Original Research

"It's Like Being a Well-Loved Child": Reflections From a Collaborative Care Team

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ABSTRACT

Objective: The present case study examines how a collaborative care model for the treatment of depression works with a low-income, uninsured adult population in a primary care setting.

Method: The qualitative interviews were conducted in 2010 at a primary care clinic as 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 single-case study design of an interdisciplinary team was used: the care manager, the primary care physician, the consulting psychiatrist, and the director of social services. Other units of analysis included clinical outcomes and reports that describe the patient demographics, services offered, staff, and other operational descriptions.

Results: Multiple themes were identified that shed light on how one primary care practice successfully operationalized a collaborative care model, including the tools they used in novel ways, the role of team members, and perceived barriers to sustainability.

Conclusions: The insights captured by this case study allow physicians, mental health practitioners, and administrators a view into key elements of the model as they consider implementation of a collaborative care model in their own settings. It is important to understand how the model operates on a day-to-day basis, with careful consideration of the more subtle aspects of the program such as team functioning and adapting tools to new processes of care to meet the needs of patients in unique contexts. Attention to barriers that still exist, especially regarding workforce and workload, will continue to be critical to organizations attempting integration.

Prim Care Companion CNS Disord 2013;15(6):doi:10.4088/PCC.13m01541 © Copyright 2013 Physicians Postgraduate Press, Inc.

Submitted: June 7, 2013; accepted August 20, 2013. Published online: November 28, 2013. Corresponding author: Katherine Sanchez, PhD, School of Social Work, The University of Texas at Arlington, 211 S. Cooper 5t, Arlington, TX 76019 (KSanchez@uta.edu). The chronic care model described by Wagner et al¹ and applied to the treatment of mental disorders in primary care has come to be known as collaborative care.² The model is a systematic approach that involves integration of mental health specialists, care management, and primary care physician oversight to proactively treat mental health disorders such as depression and anxiety.

Collaborative care models are based on the principles of chronic disease management.^{2,3} Team members no longer work in practice silos in which independent assessments and treatment plans are implemented with little attention to structures and processes. Rather, the systematic integration of various disciplines moves team practices beyond parallel relationships to an interdisciplinary practice model that includes collaborative communication, collective action, a process orientation, and working together for common goals centered on whole person care.⁴

Care management has been well established as an intrinsic element of chronic disease care.¹ Collaborative care developed from observations of the clinical course of depression, especially as it relates to treatment adherence and disease recurrence, and its similarity to other chronic diseases.^{5,6} The time constraints of primary care physicians have forced them to rely on ancillary providers to manage depression, particularly during the acute phase.^{5,7} In a collaborative care model, the primary care practice employs a care manager, whose sole function is to manage patients' mental health disorders. The chief roles of the care manager include educating patients, supporting treatment decisions, monitoring outcomes, encouraging medication adherence, providing brief counseling, and facilitating consultation with a psychiatrist or other mental health specialist as needed.⁸

The purpose of this case study is to examine a collaborative care model of service delivery for the treatment of depression with a low-income, uninsured adult population in a primary care setting. Since it is known from over 35 randomized clinical trials that collaborative care is superior to usual care in improved outcomes,^{2,9,10} in the detailed case study that follows, we explore how a collaborative care model of service delivery works in this setting. Through intensive interviews, we examined a single, interdisciplinary team of providers to explore how the model of interdisciplinary collaborative care was an effective strategy for providing mental health treatment to a predominantly Hispanic, low-income patient population at one grant-funded primary care safety-net clinic.

METHOD

Participants and Setting

The data were collected in 2010 as part of an evaluation of the Integrated Behavioral Health (IBH) program, a collaborative care model of identifying and treating mild-to-moderate mental disorders in adults in a primary care setting. The University of Texas at Austin Institutional Review Board approved the study. The site was purposefully chosen because of its comprehensive implementation of the IBH program to inform the central phenomenon being studied.¹¹ The program was funded by the Hogg Foundation for Mental Health as part of a 3-year demonstration

- Implementation of an essential tool of collaborative care, the depression screening instrument, can be used to enrich clinical encounters with patients and give physicians a reliable method for monitoring their patients by reframing depression as a set of symptoms in need of amelioration.
- Depression care managers in a collaborative care model can monitor outcomes, discuss and support treatment recommendations, and provide brief counseling using evidence-based techniques.
- The development of collaborative care teams is a core tenet of health reform, which involves transdisciplinary collaboration that advances team work from an interdisciplinary approach to one in which team members from various disciplines develop a common language and loosen hierarchical structures, pool bodies of knowledge and theories, and jointly develop new methods and analytic techniques within a philosophy of whole person care.

project on implementing collaborative care for the treatment of depression and anxiety in community-based primary care clinics. This qualitative analysis grew out of a larger process and outcomes evaluation of the collaborative care program at the study site, whose success in significantly improving depression in the study population has been described elsewhere.¹² Therefore, the study site was chosen for its ease of access to the data, established relationships, and geographic proximity.

The participants were 4 members of an interdisciplinary team at a community-based clinic that provided care to uninsured and underinsured (Medicaid and low-income Medicare) people in central Texas. This private, nonprofit primary care clinic delivered a full range of services including medical assessment and treatment, prevention services, onsite laboratory and pharmacy, social work services, and nutrition and dietary counseling.¹²

An embedded single-case study design was used to explore a critical case of the collaborative care model to enhance knowledge of the model for practitioners and health services researchers.¹³ Case study methodology for empirical inquiry is particularly useful in health services research to understand complex health care systems.^{14,15} As the evidence base for the model was well established, we explored the elements of interdisciplinary collaboration for application to broader implementation.

Data Collection and Procedures

A major strength of case study research is the use of multiple sources of evidence.^{13,15} Embedded in the main unit of analysis, that was the IBH program, were several subunits of analysis. The first author (K.S.) conducted in-depth individual interviews with interdisciplinary team members who provided collaborative care at the site: the clinical social worker who served as the care manager, the primary care physician "champion," and the consulting psychiatrist. Additionally, the clinic's director of social services was

interviewed because she wrote the demonstration grant application, designed the program elements, hired the social work staff, and had responsibility for the clinical and administrative oversight of the IBH program. As part of the process and outcomes evaluation, the first author analyzed the patient registry data set, which provided a rich collection of demographics and outcome measures on mental health screening instruments for depression and anxiety collected by the care manager over time. It was useful to the case study to document the objective, quantifiable clinical outcomes for the patients enrolled in the collaborative care model at the study site. Some of the additional documents the first author included in the data collection for analysis were provided by the clinic and offered essential descriptions of the collaborative care model at the study site and other data about the clinic operations and its staff.

An extensive review of the literature on the collaborative care model generated the study propositions and subsequent development of the interview questions and the data collection plan.¹³ The interviews, approximately 30 to 90 minutes in length, were audio recorded and transcribed verbatim. Detailed field notes were recorded after each interview to reflect on process, themes, interview questions, and reflexivity concerns.

Data Analysis and Trustworthiness

The general structure of the analysis was drawn from Yin's¹³ strategy for case study data analysis, relying on the propositions, which helped focus the study and determine its direction and scope. Propositions, each with a distinct purpose and focus, are akin to a hypothesis in quantitative research, an educated guess about possible outcomes of the research study.^{15,16} An extensive review of the literature on the collaborative care model generated the propositions and, subsequently, development of the research questions and the data collection plan. The specific propositions around which the interview discussions were designed consisted of the key elements of collaborative care,^{2,17} which include (1) the colocation of mental health services in the primary care setting, (2) clinical care management, (3) active communication between the clinical care manager and the primary care provider, (4) consultation with an external psychiatrist if necessary, and (5) proactive follow-up and outcome monitoring by the care manager.^{2,3,18,19} Relying on propositions is a more focused attempt at data collection and can get at unanswered questions about how the model is implemented and works on a daily basis.¹³

The analysis was guided partly by the initial propositions, which framed the case study, yet allowed for analytic flexibility and identification of new themes.¹⁶ The focus of our attention was on how the interdisciplinary team members in this setting operationalized collaborative care. We detailed the specific aspects of the case by condensing the themes into a broader framework, some of which were drawn from the research literature and some of which seemed to be new contributions to understanding collaborative care. Two independent coders developed coding categories from the interview data until consensus was reached about the primary coding categories and the alignment of data within the categories. This iterative process differentiated structures and processes of care by condensing themes into a broader framework, which demonstrated consistency with the research literature but also represented new contributions to understanding how collaborative care works in primary care.

The trustworthiness of the findings was established through several verification strategies such as the use of extensive field notes, data triangulation with the empirical literature (ie, the propositions), applicability to the model, and peer examination of the coding process and outcomes.²⁰ Applicability was assessed by examining the emerging themes, which we then cross-validated with descriptions of the model in the literature to check for "fit."²⁰ Field notes helped clarify our biases and assumptions about how the model works.^{11,21}

RESULTS

A review of the data, including analysis of the interviews, patient demographics, and other sources of evidence, suggested a number of novel findings about how the elements of collaborative care worked in this setting. First, the mental health screening instrument offered the care manager a comfortable structure for a clinical encounter with a population of patients who may find traditional therapy distasteful or awkward. Second, we found the culture of the traditional medical model was initially a barrier to the implementation of the program, creating some hesitation around a social worker in the role of care manager, as opposed to a psychiatrist. But, we also found that, ultimately, the social worker was essential

to the success of the model. By building trust with the primary care providers, providing a valuable service, easing the burden of difficult patients, and improving patients' health overall, the IBH program has come to be thought of as critical to good patient care in this unique clinic.

Characteristics of the Setting

The clinic's patients were predominantly Hispanic (71%) or African-American (10%), with the majority (80%) having an annual income at or below the federal poverty guidelines. Only 5% of the clinic's patients had a household income greater than 150% of poverty.¹² The clinic provided primary care 4 evenings per week to assure access for working people. Most of the clinic staff spoke Spanish, including the physicians.

The IBH Program: "It's Like Being a Well-Loved Child"

The IBH program was designed to provide mental health services in collaboration with primary care physicians for patients with mild-to-moderate mental health disorders.



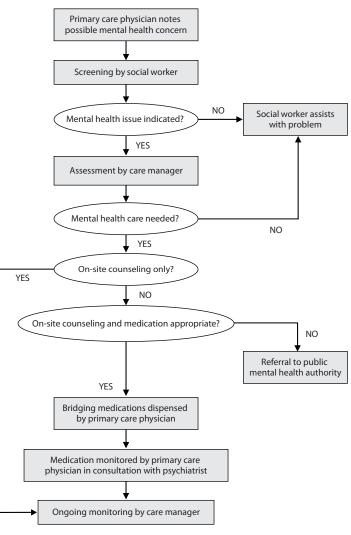


Figure 1 illustrates the IBH program patient services flowchart. On the basis of their clinical interview and physical examination, the primary care physicians initially identified the patients in need of mental health services. The primary care physician took responsibility for introducing the idea of enrolling the patient in the IBH program, often saying to patients, "Just like we check your pressure, and if it's too high, we try to do things to compensate for that, well, we can do [calculate] scores related to depression and anxiety, and, as strange as this may seem, we can do things that might help to bring those things under better control, if you're interested. Would you be willing?"

The care manager, who was a bilingual clinical social worker, conducted a psychosocial history and a mental status examination, obtained a baseline measurement of depression, and made a decision about enrollment in the program. The care manager also provided an explanation of the IBH program to the patient and structured weekly follow-up visits. The care manager provided counseling and patient education in Spanish, systematically followed up with patients by telephone, and tracked patient progress and contacts in a patient registry. She prepared cases for review and coordinated patient consultations for the consulting psychiatrist and referred patients with diagnoses considered beyond the expertise of the clinic staff (eg, substance abuse, personality disorders, schizophrenia) to a community mental health agency.

Ideally, the care manager could get an "accurate baseline" assessment of symptoms before the patient started medication. In the IBH program, the follow-up schedule was established at the first visit with the care manager during the assessment and enrollment. The care manager, in this setting, also used the 9-item Patient Health Questionnaire (PHQ-9)²² to provide feedback to patients about their improvement.

A psychiatrist, consulting to the IBH program, provided case consultation and treatment recommendations to the care manager and the primary care physicians and evaluated patients with diagnostic or treatment concerns. The consulting psychiatrist often stepped in at the primary care physician's request when patients were not responding to treatment, were having new or increased symptoms or an adverse reaction, or when any other "diagnostic clarification" was needed. The psychiatrist echoed a common sentiment, "Doctors [primary care] have less time with patients, and every year their time seems less and less and their schedules more crowded, and, so, they punt to me because I have time when they don't."

Despite common protests among professionals about private health information and the sharing of mental health records, the care manager expressed surprise at never meeting a patient who was concerned about who might gain knowledge about his or her mental disorder. In fact, she summarized, "They [the patients] felt like, 'I've got this team of people around me that care about me, that are all communicating.' It's like being a well-loved child."

The PHQ-9: Not Just an Outcome Tracking Instrument

Collaborative care differs from traditional primary care in one essential way—outcomes are systematically documented through structured information tracking systems.¹⁰ In the clinic's IBH program, depression outcomes were measured at every visit with the PHQ-9, a self-report of symptom frequency for the last 2 weeks on the 9 *DSM*-*IV* criteria for depression, and tracked through a database, which is considered an essential element to the successful implementation of collaborative care models.^{2,8}

The care manager suggested that the PHQ-9 was more than just an outcome tracking instrument. The care manager administered the PHQ-9 verbally and used it to engage the patients around their depression symptoms and to provide feedback about their improvement. For example, she might talk to patients about fluctuations in their scores and try to explore why the fluctuations were occurring. The social services director alluded to the usefulness of the PHQ-9 as well and how, over time, the patients began to use the tool as an anchor to self-monitor their symptoms. In fact, patients often internalized the scale such that, when called for followup by the care manager, the patient would begin by saying, for example, "Well, I think I'm about a 21 today."

The primary care physician also expressed his enthusiasm for and reliance on the PHQ-9 as an objective, evidencebased measure to monitor patient improvement. He stated, "Lots of patients learn to ask themselves those very same questions in terms of how they think they're doing." However, he stated that the biggest difference with the collaborative care model, that is different than the way depression was treated historically, is "You don't quit working on it until you get improvement on the measure, and if you're failing, assess why you are failing."

Primary Care Provider Buy-In: "Tag, You're It"

The care manager of the IBH program described a difficult initiation period, as she believed the primary care physicians wanted a psychiatrist or a psychiatric nurse in the role of care manager. The care manager came to understand that what she experienced was a function of the physicians thinking in a traditional medical model described as, "Okay, you have a mental health issue. Tag, you're it. Just let me pass you off to the psychiatrist, who is the expert, and then the psychiatrist has it from here."

As a unique solution to provider buy-in, a physician champion role was created early on to act as a liaison between the primary care physicians and the care manager, the psychiatrist, and the program administrators. The physician champion, a long-standing, highly regarded primary care physician, was instrumental to the success of the model. He attended all of the grant trainings and phone conferences with the program funders and "sold" the program to skeptical or new physicians. The care manager described the physician champion as the "hub" of the IBH program, while the champion humbly described himself as, "Just an advocate, and I've been fortunate because I'm honored to be associated with it."

Collaborative Care: Where Do We Begin?

Both the director of social services and the care manager emphasized that much of the program's success was in the attention given to implementation. The care manager began by "shadowing" the doctors while they were seeing patients in the clinic. The care manager explained, "I got an idea for how kind of crazy it is down there. I got to see each of them work, and, so, I got a flavor for their different styles and personalities."

Another critical early success came with the director asking each provider to make a list of 4 or 5 patients who they were having the most difficulty treating. She stated, "... I really was trying to figure out a way to respond to what they had voiced as their need, and for them to feel like somebody was responding to it, and for them to get some pretty quick relief." This approach worked well for the care manager, too, who said, "Then my case load was small enough that I could have success with those first 5." This process built confidence in the program and in having a social worker in the role of care manager. The care manager facilitated case reviews and did all of the scheduling for the psychiatrist's 4 hours of consultation per week. The care manager, who participated in those reviews, provided additional information about the case and would advocate for the patient, as they already had a wellestablished therapeutic relationship. The physician champion was confident that he spoke for the staff physicians when he described the essential function of the care management/ psychiatry consultation component of the model and how different that was from treatment as usual in primary care:

We have lots of folks coming in the door every day, and the best I've been able to do heretofore was be empathetic, care, listen, maybe if I had the time give them a [PHQ-9] score... . But, so often it came on the heels of some other, much more involved, physical issue. So, it's nice to have somebody to take that piece and share it with me. It does not really take it away, but to share it with me, and to be more responsible for that piece than I am, to a certain degree. I'm always ultimately responsible.

DISCUSSION

This case study of the IBH program represents an opportunity to examine collaborative care operations from behind the scenes, with a look into the subtleties of the model that might be unique to this setting and might contribute to its success. On the basis of our study's novel insights about how a collaborative care program works, primary care practices interested in implementing the model can understand the processes utilized to produce successful patient outcomes.

First, implementation of an essential tool of collaborative care, the depression screening instrument, can also be used to enrich clinical encounters with patients and give physicians a reliable method for monitoring their patients by reframing depression as a set of symptoms in need of amelioration, akin to medical problems for which the patient was seeking care. In essence, the depression measure in our study was adapted to facilitate processes of care by focusing on symptoms as a means of stigma reduction in a vulnerable population who might baulk at the suggestion of mental illness. Indeed, these adaptations demonstrated the flexibility and willingness of team members to think differently about the usual adjuncts to collaborative care.

Also, the influence of the traditional medical model, in which the doctor maintains control of patient care and struggles with sharing responsibility except to hand off care,²³ can create some obstacles to implementation. Although skepticism that the model will create more work for the physician is a common reaction to collaborative care, we found that the clinical social worker acting as care manager was essential to building trust with the primary care providers. This finding is consistent with previous studies that found that initially skeptical providers often become enthusiastic after working with a care manager over time.^{23,24} Moreover, the introduction of the physician champion and early identification and treatment of the most problematic patients also helped ease the medical team into understanding the model. The availability of a properly trained mental health workforce is among the most pressing health care issues facing the nation, especially in rural areas.²⁵ Many primary care practices lack professionals who are adequately trained in disease management.²⁴ Depression care managers monitor outcomes, discuss and support treatment recommendations, and provide brief counseling using evidence-based techniques.¹⁹ Such functions are consistent with Wagner and colleague's chronic care model¹ of disease management and require extensive training and skills.

The social work profession is uniquely positioned to be included in a collaborative care model to act as the behavioral health specialist and the care manager. Transdisciplinary team care is thought to be particularly critical for vulnerable populations because these individuals carry the added burden of poverty, discrimination, and lack of access, which results in worse health outcomes.²⁶ It is these populations in which social workers have comprehensive training and the ability to address a range of psychosocial issues that contribute to the mental and physical health status of an individual.²⁷ Social workers have long been familiar with standardized screening instruments and assessment tools used in the acute care setting, particularly in specialty mental health.²⁷ Finally, social workers have begun to understand the value of and necessity for evidence-based practice, while struggling with maintaining the creative, clinical judgment deemed necessary for individual situations.²⁸

The development of collaborative care teams is a core tenet of health reform at a time when the culture of crosseducation and training is quite limited.²⁶ A shift to a higher level of collaboration involves transdisciplinary collaboration that advances team work from an interdisciplinary approach to one in which team members from various disciplines develop a common language and loosen hierarchical structures, pool bodies of knowledge and theories, and jointly develop new methods and analytic techniques within a philosophy of whole person care.²⁹ In this sense, the patient is also considered a vital part of the team. Without a doubt, transdisciplinary teams offer the best hope for achieving quality health care outcomes, particularly for vulnerable populations and patients with multiple comorbidities.²⁶

Limitations

This study has limitations with regard to transferability. The findings might not be representative of collaborative care programs in other community-based clinics or primary care practices. The experiences of the interdisciplinary team members may be perspectives of collaborative care unique to the study site. Inclusion of interviews with the primary care provider, the psychiatrist, the clinical social worker, and the social services director provided a rich variety of perspectives, which enhanced the single case. For future studies, in order to further enhance rigor, we would include other study sites.

CONCLUSION

Most empirical studies of collaborative care, even those with substantial clinical outcomes, do not offer insight

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into how the model works in the real world, including the nuances and the obstacles. The insights captured by this case study allow physicians, mental health practitioners, and administrators a view into key elements of the model as they consider implementation of a collaborative care program in their settings. Because successful implementation is likely to show demonstrable improved clinical outcomes for patients, it is important to understand how the model operates on a day-to-day basis, with careful consideration of the more subtle aspects of the program, such as facilitating team functioning and adapting tools to new processes of care to meet patients in unique contexts. Attention to barriers that still exist, especially regarding workforce and workload, will continue to be critical to organizations attempting integration.

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Potential conflicts of interest: None reported.

Funding/support: This research was supported in part by a grant from the Hogg Foundation for Mental Health, Austin, Texas.

Role of sponsor: The sponsor had no role in study design, execution of the study, data analysis, or manuscript preparation.

REFERENCES

- 1. Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *Milbank Q.* 1996;74(4):511–544.
- 2. Unützer J, Schoenbaum M, Druss BG, et al. Transforming mental health care at the interface with general medicine: report for the presidents commission. *Psychiatr Serv.* 2006;57(1):37–47.
- Bower P, Gilbody S. Managing common mental health disorders in primary care: conceptual models and evidence base. *BMJ*. 2005;330(7495):839–842.
- Miller BF, Mendenhall TJ, Malik AD. Integrated primary care: an inclusive three-world view through process metrics and empirical discrimination. *J Clin Psychol Med Settings*. 2009;16(1):21–30.
- Oxman TE, Dietrich AJ, Schulberg HC. The depression care manager and mental health specialist as collaborators within primary care. *Am J Geriatr Psychiatry*. 2003;11(5):507–516.
- Klinkman MS, Schwenk TL, Coyne JC. Depression in primary care—more like asthma than appendicitis: the Michigan Depression Project. *Can J Psychiatry*, 1997;42(9):966–973.
- Miller BF, Teevan B, Phillips RL Jr, et al. The importance of time in treating mental health in primary care. *Fam Syst Health*. 2011;29(2):144–145.
- Thielke S, Vannoy S, Unützer J. Integrating mental health and primary care. *Prim Care*. 2007;34(3):571–592, vii.
- 9. Gilbody S, Bower P, Fletcher J, et al. Collaborative care for depression: a

cumulative meta-analysis and review of longer-term outcomes. Arch Intern Med. 2006;166(21):2314-2321.

- Bower P, Gilbody S, Richards D, et al. Collaborative care for depression in primary care: making sense of a complex intervention: systematic review and meta-regression. *Br J Psychiatry*. 2006;189(6):484–493.
- 11. Creswell JW. Qualitative Inquiry and Research Design: Choosing Among Five Approaches. 2nd ed. Thousand Oaks, CA: Sage Publications; 2007.
- Sanchez K, Watt TT. Collaborative care for the treatment of depression in primary care with a low-income, Spanish-speaking population: outcomes from a community-based program evaluation. *Prim Care Companion CNS Disord*. 2012;14(6):doi:10.4088/PCC.12m01385
- Yin RK. Case Study Research: Design and Methods. 3rd ed. Thousand Oaks, CA: Sage Publications; 2003.
- Anderson RA, Crabtree BF, Steele DJ, et al. Case study research: the view from complexity science. *Qual Health Res.* 2005;15(5):669–685.
- Baxter P, Jack S. Qualitative case study methodology: study design and implementation for novice researchers. *Qual Rep.* 2008;13(4):544–559.
- Tobin GA, Begley CM. Methodological rigour within a qualitative framework. J Adv Nurs. 2004;48(4):388–396.
- Druss BG. The mental health/primary care interface in the United States: history, structure, and context. *Gen Hosp Psychiatry*. 2002;24(4):197–202.
- Dwight-Johnson M, Lagomasino IT. Addressing depression treatment preferences of ethnic minority patients. *Gen Hosp Psychiatry*. 2007;29(3):179–181.
- Oxman TE, Dietrich AJ, Schulberg HC. Evidence-based models of integrated management of depression in primary care. *Psychiatr Clin North Am*. 2005;28(4):1061–1077.
- Hinojosa J, Bedell G, Buchholz ES, et al. Team collaboration: a case study of an early intervention team. Qual Health Res. 2001;11(2):206–220.
- Bogdan R, Biklen S. Qualitative Research in Education. Boston, MA: Allyn & Bacon; 2003.
- Kroenke K, Spitzer RL, Williams JBW. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001;16(9):606–613.
- 23. Nutting PA, Gallagher K, Riley K, et al. Care management for depression in primary care practice: findings from the RESPECT-Depression trial. *Ann Fam Med.* 2008;6(1):30–37.
- Kilbourne AM, Schulberg HC, Post EP, et al. Translating evidence-based depression management services to community-based primary care practices. *Milbank Q.* 2004;82(4):631–659.
- 25. Hoge MA, Morris JA, Daniels AS, et al; Annapolis Coalition on Behavioral Health Workforce Education. Report of recommendations: the Annapolis Coalition Conference on Behavioral Health Work Force Competencies. Adm Policy Ment Health. 2005;32(5–6):651–663.
- Nandiwada DR, Dang-Vu C. Transdisciplinary health care education: training team players. J Health Care Poor Underserved. 2010;21(1):26–34.
- Vourlekis BS, Ell K, Padgett D. Educating social workers for health care's brave new world. *Journal of Social Work Education*. 2001;37(1):177–191.
- Graybeal CT. Evidence for the art of social work. Fam Soc. 2007;88(4):513–523.
- 29. Gehlert S, Murray A, Sohmer D, et al. The importance of transdisciplinary collaborations for understanding and resolving health disparities. *Soc Work Public Health*. 2010;25(3):408–422.