General Hospital Psychiatry 35 (2013) 461–467

Contents lists available at ScienceDirect

General Hospital Psychiatry

journal homepage: http://www.ghpjournal.com

Integration of mental health resources in a primary care setting leads to increased provider satisfaction and patient access

Kristin S. Vickers, Ph.D., L.P. [a,*], Jennifer L. Ridgeway, M.P.P. [b], Julie C. Hathaway, M.S., L.P.C. [c], Jason S. Egginton, M.P.H. [b], Angela B. Kaderlik, M.S., R.N. [d], David J. Katzelnick, M.D. [a]

[a] Department of Psychiatry and Psychology, Mayo Clinic, Rochester, MN, USA
[b] Department of Health Sciences Research, Mayo Clinic, Rochester, MN, USA
[c] Section of Patient Education, Mayo Clinic, Rochester, MN, USA
[d] Department of Nursing, Mayo Clinic, Rochester, MN, USA

ARTICLE INFO

Article history:
Received 22 January 2013
Revised 14 June 2013
Accepted 24 June 2013

Keywords:
Delivery of health care
Integrated
Mental health
Anxiety disorders

ABSTRACT

Objective: This evaluation assessed the opinions and experiences of primary care providers and their support staff before and after implementation of expanded on-site mental health services and related system changes in a primary care clinic.
Method: Individual semistructured interviews, which contained a combination of open-ended questions and rating scales, were used to elicit opinions about mental health services before on-site system and resource changes occurred and repeated following changes that were intended to improve access to on-site mental health care.
Results: In the first set of interviews, prior to expanding mental health services, primary care providers and support staff were generally dissatisfied with the availability and scheduling of on-site mental health care. Patients were often referred outside the primary care clinic for mental health treatment, to the detriment of communication and coordinated care. Follow-up interviews conducted after expansion of mental health services, scheduling refinements and other system changes revealed improved provider satisfaction in treatment access and coordination of care. Providers appreciated immediate and on-site social worker availability to triage mental health needs and help access care, and on-site treatment was viewed as important for remaining informed about patient care the primary care providers are not delivering directly.
Conclusions: Expanding integrated mental health services resulted in increased staff and provider satisfaction. Our evaluation identified key components of satisfaction, including on-site collaboration and assistance triaging patient needs. The sustainability of integrated models of care requires additional study.

1. Introduction

Evidence shows that patients often present to primary care with mental health concerns [1,2], but primary care providers have mixed success in identifying and managing these needs on their own [3–6]. Patients have a variety of preferences and barriers associated with mental health treatment, suggesting the need for easy access to a range of treatments and providers [7,8]. To enhance acceptability and availability of mental health services available in this setting, where ideally doctors and patients collaborate in managing multiple health conditions, clinics may turn to an integrated model of primary and mental health care.

There are many models of integration and strategies that range from simple colocation of services to fully integrated care. More fully integrated models include consultation and information sharing between mental health and primary care providers [9]. Studies that integrate primary and on-site mental health care have shown improvement in patient outcomes, treatment and costs [10,11]. When patients with lower severity of impairment due to mental health problems are able to stay in the primary care setting, there may be better access to specialty care for more complex patients [12]. A few long-term studies show continued positive results 1–2 years after implementation of an integrated model in the primary care settings [11,13,14].

To ensure that system and resource changes implemented by mental health providers in the primary care setting actually meet the needs of the primary care providers and their support staff, we identified the need for planned evaluation of opinions and experiences before and after a resource change. Because systems and providers revert back to familiar practice patterns, even following introduction of additional education or resource [15,16], key stakeholder feedback from the onset of system change can guide the acceptability, feasibility and, perhaps, maintenance of system changes. Our objective was to gather provider and staff feedback using one-on-one interviews in order to assess opinions of on-site mental health service access, availability and integration, before and after resource and system

* Corresponding author. Tel.: +1 507 284 2933.
E-mail address: vickersdouglas.kristin@mayo.edu (K.S. Vickers).

0163-8343/$ – see front matter © 2013 Elsevier Inc. All rights reserved.
http://dx.doi.org/10.1016/j.genhosppsych.2013.06.011

changes at a primary care clinic. We also aimed to identify issues impacting implementation of these changes. Provider feedback was used to inform initial system changes and to evaluate whether the system and resource changes that were made actually addressed the issues that they were intended to improve. This before and after evaluation was part of a larger study to measure other outcomes of mental health service changes in the primary care setting.

2. Methods

2.1. Setting

This project took place at Mayo Family Clinic Northeast (Rochester, MN), hereafter called the Northeast Clinic, an urban primary care satellite clinic with services in community pediatric and adolescent medicine, family medicine and primary care internal medicine. Primary care providers refer to specialty care as needed.

2.1.1. Description of on-site behavioral health resources

The Northeast Clinic opened in 2003, and at that time, limited on-site behavioral health resources included several hours of psychiatrist and psychologist time each week. In the following years, the clinic added on-site services provided by clinical nurse specialists and social workers. In 2008, the Northeast Clinic initiated its first integrated model of care: the Depression Improvement Across Minnesota Offering a New Direction (DIAMOND) collaborative care model for depression [17,18]. Developed by the Institute for Clinical Systems Improvement (http://www.icsi.org) and based on the Improving Mood Promoting Access to Collaborative Treatment model, DIAMOND uses on-site-registered nurse care coordinators, supervised by a psychiatrist, to provide depression education and support and coordinate patients' care with primary care and mental health providers. With DIAMOND, care coordinators were available on-site daily at the clinic. A psychologist, psychiatrist and clinical nurse specialist also each spent limited, nonoverlapping time on-site.

In mid-2011, the clinic expanded its integrated on-site services to include the Coordinated Anxiety Learning and Management (CALM) model, which is an evidence-based treatment for anxiety specifically developed for delivery in the primary care setting [19]. The CALM intervention includes medication and/or brief psychotherapy for panic disorder, social phobia, post traumatic stress disorder and generalized anxiety disorder. A novel aspect of CALM includes training of therapists not previously expert in cognitive behavioral treatment (CBT) for anxiety to deliver brief CBT in the primary care setting [20]. With the introduction of CALM at the Northeast Clinic, two full-time licensed independent clinical social workers became available on-site for psychotherapy and to assist with triaging and referring patients to other on-site mental health treatments (pharmacotherapy) and for general social service needs. Care coordinator resources (e.g., DIAMOND) remained unchanged. The available psychologist time and clinical nurse specialist time remained unchanged, but psychiatrist time on-site increased from approximately 1 day per week to 4 days. All on-site mental health professionals (i.e., social workers, psychiatrist, psychologist, care coordinators and clinical nurse specialist) began to meet weekly to develop, refine and facilitate the delivery of a stepped care model (e.g., mental health specialists referred to one another to access specialty services and expertise). The clinic also implemented system changes at that time including a new scheduling system for mental health services and systematic implementation of several validated mental health screening measures.

Our before and after evaluation was conducted to assess provider and staff opinions of mental health services when DIAMOND was the predominant resource available and repeated with the same interviewees after resource expansion and system changes.

2.2. Design, sample and data collection

Our design included semistructured one-on-one interviews consisting primarily of open-ended questions but also including ratings scales developed for this evaluation to help quantify magnitude of change in perceptions, if any, between the first and follow-up interviews. The interview guide was developed based on our evaluation objective (to understand provider and staff opinions about on-site mental health services, including access, availability and integration and to identify issues related to implementation), as well as review of the literature on mental health service access in primary care. Qualitative open-ended interview questions were used to gain rich narrative about conditions at the site and the changes that were implemented, including the process of implementing those changes. Interview topics included in the interview guide are listed in Table 1. Rating scale items were written by the evaluation team to reflect ideas that paralleled the open-ended questions. For example, the open-ended question about the time it took to line up services for a patient had a parallel scaled item that ranked time to service from 0 (*excessively long wait/not adequate*) to 10 (*almost immediate/completely adequate*). Rating scale items were included to provide quantitative data to members of our team unfamiliar with qualitative research (e.g., for brief reports to administration), to help quantify change in perception over time and to assist with efficient capture of data within a brief individual interview (i.e., limited to 15–20 min due to provider clinical schedules). Rating scale items are listed in Figs. 1 and 2.

We used a purposive sampling approach (i.e., individuals are selected because of some characteristic or knowledge important to the evaluation) to identify staff for interviews, including physicians, nurse practitioners, physician assistants, registered nurses and clinical assistants that schedule appointments. We asked a clinic administrator to identify individuals with experience interacting with mental health services (i.e., the characteristic necessary for inclusion in sample), as these providers and staff would be able to provide the greatest depth of information about available mental health resources at the clinic. We attempted to interview all primary care providers with experience interacting with mental health services but did not feel it necessary to interview every member of the large support staff (clinical assistants and nurses). Consequently, a smaller random sample of support staff was identified for participation. Because this was a before and after evaluation, these individuals were invited (at different points in time) to participate in two 15-min interviews. The first round of interviews (conducted before resource and system changes) was held in May 2011. The second round (after changes were implemented) was held during January and February 2012. Interviews were conducted by trained qualitative researchers who were unaffiliated with the Northeast Clinic (J.H. and J.E.).

2.3. Data analysis

Quantitative analysis of rating scale items started with generation of descriptive statistics appropriate for this level of data using

Table 1
Topics covered in interview guides, providers and clinical staff[a]

Topic	Providers	Clinical staff
Overall opinion of mental health services	X	X
Access to mental health services	X	X
Time to line up mental health services	X	X
Knowledge of available mental health services	X	X
Availability of services for anxiety and panic disorder	X	
Use of tools to assess anxiety	X	
Integration of mental health services[b]	X	X
Changes in how services are ordered[b]	X	X

[a] Providers included physicians, nurse practitioners and physician assistants. Clinical staff included registered nurses and clinical assistants.
[b] These topics were only addressed in the follow-up interviews.