

# Integrated Care in College Health

## Abstract

Integrated care is a model of health care delivery intended to improve coordination of care and enable better utilization of limited resources. It focuses on treating the mind-body connection, providing opportunities for patients to gain self-care skills and become better informed and more involved in their care. The purpose of this program was to better identify students impacted academically by mental health issues and provide improved access to needed services. A pilot team of five was formed consisting of two medical providers, a psychiatrist, and two care managers. This care model was piloted during the Spring 2015 semester.

## Introduction

Depression is the 4th most common health problem according to an ACHA study of 71,860 students at 107 institutions of higher education in North America (American College Health Association, ACHA, 2007). According to the Fresno State National College Health Assessment data (NCHA, 2013), a survey completed by students, it is #8 on a list of factors reported to impact academic performance.

Depression is under treated and ethnic minorities have particularly low rates of depression treatment (IMPACT, 2003). Many seeking care for mental health prefer treatment by their primary care provider. However, treatment is often ineffective due to a lack of coordination of care between behavioral health and primary care.

Integrated care, defined as the coordination of general and behavioral healthcare (SAMHAS, 2015), can address this issue by treating the mind body connection. For this pilot several program examples research studies were reviewed.

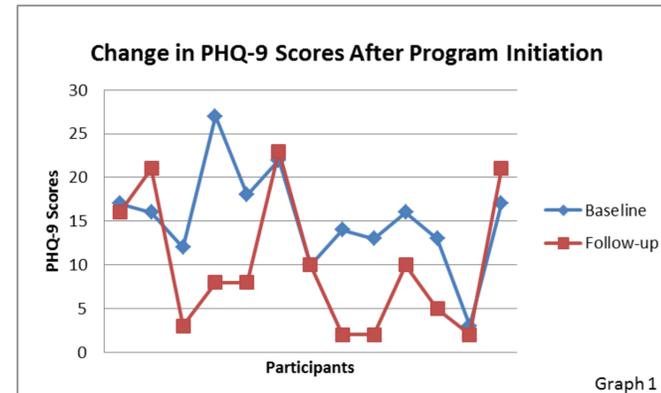
The University of Washington AIMS Center, advances research and implementation of integrated care based on evidence based practices. In 2003, the Center completed the IMPACT trails; a randomized study of 1801 adults from 18 primary care clinics across 5 states, in both urban and rural settings and diverse health care systems. Treatment included an initial screening, behavioral activation, antidepressant medication and/or behavioral health referral. At 12 months, about half of the patients receiving integrated care reported at least a 50 % reduction in depressive symptoms, compared with only 19 percent of those in usual care (JAMA, 2002).

National guidelines and Healthy Campus 2020 strongly recommend screening for depression among adults and teens in primary care (US Preventative Task Force, 2002; NCDP). National guidelines further recommend screening coupled with access to staff-assisted depression care. The PHQ-9, a nine-item depression screening tool is commonly utilized in integrated care programs. PHQ-9 scores can be used like a "vital sign" to monitor treatment progress.

A special pilot team of five was formed consisting of two medical providers, a psychiatrist, and two care managers. Team members were co-located in the same hall. Care managers reviewed IMPACT training modules and shadowed UCSF-Fresno Integrated Mental Health care managers. Care managers assembled a toolkit containing handouts, worksheets and educational materials. Select items from Community Care of North Carolina (CCNC) depression toolkit were also utilized. The full pilot team met weekly.

The pilot program had two objectives:

- Screen a minimum of 90% of the patients assigned to the pilot program providers
- Decrease program participant PHQ-9 scores 50 % by pilot completion



## Methods

**PARTICIPANTS.** A total of 25 students entering the health center seeking medical treatment who meet procedure criteria choose to participate in the pilot program. Of those, about half completed an initial baseline survey and at least one survey follow-up after program initiation making the final sample size 13 total students.

**MEASURE.** Patient Health Questionnaire Depression Scale (PHQ-9; Spitzer, Williams, Kroenke, Linzer, deGruy, Hahn, et al.), a nine-item measure adapted from PRIME MD TODAY. The standard cut-off score to recommend for additional care is 10 and above.

**PROCEDURE.** Students patients seeking medical care were assigned following standard health center protocol to a primary care provider on the ICM team. Each completed the PHQ-9 survey prior to the visit start. Students with a score of 10 or higher were offered the opportunity to meet with a care manager for 15-30 minute sessions. Number of sessions ranged based on student need and availability. The full ICM team met weekly to discuss issues, seek consultation, and coordinate care.

## Results

Analysis of program utilization was completed using the Electronic Medical Records (EMR) System and Excel.

- Care team medical care providers had a total of 1,030 visits of which 966, or 93.8% of patients were screened using the PHQ-9 survey tool.
- Approximately 17% of patients screened scored a 10 or above.
- Of the total patients screened, 2.6% participated in the pilot program.

Changes in PHQ-9 scores were analyzed using Excel.

- The overall percent decrease in PHQ-9 scores was 33.6% which is below the program objective of 50%.
- About half of the patients' scores (6 total) decreased by at least 50%.
- Overall, the percent decrease in PHQ-9 scores ranged from 0% to 70%.

A paired samples t Test analysis was completed using SPSS to determine if the difference in PHQ-9 scores was statistically significant.

- Follow-up PHQ-9 scores ( $M = 10.08, SD = 7.75$ ), were significantly different compared to baseline PHQ-9 scores ( $M = 15.23, SD = 5.76, t(12) = 2.62, p = .02, d = .72$ ).

## Conclusions

While the first program objective to screen a minimum of 90% of patients seeking medical care was met, the second program objective to decrease PHQ-9 scores by at least 50 % was only partially met with approximately half of the participants meeting that criterion.

There are additional implications for program impact.

- Completion of the PHQ-9 survey
- May help raise awareness of the symptoms of depression among students seeking medical services
- Provide an opportunity for patients to discuss the status of their mental health with their primary care provider
- Patients who may not have otherwise sought out mental health services can be identified and offered additional care options
- Patients who declined pilot program participation were often connected to other behavioral and psychiatric health services

Additional implications for program procedure were also revealed.

- Screening did not dramatically change workflow for support staff (Mas)
- Use of screening tool required minimal staff training time to implement
- No impact on scheduling of patients for medical appointments and provider time
- Location of team members in the same hallway helped facilitate team communication, warm hand-offs and consultation
- Patients' likelihood to follow through with program participation increased with warm hand-off during the medical visit or meeting with care manager immediately after or in between delivery of medical services
- Sessions were also brief (15-30 minutes) to accommodate students' schedule

**LIMITATIONS.** One important limitation to note is the actual projected completion date for the pilot program is set for the first week in May 2015. Additional data will be collected over the next month and there will be a chance to obtain follow-up PHQ-9 scores from the remaining seven current program participants. Another notable occurrence to be considered when interpreting the results of the present study was care provider observation or patient self-report of survey responses and scores did not always accurately reflect their stated experience. The sample size was also small. Although the first program objective was met there were several reasons why a patient was not screened including recent survey completion, language or comprehension barriers or refusal.

**FUTURE.** Very few college health centers have investigated the adoption of an integrated care model. More studies need to be completed in this setting to understand the impact of this type of program on the college population. The pilot team recommends an expansion of the integrated care model throughout the Student Health & Counseling Center including the addition of staff to help support the program. Future programs will need to investigate improved methods for data collection and patient tracking.

## References

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