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Listening to Women (LTW) Implementation Toolkit





LTW MISSION

To improve maternal mental health by enhancing screening, referrals and communication between pregnant and postpartum individuals and their healthcare providers.

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MODULE 1

Toolkit Overview

LTW Mission is to improve maternal mental health by enhancing screening, referrals and communication between pregnant and postpartum individuals and their healthcare providers.

A. Welcome to Listening to Women (LTW)

The Listening to Women (LTW) Program was developed to enhance communication between pregnant and postpartum individuals and their healthcare providers by strategically incorporating remote care coordination when indicated. **The LTW Program is designed to specifically focus on screening and follow-up for leading contributors to maternal morbidity and mortality: perinatal mood and anxiety disorders, perinatal substance use disorders, and intimate partner violence (IPV), as well as addressing Social Determinants of Health.**

By leveraging technology and patient-centered approaches, LTW aims to improve maternal health outcomes through timely connections with indicated interventions, provision of structured support, and use of continuous monitoring sensitive to the dynamic experiences common to pregnancy and the postpartum period.

B. Purpose of LTW

LTW seeks to bridge gaps in the implementation of evidence-based care for pregnant and postpartum individuals using digital tools — like text messaging, responsive REDCap survey tools, phone-based assessments and electronic health record (EHR) communications — to promote proactive identification and appropriate responses to mental health conditions and social determinants of health needs as well as engagement between patients and their care teams, all with the goal of ensuring that pregnant and postpartum individuals needs are addressed accessibly, efficiently, and equitably.

LTW implements a “digital SBIRT” model – or a method for implementing screening, brief intervention, and referral to treatment (SBIRT) practices remotely. This remote process makes it possible to centralize care coordination and introduces opportunities for resource sharing across a health system and/or a collection of smaller sites whose patient volume may not justify in-house care coordination personnel, and/or between higher resourced sites and lower resourced satellite sites.





Why focus on mood and anxiety disorders, substance use disorders, and IPV?

#1 They are deadly.

Mental health conditions are a leading cause of maternal deaths due to suicide and drug overdose, and many of these deaths are preventable.¹⁻⁵ Homicide, often associated with IPV, exceeds all leading causes of maternal death by more than two-fold.¹

#2 They are common.

Among pregnant and postpartum women, it is estimated that as many as:

- + One-in-four will experience perinatal mood or anxiety disorders²
- + One-in-eleven will experience IPV⁴
- + One-in seven will use harmful substances during pregnancy⁶

Note that although a majority of women with perinatal substance use disorder (83%) will abstain from substance use in pregnancy, around 80% will return to use within 4-5 month postpartum, increasing their risk for overdose and death.^{3,7-9}

#3 When left untreated, mental health conditions can negatively impact the health and safety of moms and their children.

Pregnant and postpartum women with undetected and/or untreated mood and anxiety disorders are more likely (compared to pregnant and postpartum women without these conditions) to smoke tobacco, drink alcohol, and use more medications and illicit substances.¹⁰

Perinatal mood, anxiety, and substance use disorders are associated with poor obstetric outcomes – like premature birth and low birth weight – and can negatively impact child development, including increased risk of cognitive, behavioral, and mental health problems.¹¹⁻¹⁶

The cost of untreated perinatal mood and anxiety disorders alone – not including untreated perinatal substance use disorders or IPV – is around \$32,000 per mother-infant dyad, or around \$14 Billion annually in the US.¹⁷

Supporting references are provided in [Appendix 1C](#).





What gaps in care does LTW address?

Professional organizations recommend screening for mood, anxiety, and substance use disorders, as well as IPV and social determinants of health during the peripartum period using standardized, validated screening tools, paired with further assessment and referral for treatment when indicated.¹⁸⁻²³

For those screening positive for substance use disorder, a Brief Intervention using Motivational Interviewing to support behavioral change and Referral to Treatment (SBIRT) is recommended.²¹⁻³⁰

It is also recommended that social determinants of health (things like safe housing, transportation, access to nutritious foods) are evaluated and women are connected with needed resources.³¹⁻³³

Despite strong evidence supporting these recommendations, they are not universally adopted.

- + 1 in 5 pregnant and 1 in 8 postpartum people are screened for perinatal mood and anxiety disorders³⁴
- + Perinatal substance use disorders and IPV often go undetected.^{1,4,5,22-24}
- + The majority of pregnant and postpartum women (about 80%) who are referred for treatment of depression, anxiety or substance use are not able to access evidence-based care for these conditions.³⁵⁻³⁷

Key patient, provider and systems-level barriers prohibit adoption of evidence-based recommendation and care coordination across pregnancy and the postpartum year.^{36,38} In fact, almost all maternal deaths are a result of patient, provider, and/or systems of care-related factors.³⁷

+ **Patient Factors: ~50%**

Patient-related factors include non-adherence to treatment plans, substance use, IPV, lack of social supports, unstable housing, and not recognizing the need for treatment.^{39,40}

+ **Provider Factors: ~25%**

Provider-related factors include failure to screen for mood/anxiety/substance use/IPV/social determinants of health, use of ineffective assessments or treatments, and poor communication and coordination of patient care.^{39,40}

+ **System Factors: ~20%**

System of care factors include a lack of systems to support provider-provider communication and coordinated patient care.^{39,40}





The good news ...

Women see their healthcare provider an average of 25 times during prenatal care and the first year of a newborn's life! This means that the perinatal care period offers ample opportunity for improvements in screening, intervention, communication and care coordination.^{39,40}

We have evidence-based practices that have the potential to reduce maternal mortality by:

- + Increasing screening and referral to treatment for perinatal mood, anxiety, and substance use disorders, as well as IPV and social determinants of health,³⁵⁻⁴⁰ and
- + Improving patient, provider and systems of care communication and coordination⁴⁰⁻⁴²

LTW was designed specifically as a system of care that addresses all these elements concurrently, providing a best practice model to support better screening, referral, and access to treatment to address perinatal mood and anxiety disorders, substance use disorders, IPV, and social determinants of health.

LTW was designed to offer these evidence-based services to pregnant and postpartum women while alleviating burden for obstetric and pediatric providers often associated with screening and follow-up care.

C. History of LTW and Science Supporting the Program

The LTW Program began with listening to small focus groups of pregnant and postpartum women who had experienced perinatal mood and anxiety disorders, substance use disorders, and IPV.^{43,44} The women who participated in these early focus groups told us that the most important aspect of their care was having "one", "trusted provider" that they could easily communicate with via text or phone throughout pregnancy and the postpartum year. They identified having a care coordinator as this person, someone who could assess issues in a "sensitive" and "non-judgmental" way and connect them to resources and/or treatment. They identified the care coordinator as a point of contact to assist in navigating the complex treatment systems and potential interface with legal and social service systems.





We then interviewed a national sample of obstetric (OB) and pediatric (PED) providers about their experiences and challenges in screening and referring pregnant and postpartum women to treatment for perinatal mood, anxiety, and substance use disorders.⁴³⁻⁴⁶ Key themes from providers included inadequacies in current screening and referral systems and a lack of communication and care coordination with all providers. LTW was developed to address these issues and focus groups were conducted to refine the system once built. More information about these developmental focus groups can be found in [Appendix 1A](#).

Next, the impacts of LTW were evaluated in a study that included more than 3,500 pregnant and postpartum women who were receiving care in a single, large, urban OB practice.⁴⁷ This clinical trial compared two cohorts of pregnant and postpartum women; those that received in-person SBIRT and those enrolled into LTW and was designed to mimic routine clinical care by using existing clinic staff (e.g., nurses) to enroll pregnant and postpartum women in LTW during their routine prenatal care. The aim of this study was to determine if people participating in LTW were more likely to be screened, screen positive, be referred for treatment, and attend treatment when compared with pregnant and postpartum women who received in-person SBIRT. The study found that LTW was well-received by pregnant and postpartum women, with 99% of women invited to participate in LTW agreeing to do so. The study also found that women enrolled in LTW (compared with those receiving in-person SBIRT at the OB clinic) were: (1) more likely to complete the text-based screening than women enrolled in the in-person SBIRT condition; (2) more likely to screen positive; (3) more likely to be referred for services subsequent to a positive screen; and (4) more likely to attend treatment for their indicated need(s). Importantly, LTW promoted enhanced access to care for those individuals in rural and medically underserved areas. The full results of this study can be found in [Appendix 1B](#).

Subsequently we conducted a randomized controlled trial comparing LTW, compared to Usual Care (UC) in-person screening and referral to treatment within prenatal care. 72.2% (415/575) of eligible individuals agreed to take part in the study. Participants assigned to LTW were 3.0 times more likely to be screened, 95% CI:[2.4, 3.7], over 9.4 times more likely to screen positive, 95% CI:[5.2, 16.9], 13.2 times more likely to be referred to treatment, 95% CI:[3.2, 54.5] and 17.1 times more likely to attend treatment, 95% CI:[2.3, 125.9], compared to those assigned to UC. Given that more participants assigned to UC, compared with those assigned to LTW, did not complete a screen and, therefore, would not be eligible for subsequent outcomes (that is, screened positive, referred to treatment, and attended treatment), we examined results among all





participants completing a screen. Among participants who completed a screen, those assigned to LTW compared with UC were 3.1 times more likely to screen positive, 95% CI:[1.8, 5.4], 4.4 times more likely to be referred to treatment, 95% CI:[1.1, 18.1], and 5.7 times more likely to attend treatment, 95% CI:[0.8, 41.7]. Among participants assigned to LTW and self-identifying as White or Black, a significantly greater proportion screened positive, were referred to treatment, and attended treatment, compared to their respective subgroup in the UC intervention. Among participants meeting criteria for a rural or partially rural or urban residence, defined by Health Research and Services Administration (HRSA) a significantly greater proportion of individuals assigned to LTW were screened and screened positive, compared to individuals assigned to UC. Participants living in a partially rural region were more likely to be referred for treatment, and attended treatment, compared to individuals assigned to UC and residing in a partially rural area.

As a follow-up to this study, LTW is currently being evaluated in a pragmatic, stepped wedge cluster randomized trial that compares LTW to an evidence- based, in-person SBIRT in OB clinics. The first goal of this study is to determine if there are differences in rates of treatment attendance and retention for perinatal mood, anxiety, and substance use disorders between women in the two conditions (In-person SBIRT v. LTW). We expect that LTW will increase rates of attendance and retention by increasing identification of these issues among women, connecting the with a care coordinator trained in clinical social work, and employing a shared decision-making process to support patient-centered care navigation. A second goal of this study is to determine differences in patient-reported outcomes like symptoms of depression, substance use, and maternal functioning and well-being. We expect that women in receiving LTW will report reduced symptoms and increased functioning compared with women receiving in-person SBIRT. Study enrollment will be completed October 1st, 2025 and will include a total of 10,000 participants. Participant follow-up includes at least 6 months of pregnancy and 12 months postpartum thus we anticipate data collection to be completed by April, 2027. As soon as the results of this trial are available, we will provide them here. This trial includes a total of 13 prenatal clinics located in South Carolina that are diverse with respect to size and location of the clinic and complexity of patients served within the clinic. Patients served within these clinics are diverse with respect to race and ethnicity, insurance and geographic residence in South Carolina. Barriers to and facilitators of implementation of LTW was determined through quantitative and qualitative data as LTW was implemented as part of standard of care within these clinics and informs our approach to implementation of this program within this guide.





D. Key Advantages of Implementing LTW

1: LTW improves the delivery of care.

LTW has the potential to improve systems of care because it was designed by end users through patient and provider engagement and qualitative research. LTW addresses key aspects of improving healthcare systems defined by the Institute of Medicine by leveraging technology and key personnel with the background and training to create coordinated care teams that can address the needs of pregnant and postpartum women.

#2: LTW is accessible.

Pew Research Center demonstrates that 91% of Americans own a smartphone⁴⁸ – the only technology patients need for LTW – making this intervention accessible to the vast majority of pregnant and postpartum women living in rural or urban areas with different economic, educational and racial backgrounds.

#3: LTW is patient centered.

LTW was developed and refined based on qualitative interviews with racially, geographically, and socioeconomically diverse pregnant and postpartum women with perinatal mood, anxiety, and substance use disorder, IPV and social determinants of health needs. The Program uses a shared decision-making process to engage patients in referral decisions that support patient preferences, thus increasing the likelihood that they will follow through with the referral.⁴⁹⁻⁵¹ Additionally, LTW continues to incorporate feedback from ongoing process evaluations and key stakeholder advisors.

#4: LTW is timely.

LTW screenings are performed longitudinally – that is they are completed in each trimester, as well as 1, 3, 6, 9 and 12-months following delivery. The timing of these screens facilitates early detection and intervention.

#5: LTW is efficient.

LTW screens are completed by patients in less than 60 seconds. The REDCap hub is designed to reduce administrative burdens and optimize the care coordinator's time with patients. Finally, the remote care coordinator is reachable by phone and can work with multiple practices, as opposed to having a care coordinator physically located in every clinic.

#6: LTW is equitable.

LTW creates universal screening with accessible and scalable technology shown to reduce racial disparities.⁴⁵





#7: LTW is coordinated.

The LTW care coordinator facilitates communication between behavioral healthcare providers, obstetric and pediatric providers, and the patient so that care is not siloed.

#8: LTW is sustainable.

LTW leverages scalable technology designed by end users, and is a low cost, reimbursable service. SBIRT billing codes are supported nationally by commercial insurances, Medicare, and Medicaid.^{53,54}

E. Introduction to Core LTW Elements

LTW consists of four primary core components that work together to create a structured support system for postpartum individuals. These core elements include:

- + **Patient Enrollment & Screening:** Identifying eligible individuals and assessing their needs.
- + **Ongoing Monitoring & Communication:** Using technology to maintain contact and track patient well-being.
- + **Care Coordinator Engagement:** Providing personalized support and linking patients to necessary resources by leveraging the skillsets of centralized care coordinators credentialed as Clinical Social Workers.
- + **Data Collection & Analysis:** Monitoring program effectiveness and improving implementation strategies by collecting, analyzing, and reporting key performance indicators at regular intervals across implementation.





- + These elements work in concert with the motivation, skills, and expertise of implementation sites and their staff to improve healthcare access, equity, and quality for pregnant and postpartum women.

A Note About LTW Technology Integration

LTW uses a combination of digital tools to facilitate communication and care coordination. The remaining modules of this toolkit will provide step-by-step instructions for the best-practices in integrating and operating these technology-driven components of LTW.



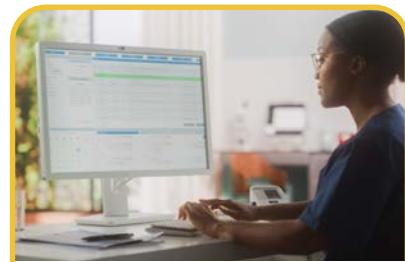
TEST MESSAGING

Enables timely check-ins, reminders, and resource sharing.



REDCAP

Supports data collection, patient tracking, and program analytics.



EHR COMMUNICATIONS

Integrates patient information within clinical workflows to enhance provider engagement.

F. How to Use This Toolkit

This toolkit is meant to serve as a guide for organizations implementing LTW. We recognize that each organization and their partnering clinic will have unique resources and needs that will likely require adaptations and minor modifications to make LTW work smoothly within diverse workflows, with diverse practitioners and patients. The toolkit materials focus on best practices and core concepts in LTW implementation. Most modules will contain the following common elements:

- + Step-by-step guides for implementing core program components
- + Forms, tools, and resources to support implementation
- + Considerations for making site-specific adaptations





What can I expect from the remaining modules of this Toolkit?

Module 2: Organizational Preparation

This module outlines the foundational components necessary for LTW implementation, including staffing models, readiness components, and technology access.

Module 3: Provider Engagement & Program Implementation

This module focuses on how to introduce LTW to healthcare providers at OB, PED clinics, and delivery hospitals, including steps for ensuring their clinic or hospital is prepared for seamless integration.

Module 4: Patient Enrollment & Workflow

This module describes options for efficient and effective enrollment of patients, including workflow considerations, technical tools, and patient communication scripts.

Module 5: Patient Experience & Communication

This module explains the patient journey within LTW, from initial screening to ongoing text-based interactions and care coordinator engagement.

Module 6: Care Coordinator Role & Responsibilities

This module provides a comprehensive guide for selecting, training, and supervising care coordinators, including REDCap usage, documentation best practices, and specialized resources.

Module 7: Data Collection & Program Evaluation

This module covers the importance of data tracking, key metrics to monitor, and strategies for assessing program impact.

As additional resources are developed, they will be made available as appendices or linked materials to support implementation.

G. Additional Resources

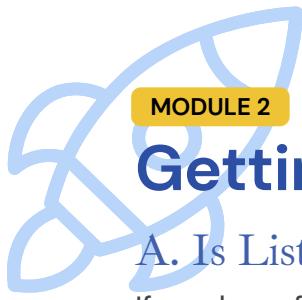
REDCap: project-redcap.org

Social Determinants of Health: odphp.health.gov/healthypeople/priority-areas/social-determinants-health

Share Decision Making: pcori.org/topics/shared-decision-making

References: Supporting references are provided in [Appendix 1C](#).





MODULE 2

Getting Started

A. Is Listening to Women a Good Fit for My Organization?

If you have found this Implementation Toolkit, it is likely that you and/or your organization has interest in improving perinatal and postpartum physical and mental health care for women in your area. That passion for improving the care experience of pregnant and postpartum women is a necessary foundation for success with the LTW program.

B. Staffing for Core Listening to Women Activities

At its core, LTW is focused on connecting pregnant and postpartum women with highly-skilled care coordination. Connections are supported by technologies that enhance reach and accessibility, and promotes shared decision making that facilitates timely connection with healthcare, mental health treatment, as well as resources to address IPV and social determinant of health needs.

To that end, the most important component for LTW readiness is ensuring that your organization has appropriately credentialed and trained staff ready to fulfill the essential LTW roles and responsibilities.

Note that each organizational staffing model may differ – some sites may choose to combine roles, create hybrid positions, or rely on some external resources more than others. Multiple factors, including anticipated patient volume, organizational resources, patient population needs, and ancillary services offered may all impact staffing models.

However, we have provided a general listing of activities critical to LTW success, with a suggested division by potential role/position title.

Position Title: Care Coordinator

The Care Coordinator is the most critical position within the LTW program and, as such, significant attention should be given to ensuring that the role is filled with a qualified, and well-trained individual. The care coordinator's overall role is to: 1) Review all completed maternal mental health screens and relevant clinical information from the Electronic Health Record (if applicable); 2) For patients screening positive for maternal health concerns, complete a phone-based brief assessment and intervention and provide appropriate referral(s) to resources and/or treatment using shared decision-making and motivational interviewing principles; 3) Communicate screening and if appropriate referral information to the participant's provider; 4) Determine if the participant





accessed the resources and/or treatment referral(s) and assist with re-connecting participants to appropriate resources and/or referrals to treatment, if needed.

We have dedicated an entire module (Module 6) in this Toolkit to detailed discussion of Care Coordinator selection, training, and supervision/fidelity monitoring. For the purposes of this section, we will briefly touch on the qualifications, training, and responsibilities associated with this position.

Prerequisite Training/Qualifications

- + Minimum Bachelor's degree (Masters preferred) in nursing, Social Work, or a related field.
- + Minimum of 2 years of experience in patient care coordination or case management.
- + Experience completing mental health assessments, brief interventions and referrals to appropriate care using shared decision making and motivational interviewing principles.
- + Knowledge of community health resources and patient advocacy.

Job Responsibilities

- + Serve as the main point of contact for enrolled patients.
- + Conduct screenings and follow-ups to assess patient needs.
- + Integrate motivational enhancement and shared decision-making strategies as appropriate to build rapport and increase patient engagement.
- + Appropriately identify, triage, and de-escalate potential medical or mental health crisis situations.
- + Provide referrals and connect patients with appropriate healthcare and social services.
- + Document interactions and maintain accurate patient records.
- + Communicate with OB/Gyn providers as appropriate and indicated.

Additional LTW Specific Training Required

- + Motivational enhancement and shared decision-making strategies.
- + Crisis management and de-escalation strategies.
- + LTW REDCap workflows.
- + LTW documentation and data entry.
- + When applicable, EHR documentation best practices.
- + LTW Case Practicum.





Position Title: Program Manager

The Program Manager provides operational oversight and management to the daily activities involved in LTW delivery. This person often serves as the “face” of the LTW program in communicating with LTW, external clinical partners, and stakeholders. For many organizations, this role and its associated responsibilities may be rolled into existing leadership or program management positions. For larger organizations, or those intending to serve high patient volumes, having a dedicated LTW Program Manager may be beneficial.

Prerequisite Training and Qualifications

- + Bachelor’s or master’s degree in public health, Healthcare Administration, or a related field.
- + Minimum of 3-5 years of experience in program management or healthcare operations.
- + Experience with data management, regulatory compliance, and stakeholder coordination.
- + Experience with budgetary management.
- + * Could be rolled into role of existing organizational leadership

Job Responsibilities

- + Oversee day-to-day program operations and ensure alignment with program goals.
- + Manage budgets, timelines, and reporting requirements.
- + Serve as the primary point of contact for internal and external stakeholders.
- + Liaise with LTW to monitor program effectiveness and implement quality improvement strategies.

Additional LTW Specific Training Required

- + LTW REDCap Workflows.
- + When applicable, Electronic Health Record (EHR) system training.
- + Leadership and project management reporting training.
- + As applicable, compliance and regulatory training (e.g., HIPAA, IRB requirements).





Position Title: Healthcare Provider Liaison (Optional)

Establishing and sustaining strong collaborations with clinical (OB/Gyn and delivery hospital) sites is critical to the successful implementation of LTW and is covered in detail in a subsequent Toolkit module ([Module 3](#)). Whereas the LTW is poised to offer assistance in finding and establishing clinical partnerships, we anticipate that many organizations may approach LTW with clinical partners in mind or with established relationships. Depending on several factors – including length and strength of the relationship(s) with clinical partners, number of clinical partners, and clinical partner attributes (e.g., staff turnover, workflows, enthusiasm for LTW, etc.) – LTW sites may consider specifying a role for a Healthcare Provider Liaison.

Prerequisite Training and Qualifications

- + Bachelor's or master's degree in healthcare administration, nursing, or a related field.
- + Strong understanding of clinical workflows and patient referral processes.
- + Experience in provider engagement, education, or outreach.

Job Responsibilities

- + Introduce and promote program adoption among healthcare providers.
- + Train clinic staff on program workflows and any applicable data entry procedures.
- + Facilitate communication between healthcare providers and program staff.
- + Address provider concerns and troubleshoot implementation issues.
- + Identify and “vet” community-based programs that may serve as referrals within LTW.

Additional LTW Specific Training Required

- + Communication and relationship-building strategies.
- + As applicable, technical training on EHR system integration.
- + Provider engagement and education methodologies.





Position Title: IT Support Specialist (Optional)

The technologies required to support LTW are minimal – networked computer with reliable internet access and phone service with texting capabilities – but essential to the successful delivery of LTW services. More information regarding technology requirements may be found later in this module.

Some sites may find it beneficial to have in-house IT support. For those organizations, position details are provided.

Prerequisite Training and Qualifications

- + Bachelor's degree in information technology, computer science, or a related field.
- + Experience in healthcare IT support, including database and software troubleshooting.
- + Knowledge of data security and privacy regulations.

Job Responsibilities

- + Provide technical support for REDCap, EHR, and other program systems, as applicable.
- + Assist with software installation, configuration, and troubleshooting.
- + Ensure compliance with cybersecurity and data protection policies.
- + Train program staff on proper technology use and security best practices.

Additional LTW Specific Training Required

- + Advanced cybersecurity and HIPAA compliance training.
- + Hands-on training for program-specific software (i.e., REDCap, Twilio).





Position Title: Data Analyst (Optional)

Data analytic support is a key service provided by the LTW. Our talented team of data managers and analysts help ensure that critical programmatic data is being collected systematically, correctly, and completely. In addition to establishing audit trails within the LTW REDCap system, our data team runs regular quality assurance checks to reduce missingness and increase confidence in the validity of the data entered into the system. Importantly, the LTW provides regular feedback reports to implementation sites regarding data quality, patient process measures, and key performance indicators to help guide programmatic improvement.

Some sites may have interest in having data management/analytic support in-house to support additional data quality improvement, data collection enhancements, or analysis and reporting. In these instances, we make the following recommendations.

Prerequisite Training and Qualifications

- + Bachelor's degree in data science, public health, biostatistics, or a related field.
- + Experience with data management tools, including REDCap, Excel, and SQL databases.
- + Knowledge of statistical analysis and performance metrics.

Job Responsibilities

- + Collect, analyze, and report on program data.
- + Ensure data integrity and compliance with privacy regulations.
- + Support program evaluation efforts and outcome reporting.
- + Develop dashboards and data visualization tools for stakeholders.

Additional LTW Specific Training Required

- + Data security and HIPAA compliance training.
- + Training on program-specific data entry and retrieval methods.





C. Strong Collaboration with Healthcare Providers Serving Pregnant and Postpartum Women

Robust partnership(s) with OB/GYN clinics and/or delivery hospitals in your service area are critical to the success of LTW. Clinical partners not only provide the optimal venue for engaging and enrolling pregnant and postpartum women in the LTW program; they may also often be the most logical point of contact for follow-up and ongoing monitoring, or care of many healthcare needs identified through LTW screening and Care Coordinator contact.

An essential initial step toward successful implementation of LTW is the identification and engagement of practice champions and practice quality improvement members who are motivated to integrate maternal mental health screening into the practice and can authorize a quality improvement initiative like LTW or engage others who may be a good fit to serve in these roles. Ideally pregnant patients are enrolled in LTW early in their prenatal care; however, it is also possible to implement this program during a hospitalization (e.g., following labor and delivery). We have provided a sample spreadsheet to help with identification and tracking of practice champions ([Appendix 2A](#)). Examples of practice champions may include and obstetric care clinician and practice administrator.

- + **Obstetric Care Clinician Champion (OC3):** A licensed independent practitioner (e.g., physician, nurse practitioner, or certified nurse–midwife) who is an advocate who can engage and support obstetric care clinicians and staff in the LTW implementation process. The OC3 commitment is typically 1–2 hours per week for 3–6 months.
- + **Practice Administrator Champion (PAC):** A person typically working in an administrative role (e.g., practice manager or administrative leader) who is dedicated to this effort and can spend the needed time to make sure the initiative moves forward. For the implementation to be successful, your practice will need to support and commit to the PAC having the dedicated time and authority needed for the implementation of LTW. Time needed is estimated to be 3–4 hours per week for 3–6 months.

[Module 3](#) of this Toolkit provides helpful guides, tools, and resources to assist your organization in identifying potential clinical site(s), engaging these sites, and onboarding appropriate site(s) to the LTW program.

Your organization may already have a strong partnership with one or more clinical sites in your area or may even be embedded in a clinical site (OB clinic/delivery hospital). Once sites are identified, conversations between your organization and your clinical site(s) should take place to determine the optimal relationship for your specific case.





Of note, the level of integration between the organization delivering LTW and the clinical sites may vary across implementation cases. However, for reference, three of the most common integration models are described below:

1: Independent Partners

In this model, Organization A is responsible for all aspects of LTW delivery. Organization A collaborates with clinical site(s) for the purposes of engaging and enrolling pregnant and postpartum women into the LTW program; however, Organization A is not integrated with clinical site(s) EHR system(s) and generally delivers LTW services independent of the clinical site(s) with more limited patient-level cross communication. This model may describe an independent community-based organization partnering with local obstetric providers in their community.

#2: Partially Integrated Partners

In this model, Organization B is responsible for all aspects of LTW delivery. Organization B partners with clinical site(s) for the purposes of engaging and enrolling pregnant and postpartum women into the LTW program. Organization B has bi-directional communication with clinical site(s) regarding patient needs and outcomes, as appropriate and indicated. This communication may be facilitated by Organization B having limited (or full) access to the clinical site(s) EHR and/or by other agreed upon secure methods of closed-loop communication. This model may describe the relationship between a managed care organization delivering LTW and the clinical sites served by their organization.

#3: Embedded Partners

In this model, the LTW infrastructure is housed within an existing clinical site or healthcare system. This model may be particularly appealing to larger volume or regional obstetric providers who are interested in efficiently streamlining care coordination across multiple obstetric clinics within their system or network.

If you are interested in learning more about adopting the LTW platform, please contact the MUSC Center for Telehealth for more information.

D. Additional Resources

Basic Information Regarding Data Use Agreements

nnlm.gov/guides/data-glossary/data-use-agreement



Introducing LTW to Clinical Sites

A. Finding Optimal Settings for LTW Implementation

Depending on your organization's level of integration with potential clinical sites, you may (or may not) be establishing a new collaborative relationship in the context of LTW delivery. Whether you are setting out to find the optimal clinical site(s) for partnership, or are fully embedded within a clinical site, the factors contributing to successful clinical site selection are similar and include a combined consideration of both patient populations served and the functional characteristics of the clinical practice site.

Ideally pregnant individuals are enrolled in LTW during their first prenatal care appointment, but the program could also be implemented anytime during prenatal care or in a hospital setting following labor and delivery. Prior to enrolling patients into LTW, practices should consider the patient age, language, literacy, and access to a smart phone. LTW is delivering the standard of care (i.e., screening, brief intervention, and referral to treatment), and therefore parental consent for prenatal care treatment for minors should be obtained as part of routine prenatal practice. LTW is available in Spanish and English, and questions are written at the 6th grade reading level. This should be considered when enrolling patients. Lastly, patients require access to a smart phone with a service plan. Organizations should determine what cell phone and services are potentially available to their patients during pregnancy and the postpartum year. For example, South Carolina Medicaid will pay for cell/service for pregnancy and postpartum year. There is also the federal Lifeline Assistance program which provides monthly cell phone service (minutes, data and texting) to those who qualify including individuals receiving Medicaid insurance. Other states may have similar resources/programming to assist the small minority of patients that may not have personal smartphone access.

Given that the optimal timing for patient enrollment in LTW is during their first prenatal care appointment, the ideal clinical setting(s) for LTW implementation would be one in which initial prenatal care appointments regularly take place. As noted in Module 2, optimal clinical sites will be willing and able to identify practice champions and practice quality improvement members who are motivated to integrate maternal mental health screening into practice and can authorize a quality improvement initiative like LTW. These champions include an Obstetric Care Clinical Champion and a Practice Administrator Champion.





- + **Obstetric Care Clinician Champion (OC3):** A licensed independent practitioner (e.g., physician, nurse practitioner, or certified nurse–midwife) who is an advocate who can engage and support obstetric care clinicians and staff in the LTW implementation process. The OC3 commitment is typically 1–2 hours per week for 3–6 months.
- + **Practice Administrator Champion (PAC):** A person typically working in an administrative role (e.g., practice manager or administrative leader) who is dedicated to this effort and can spend the needed time to make sure the initiative moves forward. For the implementation to be successful, your practice will need to support and commit to the PAC having the dedicated time and authority needed for the implementation of LTW. Time needed is estimated to be 3–4 hours per week for 3–6 months.

Though it is ideal to engage sites regularly encountering women early in their pregnancy for maximal benefit from LTW, the program can be introduced to women at any point during their pregnancy or in the immediate post-delivery context. Some organizations – particularly those serving patients in areas where prenatal care is less accessible and/or underutilized – may consider embedding LTW in delivery/postpartum units.

B. Introducing LTW to Potential Implementation Sites

The Importance of a Strong Introduction.

The clinical implementation sites will often have policies and workflows that have been crafted over time and are familiar to staff/employees. Making a strong initial impression can overcome concerns that arise when there may be potential changes to that workflow. Buy-in on the importance of the gap LTW is designed to fill and accessibility of the program can reduce challenges that may emerge from anxiety around practice workflow changes, or the addition of another work task assigned to staff that may already be feeling overwhelmed.

Organizing a Strong Introductory Meeting.

Perhaps the most efficient and effective method for introducing LTW to clinical site staff and engaging them in the process of integrating LTW into their workflow is to host an in-person introductory meeting at the clinical site. The specifics of your introductory meetings may vary depending on the strength and length of your collaboration with the clinical site and the characteristics of your partnership; however, there are some core facets of these introductory meetings that our team has found to contribute to successful onboarding.





1. When is the best time for program introduction?

- + Not too far in advance of actual implementation
- + Introductory meeting should be preceded by communication with clinic leadership and practitioners
- + May be beneficial to have regular 1:1 contact with champions or key members of the clinic as the clinic prepares for implementation subsequent to the introductory meeting
- + Consider scheduling a follow-up meeting with clinic as site nears completion of their readiness checklist activities

2. What information should be provided during an Introductory Meeting?

- + Purpose of program
- + Benefits of program
- + Effort required from practice
- + Workflow integrations that have worked in other clinical sites
- + Introduction of site champions and their role as liaisons for the LTW program implementation

3. Who should be engaged at the site to attend the Introductory Meeting?

- + Practice Physicians
- + Advanced Practice Providers and Nursing
- + Staff
- + Administration

4. Who within our organization should lead the Introductory Meeting agenda?

- + Ability to provide a comprehensive and concise overview of the LTW program, as well as enough familiarity with the LTW workflow to answer potential questions
- + Ability to relay basic information regarding the availability and impact of treatments for mental health and substance use issues (e.g., effective treatments exist and LTW can help patients access them)
- + Ability to present the agenda information in a motivating, encouraging manner (e.g., motivational enhancement strategies)

We have found that the majority of practices find that their nursing staff are best positioned to introduce the LTW program to patients and engage patients in the





enrollment process. For this reason, follow-up site visits may focus more on functional aspects of integrating LTW introduction and enrollment procedures with nursing staff. However, we have found that engaging the entire practice in the initial introductory meeting is helpful for ensuring that all practice members are motivated and engaged in LTW implementation. Of note, it may not be feasible to meet with all members of the clinic team at the same time. Your organization may prefer to schedule multiple introductory meetings to accommodate schedules or to segregate clinical team members by their role (e.g., one meeting for staff, one for providers, etc.).

5. Are there any strategies for enhancing clinic and clinician motivation to implement LTW?

Motivational enhancement strategies have proven effective in facilitating behavior change among healthcare practitioners, particularly in promoting the adoption of evidence-based practices and improving patient care outcomes. Our team has found it helpful to incorporate components of a widely used approach — Motivational Interviewing (MI) — into the tone and content of our introductory meeting. MI is a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence. When applied in our introductory meetings with healthcare professionals, MI can improve their engagement with practice change efforts, like implementing LTW.¹ In addition, we encourage a reliance on strategies like feedback and goal-setting which, when combined with motivational techniques, have been shown to enhance practitioners' self-efficacy and accountability, which are critical drivers of sustained behavior change.²

Furthermore, interventions that leverage peer influence and social comparison—such as audit and feedback interventions—can motivate practitioners to align their behaviors with best practices. These strategies are more effective when feedback is specific, timely, and perceived as credible. According to a systematic review by Ivers et al. (2012), feedback is most impactful when it includes clear action plans and is repeated over time, suggesting that sustained motivation and support are essential components of successful implementation. Integrating these motivational strategies into professional development and organizational culture can foster long-term improvements in healthcare delivery.





6. Are there any templates or other resources that our team can use to facilitate communication with our clinical implementation site(s)?

Our team has assembled a handful of templates that we have used to guide our initial communications with clinical sites. In the Appendix, you can find the following resources:

- + [Template for Introductory Email to Practitioners \(Appendix 3A\)](#)
- + [Template for Follow-Up Reminder Email to Practice/Practitioners \(Appendix 3B\)](#)
- + [Template for Introductory Meeting Agenda \(Appendix 3C\)](#)
- + [Trifold Brochure Template- English \(Appendix 3D\)](#)
- + [Trifold Brochure Template – Spanish \(Appendix 3E\)](#)
- + [Informational Flyer Template \(Appendix 3F\)](#)
- + [Introductory Slide Set Template \(Appendix 3G\)](#)

Materials specifically for use in training the clinical team in patient engagement and enrollment, as well as describing the patient experience with LTW, are presented in subsequent modules ([Modules 4](#) and [Module 5](#)). While these materials will be introduced in the introductory meeting, we suggest scheduling a follow-up meeting that is dedicated to training practice staff who will be responsible for engaging and enrolling patients in LTW for that given practice.

7. What should we have accomplished by the end of the introductory meeting?

The introductory meeting is meant as a formal “kick-off” for LTW implementation. At the end of a successful introductory meeting, your team should have accomplished three main things:

1. Built (upon) an enthusiastic foundation of support for LTW implementation in the practice setting by integrating motivational enhancement strategies to demonstrate that the LTW program is feasible and reduces staff workload.
2. Established an open and proscribed channel of regular communication between the practice and the LTW team.
3. Introduced and reviewed the LTW Site Readiness Checklist to provide practices with a clear understanding of action items and contact cadence prior to launch.





C. Communication With Practices

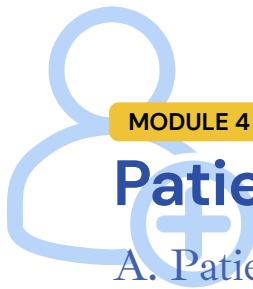
It is important to set the expectation that the Introductory Meeting is the kick-off of an ongoing, bi-directional communication between the clinical practice and the LTW team – the Introductory Meeting is just the beginning. Regular communication between the practice and the LTW team allows for the use of audit and feedback strategies that can both improve the fidelity of implementation and help the practice feel more supported in their implementation.

D. Additional Resources

Lifeline Assistance

fcc.gov/general/lifeline-program-low-income-consumers





Patient Engagement and Enrollment

A. Patient Selection: Who Can Benefit from LTW?

The goal of LTW is to improve screening, attendance, and retention in mental health and substance use disorder treatment among pregnant and postpartum women.

Stigma is one of the biggest barriers preventing women from receiving resources and/or treatment for mental health, substance use, and IPV. Prior research suggests that by using text message-based screening and phone-based assessments women feel 'less likely to be judged' 'ashamed' or 'embarrassed' about these conditions, resulting in a higher likelihood of endorsing issues when they arise. In addition, the script used for enrollment in LTW helps to normalize mental health and substance use problems, as well as promote a sense of agency by reinforcing that evidence-based interventions exist that can help.

LTW is designed for:

- + Any pregnant or postpartum woman, up to 12 months post-delivery of a live birth, still birth or fetal/pregnancy loss, can benefit from LTW. Ideally, women will be enrolled into the program during **their first OB visit**, or when they first receive medical care for a new pregnancy.
- + Universal screening and therefore includes women with and without a history of mental health, substance use, and/or IPV concerns.
- + Women fluent in English or Spanish. The program has also been evaluated by women from many cultural backgrounds and identities to make sure the questions are culturally relevant to a variety of populations. If a patient primarily speaks a language other than English or Spanish, the LTW program might not be a good fit for them at this time.
- + Women who have access to a smartphone or tablet with consistent internet access. Because of the nature of the surveys that drive the LTW program, patients will need to have access to a smartphone or tablet to complete the screenings. Importantly, programs exist to help increase access to cell phone service, data, and texting including through some individual state's Medicaid programs and through the federal Lifeline program for individuals of low income.

1 Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). Guilford Press.

2 Ivers, N., Jamtvedt, G., Flottorp, S., Young, J. M., Odgaard-Jensen, J., French, S. D., ... & Oxman, A. D. (2012). Audit and feedback: Effects on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*, (6), CD000259. <https://doi.org/10.1002/14651858.CD000259.pub3>





B. Who Can Enroll Patients into LTW?

Patients can be enrolled into LTW in a variety of ways. First, obstetric clinics or providers can enroll patients into the program during or after a new obstetric visit. We have found that in clinical settings, nursing staff are often optimally positioned to integrate LTW enrollment into their workflow; however, this may vary from site to site. Enrollment to date has occurred in a clinic setting with a nurse introducing the program to women. If an enrollment does not take place during the first prenatal care appointment, the women can be enrolled at a subsequent prenatal visit. Enrollment to date has also occurred remotely following a prenatal care visit. In this instance, a staff member attempts to contact the woman by phone to introduce the program and enroll the patient. If the staff member is unable to reach the patient, and because LTW is considered part of the clinic's standard of care, the staff member can enroll the patient remotely. There are other options for enrollment depending on staff and setting. Examples of these include maternal health program staff (i.e., Home Visiting Programs) or community organizations serving pregnant and postpartum populations (e.g., Community Based Doulas or other Community Health Workers), can enroll women into the program. Additionally, managed care organizations (MCOs) can enroll patients into LTW after learning of a new pregnancy.

Once a patient with a new pregnancy has been identified, enrollment should involve a conversation with the patient explaining the program combined with a workflow for entering the patient's information, including cell phone number, into the LTW system. Automated enrollment without an introduction is permitted but engagement with the program is higher when a nurse or staff introduce the program before enrollment.

C. Overview of LTW Enrollment Workflow

The workflow of enrolling patients into LTW may vary based on your organization type and integration status (e.g., in-clinic implementation with or without EHR integration versus MCO).

1. Clinic Enrollment Workflow

Prior to starting LTW enrollments, one or two LTW Champions should be identified from the clinical team. These are individuals who understand the need for and benefits of this program and who will be responsible for discussing and enrolling new patients. This can be a nurse, provider or administrator who is part of the clinic. Enrollment discussions should happen at one fixed timepoint across patients to streamline workflow. An option that has worked well in clinics is introducing and enrolling into LTW during the nurse education portion of a new obstetric visit. See [Appendix 4A](#) for an example of an enrollment script.





We recommended embedding an enrollment form into the clinic electronic health record (EHR) dashboard to easily highlight patients to be enrolled for clinic staff and to easily link to access the REDCap Enrollment form. This functionality would also ideally allow for crosschecking of individuals eligible for enrollment versus those who were actually enrolled, and facilitate any additional enrollments as needed.

Once patients have been enrolled using the REDCap form (details below), their enrollment should be verified. This can be done by simply asking the patient if they received the LTW welcome text message. We recommend creating an enrollment checklist ([Appendix 4F](#)) with an overview of each step for easy reference by clinic staff/nurses who will be responsible for patient enrollment.

Enrollment can be triggered in a variety of ways and can be automated. Billing codes for screening and referral to treatment exist but vary from state-to-state and insurance and can be considered for sustainability of the program.

2. MCO Enrollment Workflow

Each implementation site should identify a method for identifying eligible patients and should identify enrollment champions for their site. These individuals will be responsible for contacting eligible patients to introduce the LTW program and facilitate the enrollment process. Identified patients should be contacted by phone and email. See the Sample Email ([Appendix 4C](#)) and Flyer ([Appendix 4G](#)), which can be disseminated to identified individuals. This person can also be responsible for entering the patient's information into the REDCap form.

Once a patient has been enrolled using the REDCap form (details below), their enrollment should be verified. This can be done by simply asking the patient if they received the LTW welcome text message.

D. Introducing the Program to Patients

Introduction of the LTW program should include information on how the program works, why it is being used, and ways in which it has benefited other patients who have used it. Patients should be allowed to decline or "opt-out" of LTW as part of the enrollment process. Brochures or handouts (examples available in [Appendix 3D](#), [3E](#), and [3F](#)) should be made available so patients can access information about LTW in multiple ways (i.e. verbally, through printed materials, online materials, etc.). See the Sample Enrollment Script ([Appendix 4A](#)) for an example of what this conversation can look like, and talking points ([Appendix 4B](#)) for a summary of important notes about LTW.

It can be helpful to remind patients about the LTW program during their prenatal





care visits. There can be a lot of information to absorb during the first prenatal appointment, including any emotional response to confirmation of a new pregnancy, so it is understandable that patients might need reminders about the program.

See [Appendix 4E](#) for a brief script staff can refer to.

E. Identifying Eligible but Not Enrolled Patients

We recommend having a procedure in place to verify patient eligibility for LTW and check against patient enrollment. This should be done on a regular basis, ideally multiple times per week or month, depending on clinic volume, using automated systems. If an eligible patient is identified as not enrolled, a clinic staff can call them to explain and enroll them into the program (see [Appendix 4D](#) for example phone call, voice mail and text message scripts). To avoid patients who opted-out from enrolling into LTW, we recommend a tracking system to indicate as such.

F. Directions for Enrollment

Below is an example for clinics that choose to integrate LTW enrollment into their EHR. Patients can be enrolled into LTW using a form in REDCap. To do this, you will need the following information:

- + Patient Medical Record Number (to link back to the EHR)
- + Insurance Type (If Medicaid, these women are provided with additional information about prevention of mental health problems)
- + Estimated Date of Delivery (If integrated EHR this can be automatically updated with the Actual Date of Delivery, or will need to be manually updated.)
- + Name of Clinic/Practice receiving prenatal care (Optional, but helpful if there are multiple clinics where patients are being enrolled).
- + Preference for email or cell phone invitation (e-mail invitation is indicated if a patient reports their cell phone number is likely to change during pregnancy and/or postpartum)
- + Cell phone number or e-mail address
- + Preferred language (English or Spanish)

Example of the REDCap enrollment form:

Listening to Women & Pregnant & Postpartum People (LTWP) Enrollment

Date: Today

MRN: Please enter the full MRN, including leading 0's.

Medicaid Insurance? Yes No

Name of clinic where you are enrolling patient into LTWP:

- Penn State Health
- Advanced Maternal Care Center
- Women's Health Lancaster
- UniversityHealth Anne
- East Cooper Women's Center
- Women's Health Daniel Island
- Women's Health Houston
- Women's Health Lancaster

Will the patient's cell phone number likely change in the next 12 months? If Yes, select email invitation. If No, leave SMS invitation selected.

SMS invitation (contains survey link) Email invitation (contains survey link)

Cell Phone Number: (include Area Code)

Does the patient want to receive the LTWP text message messaging in English or Spanish? If English, leave English selected. If Spanish, select Spanish.

English Spanish

Submit





G. Preparing women for what to expect from LTW

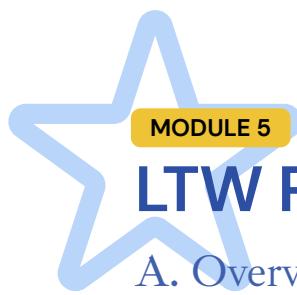
Once a patient is enrolled into LTW, they will receive a brief introductory text message with a link to a video containing information about the program. They will also receive their first screening survey. The brief screening will ask about current mental health symptoms. It will be sent via text message **every 3-months** throughout pregnancy, 1 month following delivery and **every 3-months** during the postpartum year. After completing the screening, patients will be given immediate feedback via text message, with resources. They may also be contacted by a care coordinator via phone, based on their screening responses, if support is needed. Patients can also initiate contact with their care coordinator during regular business hours via phone. The next module ([Module 5](#)) provides an in-depth overview of the patient experience with LTW.

H. Additional Resources

Appendix

- + [ww](#)
- + [4B. Introduction and/or Talking Points](#)
- + [4C. LTW Sample Enrollment Email](#)
- + [4D. Phone Call, Voicemail and Text Scripts](#)
- + [4E. LTW Patient Reminder Script for Clinic Staff](#)
- + [4F. Enrollment Checklist](#)
- + [4G. Flyer](#)
- + [4H. Brochures \(English and Spanish\)](#)





MODULE 5

LTW Patient Experience

A. Overview of Patient Experience with LTW

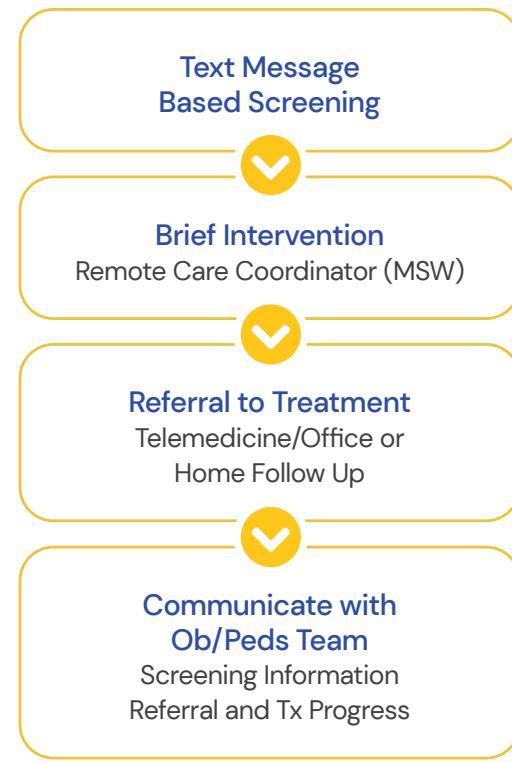
Mental health conditions are common during pregnancy and the postpartum year and can be harmful to mom and baby's health. As part of routine prenatal and postpartum care, LTW will monitor each patient's mental health, just like we monitor physical health to ensure that mom and baby are healthy. Patients have reported using text messages to screen for mental health, interpersonal violence and social determinant of health needs feels confidential, and the follow-up they receive based on their responses makes patients feel "cared for." Patients are more likely to complete screens, screen positive, be referred to treatment and actually attend treatment when screened using LTW. Traditional differences in screening, referral and accessing care by race are overcome using LTW.

B. How does the program work from the patient's perspective?

1. Overview

Patients are typically introduced to and enrolled into LTW by clinic staff. Upon enrollment, patients are also texted a video about LTW so they can learn more about the program if they desire. Patients will continue to receive text messages prompting them to complete screenings every 3-months during their pregnancy, or once in each trimester. During the postpartum year (12 months), the first screening is sent 30 days postpartum, and then every 3 months thereafter. Each screening takes about 2 minutes to complete.

A care coordinator can review each screening but will specifically be alerted to a positive screen. If a patient screens positive for



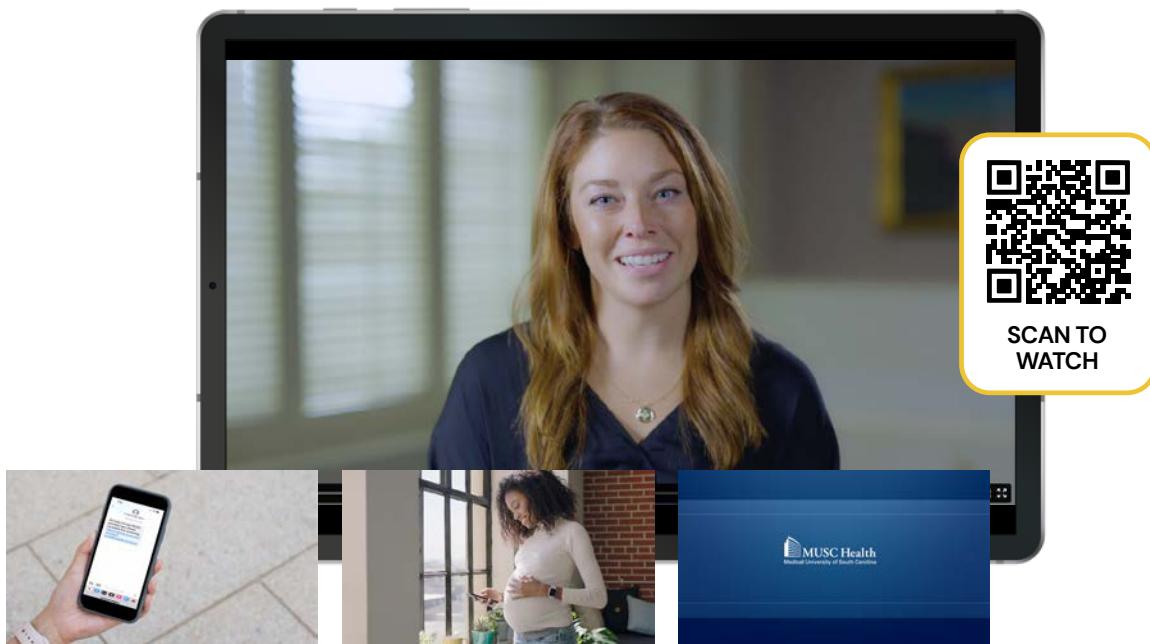


mental health, substance use, intimate partner violence or social determinants of health, a care coordinator calls them to conduct a brief assessment and intervention. The Care Coordinator can schedule mental health appointments for the patient if they request it or if the Care Coordinator deems it necessary. They can also send the patient resources for things such as social support or to community needs.

	PREGNANCY				POSTPARTUM								
	Start	1 st Tri	2 nd Tri	3 rd Tri	30 d	Mo 2	Mo 3	Mo 5	Mo 6	Mo 8	Mo 9	Mo 11	Mo 12
Screen	X	X	X	X	X		X		X		X		X

2. Welcome To LTW

Upon enrollment, patients will receive a text message welcoming them to the LTW program. This message will also contain two “contact cards” which allows patients to save the phone number that sends out the screening texts and connects them to the Care Coordinator into their cell phones. This helps facilitate communication and recognition of the phone number sending text messages. The welcome message also includes a video for patients to learn more about the LTW program.



player.vimeo.com/video/861401602





C. Screening

Patients receive their first screening survey in the welcome text message. The first page of screening contains 11 total questions:

- + 9 questions support screening, brief intervention and referral to treatment (SBIRT; 6-alcohol/substance use; 2 mental health questions; 1 interpersonal safety question);
- + 2 additional questions assess social determinants of health (SDoH) via basic needs assessment (1 question about scarcity of resources and 1 question asking if the patient would like to be contacted because of scarcity or SDoH needs). These basic needs assessment questions evaluate patients' access to housing, utilities, food, medicine/healthcare, phone/internet, baby supplies, childcare and employment.

See [Appendix 5A](#) for example of these questions from the patient's view, and [Appendix 5B](#) for a full list of questions.

Following completion of the initial screening questions, branching logic will be used to determine if further screening is needed. If so, additional questions will show up for the patient to complete on their phone:

- + The Edinburgh Postnatal Depression Scale- EPDS (depression- the version of the EPDS does not include item-10, question about self-harm)
- + NIDA Modified Assist (substance use)
- + 3-item AUDIT (alcohol use)

Patients will receive an immediate text message response confirming receipt of their screen. Responses to the screening questions will place a patient into a clinical risk category (see [Appendix 5C](#)). This category is used to determine the specific automated text message response that the patient will receive (see [Appendix 5D](#)). This will also be reviewed and acted upon by the Care Coordinator, as needed. Patients will also receive safety information after submitting their survey, including the suicide hotline phone number, regardless of risk level.

D. Feedback

Patients will receive feedback based on the clinical risk category into which they screened at enrollment. Feedback can include that they may be at risk of future or current mental health symptoms, and notification their Care Coordinator will continue to monitor their symptoms and/or reach out to them. All patients receive messages containing safety information. These include national resources (988, Maternal Mental Health Hotline, Domestic Violence Hotline), and language on how to respond to a mental health





emergency. (see [Appendix 5D](#) for automated feedback responses and [Appendix 5E](#) for a patient's view of these messages). Patients are also reminded that they can proactively text their Care Coordinator during business hours for support and/or resource assistance, if needed. If patients do not complete the survey, they will receive two reminder texts with the link to the survey at 8am for two days after the initial invite. Reminders are only sent if the survey is not complete. If the patient does not complete the survey they will be sent one last reminder and a request to answer 3 questions which include the PHQ-2 depression screen and 1 question about feeling stressed, anxious, unhappy or having difficulty coping. Similarly, a patient receives feedback on the clinical risk category and notification if their care coordinator will be reaching out and safety information.

For ongoing care after the initial screening, the screening process is repeated approximately once per trimester, 30 days post-delivery, and every 3 months thereafter, up to 12 months postpartum.

E. Care Coordinator Contact

1. Triggers for contact.

Within LTW, a care coordinator can easily and efficiently review a patient's risk category and will contact her by phone or text to complete a brief assessment, intervention and referral to appropriate resources. This information is also captured in LTW, and formulated into a brief progress note. The brief progress note is copied and pasted into the patient's EHR (see [Appendix 5E](#) for an example note).

F. What to expect from Care Coordinator call

1. Timing and Duration.

The Care Coordinator will receive an email alert once a screen is completed. The alert will include a flag for anything requiring them to follow-up directly with the patient. These follow-ups occur during working business hours, shortly after a completed screen is received, within 1 business day. The Care Coordinator will tailor their call to the screen results but can provide referral to range of services after completing an assessment over the phone. These phone calls vary in length of time, but typically last 15 minutes, on average.





2. Range of services rendered.

The service rendered by the Care Coordinator is customized based on the patient's screening results, and information gathered during a brief phone assessment. The Care Coordinator can provide referrals to resources in the community for needs like diapers, housing assistance and/or mental health or substance use services. We encourage each site to build and maintain relationships with community partners to serve their patients who screen positive for needs on the SBIRT or SDoh screenings. The Care Coordinator will document services or referrals provided in the patient's health record to facilitate communication amongst all clinical care team members.

3. Things the Care Coordinator cannot address.

The Care Coordinator does not provide psychotherapy, medication prescriptions, obstetric/medical advice or other direct patient care. If the patient has medical or other patient care related questions, the care coordinator connects the patient to an appropriate care team member and/or connects the patient back to their provider.

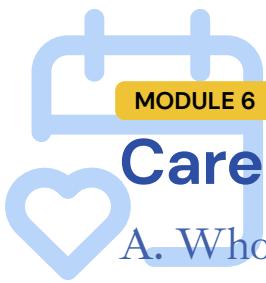
G. Ongoing Check-Ins

Follow-up screening text messages will be sent according to the established calendar generated at the time of enrollment and based on estimated date of delivery. Screens are sent approximately once per trimester, 30 days post-delivery, and every 3 months thereafter, up to 12 months postpartum. A delivery date is imported into LTW for the patient to receive their postpartum screens on the correct timeline. Delivery dates can be entered manually or automatically imported and updated nightly from the health record system if the organization is integrated.

H. Opting Out

Women who decline to take part in the program may opt out. If the patient opts out, they will receive a text message within 24-48 hours confirming their preference not to receive LTW texts, with a link to a feedback survey. If patients do not complete the feedback survey, they will receive one reminder text with the link to the survey within approximately 24 hours of receiving the first feedback survey request.





MODULE 6

Care Coordinator

A. Who is the LTW Care Coordinator?

As discussed in Module 2, the Care Coordinator is the most critical position within the LTW program and, as such, significant attention should be given to ensuring that the role is filled with a qualified, and well-trained individual.

As a reminder, the care coordinator's **overall role** is to:

- + Review all completed maternal mental health screens and relevant clinical information from the Electronic Health Record (if applicable).
- + For patients screening positive for maternal health concerns, complete a phone-based brief assessment and intervention and provide appropriate referral(s) to resources and/or treatment using shared decision making and motivational interviewing principles.
- + Communicate screening and if appropriate referral information to the participant's provider; and,
- + Determine if the participant accessed the resources and/or treatment referral(s) and assist with re-connecting participants to appropriate resources and/or referrals to treatment, if needed.





What qualifications and/or experience should we look for when hiring a LTW Care Coordinator?

We recognize that the needs and assets each implementing site brings to the table may differ. Considerations like billing requirements (i.e., specific education or qualifications allow for components of LTW to be billed to insurers), effort sharing (i.e., a care coordinator may split time across more than one project or site), and the pool of eligible job candidates may all impact the ultimate specifics of your care coordinator position posting.

However, based on our experiences with LTW implementation, we generally recommend the following prerequisite training and/or qualifications that a candidate should bring to the LTW Care Coordinator position:

- + Minimum bachelor's degree (Masters preferred) in nursing, Social Work, or a related field.
- + Minimum of 2 years of experience in patient care coordination or case management.
- + Experience completing mental health assessments, brief interventions and referrals to appropriate care using shared decision making and motivational interviewing principles.
- + Knowledge of community health resources and patient advocacy.

What specific job responsibilities should be included in the position posting?

Following are the standard responsibilities of the LTW Care Coordinator:

- + Serve as the main point of contact for enrolled patients.
- + Conduct screenings and follow-ups to assess patient needs.
- + Integrate motivational enhancement and shared decision-making strategies as appropriate to build rapport and increase patient engagement.
- + Appropriately identify, triage, and deescalate potential medical or mental health crisis situations.
- + Provide referrals and connect patients with appropriate healthcare and social services.
- + Document interactions and maintain accurate patient records.
- + Communicate with OB/Gyn providers as appropriate and indicated.

Specific information regarding the Care Coordinator responsibilities can be found in [Section 6C](#).





While the LTW development team feels strongly that anyone filling the role of LTW Care Coordinator should be equipped, prepared, and capable of performing all of the job responsibilities above, we have found it helpful – depending on patient volume and workload – to provide support to the Care Coordinator in non-patient facing responsibilities. For example, it may be helpful to aid with referral identification and vetting, as well as with collating patient information and documentation.

Similarly, text message follow-ups with patients may also be delegated to other team members if Care Coordinator time is fully allotted to direct patient interaction.

B. Care Coordinator Training

In addition to hiring or selecting a Care Coordinator with the necessary education and experience, anyone serving in the role of Care Coordinator should engage in additional training specific to LTW delivery. Trainings focused on empathic listening, referral planning and management, motivation enhancement strategies, and addressing social determinants of health needs in care planning and delivery should be identified and accessed by the Care Coordinator from reputable professional organizations.

Additionally, training specific to the LTW platform would be helpful. Additional LTW training would cover topics such as:

- + LTW REDCap/Andor workflow and shared decision support system operation
- + LTW Care Coordinator worklog documentation
- + Using LTW Data and Dashboards to improve care coordination
- + LTW Case Scenarios Practicum ([Appendix 6A](#))
- + If applicable, best practices for EHR documentation of LTW activities

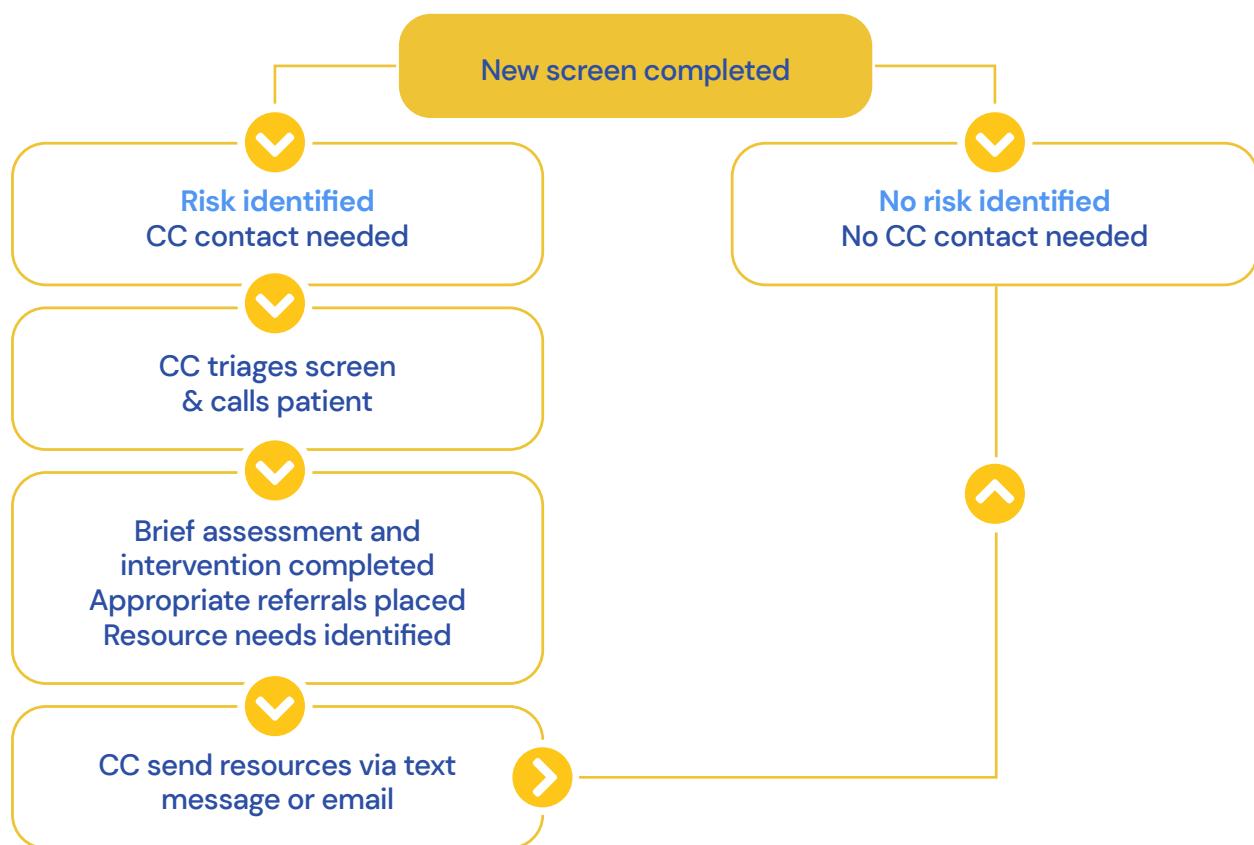
For more information regarding adopting the LTW platform and training Care Coordinators, please contact the MUSC Center for Telehealth.





C. Overview of Care Coordinator Workflow

1. Diagram of Care Coordinator Workflow per Patient



2. Description of Care Coordinator Workflow per Patient

The Care Coordinator serves the central role in LTW delivery. Whereas the daily workflow for the Care Coordinator will vary based on the balance of call types and number of follow-ups indicated, there is a general cadence to the Care Coordinator's day that aligns with the Care Coordinator role in the LTW program. The core components of the role (and workflow) include:

1. Review all completed positive screens and relevant clinical information.
2. Complete a phone-based brief assessment and intervention and provide appropriate referral(s) to resources and/or treatment using shared decision-making and motivational interviewing principles.
3. Communicate screening and referral information to the patient's provider.
4. Determine if the patient accessed the resources and/or treatment referral(s) and assist with re-connecting patients to appropriate resources and/or referrals to treatment, if needed.





Each of these four key Care Coordinator roles are described in more detail below.

1. Review all completed positive screens and relevant clinical information

All patients in LTW complete the same nine mental health, substance use, and Intimate Partner Violence (IPV) screening questions. All LTW patients complete a Social Determinants of Health (SDoH) assessment. Based on the patient's positive endorsement of the nine initial screening questions, the patient will also complete the Edinburgh Postnatal Depression Scale (EPDS; except for item 10 – suicidal ideation), National Institute on Drug Abuse (NIDA) Modified ASSIST for substance use, and the 3-item Audit within the LTW platform. LTW uses logic to score these scales according to each measure's standardized scoring criteria and provides a summary score for the Care Coordinator to review.

When a LTW patient's screening assessments are complete, the Care Coordinator is immediately notified via their preferred method of contact (i.e., text, email, or both). The notification contains the patient's record ID and a summary of the screening scores. Within the LTW program, the Care Coordinator uses the patient's record ID to select the patient and reviews the summary scores, the patient's response to each of the screening items, and other relevant demographic and clinical information that is automatically pulled from the Electronic Health Record [EHR] into LTW (e.g., phone number, address, insurance, weeks of gestation or postpartum, current problem list and diagnoses, medications, as well as dates of last prenatal care appointment, mental health appointment, Emergency Department visit, or Hospitalization, as applicable).

The screening and EHR information streamline the clinical assessment and prepares the Care Coordinator in advance for what the patient may need from a clinical and practical standpoint. The screening information helps the Care Coordinator prioritize and respond first to the most urgent issues especially as it relates to a patient's safety (i.e., risk of harm from IPV, substance use and/or depressive symptoms).

For example, if the patient is positively endorsing IPV on the initial nine screening questions, the Care Coordinator knows to follow a safety protocol when conducting clinical and clinical research with victims of IPV. ([Section 6D](#)).

Similarly, depending on the type and severity of substance use screening information, the Care Coordinator can prepare for the call by checking in with local contacts at relevant country, and/or other drug and alcohol treatment centers to see when their next available new intake/evaluation is for a peripartum patient, and/or availability within their other programs e.g., inpatient bed for pregnant and parenting women, intensive outpatient program, outpatient services etc.





Having this information at the time of the phone-based assessment helps to streamline the treatment referral process. On a practical note, the SDoH screening information (i.e., housing instability, food scarcity, utility difficulties, interpersonal safety) allows the Care Coordinator to identify potential relevant local, state, or federal resources before calling the participant.

There is a dashboard within the LTW program, called New Assessment Needed that lists the patients who need an assessment. This dashboard helps the Care Coordinator keep track of patients who they are actively trying to reach by phone to complete a brief assessment. This dashboard contains a summary of the patient's screening scores, date of the completed screen, number of attempts and dates of attempts to reach the participant and a notes section for any additional information. It also tracks the date and time of the completed assessment so that time from completed screen to completed assessment can be tracked for the Care Coordinator and for fidelity monitoring.

2. Complete a phone-based brief assessment and intervention and provide appropriate referral(s) to resources and/or treatment using shared-decision making and motivational interviewing principles.

After reviewing the screening and EHR data for patients that screen positive, the Care Coordinator will complete a phone-based brief assessment and intervention that is structured by a step-by-step interview guide (see below). The structured interview provides the care coordinator with guidelines for each step of the interview and explains the overall purpose of the step and how the interview techniques, and SBIRT and shared decision-making principles are applied within each step with each participant. Fidelity to the structured interview, interview techniques, SBIRT and shared decision-making principles can be evaluated by the implementation team.

A LTW Care Coordinator Structured Interview Guide ([Appendix 6B](#)) provides step-by-step instructions for completing the Care Coordinator interaction. We provide an overview of the two key components of the Care Coordinator-patient interaction below:

BRIEF ASSESSMENT

Before calling the participant, the Care Coordinator already has a wealth of clinical information from the completed screens and EHR to determine if a referral to resources and/or treatment is likely needed.

The **purpose of the phone-based assessment** is to provide the patient with feedback about their screenings, and an opportunity for the patient to clarify and/or provide additional information about their mental health, substance use, IPV, and/or other SDoH and how this is impacting their life in ways that are important to the patient.





The interview techniques employed in the brief assessment include open-ended questions, reflective listening, and summaries. The Care Coordinator also completes standardized assessments to determine the risk of suicide, drug overdose, or harm related to IPV. Results of these assessments are used to determine next steps for safety ([Section 6D](#)) or implementation of risk mitigation strategies with high-risk substance use. These specific assessments include:

- + **Assessment of Suicide Risk:** The Care Coordinator will ask all patients about suicide risk by first asking item 10 of the EPDS and asking about suicidal ideation, and suicide plans and/or intent. Note: the first 5 items of the Columbia Suicide Severity Scale is a scale that can be helpful for care coordinators in assessing suicidal ideation, and suicide plans and/or intent. If the patient positively endorses suicidal ideation, and suicide plans and/or intent, the Care Coordinator is to follow the **Safety Plan and Clinical Protocol**, a suggested version of which is provided in section D of this module.
- + **Assessment of Drug Overdose Risk:** For patients who endorse any substance use the Care Coordinator will complete the 8-item Alcohol, Smoking and Substance Use Screening Test (ASSIST) to determine a risk score for the substance(s) of use including risk for overdose. All patients with substance use are at risk for overdose and will receive a brief intervention described below as part of the standard of care for substance use. In addition, substance specific risk mitigation strategies will be employed using the site-specific **Safety Plan and Clinical Protocol**.
- + **Assessment of IPV:** If the patient endorses any of the IPV screening questions, the Care Coordinator will then complete the Danger Assessment-5 to screen for level of risk of serious injury/death among IPV victims and asks if the patient feels in danger right now. If the patient positively endorses any of these items, the Care Coordinator is to follow the site-specific **Safety Plan and Clinical Protocol**.

BRIEF INTERVENTION

In addition to gaining more information about the patient's safety, mental health, substance use, IPV and/or SDoH during the brief assessment, the Care Coordinator will also have gained insight as to how these problems are impacting the patient's life in areas that are important to the patient. These impacts are potential internal motivators for the patient to seek resources and/or treatment.

Next, the Care Coordinator employs a Brief Intervention. The principles employed in the brief intervention are those that are utilized in standard Screening Brief Intervention and Referral to Treatment (SBIRT) models and include providing feedback and education, expressing empathy, eliciting additional and/or reflecting motivation to change (i.e.,





seeking resources and/or treatment), providing a recommendation for next steps, and assisting with implementation of the plan.

When making a referral recommendation (i.e., referral to resources and/or treatment), the conversation is guided by shared decision-making principles including the 6 shared decision-making key elements i.e., situation diagnosis/problem, choice awareness, option clarification, harms and benefits discussion, patient preferences deliberation and making the decision.

3. Communicate screening and referral information to the patient's provider.

The Care Coordinator provides the summary of the screens, phone assessment and referral information and communicates this assessment and plan to the patient's provider via the EHR in the form of a progress note. Documentation of the assessment and referral to resources and treatment is made very efficient and easy for the Care Coordinator. Using the summary scores and logic and text describing multiple permutations of the encounter, the Care Coordinator can 'click' on relevant text describing the encounter that automatically populate a progress note, so that very little editing to the EHR progress note is needed.

If there is an urgent need to communicate with the provider, the Care Coordinator can message the provider in the EHR, phone, page or meet with the provider. The Care Coordinator is responsible for reviewing and responding to all positive screens **each day they are complete**. (For additional information about communication with the provider due to risk of suicide, overdose or harm due to IPV, please see [section 6D](#)). If the screen is completed after 5pm or Saturday or Sunday, the Care Coordinator will review the screen and call the patient the **next business day**.

The Care Coordinator will be responsible for indicating they have reviewed the screening information, communicated the phone assessment or attempted contact the patient and/or referral plan in the EHR within 24 hours of the completed screen with the exception of Saturday and Sunday. The Care Coordinator will continue to communicate via the EHR any updates to the referral plans within 24 hours of any changes.

4. Determine if the patient accessed the resources and/or treatment referral(s) and assist with re-connecting patients to appropriate resources and/or referrals to treatment, if needed.

There is a dashboard within LTW called Follow-Up Referral that contains a listing of patients who have completed a brief assessment and have been given a referral. These patients need follow-up to confirm access to resources and/or treatment.





Within the Follow-Up Referral dashboard, the date of the completed screen, initial brief assessment and plan is documented including the resources the participant has been referred to and if referred to treatment, the date of their initial intake/evaluation and with whom (e.g., provider/practice name and number). It also tracks the date the patient first attends treatment so that time from completed screen or completed assessment to completed treatment attendance can be tracked for the Care Coordinator and for program evaluation purposes.

For patients referred to resources and treatment within the site's own healthcare system, attendance to treatment may have the potential to be verified by the EHR. For those referred for treatment outside of the LTW implementing system, as the referring person, the Care Coordinator can contact the outside provider regarding if the patient attended care that should be communicated back to the patient's provider (e.g., OB/GYN) via the EHR by the Care Coordinator.

If upon follow-up with the referral, the Care Coordinator finds that the patient has not attended the treatment referral, the Care Coordinator will call the patient and complete a brief re-assessment to determine if anything has changed. The Care Coordinator will use this call back to ask – in a non-confrontational manner – why the patient has not attended treatment. The interview techniques employed in this brief re-assessment include open-ended questions, reflective listening, and summaries. If a referral to treatment is still appropriate, the Care Coordinator will employ the same brief intervention including providing feedback and education, expressing empathy, eliciting motivation, providing a recommendation for next steps, and assisting with implementation of that plan. Reasons why the patient has not attended treatment and/or referrals are then documented in the LTW database.

For those referred to SDoH related resources only, the Care Coordinator will text message the participant to determine if they have accessed the resource referral(s). If not, the Care Coordinator will call the patient and complete a brief re-assessment and brief intervention as described above. Reasons why the patient has not accessed the referral(s) are then documented in the LTW system.

3. Role of Technology in Supporting the Care Coordinator Workflow

The Care Coordinator workflow is supported at each of the 4 stages detailed above by the LTW programming delivered in either REDCap or Andor platforms. A guide to the Care Coordinator's interaction with the REDCap version of LTW is provided in [Appendix 6C](#).





D. Developing Crisis Management Standard Operating Procedures

Although rare occurrences, it is important for the Care Coordinator to be prepared and trained to manage a variety of patient crisis situations. After completing their first LTW screen, all participants are texted the number for the National Suicide Hotline, Maternal Mental Health Hotline, and National Domestic Violence Hotline (NDVH) and instructed to go to their nearest emergency room in the case of a psychiatric emergency. This text also makes it clear that all patients in this clinic are provided this information as part of routine prenatal care. In addition, each implementation site should set in place their own clinical safety protocols and Care Coordinators should be thoroughly trained to ensure that they understand the components of these protocols and can effectively implement them when needed.

The LTW developers have shared top level details of their developed safety plans and clinical protocols for high or imminent suicide risk, risk of harm due to IPV and overdose risk mitigation strategies that are employed by the care coordinator during these situations. We encourage each site to use these strategies as a springboard for the development of your own, site specific, protocols for addressing emergent patient care needs.

1. Managing Suicide Risk

Care Coordinators may become aware of a patient's suicidal risk from:

- + Item 10 of the EPDS
- + Disclosure of ideation, intent, and/or plan during care coordination interaction(s)

In the instance that suicidal ideation is indicated by a patient, the Care Coordinator should follow the **National Institute of Mental Health Adult Outpatient Brief Suicide Safety Assessment Guide**. We have provided a link to this guide in the Resources section of this module.

2. Responding to Psychiatric Emergencies

In the case of a psychiatric emergency (i.e., imminent risk for suicide, drug overdose, homicide or grave disability including but not limited to postpartum psychosis) the care coordinator is responsible for calling 911 and having the patient taken to the nearest emergency room. In this situation the care coordinator will immediately notify the patient's provider, as well as any leadership identified within your LTW implementation site as being responsible for supervising the management/response to these crises.





3. Addressing Drug Overdose Risk

All participants with substance use are at risk for overdose and will receive a brief intervention as part of the standard of care. In addition, substance specific risk mitigation strategies will be employed. Below is an example of risk mitigation strategies for participants that use any form of opioids. Though we focus on opioid use here given its strong association with drug overdose, we encourage you to consider the illicit drug use and overdose landscape in your community and adapt the plan below to be responsive to local needs and assets. A sample standard operating procedure for managing overdose risk is provided in [Appendix 6D](#).

4. Planning for Safety in the Context of IPV

Screening for and identification of IPV is a core goal of the LTW program and it is likely that your Care Coordinator will encounter patients with varying levels of risk for IPV. Therefore, your organization should be prepared with a site specific standard operating procedure for the management of IPV risk and your Care Coordinator should be trained and comfortable with implementing this procedure when appropriate.

The LTW developers encourage you to consider incorporating the National Domestic Violence Hotline (NDVH) into your IPV response plan. The Hotline provides 24 hour/7 days-a-week access to counselors for IPV care across the United States. Hotline service providers are paid employees trained in crisis counseling and receive ongoing training. The Hotline provides a wide range of services to both English and Spanish-speaking victims, as well as to friends and family of the victims and to abusive partners. Available services include but are not limited to assessment of safety concerns, assistance in developing safety plans, support via empathetic listening, assessment of victim needs, options and education regarding available resources (e.g., victim advocacy, shelter, and counseling), referrals for legal help, and education on technology and social media safety. The majority of first-time hotline service calls involve basic information about safety options, support, and overview of potential types of resources. Hotline service providers have contact information of local resources, including shelters and details about specific shelters (e.g., space for children and/or pets). All counselors working for the hotline are extensively trained. A link to the Hotline is provided at the end of this module in the Resources section.

Beyond involving the Hotline as a resource for patients experiencing IPV risk, we have provided a sample protocol for addressing IPV risk below to serve as a template or springboard for your own organizational planning. A sample IPV standard operating procedure is provided in [Appendix 6D](#).





E. Building a Referral Resource Library

The Referral Resource Library is a crucial component for the success of LTW and is something each site is responsible for developing and maintaining. Generally, this is a list of resources and referrals in the community of the implementation site and/or clinic site which can be referred to by care coordinators and disseminated to patients as needed. We strongly encourage sites to spend time creating a resource library before launching LTW. Resources in this library should be vetted upon compilation and at regular intervals throughout the year (ex: every 6 months) to ensure the most up-to-date resources are being shared with patients.

To develop an initial Referral Resource Library, Care Coordinators and/or other LTW staff can compile existing resources with which they are already familiar, use online searches, and/or institutional supportive programming. Resources should include, but are not limited to, mental health treatment providers and clinics, substance use treatment providers and clinics, interpersonal violence and domestic violence resources, pregnancy or infant loss supportive resources, and social determinant of health resources (ex: diaper banks, rental or financial assistance). Local and national non-profit organizations, churches, and/or healthcare institutions can be good places to start, including Postpartum Support International. When possible, we recommend including referral options that are baby friendly, for example, some inpatient mental health or substance use treatment programs will allow postpartum moms to attend with their baby, and others will not. Ideally, the Care Coordinator should provide a personalized resource or referral when available rather than only relying upon general resources such as “211.”

We also recommend having more than one resource and/or referral available whenever possible per need. It can be helpful to organize the resource library by both referral/resource/need **and** geographical location (ex: zip code or county). The Referral Resource Library should be housed within a shareable living document that can be used and updated by the members of the LTW team. This can include a document saved to the institutions intranet, or an external web-based storage system.

F. Monitoring Fidelity

Monitoring fidelity to the LTW care delivery model is an essential component of LTW implementation and promotes consistency and quality of patient care. Several Care Coordinator Process Reports are available from within the LTW REDCap platform. These reports can help your organization monitor key performance indicators associated with high-fidelity LTW delivery.





We encourage sites to use these embedded reports, as well as site-generated reports as needed, to monitor fidelity to the recommended response timeframes, application of motivational enhancement strategies and shared decision making, as well as successful connections with referrals (and diligent follow-up when referrals are not engaged).

The LTW developers encourage organizations to embed regular review of these reports within a framework of collegial supervision for your Care Coordinator and/or Care Coordination team. In general, we recommend selection (or some combination) of the following supervision models:

Case Staffing

A case staffing model for Care Coordinator supervision should be structured to provide consistent clinical oversight, ensure high-quality service delivery, and support staff well-being. We recommend weekly case staffing meetings—facilitated by a licensed clinical supervisor or program manager—that offers dedicated time for the Care Coordinator to review complex cases, discuss engagement strategies, and address any barriers to connecting patients with appropriate services.

Each session should incorporate a trauma-informed and culturally responsive lens as appropriate, with particular attention to the intersecting needs of patients experiencing substance use, mental health concerns, intimate partner violence (IPV), or unmet social determinants of health (SDoH).

The supervision process should balance case-level problem-solving with professional development, allowing Care Coordinators to reflect on their practice, share lessons learned, and identify training needs. Case staffing could also include review of LTW structured tools—such as risk stratification protocols, referral outcome tracking, and brief case summaries—to promote consistency and accountability. When appropriate, interdisciplinary consultation with behavioral health, medical, or legal experts can further enhance care planning.

This model not only strengthens the effectiveness of SBIRT interventions but also helps mitigate staff burnout by fostering peer support and supervisory affirmation in addressing emotionally demanding work.

Case Consultation

A case consultation model of supervision can provide flexible, on-demand support for Care Coordinators managing complex or high-risk cases. Unlike standing weekly staffing, case consultation is typically initiated by the Care Coordinator when they encounter clinical, ethical, or logistical challenges that require immediate input. Consultations





are conducted with a licensed clinical supervisor or subject matter expert and may involve reviewing specific patient circumstances—such as escalating IPV risk, co-occurring substance use and mental health conditions, or repeated barriers to service engagement—through a trauma-informed, culturally attuned lens.

This model emphasizes real-time problem-solving and individualized learning, supporting responsive, participant-centered care. Case consultations can occur through scheduled sessions, ad hoc meetings, or secure communications, allowing for rapid guidance on safety planning, motivational interviewing techniques, or referrals to specialized services. To ensure accountability and continuity, consultations should be documented with follow-up actions clearly outlined. When integrated into a broader supervision framework, the case consultation model complements routine staffing by addressing urgent needs as they arise and reinforcing clinical decision-making skills in the moment.

Direct Supervision

A direct supervision model emphasizes close oversight and frequent interaction between the Care Coordinator and a clinical supervisor, particularly during early stages of program implementation or staff onboarding. In this model, supervisors may observe service delivery activities—such as screenings, brief interventions, or care planning sessions—either in real time or through recordings, with participant consent, to provide immediate, constructive feedback. This level of supervision ensures fidelity to LTW protocols, promotes consistent use of trauma-informed and culturally responsive approaches, and allows for prompt course correction when needed.

Direct supervision also includes structured, frequent one-on-one meetings focused on skill development, performance monitoring, and emotional support, which are critical given the high-stakes and emotionally demanding nature of working with individuals experiencing substance use, mental health concerns, IPV, or unmet SDoH needs. Supervisors may use observation checklists, fidelity tools, or reflective supervision frameworks to guide these sessions. While resource-intensive, the direct supervision model builds Care Coordinator confidence, ensures quality early in program delivery, and helps establish a strong foundation for transitioning into more autonomous models of supervision like case staffing or consultation over time.





G. Additional Resources

National Institute of Mental Health Adult Outpatient Brief Suicide Safety Assessment Guide:

nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials/adult-outpatient/adult-outpatient-brief-suicide-safety-assessment-guide

The National Domestic Violence Hotline:

thehotline.org/here-for-you

Screening, Brief Intervention, and Referral to Treatment (SBIRT):

samhsa.gov/substance-use/treatment/sbirt

Postpartum Support International:

postpartum.net

Appendix Materials

- + [6A. LTW Care Coordinator Training Sample Practicum Case Scenarios](#)
- + [6B. LTW Care Coordinator Structured Interview Guide](#)
- + [6C. LTW Care Coordinator REDCap Platform Overview](#)
- + [6D. LTW Care Coordinator Safety Plan and Clinical Protocol](#)





Outcome Measures and Data Collection

A. Why include robust data collection in your LTW implementation?

LTW was developed and evaluated in the context of a series of research studies. Because of this history, the existing organizations that have delivered LTW have collected substantial data regarding patient outcomes (collected via electronic health record, administrative claims and patient report), as well as data regarding the implementation milestones of the program itself.

There are three key reasons that make incorporating data collection into your LTW implementation critical. First, developing a regular process for reviewing top-level performance metrics helps make sure that the program is being implemented with fidelity. Second, regular data collection and review can also alert an organization to process or outcome areas that may need additional attention or adaptation to best serve your specific patient population. Finally, regular review of implementation and performance outcomes can be incredibly valuable in planning for sustainability – including but not limited to making staffing decisions, seeking reimbursement from payors, and demonstrating the success of the program to other potential funders.

B. What data should our site collect in the context of LTW?

As the LTW footprint grows and the program finds new implementation homes, the types of data and outcomes of interest may be adapted to suit the specific needs of a given organization and/or payor. However, this module will focus on core outcomes that the LTW developers consider essential for monitoring implementation fidelity and gauging the impact of LTW on key mental health outcomes among pregnant and postpartum patients. We have divided these outcomes into three broad categories and address each below: (1) Patient outcomes that can typically be collected from electronic health record or claims data; (2) Patient outcomes that are best collected through direct patient report (usually standardized survey assessments); and, (3) Implementation or process outcomes that can speak to the fidelity, efficiency, and costs associated with program delivery.





Patient Outcomes: Data from Administrative and/or Health Records

Using administrative or health record data can be a valuable resource to save time and build efficiencies in collecting key information that describes your patient population served by LTW and captures top-level diagnostic and service utilization information. We briefly list key variables for your consideration, divided into two key categories of Demographic and Clinical variables.

1. Descriptive Variables

- + Patient contact information (e.g., Name, Address [zip code], Phone, Email)
- + Patient record identification (i.e., Medical Record Number)
- + Demographic information (e.g., age, race/ethnicity, sex, marital status, preferred language, age at first prenatal visit (or date of birth), etc.)
- + Insurance status
- + Physical Description at enrollment (e.g., height, weight, BMI, weeks of gestation)
- + If multiple clinical sites are included in your implementation, collect information regarding the clinic (e.g., clinic site, primary provider, etc.)

2. Clinical Variables

- + Pregnancy – All visit types
- + Postpartum – All visit types
- + Referrals to mental health affiliate (helpful to organize by pre-pregnancy, pregnancy, and postpartum periods)
- + Mental Health Only Visits – Pre-pregnancy period
- + Maternal Diagnosis Codes (Billing Diagnosis) (helpful to organize by pre-pregnancy, pregnancy, and postpartum periods)
- + Maternal Diagnosis Codes (Problem List Diagnosis) (helpful to organize by pre-pregnancy, pregnancy, and postpartum periods)
- + Mother Current Med List Review
- + Delivery Information
- + Newborn – All visit types (if available)
- + Newborn Diagnosis (Billing Diagnosis)
- + Newborn Diagnosis (Problem List Diagnosis)
- + Newborn Current Med List Review
- + Emergency Department Visits during Pregnancy and Postpartum (if available)





Patient Outcomes: Patient Reported

1. May Be Available In EHR

- + SBIRT (Completed at OB Appointments)
- + Edinburgh Postnatal Depression Screen (ePDS) (Completed at OB Appointments)

Implementation Outcomes

1. Patient-Related Process Variables

- + Eligibility/Reasons for ineligibility
- + Enrollment Date
- + Dates for Each PT contact
- + Information Re: Referrals Made by LTW Team
- + If available, Information Re: Pt Access of Referral Services

2. Care Coordinator/Staff Related Process Variables

- + Call to Contact Timeframe
- + Care Coordination Interaction Length (Time) Per Call
- + Care Coordinator Workflow Metrics (e.g., number of each call type, average time per call type, number of text messages, etc.)
- + Referral Information (e.g., number and type of referrals provided)

C. Should we hire someone with a role of managing, analyzing, and reporting on key metrics at our site?

Each implementation instance may vary slightly with respect to reporting requirements and preferences, particularly with respect to timeframes of reporting, intended audience(s), and the breadth and depth of metrics reported.

D. Final Thoughts on the Importance of a Thoughtful Data Collection and Key Metrics Plan

As we said previously, the ability to quantify key process and critical outcome metrics provides your organization with a powerful tool for planning and resource allocation, workforce development, monitoring intervention fidelity, and demonstrating value of the program to patients, providers, and payors.





We strongly encourage to develop a strategic plan for data collection, analysis, and reporting of key performance metrics prior to implementation of the LTW program. Consider the following questions when developing your plan:

- + **WHO:** Who will be responsible for data collection? Management? Analysis? Reporting?
- + **WHAT:** What key performance metrics matter most to your site and your partners? What variables need to be systematically collected in order to best capture these key performance metrics?
- + **WHEN:** When should these variables be collected? When should they ideally be analyzed? When should they ideally be reported?
- + **WHERE:** Where will you house the necessary data? Though much of the data listed in this module will be housed within the LTW platform, other variables that may be of interest might require site-specific tracking forms.
- + **WHY:** Why are you collecting these specific key performance metrics? Or, stated another way, who is (are) your intended audience(s) for these metrics?
- + **HOW:** How will each necessary variable be collected? How will data quality audits be conducted? How will issues with data collection or management that may arise be addressed?

Once you have developed your site's plan, we recommend revisiting it within the first 3 months to adjust as needed based on your early implementation experience, and regularly as needed until the plan in place appears to be meeting the needs of the site and its partners. Once a working plan is in place, we suggest revisiting the plan for updates about every 6–12 months, or more often if needed.



Planning for Stability

A. Key Considerations To Promote Sustainability From the Outset

The early days of implementation for any new program are abuzz with activity and excitement. The list of tasks to complete prior to launch can – at times – feel long. The thought of planning ahead for program sustainability in the midst of all of the pressures of initial implementation may feel overwhelming, or like a task that is easily placed in next quarter’s “to-do” list.

However, we want to encourage you and your team to think about program sustainability from the outset. Not only is it often more efficient to begin sustainability planning at the beginning of implementation, but it might also even impact decisions your organization makes around the specific choices and adaptations made during LTW implementation. Planning for sustainability from the outset can enhance efficiencies and produce long-term cost-savings.

It would be impossible for us to imagine or coach sustainability across the varied landscapes in which LTW will be implemented. The goal of this module is to briefly introduce 4 components of sustainability planning that our teams have found to be important and share resources that we have found helpful in our ongoing efforts to promote sustainability of LTW in our own settings. The 4 components briefly discussed in this module include:

- + Managing Staff Burnout and Minimizing Turnover
- + Demonstrating Value to Your Organization
- + Capitalizing on Opportunities for Reimbursable Services
- + Exploring Additional Mechanisms of Support

B. Managing Staff Burnout and Minimizing Turnover

Staff working in care coordination for pregnant and postpartum patients – especially those experiencing social determinants of health (SDoH) such as housing instability, food insecurity, or limited healthcare access – are at increased risk for burnout and secondary traumatic stress. Proactively addressing these challenges is essential to maintaining a stable, engaged workforce and ensuring high-quality care for patients.





Suggested Best Practices for Burnout Prevention

Trauma-Informed Supervision

Supervisors should adopt trauma-informed approaches, emphasizing empathy, trust, and psychological safety in all staff interactions. Regular check-ins and space for emotional processing are key components.

Manageable Caseloads

Ensure that staff caseloads reflect the intensity of client needs. A high volume of patients with complex SDoH should not be equated with standard case counts. As discussed in Module 7, careful and continuous collection of key workflow and process metrics can assist in decisions around staffing needs and caseload determination.

Reflective Practice and Peer Support

If possible, incorporate team huddles, peer case reviews, and opportunities for reflective practice into the workweek to reduce feelings of isolation and promote shared learning.

Encourage Self-Care and Flexibility

Promote work-life boundaries by encouraging staff to use paid time off, limit after-hours communication, and create flexible scheduling options where possible. Develop staff coverage plans from the onset of implementation to facilitate self-care without increasing burden upon return to work.

Helpful Strategies for Reducing Turnover

- + **Structured Onboarding:** New staff should receive a thorough orientation that includes both procedural and emotional preparation for the role.
- + **Career Development:** Offer access to ongoing training, licensure supervision, or leadership pathways—even if informal—to support professional growth.
- + **Recognition and Support:** Recognize staff contributions regularly, both informally and through formal appreciation efforts. Validation improves morale and job satisfaction.

A Few Quick Tips

1. Schedule regular reflective supervision (biweekly minimum) and/or conduct monthly peer case conferences
2. Offer free or low-cost training and professional development opportunities at least quarterly
3. Implement an anonymous feedback loop for staff to express needs





C. Demonstrating Value to Your Organization

Demonstrating value is an important component of promoting the sustainability for any new clinical program seeking to establish itself within a healthcare organization. In a resource-constrained environment, leadership must prioritize initiatives that align with strategic goals, improve patient outcomes, and offer measurable return on investment. A program that clearly articulates its value can justify continued support and ensure alignment with broader organizational priorities. Value demonstration not only validates the program's impact but also builds credibility with stakeholders who influence decisions about expansion, integration, or potential discontinuation.

LTW enhances identification and care coordination for pregnant and postpartum people with needs related to mental health, substance use, IPV, and social determinants of health. These issues are often under-identified in perinatal care, despite their significant impact on maternal and infant health outcomes. By highlighting its role in improving early identification and increasing access to appropriate behavioral health and social support services, the program can show how it addresses critical gaps in care, aligns with organizational goals related to maternal health equity and quality, and contributes to long-term cost savings through prevention and early intervention.

To make this value visible, the program should track and regularly report key metrics such as screening rates, positive identification rates, referral uptake, and successful connections to services. Data showing increased detection of depression, anxiety, substance use, or IPV—and the proportion of those individuals who are linked with care—can offer concrete evidence of impact. Additionally, qualitative data, such as patient feedback and stories, can provide compelling context that illustrates how the intervention improves lived experiences and clinical outcomes. Sharing these results through presentations to leadership, integration into institutional dashboards, and alignment with quality improvement initiatives will enhance visibility and relevance across departments. Module 7 provides more information regarding data collection and key performance metrics recommended for LTW.

Promoting sustainability requires embedding the program into existing clinical workflows and ensuring alignment with funding and policy mechanisms. Collaborating with obstetric, behavioral health, and social work teams and identification of internal program champions can foster ownership and integration. Demonstrating the program's contribution to improved maternal health outcomes, patient engagement, and equity can further solidify its place as a vital, ongoing component of perinatal care within the organization. Ultimately, demonstrating and communicating value early and consistently positions the program as indispensable to the organization's mission and long-term success.





D. Reimbursable Services & Other Support Mechanisms

Identifying billing codes for screening and care coordination, exploring grant opportunities, or leveraging value-based care incentives can help secure financial support.

Depending on the specifics of your LTW implementation context, several options for billing may exist for various components of the program. Specific billing opportunities may exist depending on your state of practice and the payor for the following components:

- + SDOH Screening
- + Maternal Mental Health Screening and Follow-Up
- + Pregnancy Medical Home/Case Management
- + SBIRT & IPV Screening
- + Telehealth

We recommend consulting with key payors covering patients in your clinic/implementation setting to determine the best approaches to maximize reimbursement for LTW service components.





E. Additional Resources

ProQOL Survey

Use the Professional Quality of Life (ProQOL) scale (Stamm, 2010) quarterly to assess burnout, secondary trauma, and compassion satisfaction levels.

proqol.org

SAMHSA Trauma-Informed Toolkit

Offers practical strategies for building supportive organizational culture.

SAMHSA.gov

National Association of Social Workers (NASW) Resources

Includes guidance on self-care, ethical practice, and clinical supervision standards.

socialworkers.org

Center for Integrated Health Solutions (CIHS)

Webinars, tip sheets, and toolkits for behavioral health and maternal care integration.

integration.samhsa.gov

South Carolina Medicaid

Provides contact information for administration officials and information regarding billable services.

scdhhs.gov

North Carolina Medicaid

Provides contact information for administration officials and information regarding billable services.

medicaid.ncdhhs.gov

Center for Connected Health Policy

Provides information and support around telehealth implementation and billing.

cchpca.org

National Academy for State Health Policy

A hub for policy development, advocacy, and information across all states.

nashp.org/policy/womens-and-childrens-health/maternal-family-health

Module 8 References

- 1 Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work*, 52(1), 63–70. <https://doi.org/10.1093/sw/52.1.63>
- 2 Hensel, J. M., Ruiz, C., Finney, C., & Dewa, C. S. (2015). Meta-analysis of risk factors for secondary traumatic stress in therapeutic work. *Traumatology*, 21(2), 75–84. <https://doi.org/10.1037/trm0000026>
- 3 Stamm, B. H. (2010). The concise ProQOL manual. Pocatello, ID: ProQOL.org.



Concluding Thoughts

A. Reflections

The Listening to Women program is a robust, patient-centered care coordination model designed to enhance the identification of, and response to, mental health, substance use, interpersonal violence and social determinants of health concerns during the perinatal period. This toolkit has been developed as a supportive resource to guide diverse organizations through the key stages of LTW implementation—from initial planning and onboarding to sustainability and outcome measurement.

Through its modular design, this toolkit offers guidance, tools, scripts, and templates refined through use in prior and ongoing LTW implementations. Each module can stand alone or be used in combination with others, depending on an organization's specific needs, existing infrastructure, and implementation timeline. While the core program design is grounded in research and practice, the toolkit also emphasizes flexibility and the importance of adapting LTW to reflect the unique characteristics (including patient needs and clinic workflow) of each implementation site.

The use of integrated technologies—text messaging platforms, and EHR systems—plays a central role in delivering coordinated, scalable support to perinatal individuals. By weaving together data, communication tools, and human connection, LTW aims to close care gaps and promote patient-centered outcomes. The success of this model relies not only on technology and protocols but on the strength of partnerships among MCOs, healthcare providers, care coordinators, and patients.

B. Moving Toward Sustainability

As implementation partners move from planning to action, and eventually into long-term operations, the final modules of this toolkit focus on measuring success and planning for sustainability. Continuous evaluation using both patient-reported outcomes and implementation metrics allows programs to monitor fidelity, assess impact, and make real-time improvements. Strategic planning around staffing, funding, and value demonstration helps secure ongoing support and scalability.

Module 8 offers practical guidance on addressing workforce sustainability, including managing staff burnout, identifying potential reimbursement strategies, and building the case for LTW within your organization. Sustained success will depend on integrating LTW into the broader maternal and behavioral health ecosystems, identifying champions at multiple levels, and remaining responsive to patient and provider feedback.





C. Adapting and Evolving

Elective implementation will require thoughtful adaptation to local context.

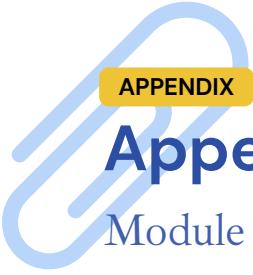
Organizations are encouraged to continuously learn from implementation experiences, collect site-specific data, and collaborate with peers to refine and evolve their programs over time.

To support ongoing adaptation, the toolkit includes editable resources, decision-making frameworks, and technical guides. These are intended to grow alongside the program—flexible enough to fit diverse implementation models but structured enough to maintain program fidelity and impact and may be updated to keep in step with best practice and our evolving knowledge of how best to implement the program broadly.

D. Staying Connected

In summary, this toolkit is a foundation – a springboard for embedding accessible, trauma-informed, and data driven care coordination practices into the heard of perinatal care. Your commitment to enhancing the lives of pregnant and postpartum people is what brings the LTW model to life. Thank you for taking this journey, and we look forward to connecting with you. If you are interested in learning more about implementing LTW in your clinic or community, please contact the MUSC Center for Telehealth.





Appendix

Module 1 Appendix

1A. Developmental Focus Groups

Drug and Alcohol Dependence Reports 3 (2022) 100064

Contents lists available at ScienceDirect

[Drug and Alcohol Dependence Reports](#)

Journal homepage: www.elsevier.com/locate/dadr

Article link: <https://doi.org/10.1016/j.dadr.2022.100064>





1B. Clinical Trial

A Non-Randomized Trial of In-Person Versus Text/ Telephone Screening, Brief Intervention and Referral to Treatment for Pregnant and Postpartum Women

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Background: Systems of care that improve mental health and substance use disorder Screening, Brief Intervention and Referral to Treatment (SBIRT) for pregnant and postpartum women are needed.

Aims: The aim of this study is to determine if women receiving prenatal care from January 2020 to April 2021 are more likely to be screened, screen positive, be referred for treatment and attend treatment with technology facilitated SBIRT, compared to women receiving prenatal care and in-person SBIRT January 2017 to December 2019.

Materials & Methods: Technology facilitated SBIRT, designated Listening to Women (LTW), includes text message-based screening, phone-based brief intervention, and referral to treatment by a remote care coordinator. A total of 3535 pregnant and postpartum women were included in the quasi-experimental study and data were collected via text message and Electronic Health Record.

Results: In-person SBIRT was completed by 65.2% (1947/ 2988) of women while 98.9% (547/553) of women approached agreed to take part in LTW and 71.9% (393/547) completed SBIRT via LTW. After controlling for potentially confounding variables, women enrolled in LTW were significantly more likely to be screened (relative risk [RR]: 1.10, 95% CI 1.03–1.16), screen positive (RR 1.91, 95% CI 1.72–2.10), referred to treatment (RR 1.55, 95% CI 1.43–1.69) and receive treatment (RR 4.95, 95% CI 3.93–6.23), compared to women receiving in-person SBIRT. Black women enrolled in LTW were significantly more likely to screen positive (RR 1.65, 95% CI 1.35–2.01), be referred to treatment (RR 1.54, 95% CI 1.35–1.76) and attend treatment (RR 5.49, 95% CI 3.69–8.17), compared to Black women receiving in-person SBIRT.

Discussion: LTW appears to increase the proportion of pregnant and postpartum women receiving key elements of SBIRT.

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doi: 10.1176/appi.prcp.20210027*





Perinatal Mood and Anxiety Disorders (PMADs), Perinatal Substance Use Disorders (PSUDs) and Intimate Partner Violence (IPV) are common during pregnancy and the postpartum year (1–3), and have been strongly associated with significant morbidity and mortality for both women and their children (4, 5). Multiple professional organizations have endorsed screening for PMADs, PSUDs and IPV during pregnancy and the postpartum period using standardized, validated screening tools, followed by assessment and referral to treatment (6). For those screening positive for substance use, a brief intervention using in-person motivational interviewing to support behavioral change and referral to treatment (e.g., Screening, Brief Intervention and Referral to Treatment [SBIRT]) is recommended (7, 8). Despite strong evidence supporting this approach to screening and intervention among patients in primary and obstetrics care, particularly for alcohol abuse, other substance use disorders, depression, and other mental health conditions (9–11), it has yet to be fully implemented and utilized in obstetric settings: only one in five pregnant and one in eight postpartum women are screened for PMADs (12) and PSUDs is often undetected (10). Among those detected, fewer than 20% of women attend treatment for PMADs (9) or PSUDs (13), despite the established efficacy of treatments for these diseases (14, 15). Similarly, only 10–20% of peripartum women are screened for IPV (16). Unlike PMADs and PSUDs, however there is still a large knowledge gap in optimal interventions for IPV following a positive screen (17).

Key patient, provider and system-level barriers exist that inhibit widespread adoption of evidence-based screening and referral recommendations during pregnancy and the postpartum year (18, 19). The breadth of recommended screenings, and the depth of knowledge needed to adequately assess and then appropriately connect women with treatment resources is, in general, beyond the capability of our current health system (8). Insufficient time, unfamiliarity with screening tools, lack of knowledge about PMADs, PSUDs and IPV, combined with the limited availability of accessible treatment services and/or resources are reasons cited for not adopting or fully utilizing screening and referral practices during prenatal care (18, 19). System or structural barriers can include lack of reimbursement for SBIRT efforts and/or integration of SBIRT in the Electronic Health Record (EHR). In addition, individual patient factors such as lack of knowledge and stigma concerns are potent barriers to mental health and/or substance use disorder treatment (18, 19).

Innovations that can overcome barriers to universal adoption and effective utilization of currently available evidence-based practices for screening and referral to treatment for PMADs, PSUDs and IPV (8) are critically needed. Text-messaging or computer-based assessments can result in a greater proportion of individuals endorsing IPV (16), or psychological distress compared to face-to-face assessments (20, 21). In addition, a





remote care coordinator with a master's in clinical social work may be more adept at employing a brief intervention for PMADs, PSUDs or IPV compared to prenatal care staff, resulting in more women attending treatment. The aim of this study is to determine if a program called Listening to Women (LTW), a text message-based screening, phone-based brief intervention, and referral to treatment by a remote care coordinator with a master's in clinical social work increases the proportion of women being screened, screening positive, referred to treatment and attending treatment, compared to in-person SBIRT. Given the significant racial disparities in maternal mental health and substance use disorder treatment, with Black women significantly less likely to receive treatment for these disorders as compared to White women (22, 23), we examined differences in screening, screening positive, referred to treatment and attending treatment by race within each screening method (LTW or in-person SBIRT) and by screening method (LTW vs. in-person SBIRT) to determine if racial disparities exist within a given screening method, and/or between screening methods, respectively.

Methods

HIGHLIGHTS

- Technology-based solutions have the potential to overcome many of the key patient, provider and systemlevel barriers that inhibit widespread adoption of evidence-based screening and referral recommendations for Perinatal Mood and Anxiety Disorders (PMADs), Perinatal Substance Use Disorders (PSUDs), and Intimate Partner Violence (IPV).
- Listening to Women (LTW), a text message-based screening, phone-based brief intervention, and referral to treatment by a remote care coordinator, appears to increase the proportion of pregnant and postpartum women being screened, screening positive, referred to treatment and attending treatment, compared to inperson Screening, Brief Intervention and Referral to Treatment (SBIRT) during prenatal care.
- Racial disparities in attendance to treatment identified with in-person SBIRT were not present with LTW; Black women were more likely to attend treatment with LTW compared to in-person SBIRT and Black and White women were equally as likely to attend treatment with LTW.





PARTICIPANTS AND SETTING

This quasi-experimental study compared two cohorts of pregnant and postpartum women who received SBIRT in the same prenatal care clinic. Cohorts differed in the timing and method by which they received SBIRT. The first cohort received in-person SBIRT during prenatal care January 1, 2017 to December 31, 2019. The second cohort received LTW during prenatal care January 1, 2020 to April 5, 2021. The prenatal care took place in a large outpatient obstetrics and gynecology clinic within a large academic medical center located in the southeast region of the United States. This outpatient clinic provides prenatal care for approximately 1200–1500 pregnant patients per year and is one of five clinics affiliated within a single hospital system. All five clinics are in the same county and are less than 30 min apart from each other. The clinic where the study took place reflects a very similar patient demographic and type of practice as all obstetric providers rotate working at each of the five clinics. Women eligible for the study were those receiving prenatal care in this clinic January 2017 to April 2021. Demographic information such as age, source of classification for race and relationship status was extracted from the EHR.

OUTCOMES

Primary outcomes for this study include the proportion of women completing a screen (defined as completing at least 1 screening question), screening positive (defined as answering "Yes" to at least one screening question), referred to treatment (defined as a referral to a mental health or substance use disorder professional e.g., psychiatrist, psychologist, Licensed Professional Counselor, or Licensed Independent Social Worker), and attending at least one appointment with one of these professionals within 3 months following a referral to treatment. We examined differences in screening, screening positive, referred to treatment and attending treatment by race within each screening method (LTW or in-person SBIRT) and by screening method (LTW vs. in-person SBIRT) to determine if racial disparities were present within a screening method, and/or between screening methods, respectively.

To determine if screening positive, referral to treatment and attending treatment varied by problem area, we compared the rates of screening positive, referral to treatment and attending treatment by group (LTW vs. In-Person SBIRT) for specific screening questions relating to PMADs (i.e., "Over the past few weeks has worry, anxiety, depression or sadness made it difficult for you to do your work, get along with people or take care of things at home?"), PSUDs (i.e., "In the past, have you had difficulties in your life due to alcohol or other drugs including prescription medications?" or "In the past month, have you drunk any alcohol or used other drugs?") and IPV (i.e., "Are you feeling at all unsafe in any way in your relationship with your current partner?").





IN-PERSON SBIRT

All pregnant and postpartum women receiving prenatal care in the clinic described above were screened for mental health, substance use, and IPV using standardized screening questions and their responses were recorded in the EHR. The standardized screening questions and SBIRT trainings were developed and widely disseminated by a statewide perinatal collaborative (23) to improve detection and treatment of PMADs, PSUDs and IPV in pregnancy and up to 12 months postpartum. The screening is completed once during the first prenatal care appointment. The state Centers for Medicaid and Medicare and other major health insurers provide reimbursement for one screening and two brief interventions per fiscal year for pregnant and postpartum women.

SCREENING ASSESSMENT

The state supported SBIRT includes eight screening questions verbally asked by a nurse during routine prenatal intake to identify potential problems with mental health, substance use or IPV. Four of the eight screening questions include the 4Ps (24), a measure that asks if your Parents, Partner or Peers have a problem with alcohol or drug use and if “In the past month, have you drunk any alcohol or used other drugs?”. The other four questions focus on difficulties with alcohol or drugs including prescription medications (“In the past, have you had difficulties in your life due to alcohol or other drugs, including prescription medications?”), cigarette use in the past 3 months (“Have you smoked any cigarettes in the past three months?”), IPV (“Are you feeling at all unsafe in any way in your relationship with your current partner?”), and the presence of worry, anxiety, depression, or sadness that interferes with functioning (i.e., “Over the last few weeks, has worry, anxiety, depression or sadness made it difficult for you to do your work, get along with people or take care of things at home?”). Screening questions are verbally administered, and response (Yes/No) are entered in the EHR by the clinic nursing staff and reviewed by the obstetric provider (e.g., Obstetrician and Gynecologist [OB/GYN] or Certified Nurse Midwife [CNM]). If the screening is not completed, screening question responses are left blank in the EHR and can be completed at a subsequent clinic visit. For women screening positive, defined as answering “Yes” to any of the screening questions, the OB/GYN or CNM has a 5–10 min conversation with the patient using motivational interviewing techniques including: i) providing feedback and education regarding the screening results and associated risks to the woman and baby; ii) listening to the patient and eliciting internal motivation for change and providing support to promote healthy choices; and iii) providing guidance, support, and referral to mental health or substance use disorder treatment services. The obstetric provider records the brief intervention and referral information in the EHR. Patients are referred to the mental health providers located within the outpatient OB/GYN practice.





Responses to the in-person screening questions, referral to treatment if indicated, and attendance to a mental health treatment appointment are captured within the EHR. A third party, designated by the Institutional Review Board, provided investigators with de-identified data from the EHR for all women receiving prenatal care for the designated clinic beginning January 1, 2017 through December 31, 2019. De-identified data included SBIRT screening and referral information and completed appointments for mental health treatment. Attendance to treatment was recorded in the EHR and defined as attending an appointment with a mental health professional within 3 months after the date of in-person SBIRT and referral to treatment.

[LISTENING TO WOMEN](#)

From January 1, 2020 to April 5, 2021, women receiving prenatal care in the same large outpatient clinic described above were enrolled by clinic nursing staff in an alternative SBIRT system, LTW. LTW employs the same eight SBIRT screening questions and delivers a brief intervention leveraging motivational interviewing techniques and referral to resources and treatment identical to those described for in-person SBIRT. LTW differs in the delivery of screening questions in that women answer the eight screening questions via text message. In addition, if women answer Yes to the screening question about their mood and anxiety they also complete the Edinburgh Postnatal Depression Scale (EPDS) (25) via their phone. If they answer yes to any of the questions related to substance use, they complete the National Institute on Drug Abuse (NIDA) Modified Assist (26) via their phone. Immediately after completing the screenings, all women receive an automated text message with feedback about their screening results, contact information for the care coordinator and letting them know if a care coordinator will be contacting them. In addition, the automated text message includes other resources for urgent mental health problems and resources for national hotlines for suicide prevention and domestic violence. LTW also differs from in-person SBIRT in that any indicated brief intervention is completed via phone by a care coordinator with a master's degree in clinical social work. The care coordinator assesses mental health and/or substance use disorders and IPV. The care coordinator identifies any needed resources (e.g., housing, food etc.) and makes referrals to an appropriate level of care and/or resources. Responses to the text-message screening questions, phone-based assessments, and referrals are recorded in REDCap, an on-line data capture system and a summary of this information is automatically generated. The care coordinator makes any necessary edits to this automatically generated summary and "copies and pastes" this information into a progress note in the EHR. Attendance at a mental health treatment appointment is captured within the EHR. Deidentified data from the EHR including attendance to a





mental health treatment appointment for women enrolled in LTW were also provided by a third party (as above) to study investigators.

Nursing staff were introduced to the LTW program by the study staff. The study staff provided a 45-min inservice training on the program and a written script explaining how to introduce the program to women along with a brief checklist for enrolling women into the program (see Supporting Information S1). The time required to introduce and enroll women in the LTW system was approximately equivalent to completing the eight inperson SBIRT screening questions. The script included information about the purpose of the program, who would review the screening information and that a care coordinator would be calling women in response to a positive screen. Women were also told the program was voluntary and if they wanted, they could delete the text messages and their responses at any time. Instead of completing inperson SBIRT during routine clinic workflow, nurses began enrolling women into LTW. Study staff demonstrated for nursing staff how to introduce and enroll at least two women receiving care in the clinic into the program and then observed nursing staff enrolling women into the program twice per week for two consecutive weeks. Study staff was available in-person during this time to answer any questions and provide feedback to nursing staff about the program introduction and enrollment process. After the 2 weeks, study staff provided nursing staff with their contact information and encouraged the nursing staff to call with any follow-up questions or concerns. Participants declining participation in the LTW program were asked to complete a brief online survey sent via text message to indicate the reason for declining participation.

As part of this pragmatic quasi-experimental clinical trial there was no additional training provided to nurses or the care coordinator in motivational interviewing techniques. Their experience with motivational interviewing is based on their prior education and training including a master's in clinical social work (MSW) for the care coordinator, and participation in a state supported SBIRT training for nurses including a half day in-person or online training in motivational interviewing. A master's degree in clinical social work is typically a 1 to 2-year program. Relevant common courses to all MSW programs include mental health and substance use assessment, diagnosis, and treatment including motivational interviewing. Upon completion of MSW a clinical social worker can provide direct clinical services for individuals, families, couples, and groups with mental health and/or substance use disorders. A single care coordinator provided the phonebased brief assessment and motivational interviewing throughout the entire LTW intervention. Because the LTW system was delivering the standard of care for SBIRT in this clinic, and only de-identified EHR data was provided to investigators through an honest broker, the Medical University of South Carolina Institutional Review Board approved a waiver of written informed consent (Protocol # 00106246).





SAMPLE SIZE

Based on the sample achieved we have performed a posthoc power analyses using a two-sided Z-Test with unpooled variance with a significance level of 0.05 for the four primary outcomes. Screened: With a sample size of 547 for LTW and 2988 for In-person SBIRT, we achieved 88.00% power to detect a difference between group proportions of 0.0669. Screened Positive: With a sample size of 393 for LTW and 1947 for In-person SBIRT, we achieved 99.00% power to detect a difference between group proportions of 0.1160. Referred to Treatment: With a sample size of 257 for LTW and 649 for In-person SBIRT, we achieved 99.00% power to detect a difference between group proportions of 0.1484. Attendance to Treatment: With a sample size of 229 for LTW and 374 for In-person SBIRT, we achieved 99.00% power to detect a difference between group proportions of 0.1549.

DATA ANALYSIS

Descriptive statistics were calculated for each screening method, including counts and percentages for categorical variables and mean and standard deviations for continuous variables. Unadjusted differences between women in LTW and women receiving in-person SBIRT were calculated using chi-square tests. The Wilcoxon–Mann Whitney test was used to calculate unadjusted age differences. All reported outcomes were dichotomous. Relative risk (RR) ratios were estimated using Poisson regression models with robust error variance in PROC GENMOD (27). Adjusted analyses controlled for potentially confounding variables (e.g., age, race, in a committed relationship). Outcomes are studies where the outcome is not a rare event (28). To account for multiple comparisons within secondary outcome analyses within each question (i.e., screened positive, referred to treatment, attended treatment), we applied a Bonferroni correction with an adjusted alpha = 0.0177 (0.05/3). All tests were two-sided with a type 1 error set at $\alpha < 0.05$ and all analyses were performed using SAS statistical software version 9.4 (Cary, NC).

RESULTS

In-person SBIRT was completed in 65.2% (1947/2988) of the women receiving prenatal care from January 1, 2017 to December 31, 2019. Conversely, 98.9% (547/553) of women receiving prenatal care from January 1, 2020 to April 5, 2021, were approached and agreed to take part in LTW. Of these, 71.9% (393/547) completed the text message-based screening and 68.5% (375/547) of women were contact by phone by the care coordinator. Reasons for declining participation in LTW included not feeling comfortable answering questions about behavioral health via mobile phone ($n = 1$), and “other” ($n = 5$). Explanations in the “other” category included: I am not interested in this care (n





= 2); as an employee (at the academic institution), I do not feel comfortable taking part in this program (n = 3) (Figure 1). Demographic variables such as age, race and in a committed relationship are compared between groups for those that are eligible for SBIRT, completed SBIRT and did not complete SBIRT (Table 1).

In unadjusted analyses, a significantly greater proportion of women in LTW were screened, screened positive, referred for treatment, and received treatment, compared to women receiving in-person SBIRT (Figure 2). After controlling for potentially confounding variables (i.e., age, race, in a committed relationship), women enrolled in LTW were significantly 10% more likely to be screened, 91% more likely to screen positive, 55% more likely to be referred to treatment, and 395% more likely to receive treatment, compared to in-person SBIRT (Table 2). The rate of positive responses to each screening question for in-person SBIRT and LTW are included in Figure S1.

FIGURE 1.

Study participant flow diagram. SBIRT, Screening, Brief Intervention and Referral to Treatment

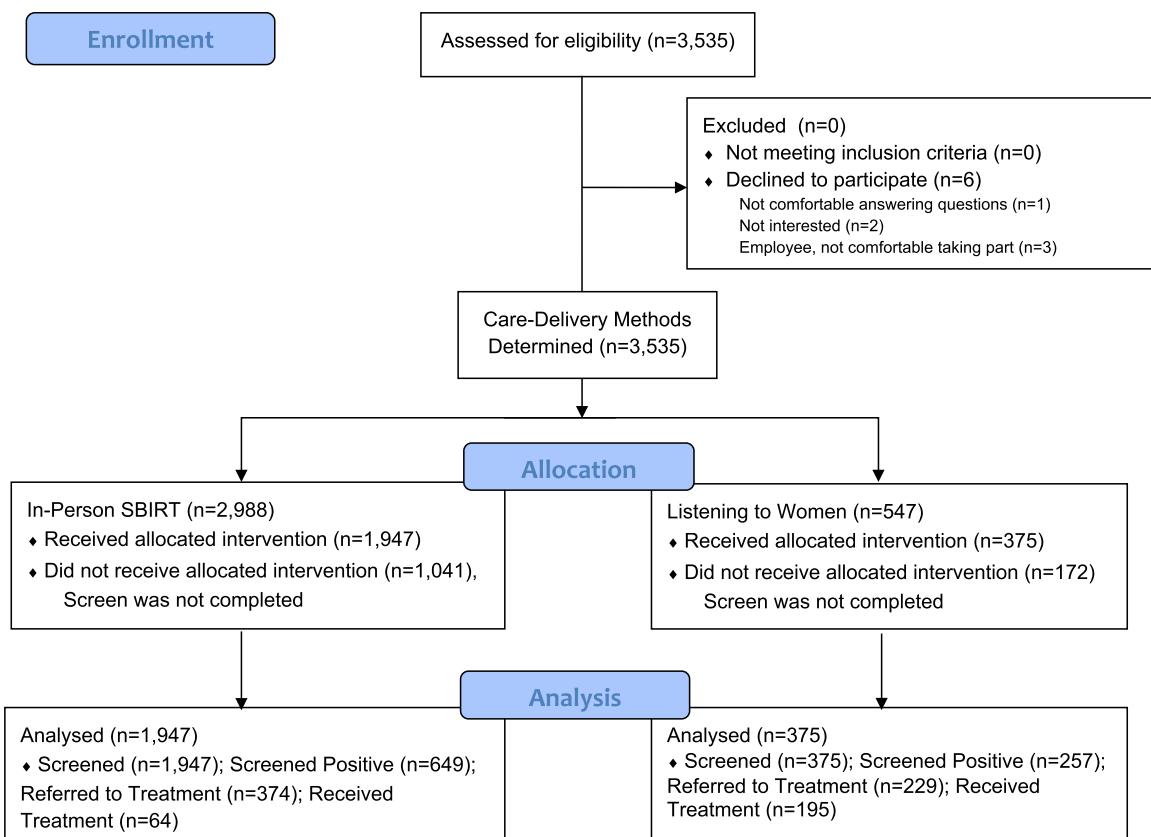


Table 1.

Demographic characteristics by screening method (LTW vs. in-person SBIRT)

Demographics	Screening method				p
	LTW (N = 547)		In-person SBIRT (N = 2988)		
	Mean	(SD)	Mean	(SD)	
Age (years), total	29.85	(5.91)	28.88	(5.93)	0.0017
Screened	30.18	(5.88)	28.84	(5.90)	0.0001
Not screened	29.01	(5.90)	28.95	(5.97)	0.7722
	N	(%)	N	(%)	
Pregnant	357	(65.25)	1984	(66.42)	0.3941
Race, total					<0.0001
Black	165	(30.16)	1276	(42.70)	-
White	291	(53.20)	1486	(49.73)	-
Other	91	(16.64)	226	(7.56)	-
Screened					<0.0001
Black	109	(27.74)	841	(43.19)	-
White	218	(55.47)	949	(48.74)	-
Other	66	(16.79)	157	(8.06)	-
Not screened					0.0002
Black	56	(36.36)	435	(41.79)	-
White	73	(47.40)	537	(51.59)	-
Other	25	(16.23)	69	(6.63)	-
Marital status, total					<0.0001
Committed relationship	241	(44.06)	1389	(46.49)	-
Divorced/separated	6	(1.10)	41	(1.37)	-
Single	287	(52.47)	1555	(52.04)	-
Widowed	0	(0.00)	2	(0.07)	-
Unknown	10	(1.83)	1	(0.03)	-
Missing	3	(0.55)	0	(0.00)	-
Screened					<0.0001
Committed relationship	195	(49.62)	877	(45.04)	-
Divorced/separated	2	(0.51)	25	(1.28)	-
Single	186	(47.33)	1042	(53.52)	-
Widowed	0	(0.00)	2	(0.10)	-
Unknown	8	(2.04)	1	(0.05)	-
Missing	2	(0.51)	0	(0.00)	-
Not screened					<0.0001
Committed relationship	46	(29.87)	512	(49.18)	-
Divorced/separated	4	(2.60)	16	(1.54)	-
Single	101	(65.58)	513	(49.28)	-
Unknown	2	(1.30)	0	(0.00)	-
Missing	1	(0.65)	0	(0.00)	-
In a committed relationship, total	241	(44.06)	1389	(46.49)	0.2951
Screened	195	(49.62)	877	(45.04)	0.0969
Not screened	46	(29.87)	512	(49.18)	<0.0001

Abbreviations: LTW, Listening to Women; SBIRT, Screening, Brief Intervention and Referral to Treatment.





FIGURE 2.

Proportion of Listening to Women versus in-person Screening, Brief Intervention and Referral to Treatment (SBIRT) participants screened, screening positive, referred to treatment and attending treatment. * $p = 0.0024$; ** $p < 0.0001$

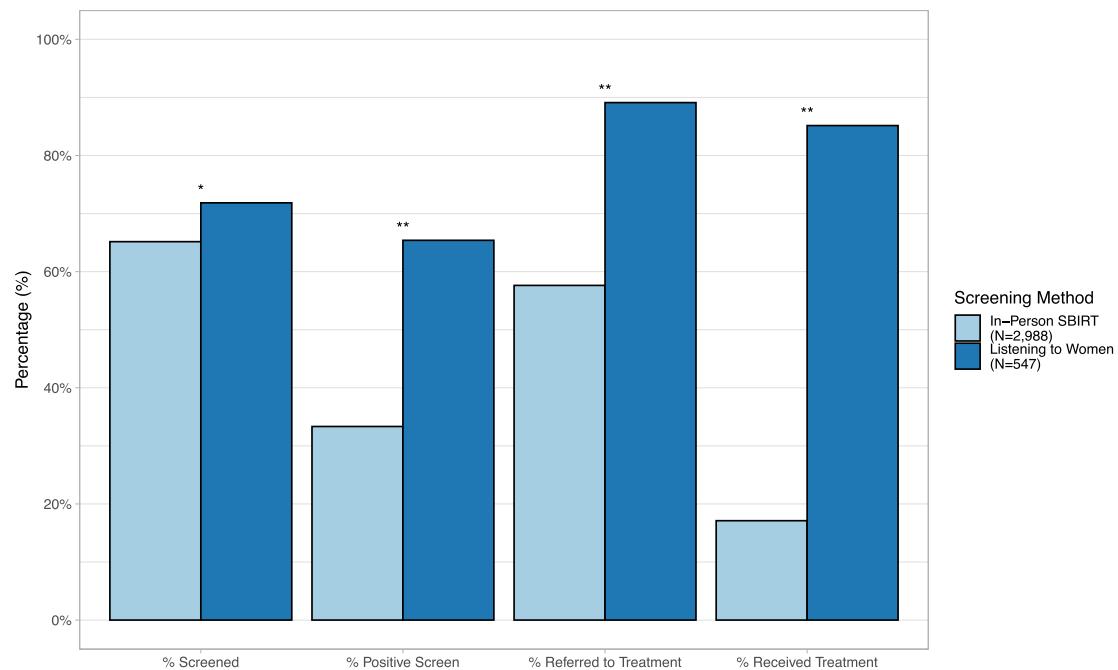


TABLE 2.

Adjusted and unadjusted analyses of rates of screening, screened positive, referred to treatment, and received treatment by group (LTW vs. in-person SBIRT)

Outcome	LTW (N = 547)		In-person SBIRT (N = 2988)		Unadjusted results			Adjusted results ^a		
					RR	(95% CI)	p	RR	(95% CI)	P
	N	(%)	N	(%)						
Screened	393	(71.85)	1947	(65.16)	1.30	(1.10–1.55)	0.0024	1.10	(1.03–1.16)	0.0027
Positive screen	257	(65.39)	649	(33.33)	2.99	(2.47–3.62)	<0.0001	1.91	(1.72–2.10)	<0.0001
Referred treatment	229	(89.11)	374	(57.63)	4.11	(2.85–5.93)	<0.0001	1.55	(1.43–1.69)	<0.0001
Received treatment	195	(85.15)	64	(17.11)	7.62	(5.49–10.56)	<0.0001	4.95	(3.93–6.23)	<0.0001

Abbreviations: LTW, Listening to Women; RR, Relative risk; SBIRT, Screening, Brief Intervention and Referral to Treatment.

^a Adjusted for age, race and in a committed relationship.





TABLE 3.

Adjusted and unadjusted analyses of rates of screening, screened positive, referred to treatment, and received treatment by race (Black vs. White) and group (LTW vs. in-person SBIRT)

Panel A. Within screening group racial disparities (Black vs. White)								
	Unadjusted results				Adjusted results ^a			
	Black		White		p	RR	(95% CI)	
Within LTW group								
Screened	109	(66.06)	218	(74.91)	0.0437	0.98	(0.85–1.13)	
Not screened	56	(33.94)	73	(25.09)	-	-	-	
Screened positive	59	(54.13)	149	(68.35)	0.0118	0.80	(0.65–0.99)	
Screened negative	50	(45.87)	69	(31.65)	-	-	-	
Referred to treatment	53	(89.83)	128	(85.91)	0.4478	1.06	(0.93–1.21)	
Not referred to treatment	6	(10.17)	21	(14.09)	-	-	-	
Received treatment	44	(83.02)	110	(85.94)	0.6160	1.03	(0.89–1.20)	
Did not receive treatment	9	(16.98)	18	(14.06)	-	-	-	
Within in-person SBIRT group								
Screened	841	(65.91)	949	(63.86)	0.2616	0.99	(0.92–1.06)	
Not screened	435	(34.09)	537	(36.14)	-	-	-	
Screened positive	277	(32.94)	323	(34.04)	0.6231	0.64	(0.56–0.75)	
Screened negative	564	(67.06)	626	(65.96)	-	-	-	
Referred to treatment	164	(59.21)	182	(56.35)	0.4798	1.01	(0.86–1.18)	
Not referred to treatment	113	(40.79)	141	(43.65)	-	-	-	
Received treatment	24	(14.63)	39	(21.43)	0.1020	0.54	(0.32–0.92)	
Did not receive treatment	140	(85.37)	143	(78.57)	-	-	-	
Panel B: Within race group screening disparities (LTW vs. in-person SBIRT)								
	Unadjusted results				Adjusted results ^a			
	LTW		In-person SBIRT		p	RR	(95% CI)	p
	N	(%)	N	(%)				
Within Black group								
Screened	109	(66.06)	841	(65.91)	0.9692	1.00	(0.89–1.13)	
Not screened	56	(33.94)	435	(34.09)	-	-	-	
Screened positive	59	(54.13)	277	(32.94)	<0.0001	1.65	(1.35–2.01)	
Screened negative	50	(45.87)	564	(67.06)	-	-	-	
Referred to treatment	53	(89.83)	164	(59.21)	<0.0001	1.54	(1.35–1.76)	
Not referred to treatment	6	(10.17)	113	(40.79)	-	-	-	
Received treatment	44	(83.02)	24	(14.63)	<0.0001	5.49	(3.69–8.17)	
Did not receive treatment	9	(16.98)	140	(85.37)	-	-	-	
Within White group								
Screened	218	(74.91)	949	(63.86)	0.0003	1.18	(1.09–1.27)	
Not screened	73	(25.09)	537	(36.14)	-	-	-	
Screened positive	149	(68.35)	323	(34.04)	<0.0001	1.91	(1.68–2.18)	
Screened negative	69	(31.65)	626	(65.96)	-	-	-	
Referred to treatment	128	(85.91)	182	(56.35)	<0.0001	1.53	(1.36–1.72)	
Not referred to treatment	21	(14.09)	141	(43.65)	-	-	-	
Received treatment	110	(85.94)	39	(21.43)	<0.0001	4.05	(3.05–5.38)	
Did not receive treatment	18	(14.06)	143	(78.57)	-	-	-	

Abbreviations: LTW, Listening to Women; RR, Relative risk; SBIRT, Screening, Brief Intervention and Referral to Treatment.

^a Adjusted for age and in a committed relationship.





Table 3 includes unadjusted and adjusted analyses examining racial disparities within each screening method (Table 3, Panel A) and between screening methods (Table 3, Panel B). In adjusted analyses within the in-person SBIRT group, controlling for age, and in a committed relationship, Black women were 36% less likely to screen positive, and 46% less likely to attend mental health treatment, compared to White women; however, no differences were found between White and Black women in likelihood of being screened or referred to treatment with in-person SBIRT. In adjusted analyses within the LTW group, controlling for age, and in a committed relationship, Black women were 20% less likely to screen positive, compared to White women; however, no differences were found between White and Black women in likelihood of being screened, referred to treatment and attending treatment with LTW. In adjusted analyses, the comparison between screening programs (i.e., in-person SBIRT vs. LTW) among Black women and controlling for age, and in a committed relationship, Black women enrolled in LTW were 35% more likely to screen positive, 46% more likely to be referred to treatment and 449% more likely to attend mental health treatment, compared to Black women receiving in-person SBIRT.

Subgroup analyses comparing rates of screening positive, referral to treatment and attendance to treatment by group and specific questions approximating PMADs, PSUDs, and IPV are included in Table S1. For PMADs and PSUDs, LTW significantly increased the proportion of women screening positive, being referred to treatment and attending treatment compared to In-Person SBIRT ($p < 0.0177$). Similarly, for IPV, LTW increased the proportion of women screening positive, being referred to treatment and attending treatment compared to In-Person SBIRT, but differences were not statistically significant ($p = 0.3068$) (see Table S1).

Discussion

The study findings demonstrate that obstetric nurses enrolling pregnant and postpartum women into a text message-based mental health, substance use and IPV screening program with a remote care coordinator is feasible and advantageous to introduce into a large volume, obstetrical care clinic. A greater proportion of women enrolled in the LTW program were successfully screened, screened positive, referred to treatment and attended treatment, compared to in-person SBIRT screening. Racial disparities identified with in-person SBIRT, where Black women are less likely to attend treatment compared to White women, were not present with the LTW program.

Our findings are consistent with a single previous study employing text message screening for postpartum depression in an obstetric clinic that also demonstrates this method of screening is feasible and acceptable to patients (29). Our study significantly





extends this line of research by including a comparison group as well as screening for substance use and IPV. Furthermore, our study demonstrates that with minimal training, implementation of the LTW system into a busy obstetrical care clinic can be accomplished using the current obstetrical care nursing staff, as opposed to study staff (29). The LTW technology-based approach was found to be highly feasible and successful with efficiently screening a significantly higher percentage of women. Among the women available to be screened during prenatal care visits, nurses were more likely to screen women with the LTW system, compared to in-person SBIRT. Similarly, pregnant and postpartum women were overwhelmingly accepting of a text-message screening system with fewer than 2% of approached women declining participation in the LTW program and overall, a greater proportion of women completing screenings, compared to in-person SBIRT which had been the established standard of care. The integration of the program into routine care by clinic nurses, combined with a care coordinator with no other SBIRT training, aside from the usual training and clinical experience for an individual with a master's degree in clinical social work, and high end-user participation rates suggest that the LTW program can be easily integrated into routine prenatal care practices. In doing so, the LTW system may help address some of the practice and provider level barriers to maternal mental health, substance use and IPV screening (18, 19).

From a clinical benefit perspective, the LTW screening system results in a greater proportion of women screening positive and attending treatment for mental health and substance use disorders, compared to in-person SBIRT. These findings are important given the known tendency of pregnant and postpartum women to underreport mental health and/or substance use problems and IPV (30, 31). It also suggests that LTW will result in more opportunities for health care providers to help facilitate needed support and life-saving treatments (4, 5). Mental illness and substance use disorders are among the most stigmatized of all health conditions and such stigma is a major barrier to seeking and receiving effective care for these illnesses (18, 19). This is likely to be particularly true for pregnant and postpartum women who might feel that health care providers could be judgmental about the consequences of mental health or substance-related issues for their pregnancy and infant. As such, it is possible that text-messaging provides a greater sense of confidentiality and lower likelihood of feeling judged as compared to a face-to-face clinical interview with a health care provider. These findings are consistent with others demonstrating more positive responses with computer-based assessments, compared to face-to-face assessments, for IPV (16) and other "stigmatized behaviors" (e.g., intravenous drug use, high risk sex, high risk HIV transmission behaviors), and "psychological distress" (e.g., hopeless, worried, depressed, suicidal ideation), compared to "neutral behaviors" (e.g., prior abscess, prior treatment) for those with substance use disorders and/or HIV (20, 21).





The increase in treatment attendance seen with LTW, compared to in-person SBIRT is promising, especially given the complexity involved in engaging pregnant and postpartum women in mental health and substance use disorder treatment. The many challenges encountered in facilitating referrals to mental health and substance use disorder treatment (18, 19) may be better navigated by an experienced social worker than by a busy obstetrical provider. Overall, these findings are consistent with a large systematic review examining depression screening and referral interventions in outpatient perinatal care settings that demonstrates an increase in utilization of depression care with screenings and referral interventions that are more intensive and target multiple patient, provider, and practice-level barriers to screening and treatment (9). While the range of study designs included in this systematic review are heterogeneous, the results support a dose-response relationship indicating that more intense strategies targeting multiple barriers to depression care are associated with enhanced mental health treatment and may be required to improve current screening and referral practices (9).

There is a robust literature demonstrating the benefit of in-person SBIRT for peripartum substance use (10, 11, 32); therefore, for current study, it is important to employ in-person SBIRT as the comparison group. Despite the efficacy of SBIRT in controlled studies, the effectiveness of SBIRT in clinical practice is not as reproducible (33). One explanation, suggested by Ino and Cho (2013), for the dilution of effectiveness may be the lack of motivational interviewing training and experience of providers tasked with employing brief interventions (33). It is possible that the greater proportion of women attending treatment with LTW, compared to in-person SBIRT, may be explained by the involvement of a care coordinator with a mental health and social work background who potentially is more skilled at assessing these conditions and/or has greater experience and training in motivational interviewing, compared to obstetric health care providers. It is also possible that the care coordinator associated with the LTW intervention has more information (i.e., completed EPDS and/or NIDA modified assist) at the time of the brief intervention and/or have more dedicated time to talk with women, compared to obstetric providers with limited time and competing priorities during routine visits. Computer-assisted SBIRT for pregnant women identified with substance use or misuse has shown to be more effective than enhanced usual care (i.e., educational pamphlet plus existing treatment resources) in reducing substance use, but comparable to the effectiveness of in-person SBIRT (13). Of note, providers delivering in-person SBIRT in this study (13) received a 15-h SBIRT workshop, followed by practice cases and feedback, coaching and monthly group supervision for the duration of the trial. These findings support the idea that fidelity to motivational interviewing is important and can potentially be achieved with computer-based algorithms.





Computer-assisted SBIRT programs and phone-based SBIRT programs employing care coordinators may potentially prove cost-effective by alleviating the time needed to train obstetric staff in motivational interviewing practices as well as retrain employees due to staff turnover, not even considering the clinical health and resource saving benefits of more effective mental health and substance use disorders screening and treatment (34). Furthermore, these models used centralized personnel resources and, as such, do not require dedicated SBIRT personnel in each obstetric clinic and is therefore a less costly alternative to in-person SBIRT (34). This same model could be applied to LTW. Furthermore, Medicaid and other health insurers provide reimbursement for SBIRT (i.e., \$24 per annual screen, and \$48 for each brief intervention reimbursed twice per year), suggesting that the cost of the care coordinator's time could be supported through SBIRT reimbursement.

Comparatively, there are fewer studies examining screening and referral interventions for IPV for pregnant and postpartum women, although, app-based screening programs are currently being piloted (35). IPV is one of the leading causes of pregnancy-related deaths (4), so improvements in detection and interventions for IPV could be lifesaving. The current study found that, although not statistically significant, women were twice as likely to endorse feeling unsafe with their partner via text message compared to in-person screening. This is consistent with the fact that abusive partners frequently control their partners interactions with health care providers, potentially leaving a brief text-messaging approach (where textmessages can be quickly deleted) as one potential way to share confidential concerns of IPV. As such, further exploration of technology-based applications to improve detection and access to support for women experiencing IPV is warranted.

Rates of screening positive for mental health, substance use or IPV were greater for Black women enrolled in LTW, compared to Black women enrolled in in-person SBIRT. However, Black women enrolled in LTW were less likely to screen positive compared to White women enrolled in LTW. A research study including qualitative interviews with pregnant and postpartum Black women is currently underway to understand and mitigate this racial disparity (NIDA R34 DAO46730). However, the racial disparities reported with in-person SBIRT, with Black women less likely to attend mental health treatment compared to White women, was not seen in the LTW program. In fact, Black women were 5 times more likely to receive mental health treatment with the LTW intervention, compared to Black women receiving in-person SBIRT. These findings are exciting given that peripartum Black women are significantly less likely to receive treatment, compared to peripartum White women for substance use disorders and postpartum depression (22, 23).





Strengths of this study are its large sample size and conduct of the study in a large obstetrical clinic using front-line providers. For the purposes of the study and data collection, having all screening, referral and treatment services captured in the EHR is a strength. A limitation of the study is the inclusion of only one large prenatal care practice in an academic health system. It is unclear if the results of the study generalize to community-based practices, although it is believed that implementation in a large practice might be more problematic than in a smaller facility. A second limitation of the study is that fidelity to motivational interviewing was not measured. Future studies will include measurement of fidelity to motivational interviewing to better understand the potential mechanism by which LTW potentially improves attendance to treatment. Third, there were fewer women enrolled in LTW, compared to In-Person SBIRT. This was expected given that in-Person SBIRT data were extracted from the EHR and LTW data were collected via active recruitment. Furthermore, LTW recruitment occurred for less time, compared to in-person SBIRT (16 vs. 24 months) and most importantly during the LTW study collection period, there was a decrease in the volume of women presenting for prenatal care due to the COVID-19 pandemic and a temporary change in workflow with some visits occurring remotely. These changes may have accounted for the number of women recruited for participation in LTW, compared to in- Person SBIRT. Importantly, in the LTW group, only 22 women or 4.02% of women identified as Hispanic and similarly only 123 women or 4.12% of women in the SBIRT group identified as Hispanic. Given the relatively small group of Hispanic women, this precluded us from estimating effects especially for outcomes that do not include the entire group, that is, screening positive, referred to treatment, attending treatment. While the proportion of Hispanic women in our sample is consistent with the ethnicity of the overall clinic and state's population, lack of representation of Hispanic women it is a limitation of the study. Lastly, the fact that the in-person SBIRT group includes individuals screened from 2017 to 2019 while data on the LTW group was collected in 2020–2021 is another potential study limitation. External factors such as COVID-19 might have exerted a differential influence on the two groups as early reports suggest that IPV and mental health problems may have increased for pregnant and postpartum women during the pandemic, compared to pre-pandemic. However, in a sample of 959 pregnant women completing an app-based voluntary IPV screening did not demonstrate a greater incidence of IPV during COVID-19 compared to prior to COVID-19 (35), and a recent meta-analysis of eight studies including 7750 pregnant or postpartum women did not demonstrate significantly higher rates of depressive symptoms, but moderately higher levels of anxiety symptoms (36) during COVID-19, compared to pre- COVID-19. Additionally, the use of telemedicine during the pandemic could have made attending treatment more convenient for women, however telemedicine was a primary modality





of service delivery for the study site prior to the pandemic. Nonetheless, these findings suggest that circumstances of COVID-19 may have had a differential effect on screening and attendance to treatment for among women in LTW, compared to in-person SBIRT. However, it is unlikely that COVID-19 alone accounted for all study findings as findings are robust, intriguing and the study design supports the feasibility of implementing a larger cluster randomized controlled trial with the inclusion of community-based OB/GYN practices which would provide greater scientific rigor to evaluating the generalizability of the LTW intervention.

Conclusion

Suicide and drug overdose combine to constitute the leading cause of maternal mortality during pregnancy and the postnatal period (4, 5), with PMADs, PSUDs and IPV increasing this risk. Additionally, each of these disorders contribute to significant maternal and child morbidity (6, 7). Despite strong recommendations from virtually all professional societies to implement effective screening and referral processes, the uptake of these recommendations has been limited and many screening and referral practices are largely ineffective. Technology facilitated SBIRT, that is, LTW, that incorporates all recommended screenings by professional societies into one program and can be delivered by current obstetric staff and care coordinators with minimal training and with high end-user participation appears to be a feasible and promising approach to improving SBIRT effectiveness. High enduser participation in the program and a greater number of positive screens creates more opportunities for health care providers to discuss and normalize problems with mental health, substance use or IPV and may help to destigmatize these conditions making it easier for women to reach out for help when needed. A large randomized controlled trial is needed to establish the efficacy and impact of the LTW intervention on maternal and child health.

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References

1. Martin SL, Mackie L, Kupper LL, et al: Physical abuse of women before, during, and after pregnancy. *J Am Med Assoc* 2001;285 (12):1581–1584
2. Luca DL, Margiotta C, Staatz C, et al: Financial toll of untreated perinatal mood and anxiety disorders among 2017 births in the United States. *Am J Public Health* 2020;110(6):888–896
3. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. National survey on drug use and health 2019 (NSDUH), 2020
4. Trost S, Beauregard JL, Smoots AN, et al: Meta-analysis of antenatal depression and adverse Birth outcomes in US populations, 2010–20. *Health Aff* 2021;40(10):1560–1565
5. Simonovich S, Nidey NL, Gavin AR, et al: Preventing pregnancy-related mental health deaths: insights from 14 US Maternal Mortality Review Committees, 2008–17. *Health Aff* 2021;40 (10):1551–1559
6. Byatt N, Masters GA, Bergman AL, et al: Screening for mental health and substance use disorders in obstetric settings. *Curr Psychiatry Rep* 2020;22(11):62
7. Byatt N, Levin LL, Ziedonis D, et al: Enhancing participation in depression care in outpatient perinatal care settings a systematic review. *Obstet Gynecol* 2015;126(5):1048–1058
8. Krist AH, Davidson KW, Mangione CM, et al: Screening for unhealthy drug use: US Preventive Services Task Force recommendation statement. *J Am Med Assoc* 2020;323(22):2301–2309.
9. Moyer V. Screening and behavioral counseling interventions in primary care to reduce alcohol misuse: US Preventive Services Task Force recommendation statement. *Ann Intern Med* 2013; 159(3):210–218
10. Humeniuk R, Ali R, Babor T, et al: A randomized controlled trial of a brief intervention for illicit drugs linked to the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) in clients recruited from primary health-care settings in four countries. *Addiction* 2012;107(5):957–966
11. Dwinnells R. SBIRT as a vital sign for behavioral health identification, diagnosis, and referral in community health care. *Ann Fam Med* 2015;13(3):261–263
12. Bauman BL, Ko JY, Cox S, et al: Vital signs: postpartum depressive symptoms and provider discussions about perinatal depression—United States, 2018. *Morb Mortal Wkly Rep* 2020; 69(19):575–581
13. Martino S, Ondersma SJ, Forray A, et al: A randomized controlled trial of screening and brief interventions for substance misuse in reproductive health. *Am J Obstet Gynecol* 2018;218(3):322.e1–322.e12





1C. References

- 1 Wallace M, Gillispie-Bell V, Cruz K, Davis K, Vilda D. Homicide During Pregnancy and the Postpartum Period in the United States, 2018–2019. *Obstet Gynecol*. 2021 Nov 1;138(5):762–769. doi: 10.1097/AOG.0000000000004567. PMID: 34619735.
- 2 Comtois KA, Schiff MA, Grossman DC. Psychiatric risk factors associated with postpartum suicide attempt in washington state, 1992–2001. *Obstet Gynecol*. 2008;199(2):120.e1–120.e5. doi: 10.1016/j.jog.2008.02.011.
- 3 Goldman-Mellor S, Margerison CE. Maternal drug-related death and suicide are leading causes of postpartum death in california. *Obstet Gynecol*. 2019;22(5):489.e1–489.e9. doi: 10.1016/j.jog.2019.05.045.
- 4 Martin SL, Mackie L, Kupper LL, Buescher PA, Morocco KE. Physical abuse of women before, during, and after pregnancy. *JAMA*. 2001;285(12):1581–1584. doi: 10.1001/jama.285.12.1581.
- 5 Saltzman LE, Johnson CH, Gilbert BC, Goodwin MM. Physical abuse around the time of pregnancy: An examination of prevalence and risk factors in 16 states. *Matern Child Health J*. 2003;7(1):31–43. doi: 10.1023/a:1022589501039.
- 6 U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. National survey on drug use and health 2019 (NSDUH). 2020.
- 7 Massachusetts Maternal Mortality and Morbidity Review Committee. Substance use among pregnancy-associated deaths – massachusetts, 2005–2014. 2018:1–6.
- 8 Massachusetts Department of Public Health. An assessment of fatal and non-fatal opioid overdoses in massachusetts (2011–2015). 2017:1–105.
- 9 Schiff DM, Nielsen T, Terplan M, et al. Fatal and nonfatal overdose among pregnant and postpartum women in massachusetts. *Obstet Gynecol*. 2018;132(2):466–474. doi: 10.1097/aog.0000000000002734.
- 10 Gentile S. Untreated depression during pregnancy: Short- and long-term effects in offspring. A systematic review. *Neuroscience*. 2017;342:154–166. doi: 10.1016/j.neuroscience.2015.09.001.
- 11 Robinson R, Lahti-Pulkkinen M, Heinonen K, Reynolds RM, Räikkönen K. Fetal programming of neuropsychiatric disorders by maternal pregnancy depression: A systematic mini review. *Pediatr Res*. 2019;85(2):134–145. doi: 10.1038/s41390-018-0173-y.
- 12 Alhusen JL, Ray E, Sharps P, Bullock L. PMC4361157; intimate partner violence during pregnancy: Maternal and neonatal outcomes. *J Womens Health (Larchmt)*. 2015;24(1):100–106. doi: 10.1089/jwh.2014.4872.
- 13 Maeda A, Bateman BT, Clancy CR, Creanga AA, Leffert LR. Opioid abuse and dependence during pregnancy: Temporal trends and obstetrical outcomes. *Anesthesiology*. 2014;121(6):1158–1165. doi: 10.1097/ALN.0000000000000472.
- 14 Weissman MM. Postpartum depression and its long-term impact on children: Many new questions. *JAMA Psychiatry*. 2018;75(3):227–228. doi: 10.1001/jamapsychiatry.2017.4265.
- 15 Guille C, Aujla R. Developmental consequences of prenatal substance use in children and adolescents. *J Child Adolesc Psychopharmacol*. 2019;29(7):479–486. doi: 10.1089/cap.2018.0177.
- 16 Carlson BE. Children exposed to intimate partner violence: Research findings and implications for intervention. 2000;1(4):321–342. doi: 10.1177/1524838000001004002.
- 17 Luca DL, Margiotta C, Staatz C, Garlow E, Christensen A, Zivin K. Financial Toll of Untreated Perinatal Mood and Anxiety Disorders Among 2017 Births in the United States. *Am J Public Health*. 2020 Jun;110(6):888–896.
- 18 ACOG committee opinion no. 757: Screening for perinatal depression. *Obstet Gynecol*. 2018;132(5):e208–e212. doi: 10.1097/aog.0000000000002927.
- 19 O'Connor E, Rossom RC, Henninger M, Groom HC, Burda BU. Primary care screening for treatment of depression in pregnant and postpartum women evidence report and systematic review for the US preventive services task force. *JAMA*. 2016;315(4):388–406.
- 20 Byatt N, Carter D, Deligiannidis KM, et al. Position statement on screening and treatment of mood and anxiety disorders during pregnancy and postpartum [position statement]. 2018.





- 21 Tobacco and nicotine cessation during pregnancy: ACOG committee opinion, number 807. *Obstet Gynecol*. 2020;135(5):e221–e229. doi: 10.1097/aog.0000000000003822.
- 22 Moyer VA. Screening and behavioral counseling interventions in primary care to reduce alcohol misuse: U.S. preventive services task force recommendation statement. *Ann Intern Med*. 2013;159(3):210–218. doi: 10.7326/0003-4819-159-3-201308060-00652.
- 23 Krist AH, Davidson KW, Mangione CM, et al. Screening for unhealthy drug use: US preventive services task force recommendation statement. *JAMA*. 2020;323(22):2301–2309. doi: 10.1001/jama.2020.8020.
- 24 Hermann A, Karabell S, Greiner M, Jackson T, Saxon A. Position statement on assuring the appropriate care of pregnant and newly delivered women with substance use disorders [position statement]. 2019.
- 25 Braillon A, Bewley S. Committee opinion no. 722: Marijuana use during pregnancy and lactation. *Obstet Gynecol*. 2018;131(1):164. doi: 10.1097/aog.0000000000002429.
- 26 Siu AL. Behavioral and pharmacotherapy interventions for tobacco smoking cessation in adults, including pregnant women: U.S. preventive services task force recommendation statement. *Ann Intern Med*. 2015;163(8):622–634. doi: 10.7326/m15-2023.
- 27 U.S. Preventive Services Task Force. Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: Recommendation statement. *American Family Physician*. 2019;99(12):Online.
- 28 Fan T, Blitz J. Behavioral and pharmacotherapy interventions for tobacco smoking cessation in adults, including pregnant women. *Am Fam Physician*. 2016;93(10):861–2.
- 29 Substance Abuse Mental Health Services Administration. Screening, brief intervention and referral to treatment (SBIRT) in behavioral healthcare. 2011:1–30.
- 30 American Academy of Family Physicians. Tobacco use in adults, including pregnant women- clinical preventive service recommendation. American Academy of Family Physicians.
- 31 Ades V, Goddard B, Pearson Ayala S, Chemouni Bach S, Wu SX. ACOG committee opinion no. 729: Importance of social determinants of health and cultural awareness in the delivery of reproductive health care. *Obstet Gynecol*. 2018;131(6):1162–1163. doi: 10.1097/aog.0000000000002660.
- 32 ACOG committee opinion no. 749: Marriage and family building equality for lesbian, gay, bisexual, transgender, queer, intersex, asexual, and gender nonconforming individuals. *Obstet Gynecol*. 2018;132(2):e82–e86. doi: 10.1097/aog.0000000000002765.
- 33 ACOG committee opinion no. 649: Racial and ethnic disparities in obstetrics and gynecology. *Obstet Gynecol*. 2015;126(6):130. doi: 10.1097/aog.0000000000001213.
- 34 Bauman BL, Ko JY, Cox S, et al. Vital signs: Postpartum depressive symptoms and provider discussions about perinatal depression – united states, 2018. *Morb Mortal Wkly Rep*. 2020;69(19):575–581. doi: 10.15585/mmwr.mm6919a2.
- 35 Byatt N, Levin LL, Ziedonis D, Moore Simas TA, Allison J. Enhancing participation in depression care in outpatient perinatal care settings: A systematic review. *Obstet Gynecol*. 2015;126(5):1048–1058. doi: 10.1097/aog.0000000000001067.
- 36 Kozhimannil KB, Dowd WN, Ali MM, Novak P, Chen J. Substance use disorder treatment admissions and state-level prenatal substance use policies: Evidence from a national treatment database. *Addict Behav*. 2019;90:272–277. doi: 10.1016/j.addbeh.2018.11.019.
- 37 Martino S, Ondersma SJ, Forray A, et al. A randomized controlled trial of screening and brief interventions for substance misuse in reproductive health. *Obstet Gynecol*. 2018;218(3):322.e1–322.e12. doi: 10.1016/j.ajog.2017.12.005.
- 38 Frazer Z, McConnell K, Jansson LM. Treatment for substance use disorders in pregnant women: Motivators and barriers. *Drug Alcohol Depend*. 2019;205. doi: 10.1016/j.drugalcdep.2019.107652.
- 39 Davis N, Smoots A, Goodman D. Pregnancy-related deaths: Data from 14 U.S. maternal mortality review committees, 2008–2017. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. 2019.
- 40 Nati Trost, SL, Beaurard, JL, Smoots, AN, Ko, JY, Haight SC, Moore Simas AS, Byatt N, Madni SA, Goodman, D. Preventing Pregnancy-Related Mental Health Deaths: Insights From 14 US Maternal Mortality Review Committees, 2008–17. *Health Affairs* Vo. 40, No. 10.





- 41 LaRocco-Cockburn A, Reed SD, Melville J, et al. Improving depression treatment for women: Integrating a collaborative care depression intervention into OB-GYN care. *Contemp Clin Trials*. 2013;36(2):362–370. doi: 10.1016/j.cct.2013.08.001.
- 42 Katon W, Russo J, Reed SD, et al. A randomized trial of collaborative depression care in obstetrics and gynecology clinics: Socioeconomic disadvantage and treatment response. *Am J Psychiatry*. 2015;172(1):32–40. doi: 10.1176/appi.ajp.2014.14020258.
- 43 Guille C, Newman, RB, Brady K, Moreland A. Reducing Racial Disparities and Maternal Mortality Associated with Untreated Peripartum Substance Use and Mental Health Disorders. Supplement to National Institute on Drug Abuse (2020) R34 DAO46730.
- 44 Guille C, Forray A, Yonkers K. Implementation of substance use screening and treatment for women in reproductive health clinics. 2020.
- 45 Guille C, Hall, C, King C, Sujan AC, Brady KT, Newman R. Listening to Women and Pregnant and Postpartum People: Qualitative Research to Inform Opioid Use Disorder Treatment for Pregnant and Postpartum Women. *Drug and Alcohol Dependence Reports*. 2022; 12:3:100064.
- 46 Witcraft SM, Johnson E, Eitel AE, et al. Listening to Black Pregnant and Postpartum People: Using Technology to Enhance Equity in Screening and Treatment of Perinatal Mental Health and Substance Use Disorders. *J Racial Ethn Health Disparities*. Published online April 11, 2024.
- 47 Guille, C, Maldonado, L, Simpson A.N, Newman R, King, C, Cortese, B, Quigley, E, Dietrich, N, Kerr, A, Aujla, R, King, K, Ford, D, Brady K.T. (2021) A Non-Randomized Trial of In-Person Vs. Text/Telephone Screening, Brief Intervention and Referral to Treatment for Pregnant and Postpartum Women. *Psychiatric Research and Clinical Practice*. 3(4):172–183.
- 48 Pew Research Center. Mobile Fact Sheet. <https://www.pewresearch.org/internet/fact-sheet/mobile/>. Updated 2025.
- 49 Barry MJ, Edgman-Levitan S. Shared decision making--pinnacle of patient-centered care. *N Engl J Med*. 2012;366(9):780–781. doi: 10.1056/NEJMmp1109283.
- 50 Stacey D, Légaré F, Lewis K, et al. Decision aids for people facing health treatment or screening decisions. *Cochrane Database Syst Rev*. 2017;4(4):Cd001431. doi: 10.1002/14651858.CD001431.pub5.
- 51 Edwards A, Elwyn G. Shared decision-making in health care: Achieving evidence-based patient choice. In: Edwards A, Elwyn G, eds. *Shared decision-making in health care*. Oxford: Oxford University Press; 2009.
- 52 Substance Abuse Mental Health Services Administration. Screening, brief intervention and referral to treatment (SBIRT) in behavioral healthcare. 2011:1–30.
- 53 Substance Abuse and Mental Health Services Administration. Coding for Screening and Brief Intervention Reimbursement. Last Updated 4/16/2020. <https://www.samhsa.gov/sbirt/coding-reimbursement> Last accessed 12/18/2021.
- 54 Centers for Medicare and Medicaid Services. Medicare Learning Network. Screening, Brief Intervention and Referral to Treatment. https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/SBIRT_Factsheet_ICN904084.pdf Accessed 12/28/2021





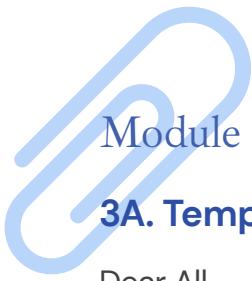
Module 2 Appendix

2A. Shell Model Spreadsheet

https://www.dropbox.com/scl/fi/zxs5bd1x2f4iu5avtugag/Appendix_2A_Shell-Model.xlsx?rlkey=e5wb6tst2vr4zr99z9jpxao30&st=15tcogqn&dl=0

OB PROVIDERS AS OF (INSERT DATE) CLINIC NAME	Scheduling Provider Name	Scheduling Provider Type	Medical Director	Nurse Manager	Champion	Annual Volume of Patients
Clinic 1						
Clinic 2						
Clinic 3						
Clinic 4						
Clinic 5						





Module 3 Appendix

3A. Template for Introductory Email to Practitioners



Dear All,

[Insert name of your organization or leadership] wanted to give you a brief update on the Listening to Women (LTW) program planned for implementation in your clinic and what to expect as a provider.

Thank you for continuing to put in a good word about the study at the New OB patient and Postpartum Visits! Your endorsement makes a huge difference. We also to say thank you to all the nursing staff who will be/are enrolling patients in this program!! We are grateful for your support, dedication, and hard work.

What is the Listening to Women (LTW) Program?

Patients attending their first prenatal care appointment at [clinic name] are enrolled into LTW and receive a text with mental health, substance use, intimate partner violence and social determinants of health screening questions. If the patient endorses any concerns and/or needs resources, a care coordinator with a master's in clinical social work calls the patient, completes a brief assessment, refers the patient to treatment and/or resources, if appropriate.

[Include information regarding how the care coordinator will communicate findings/ screening follow-up with the clinic, for example:] The care coordinators are documenting information about completed screens and referral information in EPIC. This information can be found under 'Documentation' in 'Psych Women's Services RMOB' note and includes details of screening and referral information.

Patients continued to be screened during each trimester of pregnancy, 1 month after delivery and every 3 months until 12 months postpartum. At each timepoint all patients screened are automatically sent information and relevant resources.

What do we expect?

We believe that LTW provides superior screening for mental health, substance use, intimate partner violence and social determinants of health compared to SBIRT i.e., with LTW more women will screen positive, receive a brief assessment and be referred for treatment and be retained in treatment compared to current practice.

What can you do to help?

[Insert the specific workflow identified for your practice, for example:] New OB patients are enrolled by the New OB Nurse Educator. Please make sure that all of your New OB





patients see the Nurse Educator before leaving the clinic. Please put in a good word for the LTW program at the New OB and Postpartum visits if you can. Your endorsement makes a huge difference.

We want to hear your thoughts about this program! You can contact [\[name of contact\]](#) with your feedback and/or questions as you work to implement LTW in your clinic.

What's next?

[\[Insert any next steps for the clinic prior to or during implementation.\]](#)

Please feel do not hesitate to reach out to us if you have any questions or concerns.

Thank you again for all your support.





3B. Template for Follow-Up Reminder Email to Practice/Practitioners

Hi [Name],

I hope you are having a good week. I wanted to send you the weekly numbers update for the LTW study for your clinic and share some exciting news about the study. On [date], [clinic name] will begin the **Listening to Women (LTW) Intervention**. We know there are different facets to the LTW study that may be confusing, therefore, as a friendly reminder the LTW intervention involves the clinic switching to a virtual way of screening pregnant people for mental health and substance use issues. [NOTE: THIS MAY DIFFER AT YOUR PRACTICE; The clinic's staff will be helping us by enrolling new OB patients into LTW via a flowsheet in EPIC which takes about 2 minutes or less to complete.] We are hoping this may help your staff by reducing some workload involved in the screening and referral process for mental health and substance use issues. We are scheduled to train your staff at [time] on [date] at [location]. Please do not hesitate to reach out should a different date and/or time work better for you. First and foremost, these numbers look incredible. [Enter something encouraging about numbers, are they trending upwards, staying the same, etc.]. As always, we cannot thank you enough for all you and the clinics do for the study.

-Clinic: %

We will go into more detail regarding the intervention during our training session, however, please let me know if you have any questions in the meantime. Thank you for you and your staff's support, help and work. Implementing this care improvement initiative would not be possible without it.

Best,

[Email Signature]





3C. Template for Introductory Meeting Agenda

LTW Kick-off Meeting Agenda [Name of Practice] [Date and Location of Meeting]

1. Introductions

If possible, include the names and roles/positions of meeting attendees as this can be helpful to guide introductions

2. LTW Program Overview

See Slide Set Template

3. LTW Review Enrollment Checklist

See details provided in Module 4 (Engagement and Enrollment)

4. Adapting Workflow to Include LTW

- + Give examples from previous implementations
- + Which staff could enroll patients into LTW?
- + Who gets new OB education at practice?
- + How do you think staff will perceive this new program?
 - > Sensitivity to workload and staffing issues
 - > What can LTW team do to assist with practice change?
- + Who are the nurses?
 - > Count
 - > If integrating with EHR, want IDs and names of all enrolling staff

5. Site Readiness Checklist

Introduce the Site Readiness Checklist and set expectations for next steps/action items. Some items may be addressable in the context of this kick-off meeting. Other items will need to be addressed in separate meetings, trainings, or communications.

6. Q and A with Practice Staff

Provide time for attendees to ask their questions regarding the LTW program and its specific implementation in their practice.

7. Closing and Next Steps

- + Introduce site Obstetric Care Clinician Champion (if already identified)
- + Introduce site Practice Administrator Champion (if already identified)
- + Provide contact information for LTW team
- + Provide date (or timeframe) for follow-up/next meeting



3D. Trifold Brochure Template- English

About Us

As part of our clinic's prenatal care, you will be enrolled in a free, confidential, text/phone based maternal mental health screening and referral program for pregnant and postpartum people.





For more information, contact us: wrbhr@musc.edu.



If you decide to participate in the program at a later date, we're here to help. You can email us at wrbhr@musc.edu

 **MUSC Health**
Medical University of South Carolina



MUSC's Listening to Women

 **MUSC Health**
Medical University of South Carolina
Changing what's possible





What will happen when I take part in this program?

- We will check in with you about your mental health during pregnancy and the postpartum year.
- You will receive a text message or email today and every 3 months with a link to a short screening asking you about your mental health and well-being.
- A care coordinator will review your responses and call you if needed.
- You can also call your care coordinator Monday-Friday, 8AM-5PM at 843-323-5274.

How can a care coordinator help?

A care coordinator specializes in connecting people like you with the right support at the right time by:

- Understanding your **emotional** and **mental health needs**, your **preferences**, and your **values** and will connect you with help that feels right to you.
- Understanding your **specific social needs** to get you the right supports at the right time (like diapers, formula, food, transportation, or financial support).

Your care coordinator can communicate with your MUSC Women's Health prenatal healthcare provider to ensure your care is well coordinated.

Is this program confidential?

Yes! Your screening and referral information will **ONLY** be shared with your care coordinator and your MUSC Women's Health prenatal care team.

If you do not want your screening and referral information communicated to your provider, please contact your care coordinator directly at 843-323-5274.

Why is this program important?

1 in 5 women will experience a mental health concern during pregnancy and the postpartum year. These concerns may include anxiety, depression, or substance abuse. Mental health conditions can be harmful to your health and child's development. We are here to help.



3E. Trifold Brochure Template- Spanish

Quiénes somos

Como parte de la atención prenatal en nuestra clínica, se inscribirá en un programa gratuito y confidencial de detección y referencia de salud mental materna basado en mensajes de texto/llamadas para personas embarazadas y en posparto.



Para obtener más información, póngase en contacto con nosotros:

wrbhr@musc.edu.



Si prefiere no participar en este programa, envíenos un correo electrónico a wrbhr@musc.edu

 MUSC Health
Medical University of South Carolina



Escuchando a Mujeres de MUSC

 MUSC Health
Medical University of South Carolina
Changing what's possible





¿Qué ocurrirá cuando participe en este programa?

- Vigilaremos su salud mental, igual que vigilaremos su salud física durante el embarazo y el posparto.
- Recibirá un mensaje de texto o un correo electrónico hoy y cada 3 meses con un enlace a una breve encuesta en la que se le preguntará por su salud mental y su bienestar.
- Un coordinador de cuidados revisará sus respuestas a la encuesta y la llamará si es necesario.
- También puede llamar a su coordinador de cuidados de lunes a viernes de 8 a. m. a 5 p. m. al 843-323-5274.

¿Cómo puede ayudar un coordinador asistencial?

- Un coordinador de cuidados se especializa en poner en contacto a personas como usted con los apoyos adecuados en el momento oportuno:
 1. Comprender sus necesidades emocionales y de salud mental, sus preferencias y sus valores, y ponerla en contacto con la ayuda que le resulte más adecuada.
 2. Comprender sus necesidades sociales específicas para conseguirle los apoyos adecuados en el momento oportuno (como pañales, leche maternizada, alimentos, transporte o ayuda económica).
- Su coordinador de atención puede comunicarse con su proveedor de atención prenatal de MUSC Women's Health para garantizar que su atención esté bien coordinada.

¿Es confidencial este programa?

- ¡Sí! Su información de la investigación y de la remisión será compartida con su coordinador del cuidado y su abastecedor prenatal de la salud de las mujeres de MUSC.
- Si no desea que se comunique a su proveedor la información sobre su cribado y derivación, póngase en contacto directamente con su coordinador de cuidados llamando al 843-323-5274.

¿Por qué este programa es importante?

Una de cada cinco mujeres experimentará algún problema de salud mental (como ansiedad, depresión y consumo de sustancias) durante el embarazo y el posparto.

Las enfermedades mentales pueden ser perjudiciales para su salud y para el desarrollo de su hijo. Estamos aquí para ayudar.



3F. Informational Flyer Template

Listening to Women

About Us!

As part of our clinic's prenatal care, you will be enrolled in a free, confidential, text/phone based maternal health screening and referral program for pregnant and postpartum people.

What will happen when I take part in this program?

- We will check in with you about your mental health during pregnancy and the postpartum year.
- You will receive a text message or email today and every 3 months with a link to a short screening asking you about your mental health and well-being.
- A care coordinator will review your responses and call you if needed.



For more information, contact us:
wrbhr@musc.edu

How can a care coordinator help?

A care coordinator specializes in connecting people like you with the right support at the right time by understanding your needs, whether they be emotional, mental health, and/or social needs (diapers, bills, food, etc.).

Why is this program important?

1 in 5 women will experience a mental health concern during pregnancy and the postpartum year. These concerns may include anxiety, depression, or substance abuse. Mental health conditions can be harmful to your health and child's development. We are here to help.

MUSC Health
Medical University of South Carolina

Listening to Women (LTW): Implementation Toolkit
Appendix 3

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3G. Introductory Slide Set Template



Listening To Women (LTW) Program

- This program is for NEW OB patients ONLY
- The goal is to implement this program into your clinic
 - INSERT GO-LIVE DATE IF ESTABLISHED
- Other sites currently (or planned to be) implementing LTW

How are patients enrolled in LTW?

All new OB patients will be enrolled by a nurse during their new OB teaching or at triage (whatever works best for your clinic's workflow). This includes TOC and late to care patients.

Enrollment happens through EPIC (demonstrated in training). **ADAPT FOR YOUR USE CASE**

Patients will complete the 1-minute screening on their phone.

What is LTW?

LTW is a text-message/phone based maternal mental health screening and referral program that monitors patient's wellbeing through pregnancy and the year postpartum

- Patients will receive a text message to complete a screening each trimester of pregnancy and every 3 months post-delivery until 12 months postpartum.
- A care coordinator (**masters in social work**) reviews each screen and calls the patient to help with mental health/substance use/DV concerns and resources, if needed.
- Screening/referral information is communicated back to you in EPIC **[Adapt this if not the case]**

Patient Perspective: Initial LTW Text Invitation

Patient Perspective: LTW Video

<https://drive.google.com/video/96140150211-#088a8e00>

Notes in EPIC for You and Providers to Review: **ADAPT FOR YOUR USE CASE**

When a patient completes a screen and our Care Coordinator speaks to them, the Care Coordinator places a 'documentation' note in EPIC for you to see

Example:
11/18/2024
We have completed a maternal mental health and substance use disorder screening for [name] via text messaging. Her responses indicate she has:

- elevated depressive symptoms

EPDS Score: 14
• Screened positive for SDOH: Food, work/employment. Discussed SDOH resources and emailed to Pt per request. No additional needs identified at this time.

Our behavioral health team has made contact with the patient and she is scheduled for behavioral health services on 2024-12-18 via a home video visit.

We will continue to screen the patient for mental health and substance use problems via text messaging every 2-3 months. Thank you for allowing us to take part in your patient's care. Please do not hesitate to contact us if you have any questions or concerns.

Women's Behavioral Health Care Coordinator
843-323-527





Patient Perspective: Screening Questions

- All patients asked:
 - 9 SBIRT questions
 - 2 SDoH questions

8

Other

- You can continue to do your paper or verbal MH/SUD/DV screenings as usual.
- Please think of LTWP as SOC-all patients should be screened for MH/SUD/DV
- Goal is for nurses to enroll 100% of NEW OB patients into LTWP
 - Enroll even if TOC
 - Enroll even if late GA
 - Enroll even if not delivering at your hospital
 - Uncertain viability-fine to enroll or fine to enroll once viability confirmed
- If you forget to enroll a patient our team can enroll them on the back end
- LTW program is free
 - No charge to talk to a CC
 - If a patient needs an appointment at our WRBH clinic insurance will be billed

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Patient Perspective: Screening Questions

- If patient screens positive on the SBIRT they will be asked to complete some additional questions.
 - EPDS (depression)
 - NIDA (substance use)

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SDoH Questions in the EHR: ADAPT FOR YOUR USE CASE

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- SDoH screenings tied to reimbursement
- When a patient completes a LTW screening the Care Coordinator does their best to answer the SDoH questions in EPIC
- Other clinics have found this helpful (one less thing nurses have to do)

Patient Perspective: Upon Submitting their Screen

- The patient receives a few text messages:
 - Letting them know their risk and if a Care Coordinator will be reaching out
 - Care Coordinator contact card
 - Safety language (911, suicide lifeline, DV)

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How Can You Help Once LTW is Launched?

14

- Please remind your NEW OB patients to:
 - 1.) Look out for a text message in the next few days to complete research surveys and receive compensation.
 - 2.) Complete their LTW mental health screening (should have received a text to complete this at new OB teaching or triage)





Module 4 Appendix

4A. LTW Sample Enrollment Script

As part of our clinic's prenatal care, you will be enrolled in a free, confidential, text/phone based maternal mental health screening and referral program. This program was designed by other pregnant and postpartum people like yourself to best support you during and after pregnancy.

Why is this program important?

Mental health concerns (like anxiety, depression, and substance use) are the most common complication of pregnancy and childbirth; 1 in 5 women will experience a mental health condition during pregnancy and the postpartum year.

Mental health conditions are the leading cause of maternal death during the postpartum year and have a negative impact on women's health and their child's development.

What will happen when I take part in this program?

We will confidentially monitor your mental health throughout pregnancy and the postpartum year, just like we will monitor your physical health (like weight and blood pressure).

We will do this by sending you a text message with a link to a short screening. The screening will ask you about any mental health symptoms that you may be experiencing. We will send you the screening every 3-months throughout pregnancy and the postpartum year.

Once you complete the screening, you will be given an immediate reply via text message with mental health resources.

A care coordinator will also review your screening responses and give you a call if you are experiencing any symptoms to ensure that you get any support that you may need.

You can also call your care coordinator Monday–Friday 8am–5pm at [\[Phone Number\]](#)

Is this program confidential?

Yes! Your screening and referral information will only be shared with your care coordinator and your prenatal care provider.

If you do not want your screening and referral information communicated to your provider, please contact your care coordinator Monday–Friday 8am–5pm at [\[Phone Number\]](#) to create a plan that works for you.





How can a care coordinator help?

Your care coordinator specializes in connecting pregnant and postpartum people with mental health resources that may be helpful.

Your care coordinator wants to understand your specific mental health needs, your preferences, and your values so that they can connect you with these supports (like others who have recovered from what you are experiencing!) and/or treatment(s) (like therapy and/or medication) that you feel comfortable with.

Your care coordinator wants to understand your specific social needs (like need for diapers, formula, food, financial or transportation support) and will work with you to find a way to get your needs met.

Your care coordinator can communicate with your prenatal healthcare provider by the Electronic Health Care record or by phone.

4B. Introduction and/or Talking Points

- + Mental health conditions are common during pregnancy and the postpartum year and can be harmful to you and your baby's health.
- + As part of your prenatal and postpartum care, we monitor your mental health, just like we monitor your physical health to ensure that you and your baby are healthy.
- + You will receive a text message and/or email with a link to a short screening about mental health symptoms you may be experiencing today. You will also get text messages to the screening every 3-months during your pregnancy and the postpartum year.
- + A care coordinator will review your screening and call you to help with any mental health concerns and resources, if needed.
- + Please complete this screening during your visit today. It should only take about 2 minutes to complete!

4C. LTW Sample Enrollment Email

Hello! You may be eligible to enroll in a free text and phone system that monitors your mental health during your pregnancy and postpartum period called Listening to Women. Mental health conditions are common during pregnancy and the postpartum year and can be harmful to you and your baby's health. With identification and treatment, you and your baby can be happy and healthy.

If you agree to enroll, you will receive a text message with a link to a short screening about mental health symptoms you may be experiencing at regular times throughout





your pregnancy and postpartum year. A care coordinator will review your screening and call you to help with any mental health concerns and resources, if needed.

4D. Phone Call, Voicemail and Text Scripts

Phone Call Script

Hello, my name is [name], and I work at [clinical site]. May I please speak with [patient name].

Hi, [patient name]. I am calling from [clinical site], about a program called Listening to Women. This is a text message-based mental health and substance use screening program that our clinic is using with all of our prenatal patients. We understand there may not have been time to get all this information to you at your initial prenatal appointment, so I wanted to quickly explain the program to you now.

You will receive texts asking you to complete a short screening with questions about mental health, substance use, and obtaining needs like food/housing/supplies. We have a team of care coordinators that will look over your responses and may reach out to you to try to help or get you connected with resources. Your first text should come today, along with a video briefly explaining the program, and then you will also receive a text each trimester of your pregnancy and throughout your whole postpartum year.

The goal of this program is to improve the emotional health and well-being of pregnant and postpartum people, and we want you to know that we are here for you!

Do you have any questions for me?

Thank you for your time, and have a great day!

Voicemail Script

Hi! My name is [name], and I am calling as a follow up to your recent clinic appointment. We'd like to have a quick phone call to provide additional information we were not able to tell you during your appointment about a program you will be enrolled in. Please let me know a good time to talk or call me back at [phone number]. Thanks!

Text Script

Hi! My name is [name], and I am texting as a follow up to your recent clinic appointment. We'd like to have a quick phone call to provide additional information we were not able to tell you during your appointment about a program you will be enrolled in. Please let me know a good time to talk or feel free to call [phone number]. Thanks!





4E. LTW Patient Reminder Script for Clinic Staff

I want to remind you about the Listening to Women screening program that our clinic uses for all prenatal and postpartum patients. This is a text-based program that sends you a short screening with questions about your mental health and obtaining resources (such as food, housing, supplies, etc.). You should've received your first text after your initial prenatal appointment. You also receive a text during each trimester of your pregnancy and throughout your postpartum year. A care coordinator looks over your responses and may reach out to help or get you connected with resources. When you receive the texts, please complete the screening! The goal of this program is to improve the emotional health and well-being of pregnant and postpartum people!

[Provide patient the LTW flyer]

4F. Enrollment Checklist

Listening to Women and Pregnant & Postpartum People (LTW) Enrollment Checklist

1. Briefly introduce LTW program to New OB patient and give the trifold brochure

- + Mental health conditions are common and can be harmful to you and your baby's health.
- + As part of your care, we will check on your mental health, just like we check on your physical health.
- + You will receive a text message or email with a link to a short screening about your mental health today and every 3-months during your pregnancy and the postpartum year.
- + A care coordinator will review your responses and call you to help with any mental health concerns or any needed resources.
- + Your information will only be shared with your care coordinator and your Women's Health prenatal care provider.
- + Please complete this screening during your visit today. It should only take about 2 minutes to complete!

2. Enroll the patient into LTW from EHR

1. Click the LTW flowsheet in EHR dashboard. Ensure you have opened the flowsheet from the patient encounter.
2. Click Yes to enroll.
3. Click hyperlink to complete REDCap Enrollment form.





3. Before the patient leaves

Make sure patient received the text message and encourage them to complete the screen before leaving the clinic.

OB patient does not want to enroll

1. Click No on LTW flowsheet. Ensure you have opened the flowsheet from the patient encounter.
2. Inform patient that she will receive a text asking why she did not want to participate (within 1-2 days)

OB patient is not approached for LTW or already enrolled in LTW

Leave EPIC flowsheet question BLANK (do not select yes or no).





Listening to Women and Pregnant & Postpartum People

About Us!

As part of our clinic's prenatal care, you will be enrolled in a free, confidential, text/phone based maternal health screening and referral program for pregnant and postpartum people.

What will happen when I take part in this program?

- We will check in with you about your mental health during pregnancy and the postpartum year.
- You will receive a text message or email today and every 3 months with a link to a short screening asking you about your mental health and well-being.
- A care coordinator will review your responses and call you if needed.



How can a care coordinator help?

A care coordinator specializes in connecting people like you with the right support at the right time by understanding your needs, whether they be emotional, mental health, and/or social needs (diapers, bills, food, etc.).

Why is this program important?

1 in 5 women will experience a mental health concern during pregnancy and the postpartum year. These concerns may include anxiety, depression, or substance abuse. Mental health conditions can be harmful to your health and child's development. We are here to help.

For more information, contact us:
wrbhr@musc.edu.



4H. Brochures (English and Spanish)

About Us

As part of our clinic's prenatal care, you will be enrolled in a free, confidential, text/phone based maternal mental health screening and referral program for pregnant and postpartum people.



For more information, contact us:
wrbhr@musc.edu



If you decide to participate in the program at a later date, we're here to help. You can email us at wrbhr@musc.edu

MUSC Health
Medical University of South Carolina



MUSC's Listening to Women

MUSC Health
Medical University of South Carolina
Changing what's possible





What will happen when I take part in this program?

- We will check in with you about your mental health during pregnancy and the postpartum year.
- You will receive a text message or email today and every 3 months with a link to a short screening asking you about your mental health and well-being.
- A care coordinator will review your responses and call you if needed.
- You can also call your care coordinator Monday-Friday, 8AM-5PM at 843-323-5274.

How can a care coordinator help?

A care coordinator specializes in connecting people like you with the right support at the right time by:

- Understanding your **emotional** and **mental health needs**, your **preferences**, and your **values** and will connect you with help that feels right to you.
- Understanding your **specific social needs** to get you the right supports at the right time (like diapers, formula, food, transportation, or financial support).

Your care coordinator can communicate with your MUSC Women's Health prenatal healthcare provider to ensure your care is well coordinated.

Is this program confidential?

Yes! Your screening and referral information will **ONLY** be shared with your care coordinator and your MUSC Women's Health prenatal care team.

If you do not want your screening and referral information communicated to your provider, please contact your care coordinator directly at 843-323-5274.

Why is this program important?

1 in 5 women will experience a mental health concern during pregnancy and the postpartum year. These concerns may include anxiety, depression, or substance abuse. Mental health conditions can be harmful to your health and child's development. We are here to help.





Quiénes somos

Como parte de la atención prenatal en nuestra clínica, se inscribirá en un programa gratuito y confidencial de detección y referencia de salud mental materna basado en mensajes de texto/llamadas para personas embarazadas y en posparto.



Para obtener más información, póngase en contacto con nosotros:

wrbhr@musc.edu.



Si prefiere no participar en este programa, envíenos un correo electrónico a wrbhr@musc.edu



Escuchando a Mujeres de MUSC





¿Qué ocurrirá cuando participe en este programa?

- Vigilaremos su salud mental, igual que vigilaremos su salud física durante el embarazo y el posparto.
- Recibirá un mensaje de texto o un correo electrónico hoy y cada 3 meses con un enlace a una breve encuesta en la que se le preguntará por su salud mental y su bienestar.
- Un coordinador de cuidados revisará sus respuestas a la encuesta y la llamará si es necesario.
- También puede llamar a su coordinador de cuidados de lunes a viernes de 8 a. m. a 5 p. m. al 843-323-5274.

¿Cómo puede ayudar un coordinador asistencial?

- Un coordinador de cuidados se especializa en poner en contacto a personas como usted con los apoyos adecuados en el momento oportuno:
 1. Comprender sus necesidades emocionales y de salud mental, sus preferencias y sus valores, y ponerla en contacto con la ayuda que le resulte más adecuada.
 2. Comprender sus necesidades sociales específicas para conseguirle los apoyos adecuados en el momento oportuno (como pañales, leche maternizada, alimentos, transporte o ayuda económica).
- Su coordinador de atención puede comunicarse con su proveedor de atención prenatal de MUSC Women's Health para garantizar que su atención esté bien coordinada.

¿Es confidencial este programa?

- **¡Sí!** Su información de la investigación y de la remisión será compartida con su coordinador del cuidado y su abastecedor prenatal de la salud de las mujeres de MUSC.
- Si no desea que se comunique a su proveedor la información sobre su cribado y derivación, póngase en contacto directamente con su coordinador de cuidados llamando al 843-323-5274.

¿Por qué este programa es importante?

Una de cada cinco mujeres experimentará algún problema de salud mental (como ansiedad, depresión y consumo de sustancias) durante el embarazo y el posparto. Las enfermedades mentales pueden ser perjudiciales para su salud y para el desarrollo de su hijo. Estamos aquí para ayudar.



Module 5 Appendix

5A. Patient View of questions

⊕ Did any of your parents have a problem with alcohol or drug use?

- Yes
- No

⊕ Do any of your friends have a problem with alcohol or other drug use?

- Yes
- No

⊕ Does your partner have a problem with alcohol or other drug use?

- Yes
- No

⊕ Are you feeling at all unsafe in any way in your relationship with your current partner?

- Yes
- No

⊕ In the past 3 months have you had difficulty obtaining any of the following when it was really needed? [check all that apply]

- Housing
- Food
- Utilities (example: water, gas, electricity)
- Medicine or any healthcare
- Phone/internet
- Supplies for baby and family
- Work/employment
- Care for children, elders or household members with disabilities

⊕ Would you like a care coordinator to call you to assist you in locating potential resources in your community? [check all that apply]

- Housing
- Food
- Utilities (example: water, gas, electricity)
- Medicine or any healthcare
- Phone/internet
- Supplies for baby and family
- Work/employment
- Care for children, elders or household members with disabilities





5B. Full View of Questions

- + Did any of your parents have a problem with alcohol or drug use?
- + Do any of your friends have a problem with alcohol or other drug use?
- + Does your partner have a problem with alcohol or other drug use?
- + Are you feeling at all unsafe in any way in your relationship with your current partner?
- + Have you ever experienced depression, or anxiety, or taken medications for these conditions?
- + Over the last few weeks, has worry, anxiety, depression or sadness made it difficult for you to do your work, get along with people or take care of things at home?
- + In the past, have you had difficulties in your life due to alcohol or other drugs, including prescription medications?
- + In the past month, have you drunk any alcohol or used other drugs?
- + Have you smoked any cigarettes in the past three months?

- + In the past 3 months have you had difficulty obtaining any of the following when it was really needed? [check all that apply]
 - > Housing
 - > Food
 - > Utilities (example: water, gas, electricity)
 - > Medicine or any healthcare
 - > Phone/internet
 - > Supplies for baby and family
 - > Work/employment
 - > Care for children, elders or household members with disabilities
- + Would you like a care coordinator to call you to assist you in locating potential resources in your community? [check all that apply]
 - > Housing
 - > Food
 - > Utilities (example: water, gas, electricity)
 - > Medicine or any healthcare
 - > Phone/internet
 - > Supplies for baby and family
 - > Work/employment
 - > Care for children, elders or household members with disabilities





5C. First Survey / Text Categories for Clinician Dashboard

Categories for Clinician Dashboard and their definitions

Positive Depression Screen

- + EPDS score >9 **OR** did not complete EPDS (no total score) **AND**
- + SBIRT Q6= Yes

High Risk Substance Abuse

- + Positive response to any of the following
 - > SBIRT Q3 = "Yes"; or
 - > SBIRT Q7 = "Yes"; or
 - > SBIRT Q8 = "Yes"; or
 - > SBIRT Q9 = "Yes"; or
- + NIDA Modified Assist= any question = 1 or greater; or
- + Anything greater than 0 on Alcohol questions if **pregnant** OR
- + AAQ1 >30 or AAQ2 >3 or AAQ3 >1 if **post-partum**

Low Risk Substance Abuse

- + SBIRT Q1 = "Yes"; or
- + SBIRT Q2= "Yes"; **AND**
- + NIDA Modified Assist= 0 **AND**
- + AAQ1: <30 and AAQ2: <4 and AAQ3: 0 for **post-partum** women; or
- + AAQ1 = 0, AAQ2 = 0, AAQ3 = 0 for **pregnant** women

Positive Domestic Violence Screen

- + SBIRT Q4= Yes

Social Determinants of Health

1 or more SDOH endorsed

Subcategory of Specific Substance

1. Tobacco: SBIRTQ9 = "Yes"
2. Prescription Opioids: NIDA Q2 = "Yes"
3. Cannabis: NIDA Q1 = "Yes"
4. Street Opioids: NIDA Q3 = "Yes"
5. Prescription Stimulants: NIDA Q4 = "Yes"
6. Cocaine: NIDA Q5 = "Yes"
7. Methamphetamine: NIDA Q6 = "Yes"
8. Inhalants: NIDA Q7 = "Yes"
9. Sedatives: NIDA Q8 = "Yes"
10. Hallucinogens: NIDA Q9 = "Yes"
11. Alcohol: Anything greater than 0 on alcohol questions if pregnant OR AAQ1 >30 or AAQ2 >3 or AAQ3 >0 if post-partum

Prevention

- + EPDS score <9 **OR** did not complete EPDS (no total score) **AND**
- + SBIRT Q5= Yes
- + Psych diagnosis in EHR; **OR**
- + Psych Meds in EHR; **OR**
- + Health Insurance= Medicaid

Low Risk

SBIRT ALL Nos; No Medicaid, No to SDOH questions

No Response

Has not responded to any surveys





5D. Automated text messages based on screening results

Low Risk Text Messages

Text 1

Thanks for answering these questions. Your answers suggest you are likely not experiencing symptoms related to your mental health. We will check in with you again in several weeks.

Text 2

If you notice changes in your mood or anxiety that are making it difficult for you to get along with other people, take care of yourself or things at home or work please contact us.

Care Coordinator Contact & Text 3

You can text your care coordinator Monday–Friday 8am–4pm. Please save the contact information [\[contact information link\]](#).

Safety Text 1

If you are ever experiencing a mental health emergency, such as a desire to harm yourself or others, please call 911 or go to your nearest emergency room. If you are feeling suicidal you can call/text the Suicide and Crisis Lifeline at 988.

Safety Text 2

If you are experiencing domestic abuse text START to 88788 or call 800.799.SAFE (7233) to reach the National Domestic Violence Hotline.

Positive Depression Screening

Text 1

Thanks for answering these questions. Your answers suggest you might be experiencing some mood-related symptoms.

Care Coordinator Contact & Text 2

Your care coordinator will be reaching out to ensure that you have access to support and resources you may need. You can also text her Monday–Friday 8am–4pm. Please save the contact information [\[contact information link\]](#).

Safety Text 1

If you are ever experiencing a mental health emergency, such as a desire to harm yourself or others, please call 911 or go to your nearest emergency room. If you are feeling suicidal you can call/text the Suicide and Crisis Lifeline at 988.

Safety Text 2

If you are experiencing domestic abuse text START to 88788 or call 800.799.SAFE (7233) to reach the National Domestic Violence Hotline.





Prevention Texts

Text 1

Thanks for answering these questions. You have some risk factors for developing depression or anxiety.

Care Coordinator Contact & Text 2

Your care coordinator will be reaching out with some helpful information about how to reduce this risk. You can also text her Monday-Friday 8am-4pm. Please save the contact information [contact information link].

Safety Text 1

If you are ever experiencing a mental health emergency, such as a desire to harm yourself or others, please call 911 or go to your nearest emergency room. If you are feeling suicidal you can call/text the Suicide and Crisis Lifeline at 988.

Safety Text 2

If you are experiencing domestic abuse text START to 88788 or call 800.799.SAFE (7233) to reach the National Domestic Violence Hotline.

If patients are not categorized as Low Risk, Positive Depression Screen or Prevention BUT are in one or more of the following categories i.e., Substance Abuse Risk or Domestic Violence they should receive the following message. Patients categorized as positive for Social Determinants of Health should also receive the following message.

Substance Abuse Risk, Domestic Violence or Social Determinants of Health

Text 1

Thanks for answering these questions. Your care coordinator will reach out to ensure that you have access to support and resources you may need.

Care Coordinator Contact & Text 2

You can also text her Monday-Friday 8am-4pm. Please save the contact information [contact information link].

Safety Text 1

If you are ever experiencing a mental health emergency, such as a desire to harm yourself or others, please call 911 or go to your nearest emergency room. If you are feeling suicidal you can call/text the Suicide and Crisis Lifeline at 988.

Safety Text 2

If you are experiencing domestic abuse text START to 88788 or call 800.799.SAFE (7233) to reach the National Domestic Violence Hotline.

If patients are categorized as Positive Depression Screen or Prevention AND are in one or more of the following categories i.e., Substance Abuse Risk or Domestic Violence they should receive the Positive Depression Screen or Prevention automated text messages.





5F. Example EHR Note

When a patient completes a screen and our Care Coordinator speaks to them, the Care Coordinator places a 'documentation' note in the EHR

Example:

11/18/2024

We have completed a maternal mental health and substance use disorder screening for [name] via text messaging. Her responses indicate she has:

- + elevated depressive symptoms
- + EPDS Score: 14
- + screened positive for SDOH: Food, work/employment. Discussed SDOH resources and emailed to Pt per request. No additional needs identified at this time.

Our behavioral health team has contacted the patient and patient is scheduled for behavioral health services on 2024-12-18 via a home video visit.

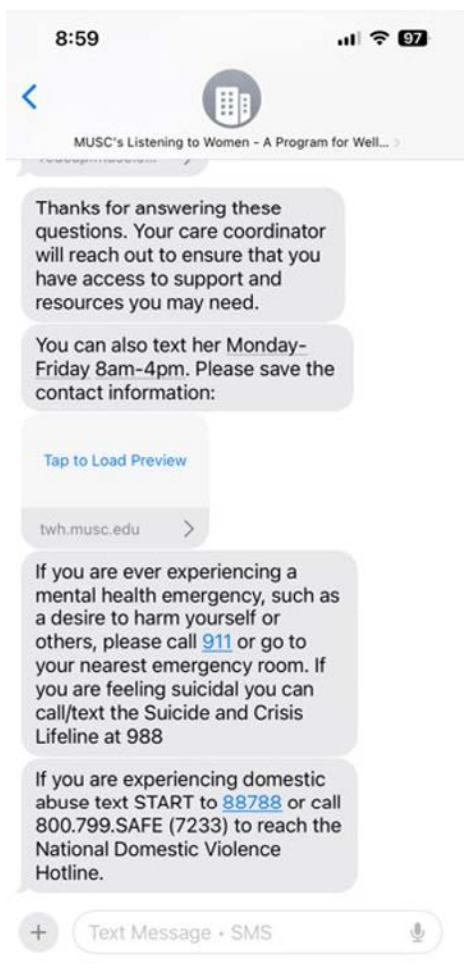
We will continue to screen the patient for mental health and substance use problems via text messaging every 2-3 months. Thank you for allowing us to take part in your patient's care. Please do not hesitate to contact us if you have any questions or concerns.

Name of Care Advocate

__***



5E. Patient View of Automated Feedback Messages



Module 6 Appendix

6A. LTW Care Coordinator Training Sample Practicum Case Scenarios

PT A567

Pt is a non-Hispanic, white 34yo, G5/P2, at 23wks gestation, insured by United Health Care, from Charleston County. Called Pt to discuss positive screened for Depression (EPDS 13). Learned this is Pt's 5th pregnancy, first was a stillborn in 2018. Learned Pt moved here 2 years ago, is struggling with adjustment to being pregnant along with having 2 other small children to care for, being away from family and support, difficultly navigating to find care that is a good fit for her. Learned Pt has a hx of depression and PTSD following the loss of her baby in 2018 and has hx of psychiatry (4yrs) and therapy (1-2yrs). Learned Pt reports was taking prescribed SSRI up until 2 years ago when she moved to SC. Learned Pt began seeing a therapist 1-2mos ago and is interested in medication eval/management at this time. Learned Pt has ongoing anxiety mostly related to how the baby is doing and is experiencing: lack of sleep, irritability, anhedonia, and not feeling like herself. Pt reports no SI/HI. CC provided PSI/PSC for support. Scheduled MD intake on 11/22/24 via telehealth.

PT B287

Pt is a Non-Hispanic, Black 20yo female, G1PO at 26wks GA, insured by UHC and Medicaid, from Charleston County. Screened positive for Depression (EPDS: 14) and SDOH: Housing, Phone, Utilities, Phone/Internet, Work/Employment. Called on 11/21 and spoke to Pt regarding positive screen. Pt initially reports she is doing fine but going through a lot during pregnancy. Pt reports feelings of social anxiety around other people and talking to other people, which has been present long before pregnancy. Pt reports she isn't interested in doing stuff and sometimes feels unhappy, which started a few months ago. Pt reports no SI/HI. Learned that Pt was in therapy in middle school into high school and that Pt is interested in talking with someone in therapy. After further discussion and establishing rapport, also learned Pt is interested in medicine and doesn't know if she's experiencing anxiety or depression. Learned that Pt is concerned about her baby being taken in relation to her receiving mental health treatment. Pt reports concerns about things getting worse PP and experiencing things like PPD. Learned per Pt, MH problems run in her family. CC was able to provide support and reassurance regarding MH stigma. Pt reports being scared to push the baby out, normalized this feeling w/Pt and discussed birthing support (Classes, online support groups). Learned the Pt has transportation issues that have prevented her from





attending birthing classes. CC provided information about Medicaid transportation for visits if needed. Addressed SDOH concerns indicated by Pt in screening for: Housing, Phone, Utilities, Phone/Internet, Work/Employment. Discussed potential resources including WIC but Pt reports difficulty making an appointment due to transportation issue. Encouraged Pt to reach out to friends/family and her partner to coordinate transportation for WIC appt to get set up w/services. Discussed other SDOH needs and potential resources and Pt agreed to receive resources via email. Discussed support/programs for first time mothers as well as young mothers via home visiting programs and additional online support. Provided PSI/PSC info for support. Reiterated a few times to Pt that visits are telehealth as she mentioned several times being very busy with other appointments and transportation as barrier. Scheduled therapy 12/20 & MD on 12/23. Sent text and email with information above, reminder of appt information, and encouraging Pt to reach out w/any additional questions, concerns, needs.

PT C643

Pt is a 23yo, G2PO, at 9wks GA, uninsured, black, Hispanic, from Berkeley County. The patient screened positive for depression/SDOH: food and supplies for baby/family and requested SDOH resources. Called and spoke to patient on 8/20, learned the patient is currently uninsured but applied for Medicaid last week. The patient reports experiencing anxiety/depression and is interested in therapy. The patient reports she is scared to take medications because she is afraid of them changing her and making her not be able to feel anything. Care coordinator scheduled patient w/MD as do not bill for 9/18/24, anticipating Pt's Medicaid will be active by then and can be scheduled for therapy. Pt is first time mom, unsure of what things she will need and when to start preparing. Patient reports FOB is even more nervous than her and asked for parenting support for dad. Discussed and provided information for WIC, SNAP, food pantries, meal delivery programs, diaper banks, agencies that assist with other baby supplies, parenting programs (first time mom/dad support), and PSI & PSC info for additional support.

PT D529

Pt is a 33yo, G1PO, at 8wks GA, insured by BCBS, white, non-Hispanic, from Charleston County. Pt screened for positive depression, with an EPDS score of 9 on 8/8/24. Care Coordinator called and spoke to the patient on 8/9/24: Discussed past mental health history, current symptoms, and social history. Pt interested initially in adding talk therapy to her treatment, upon further discussion, thinks it would be beneficial to talk with perinatal psychiatrist about medication management. Patient is currently managed on Lexapro 10mg. Provided PSI and PSC info for support. Scheduled to see therapy 8/12





and MD on 9/9 for evaluation. Pt attended therapy on 8/12, learned patient is having increased anxiety, is working with MD to manage PCOS, has social stressors. The patient was diagnosed with GAD and MDD by MH provider. It was planned for the patient to continue psychotherapy 1x/week and was scheduled for a follow up visit with the therapist.

PT E464

Pt is a 25yo, G2P1, at 19wks 6d GA, insured by BCBS and Medicaid, white, non-Hispanic, from Berkeley County. Pt initially screened for prevention and SDOH on 5/9/2024. Prevention information and SDOH resources were sent to Pt with no MH symptoms noted at the time. Patient screened positive for SDOH and depression, with an EPDS score of 9 on 7/8/24. Care Coordinator called and spoke to Pt on 7/8, discussed mental health history and current symptoms. Learned the patient is currently following w/ community psych provider and prescribed Lamictal and Prozac but is unhappy with medication management. Pt scheduled to see MD provider on 8/1 but added to MD waitlist per patient request. Discussed requested SDOH resources available and resources sent at time of last screening. Pt reports she did not look through previous resources sent to Pt via email for SDOH. Pt requested assistance for transportation to and from medical visits; we discussed information for Medicaid Transportation (Modivcare) Re-sent email with additional SDOH resources as requested. Pt attended earlier scheduled MD appt on 7/23/24 where it was learned that the patient has history of bipolar disorder, PTSD, and BPD presenting with increased mood lability and insomnia after discontinuing mood stabilizer (lithium) for pregnancy. Patient diagnosed at this visit with: Bipolar disorder, with active symptoms and Borderline Personality Disorder. It was planned for the patient to continue current medication as she recently received an increased dose, to look for improvement before making further adjustments. The patient was started trazadone for insomnia as she has tolerated well and was helpful in the past. Plan for patient to discontinue seeing community psychiatrist while med management and therapy with WRBH and return to community care in the post-partum. The patient was also scheduled for therapy and attended first session on 8/14.

PT F939

Pt is a 32yo, G1P1 who is PP (delivered 5/26/24), insured by Tricare East, white and non-Hispanic from Berkeley County. The Pt completed Screening 3 on 5/5/24, and screened positive for depression with an EPDS score of 14. Care Coordinator called on 5/6/24 and discussed positive depression screening. The Pt reported some anxiety but reports she has contributed it to hormones and other daily stressors. Pt reports her NP prescribes





Zoloft, which she has been taking for 3 years. Pt reports overall her anxiety is well-managed on Zoloft and that she has not had any panic attacks since starting Zoloft. Pt reported she may want services postpartum but would first like to find out when to expect the baby, and reported she has a follow up scheduled with her NP later in June. Care Coordinator emailed the Pt with provider to provider consult option as well as info to call/text/email CC if she wants to get scheduled for WRBH services. CC reviewed and sent info for PSI and PSC for support. No additional needs identified at this time. Pt called CC on 6/19/24, reports having her baby, and asked to get scheduled for WRBH services. Pt initially expressed interest in therapy but additionally scheduled to see Psych provider per request. Pt reports hx of anxiety/depression that worsened towards the end of pregnancy and worsened more after delivery. Pt reports currently taking 100mg of Sertraline. Per Pt, her prescribing provider recently increased her dose to 200mg. Pt reports she is exclusively breastfeeding. Pt reports she was previously in therapy but stopped during pregnancy and now wishes to see perinatal providers. Pt was scheduled to see MD on 6/26/24 and therapist on 7/16. The Pt completed her 30-Day Post-Delivery Screening on 6/26/24 and screened positive for depression with an EPDS score of 17. The Pt was scheduled for and attended her MD visit with Psych provider later this day. Per MD note from Pt visit, "she felt stable during pregnancy, and was maintained on Zoloft 100mg daily in addition to psychotherapy. Her dose was increased to 200mg daily several days ago after her husband noticed affective changes and she identified crying frequently for no reason, feeling irritable and sad, and having poor energy despite sleeping excessively. She reports losing interest in gardening and not keeping up with her garden, which is very unusual for her. She reports a low appetite despite breastfeeding and has had increased difficulty focusing. Noted brief passive SI, without plans or intent to harm herself. No thoughts of harming others. She reports she is getting adequate sleep as she splits newborn care with her husband and gets consecutive hours of sleep. Additionally, she reports excessive worries about her daughter and has difficulty leaving her (even in a different room). She reports worrying about her daughter's health excessively and notes that worries make it hard to relax. She reports her ruminating thoughts make it difficult to accomplish tasks and contribute to irritability. She reports she has always been prone to worrying throughout life, but symptoms have worsened. No history of psychosis or mania. No side effects from Zoloft." Per MD assessment, "Given that her dose of Zoloft was just recently increased to 200mg daily, recommended giving this dose a full trial (4-6 weeks) before making other changes. Discussed zuranolone as a possible option in the future, if symptoms do not respond to Zoloft, which aligned with patient's preference to avoid any changes today." The patient was diagnosed with MDD and GAD. Per MD plan, "1. Continue Zoloft 200mg daily for mood/anxiety sxms, (increased several days ago). Pt has adequate supply at home. Discussed data on use in breastfeeding. Discussed zuranolone as another





option for consideration in the future, if needed. 2. Start psychotherapy with on 7/16/24. 3. Scheduled for follow-up on 7/30/24. Pt educated on how to access emergent psychiatric care if sx worsen or develops SI/HI, including calling 911 or going to nearest ER. "

PT G631

Pt is 38yo, G2P1 at 10wks gestation, insured by Cigna, white non-Hispanic from Charleston County. Called Pt due to positive depression screening, EPDS: 18. Pt reports she need help, states she tried to see psychiatrist before pregnancy. States her and psychiatrist "didn't jive", she didn't feel that she was helpful and feels like the psychiatrist was just trying to give her a handful of pills. Pt reports she was prescribed a bottle of Trazadone to help with sleep but hadn't taken any, so she still has a full bottle at home. Currently has daily anxiety, severe panic attacks 1-2x week, and recent SI for the first time. Pt reports this past weekend, she "felt like everyone would be better off without me". Pt also reports she, "wondered if I took the whole bottle (of trazadone) if it would be a quick death. It passed the next day. It was worrisome." Pt reports she stopped seeing the psychiatrist 2-3months ago. Pt reports additional current sx: feeling constantly on edge, heart beats fast, panic attacks that happen for no reason ("feels like I'm dying, can't breathe, sweating, world was caving in, significant fear"). Pt reports the last time she was pregnant; she went through adjustment disorder (due to social stressors—unplanned pregnancy— was in law school, moving in with father of baby). Pt reports she tried to do therapy through church Aug 2023–Nov/Dec 2023 but it was expensive as her insurance wasn't covering it. Pt reports therapy was the most helpful. Discussed several services and treatment options as Pt's insurance (Cigna) is out of network with WRBH clinic. Offered a consult with psychiatrist as "do not bill" but Pt opted for a provider-to-provider consult. Discussed and emailed several external psychiatry/therapy provider resources. Discussed and provided emergency information—calling 911 or going to ED. Provided various hotline numbers she can call/text. Discussed safely discarding trazadone medication at nearby pharmacy if Pt does not plan to take it as prescribed. Pt reports having supportive family that lives close by. Informed Pt to have her OB email/in-basket message physician to discuss Pt's care and treatment recommendations. Sent PSI and PSC information to Pt. Emailed physician with Pt info and background to anticipate phone call from provider.

PT H766

Pt is 26yo, G5PO, was 11wks pregnant at time of enrollment, upon chart review, Pt had D&C on 4/24/24. Pt insured by Cigna, white non-Hispanic, from Berkeley County. Pt reports recently switching insurance to Cigna, on waitlist for therapy for grief counseling





(Pt states with our clinic but may be with MUSC General psych). Pt reports being in a transition period and seeking therapy for reoccurring pregnancy loss. No interest in evaluation for medication at this time. Pt reports no SI. Discussed Cigna being out of network with WRBH clinic. Discussed available services/treatment options. Pt reports no interest in group therapy. Emailed Pt with external therapy resources and provided National Share website as resource for pregnancy loss. No additional needs identified at this time.

PT I855

Pt is 27yo female, G4P4, PP delivered on 1/11/24. Insured by Medicaid, race: white, ethnicity: not Hispanic or Latino, from Greenville County. Per chart review on 2/9, Pt attended initial MD appt on 2/8. Has f/u therapy on 2/14 and f/u MD on 3/04. Primary Dx: Depression. Initially reached out to the Pt after she completed her first screening late December. Pt screened positive for: Positive Depression, High Risk Substance Use: tobacco, and SDOH: phone/internet and supplies for baby/family. The patient indicated in her screening that she did want assistance with resources related to baby supplies. EPDS 14. Made brief contact with the patient on 12/27 to discuss +Depression, +substance use, and SDOH. Discussed SDOH resources for infant supplies. Pt advised she would call Care Coordinator back at a better time, as Pt was entering a doctor's visit. CC sent Pt resources for infant supplies on 12/27 per Pt request and sent text and email with reminder to call CC back when it is a better time for her. Did not hear from Pt. Reached back out to Pt on 1/11 to complete assessment. Pt reports that she delivered her baby on 1/7, and that the baby is currently in the NICU at the Children's hospital in Charleston and he is scheduled for surgery. Rest of CC note from 1/11: "Pt reports a lot of anxiety still and is stressed, finds it difficult not to "freak out". Anxiety worsened since pregnancy due to social stressors. Pt reports she feels her depression is okay right now. Provided Pt with PSI information. Pt scheduled on 1/19 3:45pm with psychiatrist. Pt reports she is awaiting approval for WIC, SNAP, and TANF, no assistance needed for food resources at this time. Pt aware of Modivcare as a resource for transportation, encouraged Pt to use. Pt discussed that neither her or her husband have a phone, and they are using her mother's phone right now. Confirmed she will be able to use her mom's phone for upcoming appt. Pt reports she previously had utilized Life Wireless program for free cell phone but was cut off and unsure of what happened. CC sent additional email with resources for phone/internet and general resources, including some in Charleston since Pt is in town while her baby is hospitalized. Pt mentioned she was informed the hospital social worker could help with applying for SSI. CC encouraged Pt to ask her baby's care team for a social work consult to ensure she gets assistance. Pt discussed desire to quit smoking tobacco, states she is interested in a Nicotine patch,





as she was given one at MUSC previously and found it helpful. Discussed MUSC smoking cessation program and provided Pt information via email to reach out if interested. No additional needs identified at this time. 1/26: Per chart review, Pt No Showed her appt on 1/19 with WRBH provider. Texted patient to provide clinic scheduling # and encouraged her to call scheduling line to get rescheduled if she would like, no response from Pt. Pt completed her 30 Day Post Delivery Screen on 2/6/24. CC reached out on 2/6 to address Pt's screen positive for: Depression, High Risk Substance Use: tobacco, and SDOH: work/employment. EPDS: 16. Reached Pt's mother who provided Pt's new phone number as Pt got new phone of her own (updated chart and Redcap w/new contact info). Pt reports struggling with her mental health currently: beating herself up a lot, guilt, and lack of sleep. Pt reports no SI. Discussed previously emailed resources, Pt reports she is unsure if she received them because she has been too busy to look due to baby's medical needs. Pt reports continued tobacco use and continued desire to quit, but Pt reports regarding smoking cessation, she doesn't think she'll be able to fit it in right now. Per chart review, at the time of delivery, she had reported decreasing tobacco use from 2 packs of cigarettes/day to 1 pack/day. Pt reports that she indicated assistance with SDOH: work/employment, as she would like to find a work from home job so she can be home with her kids and care for the baby once discharged from NICU. Re-sent previously provided email and included resources for work/employment. Encouraged Pt to look through resources when she can and to reach out to Care Coordinator if she has additional needs. Scheduled with MD on 2/8 at 8:00am. Pt attended her initial MD appt on 2/8 and was scheduled for follow up visits on 2/14 (therapy) and 3/04 (MD). The patient was seen after delivery for a follow up visit on 1/12 for, ""Encounter for routine checking of intrauterine contraceptive device (IUD)". Patient was also seen on 1/17 for a BP check. Patient is scheduled for her Postpartum visit on 2/20/24, since Pt is still expected to be in the Charleston area due to her infant's medical condition and NICU admission. Update 2/14: Pt attended her visit on 2/14 with therapy provider. From initial evaluation on 2/8: Pt diagnosed with Adjustment Disorder with depressed mood (does not meet criteria for MDD but could potentially progress to MDD). Plans to start Cymbalta, continue to assess for increase in/problematic alcohol intake, scheduled with WRBH therapist. Per MD note, Pt has prior trauma, utilizes CBD to help relax, drank heavily when younger with urges to self-medicate with alcohol lately. Hx of PPD with first pregnancy that led to stay at the Carolina Center. Current pregnancy complicated by gestational hypertension, tobacco use, and neonatal cardiac malformation. Hx of difficulty complying with medication regimen. Family Hx of widespread depression and alcohol addiction.





PT J519

Pt is a 23yo female, G1PO, at 7 wks GA, insured by Medicaid, race: other, ethnicity: Hispanic or Latino, from Charleston County. Called Pt to address screen: Prevention/HRSU: Alcohol. Pt reports no alcohol use since pregnancy, only consumed it occasionally on weekends, no concerns for substance use, declined need for substance use resources. Pt first stated she is doing okay and feels she is on track with everything, declined need for any services. Pt then asked about therapy and we reviewed services offered. Pt was hesitant to discuss what is concerning her. She then described some mental health concerns—fear/worry about being a good mom d/t her childhood trauma. Pt later disclosed that she was worried to bring these mental health concerns up because she was fearful that she would be deemed an unfit mother or be thought of as crazy. CC normalized these feelings, explained program in a supportive way, offered additional support to connect with other people who have gone through or are going through similar things (PSI and PSC). Scheduled for psych intake with psychiatrist on 2/2 at 3:45pm (d/t having Medicaid-need for MD appt). Pt prefers in-person therapy and is scheduled to begin therapy on 3/5 8:00am. CC texted Pt with her appt info with PSI and PSC links.

6B. LTW Care Coordinator Structured Interview Guide

Step 1: Introduction and Permission to Talk

Purpose

The Care Coordinator introduces her/himself and describes her/his role, and relationship to the patient's provider as well as establishes that the patient feels comfortable talking with the Care Coordinator at this time and in their current location.

Interview Guide

"Hi Ms X [in the case of IPV, use first name]. My name is X and I work with Dr. X at the X clinic and am calling in response to your visit today [or day/date of visit], and your behavioral health screenings. We want to be sure you are getting the best care possible, and I wonder if you have a few minutes to review this information with me? Are you in a private location and feel comfortable reviewing this now?" [If not, establish another time to talk].

Step 2: Feedback, Clinical Assessment, and Insight into Motivation for Change

Purpose: The Care Coordinator provides feedback based on the completed screening information and clarifies if there are any additional symptoms or social determinants of health (SDOH) that may be impacting the patient's mental health and functioning, particularly in areas that are important to the patient.





Interview Guide

"Thank you for completing these screens and providing this information. From your responses, I noticed you may be struggling with X" [X=depressive or anxiety symptoms, substance use, feeling unsafe at home etc.]. "Can you tell me a little more about that" [clarify any additional symptoms, frequency, duration, severity]? "Can you also tell me about how these symptoms or X [use participants language to describe] is impacting areas of life that are important to you" [e.g., relationships with partner, child or children, family members, friends and/or others, responsibilities at home or work or school etc.]? "I also noticed that you indicated that X [food, housing, utilities, personal safety] may be a challenge right now. Can you tell me a little more about that?"

[IF INDICATED] "Thank you for sharing this with me. Often when people are experiencing X they might also be experiencing thought of wanting to die. I would like to ask you some questions about suicide" [Complete item 10 of the Edinburgh Postnatal Depression Scale and ask the first 5-items of the Columbia Suicide Severity Rating Scale for all participants and follow site-specific **Safety Plan and Clinical Protocol** for any patient endorsing any of these items].

[IF INDICATED] "Thank you for sharing this with me. I am concerned about your substance use and I would like to ask you some questions about your risk for drug overdose" [For patients endorsing substance use, complete the 8-item Alcohol, Smoking and Substance Use Screening Test (ASSIST) and follow site-specific **Safety Plan and Clinical Protocol** for risk mitigation strategies].

[IF INDICATED] "Thank you for sharing this with me. I am concerned about your safety and would like to ask you some more questions about your risk of harm from IPV." [For patients endorsing IPV on the initial nine item screen and any of the PSV items, complete the Danger Assessment-5 and follow site-specific **Safety Plan and Clinical Protocol**].

Step 3: Empathy, Reflective Listening & Summarizing

Purpose: Whenever possible and appropriate within the encounter, the Care Coordinator provides empathy and support. In addition, the Care Coordinator uses reflective listening which includes following the thoughts and feeling of the patient and understanding what the patient is saying from the patient's perspective. With reflective listening, the Care Coordinator clarifies and restates what the patient is saying. This provides an opportunity for the patient to correct any misunderstandings and/or further clarify any of their experiences and facilitates rapport by the patient feeling heard and understood.





Interview Guide

"I'm so sorry to hear about all that is going on and would like to help. From what you have been describing, it sounds as though you are experiencing X and it has impacted you [and others] in X ways. It also sounds like you would like X to change X because of X. Have I understood this correctly? Is there anything else you would add?"

Step 4: Participant Education

Purpose

The Care Coordinator briefly provides education about the risks to the patient, their pregnancy/newborn or child and family associated with untreated/or unaddressed mental health, substance use and IPV. This is not meant to be used as motivation for change, unless the patient feels that this information motivates them toward positive change.

Interview Guide

"Unfortunately, we know that when X goes unrecognized/untreated/unaddressed, it can have a negative impact on women's health including their pregnancy, their newborn's health and their child's development. There are treatments [or interventions] that can address X and have been shown to improve women's and children's health."

Step 5: Referral, Motivation and Shared Decision Making

Purpose

Based on the patient's screening results and clinical assessment, the Care Coordinator providers referral options to an appropriate provider and level of care. When making a referral to treatment, the Care Coordinator is reflecting the patient's own internal motivation for change and using Shared Decision-Making (SDM) to determine the optimal referral option for the patient. The 6 SDM key elements include 'situation diagnosis' which for the purposes of this situation is 'situation problem', as the Care Coordinator's assessment is not diagnostic, choice awareness, option clarification, harms and benefits discussion, patient preferences deliberation and making the decision.

Interview Guide

"Based on what you are describing and how it is impacting X and your wish/goal for X, I would like to see you get the help and support that you desire to reach your goal(s). There are multiple sensible ways to address X and your input in deciding on how to proceed is important. There are a few options for X." (*For the purposes of this illustration, we will use mild-moderate depressive symptoms.) "There are different types





of mental health providers that can help with mild/moderate depressive symptoms including those that only provide therapy (e.g., Psychologist, Licensed Independent Social Worker, Licensed Professional Counselor) and those that can provide both therapy and medications (e.g., Psychiatrist). There are also support groups that are led by professionals that can provide some additional support if you are interested as well as support groups led by peers. How does any of this sound to you? Do you have any concerns or questions about seeing a mental health provider or joining a group or this referral?" [Discuss concerns/risks and benefits for the participant.] "Do you have a preference for how you would like to proceed? Do you feel like you are ready to decide which referral you would like?"

Step 6: Removing Barriers, Reaffirming Motivation and Navigating Health Systems

Purpose

The Care Coordinator and the patient discuss any potential patient, provider or system level barriers that may prevent the patient for accessing the referral resource or treatment. The care coordinator and patient work collaboratively to overcome these barriers and reaffirm the patient's motivation to access this resource and/or treatment.

Interview Guide

"Is there anything that might make it difficult for you to access this resource and/or attend treatment? (*For the purposes of this illustration, we will use transportation and childcare.) "It sounds like transportation and childcare are going to be barriers to attending in-person treatment. Do you have any ideas about how you can remove these barriers, so you are able to get the help you desire? [If difficulty solving this barrier, care coordinator to offer suggests and potential solutions]. How do you feel about a telehealth visit from your home? This prevents the need for transportation, and you can remain home with your child. [If interested, check for other potential barriers.] Do you have an internet connection and device with audio and video i.e., smart phone, iPad, computer with a camera? If not, could you borrow one from a family member or friend for the visit? Is there a private room you could use during your appointment?" "What other things will make it difficult for you to access these resources and/or attend treatment? Can you remind yourself of the reasons why you want to access these resources and/or attend treatment? What are those reasons, again?" [i.e., internal motivators to seek resources and/or treatment.]





Step 7: Keeping the Communication Open and Close on Good Terms

Purpose

The Care Coordinator reminds the patient that if they need assistance with resources for social determinants of health (SDoH) and/or referrals to a mental health or substance use provider or IPV, that she/he is available by phone Monday through Friday 8am to 5pm during their pregnancy and the postpartum year. In the case where a patient is not interested in any of the recommendations, the Care Coordinator respects the individual's decision and in a non-confrontational way asks why the patient is not interested in the referral and documents this in the LTW system and for study purposes. The Care Coordinator reiterates to the patient, that no matter what she decides, the Care Coordinator is available during their pregnancy and the postpartum year if they need assistance with any resources for SDoH, or any mental health or substance use problems, or IPV.

Interview Guide - Accepting a Referral

"Thank you for talking with me today. If you have any problems with this referral, please let me know by phone call or text. I would be glad to help re-connect you or find alternative referrals if this does not work for you. Also, at any time during your pregnancy and the postpartum year you need assistance with resources for SDoH and/or referrals to a mental health or substance use provider or IPV, please contact me by phone or text." [Remind the participant that the Care Coordinator's contact information was texted to them at LTW enrollment, and they can save the number to their contacts or provide the patient the number again]. "I am available Monday through Friday 8am to 5pm, so if you call outside this time, I will call you back the next business day."

Interview Guide - Not Currently Interested in a Recommended Referral

"Thank you for talking with me today. I understand that a referral for X is not helpful to you at this time. So that I can better assist you and others in the future, do you mind sharing why you would not like to pursue this referral at this time? Thank you for sharing this with me. If at any time during your pregnancy and the postpartum year you change your mind or need assistance with resources for SDoH and/or referrals to a mental health or substance use provider or IPV, please contact me by phone or text. I would be glad to help." [Remind the patient that the Care Coordinator's contact information was texted to them at LTW enrollment, and they can save the number to their contacts or provide the patient the number again]. "I am available Monday through Friday 8am to 5pm, so if you call outside this time, I will call you back the next business day."





6C. LTW Care Coordinator REDCap Platform Overview

To Open a Record

1. In the far-left column under Data Collection, click Record Status Dashboard To locate the record for review, find Displaying Record and click the downward arrow
2. Choose the corresponding page that the record number you are searching for can be found on (Ex. Looking for Record 22, you would choose page 3)
3. Under Record ID, click record number you would like to review

Baseline Screening

1. SBIRT Clinician

- a. If the bubble in this row appears RED, it indicates that the record is new and needs review. *An email will be sent to you to tell you a new screening has been completed and needs review.
- b. Click on the RED bubble – the information will be automatically populated for your review
- c. Note the risk category: Low Risk, Low Risk Substance Use, Prevention, SDOH, Domestic Abuse and/or Positive Depression status
- d. If SUD is indicated, note Substance
- e. Review the info, change the last box to “complete” which will make the bubble green. Click save & Exit.

2. EPDS-NIDAMA-AA

- a. If the bubble appears GREEN, it indicates that the patient completed the EPDS portion of the screening. If the bubble is blank, the patient did not complete the EPDS portion of the screening.
- b. Click the GREEN bubble to review
 - I. Note the EPDS score and NIDAMA/AA if applicable. EPDS score >9 is considered high.
 - II. If SUD is indicated, note Frequency

3. Pre-call Review Dashboard

- a. The information for the Baseline Screening will automatically populate for you to review.
- b. Change the last box to “complete” which will make the bubble green. Click save & Exit.





4. Care Coordinator Worklog

- a. Go to EPIC and search the patient's MRN
 - I. Under Encounters, look for hx of visits with WRBH
 - II. If visits are found, note if last visit is within 2 months of this screening
 - III. Review any WRBH notes for relevant information
- b. Click the RED bubble
- c. Enter the patient's first and last name
- d. For Date of Worklog Initiation, click Today
- e. For all patients EXCEPT those screening Low Risk, Prevention, or those who have been seen by a WRBH provider within 2 months, call to assess for:
 - I. Current symptoms, including suicidality
 - II. For suicidal patients, refer to ED and provide National Suicide Hotline
 - III. Psychiatric history/treatment
 - IV. Substance Use
 - V. Domestic violence
- f. The patient will be offered evaluation via video visit or in-person. Patient will also be offered peer support such as Postpartum Support Charleston (PSC) and Postpartum Support International (PSI).
- g. If patient does not answer phone, CC will leave a message and follow-up with a text message. CC will make 3 total attempts to contact the patient.
 - I. Each attempt should include a call, leaving a voicemail if able, and a text message.
 - II. For every attempt to contact the patient, document attempt made in the Clinical Notes section. (Ex. Date: Called, left voicemail, sent text message)
 - III. Text sent if cannot reach patient: Hi, this is XX, Care Coordinator with MUSC Women's Reproductive Behavioral Health Clinic. I'm following up on a recent text-based behavioral health screening you completed. I'd like to review the screening with you and see if there are any resources or services that could be helpful for you. Please call back at XXX-XX-XXXX when you get a chance. Thanks!
- h. If CC doesn't reach patient, select Post Call Information: Status of Case as "In Progress", and select Form Status as Unverified (turn bubble yellow).





- i. For patients you have been Unable to Contact after 3 attempts, choose the first checkbox (“Our behavioral health team has made several attempts to contact this patient, but we have not been successful”) in the section: “What are the outcomes of the care coordinator’s attempt to reach the patient?”
 - I. Ensure all 3 attempts are documented in the Clinical Notes
 - II. Click the checkbox next to “Could not reach patient” that indicates we will Continue to Screen
 - III. In Additional Notes to be included in Letter to Provider, enter if the patient screened for High-Risk Substance Use, SDOH, or domestic violence and notate that CC was unable to reach the Pt to assess further or provide resources.
 - IV. For the Date of Worklog Completion, select the date your final contact attempt was made.
 - V. For Post Call Information: Status of Case, change to: “Complete”, and select Form Status as “Complete” (turn bubble green).
 - VI. Click Save & Stay
- j. For patients that screen Positive Depression, High Risk Substance Use, Domestic Abuse, or Prevention that have been contacted but Not Scheduled, choose the second checkbox button (“Our behavioral health team has contacted the patient, but the patient was not scheduled for an appointment”) in the section: “What are the outcomes of the care coordinator’s attempt to reach the patient?”
 - I. A new section will appear Patient contacted, but was not scheduled; select the reason (Services not needed/Not Interested/Unable) and follow the prompts
 - II. Click the checkbox next to “Could not reach patient” that indicates we will Continue to Screen
 - III. For the Date of Worklog Completion, select today’s date
 - IV. For Post Call Information: Status of Case, change to: “Complete”, and select Form Status as “Complete” (turn bubble green).
 - V. Click Save & Stay





k. For patients that screen Positive Depression, High Risk Substance Use, or Domestic Abuse, that have been contacted and scheduled for services:

- I.** Clinical Notes box, enter information obtained from patient during phone call including details of mental health symptoms, substance use, domestic violence, SDOH, current medications, treatments, resources provided, interventions provided, etc.
- II.** What are the outcomes of the care coordinator's attempt to reach the patient? Choose the third checkbox ("Our behavioral health team has made contact with the patient and she is being scheduled for behavioral health services").
- III.** Date scheduled for behavioral health services, enter date of scheduled WRBH visit
- IV.** Patient is being scheduled for behavioral health services via, select the correct visit type
- V.** Additional Notes to be included in Letter to Provider, use this box to type any additional notes you would like to appear in the "Letter to Provider", which gets entered into the patient's chart. Enter if the patient screened for High-Risk Substance Use, SDOH, or domestic violence and note review of topic discussed with patient and whether resources were declined/ accepted by patient and if and how resources were provided.
- VI.** Answer the remaining questions accordingly ("Approximately how many minutes did it take you to complete the note for providers?" through "If the patient has a new cell phone number within the past 3 months enter the new cell phone number here")
- VII.** For Post Call Information: Status of Case, change to: "Scheduled and waiting for appointment", and select Form Status as "Incomplete" (turn bubble Red).
- VIII.** Click Save & Stay

- I.** For patients that screen for Prevention only (No SDOH indicated):
 - I.** Click the fourth checkbox (" Our behavioral health team has made contact with the patient and she was given information about how to access additional supports including:")
 - II.** A new section will appear. Select appropriate option(s) ("Peer Support" or "Other Supports").
 - III.** Click the checkbox that indicates we will Continue to Screen
 - IV.** For the Date of Worklog Completion, click Today
 - V.** Select Complete, and then click Save & Stay





m. For patients that screen for Prevention and SDOH:

- I. CC to call patient to discuss screen, ask about SDOH issues and discuss options including community resources.
- II. If patient does not answer phone, CC will leave a message and follow-up with a text message requesting that the patient reach back out to discuss resources.
- III. Send text: "Hi, this is XX, Care Coordinator with MUSC Women's Reproductive Behavioral Health Clinic. I'm following up on a recent text-based behavioral health screening that you completed. I just called and left a voicemail. You indicated you would like resources for XX (enter SDOH categories selected by Pt here). Please reach back out to discuss potential resources available. You can learn more about perinatal mental health at the link below and reach out if you have or develop related symptoms. Take care! <https://www.postpartum.net/learn-more/>
- IV. CC will make 1 total attempt to contact the patient.

n. For Low Risk or Low Risk: Substance Use patients, next to What are the outcomes of the care coordinator's attempt to reach the patient? choose the sixth option (" Low risk-no further contact indicated") in the section: "What are the outcomes of the care coordinator's attempt to reach the patient?"

- I. Click the checkbox next to "branch from low risk and SDOH" that indicates we will Continue to Screen
- II. For the Date of Worklog Completion, click Today
- III. Select Complete, and then click Save & Stay

o. For Current Patients that have been seen by WRBH within the last 2 months, select the fifth checkbox (Continues to Work With)

- I. For the Date of Worklog Completion, click Today
- II. Select Complete, and then click Save & Stay

p. For ALL Outcome types, copy the Letter to Provider and paste it into a progress note in the patient's EPIC chart; no co-sign is necessary for the EPIC encounter. Go to EPIC button, select Patient Care, select Documentation at the bottom, enter MRN and select patient name, new encounter pops up so select provider (yourself) and click Accept. Copy & paste Letter to Provider into Progress Note section on right panel and click Sign.





5. Clinical Diagnosis

- a. If the patient is not scheduled for an appointment or not in care with WRBH already mark the survey as yellow (unverified).
- b. If the patient is going to be seen for an appointment with WRBH turn the survey bubble red (incomplete).
- c. If a patient screens positive at a follow-up screen and schedules an appointment with WRBH, change the Clinical Diagnoses survey bubble to red (incomplete).
- d. At the end of each month go to the record status dashboard and complete the Clinical Diagnosis survey for the red bubbles by going into EPIC and finding the initial WRBH evaluation progress note.
- e. If a patient was scheduled but canceled the WRBH appointment or is a No show, change the bubble back to yellow.

Ongoing Screenings:

1. Ongoing Screening follows the same process as Baseline Screening, including the Care Coordinator Worklog, with the following additions:

- a. In addition to looking for RED SBIRT Clinician bubbles, you may also see a single GREEN bubble with a check mark in the Text Follow-Up Screens column. In this case:
 - I. Select the Text Follow-Up Screens bubble
 - II. If all answers are No, go to SBIRT Clinician and select Low Risk, select Complete and Save, then complete the Care Coordinator Worklog as instructed above
 - III. If the patient has answered Yes to any question, contact the patient to assess as described above, complete SBIRT Clinician with your assessed Risk Category, mark Complete, then complete the Care Coordinator Worklog as instructed above

*An email will be sent to you to tell you a new text follow up screen has been completed and needs review.

2. Also look for Yellow dots in Care Coordinator Worklog. These are people who need to be contacted again. *Make sure to scroll across to look at all screening time points. No email alerts are sent for these.





Reports: High Risk Categories but No EPDS Completed

1. Needs checked weekly
2. On the right-hand panel under Reports, select High Risk Categories but No EPDS Completed. This will display a list of patients who were placed in a High-Risk Category based on their SBIRT/Text Follow-up Response but the patient did NOT complete corresponding EPDS/NIDAMA for event (event though they were prompted to complete it based on their responses in the SBIRT/Text Follow-Up).
 - a. Sort by Clinical Risk Category by clicking on the yellow subject heading
 - b. For Domestic Abuse and High-Risk Substance Use, complete ALL screenings regardless of the date completed or if subsequent screenings have been completed.
 - c. For Positive Depression (without domestic abuse and/or high-risk substance use) check the date of screen completion. If the patient has completed any subsequent screenings, complete the Care Coordinator work log without contacting the patient. If the patient has not completed subsequent screenings, proceed by contacting the patient.

6D. LTW Care Coordinator Safety Plan and Clinical Protocol

Sample Standard Operating Procedures (SOP)

Sample SOP: Overdose Risk

Medications for Opioid Use Disorder (e.g., Buprenorphine, Methadone, Naltrexone) significantly reduce the risk of overdose and therefore the care coordinator will facilitate either same day or next day appointments for the participant to be evaluated by an addiction specialist and potentially started on one of these medications. South Carolina has several options for same day or next day appointments for evaluation and treatment of Substance Use Disorders, particularly Opioid Use Disorders and can initiate buprenorphine or methadone, as appropriate, following an initial evaluation.

Participants can access Naloxone and Fentanyl test kits within these treatment centers and South Carolina also has several free Naloxone and Fentanyl test kit distribution centers. Participants are provided with information on how to obtain Naloxone and Fentanyl test kits and the care coordinator uses the interview guide to assist with connections to these resources. Other risk mitigation strategies are discussed (e.g., using with others that can administer naloxone and/or call 911, if they are going to use). The interview guide includes education about the increased risk of overdose with synthetic opioids and that they are often in any illicit substance including pills, heroin, cannabis, methamphetamine often without participant being aware of this as well as the additional risk of overdose with opioids when combined with any other substance particularly





benzodiazepine, alcohol, or other sedating substances. Loss of tolerance and increased risk of overdose is also discussed. Similarly, risk mitigation strategies are discussed for all other substances (e.g., alcohol, benzodiazepines, methamphetamine etc.).

Sample SOP: IPV Risk

RISK FOR IPV IS INDICATED WITHIN THE LTW PROGRAM BY:

- + Positive endorsement on any PVS item and 0-1 items on the DA-5 indicates the participant is in Danger of serious harm in the future.
- + Positive on any PVS and 2+ items on the DA-5 indicates **High Danger** for serious harm in the future.
- + Positive on “feel in danger right now” indicates the participant is in **Imminent Danger** for harm today.
- + The patient may disclose IPV danger during a phone/telehealth-based interaction with the Care Coordinator.

PROCEDURE FOR ADDRESSING IMMINENT DANGER

- + If the participant reports imminent danger of potential harm that day, and the participant wants immediate assistance to leave the relationship or contact law enforcement, the care coordinator gathers more safety planning information and provides options for the participant to include contacting local DV shelter regarding safety planning and/or contacting law enforcement to make a police report.
- + If the participant reports imminent danger of potential harm that day and the participant does not want immediate assistance to leave the relationship or to involve law enforcement, the care coordinator reiterates danger concern, provides local resources and recommendation to contact the National Domestic Violence Hotline (NDVH). The care coordinator provides education on what the NDVH can provide (see below). The care coordinator offers to contact the hotline at the time of the encounter, if participant is willing.
- + If the participant is unwilling to contact the NDVH at the time of the encounter, the care coordinator provides education about scoring results, indicates her/his concerns, and provides education and motivational interviewing with goal of the participant calling NDVH.
 - Before exiting the call, the care coordinator plans a follow-up call with the participant in 1-2 days.





PROCEDURE FOR ADDRESSING DANGER OR HIGH DANGER

- + The care coordinator provides education about scoring results, indicates her/his concerns and provides education and motivational interviewing with goal of participant calling NDVH. The care coordinator provides education on what the NDVH can provide (see below).
- + If the participant AGREES to call the NDVH, the care coordinator calls the hotline with the participant's permission while the participant is on the phone and merges the call. Again, with the participant's permission, the care coordinator explains the results of the screening to the hotline advocate. With the participant's permission the care coordinator can stay on the call or leave the call for participant confidentiality and based on participant preference, but before exiting the call the care coordinator plans a follow-up call with the participant in 1-2 days.
- + If the participant REFUSES to call the NDVH, the care coordinator reiterates her/his concern of danger provides education about scoring results and provides education and motivational interviewing with goal of motivating the participant toward calling the NDVH in the future. Before exiting the call, the care coordinator plans a follow-up call with the participant in 1-2 days.

A NOTE ON MANDATED REPORTING (MAY DIFFER BY LOCALITY):

- + If the participant discloses to any healthcare provider that a child has been a direct victim of physical or sexual abuse or has been a witness to domestic violence, a mandated report to Child Protection Agency is required per South Carolina reporting laws.
- + The care coordinator tells the participant about the mandated reporting requirements and offers to do the report with her on the phone.



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