Professional Lactation Services and Breastfeeding Rates in North Carolina: A GIS Case for Medicaid Reimbursement of IBCLCs
Kathryn Houk MS, Catherine Sullivan MPH, RD, LDN, IBCLC, Ellen Chetwynd RN, BSN, IBCLC, MPH

Background
Breastfeeding reduces health risks for mothers and infants; however, only 34% of infants in North Carolina who participate in WIC breastfeed at six weeks and only 18.7% breastfeed at six months. Low-income mothers face multiple barriers to meeting their breastfeeding goals, but mothers who receive support are less likely to stop breastfeeding before six weeks, a critical time when many return to the workforce. Professional support from International Board Certified Lactation Consultants (IBCLCs) is associated with improved breastfeeding duration. Additionally, the Centers for Disease Control and Prevention (CDC) includes an indicator for the number of IBCLCs per 1,000 live births in its annual “Breastfeeding Report Card” as one measure of clinical breastfeeding support available to women postpartum.

Purpose
To estimate the association between the availability of IBCLC services and breastfeeding at six weeks postpartum among a population at high-risk for early breastfeeding cessation. We hypothesize that geographic proximity to professional lactation support services, represented by the county-level availability of IBCLCs, will be associated with a higher prevalence of breastfeeding at six weeks.

Methods
Breastfeeding data were obtained for 11338 infants from the Pediatric Nutrition Surveillance System (PedNSS), a cross-sectional study compiling surveillance data on low-income infants in federally funded maternal and child health programs. Locations of IBCLCs practicing in NC were collected from the International Board of Lactation Consultant Examiners, and 2010 county-level births were accessed from the NC State Center for Health Statistics. We fit a log-binomial regression model using SAS 9.4 to estimate the prevalence ratio of any breastfeeding at six weeks and IBCLC density in the infant’s county of residence.

Results
Compared with infants residing in a county with no IBCLCs, the prevalence of any breastfeeding at 6 weeks among infants residing in counties with >0 and ≤3.7 IBCLCs per 1000 live births increases 1.16 (95% CI: 1.08, 1.24) per unit increase in the number of IBCLCs per 1000 live births. Similarly, compared with infants residing in a county with no IBCLCs, the prevalence of any breastfeeding at 6 weeks among infants residing in counties with more than 3.7 IBCLCs per 1000 live births increases 1.20 (95% CI: 1.12, 1.28) per unit increase in the number of IBCLCs per 1000 live births. When stratified by county urbanity, higher breastfeeding rates appear to be associated with the mid-level IBCLC density, except in the least urban counties where the increased breastfeeding rate is only seen for infants who reside in counties with more than 3.7 IBCLCs per 1000 live births.

Conclusion
Our findings suggest that the availability of IBCLC services is associated with increased breastfeeding prevalence at six weeks, especially in more urban counties where access is likely improved. While availability of IBCLCs does not guarantee utilization of their services, this analysis can be used to support advocacy for Medicaid reimbursement of IBCLC services to expand access to this important and effective clinical breastfeeding support.

Special thanks to Josephine Gaylor and Najeeb Choudhry for North Carolina Department of Health and Human Services, Division of Public Health Nutrition Services Branch for allowing us to work with the NC PEDNSS data and for all their support in conducting this analysis.

Citations: