NOET/POET, Perinatal Outreach.....What does it mean?

By Lisa Fikac, RNC, MSN

High perinatal morbidity and mortality rates have long been a concern for NC. In order to address this concern, the Perinatal Outreach Coordination program was established in 1973. At that time, NC was divided into six regional areas with the main goal being improvement in the quality of care given by primary care providers to women and infants. The ultimate aims of this shift toward quality improvement were to reduce infant mortality, morbidity and health care costs.

Formerly known as the Perinatal and Neonatal Outreach Training (POET/NOET) Program, the Perinatal Outreach Coordination program has contracts with medical schools, Area Health Education Centers, county health departments, and tertiary and regional hospitals throughout the state. We are the NC Perinatal Region V.

NC Perinatal Region V covers a vast area of NC from Pinehurst to Wilmington, with a total of 12 delivery hospitals. Region V has three major medical centers with Level II intensive care status – Southeastern Regional Medical Center, Womack Army Medical Center. Other hospitals within the region are able to accept varying levels of infant care, but the population that they serve should be able to expect the best quality of care no matter what level that may be.

In the past, the Perinatal Outreach Program has focused primarily on providing educational programs, consultation and technical assistance in order to facilitate quality care. These activities are components, which continue to be a part of Perinatal Outreach, but education alone does not create quality. In the coming months and years, you will begin to hear more and more regarding Quality Improvement, and this newsletter’s focus will be on helping you, as a neonatal care provider, and your institutions understand what exactly that means and how you can make quality improvement part of your practice.

Remember –
“To do things differently, we must see things differently. When we see things we haven’t noticed before, we can ask questions we didn’t know to ask before.”
– John Kelsch, Xerox

Key Points
- POET/NOET program is how the perinatal outreach coordination program.
- We serve NC perinatal region V.
- Region V consists of 13 counties in southeastern NC, from Pinehurst to Wilmington.
- The program is focused on promoting quality care through evidence-based practice.

Inside this issue:
- The Late Preterm 2
  By Susan Nails, RNC, MSN, NNP-BC
- Upcoming National Conferences 2
- Quality Improvement and Clinical Microsystems 3
- NC and Perinatal Region V Focus Issues (continued) 3
- Upcoming State and Regional Educational Opportunities 3
- Online Education 4
- Introducing April… 4
- Here to Serve NC Perinatal Region V 4

NC and Perinatal Region V Focus Issues

By Lisa Fikac, RNC, MSN

Perinatal Outreach Coordinators in each of NC’s six regions conduct an annual needs assessment at the state and regional levels. Using the collected data, issues for the state and regions are identified, and the Perinatal Outreach Coordinators work within each region as a whole to address those issues. The issues are data driven, show impact, are collaborative, and show outcome improvement.

The statewide neonatal issue identified is resuscitation and stabilization of the newborn. Although this is a statewide focus, the direction taken may differ from region to region. In Region V, there are several approaches to focus on resuscitation and stabilization of the newborn. Each of Region V’s delivery hospitals requires its delivery and nursery staff to be Neonatal Resuscitation Program (NRP) qualified. Recertification recurs every two years for NRP providers. Maintaining competency is of the utmost importance in the interim between recertification times. The old cliché of “use it or lose it” certainly applies to this scenario, and this is an area where ”losing it” is not a desired outcome. One activity that promotes competency and team building, is the practice of resuscitation skills with mock code drills. Mock drills provide the opportunity to reinforce the NRP steps in a non-threatening environment. Debriefing and analyzing the “code” allows the resuscitation team to evaluate its actions and plan better ways to (continued on page 3)
The Late Preterm

by Susan Nalls, RNC, MSN, NNP-BC

Preterm birth continues to be one of the major causes of infant morbidity and mortality worldwide. In the United States, 71% of all preterm births occur between 34 and 36 6/7 week of gestation. The phrase “late preterm infant” is used to describe these infants born between the 34th and the 36 6/7 week of gestation. Late preterm infants are often much bigger and healthier than their low birth weight counterpart. Even so, these infants face their own set of health risks associated with immaturity and require special attention in the initial period after birth. The late preterm infant is at risk for medical complications related to physiologic immaturity. Although there are potential health risks for the late preterm infant, not all infants born between 34-36 6/7 weeks will need intensive care. To the contrary, what is required is optimization of the infant’s health through careful attention to those special needs, regardless of the setting.

There are significant maternal and fetal medical complications that account for many late preterm deliveries. Medical indications that can result in preterm delivery can include: premature rupture of membranes, placental abruption, placenta previa, maternal bleeding, infection, poorly controlled diabetes or hypertension, pre eclampsia, multiple gestation and intrauterine growth retardation. According to the American College of Obstetricians and Gynecologists, elective delivery of infants prior to 39 weeks gestation should be avoided.

Late preterm infants are often managed in newborn nurseries and may even be coupled with their mother in a family care setting. It is vital for health care professionals to increase their understanding of the challenges facing late preterm infants to contribute to the optimal health outcomes for these at-risk infants.

Clinical practice guidelines should focus on addressing the special physiologic needs of the late preterm infant. In many cases these health issues occur during the first 12 hrs after birth and resolve within the first few days of life. However, these health issues are not benign and are sometimes responsible for increasing not only the cost of the infant’s hospitalization but also prolonging the infant’s hospitalization. Ultimately, the health care team and the infant’s family both play an integral part in the success of the late preterm infants transition to normal newborn care.

The late preterm infant is at increased risk for the following issues: hypothermia, hypoglycemia, jaundice, respiratory compromise, sepsis and feeding difficulties.

Hypothermia risks are directly related to the fact that these infants have less body fat and may be less able to regulate their own temperature. To reduce cold stress, initiate skin-to-skin contact with mother, avoid drafts and cold surfaces, delay bathing and place in an isolite if further temp control is needed.

Hypoglycemia may be a problem due to decreased or inadequate glycogen stores. Infants may present with hypothermia, apnea, tachypnea, poor feeding, decreased tone or tremors. Early formula feeds may help prevent low accuchecks and feeds should be offered every 3-4hrs. Breastfed infants should nurse every 2-3hrs. Accuchecks should be performed every hour until above 45mg/dl.

Respiratory distress may occur in the form of transient tachypnea of the newborn (TTN), respiratory distress syndrome (RDS) or pneumonia. Any of these issues may be exacerbated by hypothermia and hypoglycemia. RDS occurs in 8% of late preterm births and is often responsible for prolonged hospitalization. Respiratory interventions may range from the provision of supplemental oxygen to the need for administration of surfactant and mechanical ventilation or CPAP.

Jaundice may be prolonged (5-7 days) due to an immature hepatic system and decreased ability to conjugate or convert bilirubin. It can be complicated by poor feeding. So all late preterm infants should have bilirubin screening and transcutaneous monitoring. If left untreated, hyperbilirubinemia can progress to kernicterus and involve permanent brain damage.

Feeding issues may result from these infants experiencing difficulty with suck and swallow coordination. These infants can be sleepier and demonstrate less stamina during nippiling. Breastfeeding issues may arise from insufficient emptying of the breast, leading to inadequate milk supply. Feeding issues can contribute to hypoglycemic issues, jaundice, poor weight gains, and ultimately prolong hospitalization.

Sepsis may be a risk because the late preterm infant has less ability to fight infection. Any of the morbidities discussed above can be symptoms of infection. Maternal factors can increase the infant’s risk of infection as well. Signs of infections should be monitored. Sepsis screens and antibiotic therapy should be considered.

Discharge instructions should include a follow up appointment with the pediatrician 24-48hrs after discharge. All of the above factors should be reevaluated at that appointment.

“The late preterm infant is at increased risk for the following issues: hypothermia, hypoglycemia, jaundice, respiratory compromise, sepsis and feeding difficulties.”

The Late Preterm

by Susan Nalls, RNC, MSN, NNP-BC

Preterm birth continues to be one of the major causes of infant morbidity and mortality worldwide. In the United States, 71% of all preterm births occur between 34 and 36 6/7 week of gestation. The phrase “late preterm infant” is used to describe these infants born between the 34th and the 36 6/7 week of gestation. Late preterm infants are often much bigger and healthier than their low birth weight counterpart. Even so, these infants face their own set of health risks associated with immaturity and require special attention in the initial period after birth. The late preterm infant is at risk for medical complications related to physiologic immaturity. Although there are potential health risks for the late preterm infant, not all infants born between 34-36 6/7 weeks will need intensive care. To the contrary, what is required is optimization of the infant’s health through careful attention to those special needs, regardless of the setting.

There are significant maternal and fetal medical complications that account for many late preterm deliveries. Medical indications that can result in preterm delivery can include: premature rupture of membranes, placental abruption, placenta previa, maternal bleeding, infection, poorly controlled diabetes or hypertension, pre eclampsia, multiple gestation and intrauterine growth retardation. According to the American College of Obstetricians and Gynecologists, elective delivery of infants prior to 39 weeks gestation should be avoided.

Late preterm infants are often managed in newborn nurseries and may even be coupled with their mother in a family care setting. It is vital for health care professionals to increase their understanding of the challenges facing late preterm infants to contribute to the optimal health outcomes for these at-risk infants.

Clinical practice guidelines should focus on addressing the special physiologic needs of the late preterm infant. In many cases these health issues occur during the first 12 hrs after birth and resolve within the first few days of life. However, these health issues are not benign and are sometimes responsible for increasing not only the cost of the infant’s hospitalization but also prolonging the infant’s hospitalization. Ultimately, the health care team and the infant’s family both play an integral part in the success of the late preterm infants transition to normal newborn care.

The late preterm infant is at increased risk for the following issues: hypothermia, hypoglycemia, jaundice, respiratory compromise, sepsis and feeding difficulties.

Hypothermia risks are directly related to the fact that these infants have less body fat and may be less able to regulate their own temperature. To reduce cold stress, initiate skin-to-skin contact with mother, avoid drafts and cold surfaces, delay bathing and place in an isolite if further temp control is needed.

Hypoglycemia may be a problem due to decreased or inadequate glycogen stores. Infants may present with hypothermia, apnea, tachypnea, poor feeding, decreased tone or tremors. Early formula feeds may help prevent low accuchecks and feeds should be offered every 3-4hrs. Breastfed infants should nurse every 2-3hrs. Accuchecks should be performed every hour until above 45mg/dl.

Respiratory distress may occur in the form of transient tachypnea of the newborn (TTN), respiratory distress syndrome (RDS) or pneumonia. Any of these issues may be exacerbated by hypothermia and hypoglycemia. RDS occurs in 8% of late preterm births and is often responsible for prolonged hospitalization. Respiratory interventions may range from the provision of supplemental oxygen to the need for administration of surfactant and mechanical ventilation or CPAP.

Jaundice may be prolonged (5-7 days) due to an immature hepatic system and decreased ability to conjugate or convert bilirubin. It can be complicated by poor feeding. So all late preterm infants should have bilirubin screening and transcutaneous monitoring. If left untreated, hyperbilirubinemia can progress to kernicterus and involve permanent brain damage.

Feeding issues may result from these infants experiencing difficulty with suck and swallow coordination. These infants can be sleepier and demonstrate less stamina during nippiling. Breastfeeding issues may arise from insufficient emptying of the breast, leading to inadequate milk supply. Feeding issues can contribute to hypoglycemic issues, jaundice, poor weight gains, and ultimately prolong hospitalization.

Sepsis may be a risk because the late preterm infant has less ability to fight infection. Any of the morbidities discussed above can be symptoms of infection. Maternal factors can increase the infant’s risk of infection as well. Signs of infections should be monitored. Sepsis screens and antibiotic therapy should be considered.

Discharge instructions should include a follow up appointment with the pediatrician 24-48hrs after discharge. All of the above factors should be reevaluated at that appointment.

“The late preterm infant is at increased risk for the following issues: hypothermia, hypoglycemia, jaundice, respiratory compromise, sepsis and feeding difficulties.”
Quality Improvement and Clinical Microsystems

I know what each of you is thinking as you read this title—“I can skip this article. We already do quality improvement at my workplace.” Let me stop you from just moving onward by acknowledging that “yes, we all participate in quality improvement.” But is the change that you are seeking to make really working? Is it something that you and your co-workers really believe in? Do you see your quality changes as lasting or as just a measure to satisfy some accrediting agency?

If your answer is “no” to either of those three questions, I ask you to keep reading.

For those of you whose hospitals are involved in the Vermont Oxford Network (VON) and/or the Perinatal Quality Collaborative of North Carolina (PQCNC), you know that quality improvement drives those organizations. This commitment to quality improvement is driven by the framework of clinical Microsystems.

I know…you are shaking your heads again thinking that this is just the new “buzz” for today. And that may be so, but I really do not believe that is true. What the clinical Microsystems approach does is to provide us with a framework within which to progress toward understanding the units (or microsystems) in which we work. When we understand how we work, then we are better able to make sustained and meaningful changes for quality.

Now, you are thinking—“well, I could maybe get some useful information by listening to what she has to say.” And here is where I will be honest by saying that there are literally BOOKS about clinical Microsystems, and one article cannot begin to cover it all. So, here is my promise to you. In upcoming newsletters, there will be more information regarding what exactly clinical Microsystems is and involves. I do not want anyone to get lost in the language or concepts. So, we will take it one step at a time. Okay?

NC and Perinatal Region V Focus Issues

(continued from page 1)

approach similar situations in the future.

Another strategy to promote best care practices in resuscitation and stabilization of the newborn is the S.T.A.B.L.E. class. This valuable class focuses on stabilizing the six following areas in the newborn:

- S – sugar
- T – temperature
- A – artificial breathing
- B – blood pressure
- L – lab work
- E – emotional support for the family

S.T.A.B.L.E is taught at several Region V hospitals. Look for upcoming classes in your area over the next several months.

Finally, the regional focus issue identified is the late preterm infant. Although the late preterm infant is at greater risk for hypothermia, hypoglycemia, sepsis, respiratory distress, and feeding difficulties, many providers continue to treat these babies as normal term newborns. Over the coming months, you will see a greater focus on the care of the late preterm infant.
gan my career on a general pediatric floor. I loved to work with children, but decided that I wanted to focus more in the neonatal area. So, in 1987, I transferred into my first neonatal job in a Level II nursery. I loved my job and decided to pursue my Master’s degree. I worked a modified Baylor plan for 3 years as I took classes. In 1991, I encountered an opportunity to teach in the nursing program at UNCW and decided to take the leap. I moved to Wilmington and taught for 5 years, while working casual pool at New Hanover in the NICU and Birth Place.

While I was in Wilmington, I met my husband, and we moved to Sampson County in the summer of 1996. I commuted to Chapel Hill and worked in the NICU at UNC for 2 years, but I-40 got the better of me. So, I made a professional move to the NICU at Cape Fear Valley. I have been at “the Valley” for almost 11 years, now, except for 8 months of medical leave after breaking a leg. Many asked why I was at the bedside instead of using the Master’s degree. The very simple answer is that I love the babies. I also had the firm belief that when the right opportunity presented itself, I would use my education and background then. So, here I am now with the belief that it is the right time!

In closing, just let me say that I am here to serve you, the healthcare providers of Region V. Please let me know what you need!  

Lisa Fikac, RNC, MSN  
Neonatal Outreach Coordinator

Hello Everyone,

My name is Lisa Fikac, and I am the new Neonatal Outreach Coordinator for NC Perinatal Region V. Many of you have dealt with Stacey Cashwell in the past. Stacey retired nearly 2 years, and I thought it would be a good idea to tell you a little about myself and experiences.

I live near Newton Grove in Sampson County. I have been married for 12 years and have 2 grown stepsons. My husband and I currently parent 5 dogs, one of which is pictured to the left! I am very technologically oriented and do not fear it! I also love scrapbooking and Tarheel basketball!

I have been a nurse for 23 years. I graduated from UNC in 1986 and began my career on a general pediatric floor. I loved to work with children, but decided that I wanted to focus more in the neonatal area. So, in 1987, I transferred into my first neonatal job in a Level II nursery. I loved my job and decided to pursue my Master’s degree. I worked a modified Baylor plan for 3 years as I took classes.

In 1991, I encountered an opportunity to teach in the nursing program at UNCW and decided to take the leap. I moved to Wilmington and taught for 5 years, while working casual pool at New Hanover in the NICU and Birth Place.

While I was in Wilmington, I met my husband, and we moved to Sampson county in the summer of 1996. I commuted to Chapel Hill and worked in the NICU at UNC for 2 years, but I-40 got the better of me. So, I made a professional move to the NICU at Cape Fear Valley.

I have been at “the Valley” for almost 11 years, now, except for 8 months of medical leave after breaking a leg. Many asked why I was at the bedside instead of using the Master’s degree. The very simple answer is that I love the babies. I also had the firm belief that when the right opportunity presented itself, I would use my education and background then. So, here I am now with the belief that it is the right time!

In closing, just let me say that I am here to serve you, the healthcare providers of Region V. Please let me know what you need!

Lisa Fikac, RNC, MSN  
Neonatal Outreach Coordinator

Introducing Amy...

Now, I would like to introduce the person who takes care of so many things within Neonatal Outreach. Her name is Amy Cundiff, and she has been with the Neonatal Outreach program for just over a year.

Amy lives in Fayetteville with her husband and two sons. She loves to read and is addicted to the Twilight series!

Business would not flow nearly as smoothly without Amy. Amy handles much of the logistical planning for the Fall Update Conference, and she helps pull together the many resources needed to keep things running. She is invaluable at helping keep the budget on track and filing needed reports to the state.

If you are ever unable to reach me, please feel free to contact Amy at—

(910) 615-7010.

Amy Cundiff, Outreach Assistant