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Establishing an Integrated Health Care Clinic in a Community Mental Health Center: Lessons Learned

Aniyizhai Annamalai^{1,2} • Martha Staeheli^{1,2} • Robert A. Cole^{1,2} • Jeanne L. Steiner^{1,2}

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Abstract Integrating primary care with behavioral health services at community mental health centers is one response to the disparity in mortality and morbidity experienced by adults with serious mental illnesses and co-occurring substance use disorders. Many integration models have been developed in response to the Primary and Behavioral Health Care Integration (PBHCI) initiative of the Substance Abuse and Mental Health Services Administration (SAMHSA). One model is a primary care clinic co-located within the mental health center. The Connecticut Mental Health Center (CMHC) Wellness Center is one such co-located clinic developed as a partnership between CMHC and a Federally Qualified Health Center (FQHC). In this article, we describe the process of developing this on-site clinic along with lessons learned during implementation. We review different aspects of building and maintaining such a clinic and outline lessons learned from both successes and challenges. We briefly describe the demographics and health characteristics of the patient population served in this clinic. We make recommendations for providers and agencies that are considering or are already developing a model for integrating care. Finally, we briefly review status of our clinic after completion of grant funding.

Keywords Integrated care \cdot Co-located care \cdot Serious mental illness \cdot Medical co-morbidity \cdot Medical care of patients with serious mental illness \cdot Care coordination \cdot Peer health navigators \cdot Behavioral health home \cdot Community mental health center \cdot Federally qualified healthcare center

Introduction

Integrated health care clinics are being established within community mental health centers as one response to the disparity in mortality and morbidity experienced by adults with serious

Aniyizhai Annamalai Aniyizhai.annamalai@yale.edu

¹ Connecticut Mental Health Center, 34 Park St, New Haven, CT 06519, USA

² Yale School of Medicine, New Haven, CT, USA

mental illnesses. The Substance Abuse and Mental health Services Administration (SAMHSA) alone has funded over 180 "pilot" projects to establish such clinics. Based on our collective experience with establishing one such clinic, we describe lessons learned that might be of use to others facing similar challenges.

Background

It is now well established that people with serious mental illness (SMI) have a higher risk of mortality and decreased life expectancy compared to those without any mental illness [1, 2]. Medical conditions, rather than suicide and injury, account for the majority of this excess mortality. Many factors contribute to the increased medical comorbidity in this population including health system factors, socioeconomic variables, stigma and discrimination, and clinical characteristics [3]. People with SMI do not receive adequate treatment for medical conditions [4]. Mental health centers provide an opportunity to enhance access to medical care for people with SMI as for many, they are the only source for any health care.

Models integrating medical and behavioral health range from facilitated referrals and improved care coordination between two different sites to a fully integrated system that provides both medical and psychiatric care [5]. A range of interventions to improve general medical care have shown improved linkage to primary care and health outcomes with no increase in health care costs [6]. There is some evidence that programs that are more integrated result in greater improvement in physical health [7]. A model of medical care management, wherein care managers provide communication, advocacy, health education and support in navigating health systems, showed improved access to primary care, quality of medical care and use of preventive services [8].

In 2009, the Substance Abuse and Mental Health Services Administration (SAMHSA) launched a Primary and Behavioral Health Care Integration (PBHCI) grants program to promote the development of integrated health care services, specifically to improve physical health status of adults with serious mental illness and cooccurring substance use disorders. Over the past seven years, more than 180 grantee organizations have received funding through this mechanism. The basic requirements include screening and referral for general medical illnesses, development of data registries to track primary care outcomes, integrated care management, and provision for preventive and wellness services. Each grantee has used a different approach to integration while incorporating these core elements. PBHCI programs have shown early but promising improvements in engagement with medical services and health outcomes [9, 10]. On-site primary care with care management is one approach to integrated care and many grantees have established this with a partnership between a community mental health center and a Federally Qualified Health Center (FQHC). This model of moving primary care into a community mental health center shows potential for improving health outcomes [11].

In this paper, we describe one such co-located clinic in New Haven, Connecticut under the PBHCI program from 2013 to 2016 that has recently completed the period under the grant. We hope that the lessons we learned establishing and sustaining this clinic will be useful to PBHCI grantees and others who are bringing primary care into community mental health centers.

On-Site Clinic

The Connecticut Mental Health Center (CMHC) is a state operated, urban, community mental health center affiliated with the Yale School of Medicine that provides behavioral health treatment to more than 5000 low-income persons with serious mental illness and substance use disorders in New Haven, Connecticut each year. Services include outpatient and inpatient care, walk-in services and community rehabilitation. Blacks and Hispanics comprise 26% and 39% of the center's population, respectively. CMHC's La Clinica Hispana serves monolingual Spanish-speaking patients. Twenty two percent of CMHC patients are uninsured. Prior to the SAMHSA funding, on-site medical services were provided by a consultative medical evaluation unit staffed by a physician assistant employed by CMHC who mostly attended to inpatients and urgent medical needs of outpatients.

Cornell Scott Hill Health Center (CS-HHC) is an FQHC serving the New Haven population at 18 sites. CS-HHC provides primary care, behavioral health, dental, laboratory, nutrition, and pharmacy services. Approximately 24% of patients are uninsured.

The CMHC Wellness Center is an on-site primary care clinic formed in partnership between CMHC and CS-HHC for CMHC outpatients. During the period of grant funding, the Wellness Center was staffed by two full time peer health navigators, a full time nurse care manager, a medical assistant, and a part-time nurse practitioner. Staffing has changed slightly after completion of the grant period, as will be described later. Providers fluent in both English and Spanish were hired, when possible. Professional interpreter services for other languages, including sign language, are available. Several other key clinical and administrative personnel in both organizations are responsible for overseeing daily clinical operations. Over the life of the grant, 658 CMHC patients were enrolled in the Wellness Center, with approximately 420 patients seen in 2016, the final year of the PBHCI grant. The demographic characteristics of patients of the Wellness Center and the general CMHC population for 2016 are described in Table 1, and were similar, except that Wellness Center clients were more likely to be male, and slightly older, with a higher proportion of black patients. The gender difference was statistically significant. The most common psychiatric diagnoses of these patients were schizophrenia and schizoaffective disorder.

Patients are primarily referred to the Wellness Center by a CMHC clinician. While referrals are often based on results of screening for health indicators (e.g., engagement with a primary care provider, medical history, tobacco and other substance use history, fasting blood sugar or glycosylated hemoglobin (HbA1c), fasting lipid profile, body mass index, and blood pressure),

%		Wellness Center $N = 420$	CMHC N = 3515
Race	White	35.6	40.3
	African American	40	35.5
	Asian	0.7	1.2
	Other	23.7	22.9
Ethnicity	Hispanic	23.8	26.4
	Non-Hispanic	76.2	73.6
Gender	Male	62.9	44.6
	Female	37.1	55.4
Age	Average	48	44.6

Table 1 Demographics of Wellness Center Patients compared with the CMHC Population

patients may be referred simply for preventive care also. Patients can also refer themselves. For specialty services, patients are referred to community or hospitalbased practices by the Wellness Center. CS-HHC is a large comprehensive FQHC, with many medical specialty clinics at its main campus, which is located less than a mile from CMHC's main facility. Pharmacy services are located on CS-HHC's main campus. CS-HHC maintains electronic medical records and CMHC currently uses paper charts for their patients. Patient consent is obtained for sharing medical information.

In addition to primary care services, the Wellness Center provides many health promotion programs for prevention and management of chronic conditions. Examples include health fairs, groups for weight loss, smoking cessation and diabetes management, and workshops on heart disease, cancer screening and nutrition education. The groups are co-facilitated by a wellness specialist with a nursing or social work background, and a peer health navigator. A qualified nutritionist is available for 1:1 consultations for people referred by the nurse practitioner. Wellness Center patients are also eligible to participate in existing CMHC health promotion initiatives including exercise groups, and guest chef demonstrations.

CMHC serves as a behavioral health home (BHH) for eligible Medicaid enrollees. The Connecticut Department of Mental health and Addiction Services (DMHAS) developed BHHs for people with serious mental illness and co-occurring substance use disorders to improve chronic care delivery. The BHH initiative started at CMHC in the last year of the grant and BHH staff served as an additional resource for care coordination for medical services.

Lessons Learned

Partnership

Prior to the development of a co-located primary care clinic within CMHC, there was a long history of providing medical care to those with serious mental illness. For 15 years, CMHC maintained a consultative medicine service with a full time on-site physician assistant and 0.3 FTE visiting internists. There was no longitudinal care and no ancillary services like nursing staff or after-hours on-call medical service but patients received as-needed urgent care. Both administrative leadership and staff at CMHC, including psychiatrists and non-medical clinicians, had a tradition of assessing and arranging for medical services, when possible. The PBHCI funding allowed us the financial capability to reorganize our services to provide co-located primary care services.

It is important in the beginning stages of planning an integrated clinic that partnering institutions are carefully selected. Several characteristics can be helpful in the collaborating agency:

- a) Prior experience with integrated clinic management our partner FQHC had a long history of operating 'care sites' at community-based behavioral health agencies and had recently partnered with three area CMHCs as part of an earlier PBHCI cohort.
- b) Financial viability For a co-located clinic model, FQHCs are a good choice as they are able to bill for primary care services at the favorable Prospective Payment System (PPS) rate compared with hospital based or freestanding clinics.

- c) Shared vision The partner agency should have as their mission a similar goal to provide quality health care for local low income and medically underserved populations, including those with mental illness.
- d) Past collaborative relationship Both CMHC and CS-HHC have operated in the local community for several years and have developed a good working relationship. Administrative and clinical leadership in both institutions were already building a plan to co-locate medical services at CMHC. The grant funding provided the impetus to actually implement the plan.

Financing

As mentioned above, FQHCs provide a better chance of sustainability due to favorable PPS rates compared with other reimbursement models. Until a time when outcome based payments are implemented in clinical practice and reimbursement is not based on volume of service, FQHCs will remain a preferred partner choice for integrating care. As our integrated care model was co-located primary care, we had to renovate space within CMHC to build a clinic. The cost of furnishing this clinic as a full-fledged medical facility was built into grant start-up costs. The operating budget of the clinic during the grant period consisted of patient care revenue generated by CS-HHC, supplemented by SAMHSA PBHCI grant support for unreimbursed costs, including the salaries of the two peer health navigators. A limited amount of supplemental grant support was provided by DMHAS to underwrite the cost of co-payments and sliding fee scale payments ordinarily required by CS-HHC from its patients. This made it possible for CS-HHC to waive the collection of these fees, thereby removing a potential barrier to care for CMHC's patients.

Even with an FQHC, it was important to maintain high show rates for patient appointments. Lower patient volume was a threat to future financial sustainability. We tried different methods to improve patient show rates. We instituted reminder phone calls to patients a day before the appointment. We changed the clinic schedule to concentrate it on days and times with maximum show rates. People who missed multiple appointments were not given a scheduled time; instead, we designated specific clinic slots to be used as walk-ins for them. All these innovations improved our show rates to that seen in other sites of CS-HHC. But revenue is still inadequate to make up for the additional services provided by the nurse care manager, as those are not usually reimbursable. This remains an ongoing challenge.

Another financial consideration is affordability for patients. For patients without any health insurance, CMHC provides no-cost behavioral health treatment to individuals living at or below the poverty level. CS-HHC provides low-cost medical care for individuals on a sliding-fee scale, including those services at the Wellness Center, with a minimum \$20 required payment. This minimum sliding fee scale payment would have been a significant barrier to accessing services at the Wellness Center for many CMHC patients. Since there was no provision for this in the grant budget, CMHC administrators secured other funds for this through the Connecticut Department of Mental Health and Addiction Services (DMHAS). Specialty visits outside of the Wellness Center are funded, in part, by a local initiative, *Project Access*, which provides urgent specialty care for uninsured patients. Costs for lab services for uninsured patients are covered by CMHC funds as has always been the case. Costs for medications for medical conditions are borne by patients who are uninsured. But they are able to pay discounted prices as CS-HHC pharmacy participates in several cost savings

programs. We learned how important it was to work out details of these different mechanisms before the Wellness Center opened and started providing services.

One role that we did not initially budget for was that of a receptionist or front desk scheduling staff. It soon became apparent that we needed a person specifically for the role of registration, scheduling, checking-in patients, and receiving non-urgent messages from behavioral health staff for clinic providers. There was sufficient revenue generated from patient care to cover this additional cost. Neither the nurse care manager nor health navigators were able to perform these duties in addition to their care management responsibilities.

Personnel

We realized early on that establishing and maintaining the clinic was going to require a group effort with key personnel from both partnering institutions. The PBHCI grant did not include money for a project coordinator position. Thus, one of our first steps was to form a steering committee composed of representatives from CMHC and CS-HHC. The committee is a team-based effort for coordination of services. Members include Wellness Center staff including clinicians and managers; peer health navigators; administrative staff, medical directors and financial heads of each institution; evaluation team; a representative of the Wellness Center advisory board, and a CMHC-based internist-psychiatrist who serves as the liaison between the medical and behavioral health teams. The Wellness Center advisory board, comprised of patient representatives from the Wellness Center and CMHC staff, was formed to provide a forum for feedback on the operations of the Wellness Center. With the exception of clinic staff and evaluators, most of the steering committee representatives offer "in-kind" effort. The committee meets monthly and discussions center on periodic data review as well as management of day-to-day issues such as workflow. This centralized process was vital to coordination between clinical, administrative and data teams.

It is important to find primary care clinic staff who are comfortable working within the integrated care environment. Some helpful characteristics in the primary care provider and other ancillary staff are:

- a) Ability and willingness to work in teams Primary care in general is still not team based and physicians, mid-level providers, nurses and medical assistants may not be used to working in teams.
- b) Reasonable comfort level working with people with serious mental illnesses People with serious mental illnesses can present challenges less commonly seen in primary care. They may present with acutely dangerous situations like agitation, threatening behaviors, violence or may express suicidal intent during a primary care visit. They may present with chronic issues of impaired cognition, higher rates of non-adherence to prescribed treatment and higher rates of co-morbid substance use. Residual psychotic symptoms can interfere with accurate communication of medical symptoms. Primary care providers have to learn to address these clinical situations appropriately.
- c) Interest in health disparities Health disparities can result from factors including differences in race, ethnicity and economic status. Providers who are familiar with caring for racially, ethnically, linguistically diverse patients may be better able to address these disparities.
- d) Interest in social determinants of health Providers need to be cognizant of social determinants of health, which may include differences in socioeconomic status, education, culture, or support network. Many of these determinants, like unstable housing and employment, often directly impact health and access to services.

e) Preference for working in integrated care – Providers with an interest in improving health outcomes for those with serious mental illnesses and the willingness to learn are likely to respond constructively to clinical problems, whether medical or behavioral.

Whenever possible, the staff in the mental health center should be involved in the hiring process for a co-located clinic, though they are employees of the partner institution. A good partnership and collaboration also helps in managing personnel difficulties, such as differing levels of experience working with individuals who exhibit challenging behaviors or cognitive impairment. We were able to add training and request modifications when significant problems arose. We find that constant feedback from CMHC clinicians to Wellness Center staff is essential for improving quality of services delivered. Whenever possible, we also requested time for educational sessions even at expense of clinic time and revenue. Our education targets were awareness of common symptoms of mental illness, prioritizing health concerns with limited time and sub-optimal patient engagement, and recognizing and addressing social determinants of health.

A unique component of our model was use of peer health navigators. Peers with lived experience of mental illness were hired as patient navigators. While their personal experience formed a critical piece of their successful engagement with patients, it was also important for them to have an awareness of medical co-morbidities and understand the role of care coordination. Whenever possible, navigators with diverse skill sets should be hired. For example, some have interest and expertise in substance use and others may have a high degree of comfort working with cross-cultural populations.

Shared Culture and Ownership

A successful integrated clinic environment requires that behavioral health staff are also attuned to the culture of a medical clinic. CMHC had a long history of providing medical care, by monitoring health indicators and facilitating referrals and consultations when indicated. While these services were limited in scope, behavioral health clinicians were aware of high medical comorbidity in patients and already familiar with medical terminology. In places where this may not be the case, some effort should be put into the education of behavioral health clinicians on the necessity of and processes in medical care models. We also held a workshop for the primary care staff on symptoms of mental illness and approach to patients with serious mental illnesses. We included health navigators in the workshop and designed team-building exercises to foster a team experience.

Such learning sessions may need to occur at the expense of clinician time and clinic revenue, especially if it occurs on a regular basis. Hence, we feel it is important for both organizational partners to acknowledge the need for this and to outline a plan for such combined learning from the outset. The monthly steering committee meetings helped foster a feeling of collaboration and a sense of ownership between the two institutions, as well as an opportunity to identify areas of growth and educational potential. Many other smaller sub-committee and working group meetings also occurred between members of both institutions.

Clinic Workflow

Workflow processes are often very different in primary care and behavioral health settings. In addition to a need for clinicians on both sides to understand differences in workflow, patients need assistance in modulating expectations from the primary care staff. Staff in a primary care clinic are used to working in a fast-paced environment with short patient visits and little flexibility in managing unscheduled visits. This may be very different from mental health centers, many of which may have an open access policy for patient visits. Educating patients and helping them navigate a different workflow is important to retain them in primary care.

In addition to workflow, many administrative and procedural challenges will inevitably occur when running such a co-located clinic. Even with minor and seemingly simple problems, successful resolution requires teamwork. One example was the FQHC's requirement that each patient provide photo identification for registration. Many CMHC patients, including those who are undocumented immigrants, do not have photo identification. Administrators of both agencies had to confer before it was determined that other forms of identification, including personal "vouching" by a CMHC staff member, could be used as verification.

We wanted to make the registration process as simple as possible for both staff and patients. We created two referral streams – patient self-referral and referral by behavioral health clinicians. A majority of patient referrals to Wellness Center were initiated by clinicians. The registration packet included demographic data and clinical information on known medical and psychiatric history along with an active medication list. Patients also signed a two-way consent form if they agreed to exchange of medical information between the two organizations. In our experience, patients willing to receive care at the on-site primary care clinic were also agreeable to allowing exchange of medical information.

Patient Engagement

The first step in improving patient outcomes is to keep patients engaged in care. We had no problems enrolling patients in care and in fact we greatly exceeded our target. This likely reflected the need that CMHC clinicians had recognized for a long time. Patients liked the convenience of seeking care at the same location. But some patients with primary care providers chose to remain in their current treatment location and some were still not interested in any medical care.

We exceeded our grant-mandated enrollment goal of 600 patients, and retained most patients in care at a rate of 65% over the life of the project. Most patients who withdrew from care at the Wellness Center also had been discharged from CMHC. However, show rates (also around 65%) for active patients were lower than desired, as those remaining in treatment did not always keep scheduled appointments. The show rates for specialty referrals were even lower. As mentioned above, some measures that helped patient attendance included reminder phone calls and obtaining a vehicle to transport patients, especially to specialist appointments. However, increasing enrollment after the initial surge is an ongoing challenge. We focused on the clinical teams at CMHC that showed lower rates of enrollment. For example, the proportion of Hispanic patients enrolled at the Wellness Center was less than the Spanish speaking population served at CMHC and so we proactively solicited feedback from leaders at La Clinica Hispana. As long as reimbursement is based on volume of services, enrolling larger numbers of patients will remain essential for a clinic to operate without external funding.

Patient engagement in wellness activities and health education groups has been challenging. As initial attendance and retention were low, we began providing incentives such as healthy foods and meal vouchers. We allowed rolling enrollment into the groups. We also held an informational session for behavioral health clinicians so they could provide patients a more informed choice. While these initiatives resulted in an increase in patient participation, numbers were still small. However, we did see health improvements (e.g., stopping tobacco smoking, weight reduction) in the small subset of patients who did attend. Whenever possible, structured group interventions should be consistently offered and motivation to attend these groups should come from multiple sources – primary care staff, psychiatrists and other behavioral health clinicians. We also jointly conducted health fairs at CMHC to engage patients in medical care. We used the health fairs as a medium to reinforce the importance of primary and preventive care to behavioral health clinicians and remind them to refer patients to the clinic.

Medical Information Sharing

The two agencies use completely different medical record systems and there was no easy way of sharing medical information. To surmount this barrier, we developed a system where clinic visit notes from the Wellness Center were manually copied and transmitted to the behavioral health clinicians via the medical records office at CMHC. When there were significant changes in medications or other relevant clinical presentation, behavioral health clinicians also provided information back to the Wellness Center. The agency providing laboratory services for CMHC patients is also utilized for the Wellness Center patients, improving access to test results by all providers.

Direct communication is important for the success of any integrated care model. For patients with complex medical needs, we tried as much as possible to arrange for face-to-face meetings between providers. We limited this to very complex patients as loss of time from direct clinical care results in loss of revenue and is a risk for sustainability. For routine clinical matters, providers used phone calls and encrypted forms of electronic communication. When information had to be conveyed but direct provider communication was not essential, peer health navigators served as liaisons. They were assigned to specific behavioral health teams and attended their weekly meetings to identify and engage with patients with complex clinical needs. For patients who needed assistance, they accompanied them to the clinic appointment at the Wellness Center. After the BHH program was established, BHH staff shared in the care coordination role allowing for peer health navigators to focus on patient education and health promotion. Regardless of the mechanism, organizations building an integrated care model should at the outset determine effective and feasible modes of communication between primary care and behavioral health providers. Shared treatment planning can only occur when there are effective ways of communication between the two sets of clinical providers.

Data and Outcomes

To meet the requirements of our grant and to improve the care at the Wellness Center, we collected data on both clinical processes and health outcomes. One of the significant challenges in implementing this project was the difficulty of sharing health information between the two organizational components, given that CMHC maintains paper records with a limited electronic health record, while CS-HHC solely uses an electronic health record. Maintaining consistent health data was an ongoing challenge and, from an evaluation perspective, required the development of parallel data collection systems in the form of an MS Access database in order to collate health information.

Additionally, improvement in patient health behaviors (like smoking) and outcomes (like weight, blood pressure, or HbA1C) take long periods of time to alter and changes may be

modest, even with evidence based treatment (e.g., weight, smoking). While a discussion of health outcomes is beyond the scope of this current paper, we continue to track and monitor Wellness Center patients to determine effects on their global health, as well as in the management of chronic health conditions like diabetes and hypertension. We have several examples of patients whose access to care or quality of care improved after they started receiving primary care at the Wellness Center. The factors facilitating these positive changes were proximity of the primary care clinic, increased communication between primary care and behavioral health providers including exchange of medical information, care coordination by peer navigators or BHH staff that included transportation to specialist appointments and reminders for appointments, and reduced appointment wait time compared to other primary care clinics.

Some of these observations are corroborated by a cross-sectional descriptive study of patients receiving care at the Wellness Center. The study measured patients' perception of barriers and facilitators to receiving health care [12]. Major factors facilitating access to care and care seeking behaviors were a) structural issues such as transportation, clinic hours, appointment wait times, appointment reminders b) interpersonal aspects such as liking the provider, being able to talk to the provider and feeling provider cares about the patient c) a sense of agency by patients and the feeling that they could take charge of their own health. These results inform planning of health care services and are important for improving existing services both in our center and other similar health delivery systems.

Given the difficulty of measuring changes in health outcomes, there were other processoriented measures, like patient satisfaction, that we developed to inform the implementation of the Wellness Center. As a result, we asked 157 Wellness Center clients to rate their satisfaction with services on a scale from 1 to 5, with an overall satisfaction rating of 4.3 (See Fig. 1). A summary of care coordination and health promotion activities is provided in Table 2.

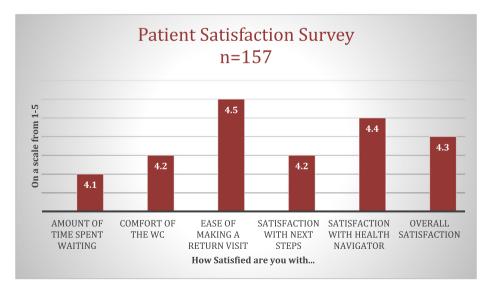


Fig. 1 Patient Satisfaction Survey

Specialty Care Coordination	2065 referrals were made to specialty providers for Wellness Center patients. Care was coordinated between Wellness Center clinicians, CMHC staff and case management services, and BHH, for specialty care. BHH shares approximately 264 Wellness Center patients.
Health Promotion	Health promotion referrals were made for nutritional counseling, smoking/tobacco cessation, diabetes and chronic disease management, and educational programming. Questions about alcohol and tobacco use, seatbelt use, sun exposure, other risky behaviors, exercise, and diet are routinely asked as part of physical exams. Referrals for routine preventive screenings were made for patients when appropriate (including colonoscopy, mammography, dermatology).
Comprehensive Coordinated Care	All efforts are made to assist communication between Wellness Center clinicians and CMHC clinicians using direct face-to-face/phone contact or via peer health navigators and BHH staff.
Peer Support	Peer Health Navigators work one-on-one and in groups with patients to provide peer-based supports. The groups include smoking cessation, nutrition, cooking classes, diabetes education, exercise programs, among others.
Community and Social Support Services	Coordination between Wellness Center staff and housing and employment agencies occurs, whenever possible, via CMHC and BHH staff.

Table 2 Care coordination and health promotion activities at the Wellness Center

Conclusions

There are many elements in building an integrated healthcare program. While we describe a co-located clinic, elements described here apply to all integrated care models. While financing is a key element of starting and maintaining an integrated care clinic, selecting the right personnel for this type of work is equally important. In addition, a shared sense of ownership between participating organizations and emphasis on creating a shared work culture are important. Investment and commitment by top leadership with ongoing/open communication on both sides was critical to start and maintain the initiative. It cannot be emphasized enough that tracking and analyzing data should be part of any service delivery model to inform further development of such programs. And even with all these elements, the project will still fail if adequate attention is not given to details of implementation and ongoing performance improvement on matters such as sharing of medical records and clinic workflow. Unfortunately there is no standard method that will apply to all institutions, but creative solutions to implementation barriers will be necessary to the success of any integrated behavioral health and primary care model.

Future of the Clinic

Our co-located clinic continues to remain open and serve patients within CMHC even after subsidies from the grant ended. We are approximately six months out of the grant funding period and able to sustain the clinic by patient care revenue. CS-HHC reduced the hours of operation to match the patient care revenue so the Wellness Center would be self-supporting. Our challenge is to increase patient numbers in order for the clinic to provide services full time. We exceeded our target enrollment in the very first year of the clinic, which likely reflects the need perceived both by patients and behavioral health clinicians who referred patients. However the patient volume has not increased at a similar rate in subsequent years and after the grant period. We had to cut the role of the nurse care manager, as most of the care coordination services provided by the nurse care manager were not reimbursable. The care coordination roles are now mainly filled by the peer health navigators and BHH staff.

CMHC leadership has determined that increasing patient enrollment at the Wellness Center will be a key strategic performance improvement goal in the coming year. We will also work to improve care coordination with the next phase of the BHH initiative. We continue to work together as a team to keep the clinic open, increase hours of service, and retain care coordination services. The steering committee still meets monthly and representatives from both institutions are working collaboratively to meet these shared goals. It is a shared commitment by leadership at both institutions that allows for flexible realignment and reorganization of services to continue primary care services for people with serious mental illness.

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Compliance with Ethical Standards

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Conflict of Interest The authors declare that they have no competing interests.

Ethical Approval All procedures performed in this project were in accordance with the ethical standards of the local Institutional Review Board and with the 1964 Helsinki declaration and its later amendments.

Informed Consent Informed consent was obtained from all participants in this project.

References

- Walker ER, McGee RE, Druss BG. Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis. JAMA Psychiatry. 2015;72(4):334–41.
- Colton CW, Manderscheid RW. Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. Preventing chronic disease. 2006;3(2): A42.
- Druss BG, Zhao L, Von Esenwein S, Morrato EH, Marcus SC. Understanding excess mortality in persons with mental illness: 17-year follow up of a nationally representative US survey. Medical care. 2011;49(6): 599–604.
- Nasrallah HA, Meyer JM, Goff DC, McEvoy JP, Davis SM, Stroup TS, et al. Low rates of treatment for hypertension, dyslipidemia and diabetes in schizophrenia: data from the CATIE schizophrenia trial sample at baseline. Schizophrenia research. 2006;86(1–3):15–22.
- SAMHSA-HRSA Center for Integrated Health Solutions. Standard framework for levels of integrated healthcare [cited 2015 Jan 11]. Available from: http://www.integration.samhsa.gov/resource/standardframework-for-levels-of-integrated-healthcare.
- Druss BG, von Esenwein SA. Improving general medical care for persons with mental and addictive disorders: systematic review. Gen Hosp Psychiatry. 2006;28(2):145–53.
- Gilmer TP, Henwood BF, Goode M, Sarkin AJ, Innes-Gomberg D. Implementation of Integrated Health Homes and Health Outcomes for Persons With Serious Mental Illness in Los Angeles County. Psychiatr Serv. 2016;67(10):1062–7.

- Druss BG, von Esenwein SA, Compton MT, Rask KJ, Zhao L, Parker RM. A randomized trial of medical care management for community mental health settings: the Primary Care Access, Referral, and Evaluation (PCARE) study. The American journal of psychiatry. 2010;167(2):151–9.
- Scharf DM, Schmidt Hackbarth N, Eberhart NK, Horvitz-Lennon M, Beckman R, Han B, et al. General Medical Outcomes From the Primary and Behavioral Health Care Integration Grant Program. Psychiatr Serv. 2016;67(11):1226–32.
- Krupski A, West, II, Scharf DM, Hopfenbeck J, Andrus G, Joesch JM, et al. Integrating Primary Care Into Community Mental Health Centers: Impact on Utilization and Costs of Health Care. Psychiatr Serv. 2016;67(11):1233–9.
- Druss BG, von Esenwein SA, Glick GE, Deubler E, Lally C, Ward MC, et al. Randomized Trial of an Integrated Behavioral Health Home: The Health Outcomes Management and Evaluation (HOME) Study. The American journal of psychiatry. 2017;174(3):246–55.
- Bellamy CD, E HF, Costa M, O'Connell-Bonarrigo M, Tana Le T, Guy K, et al. Barriers and Facilitators of Healthcare for People with Mental Illness: Why Integrated Patient Centered Healthcare Is Necessary. Issues Ment Health Nurs. 2016;37(6):421–8.

Aniyizhai Annamalai , M.D. is the Medical Director of the Wellness Center. She is trained as an internist and psychiatrist. She provides psychiatric care for CMHC outpatients and oversees all medical services at CMHC. In addition to overseeing clinical activities at the Wellness Center, she also liaises between Wellness Center and CMHC staff. She serves as a clinical resource for the health promotion groups, consulting nutritionist, and BHH services. She conceptualized and wrote the manuscript.

Martha Staeheli, PhD. leads the evaluation team for this project. She is an Associate Research Scientist at the Program for Recovery and Community Health in the Yale School of Medicine Department of Psychiatry. She has worked on several mixed method participatory evaluations of community and clinic-based interventions and services, including the SAMHSA-funded PBHCI initiative to integrate care at the Connecticut Mental Health Center. She performed data analysis and edited the manuscript.

Robert A. Cole, **M.H.S.A** is the Chief Financial Officer at CMHC. He co-chairs the Wellness Center steering committee. He is the principal liaison to the FQHC from CMHC's top leadership group with regard to organizational issues, principal liaison with DMHAS (the SMHA and official SAMHSA grantee) with regard to grant administration, and principal liaison with SAMHSA and the Center for Integrated Health Solutions with regard to project implementation and evaluation. He contributed to conceptualization and editing of the manuscript.

Jeanne L. Steiner, D.O. is Medical Director at CMHC, overseeing psychiatric practice and training. She cochairs the Wellness Center steering committee. She has been involved in several initiatives to improve the integration and improvement of physical and mental health services at the Center, and was instrumental in developing the Wellness Center. She contributed to conceptualization and editing of the manuscript.