Reducing Medicaid Maternity Care Expenditures through Utilization of Certified Professional Midwives in Illinois

April 9, 2012

Introduction

Medicaid cost containment is arguably the biggest challenge to Illinois' fiscal solvency. It is one of the greatest challenges for all states. As states are grappling with this issue, more and more states are recognizing that Certified Professional Midwives (CPMs) are an essential part of the solution. Birth is the most common hospital diagnosis and accounts for more than 10 percent of all hospital stays.[1] The percentage of births covered by Illinois Medicaid has risen to 54% of all births.[2] Certified Professional Midwives, who attend the majority of home births throughout the country,[3] are the most cost-effective providers of maternity care in the nation. Cost-savings are gained primarily through elimination of facility fees. Equally important, CPMs utilize the Midwives Model of Care ™ providing one-on-one, community-based care focused upon keeping mothers healthy, thus preventing expensive birth complications.[4] CPMs are so cost-efficient that even low utilization rates will save millions of dollars for Medicaid as well as for private insurance. If only 1/2 of 1% of Medicaid births were attended at home by Certified Professional Midwives, the state of Illinois would save a conservative estimate of $1.25 million Medicaid dollars. Increasing the utilization rate to 2%, results in a conservative estimated savings of $5 million in Medicaid spending annually. Certified Professional Midwives are an essential component of maternity care cost containment.

The following proposal is based on Illinois' current capacity to serve the population of women who are both interested in home birth and receiving Medicaid benefits. The model takes into consideration Illinois' current infrastructure of providers available for licensure based on the Certified Professional Midwife credential. The projected savings of this model are $3 -5 million per year in charges to Medicaid, depending upon the level of utilization authorized by the state legislature. *Unlike some other cost-reduction proposals, this proposal does not eliminate any services.* In contrast, it expands the type of services available to women preparing for childbirth.

History of Home Birth and Medicaid in Illinois

The State of Illinois has a long and rich tradition of providing home birth services to low income families. Chicago is the home of a nationally famous one-of-a-kind home birth service -- the Chicago Maternity Center. Originally affiliated with the Chicago Lying-In Hospital (which later merged into the University of Chicago Hospital) the program eventually became an independent non-profit entity, partnering with the Northwestern Memorial Hospital School of Medicine, which sent its residents and fourth year medical students to learn obstetrics in the kitchens and bedrooms of Chicago's low income families[5]. For over 75 years, between 1895 and the 1970s, the Maternity Center served

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[1] http://www.hcup-us.ahrq.gov/reports/factsandfigures/2009/highlights.jsp
[2] http://www.nwitimes.com/news/local/illinois/chicago/cutting-the-cord-ill-eyes-reductions-in-medicaid-spending/article_24c4891a-822d-5bc1-a0a8-6d98d968f440.html
[3] http://www.cdc.gov/nchs/data/databriefs/db84.htm
[4] http://cfmidwifery.org/mmoc/define.aspx
[5] http://uic.edu/orgs/cwluherstory/CWLUArchive/materncenter.html

hundreds and sometimes thousands of families at home every year. Despite the general poor health and poor living conditions of these families, the adjusted maternal mortality rate for these women giving birth at home was one-sixth of the adjusted national rate (.09% versus .59%).[6] At the time of its closing in 1974, the center's clientele was 50% black, 35% Latina and 15% non-Hispanic white.[7] Because of its unique place in the history of American obstetrics, two documentaries have been made about the Center and its extraordinary success at caring for low income women of diverse backgrounds in their homes.

A second program involving home birth services and low-income mothers in Illinois was administered to approximately 150 families per year in Chicago's Pilsen neighborhood in the 1990s. The program combined the services of nurse-midwives and direct-entry midwives to provide innovative and culturally sensitive homebirth services for an under-served, low-income, low-literacy, Mexican-American and immigrant community (93 percent Medicaid patients) and was recognized by the American College of Nurse Midwives' Kitty Ernst Award in 1998, and won the UNICEF Safe Motherhood Initiative-USA Model Awards in 1999 and 2000.

Current Utilization of Certified Nurse-Midwives and Certified Professional Midwives for Home Births

Across the nation, the majority of home births are attended not by certified nurse-midwives, but by CPMs. Although certified nurse-midwives may provide home birth services in most states, currently only 6 such practices exist in the state of Illinois. Only two exist south of the I88 Corridor and only two (one in Lake County and one in DuPage) provide services to Medicaid families. Certified Professional Midwives are especially trained to provide home birth services but are not recognized by the State of Illinois.

Twenty-seven of the United States *do* allow CPMs to deliver babies[8] for mothers who choose to give birth at home. Most of these states offer a license, though a few offer registration or simply allow practice without regulation. Of these states, 12 currently allow CPMs to register as Medicaid providers - Alaska, Arizona, California, Florida, Idaho, New Hampshire, New Mexico, Oregon, South Carolina, Vermont, Virginia and Washington. Texas, now in the process of a rules change, will soon become the 13th state to allow CPMs to become Medicaid providers.

[6] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1563039/
[7] http://www.ejumpcut.org/archive/onlinessays/JC17folder/MaternityCentr.html
[8] http://www.illinoismidwifery.org/blog/wp-content/uploads/2012/03/CPM-Licensing-Trends-2012.pdf

Proposed Pilot Project and Projected Cost Savings in First Years of Licensure

Given Illinois' long history of success in providing home birth services to low income women, the shortage of home birth providers in Illinois, and the current mandate to reduce the Illinois Medicaid budget by billions of dollars, it is logical to consider the potential savings that could be realized by allowing women in the Illinois Medicaid system renewed access to home birth care and allowing that care to be provided by Certified Professional Midwives.

The Coalition for Illinois Midwifery proposes a five-year pilot project involving licensure of 30 Certified Professional Midwives for the first three years with the option to expand to 50 licenses in the fourth and fifth years.

The following describes the possible savings for the first phase. All cost data and categorization has been obtained from the Healthcare Cost and Utilization Project (HCUP) of the U.S. Department of Health and Human Services (HHS) Agency for Healthcare Research and Quality (AHRQ) http://hcupnet.ahrq.gov/
Financial data is listed in terms of charges to Medicaid, not payments by Medicaid.

30 CPMs serving 2 families per month = 720 births per year.
Approximately half of these (360) will be families using Medicaid. This figure is consistent with the numbers of requests reported by community midwives and by the fact of 54% of IL births now covered by Medicaid.

With 12 Medicaid births per year, a cohort of 30 midwives would attend to 360 families choosing home birth. Of these families, 12.1% will transfer to the hospital at some point during labor and 3.7% will have a cesarean section.[9]

Of those having a vaginal birth in the hospital, 50% will have at least one complication.[10]
Of those having a cesarean section, 21% will have complications.[11]

Thus:
30 x 12 = 360 births
12.1% of 360 = 43.56 (round to 44) births transferred to hospital.
3.7% of 360 = 13.32. (round to 13) cesarean sections in hospital.
44 transferred births - 13 cesareans = 31 vaginal births in hospital

31 vaginal births x 50% complications = 15.5 vaginal births in hospital with complications and 15.5 without complications. (round to 16 with complications and 15 without to err on side of higher expense)
13 cesareans x 21% complications = 2.73. (round to 3) cesareans with complications
13 – 3 = 10 cesareans remaining without complication

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[9] http://www.bmj.com/content/330/7505/1416.full
[10] http://www.ncbi.nlm.nih.gov/pubmed/18448740
[11] http://www.ncbi.nlm.nih.gov/pubmed/14981385

Summary of Pilot Project and Calculation of Charges to Medicaid

30 CPMs
360 births for families using Medicaid per year
316 completed at home
15 in hospital - vaginal uncomplicated
16 in hospital - vaginal complicated
10 in hospital - cesarean uncomplicated
3 in hosp - cesarean complicated

When Medicaid charges from HHS HCUP are applied, we get the following:

316 births at home x $3000 = $948,000
15 in hosp vaginal uncomplicated x $9345 = 140,175
16 in hosp vaginal complicated x $12845 = 205,520
10 in hosp C-sec uncomplicated x $16113 = 161,130
3 in hospital C-sec complicated x $21913 = 65,739
Total for 360 planned home births with CPMs = $1,520,564 billed to Medicaid

If we compare a cohort of 360 births in hospital, 32.9% will have a cesarean section[12] and 21% of those will have complications. Half of those giving birth vaginally will also have complications.

360 x 32.9 % =118 cesarean sections. 24.78 (round to 25) will be complicated
242 vaginal births, 50% of them complicated

121 vaginal births uncomplicated x $9345 = $1,130,745
121 vaginal births complicated x $12845 = $1,554,245
93 cesarean births uncomplicated x $16113 = $1,498,509
25 cesarean births complicated x $21913 = $547,825
Total for 360 births in hospital $4,731,324 billed to Medicaid

Difference in charges between hospital birth and planned home birth with CPM = $3,210,760

This is a very conservative estimate, taking only into account maternal outcomes and facility charges. It does not account for obstetrician fees, anesthesiologist fees and the additional $2995 facility charge per healthy newborn for hospital birth. Even if we were to assume that every baby born in the hospital cohort were completely healthy, this would add up to over $1 million in additional charges billed to Medicaid for newborn facility care, which in the home birth cohort would be eliminated. ***This addition increases the savings in Medicaid charges to over $4 million annually. When OB and anesthesia charges are added, the savings in charges rises to approximately $5 million.***

If by the fourth year of the pilot project, the number of available licenses for CPMs were increased, there would be a corresponding increase in savings.

[12] http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_01.pdf

Projected Cost Savings Long Term

Of the 12 states currently allowing Medicaid reimbursement of CPMs, only Washington State has undergone the complex calculations required to fully and accurately evaluate Medicaid savings over the long term related to services provided by CPMs.

Initial estimates of data collected from 2001 – 2004 showed that use of CPMs was found to have saved the State of Washington, 473,000 in Medicaid expenditures per biennium[13], *however additional evaluation showed the true savings to be $3.1 million per biennium in 2004 Medicaid dollars (see attached letter Thompson to Lawlor).*

Long-term outcomes for Illinois usage of CPMs can be predicted by extrapolating from the Washington State numbers. Observing what happens in states that allow full and open access to CPMs – the Childbirth Freedom[14] concept comes into play and the percentage of population choosing home birth rises to approximately 2%. If after the initially proposed pilot project, Illinois removes the restriction on the number of licenses in order to allow the population of midwives the ability to grow and meet demand, it is likely that Illinois' situation will become parallel to Washington State at the time of their survey.

If we assume Childbirth Freedom and then account for a 73% increase in healthcare costs since 2004, and account for Illinois' larger population, extrapolation from the Washington State data predicts a minimum of $5 million per year savings in Illinois Medicaid dollars spent. This long term prediction is considerably more than the savings in the pilot project which predicts $5 million annual savings in dollars *charged* to Medicaid. This calculation was reviewed by Economist, Dr. David Anderson of Centre College, Danville, Kentucky. Dr. Anderson, whose data has been published in the Journal of Nurse-Midwifery, is considered a national expert on Medicaid and midwives.

In recent times, Dr. Anderson provided data support contributing to the successful addition of section 2301 to the Patient Protection and Affordable Care Act. Section 2301 modifies the Social Security Act to mandate Medicaid reimbursement of midwifery fees, including those for services provide by licensed CPMs working in Freestanding Birth Centers. Regarding the utilization of licensed CPMs to save Illinois Medicaid dollars, Dr. Anderson states:

> As an economist who conducts research on the safety and cost of births in homes, hospitals, and birthing centers, I write in support of this proposal. On the basis of my estimate of the cost savings from similar options at the national level, I feel confident that the $5 million in savings suggested by Ms. Breen is just the tip of the iceberg.[15]

[13] http://www.washingtonmidwives.org/assets/Midwifery_Cost_Study_10-31-07.pdf
[14] http://theminmch.blogspot.com/
[15] http://theminmch.blogspot.com/2012/02/childbirth-freedom-would-save-illinois.html#comment-form

Additional Benefits - Certified Professional Midwives Reduce Costly Health Care Disparities in Childbirth Outcomes

The cost-effective care provided by Certified Professional Midwives does not have to be limited to home birth. In many states, Certified Professional Midwives provide services in freestanding birth centers. In addition, an innovative midwife recently utilized the Midwives Model of Care™ to reduce health care disparities among low income (48.2% Medicaid and 42.4% uninsured), moderate -- high risk, women in Florida. In this program, CPMs provide prenatal and postnatal care, though not delivery care.[16]

The Florida program has demonstrated remarkable reductions in rates of prematurity. Preterm birth is strongly associated with short and long-term illness as well as infant mortality. Preterm birth is one of the strongest indicators of infant morbidity and mortality. The US Department of Health and Human Services has identified preterm birth as a target to both improve the health status of newborn babies and to reduce Medicaid expenditures. A ten percent reduction in preterm deliveries would generate over $75 million in annual Medicaid savings nationally.[17]

The US Department of Health and Human Services Healthy People 2020 project has established a national goal to reduce the rate of preterm birth to 11.4% The Florida program, utilizing Certified Professional Midwives to manage and deliver prenatal care to a demographically high risk population, achieved a preterm birth rate of just 4.8%.[18]

In 2009, Illinois Medicaid was charged $69,611,626 for care and services related to and resulting from preterm deliveries, including NICU services. The average cost-per-baby charged to IL Medicaid ranges from $17,000 to $209,000 depending on severity of prematurity.[19]

Severity of Prematurity	Average Charge to IL Medicaid
Extreme prematurity	$209,646
Prematurity w major problems	$67,828
Prematurity w/o major problems	$17,855
Normal Newborn	$2,995

Below is a summary of outcomes from the Florida demonstration project and estimated Medicaid cost-savings realized from those healthy birth outcomes. Orange County, Florida data is used as a comparison (Expected Outcomes). Based on this comparison, prenatal care provided by CPMs, in a high risk, clinic population, saves at least $2,529 per birth.

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[16] http://jenniejoseph.com/node/16
[17] http://www.hhs.gov/news/press/2012pres/02/20120208a.html
[18] http://jenniejoseph.com/node/16
[19] http://hcupnet.ahrq.gov

Outcome	Program Outcome	Expected Outcome	Estimated Medicaid Savings
C-Sections	25%	35%	$81,216
Preterm Birth	4.8%	15.2%	$133,740
Total Savings			$214,956
Savings per Birth			$2,529

These are conservative estimates because all births are considered non-complicated and prematurity is considered without major problems. Source for financial data: http://hcupnet.ahrq.gov/ (Illinois, 2009)

It is worth noting that the women who participated in the Florida program were different from women who typically receive care from CPMs. The participants in the Florida project were not seeking home birth services. They were simply seeking care (42% uninsured). Women who seek home birth care are typically white (90% non-hispanic white) and middle income[20]. In contrast, the participants in the Florida program were all from low-income families with culturally diverse backgrounds (29% black, 17% Hispanic). The Florida project is just one example demonstrating interest in certified professional midwifery care by culturally diverse populations. Experts agree that the higher than expected occurrence of white interest in planned home birth is an issue of access rather than an issue of preference. When home birth and certified professional midwifery care is illegal and underground, access to midwives is limited to women of privilege

Licensure Logistics, Quality, and Projected Costs of the Pilot Project

The basis for licensure of home birth midwives in Illinois would be the already existing, nationally recognized, Certified Professional Midwife credential. The Ohio State University Vocational Instruction Materials Laboratory evaluated the CPM credential in 1997. Robert A. Mahlman, Associate Director, found: "The overall quality of the processes used to develop the certification tests and testing procedures is very high and represents ""best practice" within certification industry standards."

The CPM credential has now been recognized in 27 states.[21] Not one of those states has ever rescinded approval. The legislatures of Texas and Colorado have affirmatively endorsed the continuation of their respective licensure programs when those programs came up for sunset review, and the Arizona legislature recently directed the agency that regulates midwives to recognize the CPM credential and consider expansion of the scope of practice.

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20 http://journals.lww.com/greenjournal/Fulltext/2010/07000/Outcomes_of_Planned_Home_Births_in_Washington.16.aspx

21 http://www.illinoismidwifery.org/blog/wp-content/uploads/2012/03/CPM-Licensing-Trends-2012.pdf

The CPM credential is administered by NARM, the North American Registry of Midwives.[22] NARM is accredited by National Commission on Certifying Agencies (NCCA), the certifying arm of the Institute for Credentialing Excellence (ICE), formerly the National Organization for Competency Assurance (NOCA).[23]

Accreditation by the NCCA requires an extensive evaluation of the development and administration of the credential. The NCCA sets national standards for the required components of an accredited credential and evaluates the accrediting agency to assure that these standards are met. In addition to the Certified Professional Midwife, the NCCA accredits over 251 credentials offered by 108 accrediting organizations, most of which are healthcare related, including Certified Nurse-Midwife, Certified Critical Care Nurse, Certified Women's Health Care Nurse Practitioner, Certified Neonatal Nurse Practitioner, Certified Inpatient Obstetrical Nurse, Certified Pediatric Nurse and Certified Perinatal Nurse.

Regarding safety and outcomes, a prospective study performed in the year 2000 and published in the British Medical Journal in 2005 undertook to evaluate outcomes for Certified Professional Midwives.[24] The study tracked over 5000 women who were planning home births attended by CPMs in North America. The results were remarkable, showing equally safe outcomes for infants born at home compared to a matched group of infants born in the hospital. At the same time, the study showed far better outcomes for mothers, with a lowered incidence of morbidity and intervention – especially where cesarean surgery was concerned. The rate of cesarean section for the mothers attended by CPMs was only 3.7% compared to a rate of 19% for low-risk women receiving hospital care with physicians.

This study demonstrated the safety of utilizing Certified Professional Midwives to attend home births. Further studies have confirmed the safety of home birth; however, some recent, poorly-designed studies have confounded the issue. A recent publication by the University of British Columbia,[25] *Home Birth, an Annotated Guide to the Literature*, ranks home birth studies in order of quality and is very helpful in sorting out home birth safety data, in particular. See attached file.

By utilizing the CPM credential as the basis for licensure, the State of Illinois would not only be assured that its Licensed Midwives (LMs) were held to a high standard, it would also be unburdened of the expense required to set up a separate credentialing process with all of the associated costs.

Language for licensure will be provided as an addendum to this proposal at a later date but would reasonably approximate language that has been submitted in the past.

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[22] www.narm.org
[23] http://www.credentialingexcellence.org/
[24] http://www.bmj.com/content/330/7505/1416.full
[25] http://www2.cfpc.ca/local/user/files/%7B47703B4B-F93D-471B-AF39-EF394B7C46B9%7D/Home%20Birth%20Annotated%20guide%20to%20the%20literature%20May%202011.pdf

Costs associated with startup are expected as follows -

1) The Department of Financial and Professional Regulation in a 2010 discussion with the Coalition for Illinois Midwifery, predicted a close to $70K unavoidable startup fee for Information Technology to add the new licensure category to the existing Illinois computer system. Thereafter there would be an annual administration fee, so far unnamed.

2) While the State of Illinois does not require any of its professional healthcare workers to carry mandated professional liability insurance, Medicaid does require that its providers be covered. Such insurance is prohibitively expensive for individual practitioners who provide care for no more than 24 clients per year. Most of the states reimbursing CPMs for Medicaid care, such as Idaho, New Mexico and Vermont, do not require Medicaid providers to be covered by liability insurance. The two that do, Washington and Florida, do so by underwriting the program. An inquiry is being made to obtain a quote for the Illinois pilot project, however that quote is not yet available. Even if premiums cost $30,000 per midwife (unlikely because they care only for low risk women and do not have prescriptive authority) the total premium cost for 30 Licensed Midwives would be just under one million. This would reduce Medicaid charge savings from $5 million, down to $4 million – still offering considerable overall savings.

We therefore propose that if the State would like to see a rapid build-up of Licensed Midwives ready to begin attending to families who rely upon Medicaid, the best course of action is to fund the IT startup fees and either waive the requirement for, or underwrite professional liability coverage.

Conclusion

Home birth has always been part of Illinois' cultures and traditions. Today, however, despite well-documented demand, evidence-based safety research,[26] and undeniable cost-effectiveness data, access to safe licensed home birth providers is extremely limited in Illinois. Even more limited is access to home birth providers who accept Medicaid. Licensed home birth practices are found in fewer than ten of Illinois' 102 counties and only two of these practices accept Medicaid.[27]

Diverse groups of Illinois women want home birth and have been asking the General Assembly to license home birth midwives for over thirty years.[28] During the past twelve years, the General Assembly has observed increased dedicated activities addressing licensure of home birth midwives based on the Certified Professional Midwife, the national standard for licensing home birth midwives.

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[26] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1595304/
[27] http://www.illinoismidwifery.org/blog/home
[28] http://www.illinoistimes.com/Springfield/article-7111-home-delivery.html

All the while, home birth interest is growing throughout our nation. US home births have increased 29% from 2004 to 2009.[29] While this increase is primarily attributed to non-Hispanic, white women, it is widely believed that this is a disparity issue. White women are more comfortable challenging the system.[30] [31] [32] [33] [34]

Jeanine Valrie, a young mother and activist from Chicago expresses her concerns:

> As a woman of color and homebirth mama, I represent one of an increasing amount of women of color interested in homebirth. We are interested now and have always been interested. Limited access, legislative struggle, and socio-economic barriers continue to be our greatest hurdle in reducing the health care inequities within our communities. Licensing CPMs and recognizing them as Medicaid providers, allowing them to attend to women during pregnancy, birth and postpartum will stop the disproportional rates of infant and maternal mortality in my community. If Illinois is concerned with the well-being of mothers and babies of color they will make this an absolute priority.

Due to the restrictive policies on home birth, Illinois Medicaid is, and has been, over-spending for maternity care services, especially since the loss of the Chicago Maternity Center and Alivio's home birth program. By licensing Certified Professional Midwives and recognizing them as Medicaid providers, the Illinois government would assure that women throughout the state would have access to cost-effective care. Medicaid now pays for over half of all Illinois births. Women on Medicaid frequently approach the few licensed home birth providers for services and many more are reaching out to Illinois' grassroots network for referrals. Sadly, for most of Illinois, there are no resources for women like Tanya, who lives south of Joliet, Illinois, and could not find a home birth provider who would accept her Medicaid card.

> I had previously had a homebirth and was looking forward to having another one. I had contacted a midwife in the area and thought we were well on our way. However, my husband lost his job and we had to rely on state aid to assist us and my hopes for having a homebirth died as the state wouldn't cover the costs of a homebirth. I was very disappointed and resorted to using a hospital that was nearly an hour away, just to get the type of birth I thought I deserved. Just the thought of leaving my home that hot summer morning while in active labor in order to reach the hospital was, and is still, agonizing.

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[29] http://www.cdc.gov/nchs/data/databriefs/db84.htm
[30] http://www.npr.org/blogs/health/2012/01/26/145880448/home-births-grow-more-popular-in-u-s
[31] http://radicaldoula.com/2012/01/31/increase-in-home-birth-leaves-women-of-color-behind/
[32] http://colorlines.com/archives/2011/04/childbirth_care_and_access_to_midwives.html
[33] http://home.sevenstories.com/index.php/news/interview-with-ina-may-about-women-of-color-and-birth/
[34] http://mothering.com/all-things-mothering/pregnancy-birth/u-s-home-births-increase-29-in-five-years

Attachments:

CPM Licensing Trends Map
Washington State Study
Thompson Letter
Annotated Guide to Home Birth Studies

Coalition for Illinois Midwifery, April 9, 2012

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