

## Barcode solution for hospital care

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Driven by rising incomes and the prevalence of chronic diseases, hospital revenues in the Asia-Pacific region will climb to USD1.09 trillion by 2017 from USD377.9 billion last year, according a report by Frost & Sullivan.

To tackle this demand, the analysts also note that healthcare expenditure in the Asia Pacific will grow at a compound annual growth rate of 12.8 percent, almost double in the next six years.

Driving this growth is the rise of the Asian middle class and their increasing demand for healthcare solutions, notes medical

device consultant, Pacific Bridge, who quotes a recent study by the Organisation for Economic Co-operation and Development (OECD) which projects that Asia's rising middle class will increase consumer spending in Asia from USD4.9 trillion in 2009 to more than USD30 trillion in 2020. As Asian populations become wealthier, the healthcare sector in Asia will continue its strong growth. The Economist estimates that healthcare spending in Asia has risen from 14 percent of the global total in 2006 to 23 percent in 2012.

In the rapidly growing Asia-Pacific healthcare market, reputation is key as consumers exercise choice in where to go or make their voice heard. Patient safety remains a serious global public health issue. Healthcare organizations are continuing to turn to technology to improve quality of care for patients, and Frost & Sullivan note that private and public hospitals will invest extensively in installing, maintaining and upgrading IT capabilities to increase operational efficiency, clinical outcomes and financial profitability.

When considering technology deployment in the healthcare space, service providers should look into solutions that seamlessly integrate into existing healthcare systems and give a virtual voice to patients, clinicians and assets to improve visibility into patient information and status. Technology can also guide busy staff on the correct course of action, thereby greatly improving safety and quality of care. Some underserved areas of care to consider are:

### **Starting Right with Admissions**

Many healthcare providers, particularly public hospitals and clinics, often handle large amounts of patient cases every day. As patient volume rises, hospitals are increasingly faced with the challenge of ensuring that they continue to deliver safe and efficient patient care. It is specifically in situations like this where solutions like patient wristbands can help. In busy emergency rooms or even for scheduled surgeries, patients should be provided with barcoded, antimicrobial-coated, long-lasting wristbands so that they can be accurately identified throughout their hospital stay. During disaster recovery situations, a hospital or onsite temporary facility can quickly and also accurately identify, track, and secure personnel, victims, and assets by providing patients with wristbands, allowing for quick reunification with loved ones. Wristband print solutions have evolved rapidly and have become the most effective way to enable immediate and accurate access to critical patient information at the bedside and across various departments.

### **Eliminate Identification Errors**

According to the College of American Pathologists, specimen labeling errors account for more than 55.5 percent of identification errors every year. Identification errors such as the switching, mislabeling, or incorrect display of test specimens or results are the leading cause of wrong site surgery. To dramatically reduce errors, many hospitals have chosen to bring barcoding to the point of care. Providing barcoded identification to caregivers, specimen takers, medication providers and even nutrition providers not only prevents identification errors, it also enables a valid and easily traceable electronic trail in the event of issues arising. Using barcoding for identification and verification at the bedside reduces the number of errors quickly and easily. Later in the laboratory, those barcodes can be scanned to record transfers and create accurate test result entries. Beyond point of care clarity, eliminating manual data entry also drastically eliminates errors, cuts costs and saves time.

### **Right Medication To the Right Person At the Right Time**

In hospital pharmacies, barcode solutions allow hospitals to add variable data to every drug at the unit-dose level. These barcode labels are scanned immediately to verify and record medication dispensing, as well as check patient identification against the prescription order to ensure the correct medication in the correct dosage is administered to the correct patient. This not only protects patients, but also streamlines patient record processes. Such barcode solutions also directly address drug theft which is also on the increase. Some facilities have even deployed tamper resistant desktop printers with special prescription paper to ensure the protection and proper dispensation of drugs.

Simple but thorough deployments of the solutions discussed above assist in implementing closed-loop practices by using barcode technologies at the patient's bedside and linking critical patient information to medical records across hospital departments. Solutions such as these can also help ease compliance with regulatory requirements, such as electronic health records.

With rising demand and growing patient volume outpacing the increase in healthcare resources, healthcare administrators should consider the use of technology across the facility to ensure the creation of efficiencies and clarity, which, in turn enable their staff to provide proper care.