



Emmi® Case Study

# Randomized controlled study finds Emmi reduces anxiety and cost, increases patient knowledge

**Dartmouth-Hitchcock Medical Center (DHMC) and the Geisel School of Medicine at Dartmouth cite positive impact of interactive, web-based patient engagement program on first-time colonoscopy patients.**

**The Business Challenge**

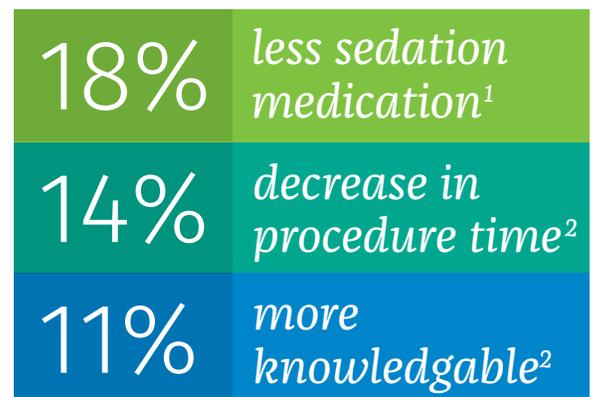
First-time colonoscopy patients often arrive anxious and unsure about the procedure. They worry about how the procedure will be performed and the possible results. The challenge for the organization was to reduce patient anxiety and improve education about what to expect before, during and after a colonoscopy.

**The Method**

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 colonoscopy program, in addition to receiving the same packet. 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.

**The Result**

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 by allowing lower doses of sedative medications to be used.



1 Calculation based on total amount of Midazolam given

2 Percentage scores based on survey assessment prior to procedure

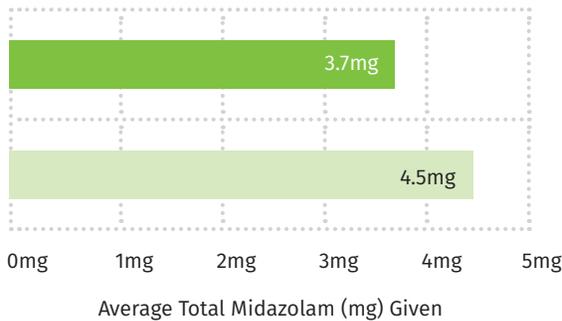
*“Patients have a lot of anxiety about a colonoscopy, mostly due to uncertainty about the prep, the procedure and what might be found during the procedure. If they come in more knowledgeable about the procedure, they know what to expect and are more comfortable and relaxed once they arrive at the hospital and during the procedure itself.”*

**Corey A. Siegel, MD**

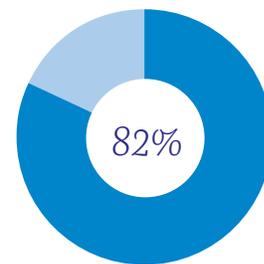
**Director, Inflammatory Bowel Disease Center,  
Assistant Professor of Medicine, Geisel School of Medicine, Dartmouth**

**Patients who watched the Emmi program:**

Required 18% less sedation medication

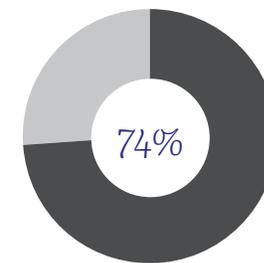
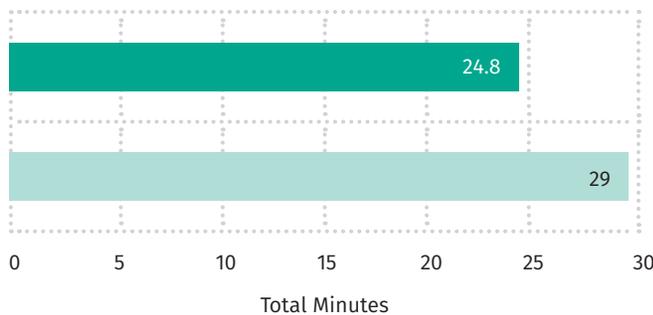


Were 11% more knowledgeable about colonoscopy



Emmi Viewers

Had a 14% decrease in procedure time



Control

**References**

Based on analysis by Siddhartha Parker, MD, MA<sup>3,4</sup>, Jonathan Zibursky, MD<sup>4</sup>, Helen Ma<sup>4</sup>, Corey A. Siegel, MD, MS<sup>3,4</sup>. Findings presented at the 2013 American College of Gastroenterology Annual Scientific Meeting.

3 Dartmouth-Hitchcock Medical Center 4 Geisel School of Medicine at Dartmouth