Preparing patients for the day of surgery can mean chasing faxes and other documents that are easily misplaced. Missing information can lead to surgical delays and cancellations, not to mention frustrated physicians and staff.

If ever a process was ripe for automation, this is it. With the government’s funding for electronic health records (EHR), the preoperative process is one area hospitals and physicians may be looking at.

One option is to harness the Internet. Preoperative documentation is submitted through a secure web portal where physicians, nurses, and other authorized users can access it easily.

OR Manager spoke with users and representatives of 3 companies that offer web-based systems for managing preoperative information.

Presurgical Care Management System

Advocate Lutheran General Hospital in Park Ridge, Illinois, has been using an automated preoperative evaluation system for about 5 years.

“We almost never cancel a case anymore because a patient hasn’t been prepared appropriately preoperatively,” says Mary Kay Bissing, DO, chair of anesthesia and perioperative medicine. “And we don’t have to get last-minute consults, which we were doing almost daily.” She estimates the software has reduced the cancellation rate from missing paperwork on the day of surgery from about 5% to near zero.

The Presurgical Care Management System was developed by David Young, MD, Advocate Lutheran General’s medical director of presurgical testing. The software collects patient information, processes it into risk scores and treatment plans, and generates reports. The system is now owned by DocuSys, Inc, Atlanta (www.docusys.net). Dr Young is the company’s medical director of presurgical care.

Web-based questionnaire

Patients access the automated questionnaire at home or through kiosks in surgery centers and physician offices using an identification number.

The questionnaire, developed by the Cleveland Clinic and used by the Clinic and Advocate Lutheran General, focuses mainly on pulmonary, diabetes, and cardiac issues.

Patients answer the yes or no questions phrased in layman’s terms. Yes answers trigger further questions. A nurse always verifies the completed questionnaire with the patient and asks more questions if needed, Dr Young notes.

The software converts the patient’s responses to medical terminology. For example, the questionnaire asks: “Do you have shortness of breath at
night that requires sleeping on more than 2 pillows?” If the patient enters “yes,” the program reports that the patient has “nocturnal dyspnea.”

Once the information is entered and verified, the software compares the findings with the surgery the patient will have and determines the lab testing and any further evaluation needed. The system then creates different reports for the patient, surgeon, preop evaluation clinic, primary care physician, and anesthesiologist.

My Medical Files

Automation has helped end the paper chase at Christiana Care Health System, Wilmington, Delaware, which in September 2008 adopted a web-based system from My Medical Files (MMF from MMF Systems, Inc, New York City, www.mmf.com)

Before, a blizzard of faxes led to “many delays on the day of surgery and physician dissatisfaction,” says Andrea Rodriguez, RN, BSN, CNOR, manager of surgical services for Christiana Care.

MMF indexes, tracks, and notifies clinicians of missing information without the involvement of hospital staff.

How it works

With MMF, patient information is faxed to a central number. The incoming faxes are received by fax services, which digitize and store the documents in a database. The documents are then made available over MMF’s secure web servers in Virginia and California. Users are given a password to the MMF website.

The digitized documents then go to trained personnel in India who index patient information around the clock, making it available on the MMF website minutes after receiving it, explains Jose Barranco, MMF’s vice president for market development and compliance. He says the company can provide an entire patient folder within 30 minutes of receiving a patient’s documents.

None of the data actually travels to India, Barranco notes. Personnel have read-only access to the documents that remain in the secure web servers.

Missing information is tracked down by MMF staff based in Panama (who speak fluent English), who phone surgeons’ offices.

Patients’ folders can be accessed by Christiana Care clinicians and office staff. Patients do not have access to the file.

“I can’t tell you how much the tracking service has changed the quality of life at the points of service,” says Rodriguez.

Eliminating the paper shuffle

The day before surgery, the OR staff prints out a hard copy of the patient’s folder.

“We still need a hard copy of the patient’s chart. But we have eliminated 60,000 pieces of paper we were shuffling each month,” says Rodriguez, noting physician satisfaction with MMF is high.

Anesthesia providers print out the patient’s information because the anesthesia department does not have an automated information system yet. The goal is to go paperless.

One Medical Passport

One Medical Passport (Medical Web Technologies, Scituate, Massachusetts) is a different approach, giving patients a free portable health
Individuals can set up a “medical passport” on the company’s website (www.onemedicalpassport.com) and keep it for their records.

“Patients have a tremendous interest in creating a personal health record, and One Medical Passport is a great tool for doing this. There is no charge to patients,” says Stephen Punzak, MD, an anesthesiologist who is the company’s founder and CEO.

Health care facilities and physician offices pay a fee to access a patient’s One Medical Passport information, with the patient’s permission.

Geared for first-time users

Typically, patients find out about One Medical Passport when they schedule surgery with a hospital or surgeon who uses the system. The surgeon gives the patient a card with the surgery date, type of surgery, and how to access the website. The patient logs on at home, creates a user name and password, and fills out the online questionnaire. Patients cannot skip questions and can review the information before it is submitted.

“The system is geared for people who have never used it before and for those with limited computer experience,” says Dan Short, Medical Web Technologies’s vice president of sales.

The completed passport data is stored in the company’s secure storage facility and can be downloaded by any provider a patient has granted access to. The information either is displayed in a report format that can be printed or in an electronic format that can be interfaced.

Power of the passport

The power of the One Medical Passport technology is not only in the data collection but also in what it does with the data, Dr Punzak says. Rather than simply printing out the patient’s information, the system routes the information to the clinician who needs it.

An Assessment Checklist module lists tasks and forms that need to be completed for each patient. As information comes in, the system automatically takes the task off the list. An audit trail shows who indicated the task was completed and when.

A document manager module automatically scans documents, alerts the facility the documents have been submitted, and automatically alerts the surgeon’s office if documentation is missing.

More accurate information

A surgery center that has used One Medical Passport for about a year finds the system has improved the accuracy of patient information.

Patients can fill out the online questionnaire from their homes in a relaxed manner, which helps ensure the information is correct and complete, says Gina Espenschied, RN, BSN, CNOR, administrator of The Surgery Center at Brinton Lake, Glen Mills, Pennsylvania, which performs about 500 to 600 cases a month.

“In the past, when preoperative nurses called patients, they often caught them in the car or at work with little time to focus on the questions,” she says. As a result, the information sometimes wasn’t complete or differed from what the patient gave on the day of surgery.

Espenschied says the document manager module has decreased surgery cancellations caused by missing paperwork by nearly 15%. Presently, about
70% of patients complete the Passport compared to 20% when the program was introduced. — Judith M. Mathias, RN, MA

Preop automation costs

Presurgical Care Management System
DocuSys

The price is based on the hospital’s annual surgical cases. The software is available as a site license or on a per-case basis. There is a one-time implementation fee and annual maintenance fee.

For a hospital with 5,000 cases a year, the base one-time license fee is about $80,000 plus implementation services and an annual maintenance fee of $15,000.

For a surgical center with 2,000 cases per year, the base one-time license fee is about $25,000 plus implementation and an annual maintenance fee of $5,000.

Alternatively, the system is offered for a per-patient fee of $2.50 to $6.50, depending on volumes and configuration. —www.docusys.net

My Medical File
MMF Systems

Fees are based on the number of procedures a facility performs.

For indexing 10,000 cases a year, MMF charges $4,000 a month. Include in the request for proposal the number of representatives the company will provide for training and for how long, advises Andrea Rodriguez, RN, BSN, CNOR, of Christiana Care, Wilmington, Delaware, which uses MMF.

—www.mmf.com

One Medical Passport
Medical Web Technologies

Pricing varies based on the configuration, modules purchased, and surgical volume.

A community hospital with a standard configuration, for example, could expect to pay about $1,000 to $2,000 per month.

—www.onemedicalpassport.com