It’s 2 pm, and it’s time for phone tag. Preoperative nurses are on the phone, calling patients about their upcoming surgery. Many times, patients aren’t home. Nurses leave a carefully worded message to call back, not wanting to jeopardize the patient’s privacy. The patient may call back—or not.

There’s another way—have patients submit their histories online. Not many places are doing it yet. But 14 sites, including surgery and a cath lab in Utah’s Intermountain Healthcare (IHC) system, give patients that option. And an anesthesiologist started a business that provides web-based patient histories and registrations for surgical facilities.

Online histories time-saver for nurses

At Cottonwood Surgical Center in Murray, Utah, an average of about 20% of patients per month submit their health histories through the Internet. Cottonwood and some other IHC surgical facilities have had online history forms available for 2 years.

“We do 100% phone assessments, and the online histories have been a real time-saver for the nurses,” says Cotton-wood’s manager, Rebecca Hales, RN, B5, CNOR. Nurses do not spend as much time playing phone tag with patients, and phone assessments do not take as long. They also receive a legible record.

Online histories are an advantage for patients because they have more time to think about their health and medication history, adds Cathy Hughes, RN, BSN, CAPA, nurse manager of the Same-Day Surgery Unit at LDS Hospital in Salt Lake City, where 20% to 25% of patients use the service.

“We see 75 to 80 patients a day, and there is a lot of pressure to get things done,” she says. “Anything that speeds up that process is helpful. We probably get better and more complete information with the online histories.” LDS is building a new hospital, which will include computer stations in the waiting area that patients can use for this purpose.

“It’s surprising to me how many older people want to do this. They will ask for the web address and actually use it,” Hughes says.

How it works

Here’s how it works. When patients are seen at the surgeon’s office or call the hospital to preregister, they are given the web address at www.ihc.com/surgery. They click on the link for their facility, which brings up instructions for the online form. They enter their e-mail address and link into the form, which is on a secure site. The form has fillable boxes and buttons, similar to those used by Internet retailers like Amazon. The form takes about 15 to 30 minutes to complete. Certain fields are required, and the form cannot be submitted until these are completed. The form has a place where the patient can request a nurse to call, provide a phone number, and give a convenient time to call.

At the facility, “the form prints out just like our paper form and goes right into the chart,” Hales says. The form is identical to the manual version.

A nurse reviews the form. All patients are called, even if nurses are satisfied with the information, to give them the surgery time, review preoperative instructions, and ask if they have questions.

Protecting confidentiality
Only 4 or 5 persons at each facility have access to the account where the health histories are received. Once the form is printed out, the patient’s file is deleted. The form is kept on the site for 72 hours so patients can take their time to complete it.

At present, the online forms are kept in hard copy. Cottonwood is moving toward perioperative charting.

Hales led the effort to develop the form, with the support of IHC’s information services department and Belle Rowan in IHC’s e-Business Department. IHC developed the software in-house. Rowan worked with a company that specializes in business forms (www.moorewallace.com), to develop the PDF version of the form. In addition to the cost of web development and programming, Hales estimates the cost of developing the fillable PDF form was about $1,000. Other IHC facilities have been able to adopt it because most use the same patient history form.

Hales and other OR managers would like to encourage more patients to submit their forms online. To increase participation, they have sent flyers to physicians’ offices and asked admission clerks to give the Internet address to patients when they call to preregister. She says patients like using the online form and only have a problem if the server is down or if they have an older browser version.

**Getting started**

Hales’s advice to other managers who are interested in developing an online health history:

- Know your patient population. Are enough of your patients online and computer literate to benefit from this service? Utah, the home of many high-tech businesses, has a computer-savvy population.
- Consider the complexity of patients’ health histories. Completing a form for a healthy patient is not time consuming, but the process would take longer for patients with more complex histories.
- You need strong support from the e-business and IS department. “I had complete support from the top of both these departments,” Hales says.

**’Medical passport’ is portable**

“We’re basically doing for ambulatory surgery centers what the ATM machine did for banking 20 years ago,” says Stephen Punzak, MD, of his company, Medical Web Technologies, Dover, Mass, which has a web-based service called One Medical Passport (www.onemedicalpassport.com).

Through the web site, patients can create a “medical passport” with demographic and insurance information and a medical history.

The way it typically works, he says, is that a patient is at a surgeon’s office and has decided, for example, to have an anterior cruciate ligament repair at a surgery center. The surgeon gives the patient a One Medical Passport card filled out with the surgery date, type of surgery, surgical site, and how to access the web site. The patient takes the card home, logs on, creates a user name and password, and fills out the online questionnaire.

The questionnaire is broken down into steps, with a page on medications, a page on allergies, and so forth. Patients point and click or use drop-down menus with little need to enter text. They cannot skip questions and can review the information before it is submitted. Once completed, the passport is submitted to the company’s web site where it is processed through software to convert it into reports useful to clinicians.

“Rather than having 5 different people ask the patient the same questions, we ask the questions once in a comprehensive way, and the program generates all of the different forms people need. It’s very user friendly,” Dr Punzak says. Reports can be customized.

**A closed loop**

At the ambulatory surgery center (ASC), the preop nurse can access the site and get a report of medical passports that have been completed for patients scheduled at that center. She then downloads each patient’s passport, which has several parts, including
an admitting page, an anesthesia preop report, a nursing preop report, and a short history and physical with a place for the surgeon to sign.

The system has a task list that shows nurses what tasks have been completed, such as the surgical consent, anesthesia consent, and preop phone call. Icons turn red, yellow, or green to indicate what is finished and what is still to be done.

“The system doesn’t let you sign off on that patient until all those items have turned green,” he says. “It’s a closed loop of checks and balances that doesn’t allow you to miss outstanding lab work, for example.”

Once nurses get used to the reports, he says they can quickly scan them to determine which patients need a preoperative appointment at the facility and which can be assessed on the day of surgery.

Dr Punzak says the program is easy for ASCs to start using, requiring about a half hour for staff training.

Patient participation ranges from 20% to 96%, depending on the facility. The best compliance, he says, is for ASCs that call patients to give them information about the site and how to access it.

A major advantage, he says, is patient convenience. Completing the passport typically takes 20 to 30 minutes. “We get half of the medical passports created after 7 pm,” he says. “The advantage is that they have all of their medications there. If they need to, they can ask a significant other to help them.”

Though he says the system can be interfaced with other software, so far only one hospital has done so.

The medical passport is portable. Patients continue to have access to it and can give it to physicians and facilities they choose.

In all, 34 facilities are using One Medical Passport, primarily ASCs and a few hospitals. For ASCs, there is a monthly charge of $250 a month plus a $2 per-patient transaction fee. Hospitals pay $2,000 a month plus a $1 per-patient fee.