



DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

**RECOMMENDATIONS TO IMPROVE MATERNITY CARE  
IN MASSACHUSETTS**

**REPORT OF THE EXPERT PANEL IN OBSTETRICS**

Convened by the Betsy Lehman Center for Patient Safety  
and Medical Error Reduction  
Massachusetts Department of Public Health

November 18, 2009

**Report of the Expert Panel in Obstetrics  
Massachusetts Department of Public Health  
Betsy Lehman Center for Patient Safety and Medical Error Reduction**

**Executive Summary**

In March 2008, the Betsy Lehman Center for Patient Safety and Medical Error Reduction (BLC) at the Massachusetts Department of Public Health (MDPH) convened an Expert Panel in Obstetrics to look at issues of patient safety and quality in Obstetrics across the Commonwealth. The mission statement of the panel was:

*Under the auspices of the Betsy Lehman Center for Patient Safety and Medical Error Reduction, the Expert Panel in Obstetrics will review the existing state of the art in selected areas of obstetric quality and safety, including existing and developing best practice approaches; make evidence-based recommendations to improve care quality and safety; and identify areas for further research and collaboration.*

The panel was chaired by Fredric Frigoletto, MD from Massachusetts General Hospital and Bonnie Glass, RN, MSN from South Shore Hospital, and included membership from a broad range of hospital and health care organizations with expertise in Obstetrics and quality and safety from across the Commonwealth.

The panel focused its work in the Labor and Delivery (L&D) area, and established task groups that produced reports on the following topics:

- Electronic Fetal Monitoring
- Induction
- Staffing and Communications
- Cesarean Sections
- Maternal Hemorrhage

In addition, a subcommittee of the panel conducted a preliminary survey with L&D staff to identify the diverse populations seen; cultural, religious and linguistic issues encountered in the care of these patients; and training and resources available.

**Recommendations of the Panel**

Each task group developed one or more recommendations to improve the care and management of L&D patients in Massachusetts hospitals related to its topic area. The recommendations follow:

1. **Electronic Fetal Monitoring (EFM)** – All 47 maternity hospitals in Massachusetts should:
  - Adopt the new NICHD/AWHONN/ACNM/ACOG (see glossary of acronyms) approved definitions, terminologies, interpretation and management for EFM;
  - Develop educational programs related to the new guidelines; and
  - Establish processes to evaluate the implementation of the new guidelines, including maternal and neonatal outcomes.
  
2. **Timing of Elective Delivery** - Elective delivery of normal, singleton gestation newborns should not be planned to occur prior to 39 weeks.
  
3. **Staffing and Communications** –L&D units in Massachusetts hospitals should ensure that clinicians are well rested, and that communications between providers is optimal. Specifically:
  - Minimum standards and policies should be developed that ensure that all obstetrical providers have access to coverage arrangements that allow adequate rest; as needed, adjustments in work load and work hours that are consistent with current research should be made; pilot projects for the implementation of this recommendation are encouraged.
  - Hand-offs of patient care should be conducted in a structured & consistent manner.
  - The prenatal record should be available when the patient arrives in L&D.
  
4. **Cesarean Delivery** – To address cesarean delivery, the following are recommended:
  - A trial of labor after prior cesarean delivery should be offered to eligible women in Massachusetts, with counseling services and resources, including referral centers, made available, as needed.
  - Although cesarean delivery in Massachusetts is generally safe, there are identified elements and techniques that will optimize safety and outcome that are presented that should be followed.
  - Additional data, possibly collected through the birth certificate, should be available to inform analyses investigating causes of the rising rate of cesarean delivery in Massachusetts.
  
5. **Maternal Hemorrhage** - Each maternity hospital in the Commonwealth should have clinical guidelines and protocols for the recognition and management of maternal hemorrhage.

In addition to the clinical recommendations above, the panel recommended the development of process and outcome measures to evaluate their implementation and effect; an ongoing role for the BLC and MDPH in supporting and evaluating these efforts; enhancements to the birth certificate data to monitor progress; and further research in the topic areas.

The provider surveys on diversity indicated much racial/ethnic diversity in Massachusetts L&D units, with Hispanic patients being the largest group, followed by Black and Asian/Pacific Islander women. Those interviewed reported some cultural, linguistic and other issues in caring for these patients, but there is no uniformity of policy and procedures or training in diversity issues. Based upon these preliminary interview results, the panel recommends that a more comprehensive assessment of all maternity hospitals in Massachusetts regarding these issues be conducted, with the goals of identifying best practices and strategies for improving care.

### **Next Steps**

Each maternity hospital in the Commonwealth should review the recommendations in the report, prioritize them based on their status at the hospital and develop plans to address them. In collaboration with the maternity hospitals, the BLC and MDPH should develop plans and processes to assist hospitals in implementing the recommendations, and measuring their effects.

## **Glossary of Acronyms**

<b>AWHONN</b>	Association of Women’s Health and Neonatal Nursing
<b>ACNM</b>	American College of Nurse Midwifery
<b>ACOG</b>	American College of Obstetrics and Gynecology
<b>DIC</b>	Disseminated Intravascular Coagulopathy
<b>EFM</b>	Electronic Fetal Monitoring
<b>IOM</b>	The Institute of Medicine
<b>L&amp;D</b>	Labor and Delivery
<b>NICHD</b>	National Institute of Child Health and Human Development
<b>SMFM</b>	Society for Maternal Fetal Medicine
<b>TOLAC</b>	Trial of Labor after Caesarean section
<b>TJC</b>	The Joint Commission
<b>TOL</b>	Trial of Labor
<b>VBAC</b>	Vaginal Birth after Caesarean section