

ABSTRACT: Chronic Pelvic Pain (CPP) is a debilitating problem that afflicts 15-20% of reproductive age women.¹ The significant suffering it causes leads to multiple surgeries and long-term medical therapies at a cost of at least \$2.8 billion annually, and many women undergo hysterectomy with consequential fertility implications in hopes of pain resolution.¹ Pain and suffering often persist despite treatment, and lead to decreased productivity and reduced quality of life.^{2,3} The limitations of current surgical and pharmacologic treatments for CPP have been well documented.

One of the most significant clinical challenges in CPP is predicting which treatment is likely to be effective for an individual patient, due in large part to the heterogeneity of CPP. Management of other chronic conditions has improved with development of clinical phenotypes, which help clinicians more quickly match patients with effective treatments. However, clinical phenotypes have not yet been extensively explored in CPP.

Cognitive Behavioral Therapy (CBT), acupuncture, and physical activity interventions have been shown to be effective in a wide range of chronic pain conditions.⁴⁻⁶ Among patients with CPP, several small studies have demonstrated efficacy of CBT, acupuncture, and physical activity interventions.⁷⁻¹² Effect sizes of individual non-pharmacologic interventions are typically small (0.15-0.3).¹³⁻¹⁵ However, interventions that integrate several of these modalities appear to have substantially improved efficacy (0.3-0.8),¹⁶⁻¹⁹ indicating possible synergistic rather than additive effects. Web-based self-management programs help to reduce barriers to access and many have been shown to be as effective as traditional face-to-face interventions.^{9,20,21} Our project will build upon Fibroguide, a successful web-based cognitive/behaviorally-focused self-management program for fibromyalgia. Patients with fibromyalgia demonstrated improvements in pain (0.64) and physical function (0.38) utilizing Fibroguide compared to usual care.²⁰

We propose to develop a web-based, self-management program for patients with CPP and to conduct a pilot randomized controlled trial to evaluate preliminary effectiveness of the intervention and phenotypic factors that predict positive response. Our overall hypothesis is patients with CPP will find a web-based self-management program to be a valuable treatment strategy, and that patients who participate in this program will demonstrate improvements in pain, physical function, and quality of life with this integrative self-management approach. This project will generate preliminary data to support an R01 application to perform an RCT efficacy trial with a focus on patient phenotyping and will ensure that the candidate has the skills to conduct independent research in development and evaluation of personalized therapies for CPP.