



Increasing patient engagement to move enhanced recovery forward

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We read with great interest “Ensuring Early Mobilization Within an Enhanced Recovery Program for Colorectal Surgery A Randomized Controlled Trial” in the August issue of *Annals of Surgery*, and applaud Fiore and Feldman for highlighting an important concept. Enhanced recovery pathways (ERPs) work to improve patient recovery and healthcare financial outcomes (1); there is no dispute about that. Early mobilization a cornerstone of the postoperative period, and “enforced” early mobilization is strongly recommended by the ERAS Society, ASER, and other perioperative care guidelines (2,3). Furthermore, studies assessing the importance of the individual elements in an ERAS pathway identified early mobilization as an essential element for fast recovery (4-6). There is also no question that compliance with the ERAS elements is essential for success (7). Having staff assigned to enforce mobilization facilitates compliance with this ERAS guideline, and is associated with accelerated recovery, as seen in the Fiore Jr *et al.* study (8). In their work, a physiotherapist or comparable trainee reinforce mobilization goals, assist with transfers, and walk with the patient multiple times daily from today of surgery onward. We agree with the authors on the impact of allocating additional resources to ensure early mobilization within an ERP for colorectal surgery. However, we offer an alternative solution—allocating resources to increase patient engagement, not increasing the burden on the support staff.

Preoperative education is essential (9). In the preoperative clinic, verbal and written instructions about postoperative

mobilization with specific targets are valuable (10). While effective, there are limitations to this as an engagement tool. Despite use of preoperative education, patients have identified the need for more education and counseling as a barrier to ERAS success (11). Studies have shown the perioperative information needs to be repeated at different points in time to reduce anxiety, make the patient feel safe, explain postoperative pain management, and provide details on the care pathway (9). In addition, patients or caregivers with poor reading skills often have difficulty understanding printed postoperative instructions. They also may not retain information, especially when under stress. One study found that patients forget 80% of what clinicians tell them, and almost 50% of the remembered data is recalled incorrectly (12).

Allocating resources for mobile health technology to increase patient engagement—with applications such as SeamlessMD or Twistle—may be an ideal solution. These mobile health apps are easily accessible through the Web, Apple, and Android platforms, and offer a comprehensive ERAS tool for the patient and provider, with patient education, engaging checklists and electronic reminders, remote patient monitoring, and real-time, automatic patient reported outcome collection to facilitate quality improvement and compliance with ERPs. For a specific task like postoperative mobilization, the app could empower patients with engaging education resources, reminders and encouragement for the task, tracking, and reporting mobilization, as well as reasons for failure to meet goals.

All this information is easily available to the physician, without the need for additional support staff for the task. Recent studies have found mobile health technology increased patient knowledge and improved physician-patient communication and patient outcomes in colorectal surgery (13). Most adults own a smartphone regardless of socioeconomic status, and prospective patients have reported willingness to use mobile health technology to improve their health (14). Even older respondents have been as willing as younger respondents to engage with the apps (15).

While we agree with the goals of the authors, and are grateful for their evidence-based work on the topic, we suggest an alternate solution to help meet mobilization goals and move enhanced recovery forward is through patient engagement with mobile health apps.

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