

Gwinnett Medical Center (GMC) cuts paper use to 3.5 million sheets annually by streaming encrypted patient reports to Lexmark multifunction printers for on-demand printing in the event of a network outage.

## Lexmark Downtime Reports provides instant access to current patient information during IT systems downtime at Gwinnett Medical Center

### The Organization

Gwinnett Medical Center (GMC) is a not-for-profit healthcare network providing a wide array of high-quality services and facilities throughout Georgia's Gwinnett county and surrounding areas north of Atlanta. The institution encompasses two hospitals plus additional supporting medical facilities staffed by 4,200 employees.

### The Challenge

Gwinnett Medical Center identified two document-related projects in its ongoing efforts to ensure that patients receive world-class healthcare. First, GMC believed it should modernize pharmacy operations to prioritize incoming Rx orders, fill orders more quickly, generate an audit trail, and balance the Rx fulfillment workload among its several on-campus pharmacies. Second, GMC expressed a strong desire to automate and simplify its process for providing medical personnel with up-to-date patient reports in the event of a network outage.

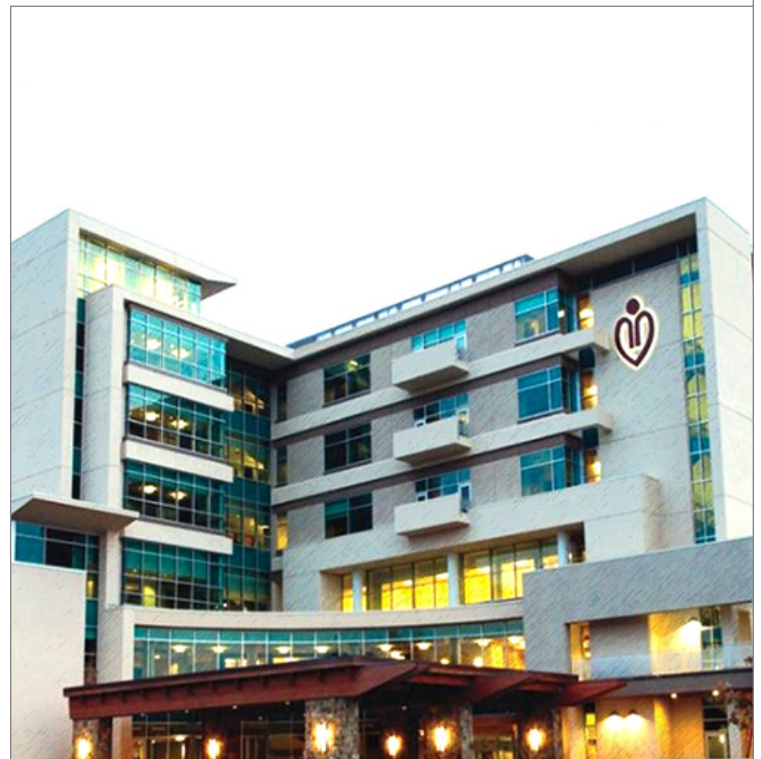
An update to its McKesson Horizon Admin-Rx™ point-of-care application provided the ability for GMC's pharmacies to accept scanned Rx orders. This upgrade was a leap ahead of the old method of sending physicians' hand-written orders via a pneumatic tube system. This approach was riddled with challenges. Orders lined up, without an easy way to prioritize them. Nurses couldn't track the status of each order, which often prompted follow up calls to the pharmacy to get updates. Orders were not immediately linked to the patient's electronic medical record, so order history was not readily available. And, orders went directly from one nursing station to a specific pharmacy and couldn't be routed based on volume or availability. "We needed a way to load balance and avoid any possibility of delay and also tie in with our medical records system," said Kevin Toenes, GMC's Manager of IS Customer Service.

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Gwinnett  
Medical Center

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To do that, GMC wanted to implement “on-ramps” at nurses’ stations to scan doctors’ Rx orders, route those orders to the next available pharmacist, identify pediatric and STAT orders for immediate processing, and immediately enter the Rx data into the patient’s electronic medical and billing records. Choosing a networked multifunction printer (MFP) would also allow nurses’ stations to consolidate separate printer, copier, fax and scanning devices into a single, space-saving unit.

Its second project was aimed at ensuring that patient information was available during a network outage. When a planned or unplanned network outage occurs, hospital personnel need to have access to patient records. With its previous approach, GMC printed 5,000 pages of backup patient reports twice daily. Even though the reports were rarely used, they needed to be printed and available, but realistically the information could be up to 12 hours old. The approach was costly to the medical center and to the environment. In fact, the practice consumed 3.6 million sheets annually, more than 7,200 500-sheet reams. Adding to the complexity and cost of this approach, HIPAA privacy requirements mandated that these reports be confidentially shredded.

For both of these business challenges, GMC knew there had to be a better and more cost effective way to accomplish its goals and support patient care.

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### **The Solution**

After analyzing proposals from several output technology providers, GMC selected technology and solutions from Lexmark. Toenes and his team were impressed by the lengths Lexmark went to build a comprehensive solution tailored for GMC – well beyond competing vendors. “When we asked the other major maker of laser printers to demonstrate a proof of concept, they did not show a willingness to put in the effort necessary to discover the real technical needs, write custom scripts, do testing and certification, and work with McKesson,” said Toenes.

Specifically, GMC installed 50 Lexmark printers and MFPs, along with supporting workflow software to enable both the automation of its medical orders and a downtime solution. In the process, Lexmark removed 40 additional devices from the environment.

To integrate the Lexmark MFPs into the prescription-fulfillment workflow, Lexmark engineers developed custom scripts that interface with the Admin-Rx application. A prescription order is placed on the MFP’s scanner and the nurse simply taps the appropriate icon on the full-color Lexmark eTask™ touchscreen to indicate STAT, pediatric, or standard. In a single operation, the prescription is scanned and imaged. The image is routed to the next available pharmacist and simultaneously saved into the patient’s electronic record, eliminating the need for subsequent manual data entry. “We have speeded up the entire process of getting medications to patients,” said Toenes. “The pneumatic tubes have been eliminated and the labor intensity has been cut nearly in half.”

To eliminate the twice-daily printing – and shredding – of rarely used reports, GMC implemented Lexmark Downtime Reports on its Lexmark MFPs. Downtime Reports ensures 24/7 access to critical patient forms and reports. As IT generates updated information, information is aggregated and streamed to the secure, encrypted internal hard drives of designated on-premises Lexmark printers or MFPs.

During a downtime event, an authorized user can visually open an electronic folder on the Lexmark MFP touchscreen and choose which records to print. All that’s needed is electrical power. Downtime Reports can be optionally configured to store barcoded forms containing personalized patient data. After the downtime has ended, patient records can be quickly updated or scanned back into the hospital’s electronic medical records system.

To ensure compliance with privacy requirements, Downtime Reports stores documents and reports on the printer’s encrypted hard drive. A variety of authentication options are available to prevent unauthorized access. Documents cannot be accidentally erased or lost if the device is powered down. Downtime Reports can be configured to upload or overwrite documents at specified intervals with expired documents deleted automatically.

### **The Results**

Scanning and imaging Rx orders has allowed GMC to retire its pneumatic tube system. The workload at its pharmacies can now be distributed between pharmacies, avoiding potential bottlenecks. On their screens, pharmacists can immediately identify STAT and pediatric orders and fill those first.

Through custom workflow scripts developed for GMC, the prescription image is routed seamlessly to the Admin-Rx application and into the patient's electronic record. Device consolidation, though it was not a primary objective, has allowed GMC to retire 40 single-function printers, faxes, and scanners.

Instead of printing backup reports just twice daily, patient reports are streamed hourly to designated Lexmark devices. "When necessary, nurses now go to the Lexmark device, authenticate themselves, and print reports that are never more than one hour old," said Toenes. Elimination of printing 3.6 million pages yearly is allowing GMC to save more than \$200,000 on paper alone.

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For Toenes and his team, the Lexmark experience is very different from what might have been. "Lexmark was the only vendor willing to do what it took to assess and understand our business, operational, and technical requirements. They are outstanding to work with," he said.

Gwinnett Medical Center has long been acclaimed for delivering world-class medical care to its patients. By working with Lexmark to streamline its prescription fulfillment systems and ensure that up-to-date patient information is always available, Gwinnet is assured of maintaining its high level of patient care well into the future.