Midwifery: Evidence-Based Practice

A Summary of Research on Midwifery Practice in the United States

Revised April 2012

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INTRODUCTION

The vast majority of midwives in the United States (U.S.) are certified nurse-midwives (CNMs) and certified midwives (CMs). CNMs are licensed and have prescriptive authority in every state. CMs are licensed in five states. According to the American Midwifery Certification Board, as of January 2012 there are 12,622 CNMs and 73 CMs in the United States (D. Smith, personal communication, January, 2012), and since 1991, the number of midwife-attended births in the United States has more than doubled.[1,] This growth of midwifery has been supported by published research that demonstrates midwifery care is associated with high-quality and is comparable or in some studies, better outcomes than care provided by obstetrician/gynecologists. Recipients of care by midwives report high levels of patient satisfaction, and midwifery care results in lower costs due to fewer unnecessary, invasive, and expensive interventions.

This document provides an overview of research and statistics that describe the practice of midwives represented by the American College of Nurse-Midwives (ACNM) in the United States.

Certified nurse-midwives (CNMs) are registered nurses who have graduated from a nurse-midwifery education program accredited by the Accreditation Commission for Midwifery Education (ACME) and have passed a national certification examination to receive the professional designation of certified nurse-midwife. Nurse-midwives have been practicing in the United States since the 1920s.

Certified midwives (CMs) are educated in the discipline of midwifery. They earn graduate degrees, meet health and science education requirements, complete a midwifery education program accredited by ACME, and pass the same national certification examination as CNMs to receive the professional designation of CM. Graduates of an ACME-accredited midwifery education program must pass a national certification examination administered by the American Midwifery Certification Board (AMCB) to receive the professional designation of CNM or CM. To maintain the designation of CNM or CM, midwives must be recertified every 5 years through AMCB and meet specific continuing education requirements.

Midwifery as practiced by CNMs and CMs encompasses a full range of primary healthcare services for women from adolescence to beyond menopause. These services include primary care, gynecologic and family planning services, preconception care, care during pregnancy, childbirth, and the postpartum period, care of the normal newborn during the first 28 days of life, and treatment of male partners for sexually transmitted infections. These services are provided in diverse settings such as ambulatory care clinics, private offices, community and public health systems, homes, hospitals, and birth centers. CNMs and CMs practice in accord with the Standards for the Practice of Midwifery, as defined by the ACNM. These standards meet or exceed the global competencies and standards for the practice of midwifery as defined by the International Confederation of Midwives.

CNMs and CMs work collaboratively with physicians to provide care to suit the unique and individual needs of each woman and her family.

JOINT STATEMENT OF PRACTICE RELATIONS BETWEEN OBSTETRICIAN-GYNECOLOGISTS AND CERTIFIED NURSE-MIDWIVES/CERTIFIED MIDWIVES

The American College of Obstetricians and Gynecologists (the College) and the American College of Nurse-Midwives (ACNM) affirm our shared goal of safe women's health care in the United States through the promotion of evidence-based models provided by obstetrician–gynecologists (ob-gyns), certified nurse-midwives (CNMs), and certified midwives (CMs). The College and ACNM believe health care is most effective when it occurs in a system that facilitates communication across care settings and among providers. Ob-gyns and CNMs/CMs are experts in their respective fields of practice and are educated, trained, and licensed, independent providers who may collaborate with each other based on the needs of their patients. Quality of care is enhanced by collegial relationships characterized by mutual respect and trust as well as professional responsibility and accountability.

Recognizing the high level of responsibility that ob-gyns and CNMs/CMs assume when providing care to women, the College and ACNM affirm their commitment to promote the highest standards for education, national professional certification, and recertification of their respective members and to support evidence-based practice. Accredited education and professional certification preceding licensure are essential to ensure skilled providers at all levels of care across the United States.

The College and ACNM recognize the importance of options and preferences of women in their health care. Ob-gyns and CNMs/CMs work in a variety of settings, including private practice, community health facilities, clinics, hospitals, and accredited birth centers. The College and ACNM hold different positions on home birth. Establishing and sustaining viable practices that can provide broad services to women requires that ob-gyns and CNM/CMs have access to affordable professional liability insurance coverage, hospital privileges, equivalent reimbursement from private payers and under government programs, and support services including, but not limited to laboratory, obstetric imaging, and anesthesia. To provide highest quality and seamless care, ob-gyns and CNMs/CMs should have access to a system of care that fosters collaboration among licensed, independent providers.

Approved February 2011 by the American College of Obstetricians and Gynecologists and the American College of Nurse-Midwives.

MORE WOMEN ARE CHOOSING MIDWIFERY CARE

- CNMs and CMs attended 313,516 births in 2009, according to the National Center for Health Statistics. This represents 11.3% of all vaginal births, or 7.6% of all US births.[1]

- The proportion of CNM/CM-attended births has risen nearly every year since 1989, the first year that CNM/CM statistics were made available.[1]

Midwifery care of low-risk women improves the infant mortality rate in hospitals and birth centers compared to physicians caring for women of equally low risk.[2]

HIGH QUALITY CARE AND EXCELLENT OUTCOMES

Decades of research indicate that primary care services provided by advanced practice nurses and nurse-midwives compare favorably to those provided by physicians. In a recent systematic review of studies comparing midwifery care to physician care, researchers examined multiple outcomes. Results indicated that women cared for by CNMs compared to women of the same risk status cared for by physicians had

- Lower rates of cesarean birth,
- Lower rates of labor induction and augmentation,
- Significant reduction in the incidence of third and fourth degree perineal tears,
- Lower use of regional anesthesia, and
- Higher rates of breastfeeding.[3]

In a review of maternity care processes of CNMs and physicians, the authors concluded that care processes are heavily influenced by the provider group.[3] Women in the CNM group were more likely to receive

- Prenatal education focusing on health promotion risk reduction behaviors,
- A more hands on approach with a closer supportive relationship with their provider during labor and birth, and
- Fewer technological and invasive interventions.[4]

Researchers conducted a rigorous systematic review comparing midwife-led models of care and physician-led models of care and concluded that midwife-led care has benefit over other models of care for women of similar risk status. Women in the midwife-led models had

- A significantly higher chance for a normal vaginal birth, fewer interventions, and successful initiation of breastfeeding,
- Care during labor provided by a midwife that the woman knew, and
- Increased sense of control during the labor and birth experience.[5]

CenteringPregnancy® is a midwifery-based, woman-centered model that incorporates risk assessment, support, and education into a unified program of group prenatal care. A randomized clinical trial was conducted at two university-affiliated prenatal clinics to compare select outcomes in women receiving care in a CenteringPregnancy® group and women receiving traditional prenatal care. Results indicated that women receiving CenteringPregnancy® group care experienced a 33% reduction in the risk for preterm birth and had significantly

- Higher rates of breastfeeding,
- Higher readiness for labor and birth,
- Better prenatal knowledge, and
- Higher rates of satisfaction with care.

In comparing national benchmarking data of 90 midwifery practices[6] to national survey[7] and birth data[1] on obstetric procedures, women receiving care from CNMs/CMs had

- Lower than the national average rate for episiotomy (3.6%[6] compared to 25%),[7]
- Lower than the national average rate for primary cesarean (9.9%[6] compared to 32%),[1] and
- Higher than the national average rate for breastfeeding initiation (78.6%[6] compared to 51%).[7]

MIDWIVES PROVIDE PRIMARY CARE

Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing the majority of health care needs, developing a sustained partnership with patients, practicing within the context of family and community (ACNM Core Competencies). Certified nurse midwives are recognized as primary care providers under current federal law.

The majority of CNMs/CMs participating in a task analysis survey of American nurse-midwifery and midwifery practice reported providing non-reproductive primary care services.[8]

FEWER CESAREANS WITH MIDWIVES

Midwifery care results in fewer cesarean births than physician care for equally low-risk women.

Between 1970 and 2009, the cesarean rate in the United States increased dramatically from 5% to 33%.[1] Today, approximately one in three women gives birth by cesarean. To date, no published research demonstrates that significant maternal or child health indicators have improved in the wake of the increased cesarean rate.

The US Department of Health and Human Services and other government agencies have come to a consensus that the primary cesarean birth rate must be reduced:

- According to the Centers for Disease Control and Prevention's National Center for Health Statistics, the state of New Mexico, where CNMs attend one-third of all births, has the lowest cesarean rate of all 50 states.[1]
- The 2011 Systematic Review of Advanced Practices Nurse Outcomes included 15 studies comparing cesarean rates of women cared for by physicians and by CNMs. The findings demonstrated significantly lower cesarean rates for women cared for by CNMs than for women cared for by physicians in comparable populations.[3]
- Women who received care in a collaborative practice of CNMs and obstetricians with the option of giving birth at a freestanding birth center were more likely to have a normal spontaneous vaginal birth. Specifically, the data in this study demonstrated that 80.9% of the women in the collaborative practice group gave birth vaginally, versus 62.8% in an all-physician practice.[9]
- CNMs/CMs are the predominant care providers within birth centers in the United States. Preliminary data from the American Association of Birth Centers online data registry 2007-2010 for 15,661 women who presented to 76 different birth centers in labor demonstrate excellent outcomes (S. Stapleton, personal communication, November 7, 2011). Findings related to women and infants transferred to the hospital in labor or after birth include the following:

    - No maternal mortality,
    - Neonatal mortality of 1.6 births/1000 (national neonatal mortality rate 6.1/1000),[10] and
    - Cesarean rate of 6.1% (national cesarean rate 33%).[1]

MIDWIVES ARE LEADERS IN HEALTH CARE REFORM

Midwifery care reduces the use of unnecessary procedures, reduces health care costs, and increases access to care.

A multi-disciplinary workgroup from public health, medicine, midwifery, and government developed a ''Blueprint for Action: Steps Toward a High Quality, High Value Maternity Care System,'' in order to provide a working plan to improve maternity care in the United States. The workgroup recommended that health care organizations, "implement policies and practices that foster safe physiologic childbirth and decrease excessive use of elective procedures and interventions."[11]

Reducing costs and increasing access to care are key government goals for reforming the US health care system.

MIDWIFERY CARE REDUCES THE USE OF UNNECESSARY PROCEDURES

While all standard medical and obstetric procedures are available to CNM/CM clients, their application is based on the condition of the woman and her fetus/newborn. CNMs/CMs provide intermittent fetal monitoring for women who are low risk allowing them greater mobility and comfort. This care is less invasive, less expensive, and less likely to result in misdiagnosis and the use of unnecessary interventions, including unnecessary cesareans.

In a 2011 study evaluating maternal and neonatal outcomes, researchers documented that women receiving care in a "high-touch, low-tech" collaborative CNM practice had

- Lower than the national average rate of cesarean birth and episiotomy and
- Lower than the national average rate of pharmacologic pain management and labor induction.[12]

MIDWIFERY CARE REDUCES HEALTH CARE COSTS

The total amount spent on health care in the United States is greater than in any other country in the world.[13] Hospitalization related to pregnancy and childbirth costs approximately $86 billion per year, which represents the highest hospitalization costs for any health condition.[14] Unfortunately, this high cost has not translated into quality care. Even though the United States spends more per capita on childbirth care, it ranks a low 41st in maternal deaths among industrialized and developing countries.[15]Unnecessary interventions during pregnancy and birth burden women emotionally and physically and is costly to the entire health care system. Midwifery care lowers healthcare costs in part by appropriate use of expensive technology and reducing cesarean rates.

- The average costs for vaginal birth are approximately 50% lower than those for cesarean birth.[14]
- The Office of Technology Assessment analyzed nurse practitioner and nurse-midwife practice at two different points in time and found that they provided medical care that was equivalent to or exceeded physician care at a lower total cost.[16,17]

MIDWIFERY CARE INCREASES ACCESS TO CARE

Women with less access to resources, particularly those in rural areas, can face considerable obstacles in obtaining maternal health care Pregnant women in rural areas are more likely to receive delayed or no prenatal care and to receive less adequate care when it is available, factors that contribute to higher infant mortality.

- Since the 1920s with the initiation of the Frontier Nursing Service nurse-midwifery model of care, nurse-midwives have been providing care in underserved areas.[18]
- The number of family medicine physicians and ob-gyns delivering infants in rural areas continues to decline.[19,20]
- CNMs provided care to more women on Medicaid living in rural areas of California and Washington than obstetricians.[21]
- According to a report published by the Institute of Medicine (IOM) in 2010, nurse-midwives have improved primary health care services for women in rural and inner-city areas. The IOM recommended that nurse-midwives be given more responsibility for providing women's health care.[22]

HIGH SATISFACTION WITH MIDWIFERY CARE

Women are satisfied with the personalized care that midwives provide.

- In a Delphi study, women receiving midwifery care valued the caring respect, compassion, and attentiveness provided by midwives.[23]
- Women receiving care from midwives in a group-care model reported high levels of satisfaction with prenatal care.[24]
- As part of a 2011, women receiving care in a collaborative CNM practice had patient satisfaction in the 91- 95 percentile on Press-Ganey national survey.[12]

WHAT WOMEN SAY WHEN THEY RECEIVE MIDWIFERY CARE

The following quotes are from women who received midwifery care and posted onwww.teammidwife.org

- "My midwife appointments were an hour long, and we felt our midwives really cared about us and not just about the physical aspects of the pregnancy, but the emotional as well. They didn't just help me birth a baby; they helped us become a family."

- "I am so thankful that we have a wonderful midwifery practice in my city that delivers in a great progressive hospital. My midwife was so calm and treated my labor as something normal and not scary. Not surprisingly, I didn't feel afraid after that! I saw her confidence in me and my ability to give birth. We were so pleased with our experience that we cannot imagine going to anyone but a midwife for our next child."

- “When I became pregnant with my first child, my sister-in-law, an ob-gyn, suggested that I see a midwife. She so overwhelmingly praised the midwives in her practice that it seemed like the natural choice for us. My midwife approached pregnancy as a normal process and conveyed a sense of calm empowerment to me throughout. I am certain that her patience and wisdom saved us from needing undesired interventions and helped us have the birth experience that was important to us. She will always have a special place in our lives and hearts.”

- “Within a matter of weeks after finding out I was pregnant, I chose to see a group of certified nurse-midwives who attended births at a freestanding birth center as well as a nearby hospital. I am so grateful that I had a full spectrum of choices for navigating labor and birth and a care provider I could trust to guide me through the difficult patches without abandoning my values and wishes. I’ll continue visiting my midwife for my gynecologic care and without a doubt will return for my next birth.”

- “To say that I love my midwife is nothing short of an understatement. She unselfishly gave me the support and encouragement that I needed to confidently obtain a wonderful natural healthy birth for my daughter. After having been through a very difficult birth experience with my first child as a direct consequence of multiple unnecessary medical interventions, I knew that there had to be a better way to experience birth. She helped me see it through to the very end; through every tear and drop of sweat she stood with me, all the while saying, ‘“You can do this!’”

WHAT THE EXPERTS SAY ABOUT MIDWIFERY CARE

- “Midwives understand and protect the normal physiology of childbirth and provide safe, satisfying and supportive care to women and their babies.” – Maureen P. Corry, MPH, Executive Director, Childbirth Connections

- “Ob-gyns working collaboratively with midwives are a way to address the gap between the supply of ob-gyns and the demand for women’s health care services.” – Richard N. Waldman, MD, FACOG, Former President, American College of Obstetricians and Gynecologists

- “Midwives offer evidence-based health care services. In today’s world of high technology, midwifery services provide the individualized care women need.” - Doug Laube, MD, Former President, American College of Obstetricians and Gynecologists

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