby, and family.

The *Transforming Maternity Care* project does not address the pre- and interconceptional periods for two reasons. First, the focus on maternity care during pregnancy, around the time of birth, and in the initial period after birth is in itself a large, challenging scope of work. Second, although the importance of pre- and interconceptional health for childbearing is well recognized, the current scientific literature reveals very little high-level evidence about the positive impact of specific interventions during these periods on childbearing, as clarified by recent commentators (Atrash et al., 2008; Jack, Atrash, Bickmore, & Johnson, 2008) and a new Cochrane review (Whitworth & Dowswell, 2009). In keeping with its direction-setting goal, the "2020 Vision" contextualizes maternity care within a coordinated, integrated system of life-span, family-oriented, preventive and supportive health care, and calls on the stakeholders to develop actionable strategies to ensure the integration of evidence-based interventions for the periods before and between pregnancy.

All Vision Team members agree on the fundamental values and principles expressed in the "2020 Vision for a High-Quality, High-Value Maternity Care System"; their application to maternity care practice and the delivery of maternity care services is beyond the scope of the Vision Team's work. With this paper, the Vision Team aims to provide both reasoned rationale and motivation to stakeholders and decision makers whom it calls on to implement the vision.

Values and Principles for a High-Quality, High-Value Maternity Care System

The IOM's landmark 2001 report, *Crossing the Quality Chasm*, called for a fundamental redesign of the U.S. health care system. The report provided a rational framework for improvement through six dimensions of care. In accordance with this framework, the mission of a maternity care system that delivers the highest quality and value is to achieve optimal health outcomes and experiences for mothers and babies through the consistent provision of woman-centered care grounded in the best available evidence of effectiveness with least risk of harm, and the best use of resources. Such care is provided in ways that are safe, effective, timely, efficient, and equitable for all women and their families. The ideal maternity care system protects, promotes, and supports physiologic childbirth, and optimal experiences for childbearing women based on shared decision making and respect for informed choice; provides care that is coordinated, evidence-based, and subject to ongoing performance measurement and quality disclosure; and promotes a work environment that is satisfying and fulfilling for its caregivers.

Six Aims Applied to Maternity Care

These aims serve as a foundation for our vision. The Vision Team elaborated on each of these aims to describe their distinctive features within the context of maternity care in the United States:

Woman-centered means that care respects the values, culture, choices, and preferences of the woman, and her family, as relevant, within the context of promoting optimal health outcomes. It means that all childbearing women are treated with kindness, respect, dignity, and cultural sensitivity, throughout their maternity care experiences.

- Pregnancy and birth are unique for each woman. Women and families hold different views about childbearing based on their knowledge, experiences, belief systems, culture, and social and family backgrounds. These differences are understood and respected, and care is adapted and organized to meet the individualized needs of women and families.
- To promote positive maternity care experiences, care teams engage in high-quality relationships with women and their families, based on mutual respect and trust.
- Caregivers and settings have a powerful effect on childbearing women. Attention is given to the power of language, communication, and care practices to create a climate of confidence and enhance outcomes of care, as well as women's childbearing experiences.

Safe means that care is reliable, appropriate, and provided in systems that foster coordination, a culture of safety, and teamwork to produce the best outcomes for women and babies and minimize the risk of harm. Maternity care processes impact outcomes for both mothers and babies; safe care considers and balances the risks and benefits to both recipients, taking into account the health status of each.

Effective means that the care is based on sound evidence applied properly to the circumstances of the individual pregnant woman and her baby to achieve desired outcomes. Effective care minimizes overuse, underuse, and misuse of care practices and services and emphasizes care coordination to prevent duplication, omission, fragmentation, and error.

Timely means that care delivery is structured so that all care is delivered at the time that it is needed. In

maternity care, this means that the timing of the onset and course of all stages of labor and the birth of the baby are determined by maternal–fetal physiology whenever possible, and not by time pressures exerted externally without clear medical indication. In the context of informed consent/refusal in maternity care, timely means that whenever possible discussions and information to facilitate women's decision making around the time of birth are available well in advance of the onset of labor and again as relevant during labor. Finally, unnecessary wait times do not compromise safety, system efficiency, cost effectiveness, and satisfaction with maternity care.

Efficient means that the maternity care system delivers the best possible health outcomes and benefits with the most appropriate, conservative use of resources and technology. Overuse and misuse of treatments and medical interventions are avoided because they waste resources and can result in preventable iatrogenic complications. Similarly, efficient maternity care captures the unrealized benefits from effective underutilized measures.

Equitable means that all women and families have access to and receive the same high-quality, high-value care. Any variation in maternity care practice is based solely on the health needs and values of each woman and her fetus/newborn, and not on other extrinsic, nonmedical factors. Furthermore, an equitable maternity care system addresses disparities in the baseline health status of women related to class, race, ethnicity, and language to ensure optimal maternity care outcomes and experiences for every woman and her children.

Further Foundational Values and Principles for Maternity Care

In addition, the following values and principles are foundational to our vision for a maternity care system of highest quality and value.

Life-changing experience. Pregnancy, labor and birth, and the early postpartum and newborn period are important life-changing and memorable times in the lives of women and their families. Taken together, they represent a time of great opportunity to promote and improve health, because women and families often are greatly motivated to improve their lives at this time. The outcomes and experiences of childbearing have wide-ranging impact.

Care processes protect, promote, and support physiologic childbirth. Women and their fetuses/newborns share complex innate, mutually regulating, hormonally driven processes that constitute the biological foundation for childbearing. These physiologic neuroendocrine feedback mechanisms facilitate the period from the onset of labor through birth of the baby and placenta, as well as the establishment and continuation of breastfeeding and the development of mother–baby attachment. These processes confer physical, psychological, and social benefits. The complex hormonal orchestration of the process of parturition taken in its entirety constitutes physiologic childbirth.

Effective care with least harm is optimal for childbearing women and newborns. This entails conservative, preventive practices and support for physiologic childbearing for all women and babies without significant complications, for whom unnecessary intervention is likely to incur more harm than benefit. The majority of childbearing women are healthy and have good reason to expect an uncomplicated pregnancy and birth and a healthy newborn. Thus, practice variation for low-risk women is minimized under the principle that any intervention in the physiologic processes of pregnancy and childbirth must be shown to do more good than harm. Higher levels of care are only appropriate for those with a demonstrated need. Women and fetuses/newborns who experience complications, adverse situations, and unexpected outcomes require additional treatment and support tailored to their individual needs.

To this end, all providers of maternity care recognize, protect, promote, and support physiologic childbirth; respond appropriately to complications; and receive adequate training to do both. Protection of physiologic childbearing involves avoiding disruption and interference (e.g., unnecessary interventions, noise, personnel), promotion involves the health system (e.g., research, education, measurement, policies, values), and support involves skillful facilitation (e.g., comfort measures, encouragement, supportive care).

Care is evidence-based. Maternity care policy and practice evolve with the emergence of new research evidence and new ability to refine research methods. There is a focus on continuous critical appraisal of the existing research literature and investment in the ongoing study of the comparative effectiveness of a wide array of practices and approaches in maternity care, using a variety of validated methodologies in keeping with the mandate of the "Sicily Statement on Evidence-based Practice", to continue to advance toward optimal care, defined as effective care with least harm, for all childbearing women and their fetuses/babies.

Quality is measured and performance is disclosed. Quality measurement and disclosure through public reporting are essential features of a high-performing maternity care system. They are critically important to those who seek, provide, purchase, and pay for maternity care. System capacity is enhanced to evaluate and report the quality and outcomes of care at clinician,

facility, health plan, and other levels. Both performance measurement and public reporting are inherent in the obligation to advance knowledge of the effects of care. A comprehensive set of nationally endorsed, evidence-based consensus standards to assess the quality of prenatal, intrapartum, and postpartum services is in place to foster system-wide capacity for quality improvement, and these standards are regularly incorporated into care at all levels. Consumers have excellent support for understanding and using performance measures and other quality measures to make informed health care decisions. Health professionals and systems have ready access to reliable measures to support continuous quality improvement. Purchasers and payors have access to results of performance measurement to inform value-based purchasing decisions.

Care includes support for decision making and choice.

- *Decision making*. Support for shared decision making is built into care at every level. Shared decision making is an ongoing, interactive process that takes place between childbearing women and their caregivers. To make fully informed decisions, women receive complete, objective information based on the best available research. This includes information about known benefits, harms, and areas of uncertainty associated with care offered to them, and with other available options, including the decision to avoid intervention. Such information is available to all women in a variety of consumer-friendly formats through trustworthy sources. Consistent with highest standards for informed consent and informed refusal processes, such information is discussed in a shared decision-making process that allows for the desired level of family involvement, conducted in language that is understandable and at a time that is conducive to optimal information processing, whenever possible. It includes support in the form of decision aids, values clarification, and discussions of risk expressed in terms of probability.
- *Choice.* Women have the opportunity and the responsibility to make informed choices about their care from early pregnancy through the postpartum period. The ultimate control over choices surrounding the events of pregnancy and birth resides primarily with the woman, who has access to the full range of safe and effective care options, including choice of care providers, care settings, family participation, labor companions, help with labor pain, mode of birth, and infant feeding method. Following a supportive, shared decision making process, caregivers respect and honor a woman's informed choices and her right to change her mind.

Care is coordinated. Highest quality and value in maternity care are increased through seamless, effective coordination of care across settings and disciplines to maximize safety and efficiency and reduce waste. Care is coordinated to best meet the needs of mothers and their fetuses/newborns through effective teamwork, communication, coordinated management of care plans and provider responsibilities, medication reconciliation, and other shared information using electronic health records and interoperable data systems. There is particular attention to transitions of care, including from pregnancy to childbirth to postpartum care, and between settings or providers of care, to ensure consistent consideration of the woman's health history, values and wishes, plan of care, medications, and evolving needs.

Caregiver satisfaction and fulfillment is a core value. Caring for women, babies, and families during the critical time from pregnancy through the early postpartum period is both a great honor and a joy. To experience it as such, all caregivers in the maternity care system have a safe and respectful environment in which to practice, grow, and learn. This system welcomes and values caregiver contributions. It has and supports high standards of performance and respects the human needs and limits of providers. A just culture, grounded in a systems perspective and founded on appropriate assignment of accountability rather than individual blame, also protects caregivers from harm, and encourages continuous learning and professional development to maximize professional fulfillment and the ability to provide high-quality care.

Care Levels A and B: Women and Their Support Networks, and the Microsystems That Provide Direct Care

Applying Berwick's framework (2002) of four levels of care to the maternity care system, this section addresses key goals and principles for Care Levels A and B: women and their support networks, and the microsystems that provide direct care to them. It proposes a vision for the care experience of women and their support networks within a high-quality, high-value maternity care system, and describes the essential attributes and characteristics of the microsystem that reliably delivers such an experience.

Maternity care at Care Levels A and B is divided into three phases. The vision begins with a set of goal statements for each phase of maternity care—care during pregnancy, care around the time of birth, and care after birth—that describe the optimal experience of care from the perspective of the woman and her family and support network. This is followed by a description of the criteria for key participants and the principles that inform decisions about who takes part in providing high-quality, high-value care during each phase.

Principal considerations concerning decisions about settings, locations, or the environment of care that are conducive to the realization of the vision goals in each phase are also described.

Care During Pregnancy: Summary of Goals

1. Each woman is engaged as a partner in her own care and education during pregnancy; she receives affirmation and practical support for her role as the natural leader of her care team to the extent that she so desires, and is encouraged to provide input to shape her own care.
2. Each woman's preferences are known, respected, and matched with individually tailored care that meets her needs and reflects her choices during pregnancy, delivered by a care team whose composition is also customized based on her needs and preferences.
3. Each woman has access to complete, accurate, up-to-date, high-quality information, decision support, and education to help ensure that she feels emotionally and psychologically prepared to make decisions during her pregnancy, and confident about her birth care options and choices well in advance of the onset of labor.
4. Education and care during pregnancy are designed and delivered to be empowering to women, emphasizing a climate of confidence.
5. Education and care during pregnancy include support for breastfeeding; most women make decisions about infant feeding well before they give birth.
6. Each pregnant woman receives personalized coaching and has access to high-quality resources for comprehensive health promotion, disease prevention, and improved nutrition and exercise for optimal wellness during her pregnancy.
7. Care during pregnancy is available when needed and can be accessed in a time and place that is convenient and accessible for each woman, as balanced with concerns for value and efficiency.
8. Care during pregnancy acknowledges the social context in which pregnancy occurs for each woman and includes opportunities for social networking and access to adequate professional and peer support during pregnancy.

Care Around the Time of Birth: Summary of Goals

1. Each woman has a comfortable, confident relationship of trust with her birth care provider(s).
2. Each woman is engaged as a partner in her own care around the time of birth; she receives affirmation and practical support for her role as the natural leader of her care team and approaches birth prepared and confident to express her preferences and make informed choices about key decisions for labor and birth.
3. Each woman can decide where to labor and give birth as appropriate based on her health status and that of her fetus/baby; she is free to make this choice without judgment and can change her mind without sanction, as an array of risk-appropriate birth setting choices is available and supported system wide.
4. Low-risk women planning hospital birth remain at home during early labor with adequate support and appropriate contact with their care team.
5. All maternity caregivers have knowledge and skills necessary to enhance the innate childbearing capacities of women. Each woman is attended in labor and birth in the manner that is most appropriate for her level of need and that of her baby and experiences only interventions that are medically indicated, supported by sound evidence of benefit, with least risk of harm compared with effective alternatives. Women and babies at high risk for complications for whom a higher level of specialized care is appropriate have specialty care available to them that adheres to the same basic values and principles.
6. Each woman is well-supported physically and emotionally throughout labor and birth; continuous labor support is built in to maternity care.
7. Each woman has access to a full-range of evidence-based, nonpharmacologic and pharmacologic strategies for pain management and relief as appropriate to each birth setting and to staff that is trained to implement them effectively.
8. Providers are trained to maintain skills and have system support to offer the fullest range of management options supported by evidence for women with special clinical circumstances.
9. Mothers and babies routinely stay together, skin to skin, receiving evidence-based care, support, and minimal disruption in the minutes and hours after birth to promote early attachment and the initiation of breastfeeding, whenever neither requires specialized care at this time.

Care After Giving Birth: Summary of Goals

1. Each woman, baby, and family receives care that effectively addresses their needs starting in the immediate postpartum period, and extending seamlessly forward across time, settings and disciplines to anticipate and respond to both continuing and new-onset mental, physical, and social needs that may develop throughout the first year of life and beyond.

2. Each woman receives strong support for breastfeeding through an array of community-based resources and the implementation of workplace supports for breastfeeding.
3. Each woman receives strong support for mother–baby attachment that includes educational offerings, experiential learning opportunities, and peer group support available through a web of services and support systems.
4. Each woman has adequate help to cope with the challenges of the period after birth, including physical changes, shifting priorities, changes in primary relationships, family planning, and issues related to sexuality, isolation, mother–baby codependence, and postpartum depression and other mood disorders. Care at this time includes opportunities to connect with people and services through innovative mechanisms and delivery models that emphasize community and social networking, and facilitate the development of longitudinal supportive relationships.
5. Each woman receives practical support at home as needed to cope with increased demands and fatigue in the period after birth and to develop confidence in her competence as a new mother. Each woman has access to social support, health care services and information, and practical advice and assistance in the period after birth. To this end, given consideration for value and efficiency, maternity care extends beyond the direct provision of health care services to routinely include postpartum services that facilitate optimal family development. This helps to ensure that each woman is valued and supported by society in her role as a new mother.

Key Participants

The goals for maternity care are best met by implementing a holistic, relationship-based model of care that is woman-centered, inclusive, and collaborative. Caregivers are included as dictated by the health needs, values, and preferences of each woman, taking into account her social and cultural context as she defines it, and given consideration for evidence of effectiveness, value, and efficiency.

In each phase, starting with *Care During Pregnancy*, maternity care is a team endeavor coordinated by a primary maternity care provider. Qualified primary providers of maternity care have completed an accredited education program, passed a board certification examination with a mechanism for certification maintenance, and are legally licensed to practice within their jurisdiction. Professional cooperation is a system priority. There is innovation to formalize the inclusion and effective functioning of more multidisciplinary team roles. The rules and systems of care are rewritten to make room for the advent of a variety of complementary coaches, advisors, and experts, who may be involved according to their scope of practice and as desired by each woman and indicated by her individual health needs and those of her fetus.

For *Care Around the Time of Birth*, each woman is able to assemble the team of caregivers that best meets her needs for ample support and safe, effective care with least risk for harm during labor, birth, and the immediate postpartum period. The goal of the birth care team is to optimize her health outcomes and care experience during this critical time and to protect, promote and support her innate ability to give birth while providing for her individual health needs and those of her fetus.

Care After Giving Birth is envisioned as a team endeavor orchestrated around, and directed by, the needs of each woman to provide optimal care for her, for her baby, and for her family. During this vulnerable developmental period, each woman's care is coordinated by a primary caregiver with postpartum care competencies.

Care Settings

For all maternity care phases, safe, effective care is available to women in the locations that are most convenient and accessible to them, given consideration for value and efficiency. The environment of care in all settings is designed to be woman-centered and to facilitate the realization of goals for care during this phase. Specific elements of design that may contribute to achieving these goals are considered.

An array of community, ambulatory and hospital-based choices for *Care During Pregnancy* optimizes the possibilities for each woman to take advantage of this time of great opportunity to make improvements in her life and overall health, and to prepare for giving birth and parenting.

For Care Around the Time of Birth, a full range of safe birth settings is available and receives system-wide support, so that each woman is free to choose the setting that is most appropriate for her level of need and that of her fetus/baby and that best reflects her values, culture, and preferences. This choice can be made with confidence because each setting assures her a consistent standard of safe, effective, risk-appropriate care, within an integrated system that provides for coordinated consultation, collaboration, or transfer in either direction should her level of need or that of her baby change.

An expanded choice of settings for *Care After Giving Birth* continues the possibilities for each woman to make effective use of this time of opportunity for improving her life and overall health, and that of her family. To that end, care after birth is community-based, situated within the social context of the woman, and founded on a holistic model that prioritizes wellness and preventive services.

Care Levels C and D: Health Care Organizations and the Macro Environment

Applying Berwick's framework of four levels of care to the maternity care system, this section addresses key goals and principles for Levels C and D: the hospitals and health care organizations that house and support clinical microsystems, and the greater environment of health care policy, payment, regulation, accreditation, litigation, and other macro-level factors that influence the delivery of maternity care. This section describes a vision for the key attributes and characteristics at the macro levels of a high-quality, high-value maternity care system that can best support the goals put forward for the care experiences of women and babies receiving maternity care and the microsystems that directly provide such care.

Level C: Health Care Organizations

This section outlines the goals for the system features and roles of health care organizations providing maternity services within a high-quality, high-value maternity care system.

To strengthen the structure of the maternity care delivery system.

- Health care organizations align the capacity for community-level, multidisciplinary, multiservice maternity and family wellness care and the capacity for acute maternity care to be commensurate with the needs of childbearing women and families.
- Health care organizations providing maternity care shift their focus to be primarily community-based and wellness-centered, with regionalized tertiary care settings focusing specifically on the specialized needs of high-risk women and babies. Health care organizations fulfill the role of regional maternity care coordinators, integrating maternity care across settings, providers, and levels of care.
- The role of hospitals with maternity services is not only to provide inpatient maternity care with a focus on the highest level of risk, but also to provide support, training, back-up, and resources to community-based maternity care centers and service providers, including well woman and well baby services.

To strengthen the maternity workforce.

- Health care organizations providing maternity services restructure care to deploy the most appropriate providers for wellness care during the childbearing cycle, making best use of primary care providers and paraprofessionals, with mechanisms to ensure that the most appropriate, most cost-effective level of care is provided to each woman and baby according to their needs.
- Health care organizations, through their policies and programs, ensure that all maternity care providers are skilled in best practices for protecting, promoting, and supporting physiologic labor and birth.
- Health care organizations provide leadership in promoting and supporting professional cooperation through high functioning multidisciplinary team models for maternity care rather than individual provider models and silos that separate maternity caregivers from one another and from other relevant health care fields.
- Health care organizations give attention to staffing of maternity care personnel to foster professional work/life balance in a manner that enables provision of high-quality maternity care.

To foster high-quality maternity care.

- At the leadership level, all health care organizations embrace and incentivize quality measurement and reporting, and quality improvement programs aimed at fostering the provision of effective care with least harm and improving the processes, structures, and outcomes of maternity care, as well as the experiences of childbearing women and families.
- All health care organizations collect, evaluate, and make publicly available data about performance in maternity care.
- All health care organizations provide maternity care staff with access to electronic databases, resources, clinical tools and programs to promote safety, care coordination, quality improvement, and continuous learning.
- Health care organizations participate in and provide a locus for clinical and comparative effectiveness research to contribute to better understanding of the full range of effects of maternity care treatments and practices in the uncontrolled settings and diverse patient populations in which they are used.
- Health care organizations participate in integrated systems of care provided on a regional basis, including maternity care quality collaboratives designed to address disparities of care based on geography, socioeconomic status, race and ethnicity, and language.

To provide woman- and family-centered care.

- Maternity care is organized, structured, formatted, and delivered to meet the needs of the

individual and the community rather than the institution. The timing, duration, interval, setting, format, and content of maternity care prioritize the consumer/patient perspective.
- Health care organizations collect feedback from all women and their families regarding their experiences of maternity care and use the information for continuous quality improvement.
- Health care organizations convene quality boards with representation from users of the maternity care system and their advocates to participate in shared governance.
- Health care organizations test innovations to increase maternity care access and community-based services.

Level D: Macro Environment of Care

This section outlines the goals for the system features and roles of the environment of policy, payment, regulation, accreditation, litigation, and other macro-level factors that influence the delivery of care within a high-quality, high-value maternity care system.

To strengthen performance measurement.
- A comprehensive set of national standardized evidence-based maternity care performance measures, including measures of process, structure, outcome, access, and patient experience of care, is developed and maintained to foster a high standard of effective care with least harm; these measures are widely applied and transparently reported and all accrediting bodies reinforce them.
- Performance data are collected and shared in a manner that permits calculation of performance benchmarks and subpopulation analysis to address disparities in maternity care access, quality, and outcomes according to geography, socioeconomic status, race, ethnicity, and language.
- There is a mechanism for ensuring meaningful consumer engagement in the development, assessment, and reporting of maternity care performance measures.
- In all professions providing maternity services, certification and recertification are linked with performance and improvement on measures of quality and safety.
- Benchmarking for maternity care quality is organized through national organizations, regional and state organizations, and multi-stakeholder quality collaboratives.

To improve the functionality of payment systems.
- There is a comprehensive health care system in the United States that includes maternity care coverage for all women and newborns.
- Medicaid and other payors analyze positive, negative, and perverse incentives and align financial incentives with optimal care. Payors monitor and foster quality improvement through contracting and payment systems with individual, group, and facility care providers that reward the provision of effective care with least harm and desired outcomes, and do not provide financial incentives for inappropriate care.
- Health and employee benefits plans offer women and families financial incentives for choosing maternity care, including practices, providers, and settings, associated with the best outcomes for the most efficient use of resources, while preserving women's choice among comparably effective options.
- There is reimbursement for health education and expanded preventive services across the childbearing continuum through a redesigned package of priority maternity care services, as supported by current evidence of enhanced health outcomes and good value.
- Payors explore and pilot value-based payment system alternatives to the present reimbursement system for maternity care services and track their impact on rates of intervention and harm, resource utilization, and maternity care outcomes.
- There is equitable reimbursement through the Centers for Medicare and Medicaid Services, and other public and private payors for equivalent care provided by all types of qualified maternity care providers.

To strengthen professional education and guidance.
- The content of health professions education and continuing education for all maternity caregivers emphasizes critical appraisal skills for ongoing evaluation of the quality and relevance of evidence on maternity care practices and their effects, and confers adequate knowledge, skills and judgment for the protection, promotion, and support of physiologic childbearing.
- An independent multi-stakeholder body develops, collects, updates, and disseminates evidence-based practice guidelines and decision tools for maternity care through processes that are transparent and governed by multiple stakeholders.

To close priority gaps in research.
- Comparative effectiveness and outcomes research, supported through federal funding, helps to refine the evidence base for maternity care and identify variation in processes and structures that have the greatest impact on outcomes. These data inform

the development of maternity care guidelines and performance measures, the provision of maternity care, the reimbursement of maternity services, and professional and consumer education.
- There is a multi-stakeholder process that includes meaningful consumer engagement for identifying research priorities for comparative clinical effectiveness to avoid financial and industry conflicts of interest and to ensure funding for studies of clinical importance and high value to the public.
- There is targeted federal funding to support research on quality measurement and quality improvement in maternity care.
- It is a national priority to learn more about the physiology of labor and to evaluate the outcomes of physiologic management of labor in comparison with usual care practices, through randomized, controlled trials and using other comparative effectiveness methodologies.
- It is a national research priority to evaluate long-term effects of health care treatments and interventions, nutrition and lifestyle, and environmental exposures during the childbearing cycle.
- A national entity supports practice-based research networks that collect, measure, analyze, and feedback data to maternity care providers in outpatient microsystems.

To improve the functioning of the liability system.
- As a complement to safety and quality initiatives, a system that is fair and equitable for patients and providers handles compensable adverse events and maternity claims to reduce the likelihood that fear of litigation will compromise the provision of effective maternity care with least harm.
- As a complement to safety and quality initiatives, the functionality of the liability insurance system is improved through regulatory intervention and by better integrating it with health insurance, the source of payment for liability costs.

To pursue other strategies for fostering high-quality maternity care.
- Interoperable health information technology systems are in place for providing high-quality clinical care and coordination, and for capturing and sharing maternity care performance data at state, regional, and national levels, with appropriate safeguards for patient privacy and security.
- Coordination of financial, licensure, accreditation, and other relevant systems ensures that each mother can designate her maternity care "medical home" led by the qualified provider of her choice for the coordination of all aspects of care for herself and that of her baby.
- National health care quality organizations are committed to continuous learning from effective systems to identify lessons that could be adapted in maternity care settings.
- Motherhood and fatherhood are valued as reflected in family-friendly programs and policies.

Finally, "the long clear sightline of this framework for possibility" (Zander & Zander, 2000) radiates forward to culminate in the following ultimate vision:

The "2020 Vision for a High-Quality, High-Value Maternity Care System" has been actualized through concerted multi-stakeholder efforts ensuring that all women and babies are served by a maternity care system that delivers safe, effective, timely, efficient, equitable, woman- and family-centered maternity care. The U.S. ranks at the top among industrialized nations in key maternal and infant health indicators and has achieved global recognition for its transformative leadership.

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A compendium of systematic reviews and better quality evidence of the effectiveness of core elements of systems in maternity care used as a resource bibliography by the Vision Team is available at: www.childbirthconnection.org/vision.

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