Experiences and challenges in Asia

Introduction
The full capacity of information technology (IT) in supporting service delivery and patient care is yet to be fully explored. This conference highlighted the fact that while health workers and their organisations may be separated by many kilometres and different languages, the experiences and challenges they confront are often similar.

Approximately sixty delegates from countries including Malaysia, Singapore, India, Indonesia, China, Thailand, Hong Kong, and Australia attended the conference, and we learned from each other’s experiences with IT. Many delegates were from hospitals in the process of identifying the ‘best’ patient information system to implement; others came from the private hospital sector and also faced the challenge of improving ‘cash flow’ by ensuring the provision of information to health insurers in a timely manner.

Health IT and its implementation
On day one, sessions focused on an introduction to IT in health, and on implementation issues. Upon hearing the speakers’ experiences and lessons learned, it was frightening to think that they could have been presenting a case study of one of many IT projects that have been undertaken within the Australian health industry.

Lessons learned from experience
The following are examples of the several consistent themes described by presenters concerning lessons learned from experiences in health IT implementation. First, planning is crucial. Hospitals must develop a strategic plan and a ‘road map’ on how to deliver high quality services. Suggestions for achieving this included spending 80% of the time on planning and 20% of the time on implementation. Second, the move towards data consolidation and central storage, along with integrated information systems, was frequently mentioned. It is also important to:

- start on a small scale to build up confidence in staff about the project and processes
- use the ‘junior’ staff to take the main responsibility for the use of the system, as they tend to be more IT literate
- obtain the advice of experts to assist in the correct use of the system and implement processes
- nurture a work culture that uses IT
- manage people’s expectations
- address risk management issues
- begin with an end in mind, for example, to develop measurable KPIs (key performance indicators) that can indicate the success factors of the project.

Many of the presenters’ experiences reinforced the importance of implementing appropriate formal project management methodologies and realistic deliverables associated with IT projects.

Case study: Hong Kong
A case study presented by Dr. N.T. Cheung, Executive Manager, Hospital Authority in Hong Kong, demonstrated how economies of scale can be obtained when implementing large scale projects. With only 1.3% of the total budget being used over 10 years, the Hong Kong government was able to build and implement a patient management system that has been implemented across the country. This system has been implemented in an environment where there are:

- 29 000 beds
- 10 000 workstations
- 30 000 data points
- 2 data centres
- 2 WANs (Wide Area Networks).

This tool enables clinicians to complete their own ICD-9 coding via tick boxes and to run reports via the same mechanism. The system has been integrated with public pathology laboratories to enable quick retrieval of patient investigations.

A Hong Kong pilot project was also implemented for a trial of wireless software for key clinicians; however, the trial was stopped as the software and hardware were not sufficiently sophisticated to support the needs of the clinicians.

Health in IT issues
Day two of the conference was focused on general ‘IT in health’ issues and advanced IT in health. Speakers explained applications of IT in their organisations, and many reinforced the importance of managing the issues that were identified through experiences of the speakers from the previous day.

Thailand: a paperless health information system
Curt Schroeder, Chief Executive Officer of the Bumrungrad Hospital in Thailand, provided some insight into...
the experiences of a private hospital that has implemented a paperless health information system. Bumrungrad Hospital, with 2500 employees, was the 'beta' test site for Global Care Solutions and in 1999 implemented an electronic health record for patients attending for treatment. Some of the system benefits included:

- reduced waiting time for clients
- an increase in patient satisfaction
- an increase in efficiencies in staffing and space utilisation
- improved cash flow.

The system has been designed to enable users to search for data on keywords that are used extensively throughout their quality improvement activities. It was recognised that not all clinicians are able to undertake direct data entry into the information system; therefore, a scanning process was established to enable the inclusion of these documents.

**Conclusion**

This conference touched on some aspects of IT projects in Asia similar to those of IT projects that have been implemented in hospitals across Australasia, and the lessons learnt from them. Many of these organisations continue to have a paper-based system; however, IT in health will become even more significant in the future.

On a personal note I would like to thank the HIMAA Board of Directors and the Marcus Evans team for providing me the opportunity to attend the conference. I felt extremely honoured and nervous to represent the profession and present among such experts. I would encourage other Health Information Managers to take up such opportunities in the future.

Nicole Ah Yick
Health Information Manager
NorthWestern Mental Health
Melbourne Health
The Royal Melbourne Hospital
Parkville Vic 3050
Australia
Lessons for Australia: patient access to records

In previous years, Australia has led the field in health information management with the introduction of IT solutions for patient administration, and other systems to cater for diagnostics, data collection, and reporting to national standards.

It was evident from the conference presentations and discussions with other delegates that our colleagues in Asian nations have grasped the concept of how appropriate IT solutions can be used to better manage scarce health dollars while achieving acceptable outcomes for patients. Asian healthcare and hospitals have seen substantial increases in expenditure allocated to introduce or upgrade IT solutions; the above-mentioned Bumrungrad Hospital in Thailand a prime example of this.

Australia needs to follow suit and allocate appropriate funding to allow the patient to become an integral part of the ‘loop’. Systems need to cater for patient access and interaction with health information, allowing their information to be shared electronically, on a timely basis, with GPs, hospitals, and health professionals involved in the continuum of care.

The conference provided numerous examples of how patients’ expectations of their level of care have increased since they have been able to access medical information via the internet. e-Health has improved patient education, allowing timely online access to medical, surgical, and drug information. It also allows patients to provide feedback to hospitals.

The pivotal part of any future direction for IT solutions was highlighted by Associate Professor Jeffrey Soar, University of Southern Queensland, in his workshop where he introduced the concept of m-Health. In his summation Dr Soar stated: ‘The most effective hardware interface for use by hospital doctors and other mobile clinicians is likely to come from mobile technologies that they can carry with them and use at the point-of-care’.

If readers have the opportunity, they should consider making contact with Dr Soar for information regarding ‘m-Health trials at the initiative for e-Health’.

Rex E.D. Tindal
Senior Analyst, Central Wait List Bureau
Department of Health
Government of Western Australia
PO Box 8172
Perth Business Centre
Perth WA 6849
Australia