WHAT WAS THE CHALLENGE, OPPORTUNITY OR ISSUE FACED?

Researchers at Dartmouth-Hitchcock Medical Center (DHMC) and Geisel School of Medicine at Dartmouth found that first-time colonoscopy patients often arrive anxious and unsure about the procedure. They worry about how the procedure will be performed and the possible results. The challenge for DHMC was to reduce patient anxiety and improve education about what to expect before, during and after a colonoscopy.

WHAT DID YOU DO TO ADDRESS IT?

Researchers conducted a randomized controlled study investigating the impact of an interactive web-based multimedia program on patient anxiety, perception and knowledge of colonoscopy. Fifty-one patients were given DHMC’s standard printed pre-procedure colonoscopy packet, while 52 patients watched the web-based Emmi Solutions’ colonoscopy program, in addition to receiving the same packet. The Emmi® program used interactive animation, empathic narration and easy to understand language to explain the importance of getting a colonoscopy. It described what to expect before, during and after the procedure and discussed preparation details to ensure the procedure went smoothly and was conducted successfully the first time.

On the day of the colonoscopy, prior to the procedure, participants in both groups were asked to fill out a survey to assess their knowledge of colonoscopy, their emotional state prior to the procedure and their understanding of potential outcomes. The average procedure time and amount of pain medication administered were also measured.

WHAT WERE THE OUTCOMES?

Patients who viewed the Emmi colonoscopy program prior to their procedure had decreased anxiety, lower sedation medication requirements and shorter procedure times, compared with those who only received the standard printed pre-procedure packet.

Researchers concluded the Emmi program not only increased patient knowledge and comfort levels, but may also lead to increased organizational efficiency and lower costs by saving staff time and using lower doses of sedative medications.

Patients who watched the Emmi program:

- Had significantly lower anxiety scores the day of colonoscopy compared to the control group
- Required 18% less sedation medication\(^1\)
- Had a 14% decrease in procedure time
- Were 11% more knowledgeable about colonoscopy

\(^1\)Calculation based on total amount of Midazolam given.

ABOUT DARTMOUTH-HITCHCOCK MEDICAL CENTER AND GEISEL SCHOOL OF MEDICINE AT DARTMOUTH

The study was conducted by Corey Siegel, MD along with Geisel School of Medicine graduate Jonathan Zipursky, MD, now at the University of Toronto, Geisel Medical Student Helen Ma, and Gastroenterology fellow Siddhartha Parker, MD. Dr. Parker presented the findings at the 2013 American College of Gastroenterology Annual Scientific Meeting in San Diego, October 15.

Dartmouth-Hitchcock is a national leader in patient-centered health care and building a sustainable health system. Founded in 1893, the system includes New Hampshire’s only Level 1 trauma center and its only air ambulance service, as well as the Norris Cotton Cancer Center, one of only 41 National Cancer Institute-designated Comprehensive Cancer Centers in the nation, and the Children’s Hospital at Dartmouth-Hitchcock, the state’s only Children’s Hospital Association-approved, comprehensive, full-service children’s hospital. As an academic medical center, Dartmouth-Hitchcock provides access to nearly 1,500 primary care doctors and specialists in almost every area of medicine, as well as world-class research at the Audrey and Theodor Geisel School of Medicine at Dartmouth.

ABOUT THE BERYL INSTITUTE

The Beryl Institute is the global community of practice dedicated to improving the patient experience through collaboration and shared knowledge. We define patient experience as the sum of all interactions, shaped by an organization’s culture, that influence patient perceptions across the continuum of care.