

Using LOCATe to Improve Neonatal and Maternal Outcomes

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Having a baby in the United States can be risky and even fatal for both the mom and her infant. It can be even riskier if you are pregnant and giving birth in the state of North Carolina. In 2017, North Carolina ranked 41st out of 50 states in infant mortality rates [1]. This accounts for the 897 North Carolina babies that died in the first year of their life in 2017, according to data from the North Carolina Department of Health and Human Services (NC DHHS) [2]. During the same year, 27 North Carolina mothers died from causes directly related to their pregnancy or from preexisting medical problems that were exasperated by pregnancy [2].

In September of 2017, NC DHHS provided funding for a Perinatal/Neonatal Outreach Coordinator (PNOC) project. Grants were awarded to tertiary centers in 2 of the 6 Perinatal Regions of North Carolina to establish PNOC programs: one to the University of North Carolina in Perinatal Region IV and one to Vidant Health in Perinatal Region VI. The goal of the PNOC program is to improve maternal and neonatal outcomes in the state. There are 2 strategies being implemented: supporting healthy pregnancy intervals by increasing access to long-acting reversible contraception (LARC) in the immediate postpartum period, and assessing a birthing facility's levels of neonatal and maternal care by using the Centers for Disease Control (CDC) Levels of Care Assessment Tool (LOCATe).

The CDC developed LOCATe to provide a standard for assessing a facility's ability to care for high-risk moms and babies that incorporated the levels of care recommended in 2012 by the American Academy of Pediatrics [3] and in 2015 by the American College of Obstetricians and Gynecologists [4]. The tool is not intended to regu-

late or mandate care but rather to encourage conversations among the stakeholders that provide maternal and neonatal care. The LOCATe process is a 3-phase approach: 1) identify an organization to champion the state's mission; 2) the identified champion assists facilities using LOCATe to collect data; and 3) the CDC analyzes the data and returns it to the champion for their use as desired [5]. The assessments obtained in Region VI are being used to ensure that pregnant women and their babies who are diagnosed with high-risk conditions will be referred to an appropriate facility for their care.

The Vidant Health PNOC program in Region VI encompasses the 29 counties of Eastern North Carolina, an area the size of the state of Maryland that extends in the north from the Virginia border, south to Wilmington, and east of Interstate 95 to the Outer Banks. There are 18 hospitals in the region that contain birthing facilities with only one tertiary care center, Vidant Medical Center, in Greenville. This description of the geographic area points to the logistic challenges of providing risk-appropriate care. The region faces many demographic challenges. One in 8 expectant moms are uninsured and 1 in 4 are living below the federal poverty guidelines [6].

The Region VI PNOC used the relationships built by Vidant's Women's Outreach program to obtain commitments to participate from all 18 hospitals. The PNOC team introduced the LOCATe plan at a regional meeting of birthing facilities managers, created a resource book that was presented to the facility's champion, reviewed the facility's results prior to submitting to NC DHHS via online survey, and finally delivered the results to the facility. All results are kept confidential.

The LOCATe result report was created with input from Region IV and Region VI PNOC teams. This allows for uniform reporting to the participating facilities in both regions. PNOC meetings in Region VI are held at the participating facility and include the obstetricians and pediatricians as well as the birthing unit managers. The PNOC team includes the champion obstetrician and neonatologist along with the administrator of Vidant's women's service division. These meetings are the first step in identifying needs and supporting improvements for risk-appropriate care for moms and babies.

The PNOC team is evaluating the role of the tertiary care center in providing risk-appropriate care in Region VI. Opportunities for training, education, simulations, updating policy and procedures, and innovations for team performance that incorporate a specific facility's available services are arranged by the PNOC team. One consistent request of the PNOC team by regional facilities is a program of shadowing in the tertiary center so physicians and nurses can hone their skills for emergency situations.

The work of the Region VI PNOC grant program is ongoing and will culminate with a region-wide meeting in spring 2020 where the conversation on risk-appropriate care will continue. LOCATe data reported by the facilities can create insight into the possible need for a facility to increase its level of care to accommodate the patients it serves.

The relationships cultivated between the community hospitals and the tertiary care center in Region VI by Vidant's women's outreach program can serve as an example of outreach making a positive impact on outcomes for moms and babies. The LOCATe tool is a conversation starter and when overseen by a PNOC, it is the embodiment of the Perinatal Quality Collaborative of North Carolina's mission to make "North Carolina the best place to give birth and be born" [7]. *NCMJ*

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