EDITORIAL AND COMMENT

Collaborative Care for Anxiety: What's Inside the Black Box and How Can It Be Improved?

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J Gen Intern Med 32(3):233–5

DOI: 10.1007/s11606-016-3921-x

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For several decades, research on mental health collaborative care within primary care settings has principally focused on depression, the most common problem seen in this setting, with relatively few studies examining anxiety. This has been changing of late with more attention to anxiety, which often demands more immediate clinical attention because of the active degree of patient distress and, when present with depression, predicts a more complicated course and poorer outcome.¹

Collaborative care programs feature a care manager who serves as a link between busy primary care physicians and patients and who also provides the education, support and encouragement that enables patients to become more activated and adhere to treatment recommendations. Care managers are able to track patients' progress over time, using measurement-based care to assess treatment effectiveness and to adjust treatment more rapidly. They also link primary care physicians with psychiatric or psychological specialty expertise that can be more easily leveraged across many primary care patients to help adjust patient treatment plans. It is clear that collaborative care (consisting of a care manager, patient self-activation, measurement-based monitoring and specialty expertise) "works" for anxiety, just as it does for depression. In this issue of JGIM, a new study by Rollman et al.² adds to the evidence for that. It also does considerably more.

A common and compelling criticism of many collaborative care studies is that they have been conducted in research contexts that provide resources not commonly available in most primary care settings, making implementation of these programs difficult.³ Rollman et al. designed a study that was more "bare bones" in terms of personnel and costs and hence more generalizable to actual practice. The intervention employed non-mental health professionals as care managers, used the telephone rather than clinic visits to monitor outcome and manage care, and does not appear to have depended heavily on specialty in-clinic psychiatric consultation, electing to use community mental health referral for an unusually large proportion of the patients. It avoided specialized, labor-

intensive procedures to recruit and enroll subjects, using EMR alerts generated when anxiety or depression appeared on a patient's problem list, so that physicians would see them and then could refer patients to the study at the time of clinical encounter. It used this same EMR to communicate with physicians about their patient's progress with treatment. This study also employed a stepped care approach that allowed less anxious patients to enter a "watchful waiting" phase where they were monitored without treatment (since previous studies have shown that such patients have a high probability of improving naturally).⁴ These patients were only offered treatment if their symptoms worsened, thereby preventing unnecessary treatment and simultaneously conserving mental health resources. Care management emphasized promotion of behavioral activation and self-management ("lifestyle adjustments"), provided self-help CBT workbooks for the patients to use, and offered and monitored the effects of anxiolytic pharmacotherapy with biweekly phone calls that also encouraged workbook completion. A team consisting of a psychiatrist, care manager and PCP periodically reviewed the clinical status of patients. For patients who did not improve or had complex psychosocial issues, a referral to off-site specialty mental health ("community mental health") was provided.

The electronic only tables in this paper provide key information that gets a bit inside the "black box" of the intervention. Surprisingly, the uptake of the CBT "workbook" was low, with a very small proportion (19 %) of patients actually finishing the workbook. Thus, very few patients reached the exposure part of the CBT package, which is known to be important for maximal CBT effect.⁵ A slightly greater rate of SSRI use occurred in intervention patients (97 %), but this differential was not stunningly large, as the majority (85 %) of patients received an SSRI in usual care. Yet the effect size observed in this study was similar to that seen in the largest primary care anxiety study, which used more costly personnel and in-clinic visits and delivered in-person CBT as part of the intervention.⁶ How were these small to mid-sized intervention effects achieved with such a bare-bones intervention?

One must consider the important role of patient self-activation (self-management), known to be an effective intervention on its own.⁷ In this approach, patients are encouraged to directly tackle and solve health, work or relationship problems rather than avoid them out of fear or a sense of demoralization. While the degree of effectiveness of this approach for multiple medical disorders

is debatable, it may have a special role to play and be much more effective in patients with depression and anxiety, where avoidance is a core part of the disorder(s) and is thought to fuel ongoing symptoms and disability. It is possible that the care managers were successful in activating patients, providing a kind of covert CBT (where exposure essentially provides an activation stimulus for patients) despite the poor uptake of the workbook. It is likely that the telephone provided greater ease of contact than would occur with more logistically difficult office visits. Telephone collaborative care has been shown to be highly effective at leveraging scarce resources across the wide geographic areas that must be covered in rural settings.⁸

It is not clear that psychiatry or psychology specialty expertise played a particularly important role in the day-to-day care process (though it was likely crucial in creating the treatment algorithm and rules for adjusting treatment). We do not have data on how frequently medications were adjusted (a prior study showed that medication adjustments were more frequent in collaborative care programs actively using psychiatric consultation).⁹ Similarly, in a recent study of a large statewide collaborative care program serving very ill depressed and anxious patients, patients having in-person specialty consultation with a psychiatrist had greatly improved outcome.¹⁰ This reduced role of on-site specialty mental health providers may have been facilitated by the high use of off-site specialty care, i.e., over three quarters of both groups had a specialty mental health visit (again suggesting that, in this study, specialty expertise may have contributed to overall improved outcome in both groups). It is likely that specialty expertise is more valuable when treatments need to be adjusted in particularly resistant patients or when usual care is less sophisticated. Thus, specialty expertise is more important as part of second- or third-step interventions or in situations where usual care is not that effective. Indeed, in this study it appears referral was made to specialty clinic settings in these situations. Thus, it seems clear that specialty expertise is required to optimize the care of patients. The only question is when, how much and whether at some point patients need to be seen in the specialty rather than the primary care setting. This study seems to have used specialty care more than other collaborative care studies (in the large CALM study⁶ about half the usual care patients had a specialty care visit), suggesting that it adopted more of a hybrid primary care-specialty care model than other collaborative care studies.

The treatment target in this, as in other collaborative care studies, was the emotionally distressed primary care patient with anxiety. It is increasingly thought that the target of mental health treatment should not be confined to one diagnosis or set of diagnoses, but should more comprehensively address the individual patient who is more likely to have multiple comor-

bid mental health conditions contributing to their distress. In this study, the vast majority of these “anxiety” patients had major depressive disorder (85 %). It has been shown that treatments targeted to one anxiety disorder likely affect other comorbid anxiety disorders as well as depression.⁶ While only a portion of prior collaborative care studies of depression have reported anxiety outcomes, virtually all collaborative care studies of anxiety have reported depression outcomes. Not surprisingly, the outcomes across both sets of symptoms have been similar.

There will continue to be a drive to construct collaborative care “packages” that can address the patient with multiple comorbidities, not just anxiety and depression, but perhaps chronic pain and substance use and maybe even somatic symptom preoccupation that is not secondary to depression and anxiety. In conversations with primary care physicians over the years, I have found that most requested a more “generic” and customizable approach and did not want to deal with multiple “packages” for multiple mental health disorders. The best approach going forward may be to construct programs that would address multiple disorders or problems in a stepped care manner, with multiple levels of care offered according to symptom severity and problem complexity. There also will be a drive to increase the use of technology. The authors make mention of the efficacy of computerized CBT, which would likely replace the workbooks used in this study and might even foster greater participation. In addition, studies have already examined the utility of secure messaging to take the place of phone calls,¹¹ something that would likely facilitate care manager-patient contact. Finally, there may well be a more widespread adoption of the use of “non-professional” care managers, e.g., bright, creative, new college graduates looking for their first job. Many of us in academic positions have employed these individuals as our research assistants. Why not as care managers?

Collaborative care programs are here to stay, part of the inexorable push to better “integrate” mental health and medical care. The only question is: how can we make these programs better and, in this increasingly cost conscious medical system, cheaper? These two goals may seem at odds with one another but both will have to be accommodated in order to create true “value” for the primary care patient suffering from anxiety, depression and other related conditions. Currently, the AMA has approved two new CPT codes that might be used for reimbursement for care management and psychiatric consultation, and CMS is considering approval of three new G-codes for similar services in Medicare. Because these initial efforts are focused on fee-for-service models, they may be less suitable than reimbursement focused on a bundled service model where non-licensed care managers might participate, and reimbursement for psychiatrists working in these settings could be more easily set to be competitive with that provided in mental health specialty settings.

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REFERENCES

1. **Coryell W, Fiedorowicz JG, Solomon D, Leon AC, Rice JP, Keller MB.** Effects of anxiety on the long-term course of depressive disorders. *Br J Psychiatry*. 2012;200(3):210–215.
2. **Rollman BL, Belnap BH, Mazumdar S, et al.** Telephone-delivered stepped collaborative care for treating anxiety in primary care: a randomized controlled trial. *J Gen Intern Med*. 2016. doi:10.1007/s11606-016-3873-1.
3. **Roy-Byrne P.** Collaborative care at the crossroads. *Br J Psychiatry*. 2013;203(2):86–87.
4. **Hermens ML, van Hout HP, Terluin B, et al.** The prognosis of minor depression in the general population: a systematic review. *Gen Hosp Psychiatry*. 2004;26(6):453–462.
5. **Glenn D, Golinelli D, Rose RD, et al.** Who gets the most out of cognitive behavioral therapy for anxiety disorders? The role of treatment dose and patient engagement. *J Consult Clin Psychol*. 2013;81(4):639–649.
6. **Roy-Byrne P, Craske MG, Sullivan G, et al.** Delivery of evidence-based treatment for multiple anxiety disorders in primary care: a randomized controlled trial. *JAMA*. 2010;303(19):1921–1928.
7. **Houle J, Gascon-Depatie M, Belanger-Dumontier G, Cardinal C.** Depression self-management support: a systematic review. *Patient Educ Couns*. 2013;91(3):271–279.
8. **Fortney JC, Pyne JM, Mouden SB, et al.** Practice-based versus telemedicine-based collaborative care for depression in rural federally qualified health centers: a pragmatic randomized comparative effectiveness trial. *Am J Psychiatry*. 2013;170(4):414–425.
9. **Lin EH, Von Korff M, Ciechanowski P, et al.** Treatment adjustment and medication adherence for complex patients with diabetes, heart disease, and depression: a randomized controlled trial. *Ann Fam Med*. 2012;10(1):6–14.
10. **Bao Y, Druss BG, Jung HY, Chan YF, Unutzer J.** Unpacking collaborative care for depression: examining two essential tasks for implementation. *Psychiatr Serv*. 2016;67(4):418–424.
11. **Simon GE, Ralston JD, Savarino J, Pabiniak C, Wentzel C, Operskalski BH.** Randomized trial of depression follow-up care by online messaging. *J Gen Intern Med*. 2011;26(7):698–704.