



Integrated Primary Care and Behavioral Health Services: Can the Model Succeed?

A LITERATURE REVIEW

ON MODELS, EVIDENCE-BASED PRACTICES, AND LESSONS LEARNED FOR COMMUNITY CLINICS AND HEALTH CENTERS, AND COUNTY SPECIALTY MENTAL HEALTH PROGRAMS

July 11, 2011

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Funding for this report was provided by the County of San Diego Health and Human Services Agency, Behavioral Health Services, through Contract #532853, which was granted to the Community Clinics Health Network, a subsidiary of the Council of Community Clinics.

Introduction

Over the past several years the Council of Community Clinics has supported member clinics in their efforts to provide integrated behavioral health services to their patients. Recently, San Diego community clinics and health centers (CCHCs) and County specialty mental health programs have been advancing the conversation about working collaboratively to improve the system of care for individuals with mental illness. While CCHCs recognize the value of integrated services, some have also faced challenges in implementing programs at their sites due to financial, time and other constraints, not the least of which is the tremendous culture change needed to make an integrated behavioral health program successful. Interfaces with County specialty mental health programs are in their early stages, but like these programs, CCHCs have a history of serving the low income community reaching back to the 1960s. Today CCHCs continue to serve the same community not only with direct care, but also with disease management, patient support, electronic health records, and administrative structures that support quality and safety. The literature backs up the experience of providers who see that many of their patients with diabetes or hypertension also face depression that interferes with the patient's ability to manage their condition. CCHCs that want to incorporate integrated behavioral health services will benefit from information about model programs, potential barriers to overcome, and strategies to create change within their own clinic cultures.



Recently, San Diego community clinics and health centers and County specialty mental health programs have been advancing the conversation about working collaboratively to improve the system of care for individuals with mental illness.

The literature is rich with information on primary care and behavioral health integration, especially as it relates to depression. There are comprehensive reviews of randomized controlled trials (RCTs), model programs, and emerging practices, including detailed program descriptions, lessons learned and financial implications. In addition, much has been written on the cost of integrated models, the need for adequate payment, and the importance of eliminating the silo approach to services as behavioral health is carved out of health care services in most health plans. "How-To" manuals have been developed to describe how to implement an integrated program in a primary care practice, and books and websites are dedicated to the topic. Several foundations have funded projects related to integrated behavioral health.

Rather than attempt to touch on all of these components of integrated care, the purpose of this report is to highlight information that will further support CCC member clinics and County specialty mental health programs who are moving toward integrated behavioral health services. It will 1) define primary care and behavioral health integration, and describe the continuum from low to high integration; 2) provide theoretical constructs that support integrated services, and give context to the variety of ways in which integrated care is delivered; and 3) describe integrated models of care through a review

of the literature, as well as findings and lessons learned. This report highlights a selection of relevant studies in the literature, and is not intended to be a comprehensive review.

As an aside, the majority of RCTs are not conducted with the populations that comprise CCHCs. Of the 4.7 million patients visiting California CCHCs, 65% are female, 54% are Hispanic, and 31% are between the ages of 20 and 34. Two-thirds of clinic patients are either uninsured or covered by Medi-Cal, with the balance covered mostly by other public programs such as Family PACT. Only 7% have private insurance and 5% are covered by Medicare (California Primary Care Association, 2009 OSHPD Data). There is an emerging literature that conducts RCTs on low income and ethnically diverse populations, but existing literature continues to be informative in many ways.

Evolution of the Interface between Primary Care and Behavioral Health

By way of background, CCHCs and specialty mental health programs are all rooted in the community and have followed similar paths that today are closer than ever. During the first part of the 20th century, medical care shifted from the community to the hospital. At the same time, the care of people with serious mental illness moved from families and small community settings to state-run institutions (Mauer & Druss, March 2007). The goals of the community mental health movement of the 1950s and 1960s was to shift mental health treatment back to outpatient settings, and to encourage individuals to be more active in their treatment rather than relying on custodial care.

President Kennedy's focus in the 1963 Community Mental Health Center Act was to "return mental health care to the mainstream of American medicine." The Act proposed to organize community mental health centers around general medical hospitals. Unfortunately integration was not achieved due to a combination of limited financial resources and a view of mental illness not as a medical condition but as something that could be addressed through social methodologies. Funding for the program devolved from the federal government to the states in the 1980s through block grants, and since then mental health funding has become extremely variable on a state-by-state basis. In fact many states began to focus primarily on people with serious mental illness (SMI), mainly through Medicaid, and offered little support for non-SMI or uninsured populations (Mauer & Druss, March 2007).

At the same time, community health centers were developed in the 1960s as part of the War on Poverty. Their mission was to provide health care to people with very little money. Unlike community mental health centers, CHCs have continued as federally-funded programs. The development of managed care in the 1980s and 1990s resulted in primary care providers (PCPs) being responsible for more mental health services. It also resulted in greater use of carve-outs where mental health services are financially and organizationally separated from medical care, creating silos for access, service planning and payment (Mauer & Druss, March 2007).

Today CCHCs and County specialty mental health programs have the opportunity to create partnerships that make the most of their strengths and result in better care to their clients. Models of working together will be described in more detail below.

Levels of Integration

The definition of "integrated care" varies considerably, depending on who is describing it. On one end of the continuum, some consider integration to refer simply to enhancing the relationship between physical and behavioral health providers so that a patient receives more comprehensive services. Others believe integrated care has only been accomplished when physical and behavioral health providers work together as a team to develop a unified patient care plan (RAND Corporation, May 2009). The AHRQ Evidence Report/Technology Assessment (Butler et al., October 2008) shows the range of definitions of integrated care:

- "Integration occurs when the mental health provider is considered a regular part of the health care team" (Kirk Strosahl).
- "Integration is characterized by a high degree of collaboration among the various health professionals serving patients in terms of assessment, treatment planning, treatment implementation, and outcome evaluation" (The American Psychological Association's Presidential Task Force on Integrated Health Care).
- Integrated services "have medical and behavioral health components within one treatment plan for a specific patient or population of patients." Integrated care "describes care in which there is one treatment plan with behavioral and medical elements rather than two treatment plans. The treatment plan is delivered by a team that works together very closely or by pre-arranged protocol" (Blount, 2003).

One of the most detailed descriptions of the continuum of integration describes three levels of care: coordinated, co-located, and integrated (Collins et al., 2010) (see Figure 1). With coordinated care, the PCP screens for behavioral health problems and develops a referral relationship between primary care and behavioral health, which may be located on- or off-site. With co-located care, medical and behavioral health services are located in the same facility and enhance communication takes place between the providers. In integrated care there is one treatment plan for the individual that includes both medical and behavioral components. Care teams are organized around meeting the physical and behavioral health needs of the person (Collins et al., 2010).

(Please see next page.)

Figure 1: Collaborative Care Categorizations

Coordinated	Co-Located	Integrated
<ul style="list-style-type: none"> ■ Routine screening for behavioral health problems conducted in primary care setting ■ Referral relationship between primary care and behavioral health settings ■ Routine exchange of information between both treatment settings to bridge cultural differences ■ Primary care provider to deliver behavioral health interventions using brief algorithms ■ Connections made between the patient and resources in the community 	<ul style="list-style-type: none"> ■ Medical services and behavioral health services located in the same facility ■ Referral process for medical cases to be seen by behavioral specialists ■ Enhanced informal communication between the primary care provider and the behavioral health provider due to proximity ■ Consultation between the behavioral health and medical providers to increase the skills of both groups ■ Increase in the level and quality of behavioral health services offered ■ Significant reduction of no-shows for behavioral health treatment 	<ul style="list-style-type: none"> ■ Medical services and behavioral health services located either in the same facility or in separate locations ■ One treatment plan with behavioral and medical elements ■ Typically a team working together to deliver care, using a prearranged protocol ■ Teams composed of a physician and one or more of the following: physician's assistant, nurse practitioner, nurse, case manager, family advocate, behavioral health therapist ■ Use of a database to track the care of patients who are screened into behavioral health services

Source: Collins et al., 2010

Theoretical Constructs

Chronic Care Model and Patient-Centered Medical Home

The conversation about integrated behavioral health care is taking place within a framework of primary care services that is more responsive to the needs of the whole person, comprehensive, well coordinated, and supported by information technology. Wagner's Chronic Care Model, for example, promotes the redesign of health care delivery to include coordinated care, self-management support to patients, linking patients to community resources, using information systems to support compliance with treatment recommendations, and other strategies. Although CCHCs have typically applied this model of care to chronic diseases such as diabetes and asthma, the Chronic Care Model has been used as the foundation to improve care for common mental illnesses such as depression (Butler, et al., October 2008). The Patient-Centered Medical Home also endorses a whole-person orientation, coordinated or integrated care, and use of a physician-directed care team which could include a mental health provider, patient management support and patient tracking, among other principles. Both of these models promote better integration and increased access to comprehensive services for patients.

Four Quadrant Model

The Four Quadrant integration model (see Figure 2) was originally conceived by mental health and substance abuse directors based on a consensus statement to describe appropriate mental health and substance abuse addiction services (Mauer B. J., 2006). The National Council for Community Behavioral Healthcare modified it to address mental health and physical health in 2006, then updated it in 2009 to incorporate "person-centered healthcare home" concepts,¹ which are indicated in bold in Figure 2 (Mauer, April 2009). The Four Quadrant model describes how primary care and specialty mental health can partner in order to provide optimal care for patients with high behavioral health complexity. The model is not meant to be prescriptive about how care is organized or how a particular individual receives care. Instead it is a conceptual framework to address the need of population subsets. The model also supports the idea that people with serious mental illness who are stable in their recovery may make a personal choice to be served in a primary care setting rather than in a specialty behavioral health setting.

The Four Quadrant model describes how primary care and specialty mental health can partner in order to provide optimal care for patients with high behavioral health complexity.

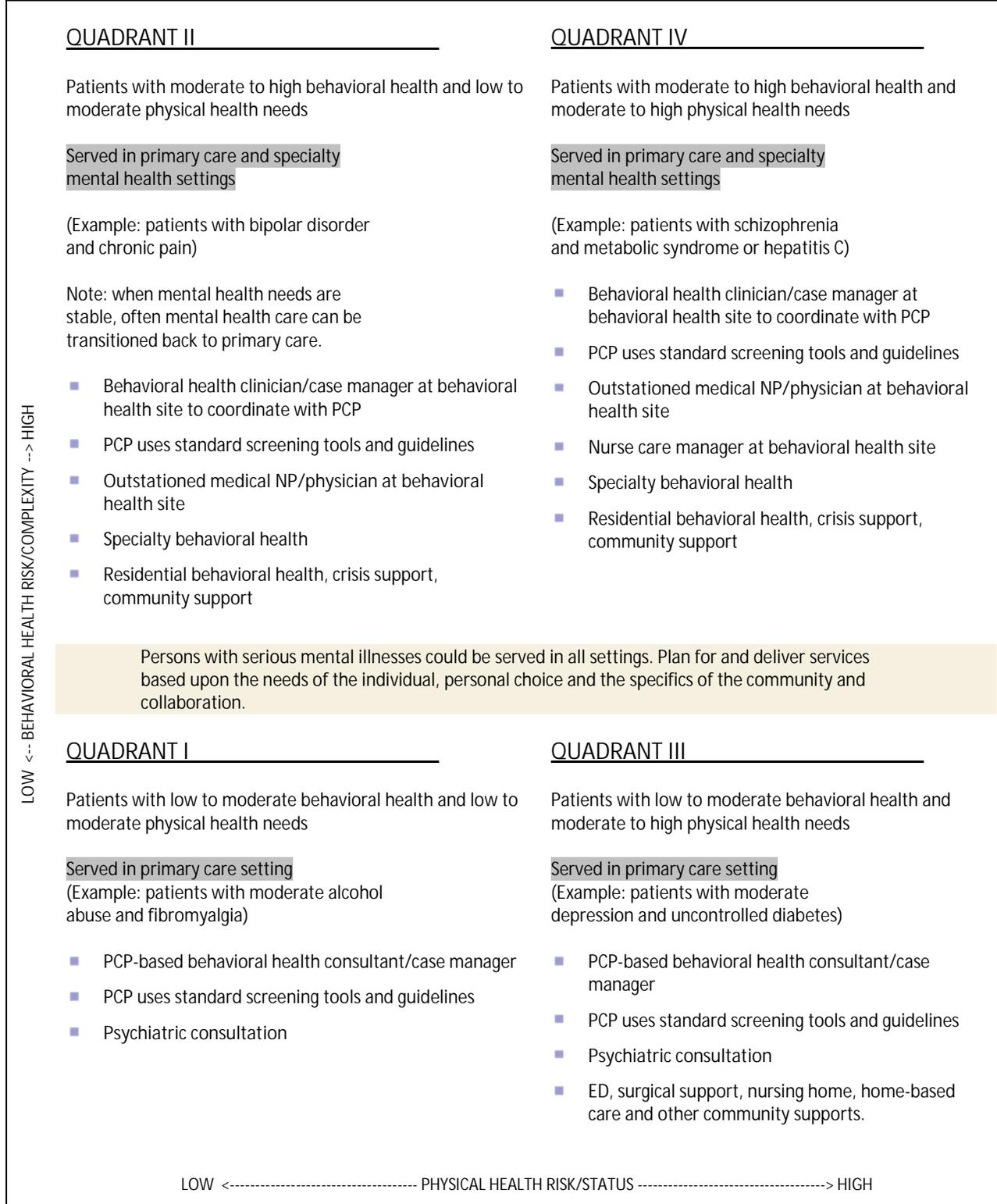
Quadrant I: The target population is patients with **low to moderate** behavioral health and **low to moderate** physical health needs.

The PCP provides the full scope of health care services and uses standard behavioral health screening tools and practice guidelines to assure patients needing behavioral health care are identified. The PCP is responsible for prescribing psychotropic medicine. Psychiatric consultation is provided to the PCP and behavioral health care manager, mainly for patients who are not showing improvement. The care manager is linked with the specialty behavioral health system and can support stepped care² if needed. In smaller practices the care manager may provide interventions to help individuals manage their mental health, and will do their own care management tracking. In larger practices, the care manager may be supported by a paraprofessional who is responsible for tracking activities (Mauer 2009).

¹ The term "person-centered healthcare home" was preferred by the National Council over "patient-centered medical home" to expand the medical home scope to emphasize the importance of behavioral health and to avoid a medical model (i.e. "patient" and "medical").

² Stepped care refers to providing care that causes the least disruption in the person's life; and is the least extensive, expensive and expensive needed for positive results. If the patient's level of functioning does not improve with a basic level of care, then the intensity increases based on the patient's needs and response. For example, a provider may begin with patient education or referral to self-help groups. If this doesn't work, the care is stepped up to involve clinicians who will offer psycho-educational interventions and make follow-up phone calls, which in the next step would be followed by involvement of a more highly trained behavioral health care professional will follow a care logarithm to meet the patient's needs. If a patient does not respond to any of these interventions, then he or she is referred to specialty mental health care services. It is expected that this provider will continue to collaborate with the primary care provider, and that the patient will be transitioned back after the treatment has been provided and the patient is ready (Collins, Hewson, Munger, & Wade, 2010).

FIGURE 2: FOUR QUADRANTS OF CLINICAL INTEGRATION BASED ON PATIENT NEEDS



BOLD indicates additions to the four-quadrant model related to the person centered healthcare home (Mauer, 2009)
 Sources: Adapted from Collins, Hewson, Munger & Wade, 2010; Mauer, 2006; and Mauer, 2009.

Quadrant II: The target population is patients with **moderate to high** behavioral health and **low to moderate** physical health needs.

This model assures primary care capacity in a behavioral health setting using a medical nurse practitioner or PCP, and stepped care to a primary care setting if appropriate. In this setting the individual has access to the full scope of specialty behavioral health services to support recovery. Psychotropic medication will most likely be handled by the specialty behavioral health prescriber in collaboration with the PCP.

Quadrant III: The target population is patients with **low to moderate** behavioral health and **moderate to high** physical health needs.

In comparison to Quadrant I, this quadrant has a greater role for the behavioral health consultant/care manager. This individual provides health education and behavioral supports related to lifestyle and chronic health conditions. The care manager provides patient education, activity planning, skill building and mutual support. The care manager may also support efficient use of the PCP by problem solving with individuals to help them manage chronic health concerns or adhere to their medication regimen.

Quadrant IV: The target population is patients with **moderate to high** behavioral health and **moderate to high** physical health needs.

As in Quadrant II, primary care capacity is created in the behavioral health setting using a medical NP or PCP, however in Quadrant IV a nurse care manager is also added. Not only does the individual have access to a full scope of specialty behavioral health services, but they also have access to medical specialties, wellness programming (i.e. diabetes groups), and stepped care to a primary care setting. The nurse manager tracks standard health measures in a registry such as glucose, lipids, blood pressure, weight/BMI. The health care plan for this population will be person-specific and will be developed by a team of care providers in partnership with the individual.

Integrated Models of Care - A Review of the Literature

Examples of integrated models of care are described in this section. To set the stage, three large-scale clinical trials are reviewed: 1) IMPACT (Improving Mood - Promoting Access to Collaborative Treatment); 2) RESPECT (Re-Engineering Systems for the Primary Care Treatment of Depression); and 3) Los Angeles County Department of Health Services' Depression Care Programs. Following that is a review of pertinent studies and trends identified in the comprehensive evidence review/technology assessment conducted by the Minnesota Evidence-based Practice Center (EPC) based in Minneapolis entitled, "Integration of Mental Health/Substance Abuse and Primary Care" (Butler, et al., October 2008). This section focuses on provider and process integration across RCTs, which took place primarily within primary care groups. The last section highlights the five-level collaboration continuum reported by the Millbank Memorial Fund and provides brief program descriptions on models that integrate primary care and specialty behavioral health.

This is not intended to be a comprehensive review and it does not capture the number and diversity of RCTs, emerging programs, or leaders in the field. Instead, it is a relatively brief overview that offers enough detail for community clinic leaders and County specialty mental health programs to better understand the opportunities and recognize potential challenges along the way.

Examples of Large-Scale Clinical Trials

The following large-scale clinical trials compared groups receiving an integrated care intervention with a group that received usual care. Some are based on the chronic care model or incorporate characteristics such as care teams which are central to patient centered medical homes. Each study has a description of the design, intervention, results, and barriers as well as lessons learned if available.

IMPACT (Improving Mood - Promoting Access to Collaborative Treatment)

The IMPACT collaborative care model, which has been implemented at several community clinics with adults of all ages, has been proven more effective than usual care for depression in primary care clinics.

Design: In a randomized controlled trial, a total of 1,801 patients over age 59 with major depression, dysthymic disorder, or both, were randomly assigned to the IMPACT model (n=906) or usual care (n=895). The patients were from 18 primary care clinics from 8 health care organizations in 5 states, though none of the sites was a community clinic. Only 23% were from ethnic minority groups with half of those being African American. The average age of participants was 71.2 years.

Intervention: Those assigned to the IMPACT model of care worked for 12 months with a depression care manager who offered education, care management, brief psychotherapy (6-8 structured sessions) and problem solving treatment free of charge. If needed, the patient was prescribed medication by their primary care provider. The cost for the medication was not covered by the program but rather had to be paid by the patient or health insurer. On average, IMPACT patients had 9 in-person visits with a depression clinical specialist and 6 telephone contacts, and 11% were seen by a psychiatrist.

Results: Compared to patients who received usual care, the IMPACT group had a greater reduction in depressive symptoms, greater rates of depression treatment, more satisfaction with depression care, lower depression severity, and less functional impairment (Unutzer, 2002). The model achieves similar results to adult patients of all ages (Grypma, Haverkamp, & Little, Mar-Apr 2006).

Project Dulce/IMPACT: Project Dulce, based at the Scripps Whittier Institute for Diabetes, is a culturally competent diabetes case management program that uses peer educators to support patients with their self management. Participating patients are low income, predominately Spanish speaking patients at San Diego community clinics. The IMPACT model was incorporated into Project Dulce services since many patients with diabetes also have depression, and this must be addressed in order for the patient to manage their diabetes in the long term. A total of 99 patients participated in both programs and completed the IMPACT study. A total of 84% were female, 74% were Latino, and 71% said Spanish was their primary language. These patients completed the PHQ-9 depression screening tool³ and had clinically significant depression. They worked with a depression care manager who conducted a psychosocial history, reviewed education materials, and determined whether the patient wanted antidepressant medications, structured psychotherapy using problem-solving therapy, or both. Patients averaged 6.7 visits with the depression care manager during the project with about one month between visits. Sixty-nine percent received the structured psychotherapy and 35% received medication management. PHQ-9 scores decreased an average of 7.5 points per patient. Researchers concluded that the combined program was extremely effective in reducing depressive symptoms in this population. This is the first study of the effectiveness of IMPACT among predominantly Spanish-speaking Latinos (Gilmer, Walker, Johnson, Philis-Tsimikas, & Unutzer, 2008). Another study found that the this collaborative care model was as effective with older ethnic minority patients as it was with whites (Arean, et al., April 2005).

The IMPACT model is effective not only with white geriatric patients, who participated in the original trials, but in adults of all ages as well as Latinos and other ethnic minorities.

RESPECT (Re-Engineering Systems for the Primary Care Treatment of Depression)

Design: This project is a randomized controlled trial with participating 5 health care organizations (HCOs) including 3 medical groups, an insurer, and a behavioral health network (Dietrich, et al., July/August 2004). A total of 180 clinicians in 60 practices who had an interest in the depression care model and who were motivated to implement it with existing resources were involved. The HCOs supported the project financially. A total of 433 patients with depression were eligible to participate in the evaluation.

Intervention: The HCOs used a Three Component Model (TCM) to manage depression, as recommended by the United States Prevention Services Task Force. The three components were care management, collaboration between mental health and primary care professionals, and preparing providers for the depression management program by providing training and tools. Clinicians received a two-hour training on diagnostic assessment, use of the PHQ-9 and role of care management. Clinicians were responsible for recognition, diagnostic evaluation, initial management of depression, and follow-up care. A care manager called patients to offer support at 1, 4 and 8 weeks after the initial primary care visit, then on a monthly basis thereafter until remission of the patient's depression. A psychiatrist

³ The PHQ-9 is a nine item depression scale of the Patient Health Questionnaire. It can be used as a tool to diagnose depression and to monitor the impact of the patient's treatment.

from the HCO supervised the care manager and they had weekly supervision telephone calls. The MacArthur Initiative on Depression and Primary Care provides more detail on the model as well as extensive training materials.

Results: After six months, 60% of RESPECT-Depression patients responded to treatment compared to 47% in usual care; 90% of RESPECT-Depression patients rated their depression care as either good or excellent compared to 75% with usual care (Dartmouth Medical School, September 2004).

Barriers: Approximately two years later only two HCOs (29 practices) continued with the project. All 31 practices from the other three HCOs did not. The main barriers were lack of a shared vision and commitment among all levels of the organization, especially without proof of cost-effectiveness (Nutting P. A., Gallagher, Riley, White, Dietrich, & Dickinson, September 2006). Further analysis gleaned from in-depth interviews with the participants indicated that primary care providers understood the value of depression care management for their patients. Having the backup of a care manager who was supervised by a psychiatrist or psychologist gave clinicians more confidence in dealing with a range of patients in terms of mental health needs. Clinicians appreciated the advice they received regarding medication management and detection of other psychiatric co-morbidities. The clinicians and care managers all expressed the importance of a strong relationship in order for the model to work, and clinicians in particular needed to be confident in the care manager's abilities. In the end, however, the lack of reimbursement and the competing demands of their primary care practices were barriers that were too difficult to overcome (Nutting P. A., et al., January/February 2008).

The main barriers to success in the RESPECT model were lack of a shared vision and commitment among all levels of the organization, as well as lack of reimbursement and competing demands in primary care practices.

Los Angeles County Department of Health Services Depression Care Programs

Design: In this study, two researchers from the USC School of Social Work and one from the Claremont Graduate University School of Community and Global Health pooled data from three randomized clinical trials⁴ based at the Los Angeles County Department of Health Services in which low income, minority, county safety net clinic subjects were provided depression services along with their diabetes or cancer care (Eil, Lee, & Xie, 2010). Patients were randomly assigned to the intervention group or to "enhanced usual care" in which they received educational pamphlets on depression as well as a list of community resources.

Intervention: The depression care was provided by a depression clinical specialist, who was a social worker, in collaboration with physicians, consulting psychiatrists and patient navigators. Like the IMPACT program, patients were screened and monitored using the PHQ-9 among other standardized tools. Of note, however, is that the researchers in each of the 3 studies made cultural adaptations to meet the needs of the low income, culturally diverse study population. Specifically they:

- Had bilingual staff and intervention materials translated into Spanish
- Met with patients via telephone if they did not have transportation or could not easily go to the clinic. Phone calls took place at all times of the day including in the evening or on the weekend if necessary.

⁴ Alleviating Depression Among Patients with Cancer (n=472); the Multifaceted Depression and Diabetes Program (n=387) and the Improving Patient Access and Adherence to Cancer Treatment (n=487).

- Used a patient navigator to help patients navigate the system for their cancer, diabetes and depression treatment, and link them with community resources.

Results: Collaborative depression care using a multidisciplinary team including social workers for patients with comorbid illness is effective in a safety net clinic setting. Patients receiving the intervention had a greater reduction in symptoms than the enhanced usual care group. Results indicated that patients who received structured psychotherapy (problem-solving therapy) and/or antidepressant medication had stronger benefits than those who received brief counseling and referral to specialty mental health. Patients preferred psychotherapy over antidepressants across all three clinical trials. In the diabetes study, patients preferred to receive care in the general health care system. The clinical social workers were skilled in working with patients and providing patient navigation assistance, whereas the graduate social worker students required significant training. Primary care physicians were comfortable working directly with the social worker about prescribing antidepressant medication and rarely consulted with the psychiatrist via pager (Elliott, Lee, & Xie, 2010).

Patients preferred psychotherapy over antidepressants across all three clinical trials. In the diabetes study, patients preferred to receive care in the general health care system.

AHRQ Evidence Report/Technology Assessment

The Agency for Healthcare Research and Quality (AHRQ) sponsored an evidence review/technology assessment conducted by the Minnesota Evidence-based Practice Center (EPC) based in Minneapolis entitled, "Integration of Mental Health/Substance Abuse and Primary Care" (Butler, et al., October 2008). EPCs bring in experts and form partnerships to assure that the reports are comprehensive and contribute to health care quality improvement throughout the nation. A peer review is conducted prior to release of the report.

The purpose of this 188-page report was to assess how integration of mental health into primary care settings, and primary care into specialty mental health settings, affects patient outcomes. The researchers reviewed RCTs and high quality quasi-experimental studies conducted in the United States between 1950 and 2007 pertaining to models of integration that have been used, the impact of integrated care programs on outcomes for different populations, barriers to successful integration, the extent successful programs made use of health information technology, and successful finance models, among other questions. The review included articles pertaining to alcohol addiction but not other forms of substance abuse. Studies related to dementia, Alzheimer's and developmental disorders were excluded. The reviews included both quantitative and qualitative analyses. A score reflecting the level of integration was assigned to each study based simply on the presence or absence of 10 elements:

- Screening
- Patient education/self-management
- Medication
- Psychotherapy
- Coordinated care
- Clinical monitoring
- Medication adherence
- Standardized follow-up
- Formal stepped care
- Supervision

Out of 32 trials regarding the impact of integrating mental health specialists into primary care, 25 addressed depression, 4 addressed anxiety disorders and 3 were for other disorders. There was substantial variation between studies on the level of provider integration and integrated processes of care. Most of the trials used the chronic care model as their foundation. The studies were also categorized based on the integration of providers as well as the degree to which the care process was integrated. Reviewers then examined any link between the level of integration and patient outcomes such as symptom severity, treatment response and remission for depression care trials. Although there were too few studies to review these linkages related to anxiety and other disorders, it doesn't mean these conditions cannot benefit from integrated behavioral health services. They simply were not reviewed due to the low number of RCTs.

A care manager served as a communication link between primary care and specialty mental health and was generally supervised by a psychiatrist. They provided care management services in face-to-face meetings or by telephone.

Provider Integration Across Studies

Most models included a psychiatrist or clinical psychologist available for consultation and a care manager who served as a communication link between primary care and specialty mental health. Other communication linkages ranged from consultations on an as-needed basis to regularly scheduled care reviews, as well as formalized procedures for consulting psychiatrists/psychologists updating primary care providers on the progress of their patients through computer generated reports, notes and flags in E.H.R.s, or standardized reports from care managers. The majority of sites that described co-location indicated that mental health providers or behavioral health trained care managers were located within the primary care site. Some used telemedicine to bring mental health expertise to rural locations or small clinics. Regarding decision-making processes, only five of the studies cited decision-making by consensus between medical and mental health providers. The majority of the trials were split between coordinated decision-making practices, and the PCP having primary responsibility for making decisions with input from a care manager and specialty mental health providers if needed.

Process Integration Across Studies

The degree to which the process of care was integrated was assessed by looking at the following elements:

- ✓ Screening - Are patients screened?
- ✓ Patient education of condition - Who educates the patient?
- ✓ Patient self-management skills - Is the patient educated on these skills and if so by whom?
- ✓ Psychotherapy - Is psychotherapy provided and if so, what kind?
- ✓ Mental health specialist involvement - Is a specialist available and if so, how does the PCP access them?
- ✓ Clinical and adherence monitoring - Who provides the monitoring and how?
- ✓ Standardized follow-up - Was there follow-up and if so at what times?
- ✓ Formal stepped care - Has this approach been formally adopted?

The vast majority of studies provided patient education regarding their mental illness, but training in self-management skills was limited. A care manager or mental health therapist provided the education

in just under half the studies. As psychotherapy is relatively new in the primary care setting, only about one-third of the studies used therapists or care managers to provide psychotherapy. It was more common to refer the client to specialty mental health services.⁵ When therapy was used, cognitive behavioral therapy was the most commonly used. About two-thirds of the studies provided systematic follow up by monitoring patient clinical outcomes and patient adherence using formal protocols. Follow-up was generally done by care managers or therapists. Formal stepped processes for patients not responding to treatment were done in about one-third of studies.

For two-thirds of the studies the care manager was a new position. Care management is defined as "a collaborative process of assessment, planning, facilitation, and advocacy for options and services to meet an individual's health needs through communication and available resources to promote quality cost-effective outcomes." The backgrounds of the care managers ranged from bachelor level employees with some clinic staff experience or nurses without mental health experience to master's or doctoral level mental health providers. Virtually all care managers were supervised by psychiatrists. Patients who received care management services most commonly did so in face-to-face meetings or by telephone.

Results

In general, individuals who were part of an integrated care program saw their symptoms reduced more than in the groups that received usual care. However, improvements were seen regardless of the degree to which the approaches were integrated. It is possible that simply receiving additional attention for mental health issues results in a reduction of symptoms. In fact, most of the trials had low provider integration. Reviewers concluded that more explicit trials would be needed to draw conclusions about the impact of certain integrated care interventions on an individual's response to treatment (Butler, et al., October 2008).

Improvements were seen regardless of the degree to which the approaches were integrated. It is possible that simply receiving additional attention for mental health issues results in a reduction of symptoms.

⁵ Specialty mental health services are provided by licensed mental health providers and include assessments, individual, group, or family counseling, medication support services, crisis intervention or stabilization, adult residential treatment services, hospital care, case management and dual diagnosis services (County of San Diego Guide to Medi-Cal Mental Health Services, undated).

Primary Care and Mental Health Specialty Care Integrated Models

Collins et al. with funding from the Millbank Memorial Fund identified eight models of integration ranging from minimal to maximum integration in a detailed report. They tied these models to a five-level continuum developed originally by Doherty, McDaniel & Baird, 1995, and expanded by Peek, 2007 (see Figure 3). For each model, Collins et al. provided program descriptions based on previously published articles or website information. Included in each description was the evidence base, lessons learned regarding implementation and financial considerations, and examples of programs (Collins, Hewson, Munger, & Wade, 2010). The levels of integration are described here and relevant program descriptions are briefly summarized.

Level 1: Minimal Collaboration

At this level, providers practice separately and have separate administrative and finance systems. The most common strategies in this model are to have case managers assigned to coordinate care for primary care patients needing mental health services, or patients in a specialty mental health program needing primary care services. The behavioral health agency may offer psychiatric consultation via telephone to one or more primary care practices. Providers may develop formalized communication tools such as forms to share basic information so that entire medical records do not need to be sent. Evidence base: There are no RCTs using this model, but the process may be a first step to better integration in the future. Lessons learned: Because primary care and behavioral health cultures are so different, providers have not developed relationships in the same way PCPs have developed relationships with specialists such as surgeons, cardiologists, or endocrinologists. Primary care and mental health providers generally do not have funding to cover the costs of care coordinators or consulting psychiatrists (Collins, Hewson, Munger, & Wade, 2010).

Because primary care and behavioral health cultures are so different, providers have not developed relationships in the same way PCPs have developed relationships with specialists such as surgeons, cardiologists, or endocrinologists.

Level 2: Basic Collaboration from a Distance

At level 2, only the medical providers are directly involved in addressing behavioral health issues, such as recommending an exercise routine to depressed patients or having a nurse follow-up with the patient via telephone to check on medication compliance. PCPs may use a screening tool such as a PHQ-9 to identify adults with depression. If depression is indicated, the physician may complete a brief intervention such as asking the patient to commit to scheduling pleasant events. Evidence base: There is a substantial evidence base for the effectiveness of screening and brief intervention (SBI) for substance abuse, depression, smoking, panic disorder, generalized anxiety and pain. However providers are more likely to screen for depression than substance abuse since they are more comfortable diagnosing and treating it. Lessons learned: PCPs may be resistant to implementing an SBI program since they feel their time is already stretched, and they may not be comfortable with addressing depression, substance use, or other mental health topics. They may not be familiar with resources in the community, and may be reluctant to contact a psychiatrist they have never met for consultation. Building those relationships through "meet-and-greets," and training sessions on how to get the most out of a consultation for patients with complex conditions might help. In order for the PCP to be comfortable referring patients to a County specialty mental health program, the program must have ample capacity to accept the patient and systems must be in place for well coordinated care and communication (Collins, Hewson, Munger, & Wade, 2010).

FIGURE 3: COLLABORATION CONTINUUM

Minimal Collaboration ¹	Basic Collaboration from a distance	Basic Collaboration On-site	Close collaboration in a partly integrated system	Close collaboration in a fully integrated system
1. Improving collaboration between separate providers ²	2. Medical-provided behavioral health care	3. Co-Location	4. Disease Management 5. Reverse Co-location	6. Unified primary care and behavioral health 7. Primary Care Behavioral Health 8. Collaborative System of Care
<ul style="list-style-type: none"> ◆ Separate systems and facilities ◆ Communication is rare ◆ Little appreciation of each other's culture; little influence sharing³ 	<ul style="list-style-type: none"> ◆ Separate systems and facilities ◆ Periodic, focused communication via email or phone ◆ View each other as outside resources ◆ Little understanding of each other's culture or sharing of influence 	<ul style="list-style-type: none"> ◆ Separate systems but same facilities ◆ Regular communication which is occasionally face-to-face ◆ Some appreciation of each other's roles and general sense of larger picture, but not in-depth ◆ Medical side usually has more influence 	<ul style="list-style-type: none"> ◆ Some shared systems ◆ Same facilities ◆ Face-to-face consultation ◆ Coordinated treatment plans ◆ Basic appreciation of each other's role and culture; Share biopsychosocial model ◆ Collaborative routines are difficult due to time and operational barriers ◆ Shared influence and some tensions 	<ul style="list-style-type: none"> ◆ Shared systems and facilities in seamless biopsychosocial web ◆ Patients and providers have same expectation of a team ◆ Everyone is committed to biopsychosocial model ◆ In-depth appreciation of roles and culture ◆ Collaborative routines are regular and smooth ◆ Conscious influence sharing based on situation and expertise
Traditional referral between specialties model ⁴		Co-location model	Organization integration or primary care mental health models	

¹Source: Doherty, McDaniel & Baird, 1995

²Source: Collins, et al., 2010

³Source: Doherty, McDaniel & Baird, 1995

⁴Source: Peek, 2007

Level 3: Basic Collaboration On-Site (Co-Located Services)

In Level 3, co-location, primary care and specialty mental health share space but both practices are run as separate services. Physicians tend to like this model because it helps their patients access specialty mental health services more easily than if the patient is referred to another location. Patients served by this model usually have less severe mental illness. The benefits of this model are earlier identification of mental illness, greater patient acceptance of the referral, and improved communication and care coordination. Shared care plans enhance the quality of care and prevent duplication of services. Evidence base: The delivery of specialty mental health services in primary care settings results in a greater engagement of patients in mental health care. Emerging literature indicates that when patients can obtain substance abuse treatment services in a primary care setting they have better outcomes, and those with poorer health have the greatest improvement. When behavioral health clinicians teach and coach primary care providers on-site, diagnosis and treatment improves. Lessons learned: The greatest challenge with co-location is setting up the office space, developing consent forms, maintaining separate records, and clearly delineating roles and responsibilities. Patients still need to navigate separate organizations, including separate appointment scheduling and intake processes. Although the warm handoff may decrease the number of no-shows, other support may be needed to further reduce the traditionally high patient no-show rate for mental health appointments (Collins, Hewson, Munger, & Wade, 2010).

The greatest challenge with co-location is setting up the office space, developing consent forms, maintaining separate records, and clearly delineating roles and responsibilities.

Sample Program: Washtenaw Community Health Organization. In the Washtenaw Community Health Organization, mental health clinicians from the county public mental health system are placed in the University of Michigan Health System clinics. A psychiatrist provides consultation to the public health clinics. The two organizations are able to pool funding and share risk. The university also has a nurse practitioner visit the community mental health clinics to provide primary care and coordinate with the patient's physician if there is one (Collins, Hewson, Munger, & Wade, 2010).

Level 4: Close Collaboration in a Partly Integrated System

Disease Management Model

The disease management model, also known as Wagner's Chronic Care Model, is considered a Level 4 intervention because the systems are partly integrated. Depression or other psychological distress accompanies many chronic illnesses, and in order to get as healthy as possible, patients need their physical and mental health needs addressed. Approximately 60% of patients with chronic diseases do not adhere to their treatment regimens, and this is especially true for low income patients. In this model, a care manager follows up with patients by monitoring the patients response to treatment and their adherence to the treatment plan. The care manager may be a nurse or a master's level social worker, and they may provide brief psychotherapy if needed. Bachelor's level staff may provide these services with appropriate training. A disease registry may be used to better manage the patient

population with a certain condition, and to assure interventions are completed. This model is well developed in part because of the foundation dollars that have been dedicated to it, such as:

- John A. Hartford Foundation Initiative - Improving Mood: Promoting Access to Collaborative Treatment (IMPACT). (This model was described earlier in this paper.)
- MacArthur Foundation Initiative on Depression and Primary Care. This initiative uses a three-component model: a trained physician, a care manager, and a mental health clinician, who all work as a team. The care manager regularly follows up with the patient by phone and keeps the physician apprised of the patient's progress. Psychiatric consultation is available to physicians.
- Robert Wood Johnson Foundation (RWJF) Initiative - Depression in Primary Care: Linking Clinical and System Strategies. This program is based on Wagner's Chronic Care Model and is similar to the MacArthur Foundation initiative.

Evidence base: RCTs have demonstrated that disease management models using care managers are clinically effective. The model is also cost effective. Participating patients cost the system less money in medical care because their mental health needs have been addressed. They also have fewer hospitalizations, again saving the system money. Lessons learned: Provider engagement is essential since they will also implement new clinical guidelines for mental health conditions. Providers need to understand that depression services will be intensive over the first 12 weeks. The health center needs to have the capability to implement a disease registry, and incorporate behavioral health measures into that database. Additional funding will be needed to implement the disease management program with a behavioral health component (Collins, Hewson, Munger, & Wade, 2010).

Provider engagement is essential since they will also implement new clinical guidelines for mental health conditions.

Sample Program: Depression Improvement Across Minnesota - Offering a New Direction (DIAMOND). This is a partnership of medical groups, health plans, the Department of Human Services and employer groups. They are using the IMPACT model as a foundation for the program. A care manager provides ongoing assessment. The program also includes a patient registry, use of self-management techniques, and psychiatric consultation. Patients' outcomes are far superior than those of patients seen under usual care. Minnesota health plans are paying a per member per month (pmpm) fee for a bundle of services, including the care manager and consulting psychiatry roles, under a single billing code (Collins, Hewson, Munger, & Wade, 2010).

Reverse Co-Location

This model seeks to improve the health of individuals with serious mental illness being seen in specialty mental health settings. In this model, a primary care provider (physician, nurse practitioner, physician assistant or nurse) is outstationed to work part-time or full-time in the specialty mental health setting - usually in rehabilitation or day treatment programs. They are able to spend more time with the patient, and they develop collaborative relationships with the mental health providers. Evidence base: The literature is still in its infancy. Very few RCTs have been done with this model. Lessons learned: Again,

issues regarding space, consents of treatment, maintenance of medical records and referral processes will need to be addressed. Mental health case managers will need to learn more about medical conditions so they can help patients develop self-management goals and help them manage their conditions. As with co-location, there may be cultural differences that need to be addressed since primary care and behavioral health staff may not be experienced in working closely together (Collins, Hewson, Munger, & Wade, 2010).

Sample Program: Health and Education Services. Health and Education Services is a nonprofit, full-service mental health organization in the North Shore area of Massachusetts. It is focused on improving the physical health care of its Latino population. To better meet their needs, a bilingual nurse practitioner with expertise in primary care and psychiatry visits three clinics regularly and accepts patients on a walk-in basis (Collins, Hewson, Munger, & Wade, 2010).

Level 5: Close Collaboration in a Fully Integrated System

Unified Primary Care and Behavioral Health Model

The practice model selected for discussion from this level of care is the Unified Primary Care and Behavioral Health Model. In this model, primary care and behavioral health are unified in a single model of care. Integration is an organization-wide effort, and primary care and behavioral health staff interact regularly. Patients require referral to a specialty mental health provider only when additional intensive services are needed that are not offered at the clinic. Some federally qualified health centers (FQHCs) have implemented this model, as have Veterans Health Administration outpatient programs. Evidence base: There are few RCTs for this model, however in a study of integrating primary care with a VHA mental health clinic, patients had fewer ER visits and reported better physical health status. Lessons learned: Implementing this model is complicated, and requires redesign of the practice in areas such as credentialing, paneling, funding sources for the uninsured, coding/billing, policy requirements, IT system support, education, after-hours coverage, supervision and liability (Collins, Hewson, Munger, & Wade, 2010).

Sample program: Cherokee Health Systems. Cherokee Health Systems, which is based in Eastern Tennessee, was originally a community mental health center but it expanded and became an FQHC. Integrated primary care and behavioral health services are provided at 22 sites, and they receive a capitated rate for the complete package of services. They use an integrated paper medical record. Treatment team meetings are held on a monthly basis, and sometimes physical and behavioral health team members see complex patients together (Collins, Hewson, Munger, & Wade, 2010).

Sample program: Community Health Center, Inc. Community Health Center, Inc. is a multi-site FQHC based in Connecticut. They provided co-located primary care and behavioral health services. The interdisciplinary team shares space and has a "morning huddle" to anticipate patient needs for the day and review treatment plans. The PHQ-9 is used to screen patients, and for patients needing additional behavioral health services, the physician invites the behavioral health provider into the exam room and makes a warm handoff to transition the patient to behavioral health services (Collins, Hewson, Munger, & Wade, 2010).

Primary Care Behavioral Health model

In the Primary Care Behavioral Health model, behavioral health is a regular part of primary care. Services are modified to fit into a primary care practice, such as condensed interventions lasting 15-30 minutes in which a behavioral health provider provides psycho-education with an emphasis on skill building and home-based practice. The physician has "curbside" consultations with the behavioral health provider and have frequent interactions to discuss patients. Services include patient education, case management, telephone monitoring, and skill coaching. Evidence base: The research literature on brief intervention is increasing and is very encouraging. Brief interventions have a positive impact on depression, generalized anxiety disorder, smoking and snuff cessation, pain, panic disorder, alcohol abuse and childhood conduct. Lessons learned: A complete redesign of the practice is needed for this model to work. There is a steep learning curve for existing behavioral health providers who need to adapt to this model. Primary care providers will need to learn how to work effectively in this new model of care and to work collaboratively with behavioral health team members (Collins, Hewson, Munger, & Wade, 2010).

Sample program: Buncombe County Health Center. This health center is based in North Carolina and provides 85% of the care for low income county residents. Three behaviorists work with 12 primary care providers, and at least one behaviorist is always on-call and available to immediately triage patients. Behaviorists work out of exam rooms, and typically see about 10 patients per day, while the medical providers see about 15 patients per day. All providers use the same medical record (Collins, Hewson, Munger, & Wade, 2010).

The last model, the Collaborative System of Care, is for high need and high risk populations such as adolescents and the homeless. It is highly variable and therefore difficult to draw definitive conclusions. For those reasons it is not discussed in detail here (Collins, Hewson, Munger, & Wade, 2010).

Barriers to Successful Integration

The barriers to integrating physical and behavioral health can be divided into financial barriers and organizational barriers (see Figure 4) (Butler, et al., October 2008). The greatest financial barriers are that mental health services and providers are not necessarily eligible to bill for services. Health plans carve out mental health services from their overall plans which results in silos and lack of coordination. Services such as consultations between providers, services provided by a care manager, and telephone patient support are not billable. Funding is not available for care manager positions. Examples of strategies to address these barriers are for health plans to credential PCPs and allow them to bill for carved out mental health services; make a policy change so Medicaid will pay for a medical visit and mental health visit in the same day; and for specialty mental health to "loan" a provider to the PCP office but then bill the payer from the specialty mental health practice.

Organizational barriers include resistance to changing the practice approach and flow to include mental health services. Physicians already feel they are stretched to the limit and they cannot take on additional responsibilities, or perhaps they are simply not comfortable addressing behavioral health with their patients. Strong leadership is key to overcome these organizational challenges. Examples of strategies to overcome these barriers are to identify leaders to promote integration; train allied health professionals such as physician extenders to provide mental health services and care management.

Figure 4: Barriers to Integrating Primary Care and Mental Health

Type of Barrier	Strategy
<p>Financial</p> <ul style="list-style-type: none"> ◆ Mental health services are carved out of general services. ◆ Health plans do not reimburse for consultation between the PCP and mental health providers. ◆ The care manager is not always eligible for compensation. ◆ Medicaid does not reimburse for same day visits with a PCP and a mental health provider . ◆ No reimbursement is provided for telephone consultation. 	<ul style="list-style-type: none"> ◆ Permit credentialed PCPs to bill a carved out managed behavioral health care organization for mental health care. ◆ Allow PCPs to bill for the behavioral health visit even if it occurs on the same day as the medical visit. ◆ Employ the care manager under contract with the health plan. ◆ Pay for mental health interventions through quality improvement funding. ◆ "Loan" care specialists to primary care but bill the payer from the specialty sector. ◆ Negotiate pricing with health plans for care management services. ◆ Create new CPT codes to bill care management services. ◆ Obtain pay-for-performance funds for improved mental health outcomes.
<p>Organizational</p> <ul style="list-style-type: none"> ◆ Physicians and staff are resistant to change. ◆ It is difficult to find mental health specialists, and physicians and staff may not be accepting of this new function. ◆ It will take time to identify patients needing mental health services, but physicians feel their time is already stretched to the limit. ◆ Many physicians are not comfortable addressing mental health problems. ◆ Physicians and staff believe HIPAA prevents them from sharing patient information between providers. 	<ul style="list-style-type: none"> ◆ Identify leaders to support/promote the integration. ◆ Train allied health professionals such as physician extenders to provide mental health services and care management. ◆ Offer provider education and support. ◆ Utilize telemedicine to reach rural and small clinics.

(Butler, et al., October 2008)

Conclusion

So can integration succeed? Yes, but it will take commitment from both community clinics and health centers as well as County specialty mental health programs, as well as a reliable funding source, for it to work. Important strategies include the following:

1. Assure leadership commitment to integrated behavioral health within the CCHC setting itself, and between primary care clinics and County specialty mental health programs.
2. Create a common vision to assure primary care and specialty care are moving in the same direction in the long term.
3. Create buy-in from primary care providers who already face significant time constraints in their practices and who may be resistant to using care managers and consulting psychiatrists until a level of trust has been developed.
4. Advocate for grant funding to cover the cost of care managers since they are not billable to Medi-Cal and there is no other source of ongoing funding for this role.
5. Advocate for reimbursement for same day primary care and mental health visits from Medi-Cal and other payers.
6. Enhance linkages between CCHCs and County specialty mental health programs through leadership and provider meet-and-greets, introductions of psychiatrists to PCPs to encourage communication and referrals, and trainings on how to get the most out of a consultation for patients with complex conditions.
7. Develop a streamlined and simplified referral process for primary care patients referred to specialty mental health and vice versa.

Finally, although many studies and recommendations pertain to patients with depression, this is simply because there is a vast literature on integrated care for these patients, and very little pertaining to other disorders. As described in the Four Quadrant model, anyone with serious mental illness or other mental health issues should receive the level of care needed to address their issue with the least amount of expense, and when less care is needed or the patient is stabilized they should be stepped to a lower level of care. Although success with integrated primary care and behavioral health services will depend upon leadership, a common vision, a mutual commitment to integrated behavioral health services, adequate staffing and funding, it can be achieved in the long term if all of these elements are in place.

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