

# Developing Effective Collaboration Between Primary Care and Mental Health Providers

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**Objective:** Improving care for depressed primary care (PC) patients requires system-level interventions based on chronic illness management with collaboration among primary care providers (PCPs) and mental health providers (MHPs). We describe the development of an effective collaboration system for an ongoing multisite Department of Veterans Affairs (VA) study evaluating a multifaceted program to improve management of major depression in PC practices.

**Method:** Translating Initiatives for Depression into Effective Solutions (TIDES) is a research project that helps VA facilities adopt depression care improvements for PC patients with depression. A regional telephone-based depression care management program used Depression Case Managers (DCMs) supervised by MHPs to assist PCPs with patient management. The Collaborative Care Workgroup (CWG) was created to facilitate collaboration between PCPs, MHPs, and DCMs. The CWG used a 3-phase process: (1) identify barriers to better depression treatment, (2) identify target problems and solutions, and (3) institutionalize ongoing problem detection and solution through new policies and procedures.

**Results:** The CWG overcame barriers that exist between PCPs and MHPs, leading to high rates of the following: patients with depression being followed by PCPs (82%), referred PC patients with depression keeping their appointments with MHPs (88%), and PC patients with depression receiving antidepressants (76%). The CWG helped sites implement site-specific protocols for addressing patients with suicidal ideation.

**Conclusion:** By applying these steps in PC practices, collaboration between PCPs and MHPs has been improved and maintained. These steps offer a guide to improving collaborative care to manage depression or other chronic disorders within PC clinics.

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The prevalence of depressive disorders is high among primary care (PC) patients, ranging between 5% and 10%,<sup>1</sup> and is responsible for a heavy disability burden among affected patients.<sup>2,3</sup> Rates of successful completion of appropriate treatment, however, are low.<sup>4,5</sup> Research shows that collaboration between PC clinicians and mental health (MH) specialists is necessary if better outcomes are to be achieved.<sup>6-11</sup> We describe the process used to institutionalize ongoing MH/PC collaboration across 7 Department of Veterans Affairs (VA) outpatient clinics in 5 states as part of a depression quality-improvement project, the Translating Initiatives for Depression into Effective Solutions (TIDES) project. TIDES is a researcher-clinical-management partnership project sponsored by the Quality Enhancement and Research Initiative (QUERI) of the VA. The purpose of TIDES is to encourage VA facilities to adopt depression care improvements using evidence-based quality improvement methods.<sup>12</sup>

## METHOD

The TIDES team implemented the project in 3 VA regions, or Veterans Integrated Service Networks (VISNs). Each VISN identified 2 or 3 PC outpatient clinics (7 clinics in total) as demonstration sites for the TIDES depres-

sion care improvement initiative. Clinic sizes ranged from a caseload of 3812 patients to a caseload of 13,622 patients (Table 1). VISN directors and their MH and PC clinical leaders worked with researchers to identify depression care improvement priorities and evidence-based strategies for achieving these priorities. They then fit these strategies to VISN resources and preferences. Utilizing this process, these VISN leaders determined that collaboration between MH and PC was likely to be a central element of a successful depression care improvement initiative. They chose to implement regional telephone-based depression care management using registered nurses as Depression Care Managers (DCMs) who facilitate collaboration between PC and MH providers and assist PC providers with patient management. A MH lead clinician from each VISN supervised that VISN's DCM.

The project was organized around work groups dealing with specific aspects of the project. For example, an informatics work group developed software to facilitate collaborative care, and a Human Subjects work group dealt with human subjects issues. We therefore formed a multidisciplinary work group to support collaborative care (Collaborative Care Workgroup, or CWG). The CWG addressed barriers to collaboration as they were encountered. A psychiatrist with a consultation liaison background (B.L.F.) was the overall faculty leader of the group. The TIDES senior leaders provided the CWG with the following mission statement (see [www.va.gov/tides\\_waves](http://www.va.gov/tides_waves)):

“This work group develops guidance, published on the TIDES List serve and on this website for managing depression through TIDES. This work group consists of mental health, primary care, and nursing opinion leaders from each TIDES clinic and from the VISN. An important goal of the TIDES/WAVES project is to improve collaboration between primary care and mental health providers. The Collaboration group works closely with each site learning how it operates. It then makes recommendations on how to best implement a site-specific collaborative care system between primary care providers, mental health providers and care managers. Another important goal of this Work Group is to develop ways to assure adequate supervision for the care managers.”

CWG participants included 1 or 2 nurses, 1 depression care manager, 3 or 4 MH specialists, and 1 to 3 PC clinicians from each VISN. In total there were 31 VISN participants and 7 research team participants, although on average there were 8 participants per meeting. The group planned to meet monthly. The group met 17 times by telephone conference call between June 2002 and March 2004, or a little less than once a month, and continues to meet. The CWG developed a 3-phase process to help sites implement a collaborative process

**Table 1. TIDES Utilization by Site**

Site	Primary Care Patients, N	Total Primary Care Providers, N	Total No. of TIDES Project Consults
1	7,738	8	119
2	8,222	6	68
3	9,393	9	153
4	4,790	7	19
5	3,812	11	74
6	13,622	11	39
7	4,139	4	37

Abbreviation: TIDES = Translating Initiatives for Depression into Effective Solutions.

for improving the quality of treatment for major depression in each of the PC clinics implementing collaborative care. The 3-phase process consists of identification of barriers to collaborative care, definition of specific target problems, and institutionalization of specific solutions.

**Phase 1: Identify Barriers to Appropriate Management of Depression Within Primary Care**

Prior to implementation of the depression care improvement initiative, we assessed existing barriers to MH-PC collaboration in the participating clinics. Two members of the TIDES research team conducted semi-structured telephone interviews with all the lead PC and lead MH clinical managers at each participating site.<sup>13</sup> The interviews addressed (1) pre-intervention practices for screening, diagnosis, treatment, and management of depression care for depressed patients identified within PC, (2) perceived barriers to quality depression care, (3) the nature of pre-intervention collaboration between MH and PC services, and (4) perceived barriers to MH-PC collaboration. The TIDES interviewers recorded all interviews and conducted a content analysis of the verbatim transcripts. We used the results of the content analysis to generate a final list of barriers. The CWG classified these barriers as provider-, system-, and patient-level barriers (Table 2).

We also used the monthly teleconferences to receive ongoing information from DCMs and others about barriers to implementation that were being encountered at the sites. This method of information gathering allowed the CWG to respond to new concerns that arose after the initial interviews.

**Phase 2: Identify Target Problems and Solutions**

Often the barriers that the managers defined were too broad to lend themselves to remediation. Therefore, the second phase of the CWG focused on identifying clearly defined target problems related to these barriers and formulating specific solutions to those problems. Table 3 summarizes these problems and resolutions arrived at through the work of the CWG.

**Table 2. Site-Specific Depression Care Barriers Identified Through Qualitative Interviews and Collaborative Care Workgroup (CWG) Success in Overcoming Them**

Barrier	CWG Target Problems	What the CWG Did	Evidence of Success
<b>I. Provider-Level Barriers</b>			
1. PCPs do not have adequate training/education in depression/MH	Informal or unclear depression diagnostic criteria utilized within PC	Reviewed diagnostic criteria Incorporated information in care manager feedback to PCP	65% of patients being followed in MH or put on an antidepressant have a depression-related ICD-9 diagnosis
2. PCPs are not interested in treating depression	Too difficult to provide care in PC	Encouraged referral to care managers	41 of ≥ 84 PC clinicians referred to DCMs
3. PCPs are not comfortable treating depression/not familiar with depression	Lack of depression care education and support or care manager feedback	Referral criteria and treatment algorithms included in care manager notes Academic detailing and seminars for PCPs	82% of patients followed in PC
4. Inadequate follow-up from MH	No system for notifying MHPs when patients are no-shows	Care manager identified patients not being followed up through record review and alerted MHPs	Depression panel patients followed in MH have kept 88% of their appointments
<b>II. System-Level Barriers</b>			
1. PCPs do not have enough time/there are not enough PCPs	No system for assisting PCPs with assessment (approximately 20 minutes minimum), patient education (approximately 20 minutes), and follow-up arrangements and reminding	Implemented DCM assessment	251 patients assessed and educated (of 288 referred; 87%)
2. Current computerized medical record system is not panel-centered	System provides no way to track tasks proactively for a panel of patients	Developed paper and pencil registry and task tracking	Used on 100% of depression care panel patients
3. MH access is not sufficient/waiting time for appointment in MH is too long/not enough MHPs	Patients are not triaged, so the most ill patients might not be followed in MH specialty clinics	Developed better referral feedback and criteria	29% of all patients assessed by the DCM were also given MH service consult. Overall, 18% remained in MH for follow-up
4. Institutional barriers exist to having PC providers treat depression	Policies preventing PCPs from using appropriate antidepressants	Changed policy	76% of patients followed in PC put on antidepressants
5. Site culture/history of limiting depression to MHPs/turf issues	MHPs worry about perception of reduced need for MHPs and concern with inadequate treatment in PC	Helped MHPs understand their value as a supervisor and appreciate that more of their time can now be used to treat more seriously ill patients	Ongoing care manager supervision by MHP
6. PC and MH clinics are too far apart	Communication difficulties exist between MH and PC due to full schedules of each	Implemented the DCM as a communication facilitator	Complicated patients are routinely reviewed with MH specialist
7. Communication difficulties between PCPs and MHPs	Inconsistent forms of communication used between PCPs and MHPs	Using the electronic record, developed a system for which notes require electronic co-signatures and alerts	Electronic record is now routinely used as the way PCPs and MHPs communicate
<b>III. Patient-Level Barriers</b>			
1. Patients do not want psychiatric diagnoses and/or are reluctant to see MHPs because they fear stigma	Some patients feel more comfortable with PC follow-up. Very ill patients need strong encouragement to attend appointments with MHP	Followed healthier patients in PC Assisted referral through care manager	Of patients referred by the DCM to MH service, 88% of consult and follow-up MH service appointments were kept

Abbreviations: DCM = Depression Care Manager, MH = mental health, MHP = mental health provider, PC = primary care, PCP = primary care provider.

**Table 3. Problems Brought to the Collaborative Care Workgroup and Resolutions**

Problem	Resolution
Inconsistent and unreliable management of threatened suicide	Uniform threatened suicide policy template with site-specific tailoring
Patients with co-occurring substance abuse not managed uniformly across sites in terms of referral or initiation of antidepressants	Joint mental health and primary care specialty policy for initiating treatment in patients with co-occurring depression and substance abuse
Patients with depression who have received treatment in mental health specialty clinic for more than 6 months may still screen positive for major depression in primary care	We have initiated a PDSA cycle on this problem that aims to set goals and procedures for managing patients whose depression does not respond to initial treatment in primary care and/or mental health specialty clinic

Abbreviation: PDSA = plan, do, study, act.

### Phase 3: Institutionalize Ongoing Problem Detection and Solution Through New Policies and Procedures

In addition to the important barriers identified by site leaders, the CWG identified several additional clinical and administrative concerns. The CWG provided a forum to discuss these and arrive at possible solutions.

#### Impact Assessment

To assess impact on patient care, we established registries of depressed patients referred for collaborative care in the 7 TIDES demonstration outpatient clinics. DCMs logged all patient contacts both in the electronic medical record and in an Excel-based (Microsoft Corporation, Redmond, Wash.) data and task tracking system designed in partnership with the TIDES research team. They assessed depressive symptoms with the 9-item version of the Patient Health Questionnaire.<sup>14</sup> Quarterly reports containing combined patient data were generated and analyzed locally, regionally, and nationally and were distributed to participating VISN clinical managers.

## RESULTS

The 3-phase process resulted in identification of barriers to collaborative care and was used to develop and institutionalize effective solutions.

### Phase 1: Identify Barriers to Appropriate Management of Depression Within Primary Care

Staff responses were considered by staff role: manager, leader, or clinician. Primary care and MH managers identified some of the same barriers; each group also identified some unique barriers. At least one participant from each specialty indicated that (1) PC providers lacked adequate time for treating depression (1 PC and 2 MH managers), (2) PC providers had inadequate MH training (1 PC and 3 MH leaders), and (3) there were problems with the computerized medical record (1 PC and 1 MH leader). One PC manager but no MH managers also identified each of the following barriers to managing depression within PC: (1) institutional policy as a barrier to having PC providers treat depression, (2) lack of interest in treating depression among PC clinicians, (3) turf issues between MH and PC, and (4) inadequate follow-up from

MH. One MH manager, but no PC clinicians, identified each of the following barriers: (1) PC discomfort and lack of familiarity with treating depression, (2) insufficient MH specialty access, (3) distance between MH and PC clinics, and (4) patients not wanting to see a MH specialist. Utilizing this pre-intervention data, the CWG helped site members to clarify which barriers were present at their own sites and to take steps to implement site-specific solutions.

### Phase 2: Identify Target Problems and Solutions

Columns 2 and 3 of Table 2 summarize the target problems and solutions. Column 4 of Table 2 reports preliminary evidence of success. For example, for the manager-identified provider-level barrier, "PCPs do not have adequate training," the CWG identified the following corresponding target problem, "informal or unclear depression diagnostic criteria within PC." To address this problem, the CWG incorporated diagnostic criteria into the care manager feedback to the PCP. Preliminary evidence indicates that this has been successful. Based on pre-intervention reports from site MH leaders, virtually no PC providers provided formal depression diagnoses when initiating treatment through a referral or prescribing an antidepressant. After initiation of the CWG solution, 65% of PC patients referred to MH clinics or put on treatment with an antidepressant by PC providers had a depression-related ICD-9 diagnosis.

We addressed system-level barriers in a similar manner. For example, site managers reported that PC providers do not have enough time or that there are not enough PC providers to treat depression. The CWG discovered that this time constraint might have been exacerbated by the lack of a system for assisting PC providers with patient assessment and education. To address this, the CWG implemented case manager assessment. Preliminary evidence indicates that this assessment has been successfully implemented; of 288 patients referred, 251 (87.2%) were assessed and educated about depression.

Site managers identified a primary patient-level barrier: patients do not want psychiatric diagnoses and/or are reluctant to see MH providers because they fear stigma. As with the provider- and system-level barriers, the CWG identified a specific corresponding target problem and

solution. For those patients with mild to moderate depression who preferred to remain within PC, the DCM provided PC providers with assistance in managing these patients. For severely depressed patients, the DCM assisted PC providers with encouraging patients to accept referral to MH. Preliminary evidence indicates that DCMs have been highly successful in convincing patients to accept MH referrals; patients keep 87.7% of consult appointments and 87.6% of follow-up appointments that the DCM made.

### Phase 3: Institutionalize Ongoing Problem Detection and Solution Through New Policies and Procedures

The CWG worked to develop policies that would make it easier for institutions to address barriers to care. One clinical and system concern that developed was how to care for patients with suicidal ideation. The CWG discovered that many sites lacked clear protocols on how to care for these patients. The CWG began by achieving a consensus on core components of a successful suicidal patient protocol. Sites began with these core components and adapted them to meet their unique site needs. The CWG proposed that each site adopt a chain-of-providers notification system; sites then determined who should be in this chain at their clinics. This is an example of a policy level solution that facilitates improved depression care.

The CWG also worked with sites to develop protocols for depressed patients with a comorbid substance abuse problem. Utilizing the same process as for suicidal patients, the CWG developed core components and worked with sites to develop site-specific protocols for these depressed patients who suffer from comorbid substance abuse disorders. Currently, the CWG is developing protocols to guide providers when their patients fail first-line treatments for depression. Additional information about this and the other protocols is available on the project Web site, [www.va.gov/tides\\_waves](http://www.va.gov/tides_waves). Using a forum like the CWG helps bring providers together to better identify and address specific concerns or problems requiring protocols to sustain efficient and effective collaboration.

## DISCUSSION

Given the prevalence of depression within the PC population and the extent to which it is underdetected and undertreated, there is a compelling need to implement system changes to improve collaboration between PC and MH services. Programs that have implemented collaboration between these services have resulted in improved patient care.<sup>7-10</sup> Effective collaborative systems between PC and MH services develop after health care organizations remove potential barriers to collaboration and make a

concerted effort to institutionalize collaboration. We believe that health care organizations will be able to build effective collaborative programs by implementing similar steps and by focusing on the unique needs of their PC and MH clinics. Using a forum like the CWG helped bring providers together to better identify and address specific concerns or problems requiring protocols to sustain efficient and effective collaboration. These collaborative systems between PC and MH are currently functional across 7 distinct PC sites within the Veterans Administration health care system.

Many of the barriers and possible solutions described here should generalize beyond our sample. Clinicians at other institutions could therefore utilize the barriers list from Table 2 for identifying potential barriers within their own clinics. Some barriers will be specific to the VA. However, other barriers are common throughout PC and can be addressed regardless of setting. Ongoing discussion between PC and MH services will facilitate development of site-specific solutions to barriers.

## REFERENCES

1. Katon W, Schulberg H. Epidemiology of depression in primary care. *Gen Hosp Psychiatry* 1992;14:237-247
2. Hays RD, Wells KB, Sherbourne CD, et al. Functioning and well-being outcomes of patients with depression compared with chronic general medical illness. *Arch Gen Psychiatry* 1995;52:11-19
3. Ormel J, Von Korff M, Ustun T, et al. Common mental disorders and disability across cultures: results from the WHO Collaboration Study on Psychological Problems in General Health Care. *JAMA* 1994;272:1741-1748
4. Coyne JC, Schwenk TL, Fechner BS. Non-detection of depression by primary care physicians reconsidered. *Gen Hosp Psychiatry* 1995; 17:3-12
5. Simon GE, Von Korff M, Wagner EH, et al. Patterns of antidepressant use in community practice. *Gen Hosp Psychiatry* 1993;15:399-408
6. Katon W, Von Korff M, Lin E, et al. Collaborative management to achieve treatment guidelines: impact on depression in primary care. *JAMA* 1995;273:1026-1031
7. Katon W, Robinson P, Von Korff M, et al. A multifaceted intervention to improve treatment of depression in primary care. *Arch Gen Psychiatry* 1996;53:924-932
8. Wells K, Sherbourne C, Schoenbaum M, et al. Impact of disseminating quality improvement programs for depression in managed primary care: a randomized controlled trial. *JAMA* 2000;283:212-220
9. Hedrick SC, Chaney EF, Felker B, et al. Effectiveness of collaborative care depression treatment in Veterans' Affairs primary care. *J Gen Intern Med* 2003;18:9-16
10. Rubenstein LV, Chaney EF, Petzel R. Applying evidence from depression quality improvement research to VA. *QUERI Quarterly* 2001;3:2-4
11. Felker B, Barnes R, Greenberg D, et al. Preliminary outcomes from an integrated mental health primary care team. *Psychiatr Serv* 2004;55: 442-444
12. Rubenstein LV, Mittman BS, Yano EM, et al. From understanding health care provider behavior to improving health care: the QUERI framework for quality improvement. *Quality Enhancement Research Initiative. Med Care* 2000;38(6 suppl 1):129-141
13. Fickel JJ, Parker LE, Yano EM, et al. Improving depression care through primary care-mental health collaboration [poster]. Presented at the Academy Health Annual Research Meeting; June 6-8, 2004; San Diego, Calif
14. Spitzer RL, Kroenke K, Williams JB. Validation and utility of the self-report version of the PRIME-MD. *JAMA* 1999;282:1737-1744