Evaluation of a Collaborative Maternal Mental Health Care Pilot in Three Federally Qualified Health Centers in Los Angeles

Final Evaluation Report for California Health Care Foundation

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I. EXECUTIVE SUMMARY

Untreated perinatal depression, anxiety, and mood disorders not only affect the health and well-being of the mother but can also have lasting adverse effects on the cognitive, social and emotional, and developmental health of her infant and growing child. However many women are not identified as being at risk during pregnancy and after delivery, especially those who are socially and economically disadvantaged. Collaborative care represents an innovative approach to addressing those challenges through multidisciplinary teams in primary care settings.

Maternal Mental Health NOW was funded by the California Health Care Foundation to establish a model of collaborative care at three federally qualified health centers (FQHCs) in Los Angeles-Harbor Community Health Center, Eisner Family Medicine Clinic, and Martin Luther King, Jr. Outpatient Center. The evaluation sought to document whether the MMHN model was successfully implemented and achieved the desired outcomes at each clinical site, and to assess the model's potential for spread to reach underserved perinatal populations.

At the project's close, each clinic demonstrated significant accomplishments with implementing and refining their integrated, collaborative care models. For example, staff at each clinic site participated in trainings, were prepared for their roles in collaborative care, developed clinic protocols, and screened patients using a universal approach in the context of obstetrical as well as pediatric clinical services. All clinics improved the rate of identification of women at risk for perinatal mood and anxiety disorders. Quality improvement and consultation in each clinic site led to innovations and lessons learned, and, in particular, improved practices related to helping patients feel more comfortable disclosing symptoms, which improved the ascertainment of positive results (reducing false negatives) hence the identification of perinatal mood and anxiety disorders. These and other lessons learned are captured in the Implementation Guide developed by MMHN as a primary deliverable for their associated CHCF grant.

While all sites connected women at risk to behavioral/mental health providers, the experience was mixed in either documenting or tracking those connections. For the two clinics that established registries, challenges documenting patient follow up meant that little was learned about how many women received clinical treatments or improved. With more support for data entry and patient registry management, the pilot could have potentially showed more impact on patient outcomes.

It is critical for clinics seeking to integrate care to invest time and resources to prepare and lay a foundation for successful implementation. Staff buy in is a critical step, and can be aided through participations in training, conferences, or other workshops by collaborative care team members. Dedicated resources for the establishment of a patient registry, and resources to maintain it are also critical for patient tracking and demonstrating outcomes. Trainings and interactions outside the clinic also help staff better understand what community resources might be available to assist patients. Once some basic criteria are satisfied, the potential for model spread is good, especially in the FQHC care environment in California.

II. PROJECT DESCRIPTION

A. Background

In spite of the fact that perinatal depression and anxiety are the leading complications of pregnancy and childbirth, many perinatal care settings do not provide behavioral and mental health services. Untreated perinatal depression not only affects the health and well-being of the mother but can also have lasting adverse effects on the cognitive, social and emotional, and developmental health of her infant and growing child. Many women are not identified as being at risk, in spite of multiple visits with health care providers, during pregnancy and after delivery. Many women do not independently seek treatment, especially those who are socially and economically disadvantaged. In addition to facing stigma and lack of informed providers, these women are more likely to encounter multiple social and financial barriers to treatment, such as poor (or no) insurance coverage, transportation issues, and child care responsibilities.

Collaborative care represents an innovative approach to treating depression and anxiety disorders by establishing multidisciplinary teams in primary care settings. Research has found collaborative care using evidence-based treatments as highly effective for improving depression and anxiety symptoms as well as overall health. In addition, many studies report favorable patient engagement and satisfaction with the treatment.¹ Recent randomized trials were conducted in obstetrical and gynecological² and perinatal settings³ among socio-economically disadvantaged, publically insured and uninsured, racially/ethnically diverse populations.^{4,5}

¹ Archer J, Bower P, Gilbody S, Lovell K, Richards D, Gask L, Dickens C, Coventry P. Collaborative care for depression and anxiety problems. Cochrane Database of Systematic Reviews 2012, Issue 10. Art. No.: CD006525. DOI: 10.1002/14651858.CD006525.pub2.

² Melville JL, Reed SD, Russo J, et al. Improving care for depression in obstetrics and gynecology: a

² Melville JL, Reed SD, Russo J, et al. Improving care for depression in obstetrics and gynecology: a randomized controlled trial. Obstet Gynecol. 2014 Jun;123(6):1237–46.

³ Grote, N. K., Katon, W. J., Russo, J. E., Lohr, M. J., Curran, M., Galvin, E. and Carson, K. (2015), collaborative care for perinatal depression in socioeconomically disadvantaged women: a randomized trial. Depress. Anxiety, 32: 821–834. DOI: 10.1002/da.22405.

⁴ 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. The American Journal of Psychiatry. 2015;172(1):32-40. DOI:10.1176/appi.ajp.2014.14020258.

⁵ Huang, H, Chan, YF, Katon, W, Tabb, K, Sieu, N, Bauer, AM, Wasse, JK & Unützer, J. Variations in depression care and outcomes among high-risk mothers from different racial/ethnic groups. Family Practice 2012;29(4):394–400. DOI: 10.1093/fampra/cmr108.

These studies showed several positive impacts resulting from collaborative, integrated care, including improved multiple depression outcomes (e.g., symptoms, severity, remission), anxiety, and overall health. In addition, the care was cost-effective; for example, one study cited a cost per patient of \$1,026 for a comprehensive intervention, including 18 months of follow-up.⁶

B. Project Lead Agency, Collaborators, and Goals

Maternal Mental Health NOW (MMHN) is a nonprofit organization dedicated to removing barriers to the prevention, screening, and treatment of prenatal and postpartum maternal depression in Los Angeles County. Throughout several years of working to improve perinatal mental health care, MMHN has identified that a "major barrier to addressing perinatal mood and anxiety disorders is the fragmented behavioral health and medical health care systems that serve women and their children." With this project, MMHN sought to leverage their experience partnering with health care facilities in order to improve coordination and integration to increase access to depression screening and treatment services for medically underserved pregnant and postpartum women.

MMHN was funded by the California Health Care Foundation (CHCF) from January 2016 through December 2017 to establish a model of collaborative care at three federally qualified health centers (FQHCs) in Los Angeles County, with the following stated objectives:

- Improve the level of perinatal mental health care integration and increase the
 effectiveness of identifying, treating, and referring pregnant and postpartum women, at
 a minimum of three medical settings in the safety net;
- Improve the mental health outcomes of perinatal women and their infants being treated at participating project sites; and
- Based on the learning and evaluation of this project, publish and distribute an
 Implementation Guide, including a self-assessment tool, on integrating perinatal mental
 health care into medical settings for medical providers to facilitate the spread of the
 model.

The three FQHCs selected for inclusion during the grant period were Harbor Community Health Center (HCC), Eisner Family Medicine Clinic (Eisner), and Martin Luther King, Jr. Outpatient Center (MLK). All of these clinics serve low-income populations who are uninsured or covered by Medi-Cal and are at elevated risk for untreated perinatal mood, anxiety, and other mental health problems; the three clinics sought to improve the quality of integrated behavioral and mental health care within their obstetrical and pediatric primary care services.

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⁶ Melville JL et al. *loc cit*.

- **Planning**: Recruit and outreach to FQHCs in Los Angeles County; meetings with eligible clinics; negotiation of the MOU.
- **Project management**: Provide a part-time project manager / quality improvement consultant as the point-of-contact to oversee the weekly activities associated with the grant. Meet with and development of the coordinated care team, implement data collection through the patient registry, assist with developing patient screening and identification protocols, and provide feedback for quality improvement purposes.
- Training and knowledge exchange: Train clinical staff through different avenues, including site- and project-specific training and consultation, skill and knowledge building through the peer-learning events, professional development, and continuing education through larger trainings conferences.

Clinic administrators and clinical staff at each of the three sites were responsible for the following key activities, with the support of MMHN, as per signed Memoranda of Understanding (MOUs) with MMHN (copies of the signed agreements are provided in the Appendix materials):

- **Coordinated care team**: Clinic sites agreed to establish a clinic champion and provide time for staff to attend trainings and coordinated care team meetings.
- Screening and treatment protocols: Clinical partners also agreed to design and implement protocols to identify and provide psycho-educational information to eligible patients, assess risk through the use of evidence-based screening tools, connect at-risk patients to treatment and assess patient progress, and coordinate care.
- Patient registry: Clinic staff agreed to establish and maintain a patient registry according
 to their preferred systems and to enter data into that registry to enable the tracking of
 individual patients, including their screening results, connection to behavioral health
 providers, referrals to treatment, and treatment outcomes. The clinics agreed to provide
 de-identified individual patient records and aggregate data on the monthly number of
 patient visits and unique patients to the project manager and the evaluator (discussed
 in Evaluation Description below).

III. EVALUATION DESCRIPTION

CHCF contracted with Wold and Associates to evaluate the MMHN pilot, including pilot implementation process and screening and treatment outcomes. Key activities included designing the data elements for the patient registry (entry forms where appropriate), designing and conducting surveys and interviews with members of the collaborative care teams in each clinic, and providing analysis and feedback about the quality of data collection concerning screening and treatment. Evaluators also helped to troubleshoot problems, providing strategies and support for overcoming problems with data collection. Evaluators interacted regularly with MMHN; they met with the clinic staff at the project launch and close in addition to contact through interviews. During the initial stages of the grant, the evaluation team supported the project planning by meeting with MMHN, CHCF, and selected experts for advice and resources to support the implementation of the pilot.

A. Evaluation Goals

The overall goal of the CHCF evaluation grant was to determine whether the MMHN model, as implemented in three FQHCs in Los Angeles, was successful at recognizing and responding to maternal mood and anxiety disorders (PMADs) during the perinatal period, and to assess the model's promise for spreading to reach underserved perinatal populations. The evaluators created a logic model to determine the key outcomes and process measures (see Appendix A).

B. Evaluation Questions

Evaluators designed an evaluation plan using a mixed-methods approach to answer the following four questions:

1. What unique assets and challenges within FQHC clinical environments and among their staff and patient populations impacted the implementation of the collaborative care model?

Evaluators conducted interviews with clinic champions and their designees to provide information for the main process outcomes, including understanding the strengths and challenges associated with providing collaborative care in each of their clinical environments as well as strategies for overcoming those challenges.

Evaluators assessed each clinic's readiness to engage in the collaborative care pilot based on the receipt of signed MOUs, which spelled out specific requirements for participation in the pilot, including trainings, establishing a collaborative care team (and attendant staffing resources), time for regular meetings, data collection, and provision of those data to MMHN and project evaluators.

2. How well were specific components of the model implemented in each of the FQHCs?

The effectiveness of the implementation was evaluated based on the evidence of practice changes on the part of the care team as a result of the trainings, consultation, and quality improvement support provided. These implementation outcomes were assessed using data

from clinic staff surveys, interviews, documents from the project manager, quality improvement information, and feedback obtained at meetings with the teams.

3. How effectively did the model—as implemented—improve the identification of perinatal mood and anxiety and other mental health disorders by screening, connecting, and treating women with PMADs?

Outcomes associated with the model were evaluated using results from the patient registries at each site, where available. Specifically, evaluators analyzed results of standardized screening for PMADs using Patient Health Questionnaire 9 (PHQ-9) and Edinburgh Postnatal Depression Scale (EPDS) to assess trends in screening, the overall and positive screen rates, and whether screening was done at recommended intervals. A "positive" screening score was defined as PHQ-9 > 9 or EPDS > 3.

4. After patients with PMADs and other mental health problems were identified, what outcomes were achieved for those patients as a result?

Outcomes were evaluated using follow-up data entered into patient registries, where available. Evaluators specifically assessed whether patients identified as being at risk for PMADs received clinical assessments and treatment.

C. Data Collection, Sources and Analysis

Patient Registry

The primary source of information about screening identification of PMADs and subsequent connection to treatment resources was the patient registry at each clinic site. Recommended data elements for the patient registries are included in Appendix B. Clinic staff entered data into the registry for women screened at prenatal visits in Obstetrical (OB) and mothers of children <1 year screened at well-baby visits in Pediatrics (PED). Evaluators processed the data registries using the open source KNIME software package (http://www.knime.org, KNIME GmbH, Konstanz, Germany), Microsoft Excel, and TIBCO Spotfire.

Patient Counts

Clinic staff provided_monthly patient counts; specifically, evaluators used the unique (unduplicated) patient visits and total visits to calculate screening rates in Excel.

Surveys and Interviews

Evaluators conducted clinic staff surveys at the project's baseline, mid-point, and end (T1, T2, and T3, respectively). The surveys were conducted using a structured survey instrument and responses were collected through a combination of emailed links to an online form (using Survey Monkey) and hard copy forms. Evaluators and the project manager provided frequent email and in-person reminders to maximize the survey response rates. Evaluators used Excel to analyze frequencies and changes in mean scores for items related to practice change and knowledge, skills, and comfort levels.

Evaluators also interviewed clinic champions and their designees by telephone at baseline and mid-point (T1, T2), using semi-structured interview protocols and recorded notes, which were then analyzed to summarize major themes.

Evaluators then analyzed the surveys and interviews to understand the implementation process and summarize some of the strengths and challenges associated with implementing collaborative care in each of the clinical environments. Survey and interview instruments are provided in Appendix C.

IV. EVALUATION FINDINGS

The findings from the evaluation of the collaborative care pilot are organized by clinic site:

- Harbor Community Clinic (HCC)
- Eisner Family Medicine Clinic (Eisner)
- Martin Luther King, Jr. Outpatient Clinic (MLK)

For each clinic site, results are organized as follows:

- Overview of Key Findings and Observations: A high-level summary of the strengths and challenges associated with the pilot for each clinic as gleaned from the evaluation findings.
- Summary of Evaluation Findings: Evaluation findings organized around the four
 evaluation questions (cf. section IIIB). These findings include descriptions of the
 collaborative care environments, including patient population; collaborative care
 resource inputs; findings related to the implementation process; results of the clinic
 staff surveys; and screening and treatment and outcomes based upon the available data
 for each site. Tables and figures are numbered sequentially within each site summary.

Following the Evaluation Findings section, the Discussion and Recommendations section synthesizes the findings for the pilot overall, including the overall strengths and challenges; assesses the potential for spread; and provides recommendations.

A. Harbor Community Clinic

1. HCC Overview of Key Findings and Observations

The table below provides a high-level summary of the assets, successes, challenges, and opportunities for improvement associated with the pilot implementation at Harbor Community Clinic (HCC).

HCC: Summary of Key Findings and Observations

Assets

HCC has a relatively small clinic population as compared to other FQHCs in LA County, making it easier to identify, screen, and follow up with individual patients.

HCC also has two behavioral /mental health (BH) providers plus case management support for a relatively small patient population. BH providers are also co-located with Obstetrics/prenatal care services (OB).

HCC benefited from the groundwork laid during approximately 6 months of previous consultations and trainings with MMHN. Clinic leadership showed commitment, signing the MOU and organizing a launch meeting early in the pilot. In addition, the clinic was using a preliminary patient registry in the form of a Google document, to track patient screenings, which made building upon that process easier. Members of the behavioral health team attended additional trainings and exhibited strong buy-in.

Successes

Screening for PMADs in OB grew steadily over the course of the project, achieving a screening rate of approximately one-quarter of patients during obstetrics / prenatal care visits. Among those screened 14.4% screened positive. In addition, over 61% of all women (in OB and Pediatrics) were screened once; 22% were screened twice; 17% were screened three or more times.

Screening for PMADs in Pediatrics began as no screenings at baseline and grew steadily over the course of the pilot, with the result that nearly one-third of mothers were screened at pediatric well-baby visits. These successes were realized in spite of at least three significant barriers: Pediatrics is located off site; many mothers of pediatric patients were new to the clinic after the birth of their child (i.e., did not receive their prenatal care at HCC); in addition, there was significant staff turnover among the pediatricians, which could have impacted many outcomes, specifically fluctuations in the number of women screened monthly in Pediatrics. Strong support from the pediatric medical assistant was a clear asset to maintaining the consistency and quality of the screening.

Care team was well-coordinated, trusting, and worked well together. Providers were committed to providing integrated, collaborative care as evidenced by participation in trainings, professional growth, and engagement in the process.

HCC shows evidence of practice change and a desire to integrate lessons learned to sustain these changes through a redesigned model and engagement with external consultants. Skills, confidence, and understanding of the collaborative care process improved over the course of the pilot based upon interviews with behavioral health providers.

Based on the pilot, the collaborative care team redesigned the model in order to provide psycho-educational information and screening to all women at their initial prenatal care visit as a routine part of care. In this way, the patient is already familiar with what can happen during pregnancy, as a result of psycho-education, and has met the behavioral health provider should a subsequent screening result or concern trigger a referral.

Challenges and Opportunities for Improvement

Registry experience was mixed. While records for patient screenings were reasonably complete, the clinic struggled with data quality and with staff resources to re-enter patient follow-up information. As a result, and unfortunately, many patient records with positive screens were incomplete; they did not contain complete follow-up information (warm handoffs, referrals, or treatment).

Data-based, quality improvement feedback about patients connected to treatment is lacking. Moving forward, clinic staff expressed their commitment to continued collaborative care and are currently looking at options for improving the registry data entry and patient tracking by experimenting with a new registry format—a basic spreadsheet. However, the clinic currently appears to have limited analytical capacity so may benefit from outside assistance to build skills and capabilities.

2. HCC Summary of Evaluation Findings

Evaluation Question 1: Harbor Community Clinic

What unique assets and challenges within FQHC clinical environments and among their staff and patient populations impacted the implementation of the collaborative care model?

Harbor Community Clinic (HCC) operates two small clinics in San Pedro, which is located along the coast near the Port of Los Angeles. HCC core service area consists of the communities of San Pedro, Wilmington, Harbor City, Torrance/Torrance Gateway, and Carson. Eighty-three percent of HCC patients live in San Pedro or Wilmington.

Sixty-five percent of HCC patients live with income at or less than 138% of the Federal Poverty Level. Almost 63% of the adult patients are women; almost 63% of all patients are Hispanic, and 8% are Black/African American—all especially vulnerable groups with limited access to care. In calendar year 2016, HCC provided an affordable medical home to 6,575 unduplicated patients, providing them with a total of 26,369 medical visits. This was an increase of 23% in the numbers of patients and a 15% increase in the numbers of visits over 2015 totals. In 2016, HCC provided 4,924 medical visits to 1,337 infants, children and teens, a 14.5% increase in the number of unduplicated pediatric patients over the previous year. Of these, 468 were under 6 years old.

A total of 13 individuals from HCC were involved in the pilot, representing an estimated 0.56 FTE. The following table describes these resource inputs and functions.

These estimates also exclude any resources provided by the MMHN staff and project evaluators as well as time for additional roles / functions such as technology and information systems support, for which FTEs are not known (Table 1)

Additional pilot assets included participation in training and consultation. HCC staff participated in over 18 hours of training (with 51 in attendance combined). A description of all training events, participants, and hours is provided in Appendix D.

Table 1: HCC: Pilot Resources

	SITE		ROLES									
Harbor Community	/ Clinic		CHAMPIONS	DRIVERS*	SCREENING	PATIENT EDUCATION	DATA ENTRY / RECORD MANAGEMENT	MEDICAL CARE	TREATMENT SUPPORT/CASE MANAGEMENT			
STAFF	TOTAL TIME IN CLINIC	MATERNAL MENTAL HEALTH ACTIVITIES										
BH Medical Assistant (MA)	1.0 FTE	0.1 FTE			Х	Х	Х					
OB MA	2.0 FTE	0.2 FTE			Х	Х	Х					
Pediatric MA	2.0 FTE	0.05 FTE			Х	Х	Х					
Case Management	1.0 FTE	0.05 FTE							Х			
OB Provider	0.5 FTE	0.05 FTE						Х				
BH Provider	1.6 FTE	0.05 FTE	Х			Х			Х			
Pediatric Provider	2.0 FTE	0.02 FTE						Х				
Medical Director	1.0 FTE	0.02 FTE	Х									
CEO	1.0 FTE	0.02 FTE	Х									

The HCC care team was actively engaged with the project manager, with whom they met regularly (i.e., monthly from November 2016 through April 2017 and then every other month) to improve the systematic identification and referrals of patients. The team developed protocols for identifying patients eligible for screening; they reviewed the patient appointment schedule each morning and flagged those patient records. These protocol provided to evaluators also described workflow requirements and how patients moved through the process from the time of their appointment through screening, scoring, and discussing results, to warm handoffs or follow up with behavioral health staff. Quality improvement efforts produced some changes to the protocols. Significant among those included identifying patients eligible for screening at the beginning of the work day in order to improve screening rates. In addition, the pilot concluded with a redesign of the model, incorporating a visit to behavioral health (to provide an introduction, psycho-education) for all patients at their initial prenatal care visit. Last, the team is evaluating a simplified worksheet to monitor patient progress for those referred to behavioral health for treatment.

Evaluation Question 2: Harbor Community Clinic

How well were specific components of the model implemented in each of the FQHCs?

The effectiveness of the implementation was evaluated based on the evidence of practice changes on the part of the care team as a result of the trainings, consultation, and quality improvement support provided.

HCC Clinic Staff Survey Results

Evaluators administered a clinic staff survey to the collaborative care teams three times at each project site. The survey had five questions to assess several aspects of practice change, including, the following:

- The extent of knowledge and skills development among care team members.
- How well members of the collaborative care team were prepared for and comfortable with their roles in integrated, collaborative care.
- Staff perceptions about whether collaborative care was impacting the patient care provided at the clinic, and impacting patient outcomes.

Multiple reminders (in-person, via email and phone calls) were provided to elicit responses yielding the following response rates for HCC. Numbers of eligible staff varied due to turnover and changing involvement in the project.

HCC Survey Responses

Time period survey administered	Eligible staff	Responses	Response, %
Baseline (T1; within one month of signing MOU)	15	8	53%
Mid-point (T2; project mid-point)	12	9	75%
Final (T3; within one month of project end)	10	6	60%

Scores were analyzed in aggregate and for each staff classification (behavioral health, case manager, medical assistants, physicians, and administrative staff) in order to determine trends and areas of variation. A Likert-type scoring was used to weight the responses. Appendix C provides a full description of findings from the Clinic Staff Surveys. *Please note that percentages used in some of the following tables are used to simplify the presentation for descriptive purposes and are based upon small numbers.*

Table 2: HCC Survey Question 1. How comfortable do you currently feel conducting each of the following activities?

Activity	Summary of changes in comfort level scores	Weighted average at the end of the project (max. value = 3)
Distributing information to patients	Stable or improved for all staff types	2.83
Screening patients for maternal depression and anxiety	Stable or improved for all staff types	2.33
Scoring mental health assessments	Stable or improved for all staff types	2.17
Discussing perinatal mental health with patients	Stable or improved for all staff types	2.33
Providing in-house services with warm hand off for maternal mental health	Variable by staff type: improved for case managers but declined for behavioral health and medical assistants	1.67
Providing referrals to appropriate services	Stable or improved for all staff types	2.33
Following up with behavioral health to assure patients are receiving services	Stable or improved for staff with the exception of medical assistants whose comfort levels declined	1.67

HCC Survey Question 2. How much additional support (including training, technical assistance) do you need to implement each of the following activities?

Evaluators used responses to Question 2 to assess the need for additional support to conduct the activities listed in Question 1. The need for support declined markedly over the three time periods for all staff types, especially medical assistants and case managers but also behavioral health staff, reflecting greater levels of confidence and self-sufficiency as the project progressed.

HCC Survey Question 3. How strongly do you agree or disagree with the following statements about the implementation of collaborative care?

The survey assessed how well the implementation of collaborative care was going by asking them how strongly they agreed (or disagreed) with a series of statements, listed below with the summarized findings. These results are cause for concern in that they point to several aspects related to the implementation that staff might have felt were not going well (e.g., that patients do not have time to complete the screening; that providers do not have sufficient time to score the screenings nor talk with patients about the results). In addition, the belief that staff could connect patients with appropriate mental and behavioral health services declined over the course of the project.

Statement about the implementation of collaborative care	Change in desired endorsements over the course of the project	Weighted average at the end of the project (max. value = 5)
Patients are able to complete the screening	Declined among all staff	3.6
Patients have sufficient time to complete the screening	Declined among all staff	4.0
Staff /providers have sufficient time to score the screening	Declined among all staff	4.0
Staff / providers have sufficient time to talk with patients about the results	Declined among all staff	3.6
Patients are comfortable talking with a health provider	Declined among all staff	3.8
Cultural stigmas discourage discussion of mental health issues	Improved among all staff	3.83
Patients have negative attitudes about mental health	Improved among all staff	3.83
Staff can find appropriate services	Declined among all staff	4.0
In-house behavioral health care appointments are available when needed	Declined among all staff	3.67
I communicate about each patient's progress with appropriate providers	Declined among all staff	3.6
I feel successful in getting patients to maternal mental health care	Declined among all staff	4.4

HCC Survey Question 4. How would you describe your understanding of the clinic's behavioral health services?

Countering the trends identified in response to Question 3, responses to Question 4 revealed that levels of understanding about HCC's behavioral health services had improved over the course of the project.

Statement	Endorsement			
I have a good understanding of the scope of services that Behavioral Health (BH) provides.	Universally endorsed			
I generally know when a patient needs to be referred to BH.	Universally endorsed			
I am comfortable speaking with BH about patients.	Universally endorsed, except among medical assistants where endorsement declined			
Behavioral Health provides me with timely	Universally endorsed, except among medical			

Statement	Endorsement
feedback about my patients' care.	assistants where endorsement declined

HCC Survey Question 5. How much do you agree or disagree with the following statements about the impact of the integration pilot so far on the following broad, patient-care goals?

Evaluators asked team members to assess the overall impact of the Collaborative Care Pilot.

Statement	Endorsement
People are utilizing services and getting better.	Improved or stable for all staff types, especially medical assistants.
Improved compliance with recommended care.	Improved or stable for most staff types; slight decrease among BH providers.
Improved patient outcomes.	Improved or stable for most staff types; slight decrease among BH providers.
Decreased no shows" or missed medical appointments.	Improved or stable for all staff types, especially medical assistants.

Evaluation Question 3: Harbor Community Clinic

How effectively did the model—as implemented—improve the identification of perinatal mood and anxiety and other mental health disorders by screening, connecting, and treating women with PMADs?

Outcomes associated with the model were evaluated using results from the patient registry. Specifically, results of standardized screening for PMADs using PHQ-9 and EPDS were analyzed to assess trends in screening, the overall and positive screen rates, and whether screening was done at recommended intervals.

Overall, screening data that were entered into the HCC patient-tracking registry were complete and good quality for women screened at obstetrical and pediatric visits. Data for HCC represents an 18-month period from May 2016 through mid-October 2017, unless otherwise noted.

Overall, approximately 13% of the total patients screened in OB and Pediatrics scored at risk on the PHQ9 or EPDS. The following provides more details about screenings in the two clinical settings.

Identification of women with PMADs in OB:

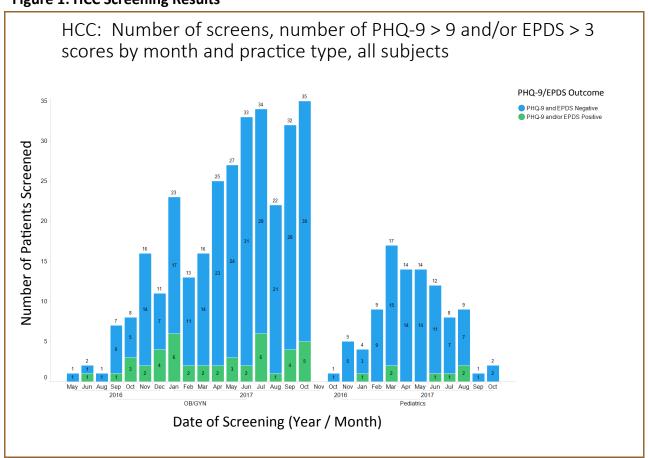
• 306 patients were screened during their prenatal care visits from May 2016 through October 2017.

- The number screened represents approximately 25% of OB patients during this time periods based on the reported number of patients / visits seen monthly.
- Using the PHQ-9 or EPDS, 44/306 (14.4%) patients screened positive EPDS and therefore were identified as being at risk for PMADs.

Identification of women with PMADs in Pediatrics:

- 96 patients were screened in pediatrics from October 1, 2016 through October 31, 2017.
- The number screened represents approximately 29% of eligible pediatric patients based on the reported number of patients / visits seen monthly.
- Note: The percentage of patients screened excludes the pediatric patient denominators from June through Oct. 2017 due to concerns about comparability.)
- 7/96 (7.3%) of those screened via pediatrics screened positive on PHQ-9/EPDS

Figure 1: HCC Screening Results



Evaluation Question 4: Harbor Community Clinic

After patients with PMADs and other mental health problems were identified, what outcomes were achieved for those patients as a result?

Referrals to Behavioral and Mental Health for possible PMADs at HCC:

Follow-up data for patients screened were challenging to complete at all sites, in spite of multiple attempts to capture. Evaluators provided analysis and feedback periodically to the project manager (and in some cases directly to HCC staff), which improved the quality of some of the data in the patient registry. As a result, HCC was able to show some follow-up data for many patients identified through the project. However, two major factors made tracking patient outcomes difficult for those who screened positive and then connected to behavioral health. First, follow-up information for patients who screened positive on the PHQ-9 or EPDS was incomplete. Second, screening results appear to be incomplete for many patients who were actually referred to behavioral health. Therefore, it was difficult to track the progress of individuals in a chronological manner or analyze the care process in much detail.

Evaluators constructed an indicator ("evidence of contact with behavioral health") from the following registry fields:

- Affirmative indication of warm handoff
- Existence of a date for first contact with mental health professional
- Indication of acceptance of behavioral health referral

Figure 2 shows 31 records with evidence of referrals to Behavioral Health. It is noteworthy that the majority of patients referred to behavioral health were not identified at risk by either screening tool (or a positive result received was not recorded). In addition, Figure 3 shows that a warm handoff appeared for a sizeable fraction of OB patients. (Pediatrics is located off-site so it makes sense that warm handoffs were rare.)

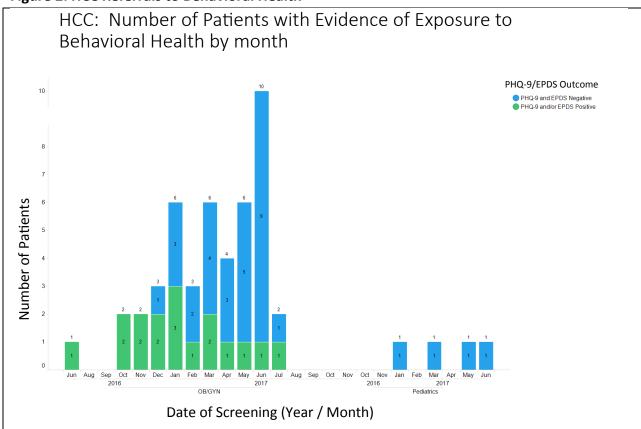


Figure 2: HCC Referrals to Behavioral Health

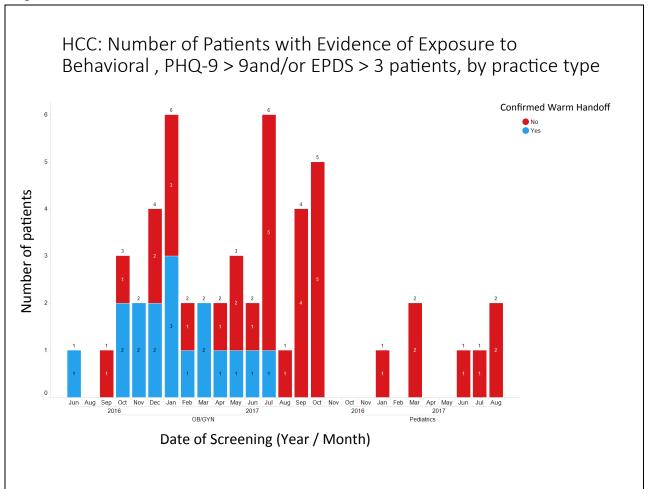


Figure 3: HCC Referrals to Behavioral Health for At-Risk Patients

HCC Patient Characteristics and Screening Outcomes

Patient screening frequency is summarized in the table below.

Figure 4: HCC: Summary of Screening Frequency

Number of Screens	Number of Patients	Percent	Mean Interval between Screens (weeks)	Standard Deviation
1	165	61.3	N/A	N/A
2	60	22.3	13.0	6.1
3	34	12.6	10.3	5.8
4	9	3.3	8.2	5.2
5	1	0.4	7.5	4.7
Total	269	100		

Figure 4 shows the screening frequency for all women screened, with just under 40% of those screened receiving two or more screens.

Evaluators collected patient demographic information, which included the following parameters: Race/ethnicity, marital status, education level, income level, number of previous pregnancies, and number of previous live births. The distribution of patients for each of these parameters is presented in tables below. In addition, distributions were tested to see if any demographic characteristics were over represented in groups of patients that scored positive in PHQ-9 or EPDS or more frequently had evidence of contact with behavioral health.

Patients who were experiencing their first pregnancy were more likely to score positive on PHQ-9 or EPDS and were more likely to have had contact with behavioral health (chi-square P values were less than or equal to 0.04 and relevant cells are highlighted in the following tables.

HCC: Race/Ethnicity

Daga (ath picity)	Total	PHQ-9/EP	Evidence of Co	ce of Contact with BH			
Race/ethnicity	Total	Negative	Positive	No	Yes		
African-American	20	17	3	20	0		
Asian/Pacific Islander	8	5	3	6	2		
Hispanic	207	180	27	184	23		
Native American	2	1	1	1	1		
Other/Unknown	11	11	0	11	0		
White	20	15	5	15	5		

HCC: Marital Status

Marital Status	Total	PHQ-9/EF	DS Result	Evidence of Contact with BH			
Marital Status	Total	Negative	Positive	No	Yes		
Married	68	58	10	63	5		
Other/Unknown	33	28	5	30	3		
Separated / Divorced	7	7	0	7	0		
Single	159	135	24	136	23		

HCC: Education Level

Education Level	Total	PHQ-9/EF	DS Result	Evidence of Contact with BH		
Education Level	Total	Negative	Positive	No	Yes	
Advanced Degree	18	15	3	16	2	
College Degree (Associates or Bachelors)	1	1	0	1	0	
Some College	89	75	14	82	7	
High School Diploma/GED	116	98	18	97	19	
Less than High School	35	31	4	32	3	
Unknown	4	4	0	4	0	

HCC: Number of Previous Pregnancies

Number of Previous	Total	PHQ-9/EP	DS Result	Evidence o	f Contact with BH
Pregnancies	Total	Negative	Positive	No	Yes
0	57	44	13	47	10
1	84	72	12	78	6
2	49	44	5	40	9
3	36	30	6	31	5
4	19	18	1	19	0
5	13	12	1	12	1
6	3	3	0	3	0
7	3	3	0	3	0

Note: Shaded cells represent significantly higher rates of positive screens and contact with behavioral health.

HCC: Number of Previous Live Births

Number of Previous	Total	PHQ-9/EP	DS Result	Evidence of Co	ontact with BH
Live Births	TOtal	Negative	Positive	No	Yes
0	78	59	19	64	14
1	93	81	12	88	5
2	55	52	3	46	9
3	20	15	5	18	2
4	10	10	0	9	1
5	6	6	0	6	0
7	2	2	0	2	0

B. Eisner Family Medicine Center

1. Eisner Overview of Key Findings and Observations

The table below provides a high-level summary of the assets, successes, challenges, and opportunities for improvement associated with the pilot implementation at Eisner Family Medicine Center (Eisner).

Eisner: Summary of Key Findings and Observations

	n key riliulings and Observations
Assets	Eisner is a comparatively large FQHC clinic that has leveraged its resources in the past to improve the identification of women at risk for PMADs and the connection with behavioral health providers. MMHN had previously worked with medical residents in training at Eisner; this past relationship and experience with integrated health was seen as an asset in the development of an Memorandum of Understanding with MMHN for the current pilot.
Successes	The clinic effectively organized their infrastructure (staffing) resources with the MMHN support to engage providers in implementing screening and access to BH providers in both the Women's Health Center (WHC) and Pediatrics. In just over 10 month, the clinic provided evidence of 2535 patients screened, and 172 patients (7%) identified at risk. Most (92%) women (in WHC and Pediatrics) were screened once and 8% were screened two more times.
	Pediatric collaboration on patient screenings was established with three medical doctors and grew steadily to five over the course of the pilot, such that the number of screenings in Pediatrics was very strong, with 365 completed in 10 months, with a sizeable fraction of women identified at risk (23%). This accomplishment was significant as the concerns at baseline were that Pediatrics staff were extremely busy and "stressed," and the perception was that it would be a heavy lift to take on something new.
	BH providers are co-located with WHC and pediatrics. Warm handoffs increased with the increased availability of the Master of Social Work staffed position in BH.
	BH providers and case managers developed strategies for connecting moms to support in spite of several identified barriers, including stigma, fear of being considered an "unfit" mother, not having resources such as transportation and child care, and being busy with a newborn and other children. Strong leadership support from the clinic champion, case managers in Pediatrics and the WHC and behavioral health providers were clear assets.
	Quality improvement activities resulted in better identification of positive screens, with some new language and approaches for screening credited.
	Eisner shows evidence of practice change and the capability to sustain the model. Understanding of the collaborative care process improved over the course of the pilot based upon interviews with behavioral health.
	Staff felt that they developed a better understanding of the community resources that were available to support families, in spite of frustrations voiced about not always mental health treatment resources in accessible settings in the community.
Challenges and Opportunities for Improvement	A difficult challenge was getting women back to the clinic for treatment sessions. They observed a low rate of follow-through on appointments, for example, and took steps to improve it through approaches such as same day appointment scheduling. Staff pointed to the need for community-based treatment and support where child care, for example, might be provided.
	The project lacked consistent resources for data entry and tracking, which made it difficult to track the full scope of contact with behavioral health. While records for

patient screenings were complete, like HCC, the clinics struggled with data quality and with staff resources to re-enter patient follow-up information. As a result, many patient records with positive screens did not contain complete follow-up information (warm handoffs, referrals, or treatment). However, Eisner made a concerted effort to complete follow-up data on patients from July, August, and September, providing some evidence for successful connection to referrals, if not successful treatment outcomes.

Data about treatment outcomes—whether patients accessed and benefited from treatment—are lacking at Eisner (and all pilot sites).

2. Eisner Summary of Evaluation Findings

Evaluation Question 1: Eisner Family Medicine Center

What unique assets and challenges within FQHC clinical environments and among their staff and patient populations impacted the implementation of the collaborative care model?

Over 75% of Eisner's patients come from communities in central LA, south and east of downtown Los Angeles, and the San Fernando Valley.

The clinic serves vulnerable groups with limited access to care. Eighty-two percent of patients live with income at or less than 100% of Federal Poverty Level (FPL), with nearly all patients at or less than 200% of FPL. Over one-quarter (27.4%) of adults and 13.7% of children are uninsured, and 66.1 are covered through Medi-Cal or CHIP. Nearly 3% of patients are homeless and 3.6% are agricultural workers. Eighty-four percent of patients are Hispanic or Latino; 19.2% are Black/African-American.

In calendar year 2016, Eisner served 40,043 patients, 49.3% of whom were children (less than 18 years in age), 47.5% were adults (ages 18-64 years), and 3.2% were oler (ages 65 years or greater). Among female patients, 46.3% are 15-44 years. (*Data obtained from the HRSA website https://bphc.hrsa.gov/uds/datacenter.aspx?q=d&bid=0921340&state=CA&year=2016.*)

A total of 8 individuals plus an unknown number of MDs, CPSP staff, and Women's Health Center (WHC) medical assistants from Eisner were involved in the pilot, representing an estimated 0.76 FTE—roughly less than 1 FTE all totaled. Table 1 describes these resource inputs and functions (Table 1).

Table 1: Eisner: Pilot Resources

	SITE					ROLES			
Eisner Family Medicine Center			CHAMPIONS	DRIVERS	SCREENING	PATIENT EDUCATION	DATA ENTRY / RECORD MANAGEMENT	MEDICAL CARE	TREATMENT SUPPORT /CASE MGMT
STAFF	TOTAL TIME IN CLINIC	MATERNAL MENTAL HEALTH ACTIVITIES							
Pediatric department screener	0.4 FTE	0.4 FTE			Х	х	Х		
WHC MA	Unknown	Unknown			Х				
WHC case manager	1.0 FTE	0.1 FTE					Х		
Pediatric case manager	2.0 FTE	0.05 FTE							
WHC LCSW	1.0 FTE	0.1 FTE				Х	Х		
WHC CPSP staff						Х			
QI Coordinator	1.0 FTE	0.05 FTE					Х		
Behavioral Health Director	1.0 FTE	0.05 FTE	Х	Х					
Medical Director	1.0 FTE	0.01 FTE	Х						
MDs in WHC	Unknown	Unknown						Х	
MDs in Pediatrics	Unknown	Unknown						Х	

The estimates in Table 1 also exclude any resources provided by the MMHN staff and project evaluators as well as time for additional roles / functions such as technology and information systems support, for which FTEs are not known.

Training and educational inputs provided by MMHN totaled over 18 hours with 164 total attendance at Eisner. A full description of trainings and participants is provided in Appendix D.

Evaluation Question 2: Eisner Family Medicine Center How well were specific components of the model implemented in each of the FQHCs?

The effectiveness of the implementation was evaluated based on the evidence of practice changes on the part of the care team as a result of the trainings, consultation, and quality improvement support provided.

Eisner Clinic Staff Survey Results

Evaluators administered a clinic staff survey to the collaborative care teams three times at each project site. The survey had five questions to assess several aspects of practice change, including, the following:

- The extent of knowledge and skills development among care team members.
- How well members of the collaborative care team were prepared for and comfortable with their roles in integrated, collaborative care.
- Staff perceptions about whether collaborative care was impacting the patient care provided at the clinic, and impacting patient outcomes.

Multiple reminders (in-person, via email and phone calls) were provided to elicit responses yielding the following response rates for Eisner. Numbers of eligible staff varied due to turnover and changing involvement in the project.

Eisner Survey Responses

Time period survey administered	Eligible staff	Responses	Response, %
Baseline (T1; within one month of signing MOU)	13	10	77%
Mid-point (T2; project mid-point)	13	8	61.5%
Final (T3; within one month of project end)	13	6 ⁷	46%

Scores were analyzed in aggregate and for each staff classification (behavioral health, case manager, medical assistants, physicians, and administrative staff) in order to determine trends and areas of variation. A Likert-type scoring was used to weight the responses. Percentages were calculated for the aggregate responses. Appendix C provides a full description of findings from the Clinic Staff Surveys.

⁷ For medical doctors and case managers, surveys at T3 were not completed; in these cases, mid-point survey responses were substituted in order to understand general trends, although interpreted with great caution.

Eisner Survey Question 1. How comfortable do you currently feel conducting each of the following activities?

Activities	Summary of changes in comfort level scores	Weighted average at end of project (max value=3)
Distributing information to patients	No change or improved for BH and Admin; N/A for other staff types	3.0
Screening patients for maternal depression and anxiety	No change or improved for BH and Admin; N/A for other staff types	3.0
Scoring mental health assessments	No change; declined for some including MDs	2.83
Discussing perinatal mental health with patients	No change; declined for some including MDs	2.83
Providing in-house services with warm hand off for maternal mental health	No change; declined for some including MDs	2.83
Providing referrals to appropriate services	No change for all staff types	3.0
Following up with Behavioral Health to assure patients are receiving services	No change for all staff types	2.83

Eisner Survey Question 2. How much additional support (including training, technical assistance) do you need to implement each of the following activities?

Evaluators used responses to Question 2 to assess the need for additional support to conduct the activities listed in Question 1. The need for support improved (by declining) over the course of the project; most participants replied "none" as to whether additional support was needed. Improvements were greatest among behavioral health and administrative staff, and to a lesser extent MDs and case managers. The issues still requiring "some" support included scoring the screenings and discussing screening results with patients.

Eisner Survey Question 3. How strongly do you agree or disagree with the following statements about the implementation of collaborative care?

The survey assessed how well the implementation of collaborative care was going by asking staff how strongly they agreed (or disagreed) with a series of statements, listed below with the summarized findings. It is important not to over-interpret these findings as they are based on small numbers; however, the results do flag those aspects of collaborative care implementation that staff felt were not going as well as others (e.g., that patients might have trouble completing the screening; that cultural stigma remains a stubborn barrier).

Importantly, the belief that staff could connect patients with appropriate mental and behavioral health services declined over the course of the project.

Statements about the implementation of collaborative care	Changes in desired endorsements over the course of the project	Weighted average at the end of the project (max. value = 5)
Patients are able to complete the screening (e.g., language, literacy)	No change or declined among all staff types	3.2
Patients have sufficient time to complete the screening	No change	3.8
Staff /providers have sufficient time to score the screening	No change	4.2
Staff / providers have sufficient time to talk with patients about the results	No change (except slight decline among some staff types)	3.8
Patients are comfortable talking with a health provider	Improved slightly	3.4
Cultural stigmas discourage discussion of mental health issues	No change	4.0
Patients have negative attitudes about mental health	No change	3.6
Staff can find appropriate services	No change or declined among all staff types	4.0
In-house behavioral health care appointments are available when needed	No change or declined among all staff types	3.6
I communicate about each patient's progress with appropriate providers	Mixed results – slight improvement among BH and MDs; no change among other staff types	3.6
I feel successful in getting patients to maternal mental health care	Improved slightly but soft endorsement overall	3.6

Eisner Survey Question 4. How would you describe your understanding of the clinic's behavioral health services?

Overall, perceptions about interacting with Eisner's behavioral health services improved over the course of the project. Endorsement of receiving feedback about patients' care was softer for MDs (but, again, given the small numbers this finding is important not to overemphasize).

Statement	Endorsement at Project End
I have a good understanding of the scope of services that Behavioral Health (BH) provides	Universally endorsed (100%)
I generally know when a patient needs to be	Universally endorsed (100%)

referred to BH.	
I am comfortable speaking with BH about patients.	Universally endorsed (100%)
Behavioral Health provides me with timely feedback about my patients' care.	60% endorsed, except among MDs where endorsement declined

Eisner Survey Question 5. How much do you agree or disagree with the following statements about the impact of the integration pilot so far on the following broad, patient-care goals?

Evaluators asked team members to assess the overall impact of the Collaborative Care Pilot.

Statement	Endorsement
People are utilizing services and getting better	No change in high levels (80%) of endorsement; softer endorsement by case managers.
Improved compliance with recommended care	Improved or stable for most staff types; softer endorsement among BH providers.
Improved patient outcomes	Improved or stable for most staff types; softer endorsement among BH providers.
Decreased no shows" or missed medical appointments	Mixed endorsement

Evaluation Question 3: Eisner Family Medicine Clinic

How effectively did the model—as implemented—improve the identification of perinatal mood and anxiety and other mental health disorders by screening, connecting, and treating women with PMADs?

Outcomes associated with the model were evaluated using results from the patient registry. Specifically, results of standardized screening for PMADs using PHQ-9 and EPDS were analyzed to assess trends in screening, the overall and positive screen rates, and the frequency of screening.

Overall, screening data that were entered into the Eisner patient-tracking registry were complete and good quality for women screened at prenatal or obstetrical appointments in the Women's Health Clinic (WHC) and well-baby visits in Pediatrics. Data for Eisner represents a 10-month period from January 2017 through October 2017, unless otherwise noted (Figure 1).

Overall, 8.9% of the total patients screened in WHC and Pediatrics were identified at risk for PMADs based on a positive result on the PHQ-9 screening or the EPDS. The rate of positive screens was higher among those identified in Pediatrics (23.6%) than in the Women's Health Clinic (7%) based upon data collected in patient registries in each of the clinic settings.

Screening and identification of women at risk for PMADs in the Women's Health Center

- 2535 patients were screened in WHC from January 2017 through October 2017.
- Using the PHQ-9 or EPDS, 172/2535 (7%) patients screened positive and therefore were identified as being at risk for PMADs.
- The number screened represents approximately 41.6% of eligible prenatal patients during this time periods based on the reported number of patients seen monthly. This estimate could potentially overestimate the number of prenatal patients eligible for screening thus underestimate the screening coverage achieved.

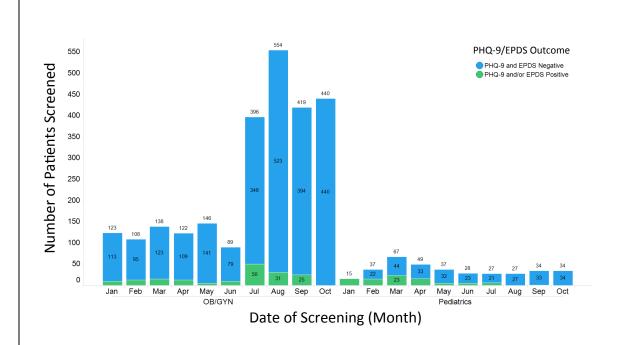
Screening and identification of women at risk for PMADs in Pediatrics

- 365 patients were screened using either the PHQ-9 or EPDS in Pediatrics from January 2017 through October 31, 2017.
- 86/365 (23.6%) screened positive and therefore were identified at risk for PMADs.
- The total number of women screened in Pediatrics represents approximately 13% of eligible patients based on the reported number of patients seen monthly.

Screening at Eisner in the WHC and Pediatrics

Figure 1: Eisner Screening Results

Eisner-WHC and Pediatrics: Number of screens, number of PHQ-9 > 9 and/or EPDS > 3 scores by month and practice type



Evaluation Question 4: Eisner Family Medicine Clinic

After patients with PMADs and other mental health problems were identified, what outcomes were achieved for those patients as a result?

Information related to Behavioral Health (BH) referrals and follow up was entered into the registry inconsistently and is also likely incomplete. For example, in some cases there were indications of follow-up interactions with BH but no "Date of first visit" with BH. The other common issue was using inconsistent nomenclature in columns mentioned above, making it difficult to assess the evidence of contact with BH (e.g., "y", "yes", "pending?", "Pending", "na", etc.).

An indicator for "Evidence of Contact with BH" was developed in order to form a general picture as to how frequently patients connected with BH, as determined by any of the following:

- An entry for "Date of first visit with BH"
- Indication of a "Location of Mental Health Information
- A date or affirmative entry for "BH Referral Acceptance"
- Affirmative entry for "Is patient receiving psychotherapy" including IBH entries which name individuals
- Affirmative entry for "Is patient receiving case management?"

As a result, Figure 2 shows the numbers of patients connecting with BH increased over the course of the pilot, especially in July, August and September. These months also coincided with a concerted effort by the Eisner staff to collect follow-up data regarding patients that might have been successfully connected with BH. In other words, if more staffing had been available to track the patients screened in the earlier months, the results might show more patients with evidence of contact.

Follow up data (and evidence of contact with BH) was very limited for those screened in Pediatrics. Staff also observed that it was much more difficult to successfully connect patients with BH and even more so to successfully engage new moms into treatment. Barriers associated with insurance coverage, transportation, child care, and being busy with their newborn were all cited as factors. It is difficult to know based on available data whether the results are due to incomplete data entry and patient follow up, low rates of follow through on referrals on the part of patients, or, most likely, a combination of both factors.

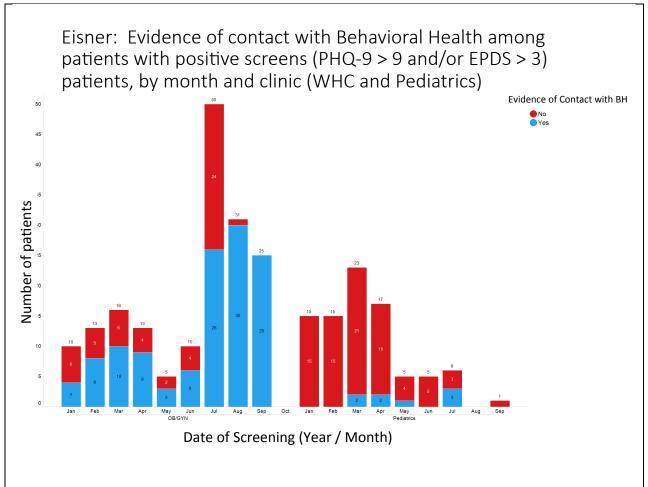


Figure 2: Eisner Referrals to Behavioral Health

Eisner Patient Characteristics and Screening Outcomes

Figure 3 shows the patient screening frequency for all women screened, with just under 40% of those screened receiving two or more screens.

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FIGURA 4	Fighar.	Niimmarv	α T	· VCrddnii	าฮ	Frequency
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Number of Screens	Number of Patients	Percent	Mean Interval between Screens (weeks)	Standard Deviation
1	477	91.9	N/A	N/A
2	35	6.7	11.6	10.0
3	5	1.0	4.9	7.7
4	2	0.4	4.3	2.5
Total	519	100		

Evaluators collected patient demographic information, which included the following parameters for Pediatrics patients (percentage of records complete are 84% or greater except where noted): race, ethnicity, marital status, education level, income level, number of previous pregnancies, and number of previous live births. Demographic data for WHC patients was collected but many records were incomplete and therefore excluded from this report.

The distribution of mothers of pediatric patients for each of these characteristics are in presented in tables below. Distributions were tested to see if any demographic characteristics were over represented in groups of patients that scored positive in PHQ-9 or EPDS or more frequently had evidence of contact with behavioral health.

 Patients who identify as White or African American represent a minority of the racial makeup of the cohort (the majority of which identifies as Latino or Hispanic) yet have higher frequencies of positive screening results and evidence of contact with behavioral health (chi-square P values were less than or equal to 0.0001 and relevant cells are highlighted in the following tables).

Eisner: Race

Race	Total	PHQ-9/EPDS Result		Evidence of Contact with BH	
Race	TOTAL	Negative	Positive	No	Yes
African American	29	21	8	27	2
American Indian / Alaskan Native	2	0	2	2	0
Asian/Pacific Islander	4	4	0	4	0
Declined to specify	20	0	20	20	0
Hispanic	264	232	32	250	14
Other/Unknown	3	3	0	3	0
White	23	6	17	23	0

Note: Shaded cells represent groups with significantly higher rates of positive screens and contact with behavioral health.

Eisner: Ethnicity (20% complete)

Ethnicity	Total	PHQ-9/EP	DS Result	Evidence of Contact with BH	
Ethnicity	TOtal	Negative	Positive	No	Yes
Declined to specify	1	0	1	1	0
Hispanic or Latino	51	6	45	51	0
Not Hispanic or Latino	9	3	6	9	0

Eisner: Marital Status

Marital Status	Total	PHQ-9/EP	DS Result	Evidence of Contact with BH		
		Negative	Positive	No	Yes	
Married	99	12	87	96	3	
Single	198	18	180	184	14	
Other/unkonwn	3	0	3	3	0	

Eisner: Education Level (59% complete)

Education Lovel	Total	PHQ-9/EP	DS Result	Evidence of Contact with BH	
Education Level		Negative	Positive	No	Yes
Advanced degree	10	9	1	9	1
Some college	44	39	5	41	3
High school/GED	130	114	16	123	7
Less than high school	26	24	2	26	0
Unknown	89	83	6	83	6

Eisner: Income Level

Incomo Lovol	Total	PHQ-9/EF	DS Result	Evidence of Contact with BH	
Income Level	Total	Negative	Positive	No	Yes
Less than \$20,000	43	38	5	42	1
\$20,000-\$39,999	13	13	0	13	0
Greater than \$100,000	1	1	0	1	0
Unknown	241	216	25	225	16

Eisner: Number of Previous Pregnancies

Number of Previous		PHQ-9/EPDS Result		Evidence of Contact with BH	
Pregnancies	Total	Negative	Positive	No	Yes
0	5	5	0	5	0
1	102	95	7	95	7
2	63	56	7	59	4
3	77	71	6	73	4
4	30	24	6	29	1
5	14	11	3	13	1
6	4	3	1	4	0
7	3	3	0	3	0
14	1	1	0	1	0

Eisner: Number of Previous Live Births

Number of Previous	Total	PHQ-9/EPDS Result		Evidence of Co	ontact with BH
Live Births	Total	Negative	Positive	No	Yes
0	3	3	0	3	0
1	110	104	6	104	6
2	72	60	12	66	6
3	74	68	6	70	4
4	25	21	4	25	0
5	11	9	2	10	1
6	2	2	0	2	0
7	2	2	0	2	0

C. Martin Luther King, Jr. Outpatient Center

1. MLK Overview of Key Findings and Observations

Most of what is known about the implementation of the MMHN collaborative care pilot at Martin Luther King, Jr. Outpatient Center (MLK) is based on interviews with clinic champions and discussions with the project manager. What follows is a summary of some of the strengths and challenges associated with the project.

MLK: Summary of Key Findings and Observations

ng commitment to behavioral health integration from leadership. Partnership MMHN was seen as helpful and effective for putting outside pressure on MLK etter integration. Operational changes are difficult in a big, public system and
de pressure from MMHN was praised for advancing integration.
HN training was viewed as valuable, with 69 staff participating in a total of 5 s, which is comparatively low as compared to other sites.
nen's clinic made some progress with developing a system for sharing patient try data (however no data were provided to evaluators).
ream achieved important practice changes among Pediatric providers and not established screening but the practice of recording the findings in the ent's (i.e., child's) chart. This is a true accomplishment. The key was getting iders to see that post-partum issues for moms do not only come up in the nen's Clinic.
borative care team was engaged, especially the lead physician in the nen's Clinic and head nurse in Pediatrics.
team meetings were viewed as very helpful, particularly for helping staff lop an understanding of broader issues - mental health, trauma, and other lems – and not hesitating to talk with the BH providers about them.
en protocols developed.
ite of numerous challenges, clinic champions felt that they made progress. ge is slow in their system (seen as County bureaucracy) and there were many ive developments, for example, buy-in from staff who were initially resistant. her cited accomplishment was starting a support group targeting young is ages 18-25 in March 2017. This group was targeted because it's where they seeing most of the referrals generated.
ed staff time for BH providers to be in clinics, which is two mornings per c. When face-to-face, things would go well. But following up on referrals was ult because it was harder to reach out and she did not always have access to otes.
e is no dedicated space for behavioral health to meet privately with patients e clinics. If a client came back to meet the BH provider in the clinic, they d search around for a private space to talk. Staff in the Women's Clinic were mmodating but this was difficult.

The partnership between Los Angeles County Department of Mental Health (DMH), Department of Health Services (DHS), and MMHN was complicated, and there were many examples of administrative barriers to collaboration. For example, mental health services are provided by the DMH, which presented difficult challenges for sharing data and making referrals. There were several challenges and numerous workarounds proposed. However, none of the strategies and efforts made to overcome the problems with entering and sharing data worked. Some were abandoned (e.g., obtaining Institutional Review Board approval) and some may ultimately succeed (e.g., DHS is creating a shared drive with de-identified records) but not in time to be documented by this pilot, unfortunately.

The project lacked resources for data entry at the most basic level—tracking screenings that included all of information. The project was using a paper system so the screening results were placed in patient's charts. This was viewed not only as unreliable but unsustainable by clinic champions.

Unknown extent of identification of PMADs through consistent screenings over the course of the pilot. Standardization of workflow and how people are asking the screening questions were cited as major challenges. Cited areas of progress included the development of an Intranet-based worksheet (in progress) which would allow multiple staff to access and contribute to records.

Data about treatment outcomes—whether patients accessed and benefited from treatment—are lacking at MLK (and all pilot sites).

Clinic staff completed baseline surveys but very few surveys were completed at the project mid-point and end in spite of multiple requests and reminders.

2. MLK Summary of Evaluation Findings

Evaluation Question 1: Martin Luther King, Jr. Outpatient Center

What unique assets and challenges within FQHC clinical environments and among their staff and patient populations impacted the implementation of the collaborative care model?

A total of 9 individuals plus an unknown number of MDs and DMH mental health providers were involved in the pilot, representing an estimated 2.36 FTE. Two FTEs for community health workers are the most notable difference between the collaborative care team at MLK as compared to the other sites. Table 1 describes these resource inputs and functions.

Table 1: MLK: Pilot Resources

SITE			ROLES						
MLK Outpatient Center		CHAMPIONS	DRIVERS	SCREENING	PATIENT EDUCATION	DATA ENTRY / RECORD MANAGEMENT*	MEDICAL	TREATMENT SUPPORT /CASE MGMT	
STAFF	TOTAL TIME IN CLINIC	MATERNAL MENTAL HEALTH ACTIVITIES					*PROVIDED BY MMHN PROJECT MANAGER		*DMH MENTAL AND BEHAVIORAL HEALTH PROVIDERS
Pediatric Clinic MAs	4.0 FTE	0.025 FTE			Х	Х			
Women's Clinic MAs					Х				
Women's Clinic CHWs	2.0 FTE	2.0 FTE			Х	Х			
Women's Clinic DMH LCSW	0.2 FTE	0.2 FTE							
Nurse manager (Women's Health and Peds)	1.0 FTE	0.1 FTE	Х	Х					
Women's clinic provider	0.6 FTE	0.01 FTE		Х				Х	
Medical Director	1.0 FTE	0.02 FTE	Х						

Training and educational inputs provided by MMHN totaled 5 hours and 69 in attendance at MLK.

Evaluation Question 2: Martin Luther King, Jr. Outpatient Center How well were specific components of the model implemented in each of the FQHCs?

The effectiveness of the implementation was evaluated based on the evidence of practice changes on the part of the care team as a result of the trainings, consultation, and quality improvement support provided.

MLK Clinic Staff Survey Results

Evaluators administered a clinic staff survey to the collaborative care teams three times at each project site. The survey had five questions to assess several aspects of practice change, including, the following:

The extent of knowledge and skills development among care team members.

- How well members of the collaborative care team were prepared for and comfortable with their roles in integrated, collaborative care.
- Staff perceptions about whether collaborative care was impacting the patient care provided at the clinic, and impacting patient outcomes.

Multiple reminders (in-person, via email and phone calls) were provided to elicit responses yielding the following response rates for MLK.

MLK Survey Responses

Time period survey administered	Eligible staff	Responses	Response, %
Baseline (T1; within one month of signing MOU)	9	6	67%
Mid-point (T2; project mid-point)	9	2	22%
Final (T3; within one month of project end)	9	1	11%

Because of the low response rates (on top of already small numbers of surveys), it is not possible to present findings or analyze changes in practices, comfort, or preparedness associated with the pilot at the MLK site. Instead, we are providing results at baseline for a point in time snapshot. Appendix C provides a full description of findings from the Clinic Staff Surveys for each site, including the T1 survey for MLK.

Evaluation Question 3: Martin Luther King, Jr. Outpatient Center

How effectively did the model—as implemented—improve the identification of perinatal mood and anxiety and other mental health disorders by screening, connecting, and treating women with PMADs?

Evaluation Question 4: Martin Luther King, Jr. Outpatient Center

After patients with PMADs and other mental health problems were identified, what outcomes were achieved for those patients as a result?

Although interviews plus very preliminary data suggest that screenings and referrals were happening, the data are insufficient for evaluators to include the MLK sites in this portion of the final evaluation report. Over the course of the project, data were being entered by the MMHN project manager for screenings based in Pediatrics. Quality improvement activities focused on screening standardization and reducing false negative screening results.

V. DISCUSSION AND RECOMMENDATIONS

Each of the three clinic sites had significant accomplishments and challenges with implementing and refining collaborative care models during the course of the project. Staff at each clinic site participated in trainings, were prepared for their roles in collaborative care, developed clinic protocols, and screened patients using a universal approach in the context of obstetrical as well as pediatric clinical services. All improved the rate of identification of women at risk for perinatal mood and anxiety disorders through the application of quality improvement approaches, screening between 13% and 42% of eligible of patients and achieving cumulative positive screening rates ranging from 7% to 29% for those clinics reporting screening data.

It is notable that all sites were able to establish screening in their pediatrics clinics. During the clinic recruitment phase, in the beginning of this project, the requirement to screen in pediatrics was a significant barrier to clinic participation and resulted in a prolonged recruitment period. MMHN staff encountered very negative attitudes from pediatricians even in otherwise enthusiastic clinics; these clinicians were often unwilling to "treat" a parent in the context of well-baby visits or record a parent's screening results in a child's record. Therefore this success should be highlighted as a significant accomplishment across all sites.

Quality improvement and consultation in each clinic site led to some valuable innovations and lessons learned, and, in particular, improved practices related to PMAD identification. Specifically, quality improvement efforts organized to observe the screening process resulted in trying new approaches that would improve patient comfort with disclosing symptoms. For example, the Eisner team reworded some of the potentially difficult or confusing language, memorized and asked the screening questions as though in a conversation instead of looking at a computer, and reassured patients that they are not being singled out (i.e., questions asked of every patient). As a result, the rate of positive screenings (by reducing false negatives) improved throughout the course of the project. These findings also suggest that greater trust was developed in the clinic staff and potentially reductions in stigma in the clinic environment. At MLK, similar innovations with Community Health Workers standardized screening approaches and reduced false negatives.

Those lessons learned are captured in the Implementation Guide developed by MMHN as a primary deliverable for their associated CHCF grant. While all clinics are unique and have different environments, the development of a standard set of approaches and considerations is better informed through the recording of such information.

Clear shortcomings of the model as implemented included the inability to demonstrate "stepped care", which is identifying which patients are improving and which patients are not improving. In retrospect, this might have been an unrealistic aspect of the model implementation plans and potentially better to simplify the focus on PMAD identification and connection to treatment.

While all sites connected women at risk to behavioral/mental health providers, the experience was mixed in either documenting or tracking those connections. Furthermore, barriers with

patient follow up meant that little was learned about how many women received clinical treatments or improved. However, two of the three sites were able to show evidence of contact with behavioral health providers for several patients; HCC had the most developed integrated registry and also shared anecdotal stories of successful connection to treatment with evaluators. Personnel changes at Eisner (staff person assigned to data entry and record review) during the project which limited their ability to complete the referral and treatment data.

With more support for data entry and patient registry management, or perhaps with access to integrated technology that would ease data entry time and facilitate record sharing, the pilot could have potentially showed more impact on patient outcomes.

Many aspects of the patient registry were challenging and would have benefited from clinic staff with specialized roles dedicated to maintaining the database. HCC was able to maintain a simplified system, establish clear roles and processes, although resources were often stretched thin so as to cause long delays in getting the information entered. Once entered, there was little time to follow up on records that were flagged. Although HCC was able to improve the quality of data in the Registry considerably, the behavioral health staff often had no time to transfer information from their case notes to the project registry. Eisner was able to hire an intern, and, while that person was there, was able to keep up with the recording of screening and some follow up information. The amount of information tracked needed to be scaled back due to limited resources for EMR extraction. The months for which Eisner recorded follow up data show a clear jump in evidence of contact with BH providers. MLK had a stack of screenings partially completed on paper when the project began, which were entered by the project manager to enable analysis.

Clinics seeking to integrate care could benefit by investing time and resources to prepare and lay a foundation for successful implementation. Once some basic criteria are satisfied, the potential for model spread is good, especially in the FQHC care environment in California.

A 2016 report from California Health Care Foundation studied trends among FQHCs in seven regional markets finding that integrated behavioral health is a major focus throughout the state: FQHCs received \$27 million in funding from Affordable Care Act grants to pursue integration. There is also significant demand; the number of behavioral health visits has grown more than the number of visits for medical services and dental care visits. Many clinics are adding clinical staff, competing for psychiatrists, psychologists, and social workers, and entering into agreements with county mental health agencies for referrals. One related issue that was brought up in the same study is the tight market for mental and behavioral health clinicians, which may impact the ability to fully staff programs in perinatal care settings, if they are competing with substance abuse, chronic disease management, and other programs.⁸

http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20S/PDF%20SteppingUpPlateFQH

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⁸ California Health Care Foundation. Stepping up to the plate: FQHCs address growing demands for care. regional markets cross-site analysis. California Health Care Almanac, October 2016. Accessed January 28, 2018

One shortcoming of the current evaluation is not assessing the impact of competing demands on collaborative care staffing resources. This evaluation was limited in that we do not fully understand those competing demands on behavioral health providers from non-maternity / perinatal patients. The staff resources that were accounted for (in FTEs) dedicated to perinatal mental health activities were very limited: These included .56 FTE (among 13 positions) at HCC; 0.76 FTE (among 8 positions) at Eisner; and, 2.36 FTE (among 9 positions including 2 full time Community Health Workers) at MLK. Associated staff costs were not collected but could be roughly estimated were the total number of patients screened and connected to behavioral health, provided with therapeutic treatment, and whether in-house treatment was provided had been adequately collected. Future studies would do well to understand the yield of staff time (and cost) relative to identification treatment outcomes.

Another limitation of the evaluation is attempting to assess and document practice changes through self-administered surveys. It was not possible to obtain responses from all members of the interdisciplinary team, especially as the project moved forward. As a result, the response rates varied and might have missed valuable perspectives from each site. In addition, the language used by the different teams and sites was difficult to anticipate and standardize for each site at the beginning of the project, even with the expert guidance of the MMHN staff. Last, it was not always clear who on the care teams could provide the desired information, which could have been remedied by interviewing the entire team. In retrospect, it might have been more revealing to interview each of the care team members once at the beginning and once at the end of the project to assess practice changes as opposed attempting to track those changes in a standardized fashion through a self-administered survey.

Sites with prior relationships and work with MMHN were able to get farther along in implementing and refining the model. Staff buy in is a critical step, and can be aided through participations in training, conferences, or other workshops by collaborative care team members. Online trainings and workshops could ground staff in the familiar concepts and help with the assignment of roles and responsibilities. Trainings and interactions outside the clinic also help staff better understand what community resources might be available to assist patients. In addition, having relationships with external mental health providers and consulting psychiatrists seems essential; agreements about sharing information for the purposes of care management would be ideal.

Ample time in the planning phases to build capacity and organizational buy-in is critical. Recommended elements of this buy-in include proof that the clinic has established a patient registry, decided on data elements has the staffing resources and plan for data entry. The current evaluation received incomplete information from the clinic's registries, which suggested that the required capacity to organize and maintain patient registries at should not be overlooked. Such capacities are examples of important requirements that should be met before entering into an agreement. (For clinics at this stage of planning, a generic set of recommended

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elements and data dictionary are available in Appendix B. In addition, the forthcoming implementation Guide produced by MMHN contains several useful "considerations for data collection" generated from the evaluation and learning from this project.

APPENDIX

Appendix A: Logic Model

Appendix B: Patient Registry: Recommended Data Elements

Appendix C: Clinic Staff Survey and Clinic Champion Interview Instruments

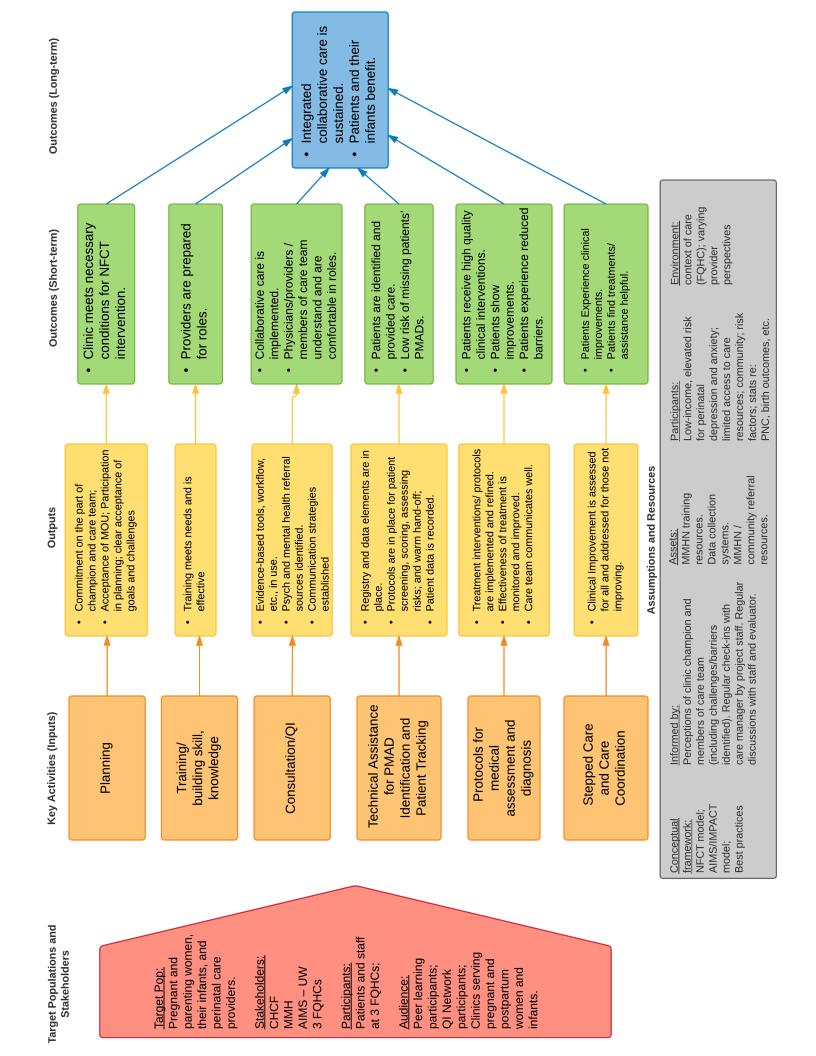
Appendix D: Survey of Training Activities

Appendix E: Links to Complete Survey Results

Appendix F: Signed Memoranda of Understanding

APPENDIX A. LOGIC MODEL

See following page.



APPENDIX B. PATIENT REGISTRY: RECOMMENDED DATA ELEMENTS

See the following page.

Perin	atal Mental Health Integration Project	- Patient Registry
Data Field	Format	Description / Data Values
LOG		
	Automatically generated when	
Timestamp	record is created or modified	2016/09/07 4:45:34 PM GMT+2
Patient ID	Text	Unique idenifier used for tracking and analysis
Date of Clinic Visit	MM/DD/YY	Today's date (or actual visit date)
		Date of follow up with patient to discuss symptoms, check on
Date of Follow Up Contact	MM/DD/YY	referral, schedule appointment, etc.
Method of Follow Up Contact	Dropdown	Follow up visit, phone, email, text, or other
MOTHER HISTORY		
Expected Delivery Date	MM/DD/YY	Due date
Child Date of Birth	MM/DD/YY	
Site of Prenatal Care	Dropdown	Did mother receive PNC at Harbor or other clinic?
Marital Status	Dropdown	Single, Married, Divorced/Separated, Widowed, Other/Unknown
		African-American, Hispanic/Latina, White (non-Hispanic),
Race/ethnicity	Dropdown	Asian/Pacific Islander, Native American, Other/Unknown
		Highest year in school or degree completed: Less than High
		School, High School Diploma/GED, College Degree (Associates or
Educational Level	Dropdown	Bachelor), Advance Degree, Unknown
Income Level	Dropdown	Annual income before taxes
Mom Date of Birth	MM/DD/YY	
# Previous Pregnancies	Dropdown	0-10 or greater, Unknown
# Previous Live-births	Dropdown	0-10 or greater, Unknown
PMAD SCREENING		
Date of PHQ-9 Screening	MM/DD/YY	Date screening was completed
PHQ-9 Raw Score	Dropdown	Screening result in whole numbers: 0-27, Not Screened
		Trimester of pregnancy (1st, 2nd, 3rd) or child age at well baby
T: : [DUO 0 C		visit (2 weeks, 1, 2, 4, 6, 9, 12 months), or whether screen was
Timing of PHQ-9 Screen	Dropdown	conducted at a behavioral health or other type of visit
EPDS Screening Date	MM/DD/YY	Date screening was completed
EPDS Raw Score	Dropdown	Screening result in whole numbers: 0-6, Not Screened
		Trimester of pregnancy (1st, 2nd, 3rd) or child age at well baby
Timing of EPDS Screen	Dropdown	visit (2 weeks, 1, 2, 4, 6, 9, 12 months), or whether screen was conducted at a behavioral health or other type of visit
Warm hand-off to Behavioral Health	Dropdown	Yes, No, Unknown
Date of first visit with Behavioral Health	MM/DD/YY	res, No, Officiowii
Date of first visit with behavioral freath	WINT DD/ 11	Patient is receiving mental health services in-house; referred out;
Location of Mental Health Intervention	Dropdown	already receiving care; or N/A
	2.0040	Patient accepted referral and appointment was made; patient
		accepted referralno appointment made; patient did NOT accept
Behavioral Health Referral Acceptance	Dropdown	referral; N/A (those w/o positive screens)
TREATMENT TRACKING		
Is patient receiving psychotherapy?	Dropdown	Yes, No, Unknown
	Fixed choice (yes, no, or unknown)	Supportive therapy; Cognitive Behavioral Therapy; Problem
If patient is receiving therapy, what is the treatment?	for each treatment	Solving Therapy; Other
	Fixed choice (yes, no, or unknown)	
If patient is receiving therapy, what setting is used?	for each treatment	Individual; Couples; Dyadic; Group
Is patient receiving medication?	Dropdown	Yes, No, Unknown
Is patient receiving case management?	Dropdown	Yes, No, Unknown
		Psychological assessment completed at clinic site (in-house);
Psychological Assessment	Dropdown	completed elsewhere (referred out); or not completed.

APPENDIX C. CLINIC STAFF SURVEY AND CLINIC CHAMPION INTERVIEW INSTRUMENTS

See following six pages.

Interview Protocol for MMH Clinics

Name of Clinic:	Date of Interview:
Name of Interviewee:	
Role of Interviewee:	
2 Clinic Director	
🛚 Care Manager (Mental Health provider)	
2 Other:	

Background: Thank you for taking the time to speak with me. We are primarily interested in documenting baseline information about the Maternal Mental Health Integration Pilot—what is in place now, where you would like to be, forces for and against, what's been provided by MMH so far (and what you need — what's been helpful — and what you need now).

- 1. Please describe how the MMH Integration project is being implemented at your clinic? (prompts: what infrastructure is in place, how are providers currently engaged in this work, etc.)
- 2. Why did your clinic decide to participate in the MMH Integration project?
- 3. In addition to yourself, who else is helping spearhead this project?
- 4. What do you want to get out of this project? (prompt: what are the goals for this project?)
- 5. What assets or strengths are you / your clinic bringing to this project? (prompts: staff, prior work in this area, etc.)
- 6. What challenges are you facing/have you faced in implementing the project?
 - a. What strategies, if any, have you used to overcome these challenges?
- 7. Do you currently have a patient registry in place for patients who are screened for depression and/or anxiety?

a. If yes, please describe.
b. If no, what resources are currently in place to develop this patient registry?
 i. What are some of the anticipated challenges in developing the patient registry?.
8. Do you currently have in place written protocols for screening / assessing maternal mental health?
a. If yes, please describe.
b. If no, please describe your plans to develop a screening protocol.
i. What are some of the anticipated challenges in developing a screening protocol?
9. What maternal mental health services does your clinic provide in house?
a. Who are your main external partners for referrals?
10. So far, how often have you met with the Maternal Mental Health training and/or other staff?
a. What are your priorities for the training and technical assistance you would like to receive from the Maternal Mental Health staff and/or other faculty? Please describe.
11. Do you have any questions or anything else you'd like to include?
Thank you for your time!

Interview Protocol for MMH Clinics- Mid-Point Check-in

Name of Clinic:	Date of Interview:
Name of Interviewee:	
Role of Interviewee:	
2 Clinic Director	
🛚 Care Manager (Mental Health provider)	
② Other:	

Background: Thank you for taking the time to speak with me. Now that your clinic has been implementing the Maternal Mental Health Integration Pilot for a few months, we wanted to have another check in conversation with clinic champions to assess progress and needs still unmet.

- 1. What would you highlight as the top 3-4 <u>accomplishments</u> to date with the integrated care pilot?
 - a. In your opinion, why have these accomplishments been so significant?
- 2. What would you highlight as the top 3-4 <u>challenges</u> you are facing/have you faced in implementing the project?
 - a. Do you have ideas about some of the key steps in overcoming some of these challenges?
 - b. Do you have the support to implement some of these ideas? If not, what support might be helpful?

Now, I'd like to ask you some questions about the Collaborative Care team meetings:

- 1. Have you been holding regular Collaborative Care/ Quality Improvement (CC/QI) team meetings?
- 2. In general, are these meetings well attended?
- 3. How have these meetings been helpful?
- 4. At these meetings, are there discussions about screening and follow up rates, such that you have a good sense of how they're changing?
- 5. What suggestions, if any, do you have for improving the meetings?
- 6. How best can MMHN staff be of help?

For the next set of questions, please consider the process of integrating behavioral health in your clinic:

1. Have <u>written protocols</u> been developed for screening / assessing maternal mental health and making referrals to behavioral health?

- 2. How would you describe the overall communication between the appropriate medical care and mental/behavioral health providers?
- 3. In your observation, are providers having conversations about individual cases?
- 4. Do providers discuss individual patient's progress, different treatments, referrals?
- 5. How can MMHN staff be of help?

Next, I'm going to ask you some questions about the Patient Registry you may or may not have already in place.

- 1. Has your clinic set up a shared Patient Registry for patients screened for depression and anxiety so that medical and mental/behavioral health providers can share information about these patients and their progress?
- 2. How is this process going?
 - a. Are you able to track patient data, such as baseline and follow-up assessments, referrals, and contacts with behavioral specialists and care team members? If yes, have you started doing data extracts from the Patient Registry to assess effectiveness of the program and whether outcomes are being met?
- 3. What do you see as steps to overcome challenges to implementing a patient registry?
- 4. How can MMHN staff be of help?

I have some questions now about trainings and staff involvement.

- 1. How frequently do you or your staff meet with the Maternal Mental Health training and/or other staff?
- 2. Have you been able to schedule internal staff trainings (without MMHN) staff?
 - a. About how frequent are these trainings?
 - b. Have all key staff involved in collaborative care attended trainings?
- 3. Do you feel that staff have been engaged by trainings?
- 4. Have certain types of staff been difficult to engage with training (e.g., admin, drs., etc.)? Why?
- 5. Have you faced staff resistance with implementing this pilot project?
- 6. What steps would you recommend to more effectively engage staff with training?
- 7. How can MMHN staff be of help?

[If needed] Is there anything else you / your clinic staff need from MMNH, e.g., what type of coaching, training or additional support?

Thank you for your time!

Clinic Staff Survey to Evaluate Quality Improvement

Thank you for answering this brief survey to help us evaluate progress with the Maternal Mental Health Integration Pilot at your clinic. This survey is completely confidential and your individual responses will not be shared. Your responses will help us understand how prepared you feel to identify and support patients with mental and behavioral health issues during prenatal and pediatric care as well as the specific challenges of this work.

We value your time and estimate that the survey will take approximately 10 minutes to complete. It is set up so that you can stop and come back to finish it. Please complete all questions by Wednesday, **August 31, 2016**.

Please feel free to contact the evaluators with any questions or concerns at cheryl@cherylwold.com

Clinic Staff Survey to Evaluate Quality Improvement

* 1. V	Vhat best describes your role at the clinic?
	Administrative
	Medical Assistant
	Behavioral Health
	Nurse
\bigcirc	Physician
	Other (please specify)

		* 2. How comfortable do you <u>currently</u> feel conducting each of the following activities?								
	Very comfortable	Somewha comfortabl			Not applicable to my job /role					
Distributing information to patients (e.g., brochures)										
Screening patients for maternal depression and anxiety										
Scoring mental health assessments										
Discussing perinatal mental health with patients										
Providing in-house services with warm hand off for maternal mental health										
Providing referrals to appropriate services (e.g., counseling, counseling support services, psychiatry)										
Following up with Behavioral Health to assure patients are receiving services										
Distributing information to patients (e.g., brochures)	A lot	Some N	ot much	None	to my job /role					
Screening patients for maternal depression and anxiety										
Scoring mental health assessments			\bigcirc							
Scoring mental health assessments					0					
Discussing perinatal mental health with patients		0								
	0		0							
Discussing perinatal mental health with patients Providing in-house services with warm hand off for maternal										
Discussing perinatal mental health with patients Providing in-house services with warm hand off for maternal mental health Providing referrals to appropriate services (e.g., counseling,										

* /	* 4. Please rate how strongly you agree or disagree with the following statements:							
		Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Not applicable to my job / role	
	Patients are able to complete the screening (e.g., sufficient language, literacy, etc.)							
	Patients have sufficient time to complete the screening							
	Staff /providers have sufficient time to score the screening							
	Staff / providers have sufficient time to talk with patients about the results							
	Patients are comfortable talking with a health provider							
	Cultural stigmas discourage discussion of mental health issues							
	Patients have negative attitudes about mental health							
	Staff can find appropriate services							
	In-house behavioral health care appointments are available when needed							
	I communicate about each patient's progress with appropriate providers							
	I feel successful in getting patients to maternal mental health care							
	5. Are there other ways that you see the integration pilo yes, please provide some examples: 6. How would you describe your understanding of the cl				·	nt care g	oals? If	
		Yes		No	Not su	re Not	applicable	
	I have a good understanding of the scope of services that Behavioral Health provides						0	
	I generally know when a patient needs to be referred to Behavioral Health							
	I am comfortable speaking with Behavioral Health about patients, as needed							
	Behavioral Health provides me with timely feedback about my patients' care							

Pilot on broad, patient-care goals so far?						
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable to my job/role
People are utilizing services and getting better						
Improved compliance with recommended care						
Improved patient outcomes						
Decreased no shows" or missed medical appointments						
9. If there is anything else you would like to tell us about please do so here.	ut your opi	nion of	how the l	ntegratio	า Pilot is	going,

* 7. How much do you agree or disagree with the following statements about the impact of the Integration

APPENDIX D. SUMMARY OF TRAINING ACTIVITIES

Evaluators are tracking training and education conducted with the pilot sites: From November 2016 through July 2017, MMHN staff provided over 40 hours of training in 18 events with 284 total attendance from the three clinic sites (18 hours with 51 total attendance at HCC, 18 hours with 164 total attendance at Eisner, and 5 hours and 69 in attendance at MLK).

Unfortunately, in an attempt to reduce demands on clinic staff time, MMHN staff decided to not collect evaluations at the conclusion of most of the clinic trainings as is typical practice. However, one exception was training at Eisner Pediatric Department for medical assistants, case managers, behavioral health providers, and other staff. Although just seven evaluations (out of 25 in attendance) were received, a summary report was provided to MMHN staff.

The psychologist from HCC attended the two-day training organized by MMHN in February 2017 on Trauma-informed care and maternal mental health and completed the on-line eLearning course created by MMHN.

MMHN also held 2 patient education events (one at HCC on 5/22/17 with 9 patients and another at MLK on 4/22/17 with 4 patients).

Date	Attendance	Staff Type	Site	Format	Hours	Notes
11/29/17	8	MD, RN, MA, Case Manager, Psychologists	НСС	In person	1	
Feb-17	1	Psychologist	НСС	2 day training	16	Conference with CEUs
Feb-16	1	Psychologist	НСС	eLearning	6	Course with CEUs
11/10/16	20	MD and MA - Pediatrics	Eisner	In person	1	
1/26/17	4	MD, RN, Case Manager, Psychologists	НСС	In person	2	screening
1/26/17	4	MD, RN, Case Manager, Psychologists	MLK	In person	2	screening
2/22/17	35	Behavioral health, MAs, Case managers	Eisner	In person	2	General PMAD integrated care, screening, treatment

2/27/17	24	MD (Ped, OB, GP), Psych, MA	НСС	In person	1.5	General PMAD and integrated care
3/9/17	25	Women's health center staff (MA, nurses, medical providers)	Eisner	In person	0.5	7 of 25 completed evaluation report
3/15/17	35	Nursing staff	MLK	In person	0.5	MMH
4/13/17	8	Behavioral health	Eisner	In person	6	IPT
4/13/17	1	Behavioral health	НСС	In person	6	IPT
4/14/17	8	Behavioral health	Eisner	In person	6	IPT
4/14/17	1	Behavioral health	НСС	In person	6	IPT
4/19/17	25	Women's clinic and hospital staff	MLK	In person	1	ММН
4/22/17	4	Patient population	MLK	In person	0.5	Patient education event
4/27/17	3	Behavioral health	Eisner	In person	1	Collaborative learning event
4/27/17	2	Behavioral health	НСС	In person	2	Collaborative learning event
4/27/17	1	RN	MLK	In person	1	Collaborative learning event
5/22/17	9	Patient population	НСС	In person	0.5	Patient education event
6/21/17	30	Pediatric Department Staff	Eisner	In person	0.5	ММН
7/20/17	35	Pediatric Department Staff	Eisner	In person	0.5	Staff retreat
Total*	284				41	

APPENDIX E. SURVEY RESULTS

Links to Findings from the Clinic Staff Surveys:

Eisner T1: https://www.surveymonkey.com/results/SM-5M9NSNRF8/

Harbor T1: https://www.surveymonkey.com/results/SM-2VQQTNRF8/

MLK T1: https://www.surveymonkey.com/results/SM-MGZZXNRF8/

Eisner T2: https://www.surveymonkey.com/results/SM-8ZDMYNRF8/

Harbor T2: https://www.surveymonkey.com/results/SM-T3XC9NRF8/

Eisner T3: https://www.surveymonkey.com/results/SM-3M3DFNRF8/

Harbor T3: https://www.surveymonkey.com/results/SM-8VZ53NRF8/

APPENDIX F. SIGNED MOU AGREEMENTS

See following six pages.

Memorandum of Understanding

Between

Community Partners for Maternal Mental Health Now and Harbor Community Clinics

AGREEEMENT PARTIES:

This Memorandum of Understanding ("MOU") is made and entered into as of July 1, 2016 ("Effective Date") by and between Community Partners for **Maternal Mental Health Now**, (hereinafter "MMHN/Community Partners"), and Harbor Community Clinics, (hereinafter "Participating Clinic"). MMHN/Community Partners and Participating Clinic are sometimes herein collectively referred to as the "Parties" and each individually as a "Party."

PURPOSE OF AGREEMENT:

The purpose of this Memorandum of Understanding ("MOU") is to clearly identify the roles and responsibilities of each Party as they relate to the implementation and evaluation of the Perinatal Mental Health Integration Project. Maternal Mental Health Now has received funding from the California HealthCare Foundation to replicate their pilot Integrated Care Project Model for incorporation of prenatal and post-natal mental health screening into the primary care delivery system / primary care teams at 3 Federally Qualified Health Centers (FQHCs). The Perinatal Mental Health Integration Project is based on principles of population-based, collaborative care, that is identifying patients with depression, anxiety, and/or other mental health symptoms and providing behavioral care and other treatment for these symptoms in the context of primary care. The Perinatal Mental Health Integration Project requires patient tracking and follow up assessments at regular intervals.

TERM:

The term of this agreement commences as of the Effective Date and shall remain and continue in effect until December 31, 2017, the end of the grant ("Project Period"). Either party can terminate this agreement with 30 days written notice.

RESPONSIBILITIES:

MMH / Community Partners:

- Consult regarding the plan and implementation of the Perinatal Mental Health Integration Project.
- Partner on the development of meaningful metrics to determine the impact of the
 Perinatal Mental Health Integration Project on clinical practice and patient outcomes.
- Provide comprehensive training, technical assistance including protocol training, patient interview techniques, workflow development and support, coaching on data collection and reporting requirements, and other support for implementation of Model as needed.
- Provide technical assistance and consultation to interdisciplinary Care Team and clinical staff and interns.
- Provide periodic population-level reporting related to the Perinatal Mental Health Integration Project.
- Manage and facilitate 4 collaborative learning events per year for 2 year project period.
- Conduct specific training for medical staff on assessment, diagnosis, and medication management.

Participating Clinic:

- Implement protocol and Perinatal Mental Health Integration Project:
- Establish an interdisciplinary team to include, at a minimum, the following members:
- Executive Champion; Primary Care Providers in OB/GYN and Pediatrics (Peds), Medical Assistants (MAs) for PCPs, Behavioral Health Specialists (Psychologist, Social Worker, Intern); Case/Care Manager for Behavioral Health Specialists.
- Provide space for periodic meetings
- Provide space for behavioral health specialists to provide psychotherapeutic interventions.
- Provide care team time to actively engage in training programs and improvement protocol.
- Implement Patient Registry and Reporting: Collect and track patient data such as baseline and follow-up assessments, referrals, and contacts with behavioral health specialists and care team at regular intervals.
- Make data extracts from Patient Registry available to the Perinatal Mental Health Integration Project Evaluator to assess effectiveness of the program and whether or not outcomes are being met.
- Attend and engage in 4 peer-to-peer learning events per year for two year project period.
- Incorporate consultant coaching into implementation plan.
- Support evaluation, data collection and de-identified data reporting: PHQ9, Edinburgh Postnatal Depression Scale 3, Baseline data, 4 progress reports over two year period.
- Agree to participate in potential long-term research efforts, data collection and/or interviews following the project period.
- Agree to be acknowledged in publications, as applicable.

Indemnification

The Parties acknowledge that the well-being and safety of patients at the Participating Clinic is the sole responsibility of Participating Clinic. As such, Participating Clinic indemnifies and holds harmless Community Partners, it employees, contractors and volunteer for any claim or liability arising out of the work undertaken in fulfillment of this MOU.

For Community Partners: DocuSigned by: 9/19/2016 Janny kum 6451DA635B6A459 Date

For Harbor Community Clinics:

SIGNATURES AND DATES:

Tamra King, CEO

Memorandum of Understanding

Between

Community Partners for Maternal Mental Health Now and

USC-Eisner Family Medicine Center

AGREEEMENT PARTIES:

This Memorandum of Understanding ("MOU") is made and entered into as of September 30, 2016 ("Effective Date") by and between Community Partners for Maternal Mental Health Now, (hereinafter "MMHN/Community Partners"), and USC-Eisner Family Medicine Center, (hereinafter "Participating Clinic"). MMHN/Community Partners and Participating Clinic are sometimes herein collectively referred to as the "Parties" and each individually as a "Party."

PURPOSE OF AGREEMENT:

The purpose of this Memorandum of Understanding ("MOU") is to clearly identify the roles and responsibilities of each Party as they relate to the implementation and evaluation of the New Family Care Team ("NFCT Model"). Maternal Mental Health Now has received funding from the California HealthCare Foundation to replicate their pilot NFCT Model for incorporation of prenatal and post-natal mental health screening into the primary care delivery system / primary care teams at 3 Federally Qualified Health Centers (FQHCs). The NFCT Model is based on principles of population-based, collaborative care, that is ,identifying patients with depression, anxiety, and/or other mental health symptoms and providing behavioral care and other treatment for these symptoms in the context of primary care. The NFCT Model requires patient tracking and follow up assessments at regular intervals.

TERM:

The term of this agreement commences as of the Effective Date and shall remain and continue in effect until December 31, 2017, the end of the grant ("Project Period"). Either party can terminate this agreement with 30 days written notice.

RESPONSIBILITIES:

MMH / Community Partners:

- Consult regarding the plan and implementation of the NFCT Model.
- Provide comprehensive training, technical assistance including protocol training, patient interview techniques, workflow development and support, coaching on data collection and reporting requirements, and other support for implementation of Model as needed.
- Provide technical assistance and consultation to interdisciplinary Care Team and clinical staff and interns.
- Manage and facilitate 4 collaborative learning events for 2 year project period.
- Conduct specific training for medical staff on assessment, diagnosis, and medication management.

Participating Clinic:

- Implement protocol and NFCT Model:
- Establish an interdisciplinary team to include, at a minimum, the following members:

- Executive Champion; Primary Care Providers in OB/GYN and Pediatrics (Peds), Medial Assistants (Mas) for PCPs, Behavioral Health Specialists (Psychologist, Social Worker, Intern); Case/Care Manager for Behavioral Health Specialists.
- Provide space for periodic meetings
- Provide space for behavioral health specialists to provide psychotherapeutic interventions.
- Provide care team time to actively engage in training programs and improvement protocol.
- Implement Patient Registry and Reporting: Collect and tract patient data such as baseline and follow-up assessments, referrals, and contacts with behavioral health specialists and care team at regular intervals.
- Make data extracts from Patient Registry available to the NFCT Model Evaluator to assess effectiveness of the program and whether or not outcomes are being met.
- Attend and engage in 4 peer-to-peer learning events over the two year project period.
- Incorporate consultant coaching into implementation plan.
- Support evaluation, data collection and de-identified data reporting: PHQ9, Edinburg3, Baseline data, 4 progress reports over two year period.
- Agree to participate in potential long-term research efforts, data collection and/or interviews following the project period.
- Agree to be acknowledged in publications, as applicable.

Indemnification

The Parties acknowledge that the well-being and safety of patients at the Participating Clinic is the sole responsibility of Participating Clinic. As such, Participating Clinic indemnifies and holds harmless Community Partners, it employees, contractors and volunteer for any claim or liability arising out of the work undertaken in fulfillment of this MOU. In turn, Participating Clinic will be held harmless for any misinformation as the result of the work undertaken in fulfillment of this MOU.

SIGNATURE S AND DATES:

For Community Partners:

Janny kum

mas Moberts SVice President & CFO

Janny Kum, Director of Finance

For [Clinic Name]

DocuSigned by:

Name and litle:

Serior VP/COO

9/20/2016

Date

Date



Los Angeles County **Board of Supervisors**

August 19, 2016

Hilda Solis First District Dear Dr. Caron Post:

Mark Ridley-Thomas

Second District

Sheila Kuehl Third District

Don Knabe Fourth District

Michael D. Antonovich Fifth District

> Cynthia M. Oliver Chief Executive Officer

Ellen Rothman, MD Chief Medical Officer

Lessie Barber, RN **Nursing Director**

1670 East 120th Street NSB-2C01 Medical Administration Medical Staff Office Los Angeles, CA 90059

> Tel. (424) 338-1501 Fax: (310)763-8909

MLK Outpatient Center is delighted to participate in the Perinatal Mental Health Integration Project. This initiative is in line with our mission and aligns with activities that we have started and hope to develop further.

We understand that in choosing to participate in this program, we will work with your team to implement and evaluate a maternal mental health integration program. We will create an interdisciplinary team that will include OB/Gyn providers, pediatricians, nursing, and mental health. We will rely on support from your team to develop metrics to assess the progress and outcomes of the mental health integration program. We will implement universal screening practices and a patient registry to track program implementation, screening rates and process and treatment outcomes. We will provide linkages to in-house providers or facilitate a warm hand-off to community-based mental health services (when necessary) for women with mental health needs identified through screening. We will also work with the evaluation and implementation team to share data related to this project, which they will use to provide our team with periodic population-level reporting on our progress. We will gladly accept the support of your team to train our interdisciplinary team on clinical best practices in maternal mental health and to ensure that evaluation of the program is rigorous and data-based. Team members from the MLK Outpatient Center will participate in four collaborative learning opportunities throughout the course of the project.

As a result of work accomplished during the implementation of this maternal mental health integration program, we understand that your team will define and make public best practices for integrating maternal mental health in medical clinics that serve low income and vulnerable populations.

We look forward to a warm and collaborative partnership.

Sincerely

CyntHla M. Oliver

