Draft - Synopsis of California LM-PHB stats for 2007

Prepared by Faith Gibson, LM, Chair, Midwifery Advisory Council
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Legislative Background: In 2006 Senator Figueroa carried a bill that amended the Licensed Midwifery Practice Act of 1993 (LMPA); Senate Bill 1638 was enrolled as Section 2516(c) of the Business & Professions Code. It requires all California licensed midwives (LM) to annually report the total number of clients seeking care for planned home birth (PHB) and to track and report statistics for a specified set of maternal-infant outcomes for PHB and all hospital transfers. The legislative intent of SB1638 was to make accurate data on PHB publicly available, and assist California's LMs in evaluating appropriate policy changes in midwifery education, scope of practice, and/or standards of care.

SB 1638 also authorized the creation of a six-member Midwifery Advisory Council composed of l LMs and three public members. The Council convened for the first time in March of 2007, and meets each quarter. Currently it is comprised of three licensed midwives, two obstetricians and one Medical Board member.

First Annual LM Report - 2007: The MBC requested that the Midwifery Advisory Council develop a questionnaire for collecting the data required by Section 2516(c). The Council worked on drafts of this document in public meetings held between March and November of 2007. The version that was sent to midwives who held active licenses in calendar year 2007 was developed during those meetings. As stipulated in the law, all completed confidential questionnaires were returned to the Office of Statewide Health Planning and Development (OSHPD). Candace L. Diamond, Manager, OSHPD Patient Data Section, is in charge of creating and maintaining the agency's database for the LM annual reports.

Assessing the First Year's Results: The questionnaire was completed by the majority of California LMs in a timely manner and returned to OSHPD as instructed. The data provided were generally complete and informative. However, several instances of confusion were identified which included missing, incorrect, or redundant data (i.e., the same outcomes recorded in more than one place). In particular, Midwifery Council members identified data from two LMs that were so unlikely that Candace Diamond was asked to contact those midwives for clarification. In both instances, the numbers stated were mistakes and Ms. Diamond was able to correct the record. Council members and OSHPD staff noted other instances of confusing or inadequate instructions and imprecisely worded questions. The Midwifery Advisory Council will address these concerns during future meetings, and will monitor and respond to the feedback submitted by LM responders.

OSHPD Feedback: In spite of these identified problems, Candace Diamond complimented the Midwifery Council and LM responders for a successful launch of a complex data collection process. She noted that her agency tracks information from all categories of medical professionals and facilities including hospitals, clinics, home health services, and hospice services. She assured us that the performance of the LM responders was in line with responses by other segments of the healthcare field.

Definition of Mortality in Midwifery Cases: By centuries of convention, all mortality in midwifery cases is attributed to the midwife, even when the laboring woman is transferred to obstetrical care many hours before the birth, or the adverse event occurred after an extensive period of hospital treatment.

Effects of Congenital Anomalies on Mortality Rates: Families who plan home births often decline perinatal screening for birth defects. When a serious defect is discovered during routine testing, this cohort of childbearing women is less likely to terminate an affected pregnancy during the pre-viable stage. This has been documented to contribute to a slightly higher rate of perinatal mortality in the home birth population. Since place of birth has no impact on congenital anomalies incompatible with life, the perinatal mortality rate for this report was calculated twice: once including deaths from birth defects, and once excluding them.

Statistical Overview for 2007: There were 164 LMs who submitted reports to OSHPD, 110 of whom provided midwifery services to 2,277 childbearing women (Section D, Line 13) whose intention was to give birth out-of-hospital. Of that initial cohort, 172 women left midwifery care for non-medical reasons and 46 women terminated midwifery care due to pregnancy losses (39 miscarriages prior to 20 weeks and 7 fetal demises or medical terminations after 20 weeks).

During the 2007 calendar year, California licensed midwives provided childbirth services to an aggregate population of 3,374 -- 1,687 mothers who began labor at home and their unborn/newborn babies. There were no maternal deaths. There were three neonatal deaths from all causes, with one infant death from a fatal birth defect. Neonatal mortality (NNM) rate, including congenital anomalies, was 2.1 per 1,000. The total cesarean section rate for this population was 7.7%. The national rate of cesarean births for the most recently reported year (2006) was 31%.

There were 633 undelivered clients at the end of the reporting period.

Interpretation of Maternal and Perinatal Mortality: An accurate record of mortality is clearly an important aspect of the data collection for out-of-hospital labors and births, including all hospital transfers. Because the current version of the questionnaire does not collect case-specific details, our ability to evaluate each instance of perinatal mortality in 2007 is less than satisfactory. Fortunately mortalities in the home birth population are rare, making it feasible to include an additional section at the end of the current questionnaire identifying case-specific circumstances and contributing factors for each death. This is consistent with the intent of SB 1638, which anticipates the use of LM-PHB data to make appropriate changes in midwifery education, standards of care, guidelines of practice, etc.

Future Expectations: Ms. Diamond assured Council members that data collection and processing errors of this sort are inevitable at the beginning of any large statistical project and that corrections are always necessary in a new program. She estimates that it will take three years to perfect the data-collection instrument, and to process and amass a sufficiently large database to generate statistically significant numbers.

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Planned Home Birth at Onset of Labor ~ 1,687 **Total Completed Home Births ~ 1,438**

	Elective	Urgent	Total	G.T
Intrapartum Transfers	226	23	**249**	
Postpartum Transfers	30	17	**47**	
			Total women transferred IP+PP > **296**	
Newborn Transfers	17	26	**43**	

Total elective transfers - all categories **273**

Total combined patient population of mothers and babies began labor at home **3,374**

Total urgent transfers – all categories **66**

Global transfers, all 3,374 mothers and babies, all categories **339 or 10%**

Transfer rate women during labor, birth or postpartum **7.4%** IP/PP rate

NB transfer rate after birth **2.6%** NB rate

Breech Twin and VBAC Births completed out of hospital:

Sets of Twins	5
Breech	14
VBACs	92

Total Cesarean Sections out of 1,687 PHB ~ delivery in hospital **130** **7.7%**

Total Vaginal Births ~ all birth settings **1,548**

Total maternal mortality all settings, all routes of birth **zero**

Total neonatal deaths **3**

Neonatal mortality rate per 1,000 ~All causes, including birth defects **2.1**

NNM Excluding congenital anomalies **1.1**

Top 5 reasons / complications for transfers of care or urgent transport to hospital

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Antepartum Dx + number or 'other' & fetal demise prior to labor

Total AP transfers: 141	**Elective**	**Urgent**	
Spontaneous or elective abortions	**39**		
Non vertex lie at term	16		
PPROM (water break)	16		
Hypertension	15		
Clinical judgment of midwife	14		
[category of 'other*'	**26**		***this category needs to be expanded to better match the responses]**
Fetal demise after 20 wks	5		

Total Intrapartum transfers: 249

Lack of progress	**125**	
Client request /pain relief	36	
Prolonged rupture of membranes	18	
Non-reassuring FHT, distress		14
Clinical judgment of midwife	13	
[category of 'other' was zero]		

Postpartum transfer: 47

Repair of laceration	**14**	
Retained placenta w/bleeding		9
Uncontrolled hemorrhage		4
Retained placenta without bleeding	6	
Signs of infection	3	
[category of 'other' was zero]		

Neonatal transfers: 43

	Elective	**Urgent**
Cardiac or respiratory distress		**9**
Clinical judgment of midwife	7	
Congenital anomalies T.7	3	4
Abnormal vital signs		5
Poor transition extra-uterine life	4	
Category of 'Other':	**2**	
