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MATERNITY CARE

Collaboration for the Improved Health of Newborns

Licking Memorial Health Systems (LMHS) offers family-centered care with up-to-date technology for the delivery and treatment of infants born at Licking Memorial Hospital (LMH). While LMHS physicians focus on prenatal health and care of the mother, circumstances sometimes arise that result in an early birth or the newborn being ill. The specially trained registered nurses of the Special Care Nursery are prepared for such circumstances, and work to provide a safe, secure environment for infants who require intermediate care. The Nursery also participates in a unique collaboration with Nationwide Children's Hospital that includes a reverse-transport agreement, clinical guidance, and professional education and training.

Both Nationwide Children's Hospital and LMH are part of the Ohio Perinatal Quality Collaborative (OPQC) – a statewide consortium of perinatal clinicians, hospitals, and policy makers and governmental entities that aims, through the use of improvement science, to reduce preterm births and improve birth outcomes across Ohio. The hospitals work together to improve the health and wellbeing of the patients and families. "We are proud to collaborate and lend our neonatal expertise to LMH. The collaboration is unique and specialized, to most appropriately and effectively serve Licking County," said Christopher J. Timan, M.D., member of the Neonatology Section at Nationwide Children's Hospital and Clinical Associate Professor of Pediatrics at The Ohio State University College of Medicine. "Our goal is to provide the most advanced care for each infant born at Licking Memorial Hospital needing critical care and to keep the infant with the mother when it is safe

to do so." The LMH staff has a special telephone line offering direct access to a Neonatologist at Children's at any time of day or night. A neonatologist is trained specifically to handle the most complex and high-risk situations, such as premature birth, serious illnesses or injury. LMH pediatricians work in collaboration with Nationwide Children's Hospital when these more complex high risk situations arise.

The Special Care Nursery at LMH is considered a Level Two for Maternal and Neonatal Care, meaning the specially trained staff is prepared for high-risk births and postpartum conditions. The nurses have formal training and experience caring for women who unexpectedly begin labor at 32 weeks or before full gestation at 40 weeks. They are skilled in the use of the special equipment needed to monitor and care for the newborn, and are able to stabilize and transfer high-risk women and infants when the situation arises. Part of the collaboration with Nationwide Children's includes training for these circumstances. Nurses from Nationwide Children's join the nurses at LMH for this training and receive the most up-to-date education on care for both mother and child.

If the need does arise for more complex care or the newborn needs to undergo specialized testing, LMH works with Nationwide Children's for a seamless, smooth transition to Nationwide Children's primary hospital in Columbus. LMH nurses care for the infant ensuring the child is stabilized and able to make the journey safely. The staff at Nationwide Children's continue care until the newborn is no longer in a high-risk situation and is able to be transported back to the LMH Special Care Nursery for continued care. The reverse-transport agreement makes it possible for parents who live closer to LMH to be near their infant as the newborn grows strong enough to be taken home. Having the parents close-by is important to the health of the infant especially if the mother wishes to breastfeed. "Breast milk is like medicine," said Marcia Fisher, Certified Lactation Consultant at LMH. "Only the mother can provide the preterm milk with a higher level of protein and minerals that the newborn needs." LMH also will allow parents with a newborn in the Special Care Nursery to stay at the Hospital if room is





Halfway through her pregnancy, Jennifer VanBuren was diagnosed with gestational diabetes. She had received the same diagnosis in one of her three previous pregnancies and carefully prepared herself for the extra vigilance required during the next several months. Gestational diabetes develops during pregnancy and, like other types of diabetes, affects how the body's cells use sugar (glucose). It also causes high blood sugar that can affect the pregnancy and a baby's health.

Jennifer was able to control her diabetes for several months by eating healthy foods and exercising. "I knew that controlling my blood sugar could prevent a difficult birth and keep me and my baby healthy," Jennifer explained. "However, I reached a point when medication became necessary to keep the diabetes under control." The medication can cause babies to gain weight rapidly and Jennifer's baby was estimated to be 11 pounds, three ounces at birth, so her physician, Janae Davis, M.D., of Licking Memorial Women's Health, monitored her progress closely.

Unfortunately, Jennifer suffered an allergic reaction to the medication, as well as severely fluctuating blood sugar – low at the beginning of her pregnancy and elevated at the end. "I lost consciousness during one of my appointments," Jennifer recalled. "The nurses quickly came to my aid, bringing juice and snacks and ensured I was stable before returning home."

Every two weeks for the last three months of her pregnancy, Jennifer visited Licking Memorial Hospital (LMH) for a nonstress test (NST), to regularly check on her baby's wellbeing in utero. Jennifer

Patient Story Jennifer VanBuren

was familiar with many of the LMH and Women's Health staff members because she delivered her three other children at the Hospital and also worked on the Maternal Child floor for five years as an Environmental Services staff member. "Everyone cared for me so well. I miss working with them. We were all great friends and keep in touch, so it was very pleasant to have time to visit with them. My appointments were enjoyable and went by quickly," she shared.

At her regular 36-week checkup, Jennifer was still being monitored and awaiting her discharge papers. She began having Braxton Hicks contractions which she had been experiencing for the previous month. Painless and sporadic, Braxton Hicks also are known as practice contractions that sometimes start around six weeks into a pregnancy. However, the contractions are not usually felt until the second or third trimester of pregnancy. Medical staff noticed that the contractions were putting Jennifer's baby in distress and immediately contacted neonatal specialists at Nationwide Children's Hospital to discuss her situation.

"I am so thankful I was at the office when the complications began. I shudder to think what would have happened had I returned home and not been aware of the situation. I believe the attentiveness to my situation up to this point and observant manner at my appointments saved my son's life." Jennifer was admitted to LMH and spent two days under close observation before physicians decided to induce labor preterm to remove the baby from possible further distress.

However, complications for Jennifer and her baby continued, and the baby suffered acute cord prolapse 11 hours into labor. Umbilical cord prolapse occurs when the umbilical cord comes out of the uterus with or before the presenting part of the fetus. It is a relatively rare condition and occurs in fewer than 1 percent of pregnancies. The concern with cord prolapse is that pressure on the cord from the fetus will cause cord compression that compromises blood flow to the fetus. Lanson was delivered by emergency

cesarean section on November 2, 2017, at 9:00 p.m. He weighed seven pounds, three ounces and was taken immediately to the Special Care Nursery where he spent about 12 hours with respiratory support.

"Dr. Davis was wonderful! She was so calming and acted quickly and carefully to deliver my son in less than three minutes. He is our miracle baby. We are so grateful for her care," said Jennifer. "By the time I saw Lanson the next morning, he had been removed from support and was able to stay with me in my room. He was perfectly healthy.

Dr. Davis is an extraordinary woman. She is very upbeat and was so reassuring and comforting to me during some very confusing and upsetting moments," Jennifer noted. "She told me she would take care of me and my baby and she kept her word. I was at peace. Everyone was very considerate and did their best to make sure my baby and I were safe. They handled themselves very well in a stressful and demanding situation."

Lanson is happy and healthy at 5 months old. He has no medical issues and has been exclusively breastfed. For now, Jennifer is a stay-at-home mom, but hopes to return to work at LMH when all of her children are attending school. She enjoys gardening and canning to provide plenty of healthy food for her children. She and her husband, John, teach their children to live by the land and also practice hunting and fishing on their grandparents' farm.

LMH earned the Baby-Friendly designation in 2016 through Baby-Friendly USA, Inc. – the gold standard in care, which encourages and recognizes hospitals and birthing centers that offer an optimal level of care for breastfeeding mothers and their babies. The criteria are challenging, designed to set the standards for the best possible breastfeeding support for mother and infant in the maternity setting. LMH is the first community hospital in Central Ohio and one of only ten hospitals in the state to earn the designation.

Maternity Care - How do we compare?

At Licking Memorial Health Systems (LMHS), we take pride in the care we provide. To monitor the quality of that care, we track specific quality measures and compare them to benchmark measures. Then, we publish them so you can draw your own conclusions regarding your healthcare choices.

According to the American Academy of Pediatrics, small-for-gestational-age infants are those who are born weighing less than the 10th percentile for their given gestational age. At term, this weight is 2,500 grams (5 pounds, 8 ounces). Many factors contribute to low birth weight, including lack of prenatal care, a mother's poor nutritional status before and during pregnancy, and drug, tobacco or alcohol use during pregnancy. Low birth-weight infants are at increased risk for health problems. Adequate prenatal care and healthy practices can significantly reduce the incidence of low birth-weight deliveries. In 2017, there were 1,011 babies delivered at Licking Memorial Hospital (LMH) – 55 of those babies weighed less than 2,500 grams.

	LMH 2015	LMH 2016	LMH 2017	National ⁽¹⁾
Low birth-weight infants	6.0%	6.5%	5.1%	8.0%

Smoking during pregnancy is an important modifiable risk factor associated with adverse pregnancy outcomes. It is associated with 5 percent of infant deaths, 10 percent of pre-term births, and 30 percent of small-for-gestational-age infants. Because pregnancy smoking rates in Licking County are higher than the national rate, Licking Memorial Women's Health providers have increased their efforts to assess patients' active smoking during pregnancy at each office visit, counsel patients to quit smoking, and refer each pregnant smoker to LMH's free "Quit for You, Quit for Your Baby" tobacco cessation program.

	LMH 2015	LMH 2016	LMH 2017	National ⁽²⁾	
Patients who reported	20%	21%	32%	12.3%	
smoking during pregnancy					

Exclusive breastfeeding is recommended as the optimal nutrition for infants for the first six months of life, with continued breastfeeding after the introduction of solid foods for the first year or longer, if desired. The American Academy of Pediatrics (AAP), ACOG, World Health Organization and other healthcare organizations support this recommendation recognizing the significant lifelong health benefits of breastfeeding for both mother and child. The AAP recommends breastfeeding should be initiated within one hour of the infant's birth and recommends against routine supplementation of newborn infants with formula or glucose water unless medically indicated. LMH provides prenatal education as well as support and assistance during the postpartum period to help mothers achieve their goals for successful breastfeeding.

Breastfeeding rate upon discharge	LMH 2015 59%	LMH 2016 74%	LMH 2017 62%	LMH Goal greater than 55%
Breastfed infants receiving exclusive breast milk prior to discharge	76%	78%	76%	National [©] greater than 55%

Cesarean section deliveries (C-sections) should be performed only when necessary. Lower percentages are preferrable.

	LMH 2015	LMH 2016	LMH 2017	National ⁽³⁾	
Maternity patients who had a C-section	24%	28%	25%	33%	
First-time C-sections	12%	15%	13%	15%	

Elective deliveries are scheduled in advance rather than occurring naturally, either through induction or C-section. Studies have shown that elective inductions performed before 39 weeks' gestation have higher rates of newborn complications, higher C-section rates, and longer hospital lengths-of-stay for mothers. LMH has chosen to follow the American Congress of Obstetrics and Gynecology's (ACOG) stricter recommendations, and will perform elective inductions only after 41 weeks' gestation.

	LMH 2015	LMH 2016	LMH 2017	National ⁽⁴⁾
Elective deliveries performed before 39 weeks	0%	0%	0%	2%



Collaboration for the Improved Health of Newborns (continued from front)

available in the postpartum unit. As the newborn grows, LMH nurses offer new parents personalized education about the care of the infant.

LMH and Nationwide Children's also are working together to better care for newborns who may be withdrawing from opiates. Staff from both hospitals are taking part in a research study to ensure the best practices in providing care. LMH nurses offer one-on-one tours of the Special Care Nursery, education on the care of the infant and information about what to expect

after birth to mothers working to eliminate their dependency on opiates. "There is no judgment here. We offer support for mother and child after delivery and simply want what is best for their health," said Kayla Gilkey, R.N., Maternity Services Manager. Shepherd Hill offers a Suboxone Clinic to assist pregnant women to safely decrease dependency on opiates over time.

With ever changing healthcare practices, medications, therapies and technology, collaboration is essential to ensure patients receive the best care possible. "By working

together, we can offer the best possible outcome for ill or preterm newborns with a more effective use of resources," Richard Baltisberger, M.D., Department Chief of Pediatrics said. The specially trained nurses alongside the Obstetricians and Pediatric Hospitalists at LMH are dedicated to the care and support of Licking County residents offering a safe environment even in less than ideal circumstances. The collaboration with Nationwide Children's ensures those born at LMH have access to more complex care if needed.

Maternity Care - How do we compare? (continued from inside)

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Group B streptococci (GBS), which emerged in the U.S. in the 1970s, is an infection that is associated with illness and death among newborns. Most neonatal GBS infections can be prevented through screenings and, if needed, by giving an antibiotic to the mother before delivery.

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	LMH 2015	LMH 2016	LMH 2017	LMH Goal		
Mothers with GBS receiving antibiotic within 4 hours prior to delivery	99%	99%	100%	100%		
Number of newborns testing positive with GBS	0	0	0	0		
*Beginning 2016. mothers who delivered within four hours of arrival at LMH are excluded from this measure.						

Gestational diabetes (GDM) is one of the most common clinical issues during pregnancy. The prevalence of GDM ranges from 2 to 5 percent of all pregnancies in the U.S., and all expectant patients should be screened between 24 and 28 weeks' gestation. Licking Memorial Health Professionals (LMHP) obstetricians screen pregnant patients for GDM by 29 weeks.

	LMHP 2015	LMHP 2016	LMHP 2017	LMH Goal
LMHP pregnant patients screened for GDM by 29 weeks	96%	96%	96%	greater than 90%

Data Footnotes:

- (1) Preliminary data for 2013. National Vital Statistics Reports, 63(2). Hyattsville, MD: National Center for Health Statistics. Available at http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63 02.pdf
- (2) Tong, VT, Dietz, PM, et al. Trends in Smoking Before, During and After Pregnancy Pregnancy Risks Assessment Monitoring System (PRAMS), United States, 40 sites, 2000-2010.
- (3) National Vital Statistics Reports, Volume 64, Number 4, May 20, 2015. Available at https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64 04.pdf.
- (4) HospitalCompare.hhs.gov Comparative Database.
- (5) Breastfeeding Report Card, United States / 2013, National Center for Chronic Disease Prevention and Health Promotion. Available at www.cdc.gov/breastfeeding/pdf/2013BreastfeedingReportCard.pdf.
- (6) MIDAS+ CPMS Comparative Database.







Please take a few minutes to read this month's report on **Maternity Care**. You'll soon discover why Licking Memorial Hospital is measurably different ... for your health!

The Quality Report Card is a publication of the LMHS Public Relations Department. Please contact the Public Relations Department at (220) 564-1572 to receive future mailings.

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