Levels of Maternal Care: Updated Guidance and Implementation

Wednesday, July 31, 2019

12:00 PM-1:00 PM ET

9:00 AM-10:00AM PT



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We recommended the following software and hardware configuration:

Windows



Processor: 850MHz or faster processor (or

above)

Operating System: Windows XP/2000/98 Memory: 512MB of RAM (or above) Screen Resolution: 1024 x 768 (or above) Microsoft Internet Explorer 5.5 (or higher) or

Mozilla Firefox 1.5

Adobe Flash Player 8 (or higher) Adobe Acrobat 6 (or higher)

Macintosh



Processor: G3 500MHz or faster processor

(or above)

Operating System: OS 10.3 (or above)
Memory: 512MB of RAM (or above)
Screen Resolution: 1024 x 768 (or above)
Mozilla Firefox 1.5 or Safari 1.2.2 browser
supported for Mac OS X 10.3 or higher
Adobe Flash Player 8 (or higher)

Adobe Flash Player 8 (or higher)
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All faculty, planning committee members, reviewers and staff have no conflict of interest to disclose relative to the content of the presentation.

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Learning Objectives

- Describe how Levels of Maternal Care supports collaboration among maternal facilities and health care providers so that pregnant women receive care at a facility appropriate for their risk.
- Describe the minimum capabilities related to health care provider availability and facility resources required for each level of maternal care.
- Identify the complex challenges to implementation of Levels of Maternal Care and stakeholder efforts to address these challenges.

Levels of Maternal Care (LoMC) Obstetric Care Consensus





The American College of Obstetricians and Gynecologists

WOMEN'S HEALTH CARE PHYSICIANS







Purpose of LoMC

Reduce maternal morbidity and mortality by ensuring that birthing facilities are prepared to provide risk appropriate maternal care.

- Encourage development of collaborative relationships between hospitals of differing levels of maternal care in proximate regions
- Provide uniform definitions as a framework integrated systems





2019 LoMC Definitions

Level	Definition
Accredited Birth Center	Care for low-risk women with uncomplicated singleton term vertex pregnancies who are expected to have an uncomplicated birth
Level I (Basic Care)	Care of low- to moderate-risk pregnancies with ability to detect, stabilize, and initiate management of unanticipated maternal—fetal or neonatal problems that occur during the antepartum, intrapartum, or postpartum period until the patient can be transferred to a facility at which specialty maternal care is available
Level II (Specialty Care)	Level I facility plus care of appropriate moderate- to high-risk antepartum, intrapartum, or postpartum conditions
Level III (Subspecialty Care)	Level II facility plus care of more complex maternal medical conditions, obstetric complications, and fetal conditions
Level IV (Regional Perinatal Health Care Centers)	Level III facility plus on-site medical and surgical care of the most complex maternal conditions and critically ill pregnant women and fetuses throughout antepartum, intrapartum, and postpartum care





Collaboration with Multiple Stakeholders

- Association of Women's Health, Obstetric and Neonatal Nurses
- Society for Obstetric Anesthesia and Perinatology
- American Association of Birth Centers/ Commission for the Accreditation for Birth Centers
- American College of Nurse-Midwives
- American Hospital Association
- American Academy of Family Physicians





LoMC: Supporting the Concept

Vital Signs: Pregnancy-Related Deaths, United States, 2011–2015, and Strategies for Prevention, 13 States, 2013–2017



be implemented in all hospitals that provide delivery services. The Alliance for Innovation on Maternal Health (AIM) has provided sets of bundled guidance to provide for such standardization. Implementation of this guidance is often supported by perinatal quality collaboratives, state-based initiatives that aim to improve the quality of care for mothers and infants (11). Ensuring that pregnant women at high risk for complications receive care in facilities prepared to provide the required level of specialized care also can improve outcomes; professional organizations have developed criteria for recommended levels of maternal care (12). CDC has created the Levels of Care Assessment Tool (LOCATe) for public health decision makers to evaluate risk-appropriate care (13). In the postpartum period, follow-up care is critical for all women,

Eliminating Preventable Maternal Deaths in the United States

Progress Made and Next Steps

Torri D. Metz, MD, MS

Box 3. Examples of Specific Recommendations for Action

Adopt maternal levels of care or ensure appropriate level of care designation

- Establish levels of care to properly triage patients
- · Establish a regional system for perinatal emergent
- Adopt maternal levels of care



Key Recommendations:

✓ The General Assembly should pass legislation to adopt the American College of Obstetricians and Gynecologists' recommended maternal levels of care within the state's regional perinatal system.





Regionalization and Access to Maternal Care

- Collaborative relationships between hospitals of differing levels enables:
 - Consultation and transfer of care when appropriate
 - > Seamless access to higher level for women in need
 - > Support for safe maternity services in hospitals providing care in the community
 - Every maternity facility to have the personnel and resources to care for unexpected OB emergencies
 - Outreach by Level III and IV facilities for quality improvement





LoMC Obstetric Care Consensus

- THE AMERICAN.
- Framework for regional hospital relationships that addresses maternal health needs
 - Uniform definitions
 - Standardized description of facility capabilities and personnel
- Each level of care reflects required minimal capabilities, physical facilities, and personnel
 - But a hospital may exceed criteria for its level





With LoMC criteria defined...

- Hospitals can identify and fill gaps in capabilities and personnel to align with national standards
- Regions and health systems can examine capabilities of their hospitals and define criteria for care locally with designated transfer of care based on risk
- States can map geographic distribution of maternity care resources to identify need for improved access





LoMC =

Levels of Maternal Care

Progress: 2015-2019





Centers for Disease Control and Prevention Levels of Care Assessment Tool (LOCATe)

- Collaboration with state health departments or jurisdictions
- Hospitals answer questions via a web-based tool
 - Assesses maternal and neonatal care capabilities
 - Questions align with AAP and ACOG/SMFM levels of care guidance
- Data analyzed via a CDC-developed algorithm
- Determine the LOCATe-assessed level of care





LOCATe

- Findings from LOCATe used to:
 - Identify gaps in perinatal services
 - Analyze differences in maternal and neonatal outcomes
 - For example, between levels of care (e.g., I vs. II) and within levels of care (e.g., all level II facilities)
- NOT used for regulatory or designating purposes
- Implementation:
 - 20 states implemented or are in process
- Feedback from CDC and states helped inform LoMC guidance revisions and verification program







LoMC Verification Program

- On-site survey to assess LoMC in an obstetric facility
 - According to the OCC criteria
- Developed by multi-disciplinary team:
 - ACOG/SMFM
 - · CDC
 - National Perinatal Information Center
 - Arizona Perinatal Trust
 - Clinicians representing:
 - > American Academy of Family Physicians
 - > American College of Nurse-Midwives
 - > Association of Women's Health, Obstetric and Neonatal Nurses







LoMC Verification Program (Pilot)

- Assessment tool: based on the ACOG/SMFM Obstetric Care Consensus
- Site visit process:
 - Pre-site visit: Facility completes LoMC forms and provides Policies and Procedures
 - > LOCATe reports used by surveyors as the initial step in the verification process
 - > Documents reviewed by surveyors prior to onsite visit
 - On site: Site visit team meets with facility personnel to:
 - > Discuss the facility's capabilities with key hospital staff, using the LoMC assessment tool
 - > Provide highlights on facility and offer "consultative advice"
 - Tour facility
 - Post-site visit:
 - > Team prepares Verification Report, which includes:
 - Verification of level according to LoMC criteria
 - Comments, highlights, and suggestions





LoMC Verification Program: Pilots

- Pilot-tested in 14 facilities in GA, IL, WY
- Published LoMC Commentary
 - Information on the process of developing the program
 - Lessons learned from the pilot



Home > December 2018 - Volume 132 - Issue 6 > Levels of Maternal Care Verification Pilot: Translating Guid...

Levels of Maternal Care Verification Pilot

Translating Guidance Into Practice

Zahn, Christopher M., MD; Remick, Arlene, MPH; Catalano, Andrea, MPH; Goodman, David, PhD, MPH; Kilpatrick, Sarah J., MD, PhD; Menard, M. Kathryn, MD, MPH

Obstetrics & Gynecology: December 2018 - Volume 132 - Issue 6 - p 1401–1406 doi: 10.1097/AOG.000000000002952

Contents: Health Services Research: Current Commentary





LoMC =

Levels of Maternal Care



All Texas hospitals that provide OB care need maternity state designation by **August 31**, **2021** to receive Medicaid funding



ACOG's Texas LoMC Verification Program

- Survey services for Levels II, III, and IV maternity hospitals
- ACOG's goal extends beyond its survey services:
 - Improve care and outcomes via collaboration with hospitals
 - Supports ACOG's national maternal mortality and morbidity reduction initiatives

Texas Program:

- Houston-based office
- Engaged key Texas organizations to develop program
- Recruited and trained team of Texas-based surveyors
- Verify compliance with the Texas Administrative Code specifications for maternal levels of care
 - > Surveyors do not determine the facility's level designation





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MATERNAL CARE DESIGNATION TIPS FROM ACOG

TIP #13: DEFINING SCOPE OF SERVICES

Tip: Ensuring that your patients receive risk-appropriate maternal care is a key strategy for decreasing maternal morbidity and mortality. As a first step, define your hospital's scope of services to gain a clear understanding of its capabilities and the types of conditions or complications that the facility is able to manage. Consider its medical and support personnel; equipment; and aspects such as location, availability of transport, and access to resources in the local or regional area.

Next, define those circumstances in which pregnant and postpartum patients should be transferred to a health care facility that offers a higher level of care. Initiate conversations with facilities of differing levels to develop relationships for consultation, referral, and transfer. (See Tip #11: Developing Collaborative Relationships in Your Perinatal Region for more information.) Institute procedures for transfer in your hospital and communicate these procedures to all personnel.

Collaboration between hospitals helps ensure that all maternity hospitals have the personnel and resources for unexpected obstetric emergencies and that consultation and referral are available if a patient needs high-risk care.

Texas Rule: §133.205(b) designation requirements for all levels (I to IV): "Program Plan. The facility shall develop a written plan of the maternal program that includes a detailed description of the scope of services available to all maternal patients, defines the maternal patient population evaluated and/or treated, transferred, or transported by the facility, that is consistent with accepted professional standards of practice for maternal care, and ensures the health and safety of patients."

Scope of the Rule: Document the scope of services provided to maternal patients in detail and monitor, on an ongoing basis, that capabilities are current. Review cases in which patients who have conditions outside the scope of services remain in the hospital and timeliness of transfers out to and in from other hospitals. The hospital should be able to show that staff know the scope of maternal services and the circumstances for transfer and that staff comply with the hospital's procedures.

Next ACOG Tip: Documentation of Training, Competency, and Continuing Education

If you know a colleague who would like to receive maternal designation tips from ACOG, please forward this email and invite them to sign up.

This information is provided for educational purposes only. This information should not be considered ACOG guidance and is not meant to be authoritative or imply designation. Texas DSHS makes the determination of designation.

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LoMC =

Levels of Maternal Care

2019 Revision of LoMC Obstetric Care Consensus



2019 LoMC Obstetric Care Consensus Revision

- Reaffirm the need for levels of maternal care
- Followed Obstetric Care Consensus methodology process:
 - Literature search
 - Evidence analysis (quality of evidence)
- Clarify definitions, revise initial criteria from experience from states, jurisdictions implementing levels of maternal care
 - Provider requirements by level
 - Timing and availability
 - Level III versus Level IV criteria





Organizational Support or Endorsement

- Association of Women's Health, Obstetric and Neonatal Nurses (endorse)
- Society for Obstetric Anesthesia and Perinatology (endorse)
- American Association of Birth Centers/ Commission for the Accreditation for Birth Centers (endorse)
- American College of Nurse-Midwives (endorse)
- American Academy of Family Physicians (support)

Endorsement: fully supports the clinical guidance in the document **Support**: clinical document is of educational value to its members; may not agree with every recommendation or statement





2019 LoMC Obstetric Care Consensus Re-emphasis 1

Support by Level III/IV hospitals for Levels I/II hospitals



 Levels of maternal and neonatal care may not match within facilities. Women should be cared for at facility that best meets her and her neonate's needs

 Trauma not integrated into levels of maternal care as trauma center levels already established.





2019 LoMC Obstetric Care Consensus Re-emphasis 2

 Each level of care reflects required minimal capabilities, physical facilities, and medical and support personnel

 Each higher level of care includes and builds on the capabilities of the lower levels





General Considerations: All Levels

- Capability to stabilize, provide initial care for any patient while accomplishing transfer if needed
 - Must have resources to manage the most common obstetric emergencies
- Collaborating receiving hospitals openly accept transfers
- Appropriate care level for patients driven by medical need, not limited or governed by financial constraints
- Have appropriate equipment for management of pregnant women with obesity





ACOG/SMFM Does NOT Define Conditions Cared For At Each Level

- Examples of conditions or complications by level are included:
 - Examples are suggested maternal conditions, NOT exhaustive or definitive.
 - Types of patients or conditions cared for at particular facility may vary depending on local and regional resources.
- Facilities/regionalized systems should develop own list of conditions or complications that warrant consultation or consideration for transfer





Criteria Clarifications and Changes: All Levels

	2015	2019
Definitions of Provider Availability	Onsite 24/7	Physically present at all times : specific person should be onsite in the location where perinatal care is provided, 24 hours a day, 7 days a week.
	Available 24/7	Readily available at all times: specific person should be available 24 hours a day, 7 days a week, for consultation and assistance, and able to be physically present onsite within a time frame that incorporates maternal and fetal or neonatal risks and benefits with the provision of care. Further defining this time frame should be individualized by facilities and regions, with input from their obstetric care providers. If referring to the availability of a service, the service should be available 24 hours a day, 7 days a week unless otherwise specified.

Levels of Maternal Care

Criteria Clarifications and Changes: Level | **

	2015	2019
Massive Transfusion Protocol	Access to blood bank supplies at all times. Protocols and capabilities for massive transfusion, emergency release of blood products, and management of multiple component therapy	Ability at all times to initiate massive transfusion protocol, with process to obtain more blood and component therapy as needed.
Physician	Obstetric provider with privileges to perform emergency cesarean available to attend all deliveries	Physician with privileges to perform emergency cesarean delivery readily available at all times.
Anesthesia Services	Anesthesia services available to provide labor analgesia and surgical anesthesia	Anesthesia providers, such as anesthesiologists, nurse anesthetists, or anesthesiologist assistants working with an anesthesiologist, for labor analgesia and surgical anesthesia readily available at all times.
Nurses es not include all ifications and changes.	Continuous availability of adequate number of RNs with competence in level I care criteria and ability to stabilize and transfer high-risk women and newborns	Appropriately trained and qualified RNs with level-appropriate competencies as demonstrated by nursing competency documentation readily available at all times.

Criteria Clarifications and Changes: Level II*

	2015	2019
Health Care Providers	Ob-gyn available at all times	Ob-gyn readily available at all times. • Based upon available resources and facility determination of the most appropriate staffing, it may be acceptable for a family physician with obstetric fellowship training or equivalent training and skills in obstetrics, and with surgical skill and privileges to perform cesarean delivery to meet the criteria for being readily available at all times.
Health Care Providers	Director of obstetric service is a board-certified ob-gyn with special interest and experience in obstetric care	Physician obstetric leadership is a board-certified# ob-gyn with experience in obstetric care. • Based upon available resources and facility determination of the most appropriate staffing, it may be acceptable for such leader to be board certified in another specialty with privileges and expertise in obstetric care including with surgical skill and privileges to perform cesarean delivery.
*Does not include a	Il clarifications and changes.	#Also includes physicians who have completed residency training and are eligible for board certification according to applicable board policies.

Criteria Clarifications and Changes: Level II*

	2015	2019
Anesthesiologist	Board-certified anesthesiologist with special training or experience in obstetric anesthesia available for consultation	Anesthesiologist readily available at all times
Special Equipment	Special equipment needed to accommodate the care and services needed for obese women	Deleted





	2015	2019
Outreach, Education, and Quality Improvement	Ability to assist level I and level II centers with quality improvement and safety programs	Provide outreach education and patient transfer feedback to level I and II designated facilities to address maternal care quality issues.
Ob-Gyn	Ob-gyn available onsite at all times	Board-certified* ob-gyn physically present at all times *Also includes physicians who have completed residency training and are eligible for board certification according to applicable board policies





Criteria Clarifications and Changes: Level III*

	2015	2019
MFM	MFM with inpatient privileges available at all times, either onsite, by phone, or by telemedicine	MFM with inpatient privileges readily available at all times, either onsite, by phone, or by telemedicine. Timing of need to be onsite is directed by urgency of clinical situation. However, MFM must be able to be onsite to provide direct care within 24 hours
Anesthesiologist	Anesthesia services available at all times onsite.	Board-certified anesthesiologist# physically present at all times #Also includes physicians who have completed residency training and are eligible for board certification according to applicable board policies





Criteria Clarifications and Changes: Level IV*

	2015	2019
Nursing Leadership	Physician and nursing leaders with expertise in maternal critical care	Nursing Service Line leadership with advanced degree and national certification
Sub-Specialists	Adult medical and surgical specialty and subspecialty consultants available onsite at all times, including those indicated in level III and advanced neurosurgery, transplant, or cardiac surgery	At least one of the following adult subspecialties readily available at all times for consultation and treatment as needed on site: neurosurgery, cardiac surgery, or transplant. If the facility does not have all three sub-specialties available, there should be a process in place to transfer women to a facility that can provide the needed service.
ICU: Definition of on-site	None	On-site ICU care for obstetric patients with primary or co-management by MFM team. Co-management includes at least daily rounds by MFM with interaction with the ICU team and other subspecialists with daily documentation. In some settings the ICU is in an adjoining or connected building which is acceptable as long MFM care is as noted above. If the woman must be transported by ambulance to the ICU, this is not considered on-
*Does not includ	e all clarifications and changes.	site.

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MFM's availability and care of patients: Level III vs. Level IV hospitals

	Level III	Level IV
2019 Criteria	On-site ICU care for OB	On-site ICU care for OB patients with primary or co- management by MFM team.
	MFM with inpatient privileges is readily available at all times to actively collaborate with critical care providers and communicate or consult, either onsite, by phone, or by telemedicine, for all OB patients in ICU.	Co-management includes at least daily rounds by MFM with interaction with ICU team and other subspecialists with daily documentation. In some settings the ICU is in adjoining or connected building which is acceptable as long MFM care is as noted
	Timing of need to be onsite directed by urgency of clinical situation. However, MFM must be able to be onsite to provide direct care within 24	above. If the woman must be transported by ambulance to the ICU, this is not considered onsite.
	hours.	MFM care team with expertise to manage highly complex, critically ill, or unstable maternal patients. A board-certified MFM attending with full inpatient privileges is readily available at all times for consultation and management.

Imaging Services: 2019*

	Level II	Level III
2019 Criteria	 Added nonobstetric ultrasound imaging Moved maternal echocardiography from Level III to Level II Standard obstetric ultrasound imaging with interpretation readily available at all times CT, MRI, nonobstetric ultrasound imaging, and maternal echocardiography with interpretation readily available daily (at all times not required) 	Basic interventional radiology (capable of performing uterine artery embolization) readily available at all times

^{*}Does not include all clarifications and changes.





Rural Health Considerations

- Ongoing discussions with American Academy of Family Physicians and National Rural Health Association
- Addressing rural maternal health challenges (complex, multifactorial):
 - Facility closures/closure of obstetric services
 - Provider shortages and maldistribution
 - Political and financial challenges
 - Lack of system coordination
 - Access to care





LoMC and Rural Facilities

- LoMC has provisions to support Level I and II facilities through regionalization:
 - Requirement that Level III and IV facilities provide outreach
 - Support for coordination of care
 - Includes transport, QA/QI coordination, education
- Supporting Level I and II facilities helps keep women safely in their communities
 - Reinforces potential for maintaining the patient's support network





LoMC and Rural Facilities

- Emphasizes the importance of ALL obstetric providers
 - Including midwives who meet the International Confederation of Midwives standards
 - Includes Family Medicine physicians
- Key update to Level II criteria: reinforces the role of Family Medicine physicians in obstetric care, particularly in rural settings





LoNC = Levels of Maternal Care

Next Steps





Implementation tools: LoMC "Companion Guide"

- Areas in which the LoMC clinical guidance may benefit from additional clarification or explanation
 - Based on implementation experience
 - > Pilot process
 - > State implementation
- Important considerations not incorporated in the LoMC Obstetric Care Consensus
- Document in progress. Will be available on ACOG website.





Assessment of State-based Implementation

- Identification of which states have publicly available guidelines for LoMC: Complete
- Resource in development identifying if LoMC in a state is:
 - Defined
 - Separate or combined with neonatal levels of care
 - Required by the state and if so, are they enforced and by whom
 - Self-designated by hospitals or designated by a government authority
 - Verified by an outside organization





Verification Program: Next Steps

- Interest expressed by states, health systems
 - State health departments, regional perinatal networks, health care systems, and individual hospitals
 - Entities have contacted ACOG with interest in implementing LoMC
 - Considerations:
 - > Voluntary participation versus "mandate"
 - > Self-assessment or verification (site survey) program
- Legislation of LoMC
 - TX, IL, GA



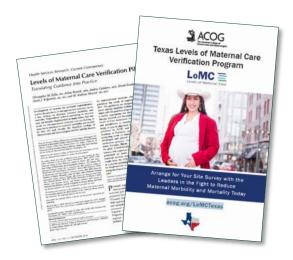


Future Research: Building the Evidence Base

- Impact of regionalized systems for maternal care on maternal morbidity and mortality
- Risk assessment tools
- Outcomes based on diagnosis
- Referral patterns that result from LoMC implementation
- Impact of policy changes on risk appropriate maternal care
- As risk appropriate care is implemented, how are policies impacted?









For additional information on Levels of Maternal Care, please visit acog.org/lomc and acog.org/lomc and acog.org/OCC

You may submit additional questions to lmc@acog.org