出國報告(出國類別：會議)

參加 Healthcare Innovation Summit Asia 2014（HISA 2014）會議

服務機關：衛生福利部
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派赴國家：新加坡
出國期間：103 年 3 月 11 日至 3 月 12 日
報告日期：103 年 5 月 11 日

摘要

本報告重點為本部派員參加 Healthcare Innovation Summit Asia 2014 (HISA 2014)之與會情形。HISA 2014 於新加坡舉行。各國醫療資訊相關產、官、學界專業人士於會中交流討論醫療資訊技術(Healthcare IT) 的最新趨勢、挑戰與前景。衛生福利部許明暉技監受邀於開場之 Session: Leadership and Strategy to Engage Patients 就主題：Working Towards Efficient and Accessible Healthcare 擔任與談人。同臺有菲律賓衛生部次長 Dr. Teodoro Herbosa 與馬來西亞衛生部官員 Dr. Fadzilah Shaik Allaudin。

報告重點

醫療業的挑戰不同於其他產業,相較於其他產業,如製造業、服務業、金融業等大多很早就經歷過不景氣的挑戰,因而格外重視營運效率的改善,也因此特別重視 IT,來改造企業體質。早期各國醫療業大多不像其他產業那樣重視 IT,許多醫院作業還是大量依賴人工,甚至為了病人安全,寧可額外安排更多人力,重複執行許多流程查核,例如病患每到一家醫院都得重新填寫資料,病患在許多治療過程,得不斷接受各方詢問,重複提供病況資訊等。

一直到了 2006 年,各國醫院開始面臨了資源緊縮的挑戰,開始大量運用 IT 改善效率。而臺灣則因為 1995 年全民健保的實施,掀起了一波醫院資訊化風潮,2000 年時,臺灣所有醫院和診所都完成了健保電子化申報,也間接帶動了臺灣醫療院所的資訊化,臺灣醫院資訊整合度遠高於其他各國的醫院。

不過,臺灣醫療業近幾年開始面臨另一波的新挑戰,不只醫療經費緊縮,健保經費改採支付總額限制,而且民眾對健康照護品質的期待也越來越高,甚至民眾人口結構轉型帶來新服務類型的需求,都將考驗醫院的營運效率和服務能耐。

依據我國衛生福利部預估,2018 年老年人口會達到 14.6%,臺灣將進入高齡社會,2025 年甚至會成為超高齡社會,每 5 個人就有 1 個是超過 65 歲的老人。未來醫院的挑戰是服務對象大多是 80 歲老人家,光是掛號和就診是否足夠友善就是考驗,如看診時間有限,能否讓說話緩慢的老人家事先錄音留言給醫生,或甚至可以讓行動不便的老人家不需到醫院看診,讓年輕人不用再請假陪同老人家看病,來減少社會成本等。

新一代醫療型態不只是醫院的治療而已,而是要發展成具備 4P 特質的健康照護,來滿足上述挑戰,這 4P 包括了預防(Preventive)、預測(Predictive)、參與(Participatory)和個人化(Personalized)。而為了善用醫療資源,減少醫院治療成本,下一代醫療會更重視預防和預測。最後則是要增加民眾參與,讓民眾也負起自己健康的維護責任。為了實現 4P,醫療得和 IT 全面結合。舉例來說,病人自行量測血糖和血壓後,再透過無線網路將資訊回傳到醫院監控,作為觀察身體健康狀態的參考,甚至當天氣預測寒流來襲溫度驟降時,醫院還能發簡訊通知高血壓病人小心避免外出。

2020 年,社會老化是醫院一定得解決的問題,醫療流程必須改變,要善用 ICT 採取更好的整合。早年醫院以「E-Hospital」為發展目標,重視醫院作業和流程的數位化等醫院電腦化措施,近幾年不少醫院則進一步想發展成「M-Hospital」(醫院行動化),善用行動裝置的溝通力,但是未來的醫院必須要成為「U-Hospital」,讓醫療服務無所不在,善用資訊整合或各種感測裝置,將醫療服務延伸到醫院以外。

臺灣早從 2007 年就開始推動電子病歷,初期先實施電子病歷以及建立醫事憑證管理中心,制定電子病歷格式標準和系統規範,並解決跨院交換的法規問題。2011 年,電子病歷交換中心設立,142 家醫院完成介接,電子病歷基礎建設初步完成,進入推廣階段。

為了解決隱私考量和醫療法規的要求,臺灣電子病歷交換架構採取電子病歷分散,只集中建置索引的作法,就像搜尋引擎一樣。所有電子病歷資料都由各醫

院保存，就像原來的病歷保存方式一樣，查詢系統只保留無涉使用者個資的索引序號，當取得病患調閱授權之後，才能透過索引資料庫取得病患電子病歷所在醫院的資訊，再進一步連線到這家醫院取得資料。

預計未來 2 年內，全臺電子病歷網路將完成串連，全臺醫療院所都能使用。到時候，民眾到任何一家診所都能取得過去六個月在不同醫院的電子病歷資訊如醫療影像等，在住家附近的診所就能善用大型醫院的資源。

我國衛生福利部勾勒的電子病歷下一階段藍圖，則是計畫在 2017 年開始發展個人健康記錄和各類加值應用，例如發展民眾健康自主管理 App 應用。這些記錄臨床資訊的電子病歷資訊，也能和遠距健康照護服務整合，不只滿足健康的需求，還能進一步滿足其他生活需求，例如安全或飲食、社交需求，這些都是 IT 能夠幫助年長者的服務。

例如透過主動式監測 App，觀察老年人在家行為，提供送餐服務，也能搭配老年人病歷資料來判讀居家行為是否異常，或調整餐點內容來維持健康，也能協助他們與他人通訊或互動等。

會議照片

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Healthcare innovation 20 14

11-12 MARCH 2014 • SINGAPORE

ORGANIZED BY: Enterprise INNOVATION

PATIENT ENGAGEMENT THROUGH INNOVATION, CONNECTIVITY AND COMMUNICATION

Venue: Marriot Hotel, Singapore

Confirmed Speakers:

Lau Wing Chew, Chief Transformation Officer, Khoo Teck Puat Hospital, Singapore

Dr Grace Frelita, Director for Global Quality Development, Siloam Hospitals, Indonesia

Dr Teodoro Herbosa, Undersecretary, Department of Health, Philippines

Dr Mubbashir Iftikhar, Chief Information Officer, KPJ Healthcare, Malaysia

Dr Fadzilah Shaik Allaudin, Deputy Director Telehealth, Ministry of Health, Malaysia

Yong Ping Swee, CEO, Parkway Primary Care Network, Singapore

Prof Lee Kheng Hock, Medical Director, Bright Vision Hospital, Singapore

Prof David Matchar, Professor and Director, Health Services Research,Duke-NUS Graduate Medical School, Singapore

Dr Tan Yeow Kee, Group Leader, Institute for Infocomm Research, A*Star, Singapore

Dr Robert Patrick Jalleh, Chairman, Alpha Specialist Centre, Malaysia

Christian Orejudos, COO, Shanghai Redleaf Hospital, China

Richard Wu, Secretary General, Taiwan Nongovernmental Hospitals and Clinics Association, CEO, Taiwan Task Force for Medical Travel, Taiwan

Anwar Anis, CEO, Pantai Hospital KL, Malaysia

Dr Jason Yap, Chief Knowledge Officer, AIC, Singapore

Dr Ahmad Djojosugito, President Director, Halmahera Surgical Hospital, Commissioner, Halmahera Group, Indonesia

Bala Rajaratnam, Project Manager, School of Health Sciences, Nanyang Polytechnic, Singapore

Dr Adam Chee, Chief Advocacy Officer, binaryHealthcare, Singapore

Dr Mubbashir Iftikhar, Chief Information Officer, KPJ Healthcare, Malaysia

Dr Steven Wong, Consultant, Diagnostic Imaging, Singapore General Hospital, Singapore

Dewi Darmawati, Medical Director, Griya Waluya Hospital, Indonesia

Tam Shepherd, President, Health Informatics Society of Australia

Mohan Karunanithi, Research Team Leader, CSIRO Computational Informatics, Australia

Dr Michael Hussin B. Muin, Healthcare IT Consultant, former CIO, The Medical City, Philippines

Dr Lee Moon Keen, Board Member, Alpha Specialist Centre, Malaysia

Richard Lirio, General Manager, BIMC Nusa Dua, Indonesia

Bruce Liang, CIO, Ministry of Health, Singapore (invited)

Conference Draft Agenda – 11 Mar 2014, Singapore	
8:10	**Registration**
8:50	**Chairperson's Opening Remarks** Dr Jason Yap, Chief Knowledge Officer, AIC, Singapore
	Leadership and Strategy to Engage Patients
9:00	**Opening Address:** **Reserved**
9:20	**Strengthening IT Capabilities to Realise Singapore's Health Care 2020 Vision** - Updates on healthcare system wide programs - NEHR, National Electronic Analytics Services, Primary Care IT enablement - Rise of Consumer Health IT Bruce Liang, CIO, Ministry of Health, Singapore (invited)
9:50 **Policy Leaders' Panel**	**Working Towards Efficient and Accessible Healthcare** - Identifying key hurdles in care integration from multiple care providers - Regional experiences and outlook - Building an interconnected healthcare system **Moderator:** Dr Jason Yap, Chief Knowledge Officer, AIC, Singapore **Panelists:** Dr Teodoro Herbosa, Undersecretary, Department of Health, Philippines Dr Fadzilah Shaik Allaudin, Deputy Director Telehealth, Ministry of Health, Malaysia Dr Min-Huei (Marc) Hsu, Director, Ministry of Health, Taiwan
10:40	**Morning coffee/tea break**
11:10 **Singapore**	**Vision and Roadmap to Singapore's Healthcare Master Plan** - Healthcare policy update

Case Study	- Championing acute, primary and nursing care integration: Singapore experience - Staying on top as the region's premier destination for quality healthcare
11:40 **CXO Panel**	**Addressing Old Challenges and Seizing New Opportunities in Healthcare** - Patient engagement: what I have done right and what I chose to put behind - Is shift to wellness good for business? - Repositioning the role of care providers in consumer age - Role of technology and its ROI Moderator: Dr Jason Yap, Chief Knowledge Officer, AIC, Singapore Panelists: Lau Wing Chew, Chief Transformation Officer, Khoo Teck Puat Hospital, Singapore Anwar Anis, CEO, Pantai Hospital KL, Malaysia Dr Ahmad Djojosugito, President Director, Halmahera Surgical Hospital, Commissioner, Halmahera Group, Indonesia Yong Ping Swee, CEO, Parkway Primary Care Network, Singapore Dr Grace Frelita, Director for Global Quality Development, Siloam Hospitals, Indonesia
12:30	**Networking Lunch**
14:00 **Elderly Care Panel**	**Key Drivers, Policy Framework and Technology Adoption to Create a Winning Formula** - Successful elderly care models in a connected healthcare system - Facility design and technology implementation planning - The role of telehealth in elderly care Moderator: Prof Lee Kheng Hock, Medical Director, Bright Vision Hospital, Singapore Panelists: Prof David Matchar, Professor and Director, Health Services Research,Duke-NUS Graduate Medical School, Singapore Dr Lee Moon Keen, Board Member, Alpha Specialist Centre, Malaysia Bala Rajaratnam, Project Manager, School of Health Sciences, Nanyang Polytechnic, Singapore
	Innovation and Quality Healthcare
14:50 **Technology Leadership Panel**	**Reaping the Benefits of an Integrated Patient Management System** - Regional updates on patient management system implementation - Align people, facility and technology to provide a seamless care: best practices - Patient retention in the increasingly competitive scene - Empowering patients through EMR Moderator: Dr Adam Chee, Chief Advocacy Officer, binaryhealthcare, Singapore Panelists: Dr Mubbashir Iftikhar, Chief Information Officer, KPJ Healthcare, Malaysia Dr Steven Wong, Consultant, Diagnostic Imaging, Singapore General Hospital, Singapore Dewi Darmawati, Medical Director, Griya Waluya Hospital, Indonesia
15:40	**Afternoon coffee/tea break**
16:10	**Predictive Analytics Technology to Facilitate Decision Support and Communication in**

Keynote Presentation	**Personalized Health**
16:40 **Keynote presentation**	**Close Loop Medication: Combining Device, System and Process Management for Improved Care Quality** Dr Adam Chee, Chief Advocacy Officer, binaryhealthcare, Singapore
17:10	**Day 1 Content Summary and Chairman's Closing Remarks**
17:30	**Networking cocktail reception**

Conference Draft Agenda – 12 Mar 2013, Singapore	
9:00	**Chairperson's opening remarks**
	Connectivity to Drive Better Healthcare Outcomes
9:10 **Keynote Presentation**	**E-health in Australia: 13 Years Down the Road** Tam Shepherd, President, Health Informatics Society of Australia
9:40 **Keynote Panel**	**Connecting Device, Application and Network Infrastructure to Revolutionise Healthcare Delivery** - Unleash the potentials of applications and wireless devices in healthcare - Investing in data integration and software infrastructure: why and how - Is Asia ready to go social? Moderator: Tam Shepherd, President, Health Informatics Society of Australia Panelists: Mohan Karunanithi, Research Team Leader, CSIRO Computational Informatics, Australia Dr Michael Hussin B. Muin, Healthcare IT Consultant, former CIO, The Medical City, Philippines
10:40	**Morning tea/coffee break**
11:10 **Innovation Showcase**	**Medical Device Showcases** *This session highlights how latest innovations keep patients, clinicians and hospitals connected for better healthcare outcomes* Dr Tan Yeow Kee, Group Leader, Institute for Infocomm Research, A*Star, Singapore NUS
11:45 **Keynote Presentation**	**Cloud Based Health Data Repository for Improved Healthcare Outcomes** - Measuring organizational performance and outcomes - Metrics to personal health outcomes - Evaluating the improvement in population health
12:15	**Mobile Health Innovation and Evolving Business Models**

Case Study	Mohan Karunanithi, Research Team Leader, CSIRO Computational Informatics, Australia
12:45	**Networking Lunch**

Communication: Patients, End-Users, Clinicians and the Business of Healthcare

14:00 Panel Discussion	**Operational Challenges in Today's Healthcare Business** - Workflow and change management in EMR implementation - Recruiting and keeping the best talent in the business - Sales and marketing strategies for hospitals Panelists: Richard Lirio, General Manager, BIMC Nusa Dua, Indonesia Dr Robert Patrick Jalleh, Chairman, Alpha Specialist Centre, Malaysia Dr Adam Chee, Chief Advocacy Officer, binaryhealthcare, Singapore
15:00 Closing Visionary Panel	**Where are the Next Biggest Opportunities for Healthcare in Asia?** - Upcoming leaders: which countries will dominate? - Particular areas in healthcare that we should watch out for - Where to look for the next disruptive technology - Top investors' pick Moderator: Christian Orejudos, COO, Shanghai Redleaf Hospital, China Panelists: Richard Wu, Secretary General, Taiwan Nongovernmental Hospitals and Clinics Association/ CEO Taiwan Task Force for Medical Travel, Taiwan
16:00	**Chairman's Closing Remarks and End of Conference followed by Tea/Refreshments**