Day-of-surgery cancellations decreased dramatically from 8% in 2008 to fewer than 3% in 2010 after a performance improvement (PI) project on preoperative communication at the Stony Brook University Medical Center Ambulatory Surgery Center, Stony Brook, New York.

“The number of cases performed has increased, along with revenue. Patient safety and patient and surgeon satisfaction have improved,” says Thomas Halton, BSN, RN, CNOR, calling it a collaborative effort. The project also has helped to reduce OR downtime and preoperative rework and decreased patient turnover. He says preventing day-of-surgery cancellations has decreased downtime because it eliminates the need to move the next patient up on the schedule and wait for that patient to arrive.

Halton’s poster on the project won first place at the ASC Association’s conference in 2010. He is assistant director of nursing at Stony Brook University Medical Center and nurse manager of its freestanding ambulatory surgery center.

Targeting preop instruction

The project started in January 2008 because of the high cancellation rate in the 8-OR ambulatory surgery center, which performs 8,500 cases per year.

“With every cancellation, there’s a cost,” says Halton. “A lot of time and effort is put into every case. When cases get cancelled, we have to question our process.”

A PI team collected data using a log book to record day-of-surgery cancellations and the reasons, which were categorized as:

- patient cancelled self
- patient was sick
- patient not medically cleared
- patient didn’t follow preop instructions
- other.

Also recorded were the name of the nurse who called each patient and the time of day. The data from the log book and computer-generated reports of case volume enabled the team to assign percentage rates for day-of-surgery cancellations. The highest percentage (28%) of case cancellations was a result of patients not following their preoperative instructions—particularly for fasting and transportation home. “The question we had to ask ourselves was, ‘Why aren’t we communicating with our patients properly?’” says Halton. “Though we could not prevent changes in a patient’s health condition or their option to electively cancel surgery on their own, we knew we could improve our preoperative instruction process.”

Keeping the personal touch

Patients were receiving 1 phone call from a nurse the day before their surgery. To achieve a more comprehensive approach while not losing the personal touch, the team
developed a clinical pathway for automating preop instructions followed by a call from a nurse. The team also developed a preoperative instruction packet.

The role of the scheduling secretaries was also expanded. At the time the case is scheduled, the secretaries now remind patients to bring a list of their medications and dosages when they come in for their histories and physicals. They also ask patients if they are diabetic, allergic to latex, or have sleep apnea/airway difficulties.

“We needed to be more proactive in getting this information earlier,” says Halton.

Automated preop call

Setting up the automated system was an integrated effort with information technology, purchasing, and nursing departments. The automated system is inexpensive, at 2 cents per call, and is fully integrated with the electronic medical record.

When a case is scheduled, the scheduling secretary enters the patient’s name, phone number, and day of surgery into the automated system.

Patients receive the automated phone message in English or Spanish 2 business days before their day of surgery. Emphasis is placed on transportation/escorts and fasting instructions. Patients are also reminded to bring their copayment with them on the day of surgery.

### Challenges to communication

<table>
<thead>
<tr>
<th>Preoperative challenges</th>
<th>Challenges overcome</th>
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<tr>
<td>Invalid patient phone numbers</td>
<td>Automated phone service provides computerized report of patients with no phone number contact. Clerk contacts surgeon’s office for phone number.</td>
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<tr>
<td>Patient memory</td>
<td>Recorded messages that can be played multiple times, emphasizing compliance to fasting instructions and need for an escort to provide transportation home.</td>
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<tr>
<td>Content of message</td>
<td>Full message that reviews the same scripted message the patient will receive from the RN the day before surgery.</td>
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<tr>
<td>Consistency of message</td>
<td>Repetition of the same message reinforces the content.</td>
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<tr>
<td>Language barriers</td>
<td>Mailed preop packet gives the patient the ability to call us with an interpreter service and alerts the nurse to use the interpreter service when making the preop call the day before surgery.</td>
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<tr>
<td>Availability</td>
<td>Automated call instructs patients to call with an alternate phone number if they can’t be reached at the number to which the automated call was placed 2 days before surgery.</td>
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<tr>
<td>Access to the web</td>
<td>Automated call and preop packet informs patients they can access the ASC’s website with e-mail availability to answer questions.</td>
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<tr>
<td>Unable to contact patients</td>
<td>The ASC manager on call is notified of any patients not contacted and attempts to call patients during the evening.</td>
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<tr>
<td>Patient accountability</td>
<td>Patients are given a preop checklist in the preop envelope instructing them what to do the day before, day of, and day after surgery.</td>
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<tr>
<td>Patients with diabetes, latex allergy, sleep apnea/difficult airway, medication lists, and copayments</td>
<td>Schedulers contact patients at time of registration. Patients with diabetes, latex allergy, or airway issues are identified and scheduled as first-order cases. Patients are instructed to bring copayment and medical list on day of surgery.</td>
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Source: ASC Association conference poster: Improving Pre-Operative Communications to Decrease Day of Surgery Cancellations in an Ambulatory Surgical Center.
“I can’t tell you how many times patients used to come in without expecting to make a copayment. And that would put us in an awkward position,” says Halton. Patients are informed that a nurse will be calling them at the same number between 1 pm and 4 pm the day before surgery. They are instructed to call and leave a different phone number where they can be reached if necessary.

**Acceptance of automated messages**

“Because a large percentage of our cases are cataract procedures, we were concerned about how the elderly would accept the automated system,” notes Halton. They found elderly patients actually liked it because they can replay the automated message. They also give patients a number to call so they can listen to the message again.

“It is very simple for them. If they miss something, they push a button, and it repeats itself,” he says.

If patients have an e-mail address, they also receive an e-mail reminding them of their upcoming surgery, with a link to the center’s website. If patients have a question, they can e-mail their question and get a quick answer.

The e-mail is HIPAA compliant, explains Halton. The message says, “Dear Mr or Mrs X, I see that you have an upcoming procedure with us. You will be receiving a phone call 2 days before your scheduled surgery. Please follow our preoperative instructions, especially those about fasting and transportation.”

A bonus of the automated system is that it takes care of invalid phone numbers. When the call goes out, the system generates a report saying who received it, whether they received it in person or via voicemail, or if it was an invalid number. An invalid number is a cue for the nurse to call the surgeon’s office and see what phone numbers the office has for the patient.

Halton says it is still important for the nurse to call the patient the day before surgery. “It gives the process a personal touch. It’s so important that these patients know there’s somebody behind this automated call who is looking at this information.”

**Preop packet**

Patients receive a preoperative instruction packet (available in English or Spanish) before the day of surgery with a:

- preoperative checklist for tasks the patient needs to complete the day before, morning of, and after surgery
- DVD with information on preoperative instructions for transportation/escorts and fasting and directing patients to the surgery center’s website (www.sbdaysurgery.com)
- business card with instructions on how to reach a language interpreter or a sign language service
- form on which to list all medications.

“We’re required to get a medication list the day of surgery, which used to be a time-consuming task for the preoperative nurse,” says Halton. Now patients bring this list with them.

During the nurse’s call the day before surgery, the nurse reviews the medication list and tells patients if there is a medication they should continue to take the morning of surgery. The nurse also enters the medication names, dosages, and times into the computer. On the morning of surgery, the preoperative nurse compares the patient’s list with the list in the computer.
Repetition is key

With the improvements, the preoperative instruction cancellation rate dropped from 28% to nearly 0 in 2 years. When the project began, there were 10 to 12 cancellations per month. There were a total of 6 for all of 2010, says Halton.

“Repetition has been the key to raising patient compliance with preoperative instructions,” says Halton. That is the message he hopes others take from the project.

“Patients hear the information on the automated call, they get it in a packet, and they read it in an e-mail. They’re getting the same message, and it’s reinforced over time.”

— Judith M. Mathias, MA, RN

Reference