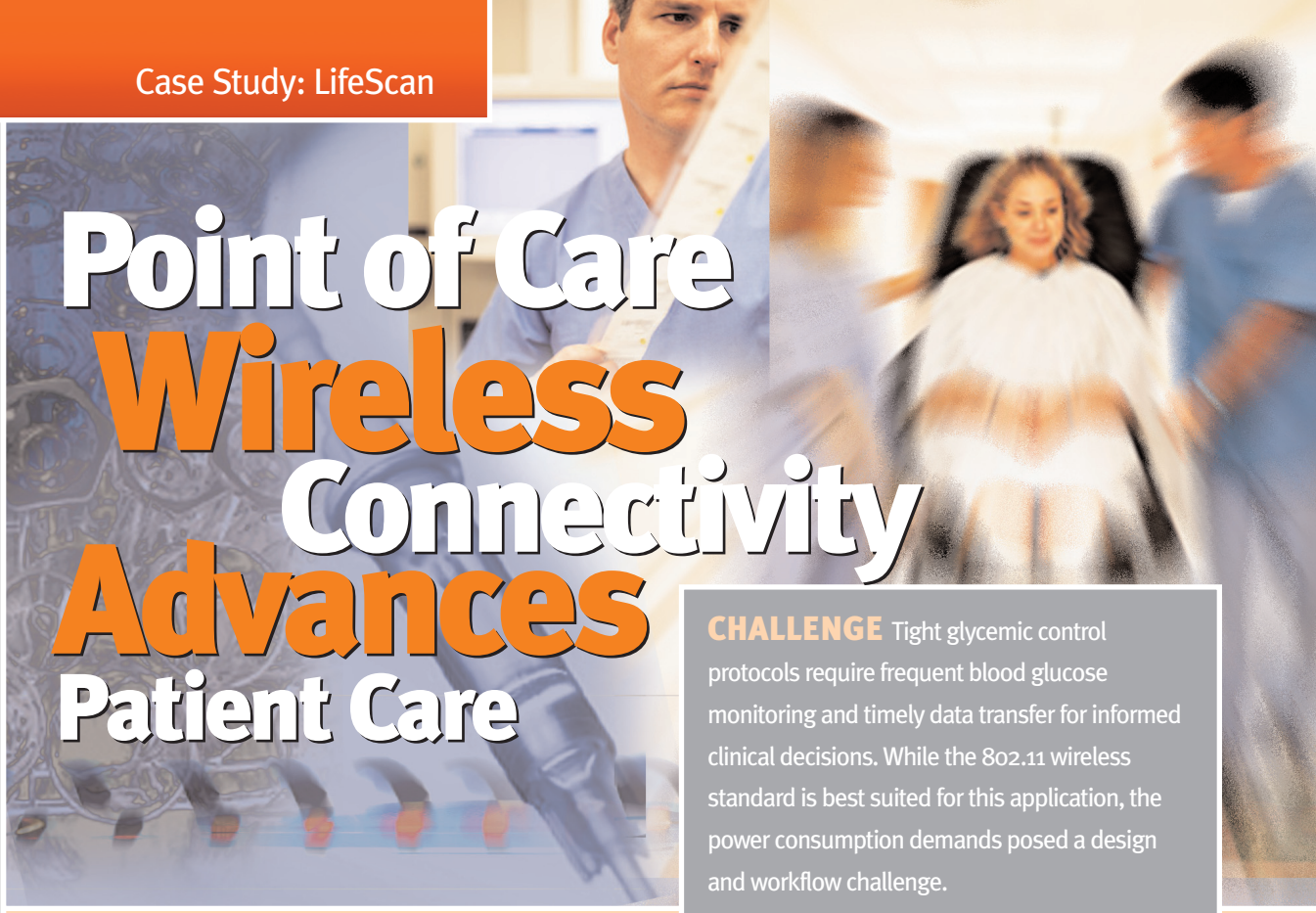

Point of Care Wireless Connectivity Advances Patient Care

"Lantronix wireless technology enabled us to bring this revolutionary product to market quickly so we can provide healthcare professionals a mobile, real-time testing and reporting tool to improve the quality of patient care."

– Paul Hausman, Senior Marketing Manager, LifeScan

CHALLENGE Tight glycemic control protocols require frequent blood glucose monitoring and timely data transfer for informed clinical decisions. While the 802.11 wireless standard is best suited for this application, the power consumption demands posed a design and workflow challenge.

SOLUTION LifeScan partnered with Lantronix to integrate a custom-developed, battery-powered version of the company's WiBox® technology, to deliver a cost-effective, scalable wireless solution for Point of Care glucose monitoring.

BENEFIT Lantronix provided the necessary security and flexibility to wirelessly network LifeScan's devices for real-time data reporting and result transfer. Patients received more frequent monitoring, leading to an improved level of care, meet quality control policies and regulatory compliance standards.

LIFESCAN IS A LEADING MAKER OF BLOOD GLUCOSE monitoring systems for home and hospital use. Through its comprehensive line of Integrated Intelligence℠ tools and processes, the company strives to improve and refine the process of capturing, transforming and applying information to enhance clinical decisions. LifeScan is also a leading proponent of tight glycemic control, a medical practice with the potential to save both lives and money. Its innovative TGC™ Program has helped hundreds of hospitals adopt and implement these lifesaving protocols within their institutions.

The Situation: Battery-Powered Network Connection Needed for Point-of-Care Data Management

Tight glycemic control is the practice of maintaining patients' blood glucose levels within a very narrow range (generally 80–120 mg/dL), which has been shown to reduce mortality and morbidity among critically ill patients.

However, this presents a logistical challenge because of the frequency at which blood glucose testing must be performed. Expecting nurses to test and download data from multiple patients 11 or 12 times a day places a tremendous burden on the staff. Data transfer delays can slow reaction to quality control problems or result in delayed charting and cost capture. To improve operational efficiencies, healthcare institutions are now requiring information faster, if not in real time.

To address these issues, LifeScan considered the need for operators to download data instantly to a

LIFESCAN
a Johnson & Johnson company

A custom battery-powered version of the WiBox® is integrated into the LifeScan OneTouch® DataLink® Unit.

central database from various locations, so it could be accessed and transformed into actionable knowledge. LifeScan looked for a solution that would provide them this functionality into its OneTouch® DataLink® Data Management System quickly and easily. Their ideal solution – a small, wireless, scalable device that could integrate into their existing product suite and connectivity solutions.

The Solution: A Custom Product Developed From Lantronix WiBox Technology and Intended for Battery-Powered Use

LifeScan turned to Lantronix, which has nearly 20 years of device networking experience. Based on its proven WiBox wireless device server, Lantronix helped speed LifeScan's time-to-market by developing a small, battery-operated unit specifically designed to meet the mobility requirements of the point-of-care environment.

After performing a blood glucose test, the unit wirelessly transmits the results from its point-of-service meters, then powers down to save battery life. This feature is especially important because of the need to perform many tests in a single day combined with the large power draw required by the 802.11 wireless standard. LifeScan named the new product the OneTouch® DataLink® Wireless Unit.

In addition to providing the necessary mobility and battery life preservation, the OneTouch® DataLink® Wireless Unit eliminates the cost and time involved in creating secure wired network links between devices.

The Result: Greater Flexibility of Data Management for More Effective and Cost-Efficient Patient Care

Equipped with Lantronix technology, the OneTouch® Flexx™ Meter and OneTouch® DataLink® offer additional flexibility to customize glucose testing for individual locations. The most significant benefit of incorporating Lantronix technology is the ability to provide better patient care. The more frequent testing of blood glucose levels allows for better monitoring of patient health status, which is key to successful tight glycemic control implementation. In addition, data is transferred to their end location more quickly, making information available in real time and solving quality issues for the hospital. Nurses are also more mobile and free to perform other tasks and spend more time with each patient.

This added flexibility also helps institutions adhere to quality-control policies and JCAHO-compliance standards. In the case of tight glycemic control, a network at the point of care can make it much more efficient to manage protocols.

Hospitals will optimize their current investment, as the new network-enabled OneTouch® DataLink® Wireless Unit is backward-compatible and works with their existing glucose meters. The mobility of the technology also allows institutions to purchase only the systems they need, helping streamline costs. The reliable OneTouch® Flexx™ Meter also reduces the risk of lost data. And because of its benefits, it has shown increased adoption among physicians and staff.

The first healthcare provider to implement the OneTouch® DataLink® Data Management System in its five acute care hospitals in New England will be Lifespan.

LANTRONIX®

Network anything. Network everything.

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