

UCLA

UCLA Previously Published Works

Title

Effective Models Urgently Needed to Improve Physical Care for People With Serious Mental Illnesses

Permalink

<https://escholarship.org/uc/item/1w54n9gg>

Authors

Chang, Evelyn T

Vinzon, Merlyn

Cohen, Amy N

et al.

Publication Date

2019

DOI

10.1177/1178632919837628

Copyright Information

This work is made available under the terms of a Creative Commons Attribution-NonCommercial License, available at <https://creativecommons.org/licenses/by-nc/4.0/>

Peer reviewed

Effective Models Urgently Needed to Improve Physical Care for People With Serious Mental Illnesses

Health Services Insights
Volume 12: 1–4
© The Author(s) 2019
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/1178632919837628



Evelyn T Chang^{1,2}, Merlyn Vinzon³, Amy N Cohen^{4,5} 
and Alexander S Young^{5,6} 

¹Department of Medicine, VA Greater Los Angeles Healthcare System, Los Angeles, CA, USA.

²Department of General Internal Medicine, David Geffen School of Medicine, University of California, Los Angeles, Los Angeles, CA, USA. ³Community Engagement & Reintegration Service, VA Greater Los Angeles Healthcare System, Los Angeles, CA, USA. ⁴VA Desert Pacific Mental Illness Research, Education, and Clinical Center (MIRECC), VA Greater Los Angeles Healthcare System, Los Angeles, CA, USA. ⁵Department of Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine, University of California, Los Angeles, Los Angeles, CA, USA. ⁶UCLA Center for Health Services and Society, Los Angeles, CA, USA.

ABSTRACT: People with serious mental illness have substantially worse health outcomes than people without mental illness. These patients use primary care less often and fail to receive needed preventive and chronic care. While a variety of care models have been implemented with the goal of improving care for these patients, few have been found to be effective. Young et al describes a specialty patient-centered medical home for patients with serious mental illness. In this model, the primary care provider manages the medical and mental health conditions of patients with stable psychiatric symptoms with assistance from a registered nurse and a consulting psychiatrist. The goal of this integrated model is to engage patients in preventive care by building a relationship with them in primary care and understanding both their medical and psychiatric needs. While this model may improve care and increase patient satisfaction, implementing this type of model may be challenging.

KEYWORDS: Mental health, primary health care, patient-centered care

RECEIVED: January 29, 2019. **ACCEPTED:** February 13, 2019.

TYPE: Commentary

FUNDING: The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Funding has been provided by the Department of Veterans Affairs, Veterans Health Administration, Health Services Research and Development Service Quality Enhancement Research Initiative (SDP 12–177) and the VA Desert Pacific Mental Illness Research, Education and Clinical Center (MIRECC).

DECLARATION OF CONFLICTING INTERESTS: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

CORRESPONDING AUTHOR: Evelyn T Chang, Department of Medicine, VA Greater Los Angeles Healthcare System, Los Angeles, CA 90073, USA. Email: evelyn.chang@va.gov

COMMENT ON: Alexander S Young, Amy N Cohen, Evelyn T Chang, et al. A clustered controlled trial of the implementation and effectiveness of a medical home to improve health care of people with serious mental illness: study protocol. *BMC Health Serv Res.* 2018; 18: 428. doi: 10.1186/s12913-018-3237-0. PubMed PMID: 29880047. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5992687/>

Background

People with serious mental illness (SMI) have substantially worse health outcomes than people without mental illness. They also have higher rates of hospitalization and emergency department use than the overall primary care population or patients with chronic medical conditions alone.^{1–4} These patients use primary care less often⁵ and fail to receive needed preventive and chronic care.⁶ Several factors contribute to this. People with SMI often have ongoing psychiatric symptoms accompanied by cognitive deficits, poor social skills, socioeconomic disadvantage, and high rates of addiction to various substances, including tobacco. These limit their ability to perform self-care and to adhere to medical treatment regimens.^{7,8} Primary care providers (PCP) typically have inadequate training and experience in the treatment of SMI and may have a stigma toward the population.^{9–12} Organizations often lack effective partnerships between primary care and mental health, as evidenced by a lack of communication and information-sharing between primary care and mental health staff.¹³

A variety of care models have been implemented with the goal of reducing utilization of high-cost services and improving patient outcomes.¹⁴ Examples include co-locating mental health and primary care, case management, and fully integrated care with joint treatment planning. These models are intuitively appealing and touted as improving care. However, when

formally studied, most have failed to produce substantial improvement in either cost or patient outcomes.¹⁵ A small number of care models have shown promise in controlled trials.¹⁶ An understudied, yet critical component, is coordination of medical care, mental health care, and addiction care in a complex population with high levels of need in each domain, and treatments that frequently interact. While medical boards have supported psychiatrists providing routine preventive care, few psychiatrists are trained in primary care, and patients infrequently receive screening or management of common medical conditions in mental health settings.¹⁷ Furthermore, while assertive community treatment teams are intended to decrease psychiatric admissions, they do not consistently address or attend to chronic medical conditions.

Intervention

This background compelled the authors of the protocol manuscript “A Clustered Controlled Trial of the Implementation and Effectiveness of a Medical Home to Improve Health Care of People With Serious Mental Illness (SMI)”¹⁸ to design, implement, and test a specialty patient-centered medical home, also called Patient Aligned Care Team (PACT), for patients with SMI (SMI-PACT). The SMI-PACT is the first attempt in the Veterans Health Administration (VHA) to tailor a medical home for this population in primary care.¹⁸ Unique



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (<https://us.sagepub.com/en-us/nam/open-access-at-sage>).

features of this intervention include (1) medical and psychiatric care delivered by a single provider and (2) pro-active panel-based care management.

The SMI-PACT¹⁸ is an integrated model, which consists of a part-time PCP who manages both the medical and mental health conditions of patients with stable psychiatric symptoms of a SMI (0.25 FTE), part-time registered nurse care manager (0.5 FTE), and a consulting psychiatrist (0.1 FTE) to care for a panel of 150 patients. In this pilot study, patients are randomly selected for enrollment based on several criteria: (1) actively managed by primary care and mental health at VA Greater Los Angeles Healthcare System; (2) in the top 25th percentile of risk for hospitalization or death using a validated VHA risk prediction tool;¹⁹ (3) diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorder with psychosis, or post-traumatic stress disorder (PTSD) if prescribed an antipsychotic medication; and (4) rated by their psychiatrist as being not at imminent risk of adverse outcomes (jail, homelessness, violence) related to their psychiatric disorder based on the Milestones of Recovery Score (MORS). The mixed-methods evaluation is currently ongoing and investigates the effect of SMI-PACT¹⁸ on health care utilization and costs, provision of preventive and chronic medical services, medication adherence, and patient and clinician experience.

The PCP receives weekly support from a consulting psychiatrist. The PCP spends one full day in SMI-PACT each week and responds to secure messages, phone calls, and notes from patients and other clinical staff on a daily basis. All participating patients are given the choice to remain with their current psychiatrist or move their mental health care to the SMI-PACT team; all receive physical health care by the team. For patients who continue their relationship with their usual psychiatrist, the PCP actively collaborates with mental health provider for joint treatment planning through co-signed notes, secure messages, and phone calls, as needed. The SMI-PACT monitors labs routinely for lithium and antipsychotic medications.

Almost half (40%) of participating patients (n = 56/141) initially chose to switch their mental health care to the SMI-PACT team and an additional 6% of patients (n = 8/141) switched their mental health care to SMI-PACT after several visits with the SMI-PACT team. Each patient who switched their mental health care to SMI-PACT had a handoff note in the chart from the patient's psychiatrist, which includes mental health diagnoses, medications, and symptoms to monitor. Some patients were not recommended to switch their mental health care to SMI-PACT because they had prescriptions that required specialized monitoring, such as clozapine (n = 1), methadone (n = 3), or stimulants for attention deficit hyperactivity disorder (ADHD) (n = 2); had changing psychotropic regimen (n = 3); or had challenging behaviors (n = 3). Based on qualitative interviews, participants who chose to have their mental health care managed by the SMI-PACT team often

reported that they did not have a strong preference for or established relationship with their current psychiatrist. They also felt that it would be more convenient to have mental health care integrated with their primary care. Participants who chose to continue with their psychiatrists often reported a good relationship with their psychiatrist and felt that the psychiatrist possessed expertise in mental health that a PCP would not have.

The psychiatry consultant to SMI-PACT meets with the PCP on a weekly basis to discuss the clinical panel. The psychiatry consultant provides consultation for all patients, including how to navigate the complex mental health system, the interactions of psychiatric medications with other medications and the side effects of psychiatric medications, and how the symptoms of the mental health condition impact the patient's self-care and treatment engagement. For patients who move their mental health care to the SMI-PACT team, the psychiatry consultant additionally assists the PCP with adjusting psychiatric medications if needed and discusses when it would be appropriate for the patient to return to intensive specialty mental health services. The psychiatry consultant is also available by phone or instant message during a clinic visit for real-time consultation with the PCP.

The nurse care manager role is critical and performs both case and care management activities. The nurse has frequent contact with the patients and knows them well, often reaching out 1 to 2 times per month for patients who are active or highly complex. During interactions with patients, the nurse provides lab and imaging results and reminds patients about upcoming appointments with specialists. The nurse also provides education for medical conditions by using simplified handouts that have been designed for SMI populations, supports smoking cessation efforts by using a breath analyzer, and monitors exercise by providing pedometers. The nurse triages patients and handles most issues, including medication refills, obtaining outside hospital records, reviewing forms requested by patients (eg, home health aide and assistance or caregiver support), and connecting patients to needed community resources for finances, housing, and transportation. The nurse ensures continuity of care by following up with patients after discharge from a VHA or non-VHA emergency room visit or hospitalization and assists with making appointments on their behalf. As a care manager, the nurse also reviews the VHA primary care dashboard for quality measures every 2 to 3 months to identify patients who need further panel management (eg, those with poorly controlled diabetes and no recent medication refills) and performs chart reviews on a routine basis to review treatment plans, labs, and pending consults.

The goal of SMI-PACT is to engage patients with SMI in preventive care and treatment for chronic medical conditions by building a relationship with them in primary care and understanding both their medical and psychiatric needs. Team members are comfortable with patients with SMI and received

in-depth training in motivational interviewing to support behavior change and addiction medicine. They adjust their patient education and treatment instructions to the patient's cognition and readiness. In addition, all intake assessments include a comprehensive assessment of patient treatment preferences, goals, and values, as well as social determinants of health. Follow-up visits entail assessment of both medical and mental health symptoms. Furthermore, patients have the option to contact the SMI-PACT clinical team by phone through a direct number to the nurse care manager, by secure messaging if they have Internet access, or by walking in for acute issues.

Potential Challenges

Evaluating the effectiveness of this model may be challenging, as 1 year of follow-up may limit the investigators' ability to capture behavioral changes (eg, medication adherence, smoking cessation, and weight loss). The mixed-methods formative evaluation, however, can be helpful to evaluate this model as a pilot to assess for feasibility, acceptability, implementation barriers, and facilitators. Including short-term outcome measures (eg, patient activation measure, patient assessment of chronic illness care, patient satisfaction), and long-term outcome measures (eg, costs, hospitalizations), will be helpful for understanding if this model achieves the aims of engaging patients in their care using a tailored approach. While utilization and costs are unlikely to decrease beyond that of usual care,²⁰ including utilization and costs may be important as balancing measures to ensure that the intervention is not too costly for the health care system.

Given the psychosocial challenges and social determinants that impact the patient's health, future iterations of this model could benefit from a social worker or licensed vocational nurse. While the SMI-PACT registered nurse was aware of community resources to meet social needs, a typical nurse may not have this knowledge and may find collaborating closely with a social worker to be helpful. These additional team members could also relieve some of the tasks that are not at a level of complexity requiring a registered nurse, such as calling patients in advance to remind them of their appointment or giving vaccinations. Other versions of this model could also include joint treatment planning with a mental health provider on the treatment team who provides in-person mental health care rather than the PCP. Including a mental health provider is common in models of care for high-risk, high-need patients.

Ensuring sustainability of this integrated model requires buy-in from both primary care and mental health and may be met with resistance. The SMI-PACT creates additional work for the PCP by adding management of mental health conditions. We have found that the patients who chose to have both medical and mental health issues addressed in SMI-PACT often require a visit duration of greater than 30 minutes to

fully address active issues, and/or require more frequent visits (eg, every 3 months), which exceeds the typical routine visit frequency and duration of a general PACT team. This limits a PCP's panel size. In addition, stigma toward this population exists among some PCPs, and not all PCPs are suited for work with patients with SMI.

The SMI-PACT also creates additional work for non-team psychiatrists by removing low-intensity patients from their panel, who are often replaced by patients requiring high-intensity psychiatric care. The psychiatric consultation that is part of the SMI-PACT model is often not billable or reimbursed by all funders (with exception of collaborative care under Medicare) or by VHA.

Implementation requires flexibility on all sides, with willingness to take on more challenging patients in both primary care and mental health. However, a health care system may consider this model as, in addition to potentially improving outcomes, it could result in patient satisfaction with "one-stop shopping" having both medical and mental health needs addressed in primary care.

Conclusion

Patients with SMI represent a segment of the high-need, high-cost patient population where there are few known effective models. People with SMI have substantially worse health outcomes than people without mental illness and often fail to receive needed preventive and chronic care. Innovative, evidence-based models are urgently needed to engage these patients in primary care. Holistic models similar to SMI-PACT may be helpful in improving care and increasing patient satisfaction.

Acknowledgements

We appreciate the assistance of Rebecca Oberman, MSW, MPH, Sona Hovsepian, LCSW, and Anthony WP Flynn with the preparation of this manuscript. The views expressed in this article are those of the authors and do not necessarily represent the views of any affiliated institutions.

Author Contributions

All authors contributed to the drafting of this manuscript and approved the final manuscript.

ORCID iDs

Amy N Cohen  <https://orcid.org/0000-0002-3925-0088>

Alexander S Young  <https://orcid.org/0000-0002-9367-9213>

REFERENCES

1. Bodenheimer T. *Strategies to Reduce Cost and Improve Care for High-utilizing Medicaid Patients: Reflections on Pioneering Programs*. Trenton, NJ: Center for Health Care Strategies, Inc; 2013.
2. Dilonardo J, Coffey R, Vandivort-Warren R, Buck J. Inpatient utilization for persons with co-occurring disorders. *Psychiatr Serv*. 2008;59:14.
3. Pearson SD, Katzelnick DJ, Simon GE, Manning WG, Helstad CP, Henk HJ. Depression among high utilizers of medical care. *J Gen Intern Med*. 1999;14:461-468.

4. Doran KM, Raven MC, Rosenheck RA. What drives frequent emergency department use in an integrated health system? National data from the Veterans Health Administration. *Ann Emerg Med.* 2013;62:151–159.
5. Lichstein JC, Domino ME, Beadles CA, et al. Use of medical homes by patients with comorbid physical and severe mental illness. *Med Care.* 2014;52:S85–S91.
6. Druss BG, Rosenheck R, Desai MM, Perlin JB. Quality of preventive medical care for patients with mental disorders. *Med Care.* 2002;40:129–136.
7. Piette JD, Heisler M, Ganoczy D, McCarthy JF, Valenstein M. Differential medication adherence among patients with schizophrenia and comorbid diabetes and hypertension. *Psychiatr Serv.* 2007;58:207–212.
8. DiMatteo MR, Lepper HS, Croghan TW. Depression is a risk factor for non-compliance with medical treatment: meta-analysis of the effects of anxiety and depression on patient adherence. *Arch Intern Med.* 2000;160:2101–2107.
9. Tai-Seale M, Kunik M, Shepherd A, Kirchner J, Gottumukkala A. A case study of early experience with implementation of collaborative care in the Veterans Health Administration. *Popul Health Manag.* 2010;13:331–337.
10. Benzer JK, Beehler S, Miller C, et al. Grounded theory of barriers and facilitators to mandated implementation of mental health care in the primary care setting. *Depress Res Treat.* 2012;2012:597157.
11. Institute of Medicine (US). *Committee on Crossing the Quality Chasm: Adaptation to Mental Health and Addictive Disorders. Improving the Quality of Health Care for Mental and Substance-use Conditions.* Washington, DC: National Academy Press; 2006.
12. Lester H, Tritter JQ, Sorohan H. Patients' and health professionals' views on primary care for people with serious mental illness: focus group study. *BMJ.* 2005;330:1122.
13. Sanchez K. Collaborative care in real-world settings: barriers and opportunities for sustainability. *Patient Prefer Adherence.* 2017;11:71–74.
14. Gerrity M, Zoller E, Pinson N, Pettinari C, King V. *Integrating Primary Care into Behavioral Health Settings: What Works for Individuals with Serious Mental Illness.* New York, NY: Milbank Memorial Fund; 2014.
15. Bradford DW, Cunningham NT, Slubicki MN, et al. An evidence synthesis of care models to improve general medical outcomes for individuals with serious mental illness: a systematic review. *J Clin Psychiatry.* 2013;74:e754–e764.
16. 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. *Am J Psychiatry.* 2010;167:151–159.
17. *Board Approves Statement on Role in Reducing Physical Health Disparities 2015.* Philadelphia, PA: American Psychiatric Association; 2015. <https://psychnews.psychiatryonline.org/doi/full/10.1176/appi.pn.2015.9b4>. Accessed September 26, 2018.
18. Young AS, Cohen AN, Chang ET, et al. A clustered controlled trial of the implementation and effectiveness of a medical home to improve health care of people with serious mental illness: study protocol. *BMC Health Serv Res.* 2018;18:428.
19. Wang L, Porter B, Maynard C, et al. Predicting risk of hospitalization or death among patients receiving primary care in the Veterans Health Administration. *Medical Care.* 2013;51:368–373.
20. Yoon J, Chang E, Rubenstein LV, et al. Impact of primary care intensive management on high-risk veterans' costs and utilization: a randomized quality improvement trial. *Ann Intern Med.* 2018;168:846–854.