



**CALIFORNIA**  
HEALTH BENEFITS REVIEW PROGRAM

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## **EXECUTIVE SUMMARY**

Analysis of Assembly Bill 259:  
Certified Nurse Midwives:  
Direct Access

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A Report to the 2009-2010 California Legislature  
April 17, 2009

# **A Report to the 2009-2010 California State Legislature**

## **EXECUTIVE SUMMARY Analysis of Assembly Bill 259 Certified Nurse Midwives: Direct Access**

**April 17, 2009**

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## EXECUTIVE SUMMARY

### California Health Benefits Review Program Analysis of Assembly Bill 259 Certified Nurse Midwives: Direct Access

The California Health Benefits Review Program (CHBRP) undertook this analysis pursuant to the provisions of Senate Bill 1704 (Chapter 684, Statutes of 2006) as chaptered in Section 127600, et seq. of the California Health and Safety Code in response to a request from the California Assembly Committee on Health on February 13, 2009. This report provides an analysis of the medical, financial, and public health impacts of Assembly Bill (AB) 259.

AB 259 would require every health care service plan regulated by the Department of Managed Health Care (DMHC) and every health insurance policy regulated by the California Department of Insurance (CDI) to allow a member the option to seek obstetrical and gynecological (OB/GYN) services directly from a certified nurse-midwife (CNM) provided that the services fall within the scope of practice of the CNM.

AB 259 is intended to clarify that female enrollees should be permitted to access OB/GYN services from a CNM, in the same way existing law allows female enrollees to access OB/GYN services directly from an obstetrician-gynecologist without a referral from another physician or authorization by the carrier. Specifically, current law requires health plans and insurers to “allow an enrollee the option to seek obstetrical and gynecological physician services directly from a participating obstetrician and gynecologist or directly from a participating family practice physician and surgeon designated by the plan as providing obstetrical and gynecological services<sup>1</sup>”. This law, which went into effect in 1995, was intended to clarify that OB/GYN services are primary care services and that members should be able to access the physicians who provide these services directly. AB 259 goes further, and clarifies that members should also have access to CNMs, who are also authorized to provide certain OB/GYN services.

Since licensing, certification, and scope of practice requirements are established at a state level, there is variation in the scope of practice and educational requirements among CNMs from state to state; however, in general in the United States, CNMs are registered nurses with further obstetrics education and training and have passed the certification examination administered by the American College of Nurse Midwifery (ACNM). In other countries, such as Australia, Canada, New Zealand, and the United Kingdom, licensed midwives are educated at the bachelor’s level and do not need to be previously educated in another profession, such as nursing.

In California, CNMs are registered nurses licensed by the California Board of Registered Nursing. They obtain additional obstetrics training from an accredited nurse-midwifery program and pass the ACNM certification examination. CNMs provide obstetrical services such as oversight of normal pregnancy and childbirth. CNMs commonly work in hospitals and birthing centers licensed by the state, and require physician supervision. There are 1,910 CNMs with active licenses in California.

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<sup>1</sup> Health and Safety Code Sections 1367.69 and 1367.695; Insurance Code Sections 10123.83 and 10123.84.

In California, the profession of midwifery has another designation, that of “licensed midwife.” A licensed midwife is an individual who has been issued a license to practice midwifery by the Medical Board of California. These midwives are not necessarily registered nurses, and there are 179 licensed midwives with active licenses in California. Services offered by these types of midwives are not affected by AB 259 since AB 259 only applies to CNMs.

The *Utilization, Coverage, and Cost Impacts* and the *Public Health Impacts* sections of this report will focus the analysis on the use of CNMs in California. However, given the availability of the existing literature, the *Medical Effectiveness* section captures and evaluates literature that may include CNMs practicing in the United States as well as licensed midwives practicing in other countries.

### **Medical Effectiveness**

- The vast majority of randomized controlled trials (RCTs) of the comparative effectiveness of licensed midwives and physicians on birth outcomes and processes of maternity care have been conducted in developed countries other than the United States.
- Although these studies have strong designs for assessing whether differences in outcomes are due to differences in the professionals providing care, their findings may not be generalizable to CNMs and physicians in California for several reasons:
  - The training received by CNMs in the United States is not identical to the training received by licensed midwives in other developed nations.
  - Most studies conducted in other developed countries compare licensed midwives to general practice physicians, whereas in the United States, most pregnant women receive care from obstetrician/gynecologists.
  - The other developed countries in which these RCTs have been performed have universal coverage through national or provincial health insurance plans.
- To ensure that the findings of this analysis would be more generalizable to persons enrolled in health plans in California to which AB 259 would apply, the medical effectiveness review incorporated nonrandomized studies conducted in the United States that controlled for potential confounders, as well as RCTs conducted in both the United States and other developed countries.
- All of the studies identified by the medical effectiveness team compared the effects of CNMs or licensed midwives to the effects of physicians on birth outcomes and/or processes of maternity care.
- No studies of the effectiveness of CNMs as providers of family planning or other gynecological services were identified.
- Most studies only assessed effects on women at low risk for poor birth outcomes.

- Findings regarding the effectiveness of CNMs as providers of maternity care are as follows:
  - Fetal and Infant Health Outcomes
    - A meta-analysis of RCTs conducted in other developed countries found that women who received maternity services from licensed midwives were less likely than those receiving services from physicians to experience fetal loss/neonatal death before 24 weeks of pregnancy, but found no difference in fetal loss/neonatal death after 24 weeks of pregnancy and over the entire duration of pregnancy.
    - One well-designed nonrandomized study conducted in the United States found that CNMs' patients had a lower risk of infant mortality than physicians' patients.
    - The preponderance of evidence from one RCT and two nonrandomized studies conducted in both the United States and a meta-analysis of RCTs conducted in other developed countries indicates that there are no differences in Apgar scores (a measure of newborn health administered immediately after delivery) and in the risks of low birthweight, preterm birth, and admission to a neonatal intensive care unit between infants whose mothers received maternity services from CNMs or licensed midwives, and those cared for by physicians.
  - Maternal Health Outcomes
    - A meta-analysis of RCTs conducted in other developed countries found no differences in rates of prenatal hemorrhage, postpartum hemorrhage, and postpartum depression between mothers who received maternity services from licensed midwives and those cared for by physicians.
    - A nonrandomized study conducted in the United States found that mothers who received maternity services from CNMs were less likely to have a major perineal laceration than mothers cared for by physicians but that rates of postpartum hemorrhage did not differ between the two groups.
  - Process of Maternity Care
    - The preponderance of evidence from nonrandomized studies conducted in the United States suggests that mothers cared for by CNMs are more likely to have a spontaneous vaginal birth and less likely to receive epidurals, intrapartum analgesia or anesthesia, and episiotomies and to have forceps or vacuum extraction used during delivery than mothers cared for by physicians. These findings are confirmed by findings from a meta-analysis of studies conducted in other developed countries that compared care provided by licensed midwives and physicians.
    - A meta-analysis of RCTs conducted in other developed countries reported that mothers who received care from licensed midwives are less likely to be hospitalized during the prenatal period than mothers cared for by physicians. Mothers and infants cared for by licensed midwives also had shorter lengths of stay for both postpartum and neonatal hospitalizations and were more likely to initiate breastfeeding.
    - Nonrandomized studies conducted in the United States suggest that mothers cared for by CNMs are less likely to have a cesarean birth or to have labor induced than

- mothers cared for by physicians, but these findings were not corroborated by the meta-analysis of RCTs conducted in other developed countries.
- A meta-analysis of RCTs conducted in other developed countries found no differences in the number of prenatal visits received by mothers who received care from licensed midwives and those cared for by physicians. The meta-analysis also found no difference in the likelihoods of having an amniotomy, perineal lacerations needing suturing, and oxytocin or opiate analgesia during labor. The length of time in labor also did not differ.
  - No studies were found that assessed whether requiring pregnant women to obtain a referral from a physician to obtain care from a CNM improves the triaging of pregnant women to CNM versus physician care based on their level of risk for poor birth outcomes.

## **Utilization, Cost, and Coverage Impacts**

### *Coverage*

- Based on CHBRP's survey of health plans, approximately 98.0% of insured Californians have coverage for services provided by a CNM. Of those with coverage, an estimated 67.0% have coverage for direct access to a CNM (i.e., no preauthorization requirements.).
  - Those who do not have direct access to CNM services in the privately insured market are those who are enrolled in DMHC-regulated plans. Those that are enrolled in CDI-regulated privately insured policies currently have direct access to CNM services since those policies typically allow members to seek OB/GYN services directly and since they have an out-of-network option.
  - AB 259 would also apply to California Public Employees' Retirement System (CalPERS) health maintenance organizations (HMOs), Medi-Cal Managed Care, and Access to Mothers and Infants (AIM) plans. CHBRP estimates that while all publicly insured members have coverage for CNM services, about 50% of CalPERS HMO members and about 50% of Medi-Cal Managed Care and AIM plan members have coverage for direct access to CNM services.

### *Utilization*

- AB 259 would not be expected to impact the rates of overall deliveries in California for women enrolled in plans subject to AB 259 (Table 1).
- Utilization impacts in this analysis are discussed in terms of changes in the use of CNMs for OB/GYN services. According to recently published data and Milliman's claims data, CNMs preside over approximately 34,000 births, or 8% of live deliveries in California for women who are enrolled in plans subject to AB 259. The extent to which AB 259 would impact the use of CNMs would depend on whether prior authorization and referral requirements are currently a barrier to ultimately obtaining CNMs services for those members who demand

those services. There is inadequate evidence to determine the number of members who may be demanding OB/GYN services from CNMs but are ultimately not able to obtain them due to preauthorization or referral requirements.

### *Cost*

- CHBRP estimates that the average cost per delivery in California in 2009 is \$11,625. This average cost represents a weighted-average cost of \$9,667 per normal delivery (about 70% of total deliveries) and \$16,127 per cesarean delivery (about 30% of total deliveries) (Table 1).
- If AB 259 would result in more women choosing to seek OB/GYN services from CNMs, the potential shift toward greater use of CNMs would have no measurable change in total premiums, per delivery cost, or total expenditures, because CNMs are generally paid the same rates for their services as physicians. It is possible that requiring a referral before gaining access to CNM services may delay the receipt of early prenatal care among some women, but again, such delays are unlikely to have direct near-term cost impacts because the vast majority of prenatal care expenses are paid for through global fees to the attending provider.
- CHBRP finds no available evidence that the average cost of normal deliveries differs between OB/GYNs and CNMs. There is some evidence that women attended by CNMs are less likely to use some maternity services. However, these nonrandomized studies do not adequately account for possible selection effects. (An example of a selection effect that may not be adequately controlled is the likelihood that women who select care from CNMs tend to not want cesarean deliveries.) The reductions in cesarean deliveries, induced labors, and epidural use from observational studies are not a scientifically reliable basis for estimating the potential cost savings associated with CNM-attended deliveries. Therefore, even if some portion of insured women switch from OB/GYNs to CNMs for their obstetrical and gynecological care, there is no scientifically valid evidence that measurable cost savings would be achieved.
- Based on responses from CHBRP's carrier survey and input from regulatory agencies, AB 259 may result in the administrative impact of health plans and insurers expanding their provider networks to ensure that members have adequate access to CNM services.
- CHBRP estimates no measurable impact of AB 259 on the number of uninsured since there would be no measurable impact on premiums.

## Public Health Impacts

- The public health impact of AB 259 hinges on (1) a change in the number and percentage of women in the covered population choosing CNM instead of physician care in response to the bill, and (2) demonstration of improved health and economic outcomes attributable to CNM care. Although the medical literature is consistent in showing that CNM care is equivalent to or surpasses physician care for various health outcomes for mothers and infants, the well-designed studies showing this effect are from outside the United States. Underlying differences in populations and care models may make their results inapplicable to the United States. In addition, we are aware of no data that address the degree to which AB 259's removal of a physician referral requirement for CNM care will promote migration to CNM care. Accordingly, CHBRP is unable to estimate a public health impact for this bill.
- Based on input from content experts, it is possible that some women may obtain earlier prenatal care due to the removal of the referral requirement.
- In addition, there may be long-term impacts, unquantifiable at present, if removal of the referral requirement leads to gradual and long-term increases in CNM-attended births. CHBRP presents an alternative long-term impact scenario assuming an increase in the proportion of births in California attended by CNMs—with clear caveats—regarding the applicability and validity of the underlying literature base. This scenario projects an increase in spontaneous vaginal deliveries, which are recognized as the ideal outcome for low-risk pregnancies, corresponding to projected increases in CNM utilization.

**Table 1.** Summary of Coverage, Utilization, and Cost Impacts of AB 259

	Before Mandate	After Mandate	Increase/ Decrease	Change After Mandate
<b>Coverage</b>				
Total population in plans subject to state regulation (a)	21,340,000	21,340,000	0	0%
Total population in plans subject to AB 259	21,340,000	21,340,000	0	0%
Percentage of individuals with certified nurse-midwife coverage	98%	100%	2.00%	2.04%
Number of individuals with certified nurse-midwife coverage	20,913,000	21,340,000	427,000	2.04%
Percentage of individuals with direct access to certified nurse-midwives	67.0%	100.0%	33.0%	49.25%
Number of individuals with direct access to certified nurse-midwives	14,277,800	21,340,000	7,042,200	49.25%
<b>Utilization and Cost</b>				
Number of deliveries	427,000	427,000	-	0%
Average cost per delivery	\$11,625	\$11,625	-	0%
<b>Expenditures</b>				
Premium expenditures by private employers for group insurance	\$50,546,207,000	\$50,546,207,000	\$0	0.00%
Premium expenditures for individually purchased insurance	\$5,944,229,000	\$5,944,229,000	\$0	0.00%
Premium expenditures by individuals with group insurance, CalPERS, Healthy Families, AIM, or MRMIP (b)	\$13,475,994,000	\$13,475,994,000	\$0	0.00%
CalPERS employer expenditures (c)	\$3,161,160,000	\$3,161,160,000	\$0	0.00%
Medi-Cal state expenditures	\$4,112,865,000	\$4,112,865,000	\$0	0.00%
Healthy Families state expenditures	\$643,247,000	\$643,247,000	\$0	0.00%
Individual out-of-pocket expenditures for covered benefits (deductibles, copayments, etc.)	\$6,384,077,000	\$6,384,077,000	\$0	0.00%
Out-of-pocket expenditures for noncovered benefits	\$0	\$0	\$0	0.00%
<b>Total Annual Expenditures</b>	<b>\$84,267,779,000</b>	<b>\$84,267,779,000</b>	<b>\$0</b>	<b>0.00%</b>

Source: California Health Benefits Review Program, 2009.

Notes: (a) This population includes privately insured (group and individual) and publicly insured (e.g., CalPERS, Medi-Cal, Healthy Families, AIM, MRMIP) individuals enrolled in health insurance products regulated by DMHC or CDI. Population includes enrollees aged 0-64 years and enrollees 65 years or older covered by employment sponsored insurance.

(b) Premium expenditures by individuals include employee contributions to employer-sponsored health insurance and member contributions to public insurance.

(c) Of the CalPERS employer expenditures, about 59% would be state expenditures for CalPERS members who are state employees, however CHBRP estimates no impact of the mandate on CalPERS employer expenditures.

Key: AIM=Access for Infants and Mothers; CalPERS=California Public Employees' Retirement System; CDI=California Department of Insurance; DMHC=Department of Managed Health Care; MRMIP=Major Risk Medical Insurance Program.

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Janet Coffman, MPP, PhD, Chris Tonner, MPH, Edward Yelin, PhD, all of the University of California, San Francisco, prepared the medical effectiveness analysis. Min-Lin Fang, MLIS, of the University of California, San Francisco, conducted the literature search. Stephen McCurdy, MD, MPH, Dominique Ritley, MPP, and Joy Melnikow, MD, MPH, all of the University of California, Davis, prepared the public health impact analysis. Gerald Kominski, PhD of the University of California, Los Angeles, prepared the cost impact analysis. Jay Ripps, FSA, MAAA, of Milliman, provided actuarial analysis. Barbara Boehler, CNM, MSN of CommuniCare Health Centers, and Aaron B. Caughey, MD, PhD, of the University of California, San Francisco, provided technical assistance with the literature review and expert input on the analytic approach. Susan Philip, MPP and Angela Killilea of CHBRP staff prepared the background section and synthesized the individual sections into a single report. Cherie Wilkerson provided editing services. A subcommittee of CHBRP's National Advisory Council (see final pages of this report) and members of the CHBRP Faculty Task Force, Richard Kravitz, MD, of the University of California, Davis, and Theodore Ganiats, MD, of the University of California, San Diego, reviewed the analysis for its accuracy, completeness, clarity, and responsiveness to the Legislature's request.

CHBRP gratefully acknowledges all of these contributions but assumes full responsibility for all of the report and its contents. Please direct any questions concerning this report to:

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A group of faculty and staff undertakes most of the analysis that informs reports by the California Health Benefits Review Program (CHBRP). The CHBRP **Faculty Task Force** comprises rotating representatives from six University of California (UC) campuses and three private universities in California. In addition to these representatives, there are other ongoing contributors to CHBRP from UC. This larger group provides advice to the CHBRP staff on the overall administration of the program and conducts much of the analysis. The CHBRP **staff** coordinates the efforts of the Faculty Task Force, works with Task Force members in preparing parts of the analysis, and coordinates all external communications, including those with the California Legislature. The level of involvement of members of the CHBRP Faculty Task Force and staff varies on each report, with individual participants more closely involved in the preparation of some reports and less involved in others.

As required by the CHBRP authorizing legislation, UC contracts with a certified actuary, Milliman Inc. (Milliman), to assist in assessing the financial impact of each benefit mandate bill. Milliman also helped with the initial development of CHBRP methods for assessing that impact.

The **National Advisory Council** provides expert reviews of draft analyses and offers general guidance on the program to CHBRP staff and the Faculty Task Force. CHBRP is grateful for the valuable assistance and thoughtful critiques provided by the members of the National Advisory Council. However, the Council does not necessarily approve or disapprove of or endorse this report. CHBRP assumes full responsibility for the report and the accuracy of its contents.

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The California Health Benefits Review Program is administered by the Division of Health Sciences and Services at the University of California Office of the President, John D. Stobo, M.D., Senior Vice President – Health Sciences and Services.