HVCoIIN 2.0

Home Visiting Collaborative
Improvement and Innovation Network

Maternal Depression

Electronic Playbook

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HV CoIIN 2.0 Maternal Depression Charter

A. WHAT ARE WE TRYING TO ACCOMPLISH?

Call to Action: Studies show that 40-60% of families with young children enrolled in home visiting programs experience elevated depressive symptoms, and 10-15% have major depression.[1] [2] Left undetected and untreated, maternal depression can have long-lasting negative effects on the growth and development of infants and young children. Studies have shown that mothers with depression are less positive, spontaneous, and responsive with infants, [3] compromising the critical relationship a young child needs to develop. Young children with compromised responsive caregiving are at an increased risk of exhibiting challenging behavior, developmental difficulties, poor social relationships, and cognitive impairment.[4][5]

Identification and linkage of women with depressive symptoms to effective, evidence-based interventions can make a difference,[6] [7] [8] reducing by half the percent of women exhibiting major depression or developing depression. [9] [10] However, families challenged with maternal depression often struggle to access and engage with treatment: they have less frequent use of preventive health services and greater use of emergency departments and in-patient services for illness and injury.[11][12]

Bennett, H.A., Einarson, A., Taddio, A., Koren, G., & Einarson, T.R. (2004). Prevalence of depression during pregnancy: A systematic review. Obstetrics and Gynecology, 103, 698-709.

[2] Chung, E.K., McCollum, K.F., Elo, I.T., Lee, H.J., & Culhane, J.F. (2004). Maternal depressive symptoms and infant health practices among low-income woman. *Pediatrics*, *113*, e523-e529

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[10] Tandon SD, Leis, J, Mendelson T, Perry DF, Edwards K. 6-month outcomes from a randomized controlled trial to prevent perinatal depression in low-income home visiting clients. (2013; epub ahead of print). Maternal and Child Health Journal.

[11] Chung, E.K., McCollum, K.F., Elo, I.T., Lee, H.J., & Culhane, J.F. (2004). Maternal depressive symptoms and infant health practices among low-income woman. *Pediatrics*, *113*, e523-e529.

[12] Minkovitz, C., Strobino, D., Scharfstein, D., Hou, W., Miller, T., Misry, K. et al. (2005). Maternal depressive symptoms and children's receipt of health care in the first 3 years of life. *Pediatrics, 115,* 306-314.

Home visiting programs have a unique opportunity to reach vulnerable families and to incorporate evidence-based and practice-informed strategies —what we know works, and what we do on the ground, to decrease rates of maternal depression. In HV CoIIN 1.0, MIECHV awardees and their LIAs tested evidence and practice-informed-changes and improved rates of depression screening and engagement in evidence-based services, and decreased depressive symptoms among women accessing services.

- 96% of women were screened for depression within 3 months of enrollment and birth
- 66% of women with a positive screen had one or more evidence-based service contacts
- 60% of women who accessed evidence-based services experienced a 25% reduction depressive symptoms within three months

In [insert your state here], [insert a description of the status of maternal depression in home visiting in your state here. If you participated in HV CoIIN 1.0, you could begin by summarizing the accomplishments and learning from 1.0. Then describe the gap in practice that you plan to overcome.]

Mission: Together, in HV CoIIN 2.0 , we will dramatically reduce depressive symptoms among mothers of young children receiving home visiting services [insert here the expected timeframe, based on the time between your launch date and December 31, 2019; for example "between January 20, 2019 and December 31, 2019"] by developing and refining policy and practices that lead to; (1) Standardized and reliable processes for maternal depression screening and response, (2) Competent and skilled workforce to address maternal depression, (3) Standardized processes for referral, treatment and follow-up and (4) Comprehensive data-tracking system for maternal depression.

SMART AIM: 85% of women who screen positive for maternal depression and access services will report a 25% reduction in symptoms in 12 weeks (from first service contact).

PROCESS AIMS:

- 85% of women will be screened, using appropriate instruments at appropriate intervals: Within 3 months of enrollment (pre- or postnatal) and within 3 months postnatal.
- 85% of women with a positive screen for MD who do not access EB services will receive a home visitor check-in within 30 days, (or sooner in cases of crises or worsening symptoms).
- 75% of all enrolled women who screen positive (and are not already in evidence-based services) will be referred to evidence based services[xiii] (offsite or in-house) within 30 days.
- 85% percent of women referred to an evidence based service will have one service contact.

B. HOW WILL WE KNOW A CHANGE IS AN IMPROVEMENT?

To identify progress towards these shared aims, we will report a common group of measures monthly. Data will be graphed on run charts and shared with all HV CoIIN 2.0 participants across the Collaborative to

promote shared learning. The following measures were selected to reflect the processes necessary to achieve the SMART aim. They are listed in the order in which these processes occur in many sites, and are labeled with the Primary Driver they reflect.

Measure #1 (Primary Driver 1): % of women screened for maternal depression within 3 months of enrollment
Measure #2 (Primary Driver 1): % of women screened for maternal depression within 3 months of giving birth
Measure #3 (Primary Driver 3): % of women who screened positive for maternal depression not in evidence-based services that were **offered a referral** to evidence-based services
Measure #4 (Primary Driver 3): % of women who screened positive for maternal depression not in evidence-based services that **verbally accepted** a referral to evidence-based services
Measure #5 (Primary Driver 3): % of women who screened positive for maternal depression and verbally accepted a referral that had at least **one evidence-based service contact**
Measure #6 (Primary Driver 3): % of women who screened positive for maternal depression and did not access evidence-based services that **received a home visitor 'check in'** within 30 days
Measure #7 (Primary Driver 4): % of team members that reviewed and used CQI data in practice this month

C. WHAT CHANGES CAN WE MAKE THAT WILL LEAD TO IMPROVEMENT?

HV CoIIN 2.0 provides a "playbook" comprised of working technical documents that establish a common vision and mission, shared aims, theory, measures and change ideas to drive improvement in maternal depression. These materials were developed by HVCoIIN 1.0 staff, faculty, and front-line home visiting teams who applied the latest evidence-based research and practice to draft, test and refine the Maternal Depression *Key Driver Diagram* (KDD). The KDD displays our aim and our shared theory of how that aim will be achieved, including the primary drivers (i.e., what needs to be in place to accomplish the aim), change ideas (i.e., how those primary drivers might be put in place), and high quality sample PDSAs from HV CoIIN 1.0 LIA teams. [Insert text here to describe how you intend local teams to prioritize areas of the KDD to test in, e.g. "each team will begin with PD1 and follow a specific sequence, moving from one driver to the next as they achieve the associated process aims", or "each team will select the driver that they prefer to start with, using data to inform which drivers to prioritize." Be sure to include language that makes explicit that they will share their learning with one another. *Sample text: Teams from participating LIAs select which of these change ideas might work in their particular contexts, and design Plan-Do-Study-Act (PDSA) cycles to test those changes and drive improvement. The change package provides more detailed descriptions of the change ideas, including examples from seasoned LIA teams that tested specific change ideas and sample PDSA plans.*]

D. COLLABORATIVE EXPECTATIONS

The HV CoIIN 2.0 National Group will:
- Provide playbooks, including draft charter, Key Driver Diagrams, Change Package with high-quality, tested sample PDSAs, and measures at a face-to-face national launch, via monthly virtual project-wide calls, and via regular and ad hoc coaching.
- Offer coaching to awardee teams to support scale design and execution to facilitate improvements in home visiting.
- Provide communication strategies to keep HV CoIIN 2.0 participants connected to the National Group and colleagues.

- Provide an online database that automates monthly reports to awardee leaders, model developers and local implementing agencies.
- Provide regular coaching and teaching on scale methods, content knowledge, quality improvement methods, and family leadership.

Participating awardees are expected to:
- Convene and lead an awardee team to be part of the HV CoIIN 2.0 project to provide support to local teams.
- Participate monthly HV CoIIN 2.0 project webinars.
- Develop a scale plan for the HV CoIIN 2.0 work (e.g. aligned with MIECHV CQI plan and state strategic priorities).
- Lead a state-wide scale effort using a specific method that will include meeting regularly (e.g. monthly) with local LIA QI teams to review progress and provide coaching as needed (e.g. PDSA quality review, data progress and quality, etc.).
- Cover travel and other expenses incurred due to participation in the HV CoIIN 2.0.

Participating LIAs are expected to:
- Connect the goals of the awardee HV CoIIN 2.0 work to a strategic initiative in the organization.
- Provide a senior leader to serve as sponsor for the team working on the HV CoIIN scale improvement work
- Convene a core team of 3-5 members and facilitate the full team's participation in awardee-level scale activities.
- Set goals and work to achieve our AIMS.
- Perform tests of changes using PDSA rapid cycle methods and submit them via the HV CoIIN 2.0 database.
- Make well-defined measurements related to the teams' aims at least monthly and submit them via the HV CoIIN 2.0 database, which will create automated run charts that plot the results over time for the duration of the scale initiative.
- Share information with the peers including details and measurements of changes made at awardee-sponsored peer-to-peer learning opportunities.
- Present the teams' experiences and results at awardee-sponsored peer-to-peer learning opportunities to celebrate success and prepare for spread of changes to practice teams beyond the initial cohort.
- [adapt these expectations to your chosen scale method. For example, for a BTS collaborative: "Participate in monthly calls/webinars with peers, and awardee HV CoIIN 2.0 faculty, staff and consultants to review data, engage in learning and problem-solve barriers"].
- Work hard, implement change and have fun.

E. OUR TEAM SIGNATURES

Sponsor (State/Tribal Lead/Not-for-Profit Lead):

Agency Lead(s):

Day-to-Day Supervisor(s):

Home Visitor(s):

Family Member(s):

Others:

Maternal Depression Key Driver Diagram

SMART AIM	Primary Drivers	Change Ideas	
85% of women who screen positive for depression & access services will report a 25% reduction in symptoms 12 weeks (from 1st. service contact).	PD1. Standardized and reliable processes for maternal depression screening and response	1. Policy and protocol for screening to include use of reliable and valid tools	
		2. Policy and protocol for screening to include periodicity (e.g., prenatally, postnatally, rescreening as needed)	
		3. Policy and protocol along with talking points for explaining depression screening process to families	
		4. Policy and protocol for home visitor response to screening results and referral	
		5. Reminder system for rescreens	
	PD2. Competent and skilled workforce to address maternal depression	1. Training/education of home visitors on maternal depression symptoms, impact, and treatment	
		2. Training/education to enhance the skill development of home visitors for connecting with families on maternal depression	
		3. Reflective supervision that encourages home visitors to discuss maternal depression	
		4. Support for home visitors on protocol responses	
	PD3. Standardized processes for referral, treatment and follow-up	1. Crisis-response protocol	
		2. Protocol for referral and linkage to service for mothers who screen positive (internal and/or external services)	
		3. In-house, evidence-based preventative support (e.g., Mothers and Babies)	
	PD4. Comprehensive data-tracking system for maternal depression	1. Tracking system for maternal depression screening periodicity and results, referral, acceptance of referral, and follow-up to treatment	
		2. Tracking system for team meetings (i.e., weekly) to review improvement data and its use for guiding program effectiveness	

Maternal Depression Change Package

SMART AIM	Primary Drivers	Change Ideas	PDSA Examples
85% of women who screen positive for depression & access services will report a 25% reduction in symptoms 12 weeks (from 1st. service contact).	PD1. Standardized and reliable processes for maternal depression screening and response	1. Policy and protocol for screening to include use of reliable and valid tools	MD.PD1.C1.Example 1. Institutionalize and implement the procedure & protocol for depression screening
			MD.PD1.C1.Example 2. Tested and compared the PHQ-9 and the EPDS screening tools
		2. Policy and protocol for screening to include periodicity (e.g., prenatally, postnatally, rescreening as needed)	MD.PD1.C2. Screening mothers prenatally
		3. Policy and protocol along with talking points for explaining depression screening process to families	MD.PD1.C3. Adjusting the screening script to help mothers feel more comfortable with the screening
		4. Policy and protocol for home visitor response to screening results and referral	MD.PD1.C4.Example 1. Improving home visitor comfort and skills around referral protocol and resources
			MD.PD1.C4.Example 2. Establishing a referral and linkage process to mental health
		5. Reminder system for rescreens	MD.PD1.C5. Creating a tickler system for depression screening and follow-up
	PD2. Competent and skilled workforce to address maternal depression	1. Training/education of home visitors on maternal depression symptoms, impact, and treatment	MD.PD2.C1.Example 1. Providing training to home visitors in perinatal mood disorders
			MD.PD2.C1.Example 2. Partnering with behavioral health staff and hosting group treatment for mothers with elevated depressive symptoms in order to improve proportion of mothers that access treatment
		2. Training/education to enhance the skill development of home visitors for	MD.PD2.C2.Example 1. Incrementally increasing the number of MI techniques to improve acceptance of referrals to evidence-based services

		connecting with families on maternal depression	MD.PD2.C2.Example 2. Increasing home visitor knowledge, skills, and abilities in addressing MD and measuring improvement through pre/posttest
		3. Reflective supervision that encourages home visitors to discuss maternal depression	MD.PD2.C3.Example1. Incorporating 7 reflective supervision elements into weekly 1:1 sessions with supervisors and home visitors
			MD.PD2.C3.Example2. Using an electronically shared chart to allow nursing supervisors and program managers to follow-up with home visitors about mothers with elevated depression scores
		4. Support for home visitors on protocol responses	MD.PD2.C4. Providing Mothers and Babies training to support home visitor follow-up with mothers who have not yet accessed behavioral health referrals
	PD3. Standardized processes for referral, treatment and follow-up	1. Crisis-response protocol	MD.PD3.C1. Training staff in policy and protocols for urgent and non-urgent care in maternal depression referrals and resources
		2. Protocol for referral and linkage to service for mothers who screen positive (internal and/or external services)	MD.PD3.C2. Standardizing a 'check-in' process using motivational interviewing for mothers with positive screens for maternal depression
		3. In-house, evidence-based preventative support (e.g., Mothers and Babies)	MD.PD3.C3. Training home visitors in Mothers and Babies Curriculum
	PD4. Comprehensive data-tracking system for maternal depression	1. Tracking system for maternal depression screening periodicity and results, referral, acceptance of referral, and follow-up to treatment	MD.PD4.C1. Testing a registry approach to the SMART aim measure
		2. Tracking system for team meetings (i.e., weekly) to review improvement data and its use for guiding program effectiveness	MD.PD4.C2. Reviewing data as a group to gain better understanding of the data

Maternal Depression Measures Cheat Sheet

The HV CoIIN 2.0 for Maternal Depression's **SMART Aim** is:

> 85% of women who screen positive for maternal depression and access services will report a 25% reduction in symptoms in 12 weeks (from first service contact).

The following measures were selected to reflect the processes necessary to achieve the SMART aim. They are listed in the order in which these processes occur in many sites and are labeled with the Primary Driver they reflect.

Measure #1 (Primary Driver 1): % of women screened for maternal depression within 3 months of enrollment [column G]

- Numerator: N of women enrolled 90 or more days ago that were screened for maternal depression [column E]
- Denominator: N of women enrolled 90 or more days ago [column C]

Measure #2 (Primary Driver 1): % of women screened for maternal depression within 3 months of giving birth [column H]

- Numerator: N of women who gave birth 90 or more days ago that were screened for maternal depression [column F]
- Denominator: N of women who gave birth 90 or more days ago [column D]

Measure #3 (Primary Driver 3): % of women who screened positive for maternal depression not in evidence-based services that were **offered a referral** to evidence-based services [column L]

- Numerator: N of women who screened positive for maternal depression not in evidence-based services that were offered a referral to evidence-based services [column K]
- Denominator: N of women who screened positive for maternal depression not in evidence-based services [column J]

Measure #4 (Primary Driver 3): % of women who screened positive for maternal depression not in evidence-based services that **verbally accepted** a referral to evidence-based services [column N]

- Numerator: N of women who screened positive for maternal depression not in evidence-based services that verbally accepted a referral to evidence-based services [column M]
- Denominator: N of women who screened positive for maternal depression not in evidence-based services that were offered a referral to evidence-based services [column K]

Measure #5 (Primary Driver 3): % of women who screened positive for maternal depression and verbally accepted a referral that had at least **one evidence-based service contact** [column S]

- Numerator: Number of women who screened positive for maternal depression and verbally accepted a referral to evidence-based services **that had least one evidence-based service contact** [column R]
- Denominator: N of women who screened positive for maternal depression not in evidence-based services that verbally accepted a referral to evidence-based services [column M]

Measure #6 (Primary Driver 3): % of women who screened positive for maternal depression and did not access evidence-based services that **received a home visitor 'check in'** within 30 days [column Q]

- Numerator: N of women who screened positive for maternal depression and did not access evidence-based services that received a home visitor 'check in' within 30 days [column P]
- Denominator: N of women who screened positive for maternal depression 30 or more days ago that did not access evidence-based services [column O]

Measure #7 (Primary Driver 4): % of team members that reviewed and used CQI data in practice this month [column Y]

- Numerator: N of team members that reviewed and used CQI data in practice this month [column X]
- Denominator: Total N of team members [column W]

Maternal Depression Data Reporting Template
Data Entry Sheet

Column letters correspond to the **measures**, **denominators**, & **numerators** in Cheat Sheet

Each Row represents the data for that month and year

Maternal Depression Reporting Template - HV CoIIN 2.0

Month	Total N enrolled women	N women enrolled 90 of more days ago	N women who gave birth 90 or more days ago	N women enrolled 90 or more days ago screened for MD	N women who gave birth 90 or more days ago screened for MD	% women screened for MD within 3 months of enrollment
Sep-16						#N/A
Oct-16						#N/A
Nov-16						#N/A
Dec-16						#N/A
Jan-17	100	50	45	30	30	60.0
Feb-17	105	55	45	45	25	81.8
Mar-17	110	60	55	55	40	91.7
Apr-17	115	65	30	30	15	46.2
May-17	120	70	25	25	24	35.7
Jun-17	125	75	20	20	16	26.7
Jul-17	130	80	60	60	40	75.0
Aug-17	135	85	65	65	35	76.5
Sep-17						#N/A
Oct-17						#N/A
Nov-17						#N/A
Dec-17						#N/A

•**Pink columns** are calculated fields (the measure) and you will not be able to edit them.
•**Yellow columns** are denominators of calculated fields.
•**Green columns** are numerators for calculated fields.
•**Gray columns** are optional fields

Link to Maternal Depression Data Reporting Template

Data Review Guidance

Reflecting on data is an important step in Continuous Quality Improvement; it provides direction, motivation and opportunities for celebration. Ensuring accurate data is a crucial component of this. Below is a list of questions that were submitted by Maternal Depression teams regarding reviewing data and identifying potential errors. This set of questions and answers is not comprehensive. If something looks off in the data but is not listed here, it is probably still worth having a conversation about. The most helpful question to ask yourself while thoroughly reviewing this data is "If the data in this column is accurate, what might I expect to see happening in the other columns?"

Maternal Depression

1. **How do we capture the women who screen positive for MD that are already in evidence-based services?**
   a. This will vary from program to program. Some programs enroll women who are referred from mental health day treatment programs, so that information is known and the LIA needs to develop a way to keep track of it and report the information. Other programs are affiliated with health facilities and need to get informed consent from clients to ask for the information and develop relationships and processes to gather the information from mental health providers—as well as developing a way to track and report the information. Other programs may choose to ask clients if they are receiving mental health support from anyone / anyplace outside of the home visiting program, and then classify the reported services clients receive as evidence-based or not using criteria provided by the faculty and in consultation with the HV CoIIN faculty if needed. If you'd like to talk through what approach might be most appropriate for your site, please reach out and we can discuss this in more detail.

2. **How will we be measuring the symptom reduction? Can we use PHQ9?**
   a. You can use the PHQ9. Sites will compare the initial score with the score 90 days post mental health contact. So for example, a reduction from a score of 12 to 9 is a 25% reduction. (12-9)/12x100= 25%

3. **What is a 25% reduction in screener score?**
   a. A 25% reduction in screener score refers to the difference between the initial positive screen score and the follow-up score. So for example, a reduction from a score of 12 to 9 is a 25% reduction and is calculated as:

$$\left[\frac{\text{Initial score} - \text{follow-up score}}{\text{Initial score}} \right] \times 100$$

$$\left[\frac{12 - 9}{12} \right] \times 100 = \left[\frac{3}{12} \right] \times 100 = 25\%$$

Below we provide a table to make it easy for programs to check if the rescreen meets a 25% reduction or not, for reporting purposes. Any client with a rescreen that shows a 25% reduction in symptoms should be included in the numerator for the outcome measure.

PHQ-9 Initial Scores	25% improvement (Score should be below or at this value to be considered a 25% improvement)
9	6
10	7
11	8
12	9
13	9
14	10
15	11
16	12
17	12
18	13
19	14
20	15
21	15
22	16
23	16
24	18
25	18
26	19

27	20
28	21

NOTE: while clients who do NOT achieve a 25% reduction should not be included in the numerator of the outcome measure, in practice, it is important to discuss these scores in more nuanced ways. For example, any reduction in symptoms can be meaningful to a client, and dropping by a couple of points should be celebrated and provide an opportunity for a home visitor to encourage the client in her activities and efforts to feel better. Recognizing and discussing reductions in symptoms that do not meet the 25% threshold could help the HV and mother to look at what outstanding issues are preventing further improvement and to develop small but achievable goals as a focus for their discussions.

4. **Are positive depression screenings only included for screenings done within 90 days of enrollment and 90 days of delivery (and then the subsequent re-screens) or should I include all positive screenings that are recorded at other intervals as well?**
   a. Include all women with a recent positive screen in the denominators for measures about women that screened positive, whether that recent positive screen happened during the pre- or post-natal period or not.

5. **At what point do we stop screening a family? Should we continue to rescreen every 30 days until the score is below nine?**
   a. Do the first check-in by 30 days and then subsequent check-ins at 90 days.

6. **Does # women who screened positive for depression not in EB services in any given month include ALL positive screens added together, or just new that month?**
   a. This number should include the number of women enrolled in services during part or all of the reporting month who had a positive screen for maternal depression at any point in time and were not engaged in evidence-based services at the time of their positive screen.

7. **If we start with a list of current clients who had a positive screen and some of them rescreen negative, do we take them out of the group of positive screens?**
   a. If a woman who had a positive screen in the past has a **negative rescreen** at the time you are beginning your HV CoIIN work, she should not be included in the group of positive screens.

   If a woman who had a positive screen in the past has a **positive rescreen** at the time you are beginning your HV CoIIN work, she should be included in the group of positive screens. As you continue to work with her, you will monitor her progress and report whether or not she was offered a referral, accepts it,

accesses services and how her symptoms evolve (i.e. if her screener score decreases by 25% or more).

8. **When someone unenrolls from the program, do we stop tracking her as of that month? Do we leave them in the registry? Is there a suggested way to document this?**
   a. We leave all clients with positive screens in the registry indefinitely (that is, we don't delete clients once they've dropped out or graduated). However, when a client drops out, she should be marked in the registry so that we stop tracking her progress and stop reporting her in the program's measures the month *after* she is closed out of the program.. Then, she should be marked in the registry as "client no longer in need of services (no longer enrolled)" She is no longer counted in denominators the month *after* she is closed out of the program (if her case is closed in February, she is included in February reported data but not included thereafter (i.e. not in March, April, etc.).

9. **If "was referral verbally accepted" = no and/or "has client accessed MH services" = no Do we change the value if later it becomes yes? Do we need to track later check in dates?**
   a. Yes. If a client initially refuses a referral, then she is counted as a "no." If she later verbally accepts a referral, she should be changed to "yes." If she has not accessed evidence-based services yet, then she should be entered as a "no," and she should receive a home visitor check-in by 30 days from her positive screen. When she has her first evidence-based service contact, the date should be entered into "if yes, date of first service contact", regardless of how long it is between the referral and the service contact, and she should be changed from a "no" to a "yes" for "has client accessed MH services." The rescreen to check for symptom improvement should happen 90 days from the date she accessed evidence-based services.

10. **If a referral was given prior to the most recent documented PHQ-9 but not after the most recent positive PHQ-9 and the client has not accessed services, does that count as "referral to services was provided"**
   a. No. If a client was offered a referral, did not access the referral and screened positive again, we would want the HV to discuss a referral (the same one or to a different evidence-based service) again, and to document she was offered a referral again, whether she verbally accepted it or not, etc. this gets complicated when there are no available services for a client – due to health insurance, language barriers and other obstacles. But regardless, this client would need to be offered a referral after the most recent positive screen.

11. **For Measure #6, if a client does not get a 'check-in' within 30 days, should they stay in the denominator but not be included in the numerator?**

a. Yes. If a client screens positive for depression and does not access services, they should receive a home visitor 'check-in' within 30 days. If they do not, they will always be a 'no' on this measure for the duration of their time in the program.

12. **For the SMART Aim, if someone has an elevated score months (or years) ago and no improvement within 12 weeks, will they stay in the denominator until they graduate but never be counted in the numerator?**
    a. For women who access services, if they do **not** see a 25% reduction in symptoms 90 or more days after their first service contact, they should be rescreened 90 days after (and every 90 days after that if they do not see improvement in services) and engaged in additional supports (layering services) if possible. When they have a 25% reduction in symptoms, they should go to the numerator.

13. **Should we only include data on biological mothers/caregivers?**
    a. No, you should include collect and include data on all mothers/caregivers, including foster mothers/caregivers or non-biological mothers/caregivers. In these instances, you should screen for maternal depression within 90 days of receiving the child.

14. **If a client with a positive screen for maternal depression is already receiving evidence-based mental health services at the time of the positive screen, do we include them in any of the downstream measures: 'referral offered', 'referral verbally accepted,' 'accessed 1 or more EB service contact', and 'had a 25% reduction in symptoms 12 weeks from EB service contact.'**
    a. No, do not include caregivers who are already receiving evidence-based services at the time of the positive screen in any of the downstream measurements. We recommend that programs keep these caregivers in the list of positive screens and check in and provide support to them, but do not include them in their measurements for HV CoIIN.

15. **We have a client who screened positive for Maternal Depression and was currently taking a medication. They stopped the medication and made an appointment with a psychiatrist in several months. It is 90 days since she stopped taking the medication but she has an appointment to see a psychiatrist now. How should we handle this instance regarding the 90 day rescreen?**
    a. In this scenario, the caregiver should be rescreened 90 days from the medication initiation, but they should also be rescreened 90 days after the counseling initiation. "First service contact" should be independent for each kind of service they engage in when they are not synchronous and when the symptoms aren't resolved. The reasoning for this is that even with evidence-based services, what works for an individual often needs to be individualized through trial and error.

    b. In reporting this instance, the agency should only count the most recent 90 day rescreen in their data for the month.

16. **Is it recommended by HV CoIIN for agencies to administer the PHQ-9 verbally to a client or if the client should fill out the PHQ-9 on paper form and submit to the staff member?**
    a. The PHQ-9 was meant to be read and filled out by a client on her own, then scored by a service provider and discussed together. However, in cases where the client has difficulty with reading or comprehension of the questionnaire it is appropriate for a home visitor who has been trained in the purpose and importance of the PHQ-9 to provide assistance by reading through it with the client.

17. **For the N of women who gave birth 90 or more days ago, should we exclude caregivers who enrolled in home visiting after 90 days of giving birth?**
    a. No, caregivers who enrolled in the home visiting program 90 or more days after they gave birth should be excluded from this measure.

II.   PDSA Q & A

1. **How many cycles do we need to do for each test?**
   a. As many cycles as it takes for the team and administrators at your local agency to decide that you have sufficient evidence to either adopt the idea and spread it or abandon the idea.

2. **Are you expecting teams to turn in a new cycle each month?**
   a. We are expecting teams to turn in as many cycles as they have realized each month. These cycles may be multiple PDSA cycles working to get a single change idea to work well. They may be multiple PDSA cycles working on a few different change ideas at once. If a team embarks on a new test (cycle) in August and gets through the Plan and Do phase, then in September we would expect you to submit an update with the Study-Act phases. If a team starts a new cycle then the new cycle would be submitted as well. When teams are uploading PDSA information to the HV CoIIN website each month we ask:

     If your PDSA is a continuation or new cycle for the same primary driver, the website will populate your prior month's submission for editing to relieve the burden of re-entering information.

3. **How many cycles do you expect a team to turn in each month?**

a. Because every PDSA cycle is designed to help us learn, the more cycles you run, the more you learn. Like the gears in a car, running 1 cycle per month is like driving in 1st gear: you will advance, but your progress will be slow. Running 5 cycles per month is like driving in 5th gear: you'll go a lot further/make a lot more progress in the same amount of time. Keeping in mind the other demands teams have on their time, we recommend aiming to complete at least 2 PDSA cycles per month. This will allow you to see steady progress, and also provides enough practice designing and executing PDSA cycles for the process of doing PDSAs to become easier and more intuitive.

III. PDSA Q & A Pt.2

1. **What if a participant has a positive screen, is referred to services, but ends up receiving services with a service provider that they found on their own. This will not be captured in any of our data, but should we still have the home visitor capture the date receiving services and whether there is a reduction in symptoms? I came across this at one of our programs and I am waiting to hear back from the clinical supervisor to determine the exact situation but wanted to check in with you about whether this participant should be included in downstream HV CoIIN 2.0 data. This would make reporting messy, so perhaps best to track this separately at the unique program level? Wanted to see if this situation arose in HV CoIIN 1.0.**
    a. We recommend including this woman on the count of people receiving services, and record the date of service initiation. The conversations that the HV had with her around the time of screening, in offering and considering treatment, and generally surfacing the symptoms, validating and normalizing the experience, and offering a path and expectation that she could feel better very likely contributed to the client actively looking for and finding support on her own. There is nothing in our toolkit that requires that someone receive the services recommended by the HV program. As long as the services she is getting are evidence-based (see operational definition), she should be counted. The home visitors could collect information on their own about what services are being accessed in the community if it's not the one they connecting participants.
2. **We have a participant who is included in Measure 5, but their rescreen after receiving services was administered early, well before 90 days. They did have a 25% reduction in symptoms. Should we include this participant in the count for reduction in symptoms, or would the rescreen need to be administered post 90 days from the date receiving services?**
    a. You should not include the client in the data report until they have reached the 90 days. It is fine to use judgment and rescreen early, but would rescreen again at 90 days and hopefully symptom reductions have been maintained. I think your state team can acknowledge the good news for the client but keep the CoIIN measures in place for data reporting.

HV CoIIN 2.0
Maternal Depression Measure Specifications

Last Updated September 2020

Aim	Outcome Measures
85% of women who screen positive for depression and access services will report a 25% reduction in symptoms 12 weeks (from 1st service contact)	% women who had at least one evidence-based service contact that had 25% improvement in depressive symptoms

Primary Drivers	Process Measures
PD1. Standardized and reliable processes for maternal depression screening and response	% of women screened for maternal depression within 3 months of enrollment % of women screened for maternal depression within 3 months of giving birth
PD2. Competent and skilled workforce to address maternal depression	
PD3. Standardized processes for referral, treatment and follow-up	% of women who screened positive for maternal depression not in evidence-based services that were **offered a referral** to evidence-based services % of women who screened positive for maternal depression not in evidence-based services that **verbally accepted** a referral to evidence-based services % of women who screened positive for maternal depression and verbally accepted a referral that had at least **one evidence-based service contact** % of women who screened positive for maternal depression and did not access evidence-based services that **received a home visitor 'check in'** within 30 days
PD4. Comprehensive data-tracking system for maternal depression	% of team members that reviewed and used CQI data in practice this month

SMART Aim

SMART Aim
% of women who had at least one evidence-based service contact that had 25% improvement in depressive symptoms

- *Numerator:* # of women who screened positive for maternal depression who had their first mental health contact 90 or more days ago that had 25% improvement in screener score
- *Denominator:* # of women who screened positive for maternal depression who had their first mental health contact 90 or more days ago

Frequency of Data Reporting
Monthly

Associated Driver
SMART Aim

Definitions

Evidence-based services
Specific approaches and intervention models delivered in the context of client characteristics, culture, and preferences that have shown to have positive effects on maternal depression outcomes through rigorous evaluations. For example, Cognitive-behavioral therapy (CBT), Interpersonal Therapy (IPT), Moving Beyond Depression™, Mothers and Babies Course and medication. Delivery of these approaches and models may happen through external referral to outside community-based services or internally within the HV program. For example, an Infant and Early Childhood Mental Health Consultation approach for home visiting (with a credentialed therapist) may integrate a short-term therapeutic CBT approach, IPT or Mothers and Babies group session to the service continuum to specifically and directly address maternal depression symptoms with families and support (e.g. reflective supervision) home visitors as the home visitor implements an EB prevention approach or model directly with families, such as the 1:1 Mothers and Babies course.

Non evidence-based services
Supports or interventions that have not been shown in rigorous research evaluations to have positive impacts on depression symptoms, but that families and individuals may access for support and may result in symptom relief, for example, home visiting benefits, pastoral counseling, cultural practices, yoga or meditation, socialization, etc.

Primary Driver 1

Measure #1
% of women screened for maternal depression within 3 months of enrollment
- *Numerator:* # of women enrolled 90 or more days ago that were screened for maternal depression
- *Denominator:* # of women enrolled 90 or more days ago

Frequency of Data Reporting
Monthly

Associated Driver
Primary Driver 1

Measure #2
% of women screened for maternal depression within 3 months of giving birth
- *Numerator:* # of women who gave birth 90 or more days ago that were screened for maternal depression
- *Denominator:* # of women who gave birth 90 or more days ago

Frequency of Data Reporting
Monthly

Associated Driver
Primary Driver 1

Definitions

Screened for maternal depression
Application of one of the following evidence-based screening tools:
- Edinburgh
- PHQ-2 **and** PHQ-9 (if PHQ-2 is positive)
- PDSS
- CESD

Primary Driver 3

Measure #3
% of women who screened positive for maternal depression not in evidence-based services that were **offered a referral** to evidence-based services

- *Numerator:* # of women who screened positive for maternal depression not in evidence-based services that were offered a referral to evidence-based services
- *Denominator:* # of women who screened positive for maternal depression not in evidence-based services

Frequency of Data Reporting
Monthly

Associated Driver
Primary Driver 3

Definitions

Screened positive for maternal depression
Scored above the cutoff specified here on one of the evidence-based screening tools
- Edinburgh – 10 or greater
- PHQ -– 10 or greater
- PDSS – 60 or greater
- CESD – 16 or greater

Offered a referral to evidence-based services
The home visitor offered to refer the woman with a positive screen to treatment for maternal depression and explained why she was making this offer (e.g. psychoeducation about depression to explain that a positive screen means she's experiencing symptoms of depression; services can help her to feel better, and will help her baby too). Offer of a referral includes a discussion of the types of assistance the home visitor can offer such as talking about the services that are available, what to expect, and providing the woman with a list of resources; offering to make a telephone call together, or offer of other efforts to connect the woman with a mental health service provider. This may include a referral to the medical home for psychopharmacology support, especially in areas where mental health services are not readily available. This offer should include a confirmation of what action(s) the mother would like the home visitor to take.

Measure #4

% of women who screened positive for maternal depression not inevidence-based services that **verbally accepted** a referral to evidence-based services

- *Numerator:* # of women who screened positive for maternal depression not in evidence-based services that verbally accepted a referral to evidence-based services
- *Denominator:* # of women who screened positive for maternal depression not in evidence-based services that were offered a referral to evidence-based services

Frequency of Data Reporting
Monthly

Associated Driver
Primary Driver 3

Measure #5

% of women who screened positive for maternal depression and verbally accepted a referral that had at least one **evidence-based service contact**

- *Numerator:* # of women who screened positive for maternal depression and verbally accepted a referral to evidence-based services **that had at least one evidence-based service contact**
- *Denominator:* # of women who screened positive for maternal depression not in evidence-based services that verbally accepted a referral to evidence-based services

Frequency of Data Reporting
Monthly

Associated Driver
Primary Driver 3

Measure #6

% of women who screened positive for maternal depression and did not access evidence-based services that **received a home visitor 'check in'** within 30 days

- *Numerator:* # of women who screened positive for maternal depression and did not access evidence-based services that received a home visitor 'check in' within 30 days
- *Denominator:* # of women who screened positive for maternal depression 30 or more days ago that did not access evidence-based services

Frequency of Data Reporting

Monthly

Associated Driver

Primary Driver 3

Primary Driver 4

Measure #7

% of team members that reviewed and used CQI data in practice this month

- *Numerator:* # of team members that reviewed and used CQI data in practice this month
- *Denominator:* Total # of team members

Frequency of Data Reporting

Monthly

Associated Driver

Primary Driver 4

Definitions

Home visitor 'check in'

Either a re-screen or a focused conversation that addresses depressive symptoms. The central point of this measure is to ensure that women that are experiencing depressive symptoms and have not accessed support beyond the home visitor don't fall off the radar. Programs could test different approaches to 'check ins', as long as the conversation makes the depressive symptoms the focus – e.g., the NFP programs have all integrated MI, so they could test an MI-focused conversation on screening, acceptance of a referral or continuation of efforts to get support; others could institute a monitoring and repeated check-in with mothers who decline to be screened.

Table 1. Calendar Calculations for Measures by Reporting Month

Reporting month	Women enrolled 90 or more days ago	Women who gave birth 90 or more days ago	N women w +MD screen 30 or more days ago that did not access services	N women w +MD screen with 1st MH contact 90 or more days ago
	Enrolled before	Date of birth before	+MD screen before	MH contact before
Oct-20	8/1/2020	8/1/2020	9/30/2020	8/1/2020
Nov-20	9/1/2020	9/1/2020	10/31/2020	9/1/2020
Dec-20	10/1/2020	10/1/2020	11/30/2020	10/1/2020
Jan-21	11/1/2020	11/1/2020	12/31/2020	11/1/2020
Feb-21	12/1/2020	12/1/2020	1/31/2021	12/1/2020
Mar-21	1/1/2021	1/1/2021	2/28/2021	1/1/2021
Apr-21	2/1/2021	2/1/2021	3/31/2021	2/1/2021
May-21	3/1/2021	3/1/2021	4/30/2021	3/1/2021
Jun-21	4/1/2021	4/1/2021	5/31/2021	4/1/2021
Jul-21	5/1/2021	5/1/2021	6/30/2021	5/1/2021
Aug-21	6/1/2021	6/1/2021	7/31/2021	6/1/2021

Sept-21	7/1/2021	7/1/2021	8/31/2021	7/1/2021
Oct-21	8/1/2021	8/1/2021	9/30/2021	8/1/2021
Nov-21	9/1/2021	9/1/2021	10/31/2021	9/1/2021
Dec-21	10/1/2021	10/1/2021	11/30/2021	10/1/2021
Jan-22	11/1/2021	11/1/2021	12/31/2021	11/1/2021
Feb-22	12/1/2021	12/1/2021	1/31/2022	12/1/2021
Mar-22	1/1/2022	1/1/2022	2/28/2022	1/1/2022
Apr-22	2/1/2022	2/1/2022	3/31/2022	2/1/2022
May-22	3/1/2022	3/1/2022	4/30/2022	3/1/2022
Jun-22	4/1/2022	4/1/2022	5/31/2022	4/1/2022
Jul-22	5/1/2022	5/1/2022	6/30/2022	5/1/2022
Aug-22	6/1/2022	6/1/2022	7/31/2022	6/1/2022
Sept-22	7/1/2022	7/1/2022	8/31/2022	7/1/2022
Oct-22	8/1/2022	8/1/2022	9/30/2022	8/1/2022

Nov-22	9/1/2021	9/1/2021	10/31/2021	9/1/2021
Dec-22	10/1/2021	10/1/2021	11/30/2021	10/1/2021

HVCoIIN 2.0
Home Visiting Collaborative
Improvement and Innovation Network

HRSA
Maternal & Child Health

EDC
Education
Development
Center

shift

Early Childhood
Investment Corporation

Institute *for*
Healthcare
Improvement

BWH

IMPROVEMENT LAB
IL