Seven health IT projects across Asia Pacific presented with the inaugural HIMSS-Elsevier Digital Healthcare Award

21 October, 2013, Singapore: During the first-ever Digital Healthcare Week, HIMSS and Elsevier presented seven HIMSS-Elsevier Digital Healthcare Awards at a gala dinner in Marina Bay Sands, Singapore. The award was established to honor organisations for outstanding achievements in the implementation and usage of health information and technology to successfully improve quality of care and patient safety.

For the inaugural award, public and private healthcare providers in Asia Pacific were encouraged to submit their projects that showcased health IT advancement. The entries were then evaluated and selected by a nominated committee.

Of all the entries received, the organisations demonstrating the best use of technology in health and patient care, are: (in alphabetical order):

1. Apollo Hospitals Enterprise Ltd (India): Patient Engagement Platform (PEP) - Apollo Prism
2. Changi General Hospital & Integrated Health Information Systems (Singapore): Closed Loop Medication Management System (with QR coded sachets)
3. Prince of Wales Hospital, The Chinese University of Hong Kong (Hong Kong): Security-Enhanced Mobile Imaging Distribution System (SEMIDS)
4. Seoul National University Bundang Hospital (Korea): n-Device strategy in the hospital environment to improve care coordination and empower patient engagement
5. Seoul National University Bundang Hospital (Korea): Next generation Hospital Information System (HIS) focusing on innovative user experience
6. Shanghai East Hospital, affiliated to Tongji University (China): Clinical Pathway Information Management System (CPIS)
7. Tan Tock Seng Hospital & Integrated Health Information Systems (Singapore): SmartSense System

Descriptions of winning projects, evaluation method and the jury panel can be found in the appendix attached.

“We would like to congratulate all HIMSS-Elsevier Digital Healthcare Awards winners. We received nominations from across the Asia Pacific region such as China, Hong Kong, India, Korea and Singapore. The winners have demonstrated superior implementation and utilization of health IT systems that have directly resulted in organization-wide advancements in patient care and operational efficiencies. We hope that their projects will inspire a new wave of IT advancement in the healthcare delivery,” said Steven Yeo, Vice President & Executive Director, HIMSS Asia Pacific, General Manager, HIMSS Analytics Asia Pacific & Middle East.
“It is exciting and encouraging to witness how the Asia Pacific healthcare industry is embracing the transformational role of technology to harness the power of medical information. The organisations recognised for the HIMSS-Elsevier Digital Healthcare Award have demonstrated how technology adoption can achieve efficiencies and improve quality of care. It is for this very reason that Elsevier is proud to support and celebrate this innovative spirit of the community,” said Gerrit Bos, Managing Director APAC, Elsevier.

For media enquiries and interviews, please contact Jasmine Chng, ichng@waggenerstrom.com, +65 6303 8474

**About HIMSS**

HIMSS is a cause-based, not-for-profit organisation exclusively focused on providing global leadership for the optimal use of information technology (IT) and management systems for the betterment of healthcare. Founded 51 years ago, HIMSS and its related organisations are headquartered in Chicago with additional offices in the United States, Europe and Asia. HIMSS represents more than 52,000 individual members, of which more than two thirds work in healthcare provider, governmental and not-for-profit organisations.

HIMSS also includes over 600 corporate members and more than 250 not-for-profit organisations that share our mission of transforming healthcare through the effective use of information technology and management systems. HIMSS frames and leads healthcare practices and public policy through its content expertise, professional development, research initiatives, and media vehicles designed to promote information and management systems’ contributions to improving the quality, safety, access, and cost-effectiveness of patient care.

To learn more about HIMSS and to find out how to join us and our members in advancing our cause, please visit our website at [www.himssasiapac.org](http://www.himssasiapac.org)

For more information about the HIMSS-Elsevier Digital Health Award, please visit: [http://www.himssasiapac.org/dhw13/award/about.aspx](http://www.himssasiapac.org/dhw13/award/about.aspx)

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Appendix: HIMSS-Elsevier Digital Award
2013

Evaluation process

Each nominee was required to submit a self-assessment case study which describes the problem and challenges being addressed and intended improvement, the design and implementation of the project, the financial considerations, the derived outcome and lessons learnt.

Jury panel

Entries were evaluated by the HIMSS-Elsevier Award Committee which included:
- John Hoyt, executive vice president, HIMSS Analytics
- Dr. Lalit Singh, physician executive, Elsevier
- Professor Steven C. Boyages, clinical professor, The University of Sydney, Australia
- Joystna Chikersal, regional advisor, World Health Organization

HIMSS-Elsevier Digital Award Winners 2013 (in alphabetical order)

1. **Apollo Hospitals Enterprise Ltd**  
   Country: India  
   Project: Apollo Prism, a Patient Engagement Platform (PEP)

**Description**

Lack of a patient-oriented Health IT system has led to lack of transparency, higher cost of care and non-scalable care delivery models. To address the issue, Apollo’s Patient Engagement Platform (PEP), Apollo Prism, contains health information of the patients to enable seamless patient interactions via a single platform. Apollo Prism, accessible via web and mobile, utilises the Hospital Information Systems to feed and compile data during the patient care process. Apollo PRISM is used by two-and-a-half million patients and connects to 30 hospitals and 80 clinics in India.

With patient centricity at the core, Apollo Hospitals has continuously focused on initiatives that provide superior patient care and comfort. The Apollo Prism initiative resonates perfectly with Apollo Hospitals’ ethos and helps in providing patients with secure and convenient access to their medical information, irrespective of their location across the world. Apollo Prism showed that a robust medical record will encourage individuals to stay more engaged with their health and in turn, enhance clinical outcomes and reduce unnecessary costs.
2. **Changi General Hospital & Integrated Health Information Systems**  
   Country: Singapore  
   Project: Closed Loop Medication Management System (with QR coded sachets)

**Description**  
Medication used in inpatient settings involves a complex series of inter-related processes involving order, review, supply and administration of medication. The Closed Loop Medication Management (CLMM) system with QR barcode medication verification at point-of-care eliminates the risk of incorrect medication serving, as it blocks medication administration that does not match the doctor’s prescription. The system also improves the efficiency of healthcare staff, giving them more time for quality patient care. Data from the system also provides clinical analytics to improve patient outcomes.

The CLMM system with QR code enables Changi General Hospital to deliver safer care through the administration of the correct drugs and dosage to the right patient at the appropriate time. It has also substantially increased productivity and staff satisfaction by improving inventory management and enabling nurses with more time for direct patient care. Changi General Hospital is the first in Southeast Asia to use QR barcode technology for CLMM.

3. **Prince of Wales Hospital, The Chinese University of Hong Kong**  
   Country: Hong Kong  
   Project: Security-Enhanced Mobile Imaging Distribution System (SEMIDS)

**Description**  
Stroke is the leading cause of disability and death. Although thrombolysis (treatment to dissolve blood clots that may lead to stroke) is a well-established effective treatment, unfortunately due to the shortage of neurologists, thrombolysis is not available during non-working hours in most hospitals in Hong Kong, which has led to medico-legal consequences. To improve the service gap, a software: Security-Enhanced Mobile Imaging Distribution System (SEMIDS) was developed. SEMIDS is a unique telestroke model (telemedicine for stroke care) to facilitate thrombolysis during non-working hours through remote real-time patient assessment (with videoconference), medical record review and CT brain image interpretation (with teleradiology) by off-site neurologists. Thrombolysis rate was increased by 3.5-fold, which translates to 10-day shorter hospital stay per treated patient.

Telestroke with SEMIDS has a major impact in emergency stroke care in Hong Kong. While advances in IT always exceed that of manpower growth, health IT improves efficiency of health care services by removing all geographical barriers and access blocks.
4. **Seoul National University Bundang Hospital**  
   Country: Korea  
   Project: n-Device Strategy in the hospital environment to improve care coordination and empower patient engagement  

**Description**  
To address the issues involved in effectively operating and maintaining the hospital information system (HIS), accessibility to hospital's medical information in a timely manner, and empowering patients to take charge of their health, the multi device strategy, n-Device, was established. n-Device consists of five components: 1) A cloud-based virtual desktop infrastructure that allows HIS applications to be accessed from all computing devices, 2) a mobile electronic medical record/ picture archiving and communication system accessible via smart phones and tablets, 3) a dashboard system using 55-inch touch screen monitors customized to wards, intensive care unit, and emergency room, 4) a patient education system to provide flash animation-based educational materials and 5) a personal health record system.

Used in hospitals, the n-Device Strategy will play a key role in improving patient safety, quality of care and increase efficiency. Additionally, it provides seamless access to patient information even outside the hospital, thereby enhancing patient satisfaction.

5. **Seoul National University Bundang Hospital**  
   Country: Korea  
   Project: Next generation Hospital Information System (HIS) focusing on innovative user experience  

**Description**  
Seoul National University Bundang Hospital (SNUBH) is the first hospital in the Asia Pacific to reach Stage 7 (the highest level) on the HIMSS EMR Adoption Model, SNUBH developed the next generation Hospital Information System (HIS) using the latest ICT such as rich client user interface platform, innovative user experience design and unified communication. The next generation HIS can process various and complex medical and patient information so that healthcare staff can effectively utilize the information and quickly make their decisions, improving patient safety and quality of care.

Hospital staff also led and contributed to the development of the next generation HIS, sharing on the ground knowledge and experience. The success of the next generation HIS was made possible with the collaboration of various teams working on different aspects of the platform.
6. **Shanghai East Hospital (affiliated to Tongji University)**  
Country: China  
Project: Clinical Pathway Information Management System (CPIS)

Due to limitations of the existing paper-based clinical pathway management system, the hospital decided to migrate and transit to an electronic Clinical Pathway Information System (CPIS) to improve operational and clinical metrics along with a Clinical Pathway Analytical system (CPAS) to perform statistical manoeuvring.

CPIS is able to detect and analyze variances in input to treatment processes and can notify when deviations occur. In addition, CPIS also allows for discontinuation in cases where patients are unsuitable to be further treated under CPIS guidelines. CPIS is now used in 37 clinical departments and covered 150 disease types as of 2013. The system has successfully decreased average medical costs per patient by 5 per cent.

7. **Tan Tock Seng Hospital & Integrated Health Information Systems**  
Country: Singapore  
Project: SmartSense System

Public hospitals, with the limited pool of skilled healthcare staff in the country, are already functioning at full capacity. SmartSense aims to address Tan Tock Seng Hospital (TTSH)’s increasing patient volumes due to Singapore’s rapidly ageing population. SmartSense system does real-time patient location tracking, non-invasive 24/7 automated temperature capturing and electronic charting under one platform. The information is then uploaded wirelessly onto an electronic chart. This solution minimises human errors and increases patient safety. It also saves nurses’ time for direct patient care, improving care quality. The location tracking facilitates better capacity and bed management.

SmartSense is a first in Southeast Asia in functionality and peripheral interfacing. It has revolutionized the way nurses work as they spend more time on direct patient care. With the system, TTSH is better equipped to manage pandemics. There are plans to integrate SmartSense with other clinical charting applications.