

## An Evaluation of the Collaborative Care Model of Integrated Health Care in Texas: An Executive Summary

### INTRODUCTION

Research shows that integrated health care, the systematic coordination of physical and behavioral health services, is successful in primary care settings. However, little information is available addressing the process of implementing these models in community-based practice settings.<sup>1,2</sup>

An evaluation funded by the Hogg Foundation for Mental Health at The University of Texas at Austin attempted to better understand the successes, challenges and outcomes of implementing integrated health care in community health clinics in Texas.<sup>3</sup> Organizations that participated in the evaluation were part of a demonstration program funded by the Hogg Foundation.

### BACKGROUND

In 2006, the Hogg Foundation selected five organizations (some with multiple sites) across Texas to implement the collaborative care model of integrated health care. The four key ingredients of the collaborative care model include a mental health assessment tool, a clinical care manager, a patient registry, and psychiatric supervision and consultation.<sup>4</sup> The care manager, with supervision from a psychiatrist, is responsible for tracking patient progress with standard measures, providing follow-up to increase adherence, and educating patients on tools for self-management.

The grantees received awards over three years to promote the effective identification and treatment of individuals with mental health challenges in primary care settings. The evaluation aimed to assess the outcomes of the collaborative care model and to identify barriers to implementation across the seven clinics participating in the evaluation. Results from one organization also came from a separate, independent evaluation funded by the St. David's Foundation.<sup>5</sup>

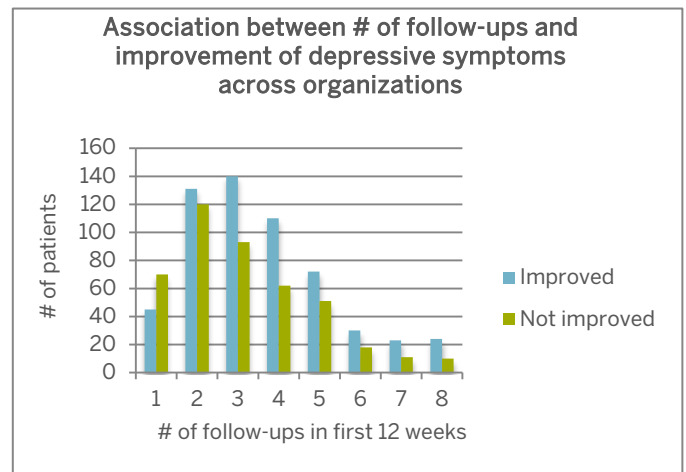
The evaluation involved data from 2,821 patients aged 18 or older with symptoms of depression and/or anxiety who were

served at the participating clinics between 2006 and 2009. Of patients served, almost 42 percent (N=1175), preferred to speak in Spanish. Although individual data on race and ethnicity was not available, Latino patients comprised a substantial proportion of the patient population at all but one clinic.<sup>6</sup>

The evaluators used four sources for data collection: the web-based patient registry, electronic medical records, site visits and observations. The patient registry included baseline and follow-up data from the Patient Health Questionnaire-9 (PHQ-9) and the Overall Anxiety Severity and Impairment Scale (OASIS).

### EVALUATION FINDINGS: OUTCOMES

**FREQUENT FOLLOW-UP WAS POSITIVELY ASSOCIATED WITH PATIENT IMPROVEMENT.** The table below shows a strong association between multiple follow-up contacts within the first 12 weeks of the initial appointment and improvement of depressive symptoms. For patients who received only one follow-up, eight percent improved, compared to 55.3 percent of patients who received four follow-ups.<sup>3</sup> However, limitations of the evaluation make it difficult to attribute patient outcomes solely to number of follow-ups.





## **PROGRAMS WITH EARLY FOLLOW-UP HAD HIGHER RATES OF IMPROVEMENT.**

Organizations that provided follow-up care within the first 21 days appeared to have better patient outcomes. Furthermore, early follow-up treatment may be important because outcomes diverged as early as four weeks.<sup>7</sup> This finding is limited because the data is not patient specific and therefore a direct relationship between early follow-up and individual patient outcomes cannot be determined.

At six of the seven sites, half of patients experienced improvement of depressive symptoms and at five sites more than 40 percent of patients achieved depression remission.<sup>7</sup>

## **PATIENTS WHO PREFERRED SPANISH HAD BETTER DEPRESSION OUTCOMES.**

Overall, evaluators found the odds of improvement for patients with depression were 54 percent higher among patients who preferred Spanish, compared to patients who preferred English.<sup>6</sup> Because services were provided in English and Spanish, the evaluation results suggest linguistically appropriate care is an important factor.<sup>2</sup> Additionally, the collaborative care model may be a culturally responsive way to serve this population in that it capitalizes on the sense of “connectedness” and personal warmth valued among Latinos.<sup>8</sup> If English language skills are limited, less frequent “hand offs” from one provider to another may contribute to higher patient satisfaction and outcomes (less retelling of symptoms; not having to find another clinic, etc.). Paired with linguistically appropriate services, the cultural fit of the collaborative care model may have contributed to the effectiveness of this program among patients who prefer Spanish.<sup>6</sup>

## **OLDER ADULTS WITH DEPRESSION AND THOSE WITH HIGH ANXIETY DEMONSTRATED LOWER RATES OF IMPROVEMENT.**

Patients who were older and those who were more anxious received more intensive and higher quality treatment and were less likely to drop out of care. Despite these intensive services, these groups showed fewer improvements than younger patients and patients with mild anxiety. These findings are consistent with other research, which indicates that in general, older patients with depression and patients with anxiety are less responsive to treatment.<sup>6,9,10</sup>

## **EVALUATION FINDINGS: IMPLEMENTATION**

### **MODEL FIDELITY IMPACTED SUCCESS.**

The structure of the organization providing care greatly impacted the success of the program implementation. Specifically, the evaluation team found that starting a new program may be easier than trying to restructure an already existing one. Sites with mental health services already in place faced more challenges in integrating the collaborative care model than those

creating new service infrastructures.

The characteristics of the site remained strongly associated with outcomes, suggesting that the effect of being treated in a particular clinic was at least as salient as receiving (or not receiving) early follow-up or appropriate pharmacotherapy. The limitations of the study make it difficult to say with any certainty which characteristics of the sites are most relevant; however, the factors addressed below may have contributed to site-specific outcomes.

Programs that did not fully integrate their care models experienced more challenges. Organizations that relied more on a referral-based process rather than a truly integrated model did not see as much success. More problems were encountered throughout implementation if staff members involved, especially the care managers, did not receive adequate training.

### **ORGANIZATIONAL INVESTMENT MADE A DIFFERENCE.**

Integrated health care is rooted in collaboration and high organizational investment. Programs that felt they had a “champion” physician reported high organizational investment. Evaluators found that programs with less buy-in from leadership did not perform as well as sites with high involvement of all staff.

Sites that demonstrated more success utilized their mental health specialist consultants, a key component of the integrated health care model. Other organizations faced challenges when this consultation did not occur or when consulting psychiatrists did not have the availability to meet the needs of the program staff.



**THERE WERE ADDITIONAL CHALLENGES.** Turnover, especially in management positions, was cited as a major challenge for organizations. Additionally, understaffed programs with high caseloads made early follow-up difficult, which was found to be one of the most important factors of a successful program. For programs without Federally Qualified Health Center status, funding constraints were an ongoing issue. Lack of transportation was cited as a barrier patients faced in accessing services. Finally, for organizations that operated multiple primary care sites, staff reported added difficulty with communication and coordination.

## CONCLUSION

There were positive successes in applying the collaborative care model in community-based practice settings. Notably, the strong findings related to patients who preferred Spanish are

especially relevant as Texas' Spanish-speaking population increases rapidly. However, the evaluation findings and recommendations have limitations. The seven sites varied in their implementation of the collaborative care model and were diverse in terms of system of care, size and location. Additionally, the small number of participating agencies prevented evaluators from quantitatively analyzing how organizational characteristics were associated with outcomes. Continued research in community-based practice settings that can clearly identify connections between the collaborative care model and outcomes is needed. However, future investigations must take into account the role of cultural and linguistic competency in the delivery of integrated health care.<sup>11</sup> Lessons shared here may allow for more informed implementation of the collaborative care model of integrated health care in the future.

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