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CLINICAL

Shepardson, R.L., Kosiba, J.D., Bernstein, L. I., Funderburk, J.S. (2018). Suicide risk among Veteran primary care patients with current anxiety symptoms. *Family Practice*, Epub ahead of print.

- **OBJECTIVE:** Although anxiety is prevalent in primary care, the association between anxiety symptoms and suicide risk remains understudied. This cross-sectional study aimed to (i) assess the prevalence of suicide risk among Veteran primary care patients with anxiety symptoms and (ii) compare suicide risk between patients with a positive (versus negative) depression screen.
- **METHOD:** Participants were 182 adult primary care patients (84.6% male, Mage = 58.3 years) with current anxiety symptoms, but no psychotherapy in specialty care in the past year, at a Veterans Health Administration medical center in New York. Participants completed self-report measures of anxiety, depression and suicide risk via telephone.
- **RESULTS:** Forty percent endorsed ≥ 1 suicide risk item. Suicide risk was more common among those screening positive (versus negative) for depression (50.5% versus 26.5%, $\chi^2(1) = 10.88$; $P = 0.001$). Participants with a negative depression screen constituted 31% of all those with any suicide risk. Logistic regression revealed that anxiety symptom severity was not associated with suicide risk ($P = 0.14$) after controlling for age, sex and depression screen status ($P = 0.01$).
- **DISCUSSION:** A substantial proportion of primary care patients with anxiety was classified as at risk for suicide, even in the absence of a positive depression screen. Primary care providers should assess suicide risk among patients with anxiety symptoms, even if the patients are not seeking specialty mental health treatment, the anxiety symptoms are not severe or do not rise to the level of an anxiety disorder, and comorbid depressive symptoms are not present.

Link: <https://www.ncbi.nlm.nih.gov/pubmed/30219849>

Petersen, J. J., Hartig, J., Paulitsch, M. A., Pagitz, M., Mergenthal, K., Rauck, S., ... & Gensichen, J. (2018). Classes of depression symptom trajectories in patients with major depression receiving a collaborative care intervention. *PloS one*, 13(9), e0202245.

- **OBJECTIVE:** Collaborative care is effective in improving symptoms of patients with depression. The aims of this study were to characterize symptom trajectories in patients with major depression during one year of collaborative care and to explore associations between baseline characteristics and symptom trajectories.
- **METHOD:** We conducted a cluster-randomized controlled trial in primary care. The collaborative care intervention comprised case management and behavioral activation. We used the Patient Health Questionnaire-9 (PHQ-9) to assess symptom severity as the primary outcome. Statistical analyses comprised latent growth mixture modeling and a hierarchical binary logistic regression model.
- **RESULTS:** We included 74 practices and 626 patients (310 intervention and 316 control recipients) at baseline. Based on a minimum of 12 measurement points for each intervention recipient, we identified two latent trajectories, which we labeled 'fast improvers' (60.5%) and 'slow improvers' (39.5%). At all measurements after baseline, 'fast improvers' presented higher PHQ mean values than 'slow improvers'. At baseline, 'fast improvers' presented fewer physical conditions, higher health-related quality of life, and had made fewer suicide attempts in their history.

- **DISCUSSION:** A notable proportion of 39.5% of patients improved only ‘slowly’ and probably needed more intense treatment. The third follow-up in month two could well be a sensible time to adjust treatment to support ‘slow improvers’.

Link: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0202245>

IMPLEMENTATION

Beck, A., Boggs, J. M., Alem, A., Coleman, K. J., Rossom, R.C., Neely, C., Williams, M. D., Ferguson, R., & Solberg, L.I. (2018). Large-scale implementation of collaborative care management for depression and diabetes and/or cardiovascular disease. *Journal of the American Board of Famil Medicine*, 31(5), 702-711.

- **OBJECTIVE:** Collaborative care models have been shown to improve mental and physical health, but their effectiveness varies. Implementation science frameworks identify measures at the structural (eg, sociocultural context, public policies), organizational, provider, innovation, and patient levels that may facilitate or impede collaborative care effectiveness. The objective was to describe commonalities and variation in multilevel measures associated with the implementation of Care of Mental, Physical, and Substance-Use Syndromes (COMPASS), a large-scale collaborative care intervention for depression, diabetes, and cardiovascular disease.
- **METHOD:** The design was a qualitative study using semistructured descriptive data obtained from annual site visit reports and supplemental site surveys. Participants were COMPASS care teams from 8 health care systems serving 3854 patients with active depression and poorly controlled diabetes and/or cardiovascular disease. COMPASS included weekly case reviews with a consulting physician and psychiatrist, a patient-tracking registry, and monitoring of hospital and emergency department use. Site visit reports were analyzed with Atlas.ti to qualitatively describe implementation measures and their variation across sites.
- **RESULTS:** Nine measures were identified that impacted implementation efforts across health systems: (1) challenges in health systems' organizational environments, (2) prior care coordination experience, (3) physician engagement, (4) care team trust and cohesion, (5) care manager training and experience, (6) patient enrollment length, attainment of clinical targets, and frequency/content of care manager contacts, (7) patient-tracking registries, (8) quality improvement and outcomes monitoring reports, and (9) patients' social needs.
- **DISCUSSION:** Understanding multilevel measures impacting COMPASS implementation could increase the success of future collaborative care implementation efforts.

Link: <https://www.jabfm.org/content/31/5/702>

Moise, N., Shah, R. N., Essock, S., Jones, A., Carruthers, J., Handley, M. A., ... & Sederer, L. (2018). Sustainability of collaborative care management for depression in primary care settings with academic affiliations across New York State. *Implementation Science*, 13(1), 128.

- **OBJECTIVE:** In a large statewide initiative, New York State implemented collaborative care (CC) from 2012 to 2014 in 32 primary care settings where residents were trained and supported its sustainability through payment reforms implemented in 2015. Twenty-six clinics entered the sustainability phase and six opted out, providing an opportunity to examine factors predicting continued CC participation and fidelity.
- **METHOD:** We used descriptive statistics to assess implementation metrics in sustaining vs. opt-out clinics and trends in implementation fidelity 1 and 2 years into the sustainability phase among sustaining clinics. To characterize barriers and facilitators, we conducted 31 semi-structured interviews with psychiatrists, clinic administrators, primary care physicians, and depression care managers (24 at sustaining, 7 at opt-out clinics).

- **RESULTS:** At the end of the implementation phase, clinics opting to continue the program had significantly higher care manager full-time equivalents (FTEs) and achieved greater clinical improvement rates (46% vs. 7.5%, $p = 0.004$) than opt-out clinics. At 1 and 2 years into sustainability, the 26 sustaining clinics had steady rates of depression screening, staffing FTEs and treatment titration rates, significantly higher contacts/patient and improvement rates and fewer enrolled patients/FTE. During the sustainability phase, opt-out sites reported lower patient caseloads/FTE, psychiatry and care manager FTEs, and physician/psychiatrist CC involvement compared to sustaining clinics. Key barriers to sustainability noted by respondents included time/resources/personnel (71% of respondents from sustaining clinics vs. 86% from opt-out), patient engagement (67% vs. 43%), and staff/provider engagement (50% vs. 43%). Fewer respondents mentioned early implementation barriers such as leadership support, training, finance, and screening/referral logistics. Facilitators included engaging patients (e.g., warm handoffs) (79% vs. 86%) and staff/providers (71% vs. 100%), and hiring personnel (75% vs. 57%), particularly paraprofessionals for administrative tasks (67% vs. 0%).
- **DISCUSSION:** Clinics that saw early clinical improvement and who invested in staffing FTEs were more likely to elect to enter the sustainability phase. Structural rules (e.g., payment reform) both encouraged participation in the sustainability phase and boosted long-term outcomes. While limited to settings with academic affiliations, these results demonstrate that patient and provider engagement and care manager resources are critical factors to ensuring sustainability.

Link: <https://www.ncbi.nlm.nih.gov/pubmed/30314522>

OPERATIONAL

Funderburk, J. S., Levandowski, B. A., Wittink, M. N., & Pigeon, W. R. (2018). Team communication within integrated primary care in the context of suicide prevention: A mixed methods preliminary examination. *Psychological Services*, ePub ahead of print.

- **OBJECTIVE:** Direct and indirect communication through the electronic medical record play a vital role in helping medical home primary care teams implement suicide prevention efforts. The purpose of this study is to examine how communication related to suicide prevention occurs among primary care team members working within a group of clinics in the Veterans Health Administration that has embedded integrated behavioral health providers (BHPs) and uses a shared electronic medical record.
- **METHOD:** Using sequential exploratory mixed methods design, eight focus groups and 11 in-depth interviews with primary care providers (PCPs), nurses, and BHPs comprised the qualitative portion of the study, which was used to help develop an online questionnaire distributed to all primary care teams. Participants ($n = 86$) of the online survey included 15 BHPs, 32 PCPs, and 39 registered nurses. Qualitative data included asking a series of questions concerning how suicide prevention is accomplished in primary care.
- **RESULTS:** Themes concerning how providers communicate both directly and indirectly arose from the data and were used to develop questions for the survey to help further understand the data. Overall, the data suggested good team communication was occurring. However, there were opportunities to enhance communication through the use of huddles and enhancing communication from PCPs to other team members when the patient's medical status changed.
- **DISCUSSION:** Direct communication was preferred, and finding ways to increase communication may be important to help decrease potential errors that may occur via diffusion of responsibility.

Link: <https://www.ncbi.nlm.nih.gov/pubmed/30272460>

POLICY

Belsher, B. E., Freed, M. C., Evatt, D. P., Engel, C. C., Liu, X., Novak, L., & Zatzick, D. F. (2018). Population Impact of PTSD and Depression Care for Military Service Members: Reach and Effectiveness of an Enhanced Collaborative Care Intervention. *Psychiatry*, *81*(4), 349-360.

- **OBJECTIVE:** Epidemiologic studies suggest high rates of posttraumatic stress disorder (PTSD) and depression among military members and veterans. To meet the needs of this population, evidence-based treatments are recommended as first-line interventions, based on their clinical efficacy and not the proportion of the target population that the intervention reaches. We apply a public health framework to examine the population impact of an enhanced collaborative care model on a targeted population that takes into account effectiveness and reach.
- **METHODS:** Using data collected from a 2012 - 2016 randomized trial, the effectiveness of enhanced collaborative care for PTSD and depression was evaluated using probable diagnostic status as the primary outcome. Exclusion criteria were then applied to a 2011 disease registry to examine the representativeness of the trial sample and estimate the potential reach of the intervention. Population impact was derived from the estimated effectiveness and reach of the intervention.
- **RESULTS:** Enhanced collaborative care was associated with a significantly greater probability of PTSD/depression remission by the end of the trial (conditional effect = -0.066, chisq = 51.1, $p < 0.001$). Based on the effectiveness and reach of the enhanced intervention, an estimated 250 (out of the 3,436) more Army soldiers with PTSD and/or depression would experience diagnostic remission during the preceding year if the enhanced model was available.
- **CONCLUSION:** The population framework permits the estimated differential impact of two collaborative care models to inform implementation considerations. These results highlight the value of applying public health models to identify front line treatments.

Link: <https://www.ncbi.nlm.nih.gov/pubmed/30332346>