Duke University Implementation Strategy
Breastfeeding Promotion in Physicians Office Practices Program Phase III
Residency Curriculum

The site directors at Duke University wanted to be able to implement the curriculum during one rotation of the resident’s career. Because there are multiple tracks for residents that may or may not lend themselves to this plan they also adapted the curriculum for those who were not currently in the rotations described below. In the future, every effort will be made to ensure that the curriculum is administered during one rotation of the resident’s career.

**Overall strategy**

**Pre-Evaluation:**
All of the sites administered a pre-implementation evaluation to all residents participating in the curriculum. This is a way to measure the knowledge, attitudes, and practice patterns of the residents prior to being exposed to the curriculum. Physicians from all disciplines should participate. Evaluating your residents’ progress each year will allow to communicate the need for this curriculum to your administration.

**Rotation based curriculum** – Duke’s goal was to implement the curriculum within their existing rotations to see if this would be not only effective, but sustainable within the curricular structure.

- **Newborn Nursery** – All pediatric interns and family medicine interns complete this rotation in their first year. The learning objectives and activities described in the curriculum outline were completed while on their 4 week required Newborn Nursery rotation.

- **Community Pediatrics** – For those residents who have completed their intern year, the curriculum was administered during their Community Pediatrics rotation during their residency.

**Non-Rotation Based Curriculum** – To provide breastfeeding education to those residents who were not scheduled for the above rotations, we provided alternative methods for learning.

- **OB-GYN Residents** – OB-GYN Faculty provided the didactic breastfeeding education to all the OB-GYN interns during group sessions. Pediatric Faculty worked with these residents in assisting breastfeeding mothers and assessing their clinical skills.
- **Other Pediatric Residents** – Some pediatric residents completed the breastfeeding curriculum in a small group format with the Pediatric Faculty.
Implementing the Curricular Components

Anatomy and Physiology -

**Activity** - Complete the Wellstart International Lactation Management Self-Study Modules Level 1, Second Edition. Take the accompanying self-study exam immediately following the completion of the modules, and again 4 months later.

**Evaluation** – We compared the residents’ scores from the test taken immediately after the completion of the modules with the scores from the test taken 4 months after completion to evaluate their retention of the material. The residents self-reported whether their scores improved immediately after completing the modules. We then assessed their medical knowledge based on group discussions of Wellstart concepts, clinical application of concepts, and observing the residents’ ability to educate parents on these concepts.

**Feedback** – Residents reported high satisfaction with the Wellstart Manual in regards to ease of use and focus. High compliance was experienced with this component.

Basic Skills -

**Activity** - Each resident watches “15 Minutes of Breastfeeding Help” (*Note: this is now titled “Breastfeeding Management, Educational Tools for Physicians and Other Professionals”*) and then teaches at least 3 new mothers the three key educational components of breastfeeding education. Residents on Newborn Nursery also receive one hour of breastfeeding education from our senior Lactation Consultant with use of models, etc.

**Evaluation** – Pediatric Faculty observed each resident at least 3 times in these interactions, including helping a mother put the baby to breast. The evaluators provided immediate feedback to residents after each interaction.

**Feedback** - Residents overwhelming provided very positive feedback on this activity and stated that this was the most helpful part of the curriculum. They have repeatedly stated that would be most helpful in intern year, so that they can apply these skills during the remainder of residency.
**Peripartum Breastfeeding Support -**

**Activity** - Identify true contraindications to breastfeeding and the use of human milk and those that are sometimes identified as contraindications, but are not (both medicines and medical conditions). Present a case in which a mother was inappropriately counseled not to breastfeed and the consequences that this led to in the health of the mother and the infant.

**Evaluation** – Faculty evaluated the effectiveness of the residents’ analysis of cases and retention of information over the rotation.

**Feedback** – Easy to implement and high yield for residents.

**Management of Common Situations in the Ambulatory Setting -**

**Activity** - Conduct a role-playing exercise to describe a step-by-step approach in the management of a mother who, on her baby’s fourth day of life, is engorged and her hungry baby will not latch on; a baby that is latching, but causing nipple damage and trauma; a baby who has ankyloglossia.

**Evaluation** – Faculty assess effectiveness of analysis of cases.

**Feedback** – Residents have found case based approach very helpful, especially as faculty use cases based on patients that the residents have seen in the rotation.

**Delivering Culturally Effective Breastfeeding Care -**

**Activity** - Use the Delivering Culturally Competent Breastfeeding Care Case Studies (*Note: this is now called Cultural Case Studies*) to have residents practice different scenarios that require cultural competency.

**Additional Description** - We also used our own cases from the month and discussed how we worked with the different families.

**Evaluation** – Faculty assessed how meaningful and respectful residents have been in case discussion and in assisting families.

**Feedback** – This was received best when we used our own cases from the rotation to get better buy in from the residents compared with using pre-made cases that were not commonly seen by residents. Residents have really found the info on how to help teen moms breastfeed most helpful. We continue to struggle with how to encourage moms of Latina backgrounds, in our community, to exclusively breastfeed rather than to do both breast and bottle. Residents generally work very hard to convince these moms to exclusively breastfeed, and are very proud when they have helped a mom to make this choice (vs. bottle supplemental when not medically indicated).
**Advocacy and Breastfeeding Promotion –**

**Activity** - Assess the hospital policy with respect to the Baby Friendly Hospital Initiative Ten Steps for Successful Breastfeeding. The Baby Friendly Hospital Initiative Self-Appraisal Tool can be used as a basis for this activity, and identify at least one barrier and one solution that could be suggested to improve the hospital’s policy.

**Additional Description** - Residents were asked to assess barriers to optimizing breastfeeding when present in our hospital and in our clinics. Residents were able to use their education and experience in breastfeeding provided by the curriculum to analyze this in a group format.

**Evaluation** – Assessed how well the residents were able to discuss the barriers and potential solutions in this group format.

**Feedback** – Residents were generally very involved in this discussion, especially after they completed the curriculum. They had real-life experiences in assisting mothers with breastfeeding within our infrastructure and spoke meaningfully of the barriers they faced. This was most effective when this discussion occurred at the end of their curriculum so they could discuss their own experiences.

**Community Outreach and Coordination of Care -**

**Activity** – Attend community breastfeeding educational sessions.

**Additional Description** - Residents on the Community Pediatrics Rotation attended a Parenting Support Class at least twice during the rotation, under the supervision of Duke Faculty. OB-GYN residents were also asked to attended similar classes through their residency program director as were the residents on Newborn Nursery Rotation.

**Evaluation** - Residents and faculty discussed the interactions with parents following their classes.

**Feedback** – This has been the most challenging to implement for the residents on Newborn Nursery. Due to ACGME working hours restrictions, it is difficult to mandate that residents on this rotation attend these classes during their “off” days. Due to increases in patient numbers and acuity, it has not been possible to take residents away from their clinical responsibilities to attend these classes. Residents obtaining the breastfeeding curriculum in the other venues have not had this problem.

*This information was provided courtesy of Duke University Medical School – one of the participants in the Breastfeeding Residency Curriculum Pilot Study. Site Directors: Aditee Narayan, MD, MPH, FAAP, and Joanne Band, MD, FAAP*