

McKesson CarePoint-RN

A 588-BED TEACHING AND RESEARCH HOSPITAL, SPARTANBURG REGIONAL Medical Center has used the ROBOT-Rx system for dispensing bar coded medications for over 10 years, and in late '90s, became one of the first hospitals in the nation to scan bar coded medications at the point of care. Bedside administration systems can be cumbersome for busy nurses. They require disparate elements – medications, supplies, a bar code scanner, and a computer for electronic documentation – to be brought together, which can make medication administration more challenging and time-consuming. So, when we heard about the emerging McKesson CarePoint-RN mobile cabinet system, we offered to serve as the national beta site, beginning in late 2005. Because it combines the security of a medication dispensing cabinet with wireless access to clinical information, we felt CarePoint-RN could simplify the process of bedside bar code verification for our nurses. Nurses on Heart Unit #4 and #5 volunteered to participate in the beta test, and each unit received two mobile cabinets. A single nurse was to use the unit throughout her shift, and we instructed our nurses to test the CarePoint-RN to its limits.

To document the beta results, Shack & Tulloch, Inc., an independent economic consulting firm, was retained. We established four criteria to measure the program's success:

- Increasing medication safety
- Enhancing nursing-pharmacy teamwork
- Improving operational efficiency
- Improving patient billing accuracy

Before the Implementation

Before the beta test, Spartanburg nurses followed four distinct steps for each medication administration event:

- Retrieve medications from unit-based cabinets in the med room
- Draw the supplies necessary for administration from the med room and/or clean utility room
- Administer medications
- Document administration electronically using a computer on wheels

At the time, we believed this workflow was the best way to reduce the risk of medication errors. But, for nurses, it was a repetitious, time-consuming process. Those four steps were repeated for each patient during each medication pass. Delays resulted from long lines at the medication cabinet and supply cabinets and searches for cabinet keys. Shack & Tulloch documented that each nurse on Heart Unit #4 and #5 spent a total of 30 minutes (15 minutes twice each day) gathering medications and supplies for each patient. For the average shift with six patients, that added up to three hours per day for each nurse. In other words, nurses were spending 25 percent of their shifts gathering medications and supplies.

Workflow Changes

Introducing CarePoint-RN to our nurses' workflow entailed more than simply turning on a new piece of technology. We all know how people usually react to workflow changes—with great skepticism. So we were pleasantly surprised by our nurses' positive reaction to the new mobile cabinets. In fact, working with one

quickly became a reward; nurses who arrived to work first got to use the CarePoint-RN mobile cabinets for the day. Their workflow was simplified because everything they needed – medications, supplies, a bar code scanner, and wireless access to medical records – was at the bedside with them. Otherwise, there was very little impact on nursing workflow; they utilize the same software and practices as they did prior to the implementation.

Likewise, the CarePoint-RN units have had very little impact on pharmacy's workflow; because the bins are filled by our robot, most of our processes have remained the same. Most of our medications are delivered straight to the CarePoint-RN unit and are stored in lockable, patient-specific bins, thereby reducing the potential for dispensing errors.

The Results

After the 12-week testing period, Shack & Tulloch found that nurses using CarePoint-RN spent just 15 minutes per med pass to gather patient medications and supplies for all patients – 30 minutes per

shift, compared to the pre-testing-period three hours per shift, with no change in our average patient census. Nurses were spending more time with the patients, because they were spending less time running back and forth to the med room and waiting in line to gather meds and supplies. Secondly, our nurses reported that they felt "safer" using the CarePoint-RN unit for medication administration and documentation, because they no longer had to work with disparate systems to document medication administration and could focus on the task – and patient – at hand. Third, our nurses reported that the CarePoint-RN handled smoothly during rounds, and the large work surface and one-button height-adjustment control made charting and paperwork preparation easier. In summary, Shack & Tulloch found CarePoint-RN users:

- Decreased time to gather medications and supplies by up to 83%—saving 2.5 hours per nurse per shift
- Cut documentation time by 0.5 hours per nurse per shift
- Reported spending 28% more time on patient care
- Enjoyed higher job satisfaction

Given these results, it was an easy decision to expand our use of CarePoint-RN to other nursing floors. We have installed 42 additional units and have since budgeted for even more. Our key goals are to give nurses more time in the patient's room and to optimize medication administration safety procedures. In that regard, CarePoint-RN has helped us deliver safer, better care to our patients. ■

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CarePoint-RN can simplify the process of bedside bar code verification for nurses.

WHERE TO FIND IT:

McKesson Health SystemsCircle reader service number 96
or visit www.mckesson.com/CarePoint-RN