Impact of marketing to improve patient access to care and clinic utilization for clinical pharmacy specialists

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Abstract

Introduction: This quality improvement initiative aimed to implement a strategy to increase access to care with clinical pharmacy specialists (CPSs), optimize CPS direct patient care activities, and promote clinical pharmacy services. The primary objective was to assess the impact of patient marketing on expanding access to care and clinic utilization in a CPS clinic.

Methods: A marketing technique was applied by a mental health (MH) CPS to expand clinical pharmacy services. Direct-to-patient brochures advertising MH CPS comprehensive medication management services were placed at the check-in window of an interdisciplinary outpatient MH clinic. Brochure content included a description of an MH team, the role of MH CPSs, and benefits of being managed by MH CPSs. Patients could contact the MH CPS or speak to their primary provider for referral. The preintervention and postintervention evaluation periods were 4-month time frames. Clinic utilization for the MH CPS clinic was compared before and after dissemination of marketing brochures. Additional outcomes evaluated were number of encounters, number of patients seen, and number of clinical interventions completed by the MH CPS.

Results: There was a significant increase in clinic utilization postintervention. The total number of encounters, patients, and clinical interventions were numerically increased postintervention.

Discussion: The observed improvements in clinic utilization suggest the benefit of marketing in optimization of access to care in CPS clinics and justification of clinical pharmacy services.

Keywords: clinical pharmacy, clinical pharmacy specialists, marketing, clinic utilization, pharmacy administration, pharmacists

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Introduction

Clinical pharmacy specialists (CPSs) are integral members of the health care team, providing comprehensive medication management (CMM).1 Patients who may gain the greatest benefit from CPS CMM include those unable...
to attain therapeutic goals, who experience adverse effects, who have poor medication adherence, or those with high hospital readmission rates.\textsuperscript{2,5}

Within the Veterans Health Administration (VHA), CPSs have collaborative scopes of practice with credentialed medication prescriptive authority.\textsuperscript{6} Studies demonstrate the value of CPSs in direct patient care, revealing positive effects on clinical, humanistic, and economic outcomes.\textsuperscript{3,4,7,9}

The VHA Pharmacy Benefits Management Clinical Pharmacy Practice Office provides guidance to implement new CPS clinics or expand practice.\textsuperscript{6} One aspect of this guidance is utilizing marketing strategies to advertise CPS services, thereby increasing patient awareness, increasing access to care, and achieving optimal clinic utilization rates.\textsuperscript{6} Clinic utilization is defined as the number of appointment slots filled and actually used in a clinic divided by the total number of appointment slots available. Clinic utilization rates of 75% to 85% are recommended to provide scheduled care while ensuring attainable and accessible high-quality services to patients needing same-day access.\textsuperscript{10-12} Marketing is a crucial component of health care professionals’ outreach to potential patients, helping to increase clinic visibility, create a reputation, and communicate an understanding of the needs and expectations of consumers.\textsuperscript{13} Effective marketing strategies include distribution of brochures, collaboration with public affairs, and participation in health fairs and patient disease state classes.\textsuperscript{14}

Although marketing techniques exist, literature evaluating the impact of marketing on optimizing access to care and clinic utilization for CPSs is limited. Marketing literature is largely derived from other health care professions and translated to CPS practice. Thus, the purpose of this quality improvement initiative was to increase patient access to care with CPSs, optimize CPS direct patient care activities, and promote expansion of clinical pharmacy services. This evaluation was conducted to assess the impact of patient marketing in a mental health (MH) CPS clinic.

**Methods**

The North Florida/South Georgia Veterans Health System is an integrated health care delivery system for veterans providing clinical care via 2 medical centers and 11 outpatient clinics. Eighty CPSs are employed within specialties including MH, cardiology, infectious diseases, oncology, pain management/palliative care, primary care, anticoagulation, acute care, critical care, and surgery (ie, MH CPSs, cardiology CPSs, etc).

Throughout the health system, there are 7 MH clinics, separated geographically; each supports an MH CPS position. An MH CPS was integrated into 1 of these clinics in July 2018. This interdisciplinary outpatient MH clinic is composed of psychiatrists, psychologists, social workers, nurses, and the MH CPS. MH CPSs provide CMM via face-to-face appointments, telehealth appointments, and electronic health record (EHR) chart consults. Patients with established diagnoses are referred to the MH CPS via referral/consult by an MH team member, population management tools (ie, clinical dashboards integrated with the EHR to identify and take action on patient-specific data), cross-coverage for an MH CPS at another location within the health system, or EHR chart consults.

To expand patient access to care, in April 2019, the MH CPS placed direct-to-patient marketing brochures advertising MH CPS services at the check-in window of this multidisciplinary MH clinic. As there is limited literature on quantities of external marketing brochures to garner patient interest in an MH CPS clinic, an estimated observation of foot traffic through the MH clinic was conducted, and 50 brochures were created, placed solely at the check-in window, and replenished as needed. These brochures, titled *Mental Health Pharmacist Provider*, were single-sheet, handheld, trifold pamphlets developed by the VHA Benefits Management Clinical Pharmacy Practice Office and modified and printed by the MH CPS for local use. The brochure included a description of an MH team, the collaborative approach, and how each interdisciplinary member contributes to the comprehensive patient-centered treatment plan. It also defined the MH CPS role, the benefits of being managed by an MH CPS, and appropriate items to bring to an MH CPS appointment. Patients were not actively instructed to take a brochure. The brochure contained the direct contact information for the MH CPS and the medical center. Patients who were interested could either contact the MH CPS or speak to their primary provider for referral.

This study was completed as a before-and-after evaluation with the preintervention period including December 1, 2018, to March 31, 2019, and the postintervention period including June 1, 2019, to September 30, 2019. The 4-month time frame was selected to evaluate several consecutive months of data following the initial start-up of an MH CPS clinic and subsequent to the marketing intervention. To allow for brochure distribution and to ascertain patient interest, a 2-month intervention period was selected.

The primary outcome of clinic utilization was compared to assess the impact of this marketing technique. Secondary outcomes included the number of patient encounters completed, patients seen, and clinical interventions completed by the MH CPS. A patient encounter is defined...
as an individual documented episode of care requiring assessment of medical history and clinical decision making via direct (face-to-face or telehealth communication) or indirect (medication record consultation in the EHR in response to a provider’s formal request) patient interactions. Clinical interventions were documented via use of the VHA Pharmacists Achieve Results with Medications Documentation (PhARMD) tool. This is a standardized template within the VHA EHR to record clinical pharmacy interventions (e.g., medication related: medication initiation, adjustment, discontinuation; nonpharmacologic: laboratory monitoring, diagnostic studies, referrals/consultations; and additional interventions: non–disease-specific interventions, including adverse drug reaction management, drug-drug interaction management). For the purpose of this study, only the MH CPS’s face-to-face clinic was evaluated. All outcomes were collected using analytic software (Pyramid Business Intelligence Office version 6.50).

Clinic utilization proportions were compared through statistical analysis with chi-squared for nominal data. Inferential statistical analysis was completed using the GraphPad QuickCalcs®, accepting an alpha error of 0.05. This project was conducted in accordance with institutional procedures for quality improvement projects.

Results

All 50 MH CPS marketing brochures were taken during the intervention. No patients contacted the MH CPS directly; all patients were referred via an MH team member. Clinic utilization significantly increased from 70.6% to 85.0% (P < .01; Figure). The total number of appointment slots available in the clinic was slightly lower preintervention (303 slots) versus postintervention (321 slots) due to clinic cancellations to account for any health system closures (e.g., federal holidays) and MH CPS leave (e.g., vacation, illness, administrative leave).

The number of encounters had an absolute increase of 26.1%. The number of patients had an absolute increase of 19.6%. The number of clinical interventions had an absolute increase of 21.5%. Medication-related interventions had an absolute increase of 28.4%, nonpharmacologic interventions had an absolute increase of 31.6%, and additional interventions had an absolute increase of 4.7%. The disease states on which the MH CPS intervened included alcohol use disorder, ADHD, anxiety, bipolar disorder, borderline personality disorder, depression, insomnia, posttraumatic stress disorder, schizophrenia, neurocognitive and neurologic disorders, OUDs, pain management, substance use disorders, and tobacco cessation. The total number of appointment slots filled and actually used were slightly lower versus total encounter numbers, both preintervention and postintervention, due to unscheduled patients presenting for same-day care. Cumulative results are summarized in the Table.

Discussion

Following passive dissemination of MH CPS marketing brochures in a multidisciplinary MH clinic, improvement in quality measures was observed. Clinic utilization rates increased significantly, and upward trends in clinic encounters, patients, and clinical interventions were observed. These results suggest the importance of marketing in enhancing visibility of CPS-managed clinics and services. This may potentially translate to improved clinical outcomes as previous studies have observed positive effects of related CPS activities.

A successful marketing campaign to raise awareness of CPSs as autonomous health care providers should comprise multifaceted approaches with internal and external methods. Internal marketing consists of staff education, so patient questions regarding the CPS services can be answered and patients directed toward promotional material. External marketing involves promotion via television/radio broadcasts, printed advertisements, websites, social media, patient educational programs, and disease state screenings. Critical components of marketing material include defining what the service is, differentiating how the service is unique from others, and why patients should enroll.

When seeking to promote services via an effective marketing campaign, CPSs should collaborate with clinical pharmacy leadership and key stakeholders. Clinical
pharmacy leadership can direct CPSs to approved marketing material, assist in mass production of material in a feasible manner, and assess the marketing effect on quality measures. Leadership can also help target marketing toward CPS clinics with low referral and clinic utilization rates. Key stakeholders (eg, other health care providers) should be sought for assistance in widespread marketing of CPS services. An educational campaign with institutional stakeholders to clarify the role and services of the CPS is critical in ensuring their ability to promote CPSs and refer patients.

Limitations should be considered in the context of this study. Internal validity may have been limited by selection bias (ie, all patients were included that were seen in the clinic during these time frames with no randomization), information bias (ie, data were reviewed and interpreted directly by the authors from analytic reports), and confounding factors (eg, other factors that could have influenced outcomes, such as new providers, provider turnover, change in services, time of year) that are inherent in observational studies. No specific adjustments for these and other factors that could have influenced clinic utilization were employed in the study. As this was an observational study, patients were not surveyed on their perception of the brochure or reason for establishing care. During the intervention period, all patients were referred by an MH team member. This may be explained by brochures prompting patients to discuss referral to the CPS with their primary provider. Also, it is possible that nonpatients took brochures as they were not monitored or actively distributed; if this did occur, there is potential for benefit as providers gaining insight into CPS services may have then referred patients. Future studies examining the effect of marketing strategies should consider incorporating direct assessments to ascertain the number of providers or patients influenced to access CPS services secondary to marketing initiatives.

This study involved implementation of marketing and clinic utilization in a single MH CPS clinic with veteran patients. The external validity is, therefore, limited. To strengthen the assertion that marketing is associated with the expansion of CPS clinic utilization, attempts to replicate the results of this project should be undertaken in additional CPS clinics among various specialties (cardiology CPSs, oncology CPSs, etc).

One form of external marketing (brochures) was assessed in this study due to ease of production and distribution as well as limited literature pertinent to any form of CPS marketing; therefore, efficacy of a multifaceted marketing approach could not be evaluated. Given the improvement seen in this study, other health systems may find this brochure technique to be a useful initial or adjunctive approach in CPS CMM marketing ventures. Implementing a simple intervention (brochures) with potential for high output is an approach that may inspire other clinical pharmacy programs in disseminating their clinical services. Comparing different marketing methods and combination approaches would be useful to delineate different effects on outcomes. Revision to marketing strategies is essential when changes to practice occur.

The outcomes of this study include measures that do not directly translate to clinical or quality endpoints. It is important to look at the association between marketing and direct clinical, humanistic, and economic outcomes. Through appropriate intervention and data evaluation, justification can continue to be provided for optimizing patient access to care and expanding clinical pharmacy programs.

Increasing access to CPS services through growth of CPS clinics is mutually beneficial for patients and CPSs, allowing patients to more easily obtain specialized care and CPSs to demonstrate their capabilities in direct patient care activities. The significant increase in clinic utilization observed as well as increased encounters, patients, and PhARMD tool interventions suggest the potential benefit of marketing in improving access to care and clinic utilization in CPS clinics.

### TABLE: Results of the marketing intervention

|                        | Totals | Preintervention | Postintervention | Percentage Increase |
|------------------------|--------|-----------------|------------------|---------------------|
| Patient encounters     | 218    | 275             |                  | 26.1                |
| Patients               | 102    | 122             |                  | 19.6                |
| PhARMD total interventions | 1056  | 1283            |                  | 21.5                |
| PhARMD medication-related interventions | 486   | 624             |                  | 28.4                |
| PhARMD nonpharmacologic interventions | 231   | 304             |                  | 31.6                |
| PhARMD additional interventions | 339   | 355             |                  | 4.7                 |

PhARMD = Pharmacists Achieve Results with Medications Documentation tool.
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