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For Immediate Release

NEWS RELEASE

CGH and TTSH Win Top Asia Pacific Award For Automatic Patient Vital Signs Recording and Medication Management With QR Code

Singapore, October 21, 2013 – Changi General Hospital, Tan Tock Seng Hospital and IHiS, the Health Ministry’s IT arm, today won two HIMSS Elsevier awards for outstanding achievement in health IT.

Tan Tock Seng Hospital (TTSH) and IHiS clinched the Asia Pacific award for their SmartSense system which continuously monitors patients’ temperatures and wirelessly records their vital signs. Changi General Hospital (CGH) and IHiS won the award for their medication management system which uses Quick Response (QR) codes.

**Automatic Vital Signs Recording**

TTSH is one of the first hospitals in Southeast Asia to continuously monitor its patients’ temperatures and wirelessly upload their vital signs data into its medical records system.

IHiS has rolled out the SmartSense system at all TTSH general wards to benefit over 1,400 patients daily.

The SmartSense RFID tag attached to the patient continually records his temperature, so nurses no longer need to wake him to check his temperature.

A bedside tablet records his pulse, blood pressure, and oxygen readings, and wirelessly uploads them to the hospital’s electronic medical records.

Doctors and nurses can instantly view online the patient’s latest vital signs to provide timely treatment.

The RFID tag also tracks patients’ locations, enabling staff to better manage infection control during pandemics. It also protects nurses’ safety as there is minimal patient contact for temperature recording. TTSH, with its Communicable Diseases Centre, is a key hub in Singapore’s infectious disease control.
TTSH’s Director of Nursing, Mr Yong Keng Kwang, said: “SmartSense has revolutionised the way our nurses work. They can now spend more time on direct patient care. With the system, we are today better equipped to manage pandemics”.

IHiS CEO, Dr Chong Yoke Sin, said: “The system is a first in Southeast Asia in functionality and peripheral interfacing. There are plans to integrate SmartSense with other clinical charting applications”.

SmartSense system increases patient safety by minimising human errors in vital signs recording. It also improves nurses’ productivity by reducing time spent measuring vital signs and locating patients to provide treatment.

The location tracking feature also helps staff improve bed management to maximise the number of patients the hospital can admit. When a patient is discharged, housekeeping and bed-management units are alerted immediately, and the bed is cleaned within 30 minutes for the next patient.

**Medication Management With QR Code**

CGH’s Closed Loop Medication Management (CLMM) system with QR code uses IT to improve patient safety.

At key points in the medication process, QR codes are used instead of conventional barcodes to match and verify the doctors’ prescriptions, drugs and patient data.

Eastern Health Alliance Group CEO, Mr TK Udairam, said: “The Closed Loop Medication Management system with QR code enables us to deliver safer care through the administration of the right drugs and right dosage to the right patient at the right time.

“It has also substantially increased productivity and staff satisfaction by improving inventory management and enabling our healthcare professionals such as nurses more time for direct patient care”

IHiS CEO, Dr Chong Yoke Sin, said: “CGH is one of the first in Southeast Asia to use QR code technology for medication management. QR codes can contain more information, and thus provide more checks for the medication process”.

QR codes can hold several hundred times more data than conventional barcodes. They can also be scanned from any angle, and be printed on very narrow spaces.
The CLMM system relieves nurses of administrative work in the medication process, improving their productivity.

Pharmacy staff are able to view real-time drug consumption levels, and thus stock only what is needed.

With the system, CGH expects to reduce by half potential errors in medicine supply, and achieve 30 per cent cost savings in drug inventory.

Data from the system also provides quality information for clinical analytics to improve patient outcomes.

In the CLMM system, doctors enter prescriptions directly into the electronic medical records system. Pharmacists review the prescriptions online, and then send them to robot packaging machines.

The robots automatically dispense the unit dose medication with QR code. This eliminates human errors in drug dispensing.

At the wards, before serving medicine to the patient, the nurse scans the QR code on the patient’s wristband and on the drugs to ensure they match.

Chinese Names

Tan Tock Seng Hospital, Director of Nursing Service, Mr Yong Keng Kwang 陈笃生医院，护理行政管理部主任，杨庆光

Eastern Health Alliance, Group CEO, Mr TK Udairam 东部医疗联盟，集团行政总裁，尤戴岗

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The news release is jointly issued by Tan Tock Seng Hospital (TTSH), Changi General Hospital (CGH) and Integrated Health Information Systems (IHiS).

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About Tan Tock Seng Hospital (TTSH)

TTSH is one of Singapore’s largest multi-disciplinary hospitals with more than 160 years of pioneering medical care and development. The hospital has 36 clinical and allied health departments, 15 specialist centres and is powered by more than 6,000 healthcare staff.

TTSH sees over 2,000 patients at its specialist clinics and some 460 patients at its emergency department every day. TTSH is part of the National Healthcare Group, providing holistic and integrated patient care. With a strong quality culture steeped in patient safety, TTSH constantly challenges itself to provide faster, better, cheaper and safer care for patients.

To achieve this, the hospital keeps abreast and believes in investing in its staff, facilities, medical technology and system improvements. In recognition of its commitment to excellent patient care and its comprehensive range of quality healthcare services, TTSH has been awarded the ISO 9001 certification and the prestigious Joint Commission International (JCI) accreditation. www.ttsh.com.sg

About Changi General Hospital (CGH)

CGH is a 790-bed hospital in the east recognised for its excellence and compassion in service and patient care. CGH offers a comprehensive range of medical specialties and services, helmed by a highly experienced team of healthcare professionals.

CGH has established itself as a centre of medical excellence with services such as the Integrated Sleep Service, Breast Centre @ Changi, Hepatobiliary Service, Vascular Surgery, Gastroenterology, Endocrinology and the Changi Sports Medicine Centre.

To improve care for patients, CGH has adopted a proactive integrated care approach. Partnering healthcare providers in the east through the Eastern Health Alliance and innovating by adopting new medical technologies and systems, CGH aims to deliver better, seamless and integrated medical services. CGH has been JCI (Joint Commission International) accredited since 2005. www.cgh.com.sg
About Integrated Health Information Systems (IHiS)

IHiS is a healthcare-IT leader, transforming patient care through excellence in technology. Managing highly integrated systems across Singapore’s public healthcare sector, its IT professionals support more than 30,000 healthcare staff at all public hospitals, national specialty centres and polyclinics.

IHiS architects and oversees the performance of the clinical, business and healthcare analytics systems of the healthcare institutions. It played a key role in five Singapore hospitals becoming among the first public institutions in the Asia Pacific region to achieve HIMSS EMRAM Stage 6, an international benchmark for advanced technology used in patient care.

IHiS is at the forefront of innovation, driving new standards in quality care. [www.ihis.com.sg](http://www.ihis.com.sg)