



Positioning Midwifery in Health System Reform: A Policy Review

Why is it so critical to address women's health care, particularly maternity care, in health reform efforts?

Maternity care matters. Health system reform efforts cannot succeed in increasing access, improving quality, or controlling costs unless we carefully and comprehensively analyze beginning-of-life care. We have data-driven solutions to turn around the current state of maternal-child health care in the United States (U.S.). Now we need policies to widely implement these solutions. With policies in place that value maternity care, we can improve the health of women for a lifetime.

Assertions that “the U.S. has the best health care in the world” have given way to the realization that, despite our spending, we live sicker and die younger than citizens of many other developed countries. The business community, health care organizations, employees, and policy makers have come to agree that the national economy will not be sustainable unless a means is found to stop the rapid escalation in the cost of health care. In addition, those who pay for health care services are no longer willing to pay for care that is either ineffective or does not meet minimal standards of care.

“We have a window of opportunity to establish a comprehensive standard of health for American women – a standard that enables women to attain good health in their childhood and adolescence, maintain good health during their reproductive years, and age well.”¹

W. Chavkin, et al. Women's Health and Health Care Reform, 2008.

This policy review briefly describes the state of maternity care in the U.S. and provides a proposal for reforming the way health care is provided to childbearing women.

For policy makers committed to improving quality while containing costs, aligning payment with quality incentives and making a positive impact on the quality of life for all Americans, there is no better target for reform than women's health care, particularly maternity care services.

Maternity care is a “high prevalence condition” that makes up a significant portion of the national hospital bill.

There are four million babies born in the U.S. each year, and hospitalization for childbirth accounts for 11 percent of all hospital stays in U.S. community hospitals.² Data from 2003 show that while private insurers were billed for more than \$17 billion dollars in childbirth-related hospital stays, another \$15 billion was publically financed through Medicaid.

A 2005 update on *The National Hospital Bill* revealed that, at \$44 billion, pregnancy and delivery had the second highest charges, exceeded only by the cost of providing care for coronary artery disease.³ Childbirth is often considered a short stay event, and for the mother it often is. However, the most recent data on hospital-based care in the U.S. reveal that the two conditions with the longest hospital stays for all patients regardless of age were related to infants: infant respiratory distress syndrome (average stay, 23 days) and premature birth and low birth weight (average stay, 26 days).⁴ These conditions were among the most expensive, ranked second and fourth. The mean charge for infant respiratory distress syndrome was \$106,500.

Summary

- *Maternity care is a gateway to health care for a family and an opportunity to influence health habits for a lifetime.*
- *Four million births per year make childbirth a “high prevalence” event that provides a significant opportunity to improve quality and rein in the costs of health care.*
- *Despite spending billions on maternity care, the United States (U.S.) lags far behind other developed countries in critical indicators of maternal and child health, and the situation is getting worse.*
- *Perverse incentives and fear of liability encourage overuse of technology and a high incidence of unnecessary intervention.*
- *Evidence-based solutions abound; the U.S. needs policies and payment reform that will support their widespread adoption.*
- *A multi-disciplinary, team approach to care will be needed in order to provide the greatest improvement in maternity care.*
- *To shift resources toward wellness, disease prevention and primary care for women, policies must promote a greater supply and a wider use of certified nurse-midwives (CNMs) and certified midwives (CMs).*

Some 62 million women in the U.S. are in their childbearing years. Between age 14 and 44, most women will spend about five years trying to become pregnant, being pregnant, or recovering from childbirth, and three decades trying to avoid or prevent pregnancy. Almost half of pregnancies in the U.S. are unintended.⁵

Despite high levels of spending on maternity care, we have little to show for it.

While maternity and newborn care account for billions in hospital charges, our perinatal mortality rates are shameful when compared to those of other industrialized countries. We are far from achieving the goals set in *Healthy People 2010*,⁶ and the health of mothers and babies is getting worse rather than better, with more mothers and babies dying each year.⁷

“The United States spends more money on health care per capita than nearly any other country in the world, yet has the highest rates of child poverty and the lowest levels of child health and safety of the rich countries. As a result, infant and child mortality rates in the United States are higher than in any other industrialized country, the only exceptions being Latvia, Lithuania and Slovakia.”⁸

The *Dartmouth Atlas Project*⁹ has brought attention to the significant and unwarranted geographic variation in health care in the U.S. While the project has focused on end of life care, there is evidence that the same problems - underuse, misuse and overuse - exist at the beginning of life as well.^{10,11}

The *March of Dimes* has given the United States a grade of “D” for its preterm birth rate of 12.7%.¹² In addition, the *March of Dimes* has drawn attention to the problems associated with routine induction and cesarean section without medical indication. In a recent report, “costs

for uncomplicated cesarean deliveries were more than 40% higher than costs for uncomplicated vaginal deliveries and approached the cost of complicated deliveries.”¹³

The burden of these unacceptable outcomes is borne disproportionately by politically disenfranchised and economically disadvantaged communities. Among the stunning statistics: the maternal mortality rate for black women is more than three times the rate for white women, preterm birth is the leading cause of death and disability among African American infants, and disparities persist in infant mortality, with nearly two and one-half times the rate for blacks than for non-Hispanic whites.^{14,15}

For decades, midwives – practicing in a manner that engenders empowerment of all women - have addressed the complex problem of health disparities and remain committed to actions aimed at their elimination, including a commitment to “work in coalition with other groups and organizations...to improve the reproductive health of women, particularly those most burdened by disease and premature death.”¹⁶

An investment in primary health care for women and a shift away from our procedure-intensive model of maternity care will improve outcomes and help “bend the curve.”

Policy makers looking to contain cost should look carefully at women’s health care, preconception care and maternity care. If managed correctly, a planned pregnancy and the birth of a healthy, term baby in a family-friendly setting that facilitates breastfeeding can lay the foundation for a healthy life. Alternatively, pregnancies that result in low birth weight and pre-term infants are often associated with inadequate preconception and/or prenatal care. Babies born prematurely frequently require extremely expensive lifelong medical care.

In a special supplement of *Women’s Health Issues* devoted to improving preconception and interconception health, the editors address the growing body of evidence that many of the most important determinants of birth outcomes may exist before pregnancy. They also document that the recommendations of the *Centers for Disease Control and Prevention Select Panel on Preconception Care* have “never advanced, in part owing to policy and financial constraints.”¹⁷ Included in this supplement is a series of invited papers that expand on health policy and finance-related recommendations, from expansion of existing public health programs to the development and implementation of quality improvement measures.

Use of the best available evidence to guide the delivery of excellent health care is what everyone expects. Unfortunately, in maternity care, a number of interventions have been adopted as the norm rather than the exception. This exposes pregnant women to unnecessary harm. The steady rise in the rates of induction of labor, epidural analgesia, and cesarean section are examples of this failure to limit the use of risky procedures to situations where the benefit outweighs the risk.¹⁸

Provision of evidence based maternity care, especially when available to all women prior to and early in their pregnancies is consistent with the goals and principles of many health reform plans and include:

- Increased focus on prevention and wellness
- Decreased use of technology
- Ending the overuse and misuse of care
- Consumer engagement in seeking care and preventing complications
- Cost containment (“bending the curve”)

What can health care reform do to improve the lives of mothers, babies and families?

Ensure that efforts to enhance primary care and care coordination (i.e. the “medical home” or health care home) address the needs of women of childbearing age.

More than 10 years ago, the *Institute of Medicine* (IOM) included in their publication, *Primary Care: America’s Health in a New Era* the following definition of *primary care*: “the provision of integrated, accessible health care services to women by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.” The IOM further defined *clinician* as “an individual who uses a recognized scientific knowledge base and has the authority to direct the delivery of personal health care services to patients...”¹⁹

While some aspects of current health care reform efforts remain contentious, there are many goals that are universally embraced, including the need to strengthen primary care and improve care coordination. A barrier to achieving that goal is the shortage of primary care providers.^{20,21,22} There is, however, a cadre of health care professionals who are expert in providing high quality, patient-centered primary care in a manner that has been shown to be cost-effective and to expand access to care: nurse practitioners and nurse-midwives.

Nurse-midwives have a long history of providing primary health care services, beginning in the 1920s at the *Frontier Nursing Services*. Midwifery care as provided by certified nurse-midwives (CNMs) and certified midwives (CMs) is family-centered and community-based care with a focus on health promotion, counseling, and education, making midwives particularly well-suited to provide primary care.²³ Federally

qualified health centers, adept at providing high quality, cost effective primary care, have steadily increased the number of certified nurse-midwives on their staffs.²⁴

Consumers want choice in their primary care provider. “The care team is led by a qualified provider of the patient’s choice, and different types of health professionals can serve as team leader.”²⁵

Policies designed to support and expand the primary care workforce must look beyond physicians to build multidisciplinary teams that include nurses, nurse practitioners and midwives, pharmacists, community health workers and others.^{26,27}

“Health centers currently need 1,843 primary care providers, inclusive of physicians, nurse practitioners, physician assistants, and certified nurse-midwives. To reach 30 million patients by 2015, health centers need at least an additional 15,585 primary care providers, just over one third of whom are non-physician primary health care providers”²⁸

In order to educate more midwives, there must be expanded funding for scholarships, clinical sites and loan repayment. A recent study analyzed the cost and benefits of nurse-midwifery education. Findings reveal that students, clinical sites, academic institutions and those who support education programs realize a net benefit from their investment.²⁹ Expanded funding is also needed for midwifery research, demonstration projects and collaborative training of midwives and resident physicians.

Encourage the widespread adoption of quality measures for perinatal care.

There is greater awareness of the need to improve many aspects of health care. As highlighted in the *Institute of*

Medicine’s 2001 report, *Crossing the Quality Chasm*, maternity care that is universally safe, effective, patient-centered, timely, efficient and equitable eludes many women.³⁰ A noted failure was the lack of performance measures for the provision of perinatal care.

Addressing this concern, in October of 2008 the *National Quality Forum* endorsed a set of 17 voluntary consensus standards for perinatal care.³¹ Widespread adoption and public reporting of these measures will help providers deliver better care, will assist families in making the best choices for their care, and will guide purchasers in getting the best value for their health care dollar.

An experience at *Intermountain Healthcare, Inc.*, the largest health care provider in Utah, illustrates that, “If you don’t measure it, you can’t fix it.” *Intermountain* documented a trend that was part of a larger national phenomenon: more healthy women were having labor induced, and increasingly those inductions were happening before the 40-week gestational age that has been proven to be ideal for mother and baby.

Intermountain’s research team analyzed data from comprehensive electronic health records. They were able to document that those women who have elective inductions before 39 weeks gestational age frequently had longer and more complicated births, with a statistically significant increase in newborn medical complications.

After adopting a quality measure and instituting company-wide policies to limit early elective inductions, the percentage of elective inductions at *Intermountain* hospitals dropped from 28 to 3.4 percent. With that dramatic drop, *Intermountain* also found a 90-minute decrease in the average length of labor in electively induced patients, with fewer medical complications including a decrease in the number of emergency cesarean sections.^{32,33,34}

Implement a comparative effectiveness research (CER) program to study issues related to women's health.

Congress made a significant down payment on health care reform with a \$1.1 billion dollar investment in comparative effectiveness research.³⁵ The question is no longer if we will have a CER program, but how it will be implemented, what topics will be chosen, and how findings will be disseminated and applied.

As currently provided in the U.S., maternity care underscores the critical need for effective dissemination of research findings and policies that promote best practices. A classic example is routine continuous electronic fetal monitoring, which is linked to the rise in the rate of birth via cesarean surgery. Despite dozens of randomized controlled trials that show no benefit to this intervention when used routinely, women continue to labor attached to fetal monitors.³⁶ A combination of heavy marketing, fear and habit has turned this medical technology into an expensive cultural norm, which few dare question.

CER priorities should include studies of how care is delivered, especially looking at innovative models for improving outcomes for common healthcare needs³⁷ such as:

- Examination of perinatal outcomes of women and infants who receive low intervention, evidence-based care following a model that supports normal physiologic processes, in multiple clinical sites.
- Comparison of group prenatal care to traditional prenatal care across multiple settings for clinical and cost effectiveness, including effect on key indicators such as preterm birth, low birth weight and other indicators of maternal, infant and family well-being.
- Identification of factors successful in preventing primary cesarean section and those care

practices that encourage the safe provision of vaginal birth after cesarean section.

Evidence-based practice: nurse-midwifery care

A summary of research on midwifery practice in the U.S., compiled in 2008 by the *American College of Nurse-Midwives*³⁸, reveals that the literature documenting the safety and effectiveness of nurse-midwifery care dates from 1958. In the 1920's, nurse-midwives began providing primary health care to women and families of Appalachia and established an innovative health care system that continues to save lives. Data from 1925-1954 reveal a maternal mortality rate of 9 per 10,000 among the midwife patients (national rate: 34 per 10,000) with a low birth weight rate that was half the national average.³⁹ Likewise, there was a "natural experiment" documented in the 1960s when medically indigent women experienced an increase in prenatal care and a decline in prematurity when midwifery care was introduced to Madeira County, CA, only to see a return to poor outcomes when the demonstration project ended.⁴⁰

The literature became more sophisticated in subsequent decades, with prospective randomized studies and intent-to-treat models that compared nurse-midwives with physicians. In 1996, epidemiologists at the *National Center for Health Statistics* examined linked birth/infant death data for all singleton, vaginal births at 35 to 43 weeks gestation, delivered either by a physician or certified nurse-midwife (CNM) in the U.S. in 1991. After controlling for medical and social risk factors, the risk of experiencing infant death was 19% lower and the risk of delivering a low birth-weight infant was 31% lower for women attended by a CNM when compared to the outcome statistics for women attended by physicians.⁴¹

A systematic review of midwifery care of poor and vulnerable women from

1925 to 2003 concluded that "extensive evidence documents excellent outcomes of midwifery care for the poor in urban and rural settings over the past three quarters of a century."⁴² There is a solid and compelling body of literature to demonstrate that midwifery care is safe and midwifery care is effective. Current research has moved beyond outcomes to investigate the process of care that leads to the positive outcomes associated with midwifery care.

Support innovative models of care that have been shown to be effective.

There is much to be gained by examining innovative models of care and facilitating their replication. By their very nature, innovations often require changes in existing policy to assure universal acceptance. To quote a CDC-led initiative to promote preconception health, "The innovations taking place in clinical practice and communities across the country need policy and finance support, or they are doomed to be unsustainable as have been other pilot projects and new directions in health care."⁴³

Two examples of innovation in maternity care backed by compelling evidence are group prenatal care and birth centers. Both await simple policy changes to facilitate their widespread adoption.

Group Prenatal Care

CenteringPregnancy is a "disruptive redesign" of prenatal care that is based on a group model.⁴⁴ It has been implemented in hundreds of clinical practices in the U.S. and abroad. It provides an integrated approach to prenatal care in a group setting, incorporating family members, peer support, and education. In a multisite randomized controlled trial, women assigned to group care were significantly less likely to have preterm births, had significantly better

prenatal knowledge and were more likely to breastfeed.

Building on the prenatal care model, the *Centering Healthcare Institute* was founded with a mission to change the paradigm of health services to a group care model in order to improve the overall health outcomes not only of mothers, babies, and new families, but of all individuals across the life cycle. The cost benefit of groups versus individual care is in the early stages of exploration, but it has become clear that shifting care from a focus on individuals to groups requires significant system change.⁴⁵

Birth centers

“The right care at the right time and at the right place” has become a mantra of health reform. But many question if enough attention has focused on identifying the right place for birth. It has been 20 years since results of *The National Birth Center Study* were published in the *New England Journal of Medicine*, demonstrating that birth centers offer a safe alternative to hospitals for selected women.⁴⁶

When one of the founders of the birth center concept, Ruth Watson Lubic, CNM, EdD, was recognized with a MacArthur “genius award” she chose to come to the District of Columbia, believing that “putting care in a social context” could have an impact on the disgraceful rates of infant mortality and low birth weight in the nation’s capitol. After three years, outcomes of care for underserved women were improved and the *Family Health and Birth Center* generated savings for the system in excess of its operating budget. Yet, limited reimbursement and exorbitant professional liability premiums challenge the survival of the *Center*.⁴⁷

Incentives for innovative delivery models, such as payment of the facility fee for birth centers, are needed to expand access. More information about birth centers is available at www.birthcenters.org.

Dr. Lubic has been recognized by the American Academy of Nursing as part of their Raise the Voice campaign, in which the Academy is showcasing stories of nurse “Edge Runners” – the practical innovators who have led the way in bringing new thinking and new methods to a wide range of health care challenges.⁴⁸

For more information, see:
www.aannet.org/files/public/Independent%20Birthing%20Center_template.pdf

Use payment reform to reward the delivery of quality care.

For most women, pregnancy and birth are physiologic events that require individualized education, psychosocial support, a limited number of routine tests, and careful observation. Only a small percentage of women need extensive testing and intensive intervention. Yet the current payment system provides little or no reimbursement for non-procedure based interventions that have shown improved outcomes, while paying well for a host of procedures of dubious benefit. Payment needs to be adjusted to reward evidence-based care.

It is important to consider not only *what* is paid for, but *who* is paid. A report on evidence-based maternity care, co-published by *Childbirth Connection*, the *Reforming States Group*, and the *Milbank Memorial Fund* recommended that payment policies “foster broad access to safe, effective midwifery care by setting adequate Medicaid and Medicare reimbursement rates for certified nurse-midwives, certified midwives, and certified professional midwives.”⁴⁹ Likewise, lawyers and economists have studied the impact of policy on the provision of care and have emphasized the need for regulation and policies that reverse the current underutilization of qualified providers.^{50,51}

As options for financing and payment reform are assessed, it is important to consider how maternity services will be affected by various options. An analysis of information on more than

3500 individual health insurance plans available in 2008 revealed that, “even where maternity coverage is available, women confront outrageous prices, unacceptable waiting periods and skimpy benefits. Health reform must ensure that women have access to comprehensive health benefits that meet their needs; adequate maternity coverage must certainly be part of every plan.”⁵²

The *National Priority Partnership*, “a collaborative effort of 28 major national organizations that collectively influence every part of the health care system,” calls for *reducing unwarranted maternity care interventions as a priority area for substantive improvements in health and healthcare*. As a first step toward fundamental changes in the care delivery system, the *Partnership* identified a set of National Priorities and Goals to help focus efforts on “high-leverage areas – those with the most potential to result in substantial improvements in health and health care.” The *Partnership* recognized the problems created by inappropriate and excessive care and identified as one of the priority areas the need to eliminate overuse. Among the recommended areas of concentration are unwarranted maternity care interventions, targeting cesarean section.⁵³

Look to integrated health systems for a model workforce.

Integrated health systems are an approach to organizing care based on the belief that it is not the lack of money, people, technology or information that is problematic, but the lack of a system that integrates or organizes the people, technology and information. There are three integrated systems that are often held out as models for a reformed system: *Kaiser Permanente*, *Geisinger Health System* and *Intermountain Healthcare*. All three of these systems depend on nurse practitioners and nurse-midwives, in partnership with physicians, to provide primary care and maternity care services to women,

using physicians to provide specialized, high-risk care.

Intermountain Healthcare is a nonprofit system of hospitals, surgery centers, doctors, advanced practice clinicians and clinics that serves the medical needs of Utah and southeastern Idaho. With 22 hospitals, 2,317 staffed hospital beds, 162 clinics and over 29,000 employees, *Intermountain Healthcare* is the largest healthcare provider in the Intermountain West. While the 2007 national cesarean section rate hit 32% and the cesarean section rate in Utah is at 22%, it is noteworthy that in 2008 the primary cesarean section rate for the *Intermountain Nurse-Midwifery Service* was 6% and the total cesarean section rate was 12%. At *Intermountain Medical Center* the nurse-midwifery service recently celebrated its 20th anniversary and 7,000th birth. The CNMs work in partnership with ten Maternal Fetal Medicine specialists and in 2008 attended 11% of the vaginal births. (D.R. Williams, CNM, MS, Advanced Practice Clinical Coordinator, *Intermountain Healthcare, Inc., Salt Lake City, Utah, unpublished data, 2010*).

Intermountain Healthcare - an integrated health care system in which midwives play an important role in the provision of integrated evidence-based care – has been highlighted repeatedly during recent health reform debates and reports in professional and public policy arenas.^{54,55}

Create alternatives to the existing liability system.

Medical liability plays a significant role in our health care crisis, limiting access, affecting the quality of care, and driving up costs. Unfortunately, reforming the medical liability system has long been a lobbying battle. On one side, organized medicine is pushing for caps and tort reform; on the other side, the trial lawyers defend

the tort system (on behalf of injured patients.) In fact, injured patients are caught in the middle, as few are well served by the current system. Worse yet, “left out of the debate entirely are the vast majority of patients – those who are not injured, yet whose safety is at risk and whose medical fees and premiums fund the entire liability system.”⁵⁶

There are, however, more than a dozen potential solutions to improve the medical liability system. The goal should be to:

- Reduce injury to patients (thereby reducing litigation)
- Encourage open communication and disclosure between patients and providers
- Ensure that when injury does occur, patients receive prompt and adequate compensation.

Among the options worthy of exploration are “no fault” compensation models (alternative dispute resolution, early offers, and birth injury compensation funds), health courts, and expansion of the reach/scope/application of the *Federal Tort Claims Act*.

A comprehensive vision.

Over a period of 18 months, starting in April 2008, *Childbirth Connection* lead a multidisciplinary, multi-stakeholder work group to create the *2020 Vision for a High Quality, High Value Maternity Care System*. More than 200 individuals from across the health care system, including consumers, contributed to the creation of a *Blueprint for Action*⁵⁷ designed to accelerate health system change.

Conceived as the first comprehensive attempt to answer the fundamental questions, “Who needs to do what, to, for, and with whom to improve the quality of maternity care over the next five years?”⁵⁸ the action steps should be the starting point for multiple reform efforts.

The National Business Group on Health (NBGH) calls investing in maternal and child health “a business imperative.” Because maternal and child health services account for \$1 out of every \$5 large employers spend on health care, the NBGH created an employer toolkit that provides data-driven recommendations on comprehensive maternity benefits. CNMs are among the “covered providers” included in the recommended minimum plan benefits.⁵⁹

Conclusion

For many years we have known that when it comes to quality health care, women in the U.S. “pay more for less.” Women are too likely to get inadequate prenatal care and the probability of their babies suffering from preventable complications is too high. It has been repeatedly demonstrated that integrated health care systems that promote collaborative relationships between physicians and nurse-midwives provide better access to care and healthier outcomes. It is also clear that appropriate allocation of resources in order to get the right care to the right woman requires creating more low-intervention settings for healthy women and assuring that women at risk for poor outcomes receive the interventions they need.

It is time for policy makers and health professionals to change the culture of childbirth by making fundamental changes that reward health care professionals who provide evidence based care and, where needed, encourage researchers to focus on problems where the evidence remains unclear.

According to a recent systematic review published in 2009 by the Cochrane Pregnancy and Childbirth Group, “Midwife-led care confers benefits for pregnant women and their babies and is recommended.”⁶⁰

About the Foundation:

The A.C.N.M. Foundation, Inc. (“Foundation”) was established in 1967 as a 501(c)(3) nonprofit organization dedicated to supporting the provision of high quality maternal, newborn, and well woman health services through the practice of midwifery. The Foundation’s mission is to promote excellence in health care for women, infants and families worldwide through the support of midwifery. More information is at: <http://www.midwife.org/support.cfm>

About the Fellowship:

The *Deanne R. Williams Public Policy Fellowship* was established by the Foundation in 2007 in honor of Deanne R. Williams, CNM, MS, FACNM, long-time executive director of the American College of Nurse-Midwives (ACNM), for her distinguished career in midwifery and public policy. Initial support for the *Deanne R. Williams Public Policy Fellowship* award was provided, in part, by the Foundation’s *Teresa Marsico Memorial Fund*. Teresa Marsico was a past-president of the ACNM.

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Deanne R. Williams, CNM, MS, FACNM, has held numerous clinical, administrative, education and leadership positions over the past three decades. As the first CNM to serve the American College of Nurse-Midwives as Director of Professional Services and Executive Director, she spent more than a decade (1993-2006) helping shape maternal and child health policy in the United States. Ms. Williams is currently Advanced Practice Clinical Coordinator, at Intermountain Healthcare, Inc., Salt Lake City Utah.

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