



## CMH Regional Health System Optimizes EHR and Forms Management Processes with Bottomline MedEx®

### Bottomline's forms automation solution helps CMH provide more informed and safer care

With a corporate vision to become the best community hospital in America, CMH Regional Health System (CMH) embraces and relies on technology to help it achieve this goal. In October 2006, CMH implemented phase one of a three-year, \$18 million patient safety initiative that included a transformation to an Electronic Health Record (EHR) system.

After selecting McKesson's EHR solution, the hospital recognized that forms automation was necessary to deploy a more complete, legal EHR system and to optimize forms management throughout the continuum of care. CMH's existing forms management processes were extremely manual, paper-based and labor-intensive, resulting in multiple errors, limited medical record storage space and decreased employee productivity. The hospital's manual processes also limited physician and staff accessibility to patient information and decreased the amount of time employees could devote to providing patient safety and care.

*“By becoming less reliant on paper medical records, we will help physicians, nurses, pharmacists and other clinicians provide more informed and safer care.”*

Tim Crowley  
CMH Regional Health System

### Choosing the Right Forms Automation System

When CMH began its search for a forms automation solution, they identified three key objectives:

- Seamless integration with their existing EHR solution
- Flexible functionality
- Ease of use for the hospital staff

After extensive research, the hospital found that forms automation solutions from Bottomline Technologies not only met these goals, but also offered significantly more flexibility and functionality than other systems.

In addition to MedEx for forms automation, CMH used Bottomline's intuitive forms design capabilities to further extend the capabilities of their technology investment. With this solution, the hospital is able to design forms and automate forms processing. They can also retrieve and store documents within a single, easily accessed repository and produce barcoded documents on-demand, helping CMH to decrease costs, increase efficiencies and enhance patient safety and care.



### Enhancing Patient Registration Processes

Prior to MedEx, patient registration was a drain on time and resources at CMH. “Our nurses and other staff members would spend a lot of time assembling patient forms and hand-delivering the forms to their destination,” said Linda Keifer, senior electronic forms and imaging analyst, CMH. “Now, the forms are automatically populated with patient information and all patient packets, including wristbands, are directly printed to the proper floor, saving our staff valuable time and effort.”

### Challenge

Deploy a more complete, legal EHR system and optimize forms management across the continuum of patient care.

### Solutions

MedEx from Bottomline Technologies

### Benefits

- Reduction in manual data entry has helped improve form version control, decreasing errors and improving patient safety
- Decreased reliance on paper has reduced costs and increased staff productivity
- Automating forms and streamlining related processes has strengthened compliance with legal requirements

### Considerable Cost Savings

To date, CMH has been able to increase efficiencies and reduce costs in multiple areas. In addition to enabling hospital staff to devote more time to patient safety and care, Bottomline's print distribution capabilities have allowed the hospital to eliminate the use of addressographs, resulting in cost savings of \$52,000 in equipment, supplies and maintenance in the first eight months following implementation.

CMH has also experienced reduced costs and process improvements through a streamlined medical records process, which includes automatic indexing and the cold feeding of forms for storage and retrieval. These improvements alone have generated a savings of nearly \$14,000/year and one half of a Full-Time Employee equivalent (FTE). The hospital also reports increased efficiencies in several areas, including accelerated chart completion (deficiency management), reduced chart delinquencies and fewer data errors.

### Improved Patient Safety and Care

MedEx is helping CMH enforce more stringent patient safety features. For example, MedEx works together with McKesson's pharmaceutical solution to enable the hospital to accurately track the administration of medication by requiring clinicians to scan the patient wristband in addition to his/her badge and the medication. Previous procedures did not require clinicians to scan the wristband, creating a potentially dangerous situation. The combined solution helps CMH ensure the right patient is receiving the right medication at the right time.

MedEx has also helped the hospital reduce the amount of manual entry of patient information. Manual data entry can lead to errors of interpretation that compromise patient safety. These solutions are helping the hospital manage version control by ensuring that the right version of each form is being used and all state regulated forms are in place.

CMH's forms automation allows the hospital to implement barcodes into the patient's EHR, eliminating the need to manually index every patient document. The barcode contains the patient name, document type and rules for sequencing the document. When scanned or cold-fed into the EHR, the

document is automatically assigned to the right patient immediately, significantly reducing loose materials handling, which requires extensive time and resources to ensure that they are appropriately inserted into the patient's record, when handled manually.

### Complete and Legal EHR Solution

The forms automation and design tool together with CMH's existing EHR solution has enhanced the hospital's ability to provide a legally compliant EHR. According to Linda Keifer, "Ensuring legal compliance was one of our key objectives in implementing a combined solution."

### Great Expectations for Continued Success

Based on the success realized by CMH thus far, the hospital anticipates considerable savings once staff members are fully trained and able to leverage the Bottomline solution to capacity. While ROI is important to CMH, the hospital is taking a long-term view on recouping its technology investment in both its EHR and forms automation solutions. That said, Keifer admits that she expects to realize the fastest ROI from its forms automation solution, based on reduction of paper printing and storage costs, alone.

*“Outside of the cost savings, our nurses and clinicians will have more time to devote to our patients, which is our top priority.”*

Linda Keifer  
CMH Regional Health System

### About CMH Regional Health System

With 95 staffed beds, more than 900 employees, and a medical staff of more than 150 in 30 specialties, CMH offers a full range of medical services, including emergency, cardiology, acute care, oncology, women's and children's services, sub-acute care, rehabilitation services, surgical services, corporate health, home care, and a family medicine residency program affiliated with the University of Cincinnati. For more information, visit [www.cmhregional.com](http://www.cmhregional.com).

For more information about MedEx and other healthcare solutions from Bottomline Technologies, call 1.800.472.1321 or visit [www.bottomline.com/healthcare](http://www.bottomline.com/healthcare).



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