

Arkansas hospitals eliminate pre-printed forms and “blue card” systems to speed up admissions process and significantly reduce costs with Lexmark laser printers and software.

St. Edward and St. Joseph Mercy Medical Centers cut costs, improve patient care with Lexmark

The Organization

Located in Arkansas, St. Edward Mercy Medical Center and St. Joseph’s Mercy Health Center are members of the St. Louis-based Sisters of Mercy Health System.

St. Edward, a general acute care hospital licensed for 343 beds, is the premier healthcare provider in Western Arkansas. Founded in 1905, it serves a large population, 400,000 people in 14 counties. St. Edward offers advanced technologies and a medical staff that deliver a broad range of services, with dedication to providing care with compassion and Christian values.

St. Joseph, in continuous operation since 1888, serves the healthcare needs of Hot Springs, Ark. and surrounding communities with its 300 beds and community outreach programs. Located on a 72-acre medical campus, it is renowned for offering high-quality care while working to keep healthcare costs down.

The Challenge

Without medical records and forms, hospitals everywhere would come to a standstill. But at most hospitals, the majority of capital funds are allocated to facilities, new construction and the acquisition of leading-edge – and expensive – medical technology. Less flashy aspects of hospital operations, such as the handling of paper, often must wait their turn.

The Arkansas hospitals in the Sisters of Mercy Health System are no exception. Though they are all part of the same organization, each relied on the manual creation and distribution of forms. And each had developed its own methods and workflows over many decades. As part of a major effort to trim operating expenses and standardize operations while maintaining high levels of patient care, the time to scrutinize forms management and output strategy had come.

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—Heather Owen
Business Systems Analyst
Sisters of Mercy Health System
Chesterfield, Mo.
[www. Mercy.net](http://www.Mercy.net)

An analysis at St. Joseph revealed that it had more than 3,000 different active forms, spanning medical, insurance, billing, administrative, regulatory, pharmacy, laboratory, and other areas. With no way to print a form on demand, the hospital had no choice but to maintain large inventories of pre-printed forms. To keep up, St. Joseph built and operated an on-site print shop at significant cost.



At St. Edward, the issue was not a flood of forms, but how to make the critical patient information they contained more legible. The hospital still used embossed plastic patient information cards, a technology firmly rooted in the 1960s. Similar to a credit card, these “blue cards,” embossed with patient identification and other information, would be tightly sandwiched under a paper form and inserted into a machine containing an ink roller. Passing the roller over the sandwich imprinted the embossed card data onto the paper form.

With these embossing machines and imprinters in continuous service for decades, legibility was often less than perfect. The inked data was prone to smudging. With the devices no longer manufactured, keeping the card embossers and imprinters in working order became increasingly difficult, time-consuming and expensive. And should a card become misplaced, a replacement would have to be made, consuming valuable time.

In addition to improving forms legibility, St. Edward wanted to ease the admissions process for patients and update its manual process for imprinting patient identification wristbands and creating labels used throughout the patient care experience.

To maintain its high levels of patient care and conform to the privacy requirement imposed by HIPAA, both facilities recognized a need to update business processes and equipment.

Keeping closets stocked with pre-printed forms wasted valuable space, tapped budgets and stole precious time from staff. And at St. Edward, finding parts to keep the old card embossers running had become nearly impossible. There had to be a better way.

The Solution

Working with representatives from St. Joseph’s IT, administrative and medical areas, a team of Lexmark medical-industry specialists analyzed the 3,000 forms used by the hospital.

Nearly all of the forms were digitized – a major undertaking – and placed on a dedicated network server running Lexmark’s Optra Forms solution. Now, patient data and forms are merged and printed on demand in one operation on Lexmark laser printers throughout the hospital.

Inventories of pre-printed forms have been eliminated, and so too, has

the need for the on-site print shop. It was decommissioned with the space it occupied reclaimed for other administrative functions.

When each on-demand form is printed, it includes a barcode, a unique identifier that will be used as the hospital eventually moves to a fully automated document management system. For now, the Lexmark document software routes documents where they are needed, to a nursing station, cashier’s office, or case management office. The process has led to improved patient care: Case managers used to sort through stacks of forms to find the paperwork for their particular cases, now they receive the forms for only those cases requiring their attention.

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At St. Edward, Lexmark medical-industry specialists worked with Heather Owen, the hospital’s Business Systems Analyst, to replace the card embossers, wristband and label-printing operations with a single, unified solution that completed these tasks in a single step.

“No two hospitals are alike,” said Owen. “Lexmark’s specialists studied our operations and listened very carefully to our needs. With all the work they did, it seems like they came to know more about our operations than even I did.”

Together, Owen and Lexmark devised a solution to print forms on demand with merged patient data – all of the data needed for the admissions and billing processes to proceed. Using Lexmark server-based forms software and laser printers distributed throughout the facility, the process is instantaneous.

In the admissions area, patient identification wristbands are now created on the laser printers, using special die-cut polyester media. The information is clear, unambiguous and cannot be smudged.

The Results

With Lexmark print-on-demand documents, St. Joseph and St. Edward are reducing expenses dramatically.

At St. Joseph, putting its 3,000 forms online allowed the hospital to shut down its internal print shop, leading to immediate cost savings of nearly \$1 million dollars.

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At St. Edward, the elimination of just one form in the admissions processes has already led to a quantifiable annual savings of nearly \$900,000, according to Owen. She expects additional savings as other processes are automated and up to 100 active paper forms are eliminated.

The completion of the forms management projects at these hospitals is not the end of the relationship with Lexmark.

“I hear from our Lexmark representatives weekly,” said Owen. “And if an issue arises, I can count on them to be onsite to answer our

questions.” That’s different than other technology vendors, she says. “We do not have a close working relationship like this with any other vendor,” said Owen. “It’s like my Lexmark account team works for the hospital.”

At St. Joseph and St. Edward, medicine and patient care will always be the top priority. By implementing electronic forms creation and document routing, these services are enhanced. Costs are down, allowing funds to be re-allocated for direct patient services. Crisp laser-printed data that replaced difficult-to-read imprinting from embossed cards eliminates the potential for misinterpretation. Documents are routed to where they are needed over the network instead of by courier.

For Owen, it’s the ongoing high level of service from Lexmark that is crucial. “Lexmark worked with our medical software vendors to make sure every aspect of these projects work correctly,” said Owen. “They’ve modified software to create special barcodes and just delivered on their promises and more.”

For the St. Joseph and St. Edward hospitals, Lexmark was just what the doctor ordered.