

System Requirements

3. General Overview and Background

3.1. WIC Background Info

Breastfeeding is an important part of nutrition for infants and young children. The Mississippi State Department of Health Women, Infants, and Children's (WIC) nutrition program provides services and support for mothers who are breastfeeding.

Breastfeeding mothers receive one-on-one and group support through peer counselors.

- Breastfeeding mothers can receive breast pumps, breast shells, and/ or nursing supplements to help support breastfeeding.
- Mothers who exclusively breastfeed their infants receive an enhanced food package.
- Breastfeeding mothers are eligible to participate in WIC longer than non-breastfeeding mothers.

With all of the breastfeeding support provided by WIC, there remains a significant gap in provision of lactation services across the state. Professional lactation support from the International Board Certified Lactation Consultants (IBCLC) has been challenging to provide in-person at local WIC agencies and virtually impossible to provide around the clock. Mississippi only has 1.93 IBCLCs per 1,000 live births, compared to the Surgeon General's recommendation of 8.6. Because of the extreme variation in levels of urbanization and socioeconomic development, many WIC participants live hours from in-person lactation support. Telehealth technology makes around the clock support for breastfeeding support easier and more cost effective.

The purpose of this project is to leverage cutting-edge smartphone and tablet technology, community partnerships, and innovative social marketing strategies to improve breastfeeding rates within the Mississippi Women, Infants, and Children (MS WIC) population. The project also aims to improve the quality of breastfeeding promotion and support provided by MS WIC through the continued provision of 24-hour live video access to professional lactation support from IBCLCs. Continuous access to IBCLCs through a tele-lactation app has proved an effective strategy for increasing breastfeeding rates and ensuring peer counselors can yield appropriately to IBCLCs when necessary. Social marketing and community partnerships are evidence-based

strategies recommended by the Centers for Disease Control (CDC) for improving breastfeeding rates in the United States.

Innovative interventions aimed at improving breastfeeding rates have been prioritized in Mississippi due to extremely low breastfeeding rates and a stark shortage of lactation professionals across the state. Breastfeeding rates in Mississippi are dramatically lower than the national average. Only 11.3% of infants are breastfed for 12 months, as recommended by the American Academy of Pediatrics, and over 90% of infants receive formula in the first six months of life.

9. WIC Lactation System Requirements

9.1. General System Requirements

- 9.1.1. **Mandatory** – The proposed system must be an app-based solution that works with Apple and Android smartphones and tablets
- 9.1.2. **Mandatory** – The proposed system must have unlimited, 24-hour live video access to professional lactation consultants with no appointment necessary
 - 9.1.2.1. **Mandatory** – The lactation consultants must be International Board Certified Lactation consultants (IBCLC)
 - 9.1.2.2. **Mandatory** – the lactation consultants must be trained on the WIC Peer Counseling Model or the Loving Support Model
- 9.1.3. **Mandatory** – The proposed system must be in line with the US Department of Agriculture (USDA) Food and Nutrition’s Southeastern Regional Office (SERO) guidelines 5 and 7
- 9.1.4. **Mandatory** – The proposed system must be able to generate unique user identification numbers
- 9.1.5. **Mandatory** – The proposed system must be able to offer lactation support in English and Spanish
- 9.1.6. The proposed system must allow the users to contact a MS WIC clinic, a Peer Counselor or an IBCLC
- 9.1.7. The proposed system must have password protection
- 9.1.8. The proposed system must have encryption and decryption available
 - 9.1.8.1. The proposed system must be able to deliver encrypted reports to MS WIC staff
- 9.1.9. The proposed system must be able to track the number of participants who access and use the system
- 9.1.10. The proposed system must have user authentication requirements
- 9.1.11. The proposed system must be able to support an enterprise license with unlimited users for a flat fee
- 9.1.12. The proposed system must be able to generate email notifications
- 9.1.13. The proposed system must be able to send out customizable push notifications to users based on the due date or birth date of an infant
- 9.1.14. The proposed system must be able to provide technical support

- 9.1.15. The proposed system must be available 24/7 with the exception of pre-notified and scheduled system maintenance
 - 9.1.15.1. The vendor will be responsible for all system updates
 - 9.1.15.2. The vendor will be responsible for all software updates
 - 9.1.15.3. The vendor will be responsible for regular scheduled maintenance
- 9.1.16. The proposed system must be able to generate reports
 - 9.1.16.1. The reports must contain participant enrollment information
 - 9.1.16.2. The reports must contain participant utilization of the system
 - 9.1.16.3. The reports must be sent to MS Women, Infants, and Children (MS WIC) staff
- 9.1.17. The proposed system must be able to track the following within the system
 - 9.1.17.1. Participants and peer counselors access to IBCLCs
 - 9.1.17.2. Quality of breastfeeding support services with MS WIC
 - 9.1.17.3. Quality of customer service experience with MS WIC
 - 9.1.17.4. Awareness of MS WIC breastfeeding support services
- 9.1.18. The proposed system must provide training to IBCLCs on MS WIC breastfeeding policies and guidelines
 - 9.1.18.1. The system must provide annual training to IBCLCs
 - 9.1.18.2. The system must provide training and refresher courses to MS WIC staff
- 9.1.19. The proposed system must be able to collect WIC participant's feedback after each visit
 - 9.1.19.1. The system must send the information collected to MS WIC staff
- 9.1.20. The proposed system must be able to design custom, co-branded marketing materials with MS WIC
 - 9.1.20.1. The marketing materials must be distributed through the system
 - 9.1.20.2. The marketing materials must be in printable format
 - 9.1.20.3. The marketing materials must be shipped to various locations
- 9.1.21. The proposed system must have multiple printing options (e.g. full-page printing, truncated printing, etc.). List the different printing options