



Evidence Base for Collaborative Care: Treating Diverse Populations

Race and Ethnicity

Multiple Minority and Underserved Populations

1. Blackmore, M. A., Patel, U. B., Stein, D., Carleton, K. E., Ricketts, S. M., Ansari, A. M., & Chung, H. (2022). Collaborative care for low-income patients from racial-ethnic minority groups in primary care: Engagement and clinical outcomes. *Psychiatric Services*, 73(8), 842–848. <https://doi.org/10.1176/appi.ps.202000924>

Summary:

The Collaborative Care Model can engage vulnerable patients and improve clinical symptoms, but there is a need to address engagement barriers to further enhance its impact on treating depressive and anxiety disorders and reducing health disparities.

Scientific Abstract:

Objective: To assess model impact and opportunities for improvement, this study examined Collaborative Care model (CoCM) engagement and clinical outcomes among low-income patients from racial-ethnic minority groups with depression and anxiety.

Methods: Starting in 2015, CoCM was implemented in seven primary care practices of an urban academic medical center serving patients from racial-ethnic minority backgrounds, predominantly Medicaid beneficiaries. Eligible individuals scored positive for depressive or anxiety symptoms (or both) on the Patient Health Questionnaire–2 (PHQ-2) and PHQ-9 and the Generalized Anxiety Disorder Scale–2 (GAD-2) and GAD-7 during systematic screening in primary care settings. Screening rates and yield, patient characteristics, and CoCM engagement and outcomes were examined. Clinical improvement was measured by the difference in PHQ-9 and GAD-7 scores at baseline and at 10- to 14-week follow-up.

Results: High rates of screening (87%, N=88,236 of 101,091) and identification of individuals with depression or anxiety (13%, N=11,886) were observed, and 58% of 3,957 patients who engaged in minimally adequate CoCM treatment had significant clinical improvement. Nevertheless, only 56% of eligible patients engaged in the model, and 25% of those individuals did not return for at least one follow-up appointment. Being female with clinically significant comorbid anxiety and depressive symptoms and having Medicaid or commercial insurance increased the likelihood of CoCM engagement.



Conclusions: CoCM can help engage vulnerable patients in behavioral health care and improve clinical symptoms. However, significant opportunity exists to advance the model's impact in treating depressive and anxiety disorders and decreasing health disparities by addressing engagement barriers.

2. Hu, J., Wu, T., Damodaran, S., Tabb, K. M., Bauer, A., & Huang, H. (2020). The effectiveness of collaborative care on depression outcomes for racial/ethnic minority populations in primary care: A systematic review. *Psychosomatics*, 61(6), 632–644.
<https://doi.org/10.1016/j.psym.2020.03.007>

Summary:

Collaborative Care is a promising intervention for treating depression in racial/ethnic minority populations in primary care settings, with potential effectiveness in improving depression outcomes, but further research is needed to understand the most effective cultural adaptations and the impact of virtual components.

Scientific Abstract:

Background: Racial/ethnic minorities experience a greater burden of mental health problems than white adults in the United States. The Collaborative Care model is increasingly being adopted to improve access to services and to promote diagnosis and treatment of psychiatric diseases.

Objective: This systematic review seeks to summarize what is known about Collaborative Care on depression outcomes for racial/ethnic minorities in the United States.

Methods: This review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses method. Collaborative Care studies were included if they comprised adults from at least one racial/ethnic minority group, were located in primary care clinics in the United States, and had depression outcome measures. Core principles described by the University of Washington Advancing Integrated Mental Health Solutions Center were used to define the components of Collaborative Care.

Results: Of 398 titles screened, 169 full-length articles were assessed for eligibility, and 19 studies were included in our review (10 randomized controlled trials, 9 observational). Results show there is potential that Collaborative Care, with or without cultural/linguistic tailoring, is effective in improving depression for racial/ethnic minorities, including those from low socioeconomic backgrounds.

Conclusions: Collaborative Care should be explored as an intervention for treating depression for racial/ethnic minority patients in primary care. Questions remain as to what elements of cultural adaptation are most helpful, factors behind the difficulty in recruiting minority patients for these studies, and how the inclusion of virtual components changes access to and delivery of care. Future research should also recruit individuals from less-studied populations.

3. Yang, K. G., Blackmore, M. A., Cook, B. L., & Chung, H. (2024). Collaborative care for depression and anxiety: Racial-ethnic differences in treatment engagement and outcomes. *Psychiatric Services*, 75(10), 961–968. <https://doi.org/10.1176/appi.ps.20230482>

Summary:

The Collaborative Care model was effective in treating depression and anxiety among Black and Hispanic patients, but significant disparities in follow-up care were observed, necessitating efforts to improve retention of minority patients.

Scientific Abstract:

Objective: This study aimed to examine racial-ethnic differences in engagement with, and clinical outcomes of a Collaborative Care model (CoCM) implemented in primary care outpatient clinics in an urban academic medical center.

Methods: Adult patients (N=4,911) who screened positive for symptoms of depression, anxiety, or both on the Patient Health Questionnaire–9 or the Generalized Anxiety Disorder–7 scale and who identified as non-Hispanic Black, Hispanic, or non-Hispanic White were offered participation in a CoCM implementation. The primary outcome was treatment engagement, defined as receipt of any follow-up visit, minimally adequate 4-week follow-up (at least one visit), and minimally adequate 16-week follow-up (at least three visits) after initial assessment. Secondary outcomes were response and remission of depression or anxiety.

Results: After adjustment of analyses for sociodemographic covariates, Black and Hispanic participants were significantly less likely than White participants to have received any or minimally adequate follow-up. Black and Hispanic participants who received any or minimally adequate 16-week follow-up were more likely than White participants to demonstrate depression symptom response and remission of anxiety symptoms.

Conclusions: This CoCM implementation appears to have been effective in treating depression and anxiety among Black and Hispanic patients. However, significant disparities in receipt of follow-up care were observed. Efforts must be made to improve the retention of patients from racial-ethnic minority groups in Collaborative Care.

4. Garcia, M. E., Ochoa-Frongia, L., Moise, N., Aguilera, A., & Fernandez, A. (2018). Collaborative care for depression among patients with limited English proficiency: A systematic review. *Journal of General Internal Medicine*, 33(3), 347–357. <https://doi.org/10.1007/s11606-017-4242-4>

Summary:

The systematic review suggests that Collaborative Care delivered by bilingual providers is effective for treating depression among patients with limited English proficiency, particularly Spanish-speaking patients, but highlights limitations in the current evidence base and calls for further research on non-Spanish-speaking populations and implementation studies.

Scientific Abstract:

Background: Patients with limited English proficiency (LEP) have high rates of depression yet face challenges accessing effective care in outpatient settings. We undertook a systematic review to investigate the effectiveness of the Collaborative Care model for depression for LEP patients in primary care.

Methods: We queried online PubMed, PsycINFO, CINAHL and EMBASE databases (January 1, 2000, to June 10, 2017) for quantitative studies comparing Collaborative Care to usual care to treat depression in adults with LEP in primary care. We evaluated the impact of Collaborative Care on depressive symptoms or on depression treatment. Two reviewers independently extracted key data from the studies and assessed the risk of bias using the Cochrane bias and quality assessment tool (RCTs) and the Newcastle-Ottawa Quality Assessment Scale (non-RCTs).

Results: Of 86 titles identified, 15 were included (representing 9 studies: 5 RCTs, 3 cohort studies, and 1 case–control study). Studies included 4859 participants; 2679 (55%) reported LEP. The majority spoke Spanish (93%). The wide variability in study design and outcome definitions precluded performing a meta-analysis. Follow-up ranged from 3 months to 2 years. Three of four high-quality RCTs reported that 13–25% more patients had improved depressive symptoms when treated with culturally tailored Collaborative Care compared to usual care; the last had high treatment in the control arm and found equal improvement. Two non-RCT studies suggest that Spanish-speaking patients may benefit as much as, if not more than, English-speaking patients treated with Collaborative Care. The remaining studies reported increased receipt of preferred depression treatment (therapy vs. antidepressants) in the intervention groups. Eight of nine studies used bilingual providers to deliver the intervention.

Discussion: While limited by the number and variability of studies, the available research suggests that Collaborative Care for depression delivered by bilingual providers may be more

effective than usual care among patients with LEP. Implementation studies of Collaborative Care, particularly among Asian and non-Spanish speakers, are needed.

5. Angstman, K. B., Phelan, S., Myszkowski, M. R., Schak, K. M., DeJesus, R. S., Lineberry, T. W., & van Ryn, M. (2015). Minority primary care patients with depression: Outcome disparities improve with collaborative care management. *Medical Care*, 53(1), 32–37.
<https://doi.org/10.1097/MLR.0000000000000280>

Summary:

The study found that Collaborative Care significantly reduced racial disparities in depression outcomes for minority patients compared to usual primary care, improving participation in care, and reducing disparities in symptom remission or persistence.

Scientific Abstract:

Background/Objectives: Racial and ethnic disparities in depression prevalence, treatment, and outcomes persist. The hypothesis of this study was that the use of Collaborative Care management (CCM) in treating depressed primary care patients would decrease racial disparities in 6-month clinical outcomes compared with those patients treated with usual primary care (UC).

Research Design/Subjects: In a retrospective chart review analysis, 3588 (51.2%) patients received UC, and 3422 (48.8%) patients were enrolled in CCM. Logistic regression analyses were used to examine disparities in 6-month outcomes.

Results: Minority patients enrolled in CCM were more likely to be participating in depression care at 6 months than minority patients in UC (61.8% vs. 14.4%; $P \leq 0.001$). After adjustment for demographic and clinical covariates, this difference remained statistically significant (odds ratio=9.929; 95% CI, 6.539–15.077, $P \leq 0.001$). The 568 minority UC patients with 6-month follow-up PHQ-9 data demonstrated a much lower odds ratio of a PHQ-9 score of ≤ 5 (0.220; 95% CI, 0.085–0.570; $P = 0.002$) and a much higher odds ratio of PHQ-9 score of ≥ 10 (3.068; 95% CI, 1.622–5.804; $P < 0.001$) when compared with the white, non-Hispanic patients. In contrast, the 2329 patients treated with CCM, the odds ratio for a PHQ-9 score of ≤ 5 or ≥ 10 after 6 months, demonstrated no significance of minority status.

Conclusions: Utilization of CCM for depression was associated with a significant reduction of the disparities for outcomes of compliance, remission, or persistence of depressive symptoms for minority patients with depression versus those treated with UC.

6. Additional References (not specific to Collaborative Care)

- Interian, A., Lewis-Fernández, R., & Dixon, L. B. (2013). Improving treatment engagement of underserved U.S. racial-ethnic groups: A review of recent interventions. *Psychiatric Services*, 64(3), 212–222. <https://doi.org/10.1176/appi.ps.201100136>
- Bauer, A. M., Azzone, V., Alexander, L., Goldman, H. H., Unützer, J., & Frank, R. G. (2012). Are patient characteristics associated with quality of depression care and outcomes in collaborative care programs for depression? *General Hospital Psychiatry*, 34(1), 1–8. <https://doi.org/10.1016/j.genhosppsych.2011.08.019>
- Jackson-Triche, M. E., Unützer, J., & Wells, K. B. (2020). Achieving mental health equity. *Psychiatric Clinics of North America*, 43(3), 501–510. <https://doi.org/10.1016/j.psc.2020.05.008>
- Miranda, J., & Cooper, L. A. (2004). Disparities in care for depression among primary care patients. *Journal of General Internal Medicine*, 19(2), 120–126. <https://doi.org/10.1111/j.1525-1497.2004.30272.x>
- Bao, Y., Alexopoulos, G. S., Casalino, L. P., Ten Have, T. R., Donohue, J. M., Post, E. P., Schackman, B. R., & Bruce, M. L. (2011). Collaborative depression care management and disparities in depression treatment and outcomes. *Archives of General Psychiatry*, 68(6), 627. <https://doi.org/10.1001/archgenpsychiatry.2011.55>
- Lee-Tauler, S. Y., Eun, J., Corbett, D., & Collins, P. Y. (2018). A systematic review of interventions to improve initiation of mental health care among racial-ethnic minority groups. *Psychiatric Services*, 69(6), 628–647. <https://doi.org/10.1176/appi.ps.201700382>
- Areán, P. A., Ayalon, L., Hunkeler, E., Lin, E. H. B., Tang, L., Harpole, L., Hendrie, H., Williams, J. W., Unützer, J., & IMPACT Investigators. (2005). Improving depression care for older, minority patients in primary care. *Medical Care*, 43(4), Article 4. <https://doi.org/10.1097/01.mlr.0000156852.09920.b1>
- Davis, T. D., Deen, T., Bryant-Bedell, K., Tate, V., & Fortney, J. (2011). Does minority racial-ethnic status moderate outcomes of collaborative care for depression? *Psychiatric Services (Washington, D.C.)*, 62(11), 1282–1288. https://doi.org/10.1176/ps.62.11.pss6211_1282
- DeJesus, R., Njeru, J., & Angstman, K. (2015). Engagement among minority patients in collaborative care management for depression. *Chronic Diseases International*, 2(1). <https://austinpublishinggroup.com/chronic-diseases/fulltext/chronicdiseases-v2-id1014.php>

American Indian/Alaska Native

1. Bowen, D. J., Powers, D. M., Russo, J., Arao, R., LePoire, E., Sutherland, E., & Ratzliff, A. D. H. (2020). Implementing collaborative care to reduce depression for rural Native American/Alaska Native people. *BMC Health Services Research*, 20(1), 34. <https://doi.org/10.1186/s12913-019-4875-6>

Summary:

The study demonstrated that Collaborative Care can be effectively implemented in rural primary care settings for Native American and Alaska Native patients, achieving equivalent depression response and remission rates compared to White patients, with significant predictors including fewer treatment episodes and more follow-up visits, and clinicians reported positive experiences with the model.

Scientific Abstract:

Background: The purpose of this study was to identify the effects of Collaborative Care on rural Native American and Alaska Native (AI/AN) patients.

Methods: Collaborative Care was implemented in three AI/AN-serving clinics. Clinic staff participated in training and coaching designed to facilitate practice change. We followed clinics for 2 years to observe improvements in depression treatment and to examine treatment outcomes for enrolled patients. Collaborative Care elements included universal screening for depression, evidence-based treatment to target, use of behavioral health care managers to deliver the intervention, use of psychiatric consultants to provide caseload consultation, and quality improvement tracking to improve and maintain outcomes. We used t-tests to evaluate the main effects of Collaborative Care and used multiple linear regression to better understand the predictors of success. We also collected qualitative data from members of the Collaborative Care clinical team about their experience.

Results: The clinics participated in training and practice coaching to implement Collaborative Care for depressed patients. Depression response (50% or greater reduction in depression symptoms as measured by the PHQ-9) and remission (PHQ-9 score less than 5) rates were equivalent in AI/AN patients as compared with White patients in the same clinics. Significant predictors of positive treatment outcome include only one depression treatment episode during the study and more follow-up visits per patient. Clinicians were overall positive about their experience and the effect on patient care in their clinic.

Conclusions: This project showed that it is possible to deliver Collaborative Care to AI/AN patients via primary care settings in rural areas.

Asian, Native Hawaiian, and Pacific Islander

1. Ratzliff, A. D. H., Ni, K., Chan, Y.-F., Park, M., & Unützer, J. (2013). A collaborative care approach to depression treatment for Asian Americans. *Psychiatric Services*, 64(5), 487–490.
<https://doi.org/10.1176/appi.ps.001742012>

Summary:

Collaborative Care for depression was equally effective in Asian Americans as in age and gender-matched Whites served in community health clinics, with culturally sensitive clinics being particularly effective in engaging and caring for Asian American populations.

Scientific Abstract:

Objective: This study examined the effectiveness of Collaborative Care for depression among Asians treated either at a community health center that focuses on Asians (culturally sensitive clinic) or at general community health centers, and among a matched population of whites treated at the same general community clinics.

Methods: For 345 participants in a statewide Collaborative Care program, use of psychotropic medications, primary care visits with depression care managers, and depression severity (as measured with the nine-item Patient Health Questionnaire) were tracked at baseline and 16 weeks.

Results: After adjustment for differences in baseline demographic characteristics, all three groups had similar treatment processes and depression outcomes. Asian patients served at the culturally sensitive clinic (N=129) were less likely than Asians (N=72) and whites (N=144) treated in general community health clinics to be prescribed psychotropic medications.

Conclusions: Collaborative Care for depression showed similar response rates among all three groups.

2. Additional References:

- Yeung, A., Shyu, I., Fisher, L., Wu, S., Yang, H., & Fava, M. (2010). Culturally sensitive collaborative treatment for depressed Chinese Americans in primary care. *American Journal of Public Health*, 100(12), 2397–2402. <https://doi.org/10.2105/ajph.2009.184911>
- Kwong, K., Chung, H., Cheal, K., Chou, J. C., & Chen, T. (2013). Depression care management for Chinese Americans in primary care: A feasibility pilot study. *Community Mental Health Journal*, 49(2), 157–165. <https://doi.org/10.1007/s10597-011-9459-9>

Black/African American

1. Meredith, L. S., Wong, E., Osilla, K. C., Sanders, M., Tebeka, M. G., Han, B., Williamson, S. L., & Carton, T. W. (2022). Trauma-informed collaborative care for African American primary care patients in federally qualified health centers: A pilot randomized trial. *Medical Care*, 60(3), 232–239. <https://doi.org/10.1097/MLR.0000000000001681>

Summary:

The study found that Trauma-Informed Collaborative Care (TICC) shows promise in addressing PTSD among African American patients in Federally Qualified Health Centers, with clinically meaningful improvements in symptoms and provisional diagnosis rates compared to enhanced usual care, although a larger-scale trial is needed to fully assess its effectiveness.

Scientific Abstract:

Background: African Americans have nearly double the rate of posttraumatic stress disorder (PTSD) compared with other racial/ ethnic groups.

Objective: To understand whether trauma-informed Collaborative Care (TICC) is effective for improving PTSD among African Americans in New Orleans who receive their care in Federally Qualified Health Centers (FQHCs).

Design and Method: In this pilot randomized controlled trial, we assigned patients within a single site to either TICC or to enhanced usual care (EUC). We performed intent-to-treat analysis by nonparametric exact tests for small sample sizes.

Participants: We enrolled 42 patients from October 12, 2018, through July 2, 2019. Patients were eligible if they considered the clinic their usual source of care, had no obvious physical or cognitive obstacles that would prevent participation, were age 18 or over, self-identified as African American, and had a provisional diagnosis of PTSD.

Measures: Our primary outcome measures were PTSD measured as both a symptom score and a provisional diagnosis based on the PTSD Checklist for DSM-5 (PCL-5).

Key Results: Nine months following baseline, both PTSD symptom scores and provisional PTSD diagnosis rates decreased substantially more for patients in TICC than in EUC. The decreases were 26 points in EUC and 36 points in TICC for symptoms ($P = 0.08$) and 33% in EUC and 57% in TICC for diagnosis rates ($P = 0.27$). We found no effects for mediator variables.

2. Cooper, L. A., Ghods Dinoso, B. K., Ford, D. E., Roter, D. L., Primm, A. B., Larson, S. M., Gill, J. M., Noronha, G. J., Shaya, E. K., & Wang, N. (2013). Comparative effectiveness of standard versus patient-centered collaborative care interventions for depression among African Americans in primary care settings: The BRIDGE study. *Health Services Research*, 48(1), 150–174.
<https://doi.org/10.1111/j.1475-6773.2012.01435.x>

Summary:

The study found that both patient-centered and standard Collaborative Care interventions showed similar improvements in clinical outcomes for African American patients with depression, with standard care resulting in higher treatment rates and patient-centered care leading to better patient ratings of care, suggesting that both approaches can be effective depending on population needs and resources.

Scientific Abstract:

Objective: To compare the effectiveness of standard and patient-centered, culturally tailored Collaborative Care (CC) interventions for African American patients with major depressive disorder (MDD) over 12 months of follow-up.

Data Sources/Study Setting: Twenty-seven primary care clinicians and 132 African American patients with MDD in urban community-based practices in Maryland and Delaware.

Study Design: Cluster randomized trial with patient-level, intent-to-treat analyses. Data Collection/Extraction Methods. Patients completed screener and baseline, 6-, 12-, and 18-month interviews to assess depression severity, mental health functioning, health service utilization, and patient ratings of care.

Principal Findings: Patients in both interventions showed statistically significant improvements over 12 months. Compared with standard, patient-centered CC patients had similar reductions in depression symptom levels (2.41 points; 95 percent confidence interval (CI), 7.7, 2.9), improvement in mental health functioning scores (+3.0 points; 95 percent CI, 2.2, 8.3), and odds of rating their clinician as participatory (OR, 1.48, 95 percent CI, 0.53, 4.17). Treatment rates increased among standard (OR = 1.8, 95 percent CI 1.0, 3.2), but not patient-centered (OR = 1.0, 95 percent CI 0.6, 1.8) CC patients. However, patient-centered CC patients rated their care manager as more helpful at identifying their concerns (OR, 3.00; 95 percent CI, 1.23, 7.30) and helping them adhere to treatment (OR, 2.60; 95 percent CI, 1.11, 6.08).

Conclusions: Patient-centered and standard CC approaches to depression care showed similar improvements in clinical outcomes for African Americans with depression; standard CC

resulted in higher rates of treatment, and patient-centered CC resulted in better ratings of care.

Hispanic and Latin/a/e/o/x

1. Lagomasino, I. T., Dwight-Johnson, M., Green, J. M., Tang, L., Zhang, L., Duan, N., & Miranda, J. (2017). Effectiveness of collaborative care for depression in public-sector primary care clinics serving Latinos. *Psychiatric Services*, 68(4), 353–359. <https://doi.org/10.1176/appi.ps.201600187>

Summary:

The study concludes that Collaborative Care for depression, tailored for low-income, Spanish-speaking patients and using available resources, significantly improves clinical outcomes and quality of care, with social workers effectively providing CBT and managing depression care, and has the potential to reduce depression-related disparities.

Scientific Abstract:

Objective: Quality improvement interventions for depression care have been shown to be effective for improving quality of care and depression outcomes in settings with primarily insured patients. The aim of this study was to determine the impact of a Collaborative Care intervention for depression that was tailored for low-income Latino patients seen in public-sector clinics.

Methods: A total of 400 depressed patients from three public-sector primary care clinics were enrolled in a randomized controlled trial of a tailored Collaborative Care intervention versus enhanced usual care. Social workers without previous mental health experience served as depression care specialists for the intervention patients (N=196). Depending on patient preference, they delivered cognitive-behavioral therapy (CBT) intervention or facilitated antidepressant medication given by primary care providers, or both. In enhanced usual care, patients (N=204) received a pamphlet about depression, a letter for their primary care provider stating that they had a positive depression screen, and a list of local mental health resources. Intent-to-treat analyses examined clinical and process-of-care outcomes at 16 weeks.

Results: Compared with patients in the enhanced usual care group, patients in the intervention group had significantly improved depression, quality of life, and satisfaction outcomes ($p < .001$ for all). Intervention patients also had significantly improved quality-of-care indicators, including the proportion of patients receiving either psychotherapy or antidepressant medication (77% versus 21%, $p < .001$).

Conclusions: Collaborative Care for depression can greatly improve care and outcomes in public-sector clinics. Social workers without prior mental health experience can effectively provide CBT and manage depression care.

2. Sanchez, K., & Watt, T. T. (2012). Collaborative care for the treatment of depression in primary care with a low-income, Spanish-speaking population: Outcomes from a community-based program evaluation. *The Primary Care Companion For CNS Disorders*.
<https://doi.org/10.4088/PCC.12m01385>

Summary:

The study concludes that a collaborative care model is effective for non-English-speaking Hispanics and highlights the importance of patient preferences and language considerations to improve depression treatment outcomes and address gaps in current mental health care practices.

Scientific Abstract:

Objective: This study sought to (1) evaluate the effectiveness of a Collaborative Care model with a predominantly Hispanic, low-income population in a primary care setting and (2) examine depression outcomes with a subpopulation of preferentially Spanish-speaking patients compared with non-Hispanic white participants.

Method: The data were collected from September 2006 through September 2009 at the study site, the People's Community Clinic, Austin, Texas. Data collection was part of an evaluation of the Integrated Behavioral Health program, a Collaborative Care model of identifying and treating mild-to-moderate mental disorders in adults in a primary care setting. A bilingual care manager provided supportive counseling and patient education and systematically tracked patient progress in a patient registry. A consulting psychiatrist evaluated patients with diagnostic or treatment concerns. The study retrospectively examined changes in depression scores among 269 subjects as measured by the Patient Health Questionnaire (PHQ-9), the primary outcome measure. The PHQ-9 is a self-report of frequency of symptoms for each of the 9 DSM-IV criteria for depression. Logistic regression models compared race/ethnicity and language group combinations on their odds of achieving clinically meaningful depression improvement when background characteristics were controlled for.

Results: Spanish-speaking Hispanic patients had significantly greater odds of achieving a clinically meaningful improvement in depression at 3-month follow-up (odds ratio [OR] = 2.45, $P = .013$) compared to non-Hispanic whites. The finding for greater improvement in the Spanish-speaking population remained after controlling for age, sex, medical comorbidities, prior treatment, and baseline depression scores.

Conclusions: The results suggest a model of care that is effective for a population at great risk for marginal mental health care, non-English-speaking Hispanics. Attention to patient

preferences in primary care is essential to improve quality of depression treatment and may improve outcomes. In light of previous research that demonstrates insufficient evidence-based guidelines for patients with limited English proficiency and evidence that evaluation of patients in their nonprimary language or through an interpreter can lead to inaccurate mental health assessments, this study suggests an opportunity to improve the quality of mental health care for non-English-speaking Hispanics in the United States.

3. Dwight-Johnson, M., Lagomasino, I. T., Hay, J., Zhang, L., Tang, L., Green, J. M., & Duan, N. (2010). Effectiveness of collaborative care in addressing depression treatment preferences among low-income Latinos. *Psychiatric Services*, 61(11), 1112–1118.
<https://doi.org/10.1176/ps.2010.61.11.1112>

Summary:

Collaborative Care interventions that include psychotherapy can increase the likelihood that Latino patients receive preferred care; however, special efforts may be needed to address the preferences of working persons, men, and Spanish-speaking patients.

Scientific Abstract:

Objective: This study assessed treatment preferences among low-income Latino patients in public-sector primary care clinics and examined whether a Collaborative Care intervention that included patient education and allowed patients to choose between medication, therapy, or both would increase the likelihood that patients received preferred treatment.

Methods: A total of 339 Latino patients with probable depressive disorders were recruited; participants completed a baseline conjoint analysis preference survey and were randomly assigned to receive the intervention or enhanced usual care. At 16 weeks, a patient survey assessed depression treatment received during the study period. Logistic regression models were constructed to estimate treatment preferences, examine patient characteristics associated with treatment preferences, and examine patient characteristics associated with a match between stated preference and actual treatment received.

Results: The conjoint analysis preference survey showed that patients preferred counseling or counseling plus medication over antidepressant medication alone and that they preferred treatment in primary care over specialty mental health care, but they showed no significant preference for individual versus group treatment. Patients also indicated that individual education sessions, telephone sessions, transportation assistance, and family involvement were barrier reduction strategies that would enhance their likelihood of accepting treatment.

Compared with patients assigned to usual care, those in the intervention group were 21 times as likely to receive preferred treatment. Among all participants, women, unemployed persons, those who spoke English, and those referred by providers were more likely to receive preferred treatment.

Conclusions: Collaborative Care interventions that include psychotherapy can increase the likelihood that Latino patients receive preferred care; however, special efforts may be needed to address the preferences of working persons, men, and Spanish-speaking patients.

4. Vera, M., Perez-Pedrogo, C., Huertas, S. E., Reyes-Rabanillo, M. L., Juarbe, D., Huertas, A., Reyes-Rodriguez, M. L., & Chaplin, W. (2010). Collaborative care for depressed patients with chronic medical conditions: A randomized trial in Puerto Rico. *Psychiatric Services*, 61(2), 144–150.
<https://doi.org/10.1176/ps.2010.61.2.144>

Summary:

The Collaborative Care model significantly improved clinical symptoms and functional status for depressed patients with chronic medical conditions in Puerto Rico, highlighting its promise for strengthening mental health and primary care services, although further study is needed to confirm and expand these findings.

Scientific Abstract:

Objective: This study examined whether a Collaborative Care model for depression would improve clinical and functional outcomes for depressed patients with chronic general medical conditions in primary care practices in Puerto Rico.

Methods: A total of 179 primary care patients with major depression and chronic general medical conditions were randomly assigned to receive Collaborative Care or usual care. The Collaborative Care intervention involved enhanced collaboration among physicians, mental health specialists, and care managers paired with depression-specific treatment guidelines, patient education, and follow-up. In usual care, study personnel informed the patient and provider of the diagnosis and encouraged patients to discuss treatment options with their provider. Depression severity was assessed with the Hopkins Symptom Checklist; social functioning was assessed with the 36-item Short Form.

Results: Compared with usual care, Collaborative Care significantly reduced depressive symptoms and improved social functioning in the six months after randomization. Integration of Collaborative Care in primary care practices considerably increased depressed patients' use of mental health services.

Conclusions: Collaborative Care significantly improved clinical symptoms and functional status of depressed patients with coexisting chronic general medical conditions receiving treatment for depression in primary care practices in Puerto Rico. These findings highlight the promise of the Collaborative Care model for strengthening the relationship between mental health and primary care services in Puerto Rico.

5. Additional References

Cabassa, L. J., & Hansen, M. C. (2007). A systematic review of depression treatments in primary care for Latino adults. *Research on Social Work Practice, 17*(4), 494–503.

<https://doi.org/10.1177/1049731506297058>

Eghaneyan, B. H., Sanchez, K., & Killian, M. (2017). Integrated health care for decreasing depressive symptoms in Latina women: Initial findings. *Journal of Latina/o Psychology, 5*(2), 118–125.

<https://doi.org/10.1037/lat0000067>

Gender Identity and Sexual Orientation

There are currently no studies that examine the effectiveness of Collaborative Care programs among individuals who identify as Lesbian, Gay, Bisexual, Transgender, Questioning, Intersex, Asexual, and other gender and sexual orientation minorities. (LGBTQIA+) in primary care. Some literature exists about general integrated care for LGBTQIA+ individuals, with most taking place outside of primary care. Reasons for this gap in the literature include a lack of collection and reporting on the gender identity and sexual orientation of study participants, resulting in an inability to stratify the data and examine differences in outcomes among this population. Below are references that examine isolated components of integrated care that may be helpful in thinking about how to expand access to and inclusion of LGBTQIA+ individuals.

Additional References

- Kwong, J., Bockting, W., Gabler, S., Abbruzzese, L. D., Simon, P., Fialko, J., Bonaparte, S., Malark, A., Towe, M., Weber, T., & Hall, P. (2017). Development of an interprofessional collaborative practice model for older LGBT adults. *LGBT Health*, 4(6), 442–444. <https://doi.org/10.1089/lgbt.2016.0160>
- Hughes, R. L., Damin, C., & Heiden-Rootes, K. (2017). Where's the LGBT in integrated care research? A systematic review. *Families, Systems, & Health*, 35(3), 308–319. <https://doi.org/10.1037/fsh0000290>
- Heredia, D., Pankey, T. L., & Gonzalez, C. A. (2021). LGBTQ-affirmative behavioral health services in primary care. *Primary Care: Clinics in Office Practice*, 48(2), 243–257. <https://doi.org/10.1016/j.pop.2021.02.005>