

## Psychiatry and primary care

Recent epidemiologic studies have found that most patients with mental illness are seen exclusively in primary care medicine. These patients often present with medically unexplained somatic symptoms and utilize at least twice as many health care visits as controls. There has been an exponential growth in studies in this interface between primary care and psychiatry in the last 10 years. This special section, edited by **Wayne J. Katon, M.D.**, will publish informative research articles that address primary care-psychiatric issues.

## Integrating psychiatry and primary care improves acceptability to mental health services among Chinese Americans

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### Abstract

The objective of this study was to investigate whether integrating psychiatry and primary healthcare improves referral to and treatment acceptability of mental health services among Chinese Americans. The “Bridge Project,” a program to enhance collaboration between primary care and mental health services for low-income Chinese immigrants was implemented at South Cove Community Health Center in Boston. The project consisted of conducting training seminars to primary care physicians to enhance recognition of common mental disorders, using a primary care nurse as the “bridge” to facilitate referrals to the Behavioral Health Department of the same facility, and co-locating a psychiatrist in the primary care clinic to provide onsite evaluation and treatment. The rate of mental health service referrals and successful treatment engagement before and during the project were compared. During the 12-month period of the Bridge Project, primary care physicians referred 64 (1.05% of all clinic patients) patients to mental health services, a 60% increase ( $\chi^2=4.97$ ,  $P<.05$ ) in the percentage of clinic patients referred in the previous 12 months. Eighty-eight percent of patients referred during the project showed up for psychiatric evaluation, compared to 53% ( $\chi^2=15.3$ ,  $P<.001$ ) in the previous 12 months. Integrating psychiatry and primary care is effective in improving access to mental health services and in increasing treatment engagement among low-income immigrant Chinese Americans. © 2004 Elsevier Inc. All rights reserved.

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### 1. Introduction

Asian Americans are one of the fastest growing minority populations in the United States. During the last decade, this population grew by 44% to the current 10.1 million, making up 4% of the US population [1]. By 2020, Asian Americans are projected to make up 6% of the nation's population. According to the Surgeon General's report [2], Asian Amer-

icans have the lowest utilization of mental health services and tend to use mental health providers as a last resort after unsuccessful attempts to seek help from families, friends, alternative practitioners, and primary care physicians. For the less acculturated Asian Americans, the lack of familiarity with mental illnesses and fear of stigma are formidable barriers to seeking mental health services [3]. When faced with mental or emotional distress, many of them seek help from their primary care providers [4], and complain chiefly about physical discomfort, which makes their emotional distress harder to detect [5,6].

To improve detection and treatment of mental illness

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among Asian Americans, the Charles B Wang Community Health Center in New York City pioneered the Bridge Project to provide linkage between primary care and mental health services [7]. The goals of the project were to increase patient access to mental health services, update the skills of primary care physicians (PCPs) for early identification and treatment of psychiatric disorders, and to raise community awareness of mental health issues. The primary features of the Bridge Project include co-location and collaboration between mental health services and primary care. In the 3-year duration of the Bridge Project at Charles B Wang Community Health Center, the number of mental health encounters increased by 300%, many of which involved patients with nonpsychotic mood and anxiety disorders that most likely would have been unrecognized before the project. The Bridge Project received the “Health Resources and Services Administration (HRSA) 2000 Models That Work Award,” and was cited in the Surgeon General’s Report as the model program for delivering mental health services to ethnic minorities [2].

In 2000, we replicated the Bridge Project at the South Cove Community Health Center, with grant funding support. This article provides a description and an evaluation of the effectiveness of the South Cove Bridge Project.

## 2. Methods

### 2.1. Setting and subjects

The subjects included in this study were Chinese Americans who attended the Adult Medicine Clinic at the South Cove Community Health Center in Boston’s Chinatown. The South Cove Community Health Center is an urban community health center serving low-income Asian immigrants who face financial, linguistic, and cultural barriers to health care. In 2000, the health center registered 72,180 medical visits and served 12,107 patients, with 6074 (50%) from the Adult Medicine (primary care) Clinic. Other clinical services include Obstetrics/Gynecology, Pediatrics, Dental, Ophthalmology, and Behavioral Health. The population served is predominantly Asian (96%). Because patients at South Cove Community Health Center are primarily recent immigrants with limited English proficiency and state subsidized medical insurance, referrals to mental health services are made exclusively to its own Behavioral Health Department within the center. The South Cove Behavioral Health Department is staffed with bilingual and bicultural providers including psychiatrists, psychologists, social workers, and mental health counselors. Despite this apparent cultural match and availability of freestanding behavioral health services, it appeared that few primary care patients were being identified or were successfully engaged in treatment after referral. Therefore, the replication effort was undertaken to improve diagnosis and treatment at South Cove Community Health Center. Because the South Cove

Bridge Project targeted patients in the Adult Medicine Department, only patients referred from this department during the project’s 1-year period were included. Data on patients referred by the Adult Medicine Department in the 12 months prior to the project were used for comparison.

### 2.2. Procedures

The South Cove Bridge Project has four main components:

1. Training of PCPs on established treatment guidelines. Two 1-h seminars for the PCPs were conducted in the 2 months before the project started, to discuss the recognition and treatment of common mental disorders. Anxiety and depressive disorders were the main focus. The treatments discussed were based on established guidelines [8,9]. Emphasis was also placed on when to refer patients for mental health services.
2. Training of the PCPs/nurse on cultural sensitivity. A 1-h seminar was organized during the first month of the project, to discuss Asian Americans’ common illness beliefs, help-seeking behaviors, and attitudes toward mental health disorders and services. Hand-outs with nonstigmatizing translations of psychiatric terminologies were given. The PCPs and the primary care nurse had opportunities to rehearse how to explain mental disorders to patients without eliciting resentment.
3. Primary care nurse as the “bridge” or care manager. The primary care nurse, who was well known to most patients in the clinic, was assigned the role of the “bridge” to overcome structural barriers between primary care and the Behavioral Health Department. In addition to the PCP’s explanation, the nurse further clarified to the patients why they needed psychiatric consultation, and set up the appointments before the patients left the primary care clinic. All appointments were scheduled within 2 weeks, with most appointments scheduled within 1 week. Patients were asked to return to the primary care clinic for the consultation. The nurse also called the patients the day before the visit to remind them of the appointment.
4. Liaison psychiatrist provided on-site services. The principal investigator and liaison psychiatrist (A.Y.) provided consultation within the primary care clinic. The co-location of primary care and psychiatry conveyed the image that psychiatric treatment was part of the medical services, thereby decreasing stigmatization of mental health services.

## 3. Measurement of outcomes

The Behavioral Health Department at South Cove maintains a record of all the patients referred to the Department,

which includes patient demographics, referral sources, reasons for referral, clinicians assigned, and disposition after the patient was evaluated. It has been meticulously kept in the Department by the same support staff since its inception.

The referral records were reviewed for the period of the Bridge Project (January 1–December 31, 2000). Referral data from the 12-month period before the project (January 1, 1999–December 31, 1999) were reviewed for comparison. Successful treatment engagement was defined as the patient showing up for his or her initial mental health evaluation.

### 3.1. Data analyses

Frequencies and mean scores of demographic information were computed. The average age of patients referred from the Adult Medicine Department before and during the project was compared using the Student's *t* test. The gender ratios, percentages of patients referred from the primary care clinic, and show-up rates before and during the project were compared using  $\chi^2$  tests. All statistical tests performed were two-sided and the significance level was set at  $P \leq .05$ .

## 4. Results

The three PCP/nurse training sessions took place during their monthly providers' meetings, and were attended by all providers ( $n=6$ ). Consensus among staff was that many patients in the outpatient clinic appeared to be suffering from significant emotional distress, as observed by the PCPs and the nurse. Many providers welcomed a stronger presence of mental health service, while some were concerned that patients would avoid the services and that the effectiveness of mental health treatment would be much reduced for a population faced with complicated financial, immigration, and other related psychosocial problems.

During the 12-month period of the South Cove Bridge Project, the PCPs referred 64 patients (1.05% of patients served during that year by that department) for mental health services. The female to male ratio was 3:1, and the mean age was  $54 \pm 18$  years. There was a wide range of psychiatric diagnoses among the referred patients (Table 1), major depressive disorder (36%) being the most common. In the 12-month period before the project, the Adult Medicine Department referred 38 patients (0.66% of patients served during that year by that department) for mental health services. There was a 60% ( $\chi^2=4.97$ ,  $P<.05$ ) increase in the percentage of patients referred for mental health services. Fifty-six patients (88%) referred during the project showed up for initial evaluation, compared to 53% in the 12-month period before the project. The rate of successful engagement improved 1.66-fold ( $\chi^2=13.4$ ,  $P<.001$ ). Patients referred before and during the project had comparable demographic characteristics in terms of age and gender ratio (Table 2).

Table 1

Psychiatric diagnoses of patients referred during South Cove Bridge Project ( $N=64$ )

Psychiatric diagnoses	<i>n</i> (%)
Acute stress disorder	1 (1.5)
Adjustment disorder	6 (9.4)
Attention deficit/hyperactivity disorder	1 (1.5)
Diagnosis deferred	2 (3.0)
Dementia	2 (3.0)
Generalized anxiety disorder	7 (11)
Gender identity disorder	1 (1.5)
Major depressive disorder	23 (36)
Personality disorder, NOS	1 (1.5)
Schizophrenia	2 (3.0)
Somatoform disorder, NOS	2 (3.0)
Deferred	16 (25)

NOS=not otherwise specified.

## 5. Discussion

The South Cove Bridge Project has resulted in an increase in mental health service referrals from PCPs. This could be explained by increased attention to patients' mental health conditions, improved diagnostic training, and improved PCP communication skills. In addition, referral and scheduling of patients for psychiatric consultation was facilitated by the primary care nurse who performed a care manager's function. Care management has been shown to be an important factor for improving outcomes for depression in primary care [10].

The increase in treatment acceptability is encouraging. In an earlier study, our team found that when PCPs referred depressed Chinese patients to mental health services, as many as 68% declined [11]. The improvement seen in this study may be attributed, at least in part, to the success in minimizing stigma associated with mental health services, via the co-location of mental health and medical services. The sensitivity of the PCPs in introducing the idea of psychiatric consultation in culturally acceptable language, and the primary care nurse's explanation and coordination of the consultation also were likely to play an important role in patient acceptability. Scheduling the appointment on the spot and offering appointments within 2 weeks also helped patients to overcome their reluctance to seek help from mental health services.

Table 2

Comparison of demographics and outcomes of patients before and during the South Cove Bridge Project

	Before	During	Statistical test
Age (mean $\pm$ SD)	53 $\pm$ 15	54 $\pm$ 18	$t=0.22$ , $P=.8$
Gender (female:male)	2:1	3:1	$\chi^2=0.5$ , $P=.5$
% of primary care patients referred to mental health service	0.66	1.05	$\chi^2=4.97$ , $P<.05$
Show-up rate for initial evaluation	53%	88%	$\chi^2=13.4$ , $P<.001$

A previous study from our group showed that the prevalence of major depressive disorder among Chinese Americans in a primary care setting was 19% [4]. It must be pointed out that, even with the South Cove Bridge Project in place, only a relatively small percentage of depressed patients were referred to mental health services. One explanation for this phenomenon might be that the PCPs at the South Cove Community Health Center were treating their depressed patients themselves, a growing trend in primary care. It is also possible that many depressed Chinese American patients remained undiagnosed, while others declined referral to mental health services.

The division of labor between primary care and mental health providers in the treatment of mental disorders is a complex issue. Whether psychiatrists or PCPs should prescribe psychopharmacological agents and provide follow-up treatment depends on practical considerations such as the availability of psychiatrists, the interest and training of individual PCP in treating mental disorders, and the incentives provided by the reimbursement policies. For instance, some health insurance policies encourage PCPs to limit the use of specialists, while other policies have payment structures that encourage the use of mental health providers.

The preliminary success of the Bridge Project in New York and Boston is encouraging evidence that it could be a useful model for treating mental disorders among Asian Americans and perhaps other ethnic groups such as Hispanics, who also tend to underutilize mental health services [12,13]. To successfully adopt such a model in other clinics, the program must be flexible enough to fit the organization, culture, and financial structure of each setting. The Charles B Wang Community Health Center and the South Cove Community Health Center used significantly different approaches to integrate with their local resources. For example, in the South Cove Adult Medicine Clinic, the primary care nurse, rather than a social worker, played the role of the care manager and “bridge” between the two departments, since she is known to most patients who attend the clinic. In addition, a liaison psychiatrist (as opposed to on-site social worker/clinicians) in the South Cove Community Health Center provided psychiatric evaluations by appointment.

From our experience, the key to integration is to enhance communication and collaboration between primary care and mental health services, and to provide user-friendly services that overcome logistic and cultural barriers. The main features for integration are the co-location of primary care and mental health services, designated staff as the “bridge” between the two services, and PCP training. When serving ethnic groups who are unfamiliar with or tend to avoid psychiatric services, providers must learn to explain why mental health consultation is necessary, sometimes with help from culturally sensitive translation of psychiatric terminologies. Strategies to improve primary health care practice, such as active screening of mental illnesses, case management, and patient education on mental disorders and

self-management can also be used to enhance the effectiveness of service integration [14].

Earlier studies showed that the improved treatment outcomes from collaborative management of depression in primary care faltered soon after the studies ended [15,16]. It is therefore important to know whether the success of the Bridge Projects is sustainable. The innovation of the Bridge Projects reduces stigmatization and streamlines the process for referral to and continuing care from behavioral health services. This maximizes the chances of adequate patient follow-up, both in the short-term and long-term. For example, the liaison psychiatrist of this study (A.Y.) has successfully continued to provide psychiatric assessment and follow-up treatment at South Cove primary care after the funding of the South Cove Bridge Project ended.

This treatment model also provides strong financial incentives for community health centers. By improving access to mental health treatment, the centers may bring in greater revenues. For example, at South Cove Community Health Center, the liaison psychiatrist (A.Y.) increased his patient volume by expanding into the primary care clinic, thus increasing reimbursements to the clinic.

In addition, the patient population in the primary care setting tends to be higher functioning compared to patients with severe mental disorders typically seen in the Behavioral Health Clinic. Treating a population with more favorable prognoses can be very satisfying to mental health clinicians, and may reduce psychiatrist turnover in such clinics. The decreased clinician turnover should also be financially favorable to the clinic. Follow-up data showed that the number and percentage of referrals from Adult Medicine were 74 (1.1% of the patients served) and 116 (1.5% of patients served) in years 2001 and 2002, respectively. The sustained increase in referrals is likely to reflect the continued interest of South Cove’s PCPs to refer patients for mental health service. However, the rates of successful treatment engagement decreased slightly from 88% during the project to 73% in 2001, and 70% in 2002. This may be explained by the fact that bonus payment to the primary care nurse as a facilitator of referral stopped at the completion of the project. Further investigation is needed to better understand specific factors that may contribute to discontinuation of treatment in this population.

It remains to be seen whether the Bridge Project can be widely generalized to become a model for service integration at other clinics. Coordination of services from different departments requires substantial energy and resources, and the willingness to create and implement novel organizational structures and practices. In both the New York and Boston sites, the projects were able to obtain support from the leadership of the health centers, and were implemented by dedicated staff members who were enthusiastic about the project. This type of dedication is a key ingredient for the project’s success.

Another challenge to the generalization of the Bridge Project is whether such a program is financially viable.

Many of the innovative measures, including PCP training, patient education, and case management, are currently not considered part of the clinical services, and are not reimbursed by most health insurance. Thus, it takes the good will, faith, and fiscal buoyancy of the administrators to finance such programs. It is hoped that when more research has demonstrated the effectiveness of such collaborative models, this could induce some policy changes—such as clinician reimbursement for training time in the healthcare industry.

Finally, unlike randomized clinical trials, this is a practice-based study with few restrictions on the clinical setting or the patient population. While the unique characteristics of the clinic may reduce the replicability of our results, such a design may better reflect real-world settings. Its effectiveness and long-term viability, nonetheless, will need to be tested in other sites in the future.

## 6. Conclusion

The Bridge Project, which aimed to integrate psychiatry and primary care services, has been successfully replicated at the South Cove Community Health Center. It appears to be a promising model for improving both accessibility and acceptability of mental health services to Chinese Americans, and possibly to other less acculturated ethnic groups that tend to use primary care as the de facto site for treatment of mental illnesses.

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