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Opportunities and Challenges of Implementing Collaborative Mental Health Care in Post-Katrina New Orleans

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Abstract

Objectives—To describe participants′ experiences with training on, and implementation of, a collaborative care mental health approach for treating depression and anxiety in post-disaster New Orleans.

Design—Healthcare providers from three organizations that participated in the Mental Health Infrastructure and Training (MHIT) program underwent semi-structured interviews.

Setting—The MHIT program provided training and clinical support to community-based agencies.

Participants—Social workers, care/case managers, primary care providers, and a psychiatrist that participated in trainings.

Intervention—The MHIT project consisted of a series of trainings and clinical support designed in collaboration with specialists from Tulane University, RAND/UCLA, the University of Washington, and local community organizations with the goal of creating local resources to provide screening, diagnosis, triage, and treatment for depression and anxiety.

Main Outcome Measures—Interview participants were asked to describe the impacts of training on the following areas: delivery of mental health services, ability to implement elements of the collaborative care model, care of clients/patients, and development of networks.

Results—Interview transcript analysis identified themes highlighting the opportunities and challenges of implementing a collaborative care model.

Conclusion—Implementation of a collaborative care model for treating depression and anxiety was possible in post-Katrina/Rita New Orleans and has potential for implementation in future post-disaster recovery settings. (*Ethn Dis*. 2011;21[Suppl 1]:S1-30–S1-37)

Keywords

Collaborative Care Model; Hurricane Katrina; Post-disaster; Implementation

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Introduction

The prevalence of mental illness significantly increased in New Orleans and surrounding communities following hurricanes Katrina and Rita.[1–4] Existing mental health services were decreased due to provider displacement and damaged infrastructure.[5]

REACH NOLA was created in 2006 to leverage community, healthcare, and academic resources to address community-identified health concerns. Increased community need for mental health resources and a desire to provide high quality, evidence-based, cost-effective care prompted REACH NOLA to create the Mental Health Infrastructure and Training (MHIT) program, which provided a series of community-academic co-led trainings on collaborative mental health care and offered clinical support to local providers and community organizations to address mental health needs in the Greater New Orleans area.[6]

Collaborative care approaches to mental health treatment have been demonstrated effective in non-specialty healthcare settings.[7] The successful implementation of collaborative care and the robustness of its impact across diverse primary care settings have been demonstrated.[8–13] Recent research has shown that collaborative care programs can be adapted for use in adults with chronic medical conditions such as diabetes,[14,15] osteoarthritis pain,[16] and cancer[17], and successfully integrated within those specialty treatment settings.

Increased community need for mental health resources and a desire to provide high quality, evidence-based, cost-effective care prompted REACH NOLA to create the Mental Health Infrastructure and Training (MHIT) program.

Building on the evidence base of collaborative care models for depression, including Partners In Care (PIC) and Improving Mood Promoting Access to Collaborative Treatment (IMPACT)[18–19], REACH NOLA along with academic partners from UCLA, University of Washington, and RAND, engaged REACH NOLA constituents in a dialogue regarding a proposed series of trainings in collaborative care that ultimately resulted in the offering of seven multi-day seminars between July 2008 and March 2010. This dialogue, which occurred in a variety of venues, helped trainers to begin tailoring materials and goals to the local audience. Training topics included principles of collaborative mental health care, team building in collaborative care, psychotherapies for depression (problem-solving treatment and cognitive behavior therapy[20]), training in the fundamentals of medication management of depression and PTSD, opportunities for interagency networking, elements of self-care, quality improvement, and mental health outreach. Training participants included community health workers, counselors, social workers, case managers, primary care providers, administrators, psychiatrists, and psychologists employed by over 70 agencies in the greater New Orleans area. Training content evolved across the training period through feedback mechanisms that included site visits with participating agencies, telephone conference calls with participants, and participant representation on the executive committee.[6]

The REACH NOLA MHIT program is an extension of an overarching community-based participatory research (CBPR) approach to organizing community response to, and recovery from, the Katrina disaster.[5] This process of engaging partners in the development of training content helps ensure that the evidence-based interventions offered in these trainings are tailored to local community/organization resources, capabilities, and contextual factors,[6] and thus to improving the likelihood of longer term sustainability and positive outcomes. In this way, the CBPR approach was utilized as a method of diffusion of innovative, evidence-based models of collaborative mental health care in the Greater New Orleans area.

In this article, we report the experience of a subset of MHIT training participants who received technical/ clinical support to implement a collaborative care approach to mental

health services in their organizations for treating patients with depression and anxiety (stress and PTSD). Specifically, we present their perspectives on identifying how participation in the training program and implementation support for mental health impacted their experiences of access to mental health care, quality of care, and network development within and across their organizations.

To our knowledge, the REACH NOLA MHIT program is the first time that a collaborative-care-based quality improvement approach for mental health treatment has been applied in a post-disaster recovery setting.

Methods

MHIT Program Training

The MHIT program is described in detail in this issue.[6]

The Collaborative Care Model

Participants in the MHIT program received training in the collaborative care model for depression treatment in primary care based upon the IMPACT study.[19] This model supports the medication management of depression symptoms by primary care providers (PCPs) in the primary care setting. A care manager does initial screenings, coordinates and facilitates further diagnostic evaluation by the PCP, provides in-person or telephone follow-up with patients, tracks treatment response, and provides updated information to the PCP regarding patient care and outcomes between clinic visits. A psychiatrist provides consultative support to the care manager in making treatment recommendations to the PCP. Screening tools are used to track symptoms over the course of treatment, and recorded in an online registry.

Interview Participants

Participants in this study were drawn from a larger sample of training participants. Of the organizations that sent participants to the MHIT program trainings, three had integrated all of the core elements of the collaborative care model, including care manager consultation support by a psychiatrist. Members of these three organizations were chosen to be interviewees for this study. The three organizations include a primary care clinic staffed by clinicians and administrators from a local academic medical center, a faith based community center that provided some health care screening and treatment services with a mobile health unit, and a community healthcare center that offered traditional and alternative care approaches to medical and mental health conditions. Each of these organizations predominantly provides care to low income and uninsured, culturally diverse, with a predominance of African-American, clients/patients. These organizations serve adult populations. Twelve healthcare workers from these three organizations (four PCPs, two social workers, two administrators, two care managers, one community health worker, and one psychiatrist) were interviewed for this study (Table 1). Ten participants were women, four were African-American, two were Latino, seven were White, and one was Asian American.

Semi-structured qualitative interviews were conducted at participants' offices or by telephone. Topics of the interview included healthcare worker training and background, implementation of the collaborative care model at the participant's organization, perceived appeal of elements of the collaborative care model, challenges of implementing elements of the collaborative-care model in their organization, impact of the MHIT program training on care in their organizations, practice patterns, and their clients/patients (Appendix A).

A REACH NOLA employee who was unaffiliated with the MHIT project conducted all interviews. Interviews were audio recorded and transcribed.

Interview Instrument Development and Analysis

The interview guide (Appendix A) for this study was modified from a guide developed for assessment of satisfaction with a collaborative-care program for treating depression and osteoarthritis pain in elderly patients.[16]

Three of the authors (KB, WB, SV) independently reviewed blinded interview transcripts to identify comments that fit into the following areas: 1) access to mental health care, 2) quality of care, and 3) network development within and across organizations. From these comments the authors generated themes. Transcript comments that did not fit into the three above areas were not included for further analysis. The three authors then compared themes and came to consensus on a set of overarching themes that were labeled as opportunities and/or challenges of implementing a collaborative care model in these organizations in post-Katrina New Orleans.

Results

Themes from the interviews were organized into two broad categories: 1) opportunities- themes that represent participant perceptions of improvements in access, care delivery, community impact with the implementation of the collaborative care model and, 2) challenges- themes that represent participant perceptions of difficulties in implementation of the collaborative care model in their organizations. Themes and supporting quotes for each category are presented in Tables 2 and 3.

Opportunities

Improved Client/Patient Access to Mental Health Care—Two organization administrators reported that implementation of elements of the collaborative care model improved organizational capacity to offer mental health services on site. These participants also suggested that integrated mental health services reduced the stigma clients/patients can associate with requesting mental health support. Also, they reported that MHIT's community health worker training program was valuable for identifying individuals in need of care in the community, again decreasing stigma about seeking mental health care.

Team Approach to Care and Improved Communication between Providers—Primary care provider participants, whose clinic had an onsite psychiatrist, social workers, and a care manager, valued having access to the care manager who provided information between patient visits. They appreciated having the support of readily accessible mental health care providers. The social worker participants from this same primary care clinic reported that they appreciated having their expertise valued and having a venue to discuss client care with other providers.

Improved Screening—Overall, participants reported that regular screening for depression and anxiety improved mental healthcare processes. A care manager reported the symptom specific screening tools, PHQ-2 & PHQ9, facilitated non-stigmatizing dialogue with patients focusing on improving functioning and accessing services. Primary care provider, social worker, and care manager respondents also reported that screening tools facilitated tracking of, and team communication about, client/patient progress. Some organizations integrated screening tools into the workflows of community outreach workers.

Care Management and Coordination of Care—All participants reported that the care manager role was integral to the success of a collaborative care model. Participants identified the care manager not only as a role, but also as a set of functions that can be distributed across different members of a care team. Some participants reported distribution and modification of care manager functions to fit their organization's service structure and needs. Others reported identifying a dedicated person as a care manager.

Improved Follow-Up between Clinic Visits—The structure for tracking clients/ patients was one of the most appealing aspects of the collaborative care model, as reported by social worker, care manager, and PCP participants. These participants viewed the collaborative care model as a tool to prevent clients/ patients from falling through the cracks. Participants reported patient tracking highlighted engagement issues sooner, creating opportunities for earlier intervention.

Improved Focus on Mental Health Issues—Comments by two PCPs, social worker, and director of clinical services participants highlighted that MHITs program training improved their knowledge and focus on mental health issues in their day-to-day work. The PCPs reported increased comfort in screening for depression and anxiety, use of antidepressants, and referral for specialty mental health services to the care manager or social worker.

Challenges

Lack of Onsite Services—Participants identified not having all service elements, particularly onsite PCP's, within their given organization as a barrier to implementation. Other participants reported that having few organization staff with multiple responsibilities, and part-time organization staff, as challenges to implementation of the collaborative care model as well.

Integration of Care Manager—Social worker, care manager, and psychiatrist participants reported that addition of care manager functions to existing responsibilities was difficult, creating a perception that the collaborative care model was too burdensome to implement and represented additional work on already strained resources. Some organizations resolved this by dedicating a staff member to care management or distributing care manager functions among different individuals.

Care manager participants also reported lack of infrastructure such as office space and protected time to meet with clients/patients as barriers to implementation of care management. One care manager reported that lack of a formalized process for introducing the care manager to a patient/client prior to follow-up telephone contacts made client/patient engagement difficult.

Initial Provider/Client Buy-in—Care manager and social worker participants reported that implementation required consistent buy-in and support from different levels within an organization as implementation necessitated change to existing organization structure and culture of care. Care manager participants reported experiencing these changes as frustrating because clinicians did not: consistently use protocols within the collaborative care model, use screening tools, or update the team about patient status as care progressed. Primary care provider participants experienced difficulty with implementation because the mental health referral process seemed to be ever changing. Screening all patients for depression added an additional task that seemed to compete with other care objectives within a clinical visit. Social worker/care manager participants suggested that the collaborative care model may

challenge a PCP's philosophy about what is, or is not, within scope of care and clinical responsibility.

Finally, social worker, care manager, and PCP participants identified the clients/patients as barriers to effective implementation of collaborative care. Some patients would express initial interest in addressing mental health needs, but did not appear for initial appointments with the care manager. Other patients began a collaborative care treatment plan, but did not keep follow-up appointments, or respond to between-visit telephone calls.

Web-based Patient Registry Implementation—None of the participants reported implementation of the web-based patient registry designed to support collaborative care. Barriers to implementation included perception that the registry was too difficult to use in a non-primary care setting and concern that it was redundant in an organization that already had an electronic medical record (EMR) system. One organization administrator reported that concurrent interest in using the web-based registry competed scheduled modifications or updates to their EMR systems compete with objectives of EMR implementation, and it seemed simpler to find ways to use the existing EMR to do some of the registry functions.

Screening Tools—Some participants questioned whether screening tools accurately reflected patients' functioning as they reported that some patients found questions confusing or had difficulty completing the questionnaires, possibly due to limited literacy.

Discussion

This study attempted to gain impressions from program participants regarding the application of a collaborative care model to address depression and anxiety. The results suggest that participants in the REACH NOLA MHIT program were open to implementation of the collaborative care model of delivering mental health services, and valued the training and support provided by the MHIT program.

That participating organizations were able to integrate the core components of the collaborative care model suggests that the CBPR approach to organizing community response post-disaster is an effective method for diffusion of innovative, evidence-based mental health interventions. A critical step in the diffusion and dissemination of service delivery innovations is the engagement of key stakeholders, decision makers, change agents, and com-municators.[21] The CBPR process in general, and the MHIT program in particular, accomplished this objective.

The results suggest that participants in the REACH NOLA MHIT program were open to implementation of the collaborative care model of delivering mental health services, and valued the training and support provided by the MHIT program.

Collaborative care models of mental health treatment build upon the strengths of primary care and mental health approaches to care, and evidence-based approaches to chronic disease management.[22] These strengths appear to be the same elements that participants reported as appealing: the multi-disciplinary approach to client/patient care, systematic screening, tracking of outcomes, and utilization of a specialized care manager.

The limited mental health resource environment of this implementation fostered creative implementation of the collaborative care model. Sharing of resources across organizations for care management and primary care occurred among some of the participating organizations. Within some organizations, the care manager tasks were distributed creatively to address client/patient needs. Probably the most novel incidence is the integration of outreach/ community health workers into the collaborative care model. These individuals

were trained to do screenings for depression and anxiety, trained in problem-solving therapy, and trained to foster connection of potential clients/ patients to primary care and other healthcare centers in the community.[23]

Physician participants in this study indicated that having close follow-up by the care manager was a valuable component of the collaborative care model. This finding is similar to that of a survey of physicians who participated in the IMPACT trial, which demonstrated that given limited PCP time and resources (even in a non post-disaster setting), having a care manager whose responsibility it is to educate patients about mental illness and provide structured follow-up between clinical visits as the most helpful component of the collaborative care model.[24]

Participants report the advantage of tracking data on patient progress, yet found implementation of a web-based registry burdensome, particularly in those organizations that already had EMR systems in place. The function of a registry to support collaborative care is not only to be a repository of disorder specific data over the course of treatment, but to also present the data in a way that encourages its real-time use for clinical decision making. Integration of a web-based registry does require specialized local IT support, and access to this may have been a barrier to its implementation for organizations. The registry approach to managing data can be done manually in a pen and paper fashion. This approach has been successful in other low resource settings.[25] This option was not specifically highlighted in the trainings and might have been a more viable option for the care managers.

A number of respondents in this study commented that implementation of a collaborative care model in their organizations met with some resistance, and suggested that this was due to perceptions that treating mental health was not within scope of the PCPs' practice, that PCPs did not have enough training to participate, or that collaborative care tasks such as screening were too time consuming. Previous studies of provider satisfaction with a collaborative care model suggest that these attitudes change over time with continued organizational, administrative buy-in and support of the collaborative care model.[24] Previous studies have also shown that objective evidence of client/patient improvement was the single most important factor, and motivator, for participating providers to continue with the collaborative care model.[19,24,26] Of special consideration, however, is the impact of post-disaster and recovery conditions on healthcare providers of all types in New Orleans. It is well documented that while providing care to the community in the context of often unpredictable and shifting priorities that can characterize recovery in a post-disaster setting, providers were also experiencing their own trauma and losses as a result of the disaster.[27,28]

This post-disaster impact is also relevant to patients/clients, many of whom were very focused on rebuilding their homes, which took priority over seeking mental health care.[27] The reality is that for many served by the organizations that participated in the MHIP program, stable housing, telephone or other methods of contact were still not in place. These two realities may well explain why some clients/patients, while expressing interest in addressing their mental health needs, were not able to consistently follow-up.[27,28]

This study was conducted in the context of a quality improvement effort without additional resources to do structured evaluation of the collaborative care model in this post-disaster setting and therefore this study has significant limitations. First, only a small fraction of those who participated in the MHITs program were interviewed, so perspectives offered here are not necessarily generalizable to the rest of the program participants. Second, there was no control group, or usual care group, for comparison, and so there is no way to identify what factors are most salient to successful implementation of a collaborative care model in this post-disaster setting. Third, the results reported here represent perspectives offered only

after implementation of the MHIT training program. Without pre-implementation data for comparison, we are unable to comment definitively on any changes in attitudes, motivations, or clinical practices. And finally, no client/patient outcomes data were gathered, and so any conclusions about the effectiveness of the collaborative care model in this setting are speculative at best.

In spite of these limitations, this study highlighted some interesting points that may serve as initial guidance for future implementations of collaborative-care models in a post-disaster setting: 1) by their nature, collaborative care models are flexible and allow for creative implementation, particularly with regard to screening and care manager functions; 2) it is feasible to integrate community health workers into screening and intervention components of the collaborative care model; 3) the role of the care manager is a fulltime task and in limited resource situations, sharing care manager tasks with dedicated support to do the tasks may be the best way to approach getting the tasks integrated; 4) screening tools can be very effective at decreasing community stigma about mental health issues by helping clients/patients focus on functional improvement; and 5) it is possible to obtain components of the collaborative care model by sharing resources across organizations.

References

1. Wang PS, Gruber MJ, Powers RE, et al. Mental health service use among Hurricane Katrina survivors in the eight months after the disaster. PsychiatServ. 2007; 58(11):1403–1411.
2. Kessler RC, Galea S, Jones RT, Parker HA. Mental illness and suicidality after Hurricane Katrina. Bull World Health Organ. 2006; 84(12):930–939. [PubMed: 17242828]
3. Sastry N, Van Landingham M. One year later: Mental illness prevalence and disparities among New Orleans residents displaced by Hurricane Katrina. Am J Public Health. 2009; 99:S725–S731. [PubMed: 19890178]
4. Galea S, Brewin CR, Gruber M, et al. Exposure to hurricane-related stressors and mental illness after hurricane Katrina. Arch Gen Psychiatry. 2007; 64(12):1427–1434. [PubMed: 18056551]
5. Springgate B, Allen C, Jones C, et al. Rapid community participatory assessment of health care in post-storm New Orleans. Am J Prev Med. 2009; 37:S237–S243. [PubMed: 19896025]
6. Springgate B. Down in New Orleans. Health Affairs. 2007; 26:1426–1430. [PubMed: 17848454]
7. Gilbody S, Bower P, Fletcher J, et al. Collaborative care for depression: a cumulative meta-analysis and review of long-term outcomes. Arch Intern Med. 2006; 166:2314–2321. [PubMed: 17130383]
8. Grypma L, Haverkamp R, Little S, Unutzer J. Taking an evidence-based model of depression care from research to practice: making lemonade out of depression. Gen Hosp Psychiatry. 2006; 28:101–107. [PubMed: 16516059]
9. Dietrich AJ, Oxman TE, Willliams JW, et al. Going to scale: re-engineering systems for primary care treatment of depression. Ann Fam Med. 2004; 2:301–304. [PubMed: 15335127]
10. Asarnow JR, Jaycox LH, Duan N, et al. Effectiveness of a quality improvement intervention for adolescent depression in primary care clinics: a randomized controlled trial. JAMA. 2005; 293(3): 311–319. [PubMed: 15657324]
11. Nutting PA, Gallagher KM, Riley K, et al. Implementing a depression improvement intervention in five health care organizations: experience from the RESPECT-depression trial. Adm Policy Ment Health. 2007; 34:127–137. [PubMed: 16967338]
12. Wells KB, Sherbourne C, Schoenbaum M, et al. Impact of disseminating quality improvement programs for depression in managed primary care: a randomized controlled trial. JAMA. 2000; 283(2):212–220. [PubMed: 10634337]
13. Pincus HA, Pechura C, Keyser D, Bachman J, Houtsinger LK. Depression in primary care: learning lessons in a national quality improvement program. Adm Policy Ment Health. 2006; 33(1):2–15. [PubMed: 16215667]
14. Katon WJ, Von Korff M, Lin EHB, et al. The pathways study: a randomized trial of collaborative care in patients with diabetes and depression. Arch Gen Psychiatry. 2004; 61:1042–1049. [PubMed: 15466678]

15. Gilmer TP, Walker C, Johnson ED, Philis-Tsimikas A, Unutzer J. Improving treatment of depression among Latinos with diabetes using project Dulce and IMPACT. Diabetes Care. 2008; 31(7):1324–1326. [PubMed: 18356401]

16. Unutzer J, Hantke M, Powers D, et al. Care management for depression and osteoarthritis pain in older primary care patients: a pilot study. Int J Geriatr Psychiatry. 2008; 23:1166–1171. [PubMed: 18489009]

17. Ell K, Bin X, Quon B, et al. Randomized control trial of collaborative care management of depression among low-income patients with cancer. J Clin Oncol. 2008; 26(27):4488–4496. [PubMed: 18802161]

18. Wells KB, Sherbourne CD, Schoenbaum M, et al. Impact of disseminating quality improvement programs for depression in managed primary care: A randomized controlled trial. JAMA. 2000; 283(2):212–220. [PubMed: 10634337]

19. Unutzer J, Katon W, Callahan CM, et al. Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. JAMA. 2002; 288(22):2836–2845. [PubMed: 12472325]

20. Ngo VK, Centanni A, Wong E, Wennerstrom A, Miranda J. Building capacity for cognitive behavioral therapy delivery in resource poor disaster impacted contexts. 2010

21. Unutzer J, Powers D, Katon W, Langston C. From establishing an evidence-based practice to implementation in real-world settings: IMPACT as a case study. Psychiatr Clin N Am. 2005; 28:1079–1092.

22. Thielke S, Vannoy S, Unutzer J. Integrating mental health and primary care. Prim Care Clin Offce Pract. 2007; 34:571–592.

23. Wennerstron A, et al. CHW paper. 2010

24. Levine S, Unutzer J, Yip JY. Physician's satisfaction with a collaborative disease management program for late-life depression in primary care. Gen Hosp Psychiatry. 2005; 27:383–391. [PubMed: 16271652]

25. Araya R, Rojas G, Fritsch R, et al. Treating depression in primary care in low-income women in Santiago, Chile: a randomized controlled trial. Lancet. 2003; 361:995–1000. [PubMed: 12660056]

26. Blasinsky M, Goldman HH, Unutzer J. Project IMPACT: a reports on barriers and facilitators to sustainability. Adm Policy Ment Health. 2006; 33:718–729. [PubMed: 16967339]

27. Springgate B. Down In New Orleans. Health Aff (Millwood). 2007; 26(5):1426–1430. [PubMed: 17848454]

28. Brideau J, Cerise FP, Boyte WR, et al. Witness to disaster (Lydia's story). Health Affairs. 2006; 25(2):478–490. [PubMed: 16522589]

Appendix A. Interview guide

- How does collaborative care for depression work?
- Were there elements of the collaborative care program that were more appealing than others?
- What do you like most about the collaborative care program at your organization?
- What were some of the challenges for your organization to implement the collaborative care program?
- What have been the most important barriers to implementing the collaborative care program?
- Were there elements of the collaborative care program that were less appealing than others?
- What would you say you liked least about the collaborative care program and how it could be improved?
- What aspects of the program have been most helpful to your patients?
- What aspects of the program have been most helpful to you?
- Is there anything that could have been done differently to encourage uptake or use of the collaborative care model by your organization?

Table 1

Characteristics of participants interviewed

Age (y)	Sex	Training	Highest Degree	Current position*	Years at position†
41	F	Public health	Masters	Executive director	2+
33	F	Medicine	MD	Physician	1+
35	F	Medicine	MD	Physician	4
35	F	Medicine	MD	Physician	1+
65	M	Education/counseling	Masters	Program coordinator	1+
29	F	Sociology	BA	Social service support	1+
40	F	Social work	Masters	Social worker	2+
34	M	Medicine	MD	Physician	2+
51	F	Nursing	BA	Community wellness director	3.5
27	F	Behavioral psychology	BS	Care/case manager	10 months
40	F	Nursing	Masters	Director of clinical services	1.5
35	F	Social Work/public health	Masters	Social worker	1

*position at current organization at the time of interview

†number years at current position

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Table 2

Themes that describe opportunities as a result of implementation of collaborative care model

Theme	Example quotation
Team approach to care	''My impression was that the patient care should be done by both the primary care and the mental health providers… as a true collaboration with the mental health provider and the primary care provider working hand-in-hand.'' [SW]
Care management and coordination of care	"Having the care manager coordinate mental health patients and implementing the screening on all our patients have been two biggest things that I've noticed that have helped improve our processes, and improve the flow of patients as well as hopefully the outcomes of patients.'' [ADM]
Improved screening	"The screening tools have been helpful… in trying to get people to see how what's been going on with them is affecting different areas of their lives." [CM]
Improved access to care	"Coming from a culture where mental health is almost like a taboo subject…we made it a little bit more acceptable to come in and request to see a social worker, or request that you would like to talk to someone about what's going on." [ADM-2]
Improved between visit follow-up	"Being able to discuss the patient's care with the care manager, informally, in between visits…because a lot of times they get different sides of the story." [PCP]
Improved communication between providers	"Helps to lessen the hierarchical kind of structure that often occurs in a primary care clinic between mental health people and the primary care physicians." [SW-2]
Improved focus on mental health issues	"The training has personally helped me grow in my knowledge of mental health issues. And therefore has helped me to get our program in a better shape than what it was before. And then by doing that, it's just helped the patients in the long run too." [ADM]
	"I tend to use anti-depressants a lot more because the conversation comes up. I tend to refer a lot more for cognitive therapy than I ever did before. And also I'm always going to be following up relatively quickly." [PCP-2]

ADM= administrator; CM= care manager; PCP= primary care provider; SW= social worker

Table 3

Themes that describe challenges with implementation of a collaborative care model

Theme	Quotation
Lack of onsite medical services	"The fact that we don't have everything under one roof is one of our biggest problems." [ADM]
Integration of care manager	"We've parachuted some roles into the clinic setting on top of people who already had other work to do. And it felt burdensome, particularly for the social workers who wanted to start doing care management tasks on top of the tasks that they're already responsible for." [PSY]
Provider and patient buy-in to use of model	"Asking primary care providers to be engaged in treatment and addressing mental health issues… requires a certain change in culture and outlook. And you have to have significant buy-in from the different members of the team." [SW]
	"Our referral process and getting the patients to the services and just the steps that we have to follow. It seems to be ever changing." [PCP]
	"There are some patients who say they agree to the care management, to the collaborative care model, and they really don't. They don't want anybody calling their house… you can't get in touch with them, for whatever reason." [CM]
Patient registry	"We looked into the online database type patient registry. Although it was good in and of itself, we were also at a point where we were trying to implement our electronic medical record system so we felt that it was necessary for us to put in our energies into establishing our own in-house system." [ADM-2]
Screening tools	"… the PHQ-9. In one sense it's appealing because it's objective and it's something that you can quickly look at as snapshot for progress. On the other hand I've noticed and we've had a lot of comments from those in our organization about it, feeling that it wasn't accurate." [PCP-2]
	"I find the PHQ9 is not the best screening tool because sometimes the patients are confused by it… (they) have a hard time reading it and understanding what we're really asking." [PCP-3]

ADM= administrator; CM= care manager; PCP= primary care provider; SW= social worker