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NEWS RELEASE

New Medication Management System at Public Hospitals Wins Top Regional IT Award

*Revolutionary system at KKH, NUH, TTSH improves patient care and healthcare staff’s efficiency, and will be rolled out at all public hospitals.*

**Singapore Mar 9, 2012** - A new medication management system at three public hospitals has improved patient care and healthcare staff’s efficiency, even while the hospitals are handling increasing patient volumes.

At KK Women’s and Children’s Hospital, National University Hospital and Tan Tock Seng Hospital, the Closed Loop Medication Management (CLMM) system has revolutionised the medication administration process, from the way doctors make prescriptions to how medicine is served to patients.

For instance, a nurse would scan the barcodes on the patient’s wristband and medication before giving him medicine, to confirm the right drug and dosage. Doctors enter prescriptions into computers instead of writing them, and robot machines, instead of pharmacists, dispense medicine.

Integrated Health Information Systems (IHiS) today received the CIO Award, a top regional IT recognition, for implementing the CLMM system at the three hospitals. An MOH subsidiary, IHiS develops and manages the IT systems at all public hospitals.

The annual CIO Awards at Marriott Hotel was organised by CIO Asia magazine.

IHiS’ Chief Executive Officer, Dr Chong Yoke Sin, said: “Studies at the three hospitals show that the CLMM system has been very effective in helping healthcare staff avert potential drug allergies or incorrect medication servings.

“The system’s increased automation has also improved healthcare staff’s productivity, giving them more time for direct patient care.
“Following the tangible benefits at the three hospitals, we are now working to implement the CLMM system at all the other public hospitals.

“Going forward, the system’s automated medication dispensing machines can also be used to pack medicine for patients at nursing homes and community hospitals, and for outpatients with chronic diseases at hospital specialist clinics.

“The CLMM system also provides a wealth of data that can be analysed to further improve patient outcomes.”

Regional Leaders

Dr Chong added: “Today, the CLMM system benchmarks KKH, NUH and TTSH as regional leaders in healthcare-IT. Few hospitals worldwide have achieved full implementation of CLMM as it involves the challenge of changing the way healthcare staff work.

“To drive the system implementation, IHiS harnessed the commitment of the hospitals’ leadership and staff to work together to achieve the best possible patient outcomes. We also rolled out the system in stages at NUH, then TTSH and KKH. As a result, implementation at the latter hospitals was faster, and healthcare staff were encouraged by the benefits at the earlier hospitals.”

Revolutionary Processes

With the CLMM system, doctors enter prescriptions directly into the hospitals’ electronic medical records system via their computers. A decision support program prompts them with relevant drug information for the medication orders.

Pharmacists receive online doctors’ prescriptions for review, and no longer need to decipher doctors’ handwriting. They then send the orders to a robot machine which automatically dispenses the patients’ medication in unit-dose sachets that are barcoded with the patients’ data.

To access the medication, nurses enter the patients’ details into ‘intelligent cabinets’, which emit guiding lights to help them quickly pick up the right drugs. This removes the need for pharmacists and nurses to dispense tablets, and thus potential human errors.
Improved Care

Data collected from the CLMM system at KKH, NUH and TTSH show that it has alerted several doctors to recheck their prescriptions for potential drug allergies. As a result, cases of drug allergies have significantly dropped.

A nursing survey at NUH showed that 89 per cent of nurses feel the ‘intelligent cabinets’ have enhanced patient safety, and 98 per cent feel the cabinets’ light guided function has made it easier for them to locate medication accurately and quickly.

Higher Staff Productivity

With doctors entering prescriptions into computers, pharmacists at NUH and TTSH are able to do nine times more timely drug reviews.

At KKH, the turnaround time for pharmacists' review of prescriptions has dropped from 51 to seven minutes. This has enabled most medication orders today to be reviewed by the pharmacists before administration.

At the wards, the ‘intelligent cabinets’ supply 85 per cent of patients’ medication, compared to 75 per cent before automation. This lowers risks of late medication servings. Urgent phone calls and paperwork for medication between the wards and pharmacies have also been substantially reduced, leading to manpower savings.

The automatic processes have also saved nurses about 30 minutes per medication administration session, or 90 minutes daily per ward. This gives nurses more time for direct patient care, improving care quality.

There is also less medication wastage, as pharmacy staff can view the system for real-time consumption levels, and stock only what is needed. Unconsumed drugs, still in their packaging, can be returned to the pharmacy.

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About Integrated Health Information Systems (IHiS)

IHiS is a healthcare-IT leader, transforming patient care through excellence in technology. Managing highly integrated systems and IT expertise across Singapore’s public healthcare sector, its over 700 professionals support more than 30,000 healthcare users 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 four Singapore hospitals becoming the first public institutions in Asia Pacific to achieve HIMSS EMR Stage 6, an international benchmark for advanced technology used to in patient-care.

A subsidiary of MOH, IHiS is at the forefront of innovation, driving new standards in quality care.

www.ihis.com.sg

About KK Women’s And Children’s Hospital (KKH)

KK Women’s and Children’s Hospital (KKH) is a regional leader in Obstetrics, Gynaecology, Paediatrics and Neonatology. The 830-bed JCI accredited hospital is a referral centre providing tertiary services to manage complex conditions in women and children. More than 400 specialists adopt a multi-disciplinary and holistic approach to treatment, and harness the latest innovations and technology for the best medical care possible.

As an academic healthcare institution, the Hospital is a major teaching hospital for Duke-NUS Graduate Medical School as well as Yong Loo Lin School of Medicine. KKH also runs the largest specialist training programme for Obstetrics and Gynaecology in Singapore as well as a highly rated Paediatric Residency Programme accredited by Accreditation Council for Graduate Medical Education International (ACGME-I). For more information, please visit www.kkh.com.sg.

About National University Hospital (NUH)

NUH is a tertiary specialist hospital and major referral centre for a wide range of medical, surgical and dental specialties including Cardiology, Gastroenterology and Hepatology, Obstetrics and Gynaecology, Oncology, Ophthalmology, Paediatrics and Orthopaedic Surgery. With combined resources from the NUS Yong Loo Lin School of Medicine and Faculty of Dentistry, and as a member of the National University Health System, NUH is poised to meet the healthcare needs of patients, train future generations of doctors more effectively, and help develop solutions to healthcare problems through research.

NUH was the first Singapore hospital to receive the Joint Commission International (JCI) accreditation, an international stamp for excellent clinical practices in patient care and safety. In 2007, NUH was chosen by the Singapore Ministry of Health to develop two new national specialist centres, National University Heart Centre and National University Cancer Institute to meet the growing needs for cardiac and cancer treatments. For more information, please visit www.nuh.com.sg.

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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 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 prestigious Joint Commission International (JCI) accreditation. For more information, please visit www.ttsh.com.sg or follow us at TTSH.fbadd.me.

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