CME

In Pursuit of Value-Based Maternity Care

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Value-based care has become the new paradigm for clinical practice, with significant implications for maternity services, where there is a large opportunity to provide better care at lower cost. Childbirth is the most common reason for hospitalization in the United States and represents the single largest category of hospital-based expenditures. At the same time, the United States ranks low among developed countries on measures of maternal and neonatal health, suggesting that we are not using resources optimally. Improving the value of maternity services will require public policies that measure and pay for quality rather than quantity of care. Equally important, clinicians will need to employ new strategies to deliver value, including considering prices, individualizing the use of new technologies, prioritizing team-based approaches to care, bridging pregnancy and contraception counseling, and engaging expecting families in new ways.

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For much of the 20th century, the motivating ethic of clinical practice was thoroughness: leaving no stone unturned in pursuit of diagnoses and treatments. As late as the 1970s–the "House of God"[1] period of clinical training–this approach entailed deploying the full arsenal of medical capability, often indiscriminately. However, as medical capabilities rapidly expanded over the past half-century, so have the options available to clinicians and patients. This has required a more judicious approach in caring for patients.

In the early 1990s, a shift toward evidence-based medicine placed a primacy on "appropriateness" of care rather than thoroughness.[2] A movement to systematize quality assurance and improvement in health care subsequently arose, largely out of a recognition that patients are inadvertently harmed when medicine is misused and overused, not only when it is underused.[3] Appropriate care has always had a basis in empirically demonstrated safety and effectiveness. However, in the current decade, we have simultaneously experienced an erosion in the affordability of individual health care services and a massive expansion of health insurance coverage. Thus "appropriate" care has taken a deeper meaning. Care must be safe, effective, and also valuable–in other words, "worth it" to those delivering, receiving, and paying for care. Value-based care has become the new paradigm for clinical practice, with significant implications for maternity services.[4]

Among health care services, childbirth is the most common reason for hospitalization in the United States and represents the single largest category of hospital-based expenditures (Fig. 1).[5] Per episode, childbirth in the United States costs more than in any other country, accounting for 0.6% of the nation's entire $17 trillion gross domestic product.[6] Costs for expecting families have increased significantly in recent years, with out-of-pocket expenses for childbirth increasing on average fourfold from 2004 to 2010.[7] And yet we do not seem to be getting much bang for our buck. For this spending, one in three mothers gets major abdominal surgery to give birth, and one in ten neonates is sent to intensive care. The U.S.

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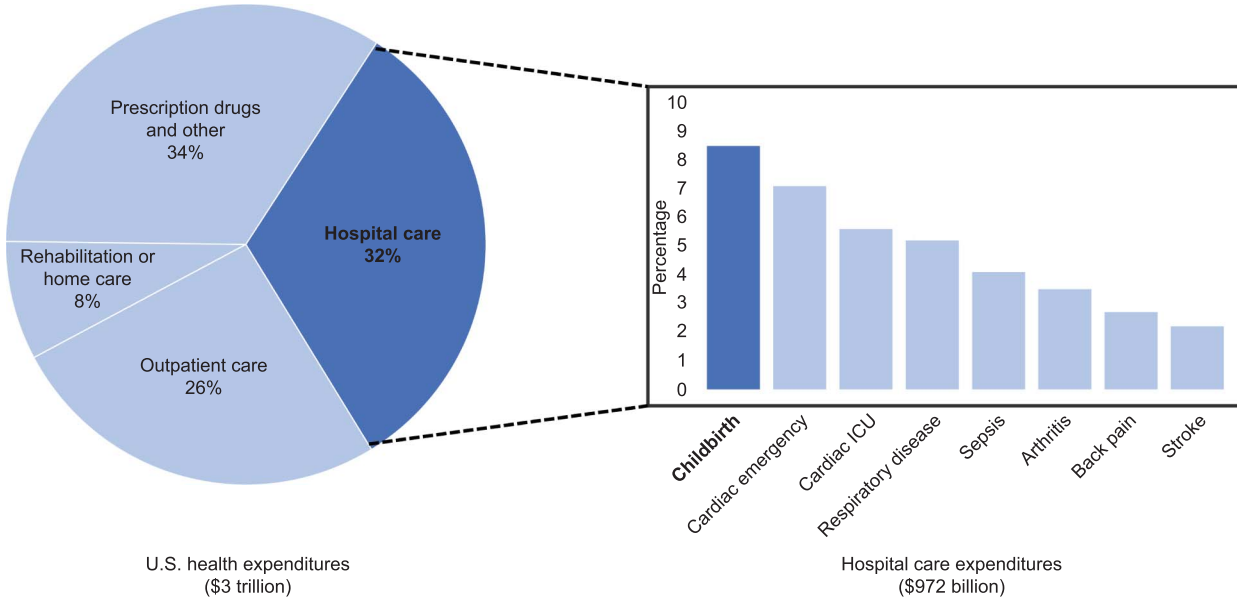

Fig. 1. Financial burden of childbirth hospitalizations in the United States. ICU, intensive care unit. Data from Wier LM, Andrews RM. The National Hospital Bill: The Most Expensive Conditions by Payer, 2008; 2011. Available at: https://www.hcup-us.ahrq.gov/reports/statbriefs/sb107.pdf. Retrieved May 14, 2018.

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maternal mortality rate is one of the worst in the developed world.[8] Collectively, these shortcomings suggest that we are currently not using resources optimally.

Achieving better childbirth outcomes at lower cost in the United States requires reliable and precise ways of measuring the value of maternity services. It also requires some ability to align payments for these services with quality instead of mere quantity. Ultimately, however, as obstetric providers we will need to deliver care differently. There is increasing agreement among physicians that cost consideration should be an integral part of clinical practice. The Accreditation Council of Graduate Medical Education under its system-based practice competencies specifies that residents are expected to "incorporate considerations of cost awareness…in patient and/or population-based care as appropriate."[9] Although many of the necessary reforms to improve care require actions from policymakers, the movement toward value-based care must be fundamentally driven by clinicians.[10]

MEASURING VALUE

An axiom that has been widely adopted in health care quality improvement is, "if you can't measure it, you can't manage it."[11] Measuring value requires measuring quality and cost, both of which present unique challenges. Quality is ideally measured in terms of positive and negative health outcomes, ranging from patients' reported experiences to clinical audits of adverse events. Because certain patient outcomes are either rare or challenging to ascertain, we in practice also measure key processes of care (such as elective induction rates) that are believed to drive outcomes. Upstream of the processes are the "structures" that enable them, such as staffing levels and the availability of hospital beds and other critical resources. This basic framework of measuring structures, processes, and outcomes, known as the Donabedian model, is routinely employed by quality officers across the country.[12] Pettker and Grobman[13] provide a comprehensive review of quality in obstetrics and the challenges in measuring quality in their Clinical Expert Series.

In value-based care, patient-reported experiences are a particularly important quality indicator. Patient experience can encompass a wide range of measures, including satisfaction, access to care (ie, ease in getting appointments), communication with health care providers, and outcomes such as pain or functionality.[14–16] Currently, there is no consensus on how to best measure patient experience in obstetrics, and the American College of Obstetricians and Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine do not include any patient-centered measures in their recommended quality measures in high-risk pregnancies.[17]

Consideration of health care costs is another key dimension that distinguishes value measures from quality measures. For many clinicians, the costs of care are a black box. This is partially because the true costs of care are distinct from the amount that a provider charges, the amount a payer reimburses, and the out-of-pocket expense to the patient (Fig. 2). In most cases, costs are estimated indirectly from the charges or reimbursements reflected on insurance claims. Hospital charges typically include physician fees, facilities fees, and fees associated with ancillary services ranging from laboratory fees to pharmacy fees. Each hospital then has a proprietary "chargemaster" to help determine the contribution of each of these services to the total charge, based on a complicated calculus that incorporates historical charges at that institution, inflation, fixed government reimbursement, and expected reimbursement rates from different payers.[18] Complicating matters, in many hospitals, one specialty will help subsidize the expenses of another, less lucrative specialty, and higher negotiated reimbursements from private payers help make up for the low fixed payments from government payers. The result is that true costs are often opaque and estimates imprecise.

Of note, the cost of delivering care is the product of the utilization of services and the price of those services. In the absence of precise cost estimates, utilization of services often serves as a proxy for cost. For example, 10-fold variation in cesarean delivery rates among U.S. health care facilities is thought to indicate a high degree of overutilization and is a commonly cited example of low-value care.[19] And even without precise knowledge of prices, insight into relative differences in prices can be helpful. On average, reimbursements for childbirth by Medicaid are half those of commercial payers,[7] and Medicaid reimbursements are publicly available. Thus, knowledge of payment mix at any given hospital can provide a sense of the price. From the patient's perspective, out-of-pocket expenditures are another (and arguably the most important) measure of cost. These costs have not traditionally been used by either payers or health care providers to track health care value or improve care but are receiving increasing popular media attention. As the out-of-pocket costs continue to rise for the average American, the affordability of health care services is likely to become an additional important basis for tracking health care value.

Irrespective of how costs are measured, it appears clear that the costs of childbirth in the United States vary tremendously by geography and by facility. Three studies looking at factors that could explain the variation in childbirth cost show an almost 10-fold difference between the lowest and highest cost facilities.[20–22] These studies use different methodologies to estimate cost and illustrate some of the challenges in measuring and understanding cost estimates (Table 1). Local factors such as property value, wages, population density and birth rates, and varying prevalence of certain risk factors would be expected to cause geographic variation in per-birth cost. Fear of malpractice litigation is one commonly perceived reason for overutilization of care in the United States, although studies that aim to quantify the effect of malpractice concerns on costs have yielded mixed results.[23–27]

Limitations in methodology, such as unobserved patient and hospital characteristics or inaccurate cost data, could lead to error in these models. Despite incorporating a significant number of hospital and

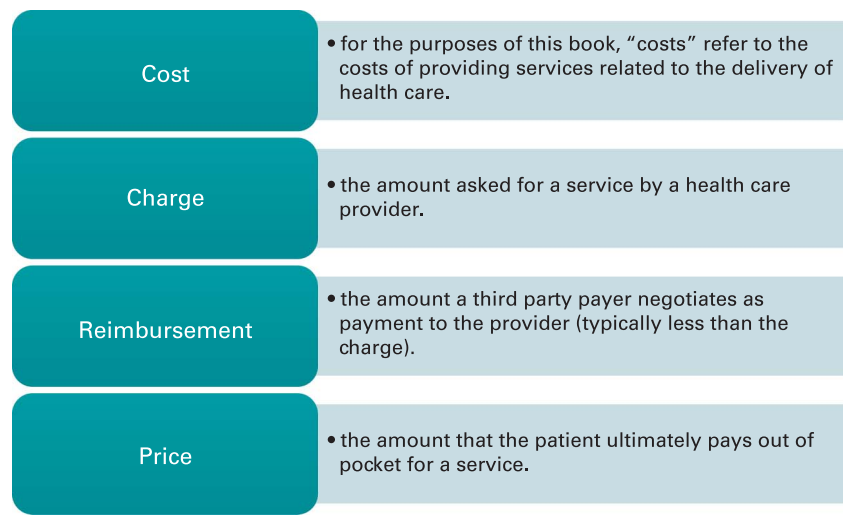

Fig. 2. Different measures of health care cost. Reprinted from Moriates C, Arora V, Shah N. Understanding Value-Based Healthcare. 1st ed. New York (NY): McGraw-Hill Education; 2015.

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Table 1. Comparison of Studies on Variation in Cost of Childbirth in the United States

Study Characteristic	Hsia et al[22] (2014)	Xu et al[20] (2015)	Xu et al[21] (2017)
Population	Privately insured patients admitted for uncomplicated vaginal or cesarean delivery in California in 2011	Births after "low-risk" pregnancies among nationally representative sample in 2011	Nulliparous term singleton vertex births in California 2010–2012
Cost estimate	Reimbursements	Costs	Costs
Range in reimbursement or cost by facility ($)	835–12,873 (vaginal delivery) 1,135–28,105 (cesarean delivery)	1,183–11,819 (vaginal delivery) 1,249–13,688 (cesarean delivery)	4,353–10,229 (10th–90th percentile range of all deliveries)

patient characteristics, the three models explained only 13–35% of the variation in cost; this implies that there are other unmeasured determinants of cost, such as the relatively arbitrary charge-setting practices described above. Moreover, the fact that in all three studies higher cost of maternity care did not correlate with better performance on quality measures suggests that there are inefficiencies and misutilization of services.

Relatively new to maternity care are efforts to combine quality and cost measurements as part of cost-effectiveness analyses. These efforts often supplement standard epidemiologic approaches to model the cost of providing services relative to the outcomes of interest and, as we discuss below, can be particularly helpful for clinical decision-making.

PAYING FOR VALUE

For most of the past half-century, reimbursement for health care services has been tied to quantity rather than quality. In recent years, this has started to shift in significant ways. The traditional model of paying for health care is widely referred to as *fee-for-service.* In the traditional fee-for-service model, each separate item in the care of a patient gets billed separately: and the physician evaluation, the imaging study, the laboratory test, the medication administered, and the physician interpretation of the imaging study. More care means more revenue, regardless of whether it provides additional benefit to the patient. In some instances, the incentive to provide unnecessary care may be realized; at the very least, there is little financial reason for the health care provider to consider utilization of care.

The advantages of this system are that it is easy to understand, and familiar, concrete services are reimbursed à la carte, care of sick patients does not put the provider at financial risk, and physician productivity is rewarded. The disadvantages are that many of the key functions needed to provide high-value care, such as coordination of care and health care access points that are not face-to-face, are not rewarded and incentivizes overutilization of other services that are usually costly (Fig. 3). A fee-for-service system reimburses any treatment that does not explicitly harm the patient, regardless of expense. As Abraham Verghese said, "in a healthcare system in which our menu has no prices, we can order filet mignon at every meal."[28] This metaphor is true with regards to both cost and health outcomes: filet mignon at every meal is not only expensive but also unhealthy.

The first step away from fee-for-service payments is pay-for-performance where health care providers are rewarded or penalized for their performance on certain quality measures–for obvious reasons such programs are rarely met with a warm reception by health care providers. They have also had mixed results given the challenges in measuring quality and value with precision.[29] An alternative tactic in value-based payment is to transition to global payments in which health care providers are paid a global, risk-adjusted, fixed fee for each patient over a year. On the continuum of volume-based payment (fee-for-service) to value-based payment (global payments), clinicians may assume increasing levels of financial risk for the care they provide for their patients; they also have more room to create innovative ways of delivering care.[29]

Health care providers are increasingly being held accountable for the outcomes of the care they provide, and the next step in payment reform is that health care providers–both individual health care providers and health care systems–may be held accountable for the costs of the care they provide. Accountable care organizations are trialing the new global payment and shared risk and savings model in a gradual fashion where fee-for-service is still in place, but cost savings and risks are shared to varying degrees, depending on the agreement. Although this transition can bring reasonable anxiety, it is possible that payment reform will alleviate at least some of the "bedside" barriers to delivering high-value care, such as the pressure to

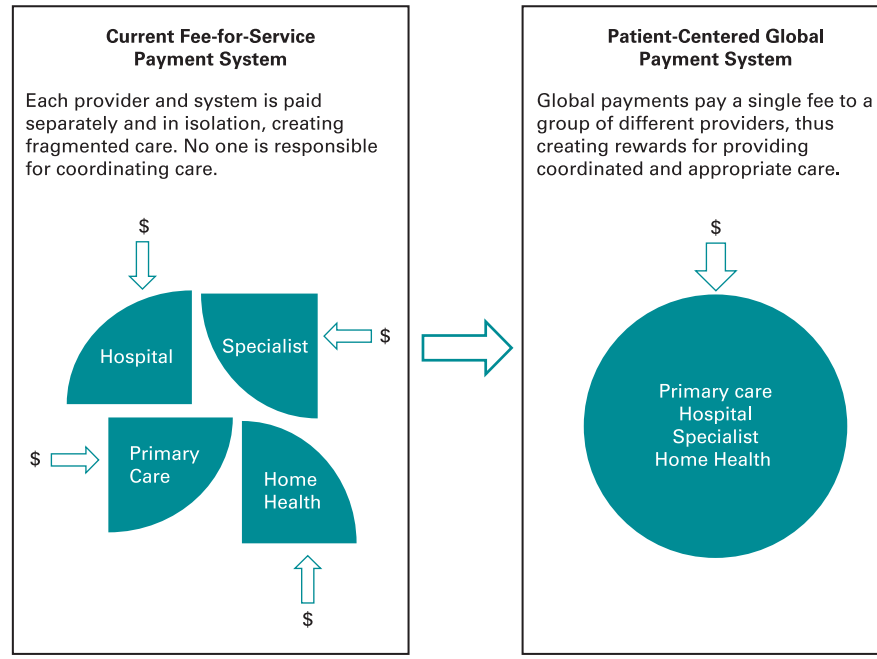

Fig. 3. Fee-for-service versus global payments. Reprinted from Moriates C, Arora V, Shah N. Understanding Value-Based Healthcare. 1st ed. New York (NY): McGraw-Hill Education; 2015.

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see as many patients as possible in an office session (Table 2). The ultimate goal of these reforms is to align the interests of health care providers and patients and to drive important changes in the ways care is delivered.

DELIVERING VALUE

There are several strategies clinicians can employ to deliver value-based maternity care, particularly when supported by efforts to measure and pay for value. We itemize some of these strategies and provide examples here.

When Therapies are Equivalent, Choose Based on Price

The simplest opportunities to provide value-based care often involve picking the less expensive test or therapy among equivalent options. For example, the

Table 2. Barriers to High-Value Care

Barriers to High-Value Care	Examples
Misaligned financial incentives	A patient with viral pharyngitis is seen in the office because telephone care is not reimbursed.
Time pressure	A patient with a viral upper respiratory tract infection who asks for antibiotics is given a prescription because it takes less time than explaining why the patient does not need antibiotics.
Imprecise measurements	Insurance claims data do not account for clinical decision making based on individual patient characteristics, nor do they assess the quality of the patient experience.
Lack of education and training	Clinicians do not incorporate costs into decision making because they were not taught where to find costs of common tests and treatments.
Healthcare system fragmentation	A test done at another institution is repeated because the electronic medical records are not interoperable and the results are not available.
Local culture and hidden curriculum	The attending physician commends the medical student for working up a rare but unlikely diagnosis on his/her patient.
Discomfort with diagnostic uncertainty	Ordering the additional testing when the patient has a straightforward clinical diagnosis "just to be sure."
Fear of malpractice	Increased hospital admissions for atypical chest pain after a clinician was sued for a bad outcome when he/she sent a patient with chest pain home from the ED.
Patient expectations	A desire to please the patient by ordering advanced imaging for low back pain because the patient requests the study.

Reprinted from Moriates C, Arora V, Shah N. Understanding Value-Based Healthcare. 1st ed. New York (NY): McGraw-Hill Education; 2015.

prostaglandin E_2 insert is about 200 times more expensive than misoprostol and has no proven advantage over vaginal or oral misoprostol.[30,31] The double Cook balloon is 10 times more expensive than the Foley balloon, and randomized control trials and meta-analyses have found the single balloon to be equally efficacious and better tolerated by patients than the double balloon.[32,33] In a similar vein, generic drugs are cheaper than brand names. These are simple purchasing decisions that can be acted on at the institutional level, as well as the individual provider level. In the outpatient setting, these decisions can make a tremendous difference in the affordability of care for patients and, accordingly, their compliance with recommendations, particularly as growing numbers of Americans face high deductibles that require thousands of dollars of out-of-pocket spending.

Another opportunity to reduce costs is to consider the optimal setting for care delivery, and to be thoughtful about whether a test or treatment truly requires a tertiary hospital or can instead be delivered in the community, at an outpatient or ambulatory facility, or even at home.[34] The setting of care, even for an equivalent service, can have a disproportionate effect on the prices our patients pay. For example, the facility fee makes up more than half of the overall cost of hospital-based care.[7] If a patient is being directly admitted to the hospital from a prenatal visit, it is more cost effective to send labs from the outpatient office setting than from the inpatient unit. There are also indirect costs for the patient to have tests done at a tertiary care center rather than in the community: transportation, parking, and time away from work. The average cost of an inpatient day in a nonprofit hospital in Massachusetts is $2,862.[35] Compare this with the cost of a hotel room, cab vouchers, or post-discharge home services such as visiting nursing care or lactation; clearly discharging patients home earlier with a nurse visit for a wound check, blood pressure check, or lactation follow-up and avoiding social admissions in the first place are cost-effective practices. For example, patients that live far away but need to present at a certain time for preprocedure testing and anesthesia consultation may benefit from cab and hotel vouchers to ensure that they present in a timely fashion while avoiding an extra night in the hospital. This is all much easier said than done: admitting a patient only takes a few clicks on the computer. Alternative solutions are more under the purview of case management or social work, and these supports are not always available, especially during off hours. These approaches also require collaborative models of care, where individual clinicians work as part of networks with multiple care settings as available. Although this is not always possible, as clinicians we should seek out opportunities to make sure the systems are in place to ensure patients have access to these options.

The growing opportunity to be selective about the birth setting specifically is worth noting specifically, particularly for low risk patients. Just as patients with suspected placenta accreta should deliver at a facility with level III or IV maternity care, low-risk patients–term vertex singletons who are expected to have an uncomplicated birth–could plan to deliver at a birth center where costs are lower (no hospital facility fee) and outcomes may be better.[36–40] Currently, birth centers face challenges in being broadly adopted within the United States as they are not consistently integrated with local hospital systems, raising concerns for their ability to handle obstetric emergencies.[40]

Critically Evaluate and Individualize Emerging Technologies

Another opportunity to deliver value-based care may be in critically evaluating the role of new, emerging technologies in our practice. For example, prenatal genetic screening and testing has great potential to improve care and change practice in the near term. However, whether marginal gains of these relatively new technologies are worth the increased costs remains an area of active debate.

Imagine a 32-year-old woman, gravida 2 para 1, with a body mass index (calculated as weight in kilograms divided by height in meters squared) of 32 and history of a cesarean delivery for breech presentation who presents for her first prenatal visit, and you discuss carrier screening with her. The American College of Obstetricians and Gynecologists recommends population-wide screening for cystic fibrosis (CF) and spinal muscular atrophy.[41] In a 1998 cost-effectiveness analysis, population-wide prenatal CF carrier screening was cost-saving in Caucasians assuming a 50% termination rate.[42] Owing to race not being a straightforward classification in the United States, the policy decision was made to provide population-wide screening. In a cost-effectiveness analysis of population-wide spinal muscular atrophy carrier screening, the authors showed a reduction in spinal muscular atrophy cases by 80% with an incremental cost of $4.9 million per year of life gained, which is not generally considered cost effective (and this was assuming a termination rate of 100%).[43] Based on the sensitivity analyses, the key inputs in the model would need to be very different, in the

unrealistic range, for it to be cost effective. The economics of this disease may change with novel treatments for spinal muscular atrophy, but for now these therapies are still considered to be experimental.

Interestingly, the National Screening Committee in the United Kingdom does not recommend antenatal screening for either disease.[44] These cost analyses suggest that rote ordering of these screening tests at the initial prenatal visit may not the value-based approach; instead, as ACOG does specify in the Committee Opinion, screening should be offered to women who "have had appropriate counseling about the possible range of severity, carrier rate, and detection rate."[41] The limitations of CF carrier screening in patients with no Northern European ancestry, something that is not always easy to determine, can make these considerations even more challenging. Of note, the analyses did not include other benefits of prenatal testing, such as the benefits for parents of being able to prepare for a certain diagnosis before birth or of notifying other possibly affected family members of the results, nor do they include the emotional effect of false negative or positive results; these are inherent challenges in cost-effectiveness analyses on prenatal screening.[45]

For a given patient, it is possible that population-wide prenatal spinal muscular atrophy screening is not the most effective way to spend limited resources. At the very least, there is opportunity to be thoughtful in how we counsel patients about the value of these tests and other tests that are sure to emerge in the future.

Prioritize Team-Based Approaches to Care

Some opportunities to improve the value of maternity care may be hidden in plain sight, and depend critically on coordinating care among multiple types of health care providers. Imagine our patient is now in the second trimester and is diagnosed with gestational diabetes mellitus (GDM). Although many of us put great effort into screening for GDM and helping our patients achieve glycemic control antepartum, these efforts may not have value unless we are equally diligent about transitioning care postpartum to ensure long-term follow-up.

A seminal cost-effectiveness analysis compared three population screening strategies: no screening for GDM, the one-hour test endorsed by ACOG, and the 2-hour test endorsed by the American Diabetes Association.[46] The third strategy would identify additional women at risk for perinatal complications but increase the prevalence of an abnormal test threefold. The assumed interventions for a diagnosis of GDM included nutritional counseling, home glucose monitoring, antenatal surveillance, insulin therapy, postpartum screening for diabetes, intensive exercise and nutrition counseling, and diabetes screening every 3 years. In this study, the perinatal complications among those with overt diabetes diagnosed in pregnancy included preeclampsia, preterm birth, cesarean delivery, shoulder dystocia, and stillbirth. The authors included maternal and offspring quality of life and assumed the diagnosis of GDM would reduce the risk of developing type 2 diabetes by 34% over 10 years. This estimate was based on the Diabetes Prevention Program that showed this reduction in risk in high-risk individuals who had lifestyle interventions.[47]

The authors found that, compared with no screening at all, both screening strategies are only cost effective if the long-term maternal health benefits are included in the model. When they restricted the analysis to the perinatal outcomes, neither screening strategy was cost effective. This implies that, from a cost perspective, the antenatal care for a patient with GDM is valuable only if we help reduce the risk of type 2 diabetes in the subsequent 10 years. In fact, postpartum care appears to be more important than antenatal care for these patients, who need weight loss and nutrition support in the period after birth as well as long-term primary care follow-up.

Team-based care is not only important in coordinating transitions in care management but also in managing pregnancy and labor. Many of us are familiar with and work closely with medical assistants, nurses, nurse midwives, nurse practitioners and physician assistants as part of our practices. Evidence from Canada and the United Kingdom broadly supports the cost effectiveness of midwifery care.[48–51] However, currently less than 10% of our patients receive care from midwifery colleagues.[52] Models with the highest degree of integration between midwifery and obstetric services do seem to deliver the highest value care by tailoring interventions and resource utilization based on risk level of patients.[51–53] An interdisciplinary collaborative model where the differential expertise of both obstetricians and midwives is available to a patient enables care to be more patient-centered, and thus valuable. Another patient-centered interdisciplinary component of antepartum and intrapartum care is professional labor support: the use of doula services has been shown to have such a profound effect on preterm delivery and cesarean rates that reimbursing doulas appears to result in net cost savings to payers.[54]

Integrate Contraception and Pregnancy Counseling

Few strategies improve the well-being of populations more than counseling women about their reproductive options: in particular, increasing access to

long-acting reversible contraception. Our patient is now in the third trimester. Although contraception is often an afterthought, this is the time to start thinking about interconception care. The frequency of prenatal visits, especially in the third trimester, lends itself well to contraceptive counseling, and the prevention of unintended pregnancy by providing access to contraception as early as possible has clearly demonstrated value.[55,56] Cost-effectiveness analyses comparing long-acting reversible contraception during the delivery admission with routine initiation at 6–8 weeks postpartum showed cost savings with the former strategy.[57,58] In the cost effectiveness analysis of postplacental intrauterine device insertion compared with routine interval postpartum insertion, immediate postplacental insertion was cost saving in 87% of simulations and cost effective in an additional 12% at a willingness to pay of $50,000 to prevent one unintended pregnancy.[57]

Indeed, the patients most at risk for unintended pregnancy are less likely to attend postpartum visits; in a retrospective study in Maryland, less than 60% of Medicaid-insured women had a postpartum or primary care visit in the 12 months after birth.[59] Unfortunately, our current reimbursement system does not currently incentivize postpartum care. In the first 6 weeks when women are still considered to be obstetric patients, they often do not get the follow up or the care coordination that they need. The American College of Obstetricians and Gynecologists recently revised clinical guidance to expand the current concept of postpartum care to include "ongoing care as needed" rather than the single 6-week postpartum visit.[60]

Expand Ways of Engaging Patients in Maternity Care

Current models of prenatal care can be quite regimented, requiring frequent contact with the health care system. This is partially why pregnancy can be a time of high impact for patients who otherwise have little contact with health care providers. At the same time, this cadence of visits may not be the optimal care model for all patients. More vulnerable patients may require more intensive care and others may require less. In North Carolina, a "maternity medical home" was developed to provide multidisciplinary care for pregnant women who may also need to see social work, nutrition, and psychiatry or a medical subspecialty. As part of the state Medicaid program, this model showed a significant decrease in low-birth-weight neonates.[61] Group prenatal visits are another promising model, particularly for those who may benefit most from access to peer support that is not otherwise readily available. Group visits have been shown to improve a wide range of outcomes for adolescent mothers, low-income women, women in the military, African Americans, women with opioid use disorder, and women with diabetes.[62–64] Cost analyses that have compared the cost savings of reducing preterm birth, one of the associated pregnancy outcomes, with the cost of implementing group prenatal care have shown this model to be cost effective, without accounting for other benefits that have been associated with group prenatal care, such as increased rates of breastfeeding, higher rates of postpartum weight loss, and improved patient satisfaction.[65,66]

In 2018, there are also many opportunities to replace some prenatal visits with electronic means of interacting. A survey by Accenture showed that more than 70% of respondents were interested in virtual health care for convenience.[67] Email and electronic patient portals can be efficient places for nonurgent patient questions and for patient information such as preprocedure instructions, appointment reminders, and patient education pamphlets or videos covering general topics, for example, genetic screening options and breastfeeding. Innovative companies have created online programs that provide women personalized platforms where they can retrieve personalized patient education and track personal metrics such as weight gain. Telemedicine for genetic counseling, consults, diabetes management, and postpartum depression screening holds promise for patients that live in rural settings especially, but there are still implementation barriers such as patient privacy and security, billing, and liability.[68]

Although useful to many patients, these online tools may not help or be appropriate for every patient. One study of the use of a pregnancy app in a Medicaid population in Wyoming showed increased prenatal care utilization and higher birth weights in the patients using the app; however, there was significant confounding and selection bias and a relatively low uptake of the app in the pregnant Medicaid population.[69] In rural or low-income communities, home visits by community health workers, nurses, or lactation may be a more effective way to reach patients who need close follow-up, especially postpartum.[70]

DISCUSSION

Although the strategies we offer to deliver value-based maternity care are by no means comprehensive, our hope is to provide a starting place as our profession collectively considers the way we can provide more patient-centered and affordable care (Box 1). The necessary transition to value-based care is not straightforward and will require a combination of policies aimed at

measuring and paying for better care, as well as clinical strategies to actually produce better care. Some health care systems may be better positioned to navigate this transition than others; specifically, safety net hospitals may find it particularly challenging owing to limited resources. Ultimately, the quest for improvement is motivated by a realization that the current system fails to align the values of expecting families and clinicians with the resources that we spend and the results we get. This is true throughout health care, but there are few services more valuable to society than childbirth. Obstetricians should work with our colleagues across the health professions and lead the way.

Box 1. Suggested Strategies to Deliver Value-Based Maternity Care

When therapies are equivalent, choose based on price.

1. Use misoprostol instead of prostaglandin E_2 insert and Foley balloon instead of double Cook balloon for cervical ripening
2. Prescribe generic formulations of medications
3. Do tests and treatments on an outpatient basis when possible
4. Minimize inpatient days by using transportation vouchers and home health care
5. Offer birth center care to low-risk patients

Critically evaluate and individualize emerging technologies.

1. Thoughtfully counsel patients on carrier screening based on their risk factors and preferences
2. Population-wide antenatal spinal muscular atrophy carrier screening is not cost effective

Prioritize team-based approaches to care.

1. For patients with chronic diseases and precursors thereof, coordinate postpartum transition of care to a primary care provider
2. Collaborate with nurse midwives to manage normal labor and delivery
3. Make doula services accessible to your patients

Integrate contraception and pregnancy counseling.

1. Integrate counseling for interconception care, including postpartum contraception, in prenatal care in the third trimester
2. Make immediate postpartum long-acting reversible contraception widely available

Expand ways of engaging patients in maternity care.

1. Consider the maternity medical home or group visits as alternate models for engaging certain patient groups
2. Develop electronic patient education materials and ways of communicating with patients
3. Pay home visits to high-risk patients that do not follow-up

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