Streamlining Operations from Pharmacy to the Point of Care at Smaller Hospitals

Pharmacy design, automated dispensing cabinets and mobile computing workstations promote quality care at Tri-County Hospital

> The Challenge

Ensuring efficient workflows from the inpatient pharmacy to the point of care is a critical issue for every hospital. Smaller hospitals face unique challenges. Most technologies – EMR software, mobile computer workstations, automated dispensing cabinets and others – are designed for large facilities and do not readily scale down to the budgets and specific needs of small hospitals.

In recent years, Tri-County Hospital, a 25-bed critical access hospital providing high-quality healthcare to communities in rural Nebraska, has sought to continually upgrade workflows and technology to improve the quality of care. An expanded inpatient pharmacy was needed to support the needs of expanded pharmacy services. Enhanced technology would need to play a key role in supporting quality care throughout the facility, including mobile computing workstations and point-of-care medication administration.

However, in reviewing options, Tri-County faced challenges in finding solutions that provided needed functionality, but could be scaled to their unique needs – and budgets – as a smaller hospital.

“Hospitals our size are overwhelmed by the cost and complexity when we look at many of the products on the market,” said Donna Soflin, director of pharmacy. “It is very important to us that solutions can be adapted to our small-hospital setting and offer flexibility to adapt to changing needs.”

> The Solution

Tri-County Hospital turned to solutions from each of Metro’s product lines to achieve its goals.

Pharmacy Design and Fixtures

In 2003, Tri-County had turned to Metro’s Lionville Series for the first
phase of the project – the design of a larger inpatient pharmacy.

“We moved into a new space that was three times larger than what we had before,” said Soflin. “Lionville helped us design the space for maximum efficiency, and the fixtures provide us with the flexibility to easily and economically reconfigure as needed to adapt to changing needs.”

Medication Carts

The decision to work with Metro Lionville is built upon a long-term relationship: Tri-County has used the company’s medication carts since 1976. “We are on our third set of Lionville carts in over 30 years, and they have provided us with excellent performance and durability,” said Soflin. After having demo carts from three vendors, nursing personnel had the major say in the selection of the Lionville carts.

Tri-County uses Lionville iPoint workstations that combine security features with the time-saving efficiency of mobile computing and bedside medication administration. The Lionville units are used primarily in the med-surg units of the hospital.

Mobile Computing Workstations

In May 2008, Tri-County took another significant step by launching its McKesson Paragon hospital information system (HIS). The lengthy, but thorough, selection process included a multidisciplinary team which included nursing, IT and pharmacy. Tri-County Hospital chose Metro’s Flo Series 1760 mobile computing workstations, which are used on the nursing unit, in the emergency department and surgery for clinical documentation.

“The mobility of the Metro Flo workstations really set them apart from the other carts we tried,” said Soflin. “We also liked the flexible features that allow us to add drawers and other accessories.”

Tri-County also liked the Flo workstations’ capabilities to support future technology additions. “We were looking ahead to our plan to upgrade the units to support computerized physician order entry, and Metro’s Flo Series is ideal for that,” said Soflin.

Metro helped forge the partnership by providing Tri-County Hospital several evaluation units to try. “This really helped build a strong service-oriented
relationship,” Soflin noted. “We contacted a number of potential vendors, but most would not provide any trial units to our small facility. Giving our nurses a chance to push the carts around and get some hands-on experience really helped in getting their buy-in.”

**Automated Dispensing Cabinets**
Automated dispensing cabinets (ADCs) from Metro’s MedDispense Series have also played a key role. Like most smaller hospitals, Tri-County does not operate its pharmacy 24/7, so secure, convenient after-hours access to medications is a key patient care issue.

In November 2005, Metro’s MedDispense ADCs replaced a paper-based system for after-hours medication access. Previously, the nurse had to leave a copy of the physician’s orders in the pharmacy and retrieve needed medications. The orders would have to be manually reconciled by the pharmacist the following day. Installing the MedDispense system allowed Tri-County’s nursing staff immediate access to needed medications after-hours and ensured pharmacy’s accountability that is essential to regulatory compliance. In 2008, Tri-County upgraded to MedDispense’s .NET software platform that centralized data capture and improved reporting capabilities.

“MedDispense helped us improve patient care by reducing the risk of medication errors and offering nurses immediate access to medications when needed after hours,” said Soflin. “In particular, our nurses really like the features that address safety issues with sound-alike and look-alike medications. There are also some very helpful reports generated by the system.”

The MedDispense ADCs have also improved charge capture — an especially important issue at Tri-County as a critical access hospital that receives cost-based reimbursement.

> **The Result**
By providing robust functionality scalable to the needs of a small hospital, Metro has helped Tri-County Hospital achieve key goals for streamlining operations.

The pharmacy design offered flexibility to adapt to changing needs. “Lionville’s design was well thought out,” Soflin said. “We may need to redesign our space to meet USP 797 guidelines for sterile work areas, and it will be easy and

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The adoption of the hospital’s health information system has gone smoothly – with critical support from Metro’s Flo and Lionville workstations and MedDispense ADCs. The units easily integrated with the hospital’s information system.

Both the Flo 1760 and Lionville iPoint workstations will receive technology upgrades in the near future to support bar code medication administration.

Tri-County has also played a valuable role in design of future workstation products by participating in a customer user group. “We really appreciate the opportunity, as a smaller hospital, to have a voice in product design,” said Soflin.

The flexibility of Metro products – and the company’s commitment to quality service – has also been essential to a successful long-term relationship.

“All of these products offer us the ability to design and build as needed to match our practice setting. That has been an important factor for us over the years,” said Soflin. “We’ve also been very pleased with service on all those products throughout the years. It’s always been a strong point – and we’ve got experience from more than 30 years of working together.”