If you think a hospital’s printing capabilities don’t affect patient care, try checking into a hospital without filling out a form. From admission documentation to medical charts to patient billing, the business of running a first-rate medical facility depends on reliable, need-it-now printing.

A case in point: Butterworth Hospital, an acute care facility in Grand Rapids, Michigan. This 529-bed community-based, not-for-profit, regional referral center and teaching hospital specializes in Heart and Vascular services, Emergency and Trauma Medicine, Women and Children’s services, Oncology and the Neurosciences. It has more than 25 patient care units; full-service Laboratory and Radiology facilities including MRI; Radiation Oncology; Pharmacy; and an Outpatient Centre designed for adults and children needing day surgery and diagnostic procedures. The hospital provides care for more than 27,000 admissions and some 5,000 births annually in a 13-county area of western Michigan.

Hospital staff members pride themselves on going the extra distance to provide the highest-quality service, offering patients everything from special amenities to valet parking. In line with this philosophy, Butterworth has implemented high-speed, high-quality digital printing in two major areas of its operations: the Information Technology (IT) Department, and the hospital’s Copy Center.
Eliminating Costly Preprinted Forms

In the IT Department, a Xerox 4850 Highlight Color Laser Printing System uses spot color to improve the readability of forms used in patient billing — and this new laser printing technology also provides significant dollar savings by eliminating the need for preprinted forms.

In the past, following the industry standard, the hospital utilized preprinted billing forms to submit payment requests to patients. These forms were specifically designed to work with the hospital’s software and required exact loading into the printer for all of the data to be printed in the correct areas of the form.

In addition, Butterworth had several other types of preprinted forms that were used for insurance purposes or to request payment for special services. The cost to the hospital for all of these preprinted forms was running approximately $17,000 a year.

The forms themselves posed several problems: Not only were they a nuisance to load into the computer printer, they were also confusing and difficult for patients to comprehend. When patients were unsure about their billing, they were likely to call the hospital for clarification — and only when they were fully satisfied that the paperwork was correct would they pay the bill. This resulted in significantly slowing the accounts receivable process.

The answer was not simply a better preprinted form. Instead, Butterworth Hospital’s IT group completely reengineered its invoice printing process by converting from its existing line printer to the Xerox 4850 laser printing system with highlight color capabilities.

Coupled with ASAP host-based page composition software from Group 1 Software, the 4850 uses plain paper to generate colorful, easy-to-read patient billing forms which feature black text and a highlight color to draw the patient’s eyes to certain areas of the bill.

The Xerox 4850 prints black plus one other color, using a unique technology that allows the black and the second color to be printed in a single pass through the print engine. It prints at speeds of up to 50 pages per minute and at a cost comparable to black-only printing. The 4850 can print data-driven variable color images at production speeds and any desired shades of the second color, and is capable of duplex printing on paper of varying sizes.

Contemporary, Personalized Billing

Ultimately, the hospital was able to consolidate three separate bills into one for additional clarity and reduction of paperwork processing time. Moreover, by taking advantage of the 4850’s capability for high-resolution printing of postal barcode fonts, the hospital is taking advantage of the U.S. Postal Service discounts — providing an estimated $50,000 annual savings. This is in addition to $17,000 per year saved by eliminating the need for vendor-produced preprinted forms.

“What we’re offering now is a very contemporary personalized billing that represents the quality of Butterworth Hospital,” says Carl Nagy, Butterworth’s Director of Patient Financial Services. “It will free up staff time, it adds a nice effect that we could in no way achieve with a preprinted form, and we can implement a change virtually overnight. We’ve really brought our billing communications up to contemporary standards.”

Networked Copy Center

Butterworth Hospital also receives document support from its in-house Copy Center, which had a modest beginning 15 years ago. “It started out with just one Xerox copier in a room hardly bigger than a closet,” says Nancy Corcoran, Copy Center Supervisor. “At that time, the Copy Center just ran the copies which the hospital’s departments didn’t have time to make on their own.”

But as its work load increased, Butterworth Hospital’s Copy Center soon moved out of the
“We’ve really brought our billing communications up to contemporary standards.”

closet — initially using Xerox 5100 and 5290 copiers. Today, the Copy Center is a 1-million-impression per-month operation using two Xerox 5552 copiers and a Xerox DocuTech Model 135 Network Publisher system.

Currently, hospital staffers who have a print job to be run can submit their jobs as hard copy, on disk or via e-mail through Butterworth’s Token Ring network. Employees can call up an electronic job ticket on their own PC, fill out the electronic form, and send the job directly to the DocuTech.

According to Fred Knott, Director of Materials Management, the DocuTech’s networking ability made it a valuable addition to the organization.

“By bringing a high-quality, networkable printer like DocuTech in-house, we are able to shift from outside printing,” he says. “Although it’s too early to have exact numbers, we know this will save us a substantial amount of money.”

Education has been a key factor. “We recently held an open house where more than 300 people visited the Copy Center — it was a huge success,” says Corcoran. “We also offer classes on how to send print jobs to the DocuTech, and this gives us another opportunity to find out one-on-one what our customers need.”

Mass Mailings Made Easy
Of the many print jobs generated by the Copy Center, mass mailings is one area that has been of particular benefit to the hospital. Using the DocuTech’s labeling feature, a mailing’s labels can be printed directly onto the piece along with the U.S. Postal Service barcode. “No more labels stuck on crooked or sideways,” says Corcoran. “They’re always consistent. When people see that we can print labels using the DocuTech, their eyes light up and they say, ‘You mean I’ll never have to stick another label again?’ That’s when I know they’ll be back.”

Like the hospital’s IT group, the Copy Center has found digital printing’s ability to generate forms on demand to be a major benefit. “Forms needed to be sent out to a vendor to be printed, which meant that we’d sometimes have to order a six-months’ supply at a time. Now we use the DocuTech to print the forms in-house, as needed. We print up a minimum run to keep on hand — usually a two-week to a month’s supply. This has saved the hospital more than $6,000 in the last six months alone, and we’ve been able to reallocate that warehouse space for other uses.”

Adds Knott, “Technology for technology’s sake isn’t enough reason for us to bring a new publishing system on board. For us to shift to a new technology, it has to do
two things — first, it has to help us better serve our patients, and secondly, it has to be cost effective. That was our primary motivation for bringing the DocuTech into our Copy Center.

Printing off the Internet
In addition to labeling and on-demand forms, by teaming up with Xerox's knowledgeable staff, Butterworth Hospital's Copy Center has been able to provide valuable assistance in other areas as well. For example, the hospital's cancer program conducts a daily search on the Internet for the latest in cancer research. This information is printed out, copied and distributed to the program's staff members — a daily task that may involve hundreds of pages. During a meeting in which one cancer program staffer was inquiring about what to do about the group’s overworked laser printer, it was suggested they contact the Copy Center.

“When I heard about what the cancer program was doing, I immediately called Xerox so we could put our heads together to come up with a solution,” says Corcoran.

“Our Xerox rep told me, ‘If they can run it from the Internet to a laser printer, they can run it to a DocuTech.’

“Now this research is downloaded from the Internet directly to their Adobe reader, and the reader sends it to the DocuTech. Users can get the copies they need, when they need them — and it's all high-quality printing off the DocuTech,” she says.

This, Corcoran points out, is just one of the ways Butterworth Hospital's Copy Center contributes to patient care. “The cancer program’s research being printed on the DocuTech is one really great success story because it helps our patients.

“And that's what we're really all about,” she adds. “We're not about sending a bunch of memos to people. We're about doing what we can to take better care of patients. And I think our Copy Center is doing something important to help.”

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