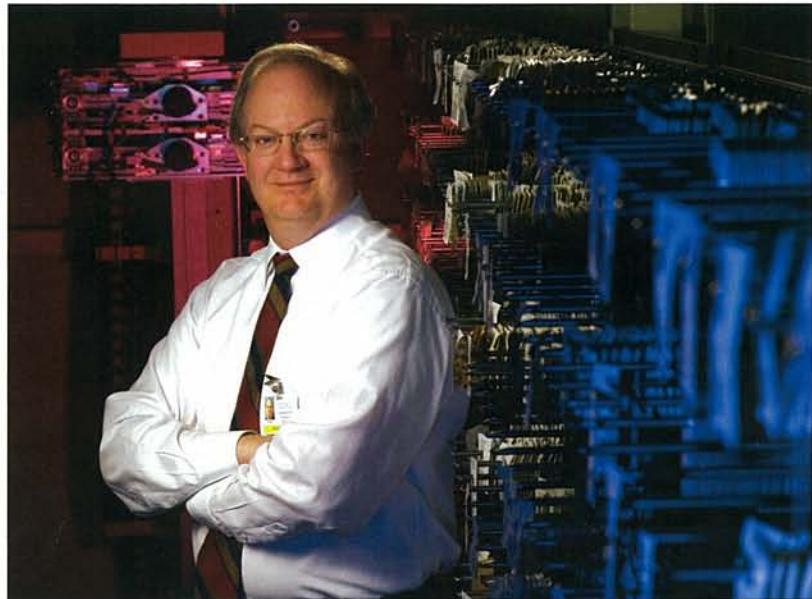
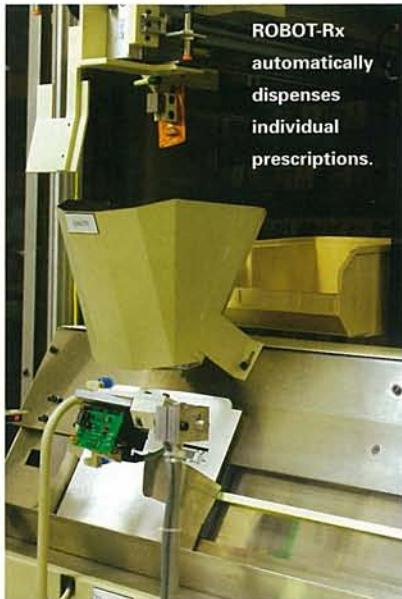


tech savvy

How robots keep our patients safe

A BAR-CODE SYSTEM HELPS GET THE RIGHT MEDICINE TO THE RIGHT PEOPLE



A robot that dispenses medicine? That may sound like sci-fi, but it's reality at Saint Peter's University Hospital, one of the first facilities in New Jersey to offer a fully integrated system that dramatically reduces errors when dispensing inpatient prescriptions.

The system is based on the bar code, the technology used by many industries to track product and sales data. "Getting the right medication in the right dose to the right patient at the right time is critical," says George Piltz, the hospital's director of Pharmaceutical Services. "It is time for health care to broaden its use of this technology, especially in the interest of safe medication handling."

Anthony Costabile, vice president for Professional Services, agrees. "We decided that to stay at the leading edge of patient care—and, more importantly, patient safety—we needed a bar-code-based system," he says.

Saint Peter's rolled out the first phase of the new system by installing a robot in its pharmacy in 2001. ROBOT-Rx, developed by the McKesson Corporation, is a state-of-the-art device that connects to patient information and medication needs through the hospital's computer system. With 100 percent accuracy, it dispenses each patient's prescriptions in sealed plastic packets marked with bar codes.

Saint Peter's then installed McKesson's Acu-

ABOVE: An integrated system uses robotic technology to get the right medications to patients, says George Piltz, Saint Peter's director of Pharmaceutical Services.

Dose-Rx automated dispensing cabinets on patient floors in 2005. Medications are stored in the AcuDose's locked drawers and can be accessed by a nurse through a touch screen.

The system also alerts staff to potential drug interactions and medication allergies, and speeds communication among physicians, nurses and pharmacists on other changes in medication profiles.

Since Saint Peter's switched to the automated system, Piltz reports, nurses have been able to devote less attention to gathering medications and more to caring for patients. And pharmacists have been freed to do what they are trained to do: optimize drug therapy.

"Now that the robot picks the orders, we have more time to review patients' profiles and work more closely with doctors, which means we're responding to patients' needs more quickly," says Piltz.

The technology now in place is a springboard for the near future, when bar-coded wristbands will directly link to patients' medication needs and further ensure patient safety. "Our ultimate goal is to bring bar-code technology directly to the bedside," says Piltz. ■