

## Videoconferencing Can Help Surgeons Make Their Rounds From A Distance

"The defining image of inpatient care is that of the physician conducting bedside rounds," the authors write as background information in the article. "This bedside interaction has come to be a measure of physician compassion. The reality for elective surgical patients is that established critical pathways define postoperative care. To be sure, these require timely physician oversight, but the value of the bedside visit may be secondary to objective vital signs and laboratory data."

Lars M. Ellison, M.D., then of the University of California, Davis, Sacramento, and now at Penobscot Bay Medical Center, Rockport, Maine, and colleagues conducted a randomised controlled trial involving 270 adults. Participants were all undergoing a urologic procedure requiring a hospital stay of 24 to 72 hours. The patients were randomly assigned to receive either traditional bedside rounds (136 patients) or robotic telerounds (134 patients) daily during their time in the hospital.

"The telerounding robot is a 60-inch--tall wheel-driven device," the authors write. "The robot consists of the motor base unit, a central processing unit, a high-definition digital camera, a flat-screen monitor and a microphone. Data to and from the robot is transferred over a high-speed wireless network and is integrated with proprietary software. The physician connects remotely to the robot via a base station."

Both types of visits followed a set script and included reviewing objective data, including vital signs and laboratory results, as well as a discussion regarding treatment goals for the day.

Telerounding did not appear to lengthen hospital stays--both groups stayed an average of 2.8 days--or increase the complication rate. Sixteen percent of the patients in the standard round group and 13 percent in the teleround group developed complications, similar to the expected rate of complications for these types of procedures (16 percent). There were no instances in which detection of complications appeared to be delayed by telerounding.

Patient satisfaction was equally high in both groups. Most of those who received telerounds rated the audio and video quality as very good or excellent, 86 percent believed they could communicate easily via the telerounding device and two-thirds agreed they would rather see their own physician remotely than another physician in person.

"Economic realities and staff shortages have placed increasing burdens on physicians' time," the authors write. "Telerounding with hospitalized patients has the ability to ease time constraints through elimination of travel time. Videoconferencing systems give physicians the potential to directly assess their own patient's situation. This is optimal compared with current practices where partners or other health care professionals with little previous patient knowledge are called on to make assessments based purely on pathways rather than firsthand operative events."

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