

641—150.7(135) Levels of maternal care. The levels of maternal care include basic obstetrical care Level I, specialty care Level II, subspecialty care Level III and regional perinatal health care Level IV. The levels reflect the overall evidence for risk-appropriate care in a hospital through the availability of appropriate personnel, physical space, equipment, technology, and organization. Each level reflects the minimal capabilities, provider type and functional criteria required.

150.7(1) Level I maternal care hospital.

a. Provider of basic obstetrical care. A Level I maternal care hospital provides care to women who are low risk and are expected to have an uncomplicated birth.

b. Capabilities. A Level I maternal care hospital has the following capabilities:

(1) To perform routine intrapartum and postpartum care that is anticipated to be uncomplicated. Care of uncomplicated pregnancies includes the 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 that provides specialty maternal care.

(2) To begin an emergency cesarean delivery within a time interval that best incorporates maternal and fetal risks and benefits with the provision of emergency care.

c. Types of health care providers. A Level I maternal care hospital will have:

(1) Maternity care providers, including certified nurse-midwives, family practice physicians, or obstetrician-gynecologists, available to attend all births.

(2) Every birth attended by at least two professionals, including the primary maternal care provider and a person competent to provide neonatal resuscitation and postnatal care to stabilize the infant.

(3) Adequate numbers of registered nurses available who have completed orientation and demonstrated competence in the care of obstetric patients, including women and fetuses, consistent with Level I care criteria and who are able to stabilize and transfer high-risk women and newborns.

(4) Nursing leadership with expertise in perinatal nursing care.

(5) A provider with privileges to perform an emergency cesarean delivery, available to attend all deliveries. The provider may be a general surgeon, an obstetrician-gynecologist, or a family practice physician with certification.

(6) A provider of anesthesia services available to provide labor analgesia and surgical anesthesia.

d. Functional criteria of support services. Support services include, but are not limited to, access to obstetric ultrasonography, laboratory testing, and blood bank supplies at all times. A Level I maternal care hospital will:

(1) Have protocols and capabilities in place for:

1. Massive transfusion,
2. Emergency release of blood products (before full compatibility testing is complete),
3. Management of multiple component therapy.

(2) Ensure optimal care of all pregnant women by having formal transfer plans established in partnership with a higher-level receiving hospital. These plans will include:

1. Risk identification,
2. Determination of conditions necessitating consultation,
3. Referral and transfer, and
4. A reliable, accurate, and comprehensive communication system between the participating hospital and the transport team.

(3) Have education and quality improvement programs to maximize patient safety, provide such programs through collaboration with facilities with higher levels of care that receive transfers, or both.

(4) Have data collection, storage and retrieval to support quality improvement.

150.7(2) Level II maternal care hospital.

a. Provider of specialty care. In addition to meeting the criteria of a Level I maternal care hospital, a Level II maternal care hospital provides care of appropriate high-risk pregnant women, both those directly admitted to the hospital and those transferred from another hospital.

b. Capabilities. In addition to having the capabilities of a Level I maternal care hospital, a Level II maternal care hospital has the following capabilities:

(1) The infrastructure for continuous availability of adequate numbers of registered nurses who have demonstrated competence in the care of obstetric patients (women and fetuses).

(2) Orientation and demonstrated competence consistent with Level II care criteria and the capability to stabilize and transfer high-risk women and newborns who exceed Level II care criteria.

c. Types of health care providers. In addition to meeting the health care provider requirements of a Level I maternal care hospital, a Level II maternal care hospital will have:

(1) Health care providers, including certified nurse-midwives or family physicians.

(2) Nursing leaders and staff with formal training and experience in the provision of perinatal nursing care who can coordinate with respective neonatal care services.

(3) An attending obstetrician-gynecologist available at all times.

(4) A board-certified or board-eligible obstetrician-gynecologist with special interest and experience in obstetric care as the director of obstetric services.

(5) Access to a maternal-fetal medicine subspecialist for consultation, available on site, by telephone, or by telemedicine as needed.

(6) A provider of anesthesia services available at all times to provide labor analgesia and surgical anesthesia.

(7) A board-certified or board-eligible anesthesiologist with special training or experience in obstetric anesthesia, available for consultation.

(8) Medical and surgical consultants available to stabilize obstetric patients who have been directly admitted to the facility or transferred from other hospitals.

d. Functional criteria of support services. In addition to meeting the support services requirements of a Level I maternal care hospital, a Level II maternal care hospital will have:

(1) Computed tomography scan and, ideally, magnetic resonance imaging with interpretation available.

(2) Basic ultrasonographic imaging services for maternal and fetal assessment at all times, either in house or on call.

(3) Special equipment needed to accommodate the care and services needed for obese women. In addition, based on the patient's BMI and other risk factors, a consultation with an obstetrician-gynecologist or a maternal fetal medicine specialist should be considered.

(4) The ability to provide high-risk obstetrical care, but efforts should be made to transfer women whose newborns are likely to need a higher level of care than a Level II maternal care hospital can provide, or when the pregnancy has risk factors that require the consultation or care of a maternal-fetal medicine specialist.

150.7(3) Level III maternal care hospital.

a. Provider of subspecialty care. A Level III maternal care hospital provides care to women that includes all Level I and Level II services and has subspecialists available on site, by telephone, or by telemedicine to assist in providing care for more complex maternal and fetal conditions.

b. Capabilities. A Level III maternal care hospital functions as the regional perinatal health care center for some areas of Iowa if there are no Level IV maternal care hospitals available. In these areas, a Level III maternal care hospital will be responsible for the leadership; facilitation of transport and referral; educational outreach; and data collection, storage and retrieval to support quality improvement. Designation of Level III maternal care hospital should be based on the demonstrated experience and capability of the facility to provide comprehensive management of severe maternal and fetal complications.

c. Types of health care providers. In addition to meeting the health care provider requirements of a Level II maternal care hospital, a Level III maternal care hospital will have:

(1) An obstetrician-gynecologist with inpatient privileges, available on site at all times.

(2) A maternal-fetal medicine subspecialist with inpatient privileges, available at all times, either on site, by telephone, or by telemedicine.

(3) A director of the maternal-fetal medicine service who is a board-certified or board-eligible maternal-fetal medicine subspecialist.

(4) A board-certified or board-eligible obstetrician-gynecologist with special interest and experience in obstetric care directing obstetric services.

- (5) A provider of anesthesia services available at all times on site.
 - (6) A board-certified or board-eligible anesthesiologist with special training or experience in obstetric anesthesia who is in charge of obstetric anesthesia services.
 - (7) A full complement of subspecialists, available for inpatient consultations, including subspecialists in:
 - 1. Critical care,
 - 2. General surgery,
 - 3. Infectious disease,
 - 4. Hematology,
 - 5. Cardiology,
 - 6. Nephrology,
 - 7. Neurology, and
 - 8. Neonatology.
 - (8) Nursing leaders and adequate numbers of registered nurses who have completed orientation and demonstrated competence in the care of obstetric patients (women and fetuses) consistent with Level III care criteria, including the transfer of high-risk women who exceed Level III care criteria, and who have special training and experience in the management of women with complex maternal illnesses and obstetric complications. Nursing personnel will be continuously available.
- d. Functional criteria of support services.* In addition to meeting the support services requirements of a Level II maternal care hospital, a Level III maternal care hospital will have:
- (1) An on-site intensive care unit to accept pregnant women.
 - (2) Critical care providers on site to actively collaborate with maternal-fetal specialists at all times.
 - (3) Equipment and personnel with expertise available on site to ventilate and monitor women in the labor and delivery unit until they can be safely transferred to the intensive care unit.
 - (4) The ability to provide the following imaging services, with interpretation available at all times:
 - 1. Basic interventional radiology,
 - 2. Maternal echocardiography,
 - 3. Computed tomography,
 - 4. Magnetic resonance imaging, and
 - 5. Nuclear medicine imaging.
 - (5) The ability to perform detailed obstetric ultrasonography and fetal assessment, including Doppler studies.

150.7(4) Level IV maternal care hospital.

a. Provider of services as a regional perinatal health care center. In addition to meeting the requirements for a Level III maternal care hospital, a Level IV maternal care hospital provides care to women with additional requirements and has considerable experience in the care of the most complex and critically ill pregnant women throughout antepartum, intrapartum, and postpartum care. The particular specialty of fetal surgery, advanced neurosurgery, transplant, and advanced cardiovascular capabilities may not all be available at an individual Level IV maternal care hospital. In some cases, specific advanced care will require care coordination to the Level IV maternal care hospital by availability of specific expertise, including but not limited to fetal surgery, advanced neurosurgery, transplant, and advanced cardiovascular capabilities. Each hospital will have a clear understanding of the categories of perinatal patients who can be managed appropriately in the local hospital and those who must be transferred.

b. Capabilities. Although Level III and Level IV maternal care hospitals may seem to overlap, a Level IV maternal care hospital is distinct from a Level III maternal care hospital in the approach to the care of pregnant women and women in the postpartum period with complex and critical illnesses. In addition to having an intensive care unit on site for obstetric patients, a Level IV maternal care hospital must have evidence of a maternal-fetal medicine care team that has the expertise to assume responsibility for pregnant women and women in the postpartum period who are in critical condition or have complex medical conditions. The maternal-fetal medicine team collaborates actively in the co-management of all obstetric patients who require critical care and intensive care unit services, including co-management of intensive care unit-admitted obstetric patients.

c. Types of health care providers. In addition to meeting the health care provider requirements of a Level III maternal care hospital, a Level IV maternal care hospital will have:

(1) A maternal-fetal medicine team member with full privileges, available at all times for on-site consultation and management.

(2) A board-certified maternal-fetal medicine subspecialist with expertise in critical care obstetrics to lead the team.

(3) A maternal-fetal medicine team with expertise in critical care at the physician level, nursing level, and ancillary services level.

(4) Institutional support for the routine involvement of a maternal-fetal medicine care team with the critical care units and specialists. A key principle of caring for critically ill pregnant and peripartum women is the hospital's recognition of the need for seamless communication between maternal-fetal medicine subspecialists and other subspecialists in the planning and facilitation of care for women with the most high-risk complications of pregnancy.

(5) A commitment to having physician and nursing leaders with expertise in maternal intensive and critical care, as well as adequate numbers of available registered nurses in a Level IV maternal care hospital who have experience in the care of women with complex medical illnesses and obstetric complications; this experience includes completed orientation and demonstrated competence in the care of obstetric patients (women and fetuses) consistent with Level IV maternal care criteria.

(6) A director of obstetric services who is a board-certified maternal-fetal medicine subspecialist or a board-certified obstetrician-gynecologist with expertise in critical care obstetrics.

(7) A provider of anesthesia services available on site at all times.

(8) A board-certified anesthesiologist with special training or experience in obstetric anesthesia who is in charge of obstetric anesthesia services.

(9) Adult medical and surgical specialty and subspecialty consultants, a minimum of those listed for a Level III maternal care hospital, available on site at all times to collaborate with the maternal-fetal medicine care team.

d. Functional criteria of support services. In addition to meeting the support services requirements of a Level III maternal care hospital, a Level IV maternal care hospital will have:

(1) The capability for on-site medical and surgical care of complex maternal conditions (e.g., congenital maternal cardiac lesions, vascular injuries, neurosurgical emergencies, and transplants) with the availability of critical (or intensive) care unit beds.

(2) Perinatal system leadership, including facilitation of maternal referral and transport, outreach education for facilities and health care providers in the region and analysis and evaluation of regional data, including perinatal complications, outcomes and quality improvement.

This rule is intended to implement Iowa Code section 135.11(27).

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