

COLLABORATION/PARTNERSHIPS

Applying Service-Learning through a Community-Academic Partnership: Depression Screening at a Federally Funded Community Health Center

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ABSTRACT **Context:** *Increasingly, health care facilities worldwide, particularly those that comprise the safety-net, are finding themselves understaffed and challenged to meet patients' needs. Identifying additional sources of support and resources is critical for facilities to be able to sustain current and develop new initiatives to improve patients' health.*

Approach: *We present one community health center's reliance on a partnership with an academic medical/nursing institution to develop and initiate a depression screening and treatment project. Incorporating students to help implement or pilot a needed clinical service for a high prevalence condition presents significant rewards as well as challenges. Nevertheless, an academic-community partnership has the potential to initiate systems change at the clinical level.*

Results: *Using a service-learning modality, medical and nursing students worked with health center providers to initiate a pilot depression screening and treatment program based on the chronic disease model. Implementation of this initiative succeeded in poising the health center for participation in a large, federally supported collaborative on depression in primary care. While students gained insight into some of the challenges faced by safety net providers and their patients, discontinuity in student availability led to uneven pacing in project implementation.*

Conclusion: *Curricula that employ a service-learning framework can enable health care facilities world-wide to gain additional resources for needed initiatives. Students' learning*

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experiences can provide an excellent mutually beneficial opportunity as a “jumpstart” for new evidence-based clinical initiatives and demonstration projects. Such programs can help meet the needs of patients while enhancing students’ education. However, students can neither make up for staffing shortages nor be expected to maintain programs. In order to be successful for the long term, service-learning projects must skirt the pitfalls of the inherent logistical incompatibilities e.g. schedules and length of commitment, between academic institutions and health care facilities.

KEYWORDS *Service-learning, safety-net, depression, primary care, student.*

Introduction

At a time of shrinking resources, individuals and communities worldwide often find themselves facing increasingly complicated health needs. The worsening mismatch of resources and needs has prompted many institutions to develop or expand partnerships, with the aim of realizing mutual benefit. While partnerships between academic institutions and community facilities have existed for decades (Bok, 1982; Seifer, 1998; Mayfield, 2001; Quinn *et al.*, 2001; Richards & Sayad, 2001), in the context of resource reductions and expanding needs, partnerships between safety net health care providers and health care training institutions are increasing in importance. This article reports on a service-learning approach used by a medical and nursing school in partnership with an urban community health center in Central Massachusetts. The arrangement allowed the health center to expand its resources to develop and implement a pilot program for screening and treating depression. Simultaneously, health professions students gained an opportunity to learn about—while contributing to—implementing the chronic disease model as it relates to depression (Wagner *et al.*, 1996; Bodenheimer *et al.*, 2002).

Background

While academic institutions have a mandate and a mission to train the next generation of health care clinicians, safety-net facilities have often struggled to attract well-trained providers. Consequently, they have become more willing to open their doors to student placements as a way to focus on “growing their own” (Seifer, *et al.*, 2000; Cauley *et al.*, 2001; Seifer, 2001). Within the parameters of service-learning, partnerships between academic institutions and health care facilities can present mutually beneficial situations for the student, the educational institution, the health care facility and the community. Service-learning is defined as academically based community service, i.e. a structured learning experience that combines community service with intentional learning and opportunities for reflection (Furco, 1996; Jacoby, 1996; Seifer, 1998; Cauley

et al., 2001). With the guidance of faculty and onsite preceptors, students link with communities to respond to community-identified needs and concerns and to gain an understanding of the context in which service is provided (Honnet & Paulson, 1989; Conners *et al.*, 1996; Seifer & Maurana, 2000). This type of learning is relevant to health professions students worldwide (Jason, 2001).

The Issue: Depression

Recently, the US Preventive Services Task Force (USPSTF) updated the guidelines for routine screening for depression (USPSTF, 2002). In contrast to 1996 findings, the Task Force determined that sufficient evidence is present to encourage primary care clinicians to screen adult patients for depression.¹ Current estimates of the prevalence of depression in the US vary from 15–25% for a lifetime. Worldwide, within the next 20 years, depression is predicted to become one of the leading causes of disability (Badamgarav *et al.*, 2003). While effective treatment is available, depression remains seriously under-diagnosed and under-treated in primary care settings (Hirschfeld *et al.*, 1997). Nevertheless in busy clinical practices, screening for depression is an extra task for stressed clinicians to perform. If patients screen positive, these same clinicians must further assess, evaluate the patients' risks and develop a treatment/management plan specific to depression. With resources and time for routine appointments shrinking, the incentive to screen is low, and hiring additional clinical support is rarely an option. Many patients are not aware of their depression and generally seek care for other more physical, and seemingly authentic, medical reasons. Given the stigma attached to depression, busy providers know the disease will require time and empathy to address effectively. Consequently, in order to add depression to the list of conditions that clinicians can diagnose and treat in a systematic manner, facilities functioning with severely limited resources must find new and/or expanded partnerships that can enhance resources and staffing.

Setting

Like most federally funded community health centers, the mission of the health center described here is to improve the health and well-being of underserved and culturally diverse people in its catchment area. Located in a low-income neighborhood of a city of 168,000, the health center provides comprehensive primary care services to multicultural clients from low-income backgrounds (Cashman *et al.*, 2004a). As a site for the University of Massachusetts Medical School's Family Medicine Residency, the health center has been training family

¹The guidelines suggest that clinicians screen adults at risk for depression with two questions: "Over the past two weeks, have you felt down, depressed, or hopeless?" and "Over the past two weeks, have you felt little interest or pleasure in doing things?" These questions have a sensitivity of 96% and a specificity of 57% in detecting depression (Pignone *et al.*, 2002). If response to either of the questions is affirmative, additional questions to help diagnose depression should be asked (Whooley *et al.*, 1997; Arroll *et al.*, 2003).

medicine residents and medical students since the residency began in 1974. More recently, with the development of the University's Graduate School of Nursing (GSN), the health center has offered placements for advanced practice nursing (APN) students, thus expanding a long-standing mutually beneficial partnership.

In 1999, the health center began a multi-year project to develop and nurture an interdisciplinary collaborative team practice model in the primary care setting (Cashman *et al.*, 2004b). Given protected time to focus on quality improvement initiatives, the clinical team identified the problem of depression as a focus for intervention. This decision was supported by a prior chart audit indicating that the prevalence of depression among the adult patients was approximately 33%.² Through in-service workshops and exploration of relevant literature, providers and staff began to educate themselves about the chronic disease model and standards for depression screening and treatment in primary care.

As part of implementing systematic depression screening and treatment, one of the team's physician leaders had conducted introductory training sessions about depression, its signs, symptoms, diagnosis, and management, with the medical assistants and nurses. Staff were trained to recognize the differences between grief and depression and to use evidence-based screening tools. With the help of the outreach worker/case manager, the interdisciplinary team became more closely linked with the health center's social services department. The goal of this connection was to ensure that patients diagnosed with depression would have ready access to mental health counseling within the facility.

The team's planned approach for improving depression screening and treatment was for the medical assistants or the nurses (depending on availability and language concordance) to administer the two-question screen. English or Spanish speaking patients with a positive score on the screen completed the Center for Epidemiologic Studies-Depression Screen (CES-D). This 20-item instrument has been evaluated extensively in primary care and can be used to rate the severity of depression and monitor response to therapy (Radloff, 1977; Williams *et al.*, 2002).

Recognizing the high prevalence of depression, as well as the impact of depression on a patient's and family's welfare, the team was committed to this project. The active engagement of nurses in the process was vital to its success. Chronic staff shortages, however, made it impossible for the nurses to accept this new responsibility. Searching for other avenues to augment staffing levels, the physician leader and the university-based project staff looked to their academic partner and recruited a first year

²The USPSTF 2002 Guidelines supports this type of chart review and encourages clinical practices that screen for depression to have systems in place to ensure that positive screening results are followed by accurate diagnosis, effective treatment, and careful follow-up.

medical student for a full time summer assistantship sponsored by the Office of Community Programs to provide an important jumpstart for piloting the project.

Approach to Depression Screening Incorporating Students as a Limited Resource

During his assistantship, the medical student worked with the clinical team to begin piloting a systematic approach to screening patients for depression (Figure 1).

When the medical student returned to classes, the initial pilot ended. Simultaneously, the GSN approached the health center about placements for several first year APN students enrolled in a role development/population health/community service-learning course. At this critical juncture, while filling the four-hour/week/15-week service-learning requirements, these students began to provide regular, predictable (albeit limited) support to maintain a minimum level of depression screening for the next stage of evaluating the initiative’s feasibility.

On days that one of the NP students was scheduled to be present, the providers designated patients on their schedules whom they thought might benefit from screening. Because screening of all adults was not logistically feasible in the course of routine care, the team decided to screen the smaller number of “red flag” adults identified by their providers. The students used the

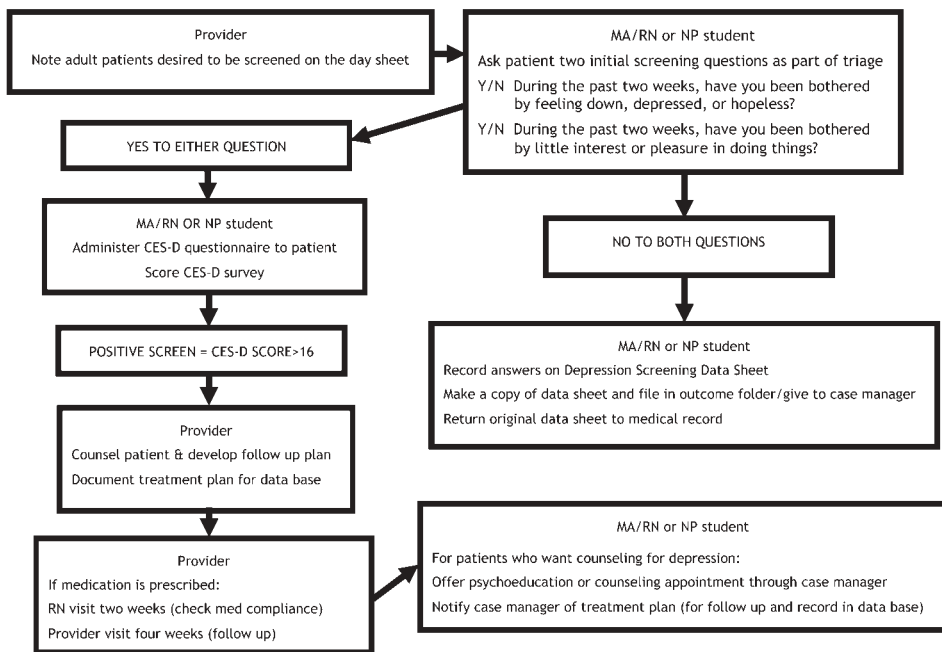


Figure 1. Depression Screening Protocol.

depression screening protocol initiated by the medical student the preceding summer. Within the eight month period that students were involved (June, 2001 through February, 2002), 207 patients completed the two question screen; 35 patients (17%) answered “Yes” to one of the questions; 82 patients (40%) answered “Yes” to both; 90 (43%) patients answered “No”. The 117 (57%) patients who responded positively to one or both questions were screened with the CES-D. Eighty-five percent (100) scored positive for depression (> 16 on the CES-D). Among these 100 patients, 16% elected no treatment or therapy, 38% chose mental health counseling/therapy, and 11% requested medications alone. Thirty-five patients (35%) elected to “watch and wait”. All patients were offered the option of therapy; slightly more than one-third (38%) were given referrals. In addition to screening patients for depression and explaining treatment options, the APN students worked with the outreach worker/case manager to demystify data collection and to develop and implement a patient tracking system.

After the students’ departure in February, the physician and nurse practitioner leaders, together with the outreach worker/case manager, searched for ways to continue to include depression screening in the clinical encounter. During this time, the health center was chosen to participate in a federal Bureau of Primary Care disease collaborative project focusing on depression, partly because of the spontaneous initiative shown by the clinical team to tackle the problem of depression. One year following the APN students’ placement, a second medical student elected a summer assistantship at the health center. Among her responsibilities was application of the federally sponsored database system to patient tracking for chronic disease at the health center.

Discussion

Developing partnerships with academic institutions interested in service-learning is one way for hard-pressed facilities worldwide to provide needed services such as depression screening. Such liaisons can facilitate the implementation of initiatives for chronic disease management. On the other hand, despite mutual benefit, such partnerships cannot make up for chronic staff shortages. The most obvious drawback is the mismatch between the schedules of the health care facility and the academic institution (Quinn *et al.*, 2001). Frequently, students are unavailable during school vacation weeks, often the time of great demand for services. In addition, students are transient; often they leave just when they have mastered the details of the system and are most able to contribute.

The project discussed in this article relied on prior interaction and partnership activity between the university and the health center. While students served as catalysts to initiate the clinical intervention, the initiative slowed considerably at the close of the academic semester. Fortunately, the

gradual introduction of the initiative lent itself to being able to withstand a hiatus. Additionally, the team's cumulative attention to depression screening poised the health center to participate in a federal initiative aimed at the wider promulgation of depression screening.

Despite the presence of characteristics that make a positive difference in service-learning (Eyler & Giles, 1999)³, the students faced significant challenges in implementing the depression screening and treatment project. Some challenges were unique to the setting and project and others are common to community service-learning experiences. Challenges unique to the setting (but typical of other centers serving the underserved) included lack of time for screening during the visit, limited time to investigate additional complex risks during problem-focused and short patient visits, the need for interpreter services for non-English speaking patients, and reliance on an inadequate information technology system. To address the need for a more efficient system, the students suggested incorporating the two screening questions on the encounter form, along with the screening questions for domestic violence to make a more streamlined, less staff-intensive approach to screening and treatment. Such an innovation would provide a systematic way to ask sensitive questions and allow the provider to review the responses during the visit.

The challenges provided a rich learning environment. The students learned to work closely with the interpreters and to establish good relationships with the social services personnel. They became acquainted with elements of the chronic disease model of care (Bodenheimer *et al.*, 2002), particularly the value of interdisciplinary teamwork for improving patient outcomes. They also learned to problem solve within the constraint of very limited resources and witnessed the challenges of access to specialty care for the medically uninsured. In addition, they became familiar with community resources described in the didactic portion of their course and experienced the value of working with community social services and interpreters to provide culturally appropriate assessment, care and follow-up. Finally, they learned that change happens slowly, that even the most obvious and needed changes require collective agreement and input, and that no job is too menial, especially in this type of setting.

More generic challenges were the mismatch between the academic and the health center's schedule and the transient nature of student participation. From the health center's perspective, the reliance on students for such an ambitious initiative only postponed the ultimate requirement for the site to

³These include the opportunity for students to take initiative and responsibility and to learn while working as peers with staff in the agency, an application linking the community with the classroom, reflection that helps the learner enrich his/her understanding of the experiences and pertinent theory, a racially and/or ethnically diverse staff and/or clientele, an experience that reflects a community's defined needs and the rich learning experience in an underserved setting.

find a way to sustain the project. Nevertheless, once the students helped clinical staff develop and pilot the project, the health center leadership was able to obtain federal support to implement the model throughout the facility.

In short-staffed safety-net facilities (Meyer *et al.*, 2004), students make valuable contributions to both beginning and long standing programs. Nevertheless, facilities relying on students for the delivery of core services run the risk of significant discontinuity. While our project was successful, we do not view it as a model for the initiation of a needed service. Rather, service-learning, with its student placements, is a way for facilities to gain additional short term intellectual and hands-on support for pilot projects. Community-academic partnerships that help facilities meet patients' needs while providing rich learning opportunities for students represent win-win situations. Such pilots can provide the data for further initiatives and for more cost-effective ways to implement "best practices". To address many of the challenges, academic programs sponsoring service-learning projects should make a longitudinal and possibly programmatic commitment to a community site so that students could be counted on to continue work begun by their predecessors. Additionally, students entering such placements might begin their work by building into their assessments a plan for how to continue the work after their departure. Simultaneously, the academic partner might, through the course leader, make a commitment to ensuring an ongoing student presence at the facility.

Conclusion

In this descriptive study, the long-standing community-campus partnership between a university and a community health center fostered a connection for student learning and expansion of needed patient services. Using a service-learning construct, medical and APN students worked with health center providers to initiate a pilot depression screening and treatment program. Students helped refine and implement the system, increased staff awareness of the value of depression screening, modeled the process for staff ensured that relevant data were collected and a database developed. While student involvement was necessary to incorporate this new component into clinical care, it was not sufficient to sustain the initiative over the long term. Eventually, health center staff had to shoulder the tasks involved. Given the challenges posed by academic calendars and student schedules, projects that rely on students need an institutional and/or course leader commitment to ensure that students as resources, as well as learners, will be available consistently to continue implementation and evaluation. This type of commitment would reflect a shared responsibility by both partners for assuring an initiative's success.

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