

Perinatal Safety: Healthy Moms and Babies

HCA's goal is for the birth experience in its hospitals to result in both healthy moms and healthy babies.

The company's Perinatal Safety Initiative has initially embraced three priorities:

- Management of jaundice and prevention of kernicterus
- Maternal medication safety
- Fetal heart monitoring education

Hospital managers along with practicing physicians and nurses at HCA facilities around the country have participated in designing and implementing the programs. HCA is also sharing its findings with the healthcare industry in order to address broad consumer concerns and increase standards of care.

Bilirubin Screening for Jaundice

On Feb. 1, 2005, HCA became the first healthcare system in the nation to voluntarily require all 124 of its hospitals with birthing units to use a simple blood test to screen newborns for elevated levels of bilirubin.

Excessive levels of bilirubin, a chemical found in everyone's blood, trigger a yellowing of skin that signals jaundice. If not treated, jaundice can lead to kernicterus, a serious brain-damaging condition that can cause cerebral palsy, hearing loss, vision impairments and dental enamel loss.

In the 1970s, kernicterus was nearly eradicated in the U.S. due to aggressive treatment and management. In recent years, kernicterus has reemerged because of several factors. Shorter hospital stays following births have shifted the responsibility of observing for jaundice from physicians and nurses to families. Also, the increase in diverse populations has made it harder to see the skin yellowing.

Babies with elevated levels are placed under bili lights, special lights to break down the bilirubin in the blood. In more severe cases, an exchange transfusion may be performed. In this case, the baby's blood, which has become toxic from bilirubin, will be exchanged for safe blood.

HCA has joined forces with Centers for Disease Control and Prevention, Joint Commission on Accreditation of Healthcare Organizations, The American Academy of Pediatrics and others to promote bilirubin testing through the "Kernicterus Prevention Partnership Campaign" (KPPC).

Medication Safety for Pregnant Women

Drawing from the success of safety protocols used by the aviation industry, a team of clinicians created pre- and in-use checklists for safe use of three high-risk medications commonly used in labor and delivery. By the end of 2005, all HCA hospitals that deliver babies will have in place safety checks for these medications.

Fetal Heart Monitoring

Fetal monitoring is a method of reducing negative outcomes for babies and mothers during delivery. A monitoring device is applied when the mother is admitted. The device allows clinicians to assess the baby's heart rate and watch for distress in the birthing process.

A strong, regular heartbeat is a sign that a baby is doing well during labor. A significant, prolonged drop in rate or intensity of the heartbeat is a sign of distress of a fetus that may, on occasion, necessitate a cesarean delivery in order to prevent injury to the baby.

A review of HCA data showed the skill level of nurses in reading monitors varied across the board. Many nurses had not been trained in school in the practice of reading fetal heart monitors. Physicians and nurses who could read the monitors often used different words to describe the baby's heart beat.

HCA partnered with the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) to create a standardized fetal heart monitoring competency course.

Since 2002, approximately 5,000 nurses have voluntarily been trained through the joint program with HCA and AWHONN. Today, fetal heart monitoring is a standard competency in all 124 HCA facilities with birthing units. The use of monitoring strips has decreased OB claims, the major indicator of problems with births, at HCA facilities to less than 2.5 per 1,000 births.