

A Sustainable Behavioral Health Program Integrated With Public Health Primary Care

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The need for behavioral healthcare for the poor and indigent is well documented in rural North Carolina, and integrated behavioral healthcare—that is, mental health screening and treatment offered as part of primary care services—has proven a very effective and efficient method to improve patients' health. In 2000, the Buncombe County Health Center (BCHC) began a grant-funded program treating depressed patients in its public health clinics and school health programs. The Health Center used the opportunity to send a team to the Management Academy for Public Health to learn business principles that could be applied to the challenge of sustaining this program as part of its ongoing public health service delivery for the county. Using their business plan from the Management Academy, the BCHC sought funding from various stakeholders, and, through their support, was able to institute a fully integrated behavioral health program in 2004. The BCHC has now joined forces with other partners in the state to address statewide policy changes in support of such programs. These efforts are an example of how a community health center can apply entrepreneurial thinking and strategic business planning to improve healthcare and effect wide-ranging change.

KEY WORDS: ambulatory care, Behavioral HealthCare, institutional management teams, Medicaid policy development, mental health, public health

Two recent Buncombe County, North Carolina, community health assessments (1995 and 2000) identified mental health (or behavioral health) care as one of the community's top unmet health needs.¹ Nationwide, mental illness is a highly prevalent problem that is often underdiagnosed and poorly treated, especially among low-income, indigent populations.²⁻⁴ An esti-

mated nearly 70 percent of patients treated by medical safety net providers have a coexisting mental health or substance abuse diagnosis, and the National Commission on Correctional Health Care estimates that 82 percent of prison inmates have a behavioral health issue.⁵ Many of these individuals may be reluctant to seek treatment from "traditional" mental health providers because of a perceived stigma attached to such treatment, and they end up using more healthcare resources than do patients who are not mentally ill.^{6,7} In North Carolina, the need for public mental healthcare may increase. The state is in the process of reforming the public mental health system including divesting itself of providing direct mental healthcare services and focusing resources on the most severely ill. For these reasons, the Buncombe County Health Center (BCHC) management needed to find a way to begin comprehensive screening for mental illness and bring mental health providers into the Health Center, a setting where patients are less apt to feel stigmatized, and therefore are more likely to receive the mental healthcare they need to lead productive, healthy lives.

● Background

The BCHC, located in Asheville, North Carolina, is the local public health agency for Buncombe County. In addition to traditional public health services, the BCHC houses a large primary care clinic, supports three school-based clinics, and provides inmate health

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services for the county jail. This practice provides 85 percent of safety net care for low-income county residents. BCHC clinic has approximately 18,000 active patients and receives 40,000 visits per year. Nearly all patients have incomes below 200 percent of the Federal Poverty Level, and most fall below 100 percent Federal Poverty Level. Approximately 30 percent of patients are insured, the majority by Medicaid. Traditionally, BCHC patients in need of behavioral health services were referred across town to the public mental health provider. Under this system, many patients declined to avail themselves of mental health treatment; moreover, many in need of mental health services were never identified because screening for mental or behavioral health problems was not standard procedure.

In 2000, the community received a grant from the Duke Endowment to integrate behavioral health services with primary care at the BCHC. In 2001, a federal grant through the Health Resources and Services Administration and a private grant from the Robert Wood Johnson Foundation provided funds to expand the primary care integration project and incorporate therapists into the school-based clinics. Through the programs' universal screening, between 2001 and 2004, Health Center personnel found that 27 percent of BCHC patients screened positive for significant depression, a rate higher than the national average of 6.6 percent for the general population.⁸ Therapists worked with the physicians and physician assistants to provide timely and coordinated care in a friendly environment. However, the grant-funded behavioral health programs were administered outside of the Health Center, and the therapists were not BCHC employees. The challenge facing the Health Center was to take over operation of the program and move beyond grant dependence to sustain the program over the long term.

● Methods

Business plan development at the Management Academy for Public Health

In 2003, BCHC sent a team to the Management Academy for Public Health to learn business skills and apply them to creating a sustainable behavioral health program. This team consisted of three health department staff members (medical director, primary care clinic manager, and school health manager), a community coalition partner, and a member of the Board of Health also closely connected with the local hospital. All Management Academy team members were involved in the BCHC behavioral health program and shared a vested interest in its success. The team applied the Management Academy emphases of manag-

ing data, managing people, and managing finances to the problem encountered.

Data

To make a business case for a behavioral health program and plan most effectively, the team collected and summarized data that would help them understand the problem and how best to address it. Data collected and analyzed included the demographics of the patient population, rates of mental illness to expect in this population, community stakeholders and their concerns, methods for approaching some of the legal and political issues around providing and financing this care, and best practices for integrating healthcare into primary care programs. These data figured prominently in the Definition of Project, Industry Analysis, and Competitors and Partners sections of the business plan, but informed every section of the plan.

Personnel

The plan focused on creating a behavioral health unit composed primarily of master-level therapists and a coordinator to provide on-site mental health services in BCHC clinics. Key Program components include screening all patients for behavioral health issues, a team approach to care by the medical provider and therapist, regular follow-up and compliance monitoring by telephone, and the availability of psychiatric consultation for the primary care medical providers and therapists.

Extrapolating from the numbers of patients seen annually at the BCHC, it was estimated that about 5,000 clients would be screened during the first year of the program; 1,663 would be more fully assessed, and about 7,000 treatment sessions. Other projected outputs were estimated at about 5,000 case management contacts and 2,272 behavioral health-related medication applications. To meet these needs, the following personnel were proposed:

- one full-time program manager
- one half-time psychiatrist (for consultation)
- one half-time pharmacist and/or pharmacy technician
- three three-quarter time therapists in the schools
- four full-time therapists in the clinic
- one full-time therapist in the jail
- two office support personnel

Finances

Table 1 details the projected ongoing expenses and start-up capital costs for the program.

The team developed a list of local stakeholders who would benefit from improved behavioral healthcare

TABLE 1 ● Business plan development projected expenses

Expenses (ongoing/annual)	
Personnel (salary/benefits)	\$637,232
Services (accounting, communications, IT, etc)	\$34,300
Office (rent, etc)	\$10,800
Pharmacy	\$173,107
Total expenses (ongoing)	\$849,439

and whose support would be needed to make a public behavioral health program successful.

The team factored ongoing contributions from some of these partners, as well as Medicaid and Medicare reimbursement, into the revenue for the program. Estimated revenue for the program is detailed in Table 2. The data show an expected profit of \$31,289 the first year. Subtracting one-time start-up costs (computers, furniture, etc) was expected to result in a profit of \$2,589 for the program's initial year. A list of stakeholders is presented in Table 3.

The team learned that the state-administered Medicaid reimbursement practices would pay for traditional mental healthcare, but not for elements that the team deemed necessary for the successful integration of this care into primary care practice. Specifically, two elements of effective integrated care—consultation between primary care doctors and psychiatrists, and phone consultations between therapists and their patients—were not reimbursed by Medicaid. The potential impact of this lack of coverage was identified during the needs assessment and data-gathering phases of program feasibility planning, and team members raised the issue with the North Carolina Secretary of Health and Human Services, who expressed interest in changing the state's Medicaid practices to accommodate this new model of care. The writing of the business plan, then, was completed with the understanding that the program could potentially have an impact far beyond one health department's operations.

Implementation of the business plan

The final business plan aimed to incorporate a sustainable behavioral health program into BCHC operations.

TABLE 2 ● Business plan development: Projected annual revenue (July 2004–June 2005)

Fee-for-services revenue	\$404,307
State	\$105,353
County	\$170,000
Hospital	\$95,000
Buncombe County Health Center (in-kind)	\$106,068
Total revenue (first year)	\$880,728

TABLE 3 ● Buncombe County stakeholders in integrated behavioral health primary care

Buncombe County Health Center clients and staff
County commissioners (fund Health Center operations and other county services)
Buncombe County and Asheville City School Systems
Mission Hospitals (community's largest public hospital)
The Duke Endowment (original funder of the depression case management project)
North Carolina Department of Health and Human Services (funds indigent care through Medicaid and the state mental health system)
Local businesses (largely service industries not providing employee health benefits)

The program would include universal patient screening and integrated behavioral healthcare, case management, and comprehensive follow-up, and would be funded by local and state stakeholders. The results and ongoing statewide impact of this implementation are detailed below.

● Results

Obtaining support from stakeholders

Using the business plan created at the Management Academy, the BCHC made the case for supporting an integrated behavioral healthcare program to the following stakeholders:

Buncombe County

The BCHC argued before the County Commissioners that this program would help patients remain productive members of the community and decrease the likelihood that they would end up using additional county resources either through the Department of Social Services or through the Criminal Justice system. The county already contributed \$400,000 per year to community mental health programs, and the BCHC applied to receive some of this funding. In fall 2004, the Buncombe County Commissioners voted to support the program, giving the Health Center nine new fully benefited positions for the behavioral health staff and covering 40 percent of the program's costs.

With this support, the BCHC created a Department of Behavioral Health in 2004. A Behavioral Health Supervisor position was created, filled by a doctoral trained psychologist working half-time in the clinic and half-time in a supervisory role. Other positions now in place include a pharmacy technician and eight therapists: four in the primary care clinic; three based in the public schools; and one based in the county jail.

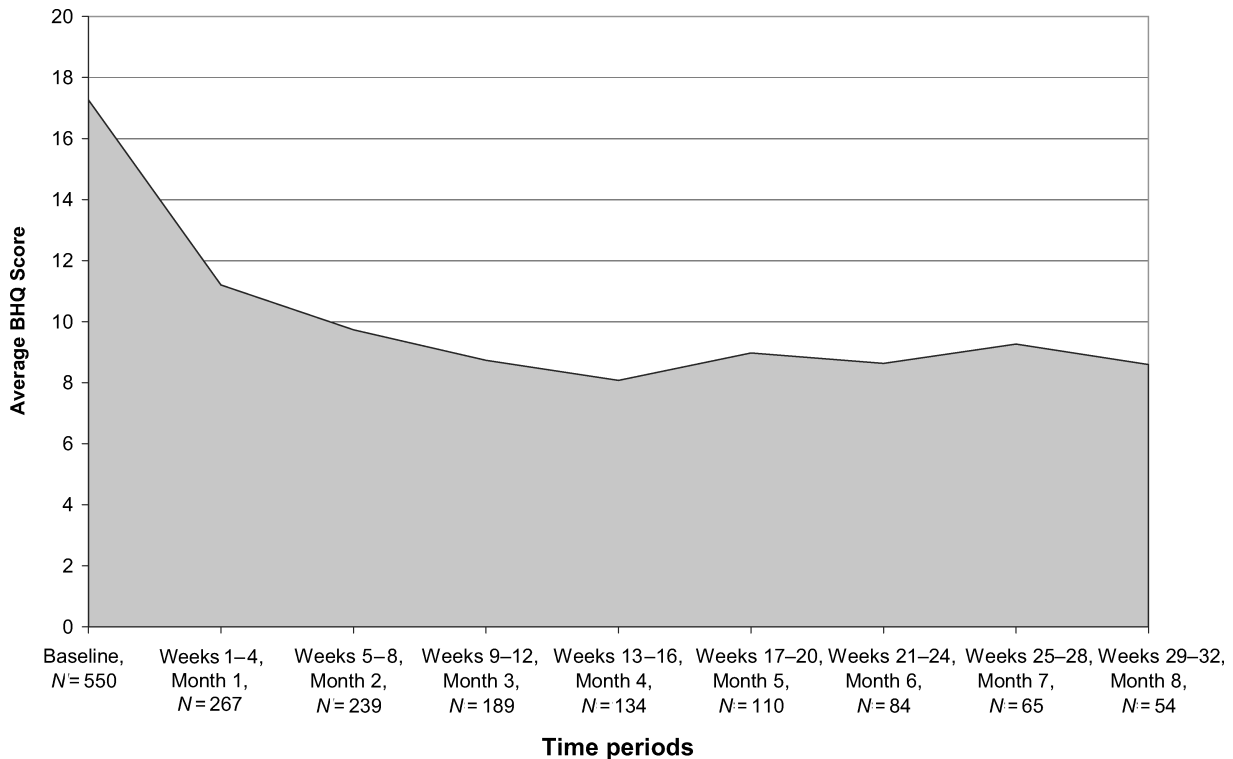


FIGURE 1. Decrease in scores for patients over an 8-month period while receiving integrated behavioral health services at Buncombe County Health Center (December 2000–August 2002) (decreasing score = decreasing level of depression).

State of North Carolina

From the state, the BCHC obtained a contract allowing BCHC to receive reimbursement for some indigent patients who receive behavioral health services. This funding covers 10 percent of program costs.

Also, with the state's support, the BCHC team participated in making a business case to the North Carolina Foundation for Advanced Health Programs, Inc, to support research into the funding of integrated care. This foundation is a nonprofit organization whose mission is to help develop public-private demonstration programs that improve the healthcare delivery system to low-income populations. The BCHC and three other public health groups doing similar work joined with the North Carolina Division of Medical Assistance, the state agency that manages the federal insurance programs. Together, they convinced this foundation to support integrated behavioral health pilot projects across the state. The purpose of the pilot programs is to evaluate the impact of funding the cost of consultation between mental health providers and primary care physicians, together with regular telephone follow-up and monitoring that are part of this model. The foundation invested more than \$1,000,000 to pay for this care during a 3-year demonstration period, during which participating agencies would gather data to prove the cost-effectiveness of such integrated care. The pilot project

is entering its final year, and at the end of this year the BCHC and other participating agencies will present data to the state about cost and lessons learned from the program. This information will be studied to see whether supporting integrated healthcare is beneficial and feasible.

Local hospital

The BCHC argued to the local hospital, Mission Hospital, that the BCHC-integrated behavioral health program will identify uninsured patients with behavioral health problems and link them with services before their diseases worsen, thus preventing many hospital visits and allowing the local hospital to reduce its uncompensated care losses. The hospital requested more information before financially supporting the program, so the BCHC team obtained a \$200,000 grant from the Duke Endowment to measure patient service use and assess whether the hospital would receive cost benefits from the program. Evaluators will examine whether an increase in primary care costs is offset by a shift away from the use of more expensive services, such as emergency visits and in-patient hospital care. When finalized, results of this evaluation will be shared with the hospital in an effort to gain additional financial support for the BCHC program.

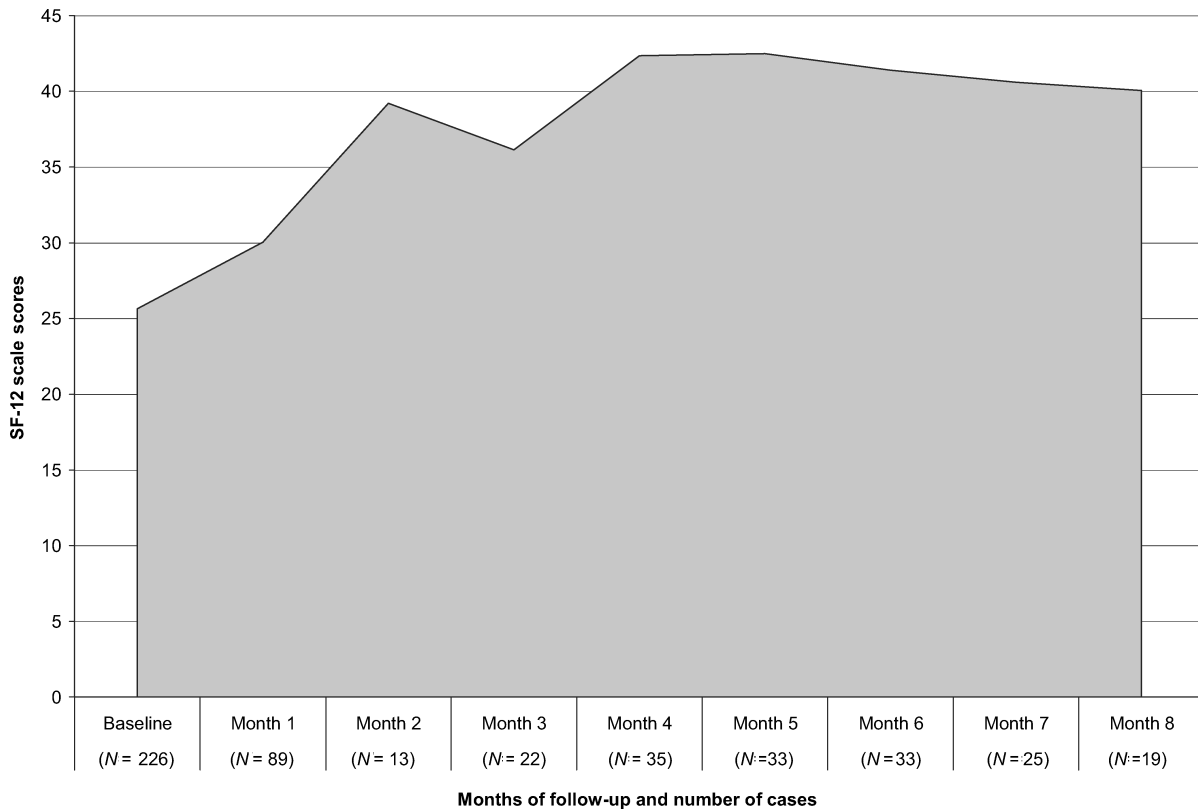


FIGURE 2. Increase in mental health functioning as measured with the Short Form-12 health survey for patients receiving integrated behavioral health services at Buncombe County Health Center (December 2000–August 2002).

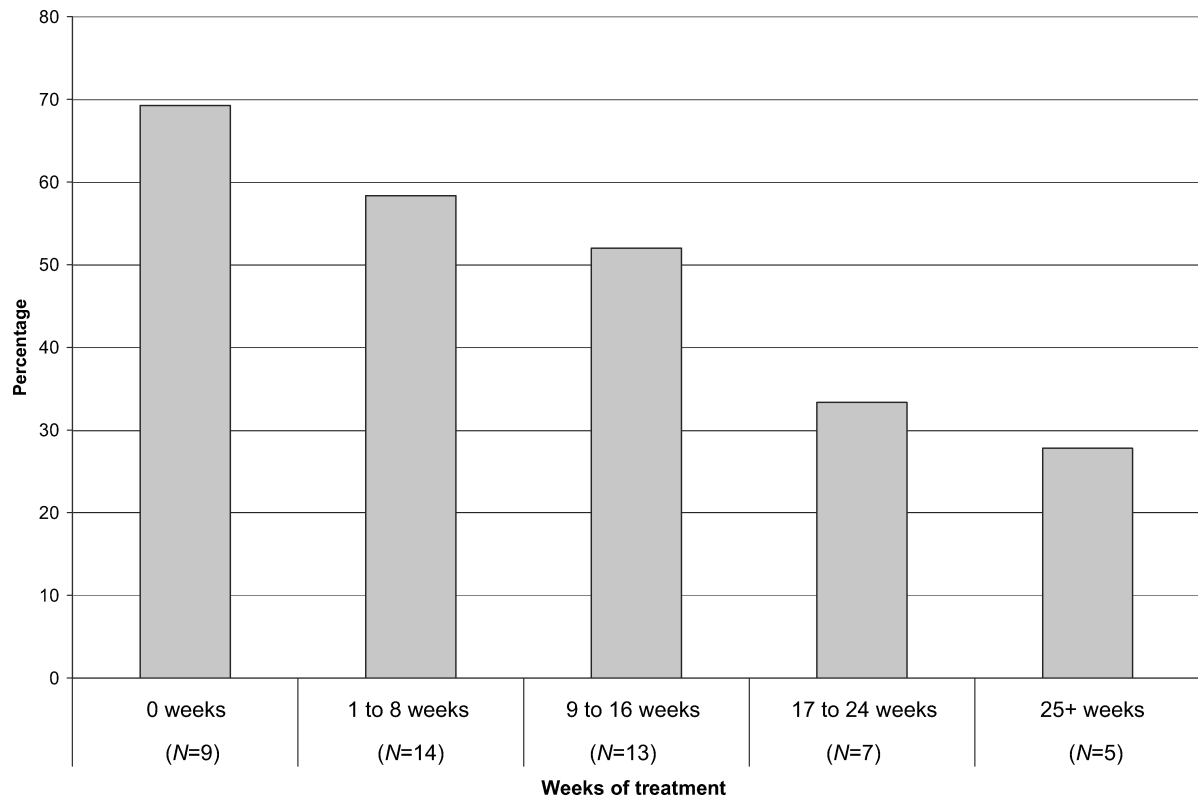


FIGURE 3. Percent of patients reporting missing work or school in the past 3 months because of emotional reasons while receiving integrated behavioral health services at Buncombe County Health Center (December 2000–August 2002).

Clinical outcomes

In the most recent calendar year (2005), a total of 2,177 behavioral health patients were served through 7,394 encounters. These encounters included triage, assessment, therapy, case management, phone treatment, and clinician consultation events; almost half (45%) were therapy sessions, and 20 percent were telephone treatment or follow-up sessions.

Clinical outcomes from the program lag behind utilization numbers. Nonetheless, 8 months into the initial program implementation, data showed declining levels of patient depression, rising scores on function tests, and fewer missed work and school days. Figures 1 to 3 illustrate these initial findings.

Results from the study of hospital utilization rates are not yet available. Further outcomes evaluation is needed to confirm the efficiency and efficacy of the integrated behavioral healthcare program over time.

● Discussion

The Management Academy team members who created this program were encouraged to think about, and plan for, their work's impact on larger professional and political realms. The BCHC's integration of behavioral healthcare into its clinical services, as well as the concurrent attempt to change state Medicaid policy with regard to funding this type of care, is a work in progress. With regard to economic justification for this program, it may take time for higher preventive and outpatient utilization of services to translate into lower utilization of higher cost health services.

Beyond tracking the program's economic feasibility, gathering and analyzing basic clinical data have proven challenging because the program no longer benefits from the built-in evaluation tools afforded by the original grant funding infrastructure. Attending the Management Academy did give program planners basic tools in evaluating programs, and the program's su-

pervisor is working to standardize coding and institute more consistent follow-up data collection. Outcomes from the self-sustaining phase of the program are expected to mirror those of the grant-funded phase. If that is the case, the program will result in a better quality of life for patients. It will also benefit the larger community, as these healthier people work and attend school, and the state, which may learn from this program how to care for those with behavioral health problems more effectively and efficiently. Other communities may find the integrated care mapped out in this program—and the methods used to fund it—helpful as they attempt to provide integrated care to their own vulnerable communities with diminishing resources.

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