Impact of Developing an Online Professional Learning Community on Chronic Pain Management in the Primary Care Setting

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BACKGROUND

There are over 100 million people in the United States with chronic pain, and the majority will seek care from a primary care provider. Primary care practices are ill-equipped to meet the complex challenges of addressing chronic pain in a patient-centered manner. Most primary care providers receive little or no training in pain care, including management of chronic pain and avoidance of prescription opioids misuse.

NEEDS ASSESSMENT

In 2013, Weitzman Institute, Community Health Center, Inc., conducted a year-long study on the evidence-based Project ECHO® model, which allowed primary care medical and behavioral health clinicians to present challenging cases to an interdisciplinary team and to receive advice on pain care. Participation in one year of Project ECHO Pain sessions was found to improve providers' knowledge about pain care and self-efficacy to treat patients with complex chronic pain. During the study, Project ECHO Pain participants expressed a need for flexible, asynchronous access to Project ECHO Pain session content in order to keep information presented by pain care specialists during live sessions and share content with other providers at their sites.

GOALS AND OBJECTIVES

In response to the recognized need for a Project ECHO Pain model extension, the Weitzman Institute is leading the development and evaluation of PainNET, an online community providing practice-level access to a customized content library of tools and resources designed to:
- Enhance provider skills and confidence to diagnose and treat pain effectively
- Improve patients' pain relief and function
- Transform the approach to treating pain in primary care

METHODS

Participants:
A cohort of interested practices was recruited between September and October 2015, consisting of a convenience sample of 52 practices participating in Community Health Center, Inc.'s Project ECHO Pain sessions.

Intervention:
Providers at these 52 practices were given access to PainNET and boarding information on October 15, 2015. Providers at 26 additional practices that joined CHC's Project ECHO Pain sessions after the launch were given immediate access to PainNET and briefly introduced. The PainNET team encouraged ongoing provider engagement by sending PainNET weekly email newsletters and presenting a "PainNET Minute" segment before each live Project ECHO session. The Project ECHO facilitators regularly referenced materials and information available on PainNET during didactic and case presentations.

Analysis:
1. Provider engagement with PainNET was measured by obtaining baseline data using Google Analytics through Weitzman Institute's hosting platform, then targeting them in group discussions during project sessions, and inviting providers to participate in a satisfaction survey in August 2016.
2. Knowledge and self-efficacy gains attributed to Project ECHO Pain and PainNET were assessed using the KnowPain50 survey and a provider self-efficacy assessment. Data was analyzed from providers: from a cohort that began and ended Project ECHO Pain and PainNET participation during the project period (Albany – started 4/2015, ended 6/2016; Colorado – started 3/2015, ended 7/2016).

RESULTS

Primary Care Provider Survey Results

Knowledge:
The KnowPain50 (Kamis, et al, 2008, 2009) is a 20-item survey that measures provider knowledge across 6 domains. Providers respond to items using a five-point Likert scale (from strongly agree to strongly disagree) with correct answers garnering five points. The total possible score is 100 points. Providers in Maine and Colorado who participated in the project for at least one year showed statistically significant increases in knowledge score from 65.5 to 77.9 (Maine, p<.00) and from 124.0 to 173.7 (Colorado, p<.00) between pre- and post-intervention.

Usefulness:
24 of 32 respondents to a provider satisfaction survey administered in August 2016 indicated that PainNET was "Useful" or "Very Useful" to their practice.

Satisfaction:
A 20-item satisfaction survey was administered to providers who had registered for an account on PainNET. Survey items had a five-point response scale, ranging from "very dissatisfied" to "very satisfied" and assessed overall satisfaction with PainNET satisfaction with elements and sub-panels of PainNET. The majority of respondents (n=31) expressed that they were "Satisfied" or "Very Satisfied" with PainNET overall, and with each of the elements and sub-panels assessed.

CONCLUSIONS

The PainNET provider community was launched on October 15, 2015, and access was granted to providers at 52 practices participating in Project ECHO Pain sessions through Weitzman Institute, Community Health Center, Inc. Access was expanded to providers at 26 additional practices throughout the duration of the project.

Two cohorts of providers who participated in Project ECHO Pain and used PainNET for 1 year or more experienced statistically significant improvements in knowledge about caring for patients with complex chronic pain, from pre-intervention to post-intervention. PainNET users who completed a satisfaction survey indicated that PainNET was useful to them in their practice, and expressed high satisfaction with PainNET overall, as well as with the ease of using PainNET and the content and resources available.

The national launch of PainNET on October 15, 2016 makes it available to any interested clinical provider or care team member. Further development of the site will be conducted in response to community members' needs. Further research is recommended to determine whether use of PainNET as a stand-alone resource is sufficient to produce statistically significant changes in provider knowledge about treatment of complex chronic pain.

CONTACT

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