

## AT A GLANCE

- **ORGANIZATION**

*St. Vincent's Hospital  
Birmingham, Ala.*

- Beds: 338
- Medical staff: 700
- Inpatient visits per year: 20,000
- Outpatient visit per year: 148,000
- “Flagship Digital Hospital”  
for parent health system,  
Ascension Healthcare

- **SOLUTION SPOTLIGHT**

- Horizon Clinicals

- **CRITICAL ISSUES**

- Access to patient information
- Medication safety
- Clinical excellence
- Attracting clinicians

- **RESULTS**

- 1,500 PCs deployed across  
1 million-square-foot campus
- 90 percent clinical information  
system usage among medical staff
- Wireless and Web-based access  
to patient information
- 10 percent decrease in average  
patient length of stay
- 25 new physicians added in 2003

## McKesson Delivers Medication Safety to High-Tech, High-Touch Care at St. Vincent's

More than 10 years ago, St. Vincent's Hospital in Birmingham, Ala., embarked on a technological journey to improve clinical and operational excellence by delivering vital, appropriate information to clinicians and staff in a timely, intelligent manner. Now, as other healthcare organizations scramble to address patient safety, reduce medication errors and improve outcomes, St. Vincent's is already realizing the value of blending “high-tech, high-touch” into healthcare that works, healthcare that is safe, and healthcare that leaves no one behind.

### Challenges

Birmingham's healthcare market is highly competitive, with 21 hospitals, numerous clinics and diagnostic centers — in fact, more than 9 percent of the local workforce is employed in the healthcare field. To fundamentally affect the medication and care delivery process in the region, St. Vincent's sought to:

- Speed access to real-time and historical patient information by placing information at clinicians fingertips anytime, anywhere
- Proactively monitor and notify clinicians of critical changes in a patient's condition
- Deploy pharmacy and bedside bar-code technology to help prevent medication errors
- Provide physicians with electronic ordering and clinical decision support tools

### Answers

St. Vincent's journey began in 1991 with the plan for a completely digital information environment. In 1993, the hospital brought live its electronic medical record. And in 1996, with the implementation of McKesson's clinical data repository, the foundation was set for future technology initiatives. With every patient procedure, test and order compiled into an evolving patient record — which now includes more than five years of

cross-encounter patient data — the aggregated records form a vast, paperless clinical repository. Caregivers can access information such as current and past medications, laboratory results, radiology and pathology reports, vital signs, input/output data, transcribed documents, and patient demographics.

To maximize the value of the repository, St. Vincent's added other McKesson clinical solutions, including many from the Horizon Clinicals™ suite of integrated solutions. Physicians and other clinicians can now analyze integrated data from any location on the 1 million-square-foot, six-building hospital campus using wireless tablets, PDAs, and computers at nurse stations and in patient rooms. The information can also be viewed from a physician's home or office using McKesson's secure portal technology.

“The cure for better healthcare is access to information,” says Timothy Stettheimer, Ph.D., St. Vincent's vice president and chief information officer. “By making information available to caregivers anytime, anywhere, we're giving them the tools to help ensure patient safety and quality outcomes.”

St. Vincent's looked to McKesson for leading-edge technology systems for every step in the care delivery process, especially for improving medication safety. The organization recognized that it needed the processes, technology and infrastructure to “close the loop” on medication errors by preventing them at every stage: prescribing, transcribing, dispensing, administering and monitoring.

To provide clinically intelligent tools for pharmacists to capture scripts, fulfill orders and validate the accuracy of the medication use process, St. Vincent's deployed

# CASE STUDY

## ST. VINCENT'S HOSPITAL • HORIZON CLINICALS

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*"We may virtually eliminate medication errors by making sure that anytime a clinician interacts with an order, a system checks that the best, most appropriate care is taking place."*

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**Timothy Stettheimer, Ph.D.**

Vice President and Chief  
Information Officer

automated dispensing cabinets, McKesson's Horizon Meds Manager™ pharmacy information system and Horizon Admin-Rx™ medication administration system. Through integration with Horizon Expert Documentation™ (McKesson's point-of-care clinical documentation system), communication among all caregivers is greatly enhanced. In addition, St. Vincent's uses McKesson's Horizon Care Alerts™ (rules-based clinical alerts system) as the "guardian" of all clinical data, monitoring and proactively notifying caregivers of any health situation that needs immediate attention or could negatively affect patient care.

The hospital is also in the final stages of implementing Horizon Expert Orders™, which will assist physicians with order entry and clinical decision-making by displaying clinically relevant information about a patient's condition along with evidence-based guidelines and treatment protocols at the point of decision making.

Here's how St. Vincent's will "close the loop" on medication errors. After a physician places a medication order in Horizon Expert Orders, it is sent electronically to the pharmacist for verification and review with Horizon Meds Manager's advanced clinical screening. The completed order is then passed electronically to the cabinets and Horizon Admin-Rx. With up-to-date information available at their fingertips, nurses administer the medication after verifying the "five rights." St. Vincent's nurses scan for a bar code match of the patient's wristband and the medication. The integrated system confirms that the right caregiver is administering the *right* medication to the *right* patient at the *right* time in the *right* dose and *right* route. After the medication is administered, the EMR is updated across all clinical systems for any necessary review or monitoring.

"By automating best practices and allowing clinicians more time to focus on direct patient care, McKesson's guidelines-based solutions are having a positive effect on quality at St. Vincent's," notes Stettheimer. "We may virtually eliminate medication errors by making sure that anytime a clinician interacts with an order, a system checks that the best, most appropriate care is taking place."

### Results

McKesson technology is supporting St. Vincent's goals for clinical and operational excellence by delivering safer, more cost-effective care. Physicians and other clinicians not only access information anytime, anywhere from 1,500 PCs deployed across the campus, but more than 90 percent of St. Vincent's 700-member staff routinely uses the hospital's clinical data repository. Stettheimer reports that the physician's improved workflow and expedited rounding has contributed to a 10 percent decrease in the average patient length of stay (4.7 days to 4.2 days). And St. Vincent's technology has helped attract and retain clinicians. In fact, St. Vincent's has attracted nearly 25 new physicians in the past year.

"Not only are physicians comfortable with technology as a means to access clinical information quickly and effectively, they now expect and even demand it," says Stettheimer. "We focused on McKesson because of its best of breed approach to technology, its ability to tie solutions together across the enterprise, and its long-term approach to supporting clinicians in all environments. Through the partnership, we've been able to meet our goal of providing excellent clinical care." ■

**MCKESSON**

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