

THE PERSONALIZED LEARNING SYSTEM

Patients are prescribed treatments all the time to fix what ails them. But what if those treatments don't really address what's more important to them—like what dietary changes make a difference? What if we could improve the current model of decisions—making improvements in clinical care to help patients answer these questions? The Personalized Learning System allows patients with chronic disease to work collaboratively with their clinicians to identify issues of importance to them, easily track outcomes, and learn both from the routine changes patients make in everyday life (e.g., diet changes, travel, sleep patterns) and formal planned experiments aimed at improving the outcomes most important to them. A web-based interface permits patients and providers to set shared goals and co-design experiments and lets patients customize the data collection via cellular short messaging system (SMS), e-mail, web-survey, and commercially available biosensor devices (e.g., Fitbit) – all in a way that is currently unavailable in traditional episodic chronic care management.

The Study

Aim

This study will test the preliminary effectiveness of the Personalized Learning System and, by aggregating knowledge gained from multiple individual patient and clinician experiences, will allow us to learn more broadly about strategies to personalize care. In this study, we aim to:

1. Describe the natural history of engagement with the Personalized Learning System among a group of highly motivate clinicians and pediatric patients with inflammatory bowel disease (IBD).
2. Estimate the impact of the Personalized Learning System on improving patient outcomes, increasing patients' control over their own health, and enhancing provider and patient collaboration.

The Platform

The C3N Platform is a customizable, multi-user (patient/family, clinician and researcher), web-based platform designed for facilitating clinician-patient collaboration identification of the most appropriate treatments for an individual, and improving outcomes for pediatric patients with IBD. The C3N Platform will allow patients to enter and track their data, in real-time, on their health status, clinicians and patients to co-design and carry out individual N-of-1 studies, and patients and providers to share data experiences with one another.

CONTACT

Project Staff

Sunny Thakkar

sunny@c3nproject.org

Project Lead

Heather Kaplan, MD, MSCE

Timeline

December 2012 - December 2014

The study will be conducted over a period of 2 years, beginning December 2012. The activities occurring during this time period include:

- Recruitment of both physician participants and patient participants
- Clinician orientation to study
- Clinician recruitment of patients for study
- Execution of study—user testing, data collection, data analysis

Requirements to Participate

Clinician:

- Must work with patients with IBD and be a physician at an ImproveCareNow care center
- Will receive orientation via webinar

Patient:

- Must be between the ages of 8 and 20 years
- Must be diagnosed with Crohn's disease or ulcerative colitis
- Patient's clinician must be practicing at an ImproveCareNow care center and be enrolled in the study
- Must have SMS texting service and/or email address in order to receive communications
- Must have internet access
- Participant in a patient-researcher-physician (PReP) orientation call