

出國報告（出國類別：國際會議）

出席「2017 醫療健康資訊與管理協會年
度研討會及展覽」
出國報告

服務機關：衛生福利部國民健康署

姓名職稱：李嘉慧副組長

派赴國家：美國

出國期間：106 年 2 月 18 日至 106 年 2 月 26 日

報告日期：106 年 5 月 11 日

（本項經費由「菸品健康福利捐」支應）

摘要

今(106)年研討會於2月19-23日於美國佛羅里達州奧蘭多橘郡會議中心(Orange County Convention Center)舉行，匯集來自世界各地超過40,000名健康資訊科技專業人員、臨床醫生、高階主管及供應商參加，以及1,335個展覽攤位。本次研討會討論主題，舉凡醫療保健和新型支付模式、護理及公共衛生、多樣化之職業發展、臨床醫學與商業智慧、臨床資訊學、個人健康科技之挑戰、顧客及病人參與、基因與精準醫學、健康資訊交換、健康資訊科技政策、個人隱私安全及網路安全等。而現場展覽項目包含各式行動化健康照護(Mobile Healthcare)、遠距醫療照護(Telemedicine)、創新應用展、互動展示區、健康體驗中心、IT應用解決方案展覽等。

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壹、目的

2017 醫療健康資訊與管理協會年度研討會及展覽，係由醫療健康資訊與管理協會主辦(Healthcare Information and Management Systems Society, 簡稱 HIMSS)(附錄一)。HIMSS 是一個全球性的、不以營利為目的之組織，透過資訊科技致力於健康服務領域。參與會議對象包括各國醫療衛生人員、資訊科技產業、學術界學者與政府代表，探討議題涵蓋醫療保健和新型支付模式、護理及公共衛生、多樣化之職業發展、臨床醫學與商業智慧、臨床資訊學、個人健康科技之挑戰、顧客及病人參與、基因與精準醫學、健康資訊交換、健康資訊科技政策、個人隱私安全及網路安全等，和創新資訊產品展覽與體驗。隨著全球資通訊技術發展與我國資通訊產業於健康促進政策應用，透過會議參與汲取經驗，做為日後推展 e-Health 領域創新應用與公共衛生政策制訂參考。

貳、過程

一、出國行程摘要

日期	行程
2/18(六)	出發前往美國洛杉磯機場(LAX)轉機，抵達美國奧蘭多國際機場(MCO)機場
2/19(日)- 2/23(四)	參加 2017 Healthcare Information and Management Systems Society
2/24(五)- 2/25(六)	返程前往美國奧蘭多國際機場(MCO)機場，至美國洛杉磯機場(LAX)轉機
2/26(日)	抵達台灣桃園國際機場

二、會議議程

Sunday, February 19	
Registration (Hotels** & Convention Center)	7:00 am – 7:00 pm
Preconference Symposia & Workshops*	8:00 am – 4:30 pm
Cybersecurity Forum* Hyatt Regency Orlando	8:00 am - 4:30 pm
Cloud Computing Forum	8:00 am - 4:30 pm
Digital & Personal Connected Health	8:00 am - 4:00 pm
Revenue Cycle Solutions Summit	8:00 am - 4:30 pm
CIO Forum* Hyatt Regency Orlando	9:00 am – 5:00 pm
Venture+ Forum	9:00 am – 5:00 pm
Registration (Airport**)	9:00 am - 8:00 pm
First Timers Conference Orientation	11:30 am - 12:30 pm
Chapter Leaders Workshop (by invitation only)	2:00 pm – 4:30 pm
About HIMSS	4:00 pm - 5:00 pm
HIMSS17 Opening Reception	5:00 pm - 7:00 pm
Monday, February 20	
Registration (Airport**)	7:00 am - 1:00 pm
Registration (Hotels** & Convention Center)	7:00 am – 6:00 pm
Keynote Speaker: Ginni Rometty, Chairman, President and CEO, IBM	8:30 am - 10:00 am
Digital & Personal Connected Health	8:30 am - 3:30 pm

Exhibits	10:00 am - 6:00 pm
Exhibit Floor Sessions	10:00 am - 6:00 pm
Interoperability Showcase	10:00 am - 6:00 pm
Concurrent Education Sessions	10:30 am - 11:30 am
First Timers Conference Orientation	10:30 am - 11:30 am
HX360 Innovation Leaders Program	10:30 am - 5:00 pm
Concurrent Education Sessions	12:00 pm - 1:00 pm
Concurrent Education Sessions	1:30 pm - 2:30 pm
About HIMSS	1:30 pm - 2:30 pm
Concurrent Education Sessions	3:00 pm - 4:00 pm
Startup+ Workshop	4:00 pm - 6:00 pm
Fellows Reception (by invitation only)	4:30 pm - 5:30 pm
Exhibition Floor Social Hour	4:30 pm - 6:00 pm
Communities Open House	5:30 pm - 6:30 pm
Women in Healthcare IT Reception* Blue Martini Lounge at Pointe Orlando	5:30 pm - 7:00 pm
Millennials Reception* Club 39 (located in Rosen Plaza hotel)	6:30 pm - 8:00 pm
Tuesday, February 21	
Registration (Convention Center only)	7:30 am – 5:00 pm
Concurrent Education Sessions	8:30 am – 9:30 am
Meeting the Challenges of Precision Medicine: Enhancing Innovation and Mitigating Risks	9:00 am – 11:00 am
Exhibits	9:30 am – 6:00 pm

Exhibit Floor Sessions	9:30 am – 6:00 pm
Interoperability Showcase	9:30 am – 6:00 pm
Cisco Connected Health Summit	10:00 am - 2:00 pm
HIMSS17 Career Fair Hyatt Regency Orlando	10:00 am - 5:00 pm
Concurrent Education Sessions	10:00 am – 11:00 am
HX360 Innovation Leaders Program	10:30 am – 5:00 pm
Concurrent Education Sessions	11:30 am – 12:30 pm
Disruptive Women in Healthcare Lunch - Navigating Uncertainty: Disruptive Women Style	12:30 pm – 2:30 pm
Concurrent Education Sessions	1:00 pm – 2:00 pm
Concurrent Education Sessions	2:30 pm – 3:30 pm
Awards Gala* Loews Portofino Bay Hotel at Universal Orlando	6:30 pm - 9:00 pm
Wednesday, February 22	
Registration (Convention Center only)	7:30 am – 5:00 pm
Concurrent Education Sessions	8:30 am – 9:30 am
Blockchain in Healthcare: A Rock Stars of Technology Event	9:00 am – 5:00 pm
Exhibits	9:30 am – 4:00 pm
Exhibit Floor Sessions	9:30 am - 4:00 pm
Interoperability Showcase	9:30 am – 4:00 pm
Concurrent Education Sessions	10:00 am – 11:00 am
Concurrent Education Sessions	11:30 am – 12:30 pm

Concurrent Education Sessions	1:00 pm – 2:00 pm
Concurrent Education Sessions	4:00 pm - 5:00 pm
Education Social Hour	5:00 pm - 6:00 pm
HIMSS Wednesday Night Special Event at The Wizarding World of Harry Potter TM * HARRY POTTER characters, names and related indicia are © & TM Warner Bros. Entertainment Inc. Harry Potter Publishing Rights © JKR. (s16) Universal elements and all related indicia TM & © 2016 Universal Studios. All rights reserved.	7:30 pm – 11:00 pm
Thursday, February 23	
Registration (Convention Center only)	7:30 am – 11:00 am
Keynote Speakers: John Boehner & Ed Rendell	8:30 am - 10:00 am
Concurrent Education Sessions	10:30 am – 11:30 am
Concurrent Education Sessions	12:00 pm – 1:00 pm
Closing Keynote Speakers: Kevin O’Leary and Robert Herjavec, Stars of ABC’s “Shark Tank”	1:15 pm - 2:30 pm

三、我國與會人員：衛生福利部國民健康署資訊及健康傳播小組李嘉慧副
組長代表出席。

本次年度研討會共計超過 300 場次課程，另會場內計有 1,335 個展覽
攤位(附錄二)。會議為同時段不同場地同時進行，因此，課程選擇係以每
日專題、本署重要政策計畫(如 e-Health)等創新應用議題，並利用課程空檔
前往展覽攤位進行觀摩學習。另於行前受邀與來自 HIMSS Asia 分會代表

Ms. Melissa Leong 進行業務交流及邀請我國可踴躍參與亞洲分會研討會等，如 HIMSS Australia eHealth Summit 2017 (5/31-6/1) 、Asia Pacific conference (9/11-14)。



圖一、美國佛羅里達州奧蘭多橘郡會議中心外觀(Orange County Convention Center)



圖二、2月20日下午2點-3點與 HIMSS Asia Ms. Melissa Leong 業務交流

參、會議重點

一、本次會議共包含十七項會議主題：

- (一) Clinical and Business Intelligence
- (二) Clinical Informatics and Clinician Engagement
- (三) CMS Quality Payment Program and Value-Based Payments
- (四) Compliance, Risk Management and Program Integrity
- (五) Connected Health
- (六) Consumer and Patient Engagement
- (七) EHRs

- (八) Genomics/Precision Medicine
- (九) Health Information Exchange, Interoperability and Data Access
- (十) Health IT Public Policy
- (十一) Human Factors, User Experience and Design
- (十二) Innovation, Entrepreneurship and Venture Investment
- (十三) IT Infrastructure, HIT Standards, Certification and Medical Device Integration
- (十四) Leadership, Governance, Strategic Planning
- (十五) Privacy, Security and Cybersecurity
- (十六) Process Improvement, Workflow, Change Management
- (十七) Quality and Patient Safety Outcomes

二、主題演講：

- (一) 主講人：**GINNI ROMETTY(Chairman, President and Chief Executive Officer IBM)**

演講內容摘要：

- 1.美國醫療健康資訊發展與設計，緊扣美國健康照護政策與保險制度演進，以降低醫療成本支出為首要目的。因此，基因檢測與精準醫療照護趨勢，提供新的保險制度設計方向。
- 2.科技發展，已走向大數據及人工智慧(AI)開發與運用，這幾年致力於人工認知系統建置及臨床實驗，已有部分新研發產品上市。

- (二) 主講人：

- ***John Boehner** (Former Speaker of the US House of Representatives Political Perspectives on America's Future)
- ***Ed Rendell (45th Governor of Pennsylvania)**

演講內容摘要：

- 1.美國川普總統上任後，對於健保法案態度與政策，將影響醫療健康資訊產業發展，必須從法令面、系統開發等不同層面評估歐巴馬健保法案被廢止後之經濟產值損失。
- 2.未來需積極開創新的醫療健康資訊市場，確保產業永續發展。

(三) 主講人：

* **Kevin O’Leary** (Investor in Innovation)

* **Robert Herjavec** (Cybersecurity Expert, Entrepreneur, Author)

演講內容摘要：

- 1.全球產業 i 化，網路就是產業機會，但網際網路與跨產業間資訊流，須將資訊安全擺在第一要務，遵循國際資訊安全標準與規範，透過技術面加密設計，將可能危害降至最低。
- 2.應用創新服務與前者同等重要，被視為從事健康照護及資訊科技專業人士最重要之兩項議題。如何兼具安全與創新，應從基礎設計開始就融入資訊安全規劃，隨著專案推展增加不同安全防護機制與設計。

三、重要分場教育課程：

(一) **講題一：Using The Internet of Healthy Things to improve Health and Care** (主講人 Joseph C .Kvedar, MD ； Vice President, Connected Health Partners Healthcare)

演講重點摘要：

- 1.智慧型手機與行動載具普及以及社群訊息快速流通，健康物聯網 (Health IoT)，讓民眾隨時記錄個人健康資訊，透過手環及感應器，穿戴式裝置即時監測與簡訊提醒健康狀況。
- 2.管理後台形成無數大數據資料庫，提供管理者進行模組分析與預測，帶動健康行為改變。



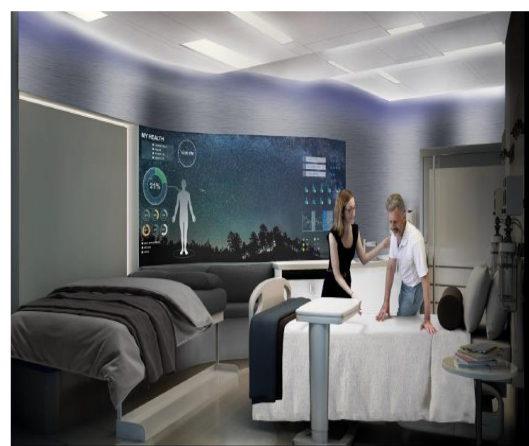
圖三、健康物聯網(Health IoT)展示

(二) 講題二：The Patient Room of the Future: Designing for Millennials

(主講人 J Joan Saba Partner ; NBBJ)

演講重點摘要：

1. 嬰兒世代與千禧年世代年齡與與 IT 使用程度，在不同空間場域設計尚須契合該世代入住醫院原因與使用習慣。
2. 透過大型電子白板，依照需求進行不同展現，讓住院者感受截然不同。



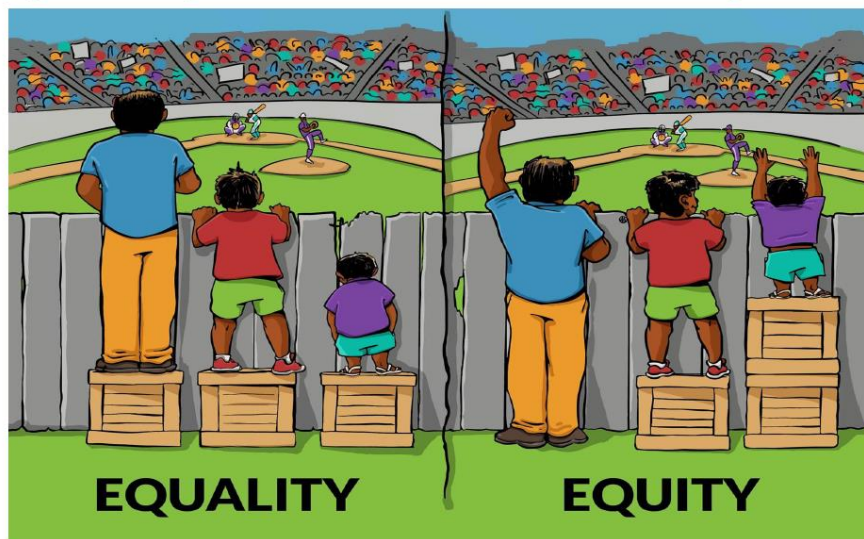
圖四、依照病房活動，電子白板可提供線上視訊會診以及夜晚情境，減少住民與外界剝離感

(三) 講題三：**How Well do you Know your population's health risk and How to Manage it ?** (主講人 Gowtham Rao, MD PhD ; Chief Medical Informatics Officer Blue Cross BlueShield of South Carolina)

演講重點摘要：

- 1.醫療健康照護資訊系統開發，須兼具病人使用感受與醫護人員操作方便性，整體架構須先定位出使用族群以及相關風險因子評估，達到資訊傳遞與收集對等。
- 2.健康社會決定因子(Social determinate of Health)，也是影響健康重要因素，如何結合財務系統、資訊系統，有效降低健康不平等與促進健康行為改變，是公共衛生(關注人群健康者)、臨床醫療照顧者應共同重視與投入課題。

Concept 3: Population Risk Stratification (Determinants)



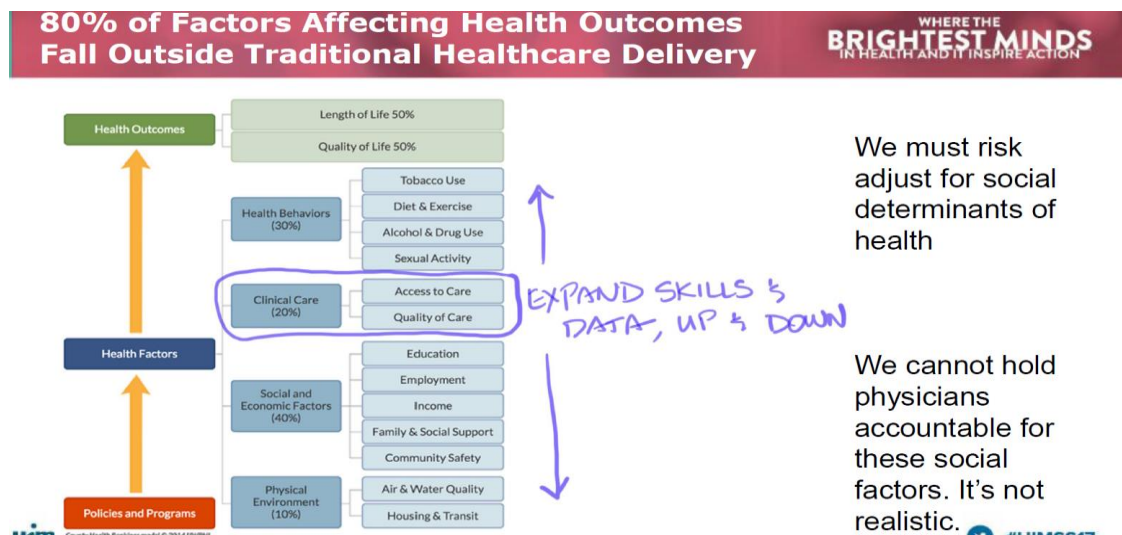
Source: "Interaction Institute for Social Change | Artist: Angus Maguire."

圖五、各界應重視健康社會決定因子，對於人們健康狀態影響與日後財務負荷

(四) 講題四：Transforming big data into smart data for new care models? (主講人 Dale Sanders ; Executive Vice president, Product Development ; Health Catalyst)

演講重點摘要：

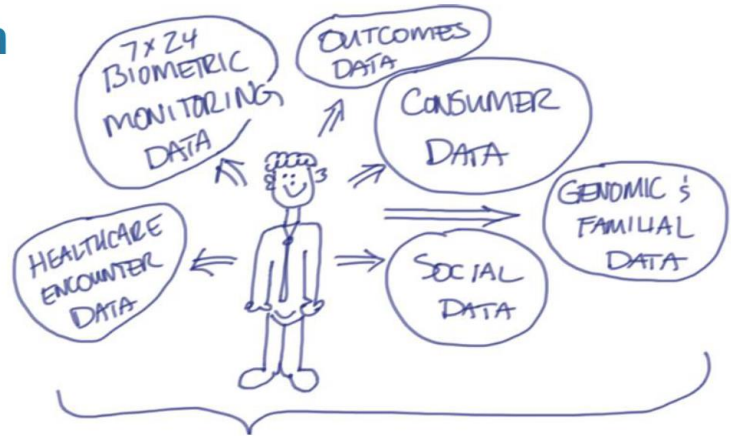
- 1.傳統健康體系，臨床照護措施施行，需要人工蒐集具實證且正確數據過程，才能形成臨床指引，提供醫護人員遵循運用。然而從研究數據顯示，「臨床照護」僅占健康影響因子 20%。反而其他影響因子占大部分。
- 2.美國醫療健康資訊發展與保險制度相當緊密，反而對於健康群族健康數據收集與管理平台發展較少，此部分市場值得進一步開發，形成完整健康生態系統與臨床照護系統，增進全人口健康。



圖六、傳統健康體系中，影響健康狀態比例

The Human Health Data Ecosystem

And, by the way, we don't have much of any data on healthy patients

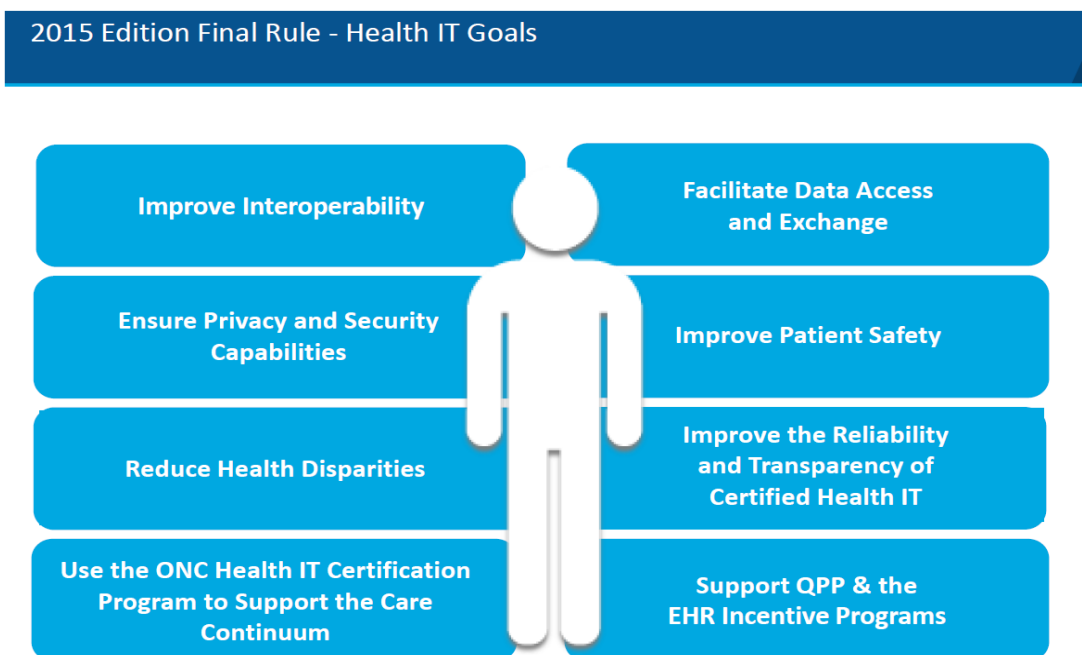


圖七、反思 The Human Health Data Ecosystem

(五) 講題五：ONC Police Overview (主講人 The Office of the National Coordinator for Health Information Technology)

演講重點摘要：

1. 本場次由美國健康資訊部門說明 2015 健康資訊政策(包括資訊安全架構規範、EHR 規定與臨床資料傳輸欄位格式及認證申請作業等)。
2. 會中也提出 2015(最近一期)修訂健康資訊推動目標如病人安全、資料傳輸安全等 8 項與與惠中進行分享互動交流。

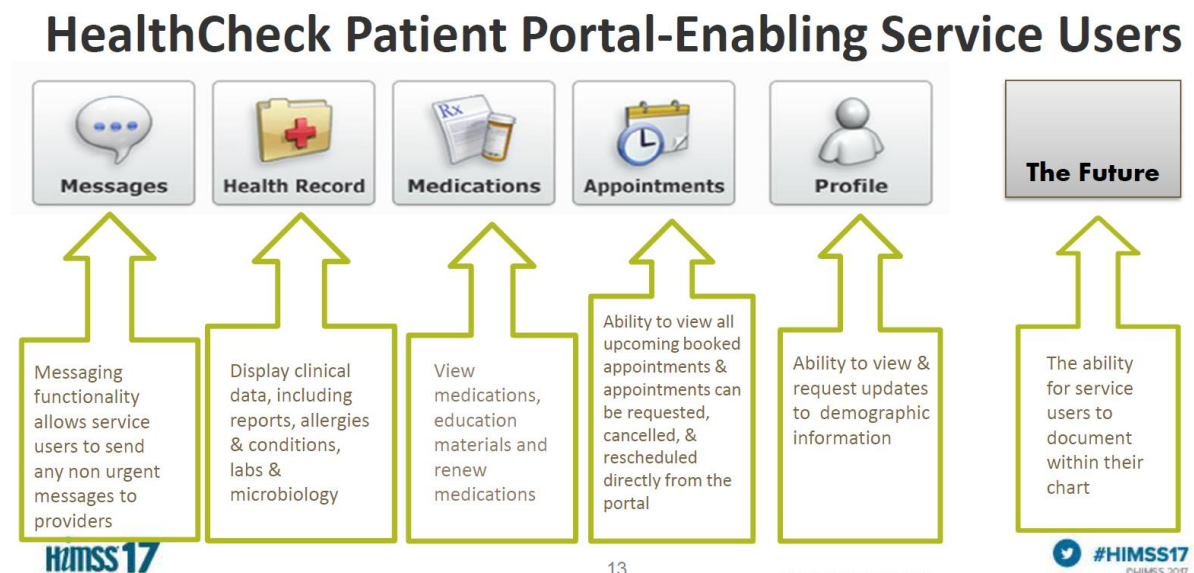


圖八、2015 ONC Health IT Goals

(六) 講題六：**Advancing patient Engagement in Behavior Health** (主講人：
Sarah Kipping RN,MSN,CPMHN(C),Clinical Practice Leader；
Wendy Odell BBA,CHIM，CPHIMS-CA, Manager Clinical Information, Ontario Shores Centre for Mental health Sciences)

演講重點摘要：

- 1.醫院營運與病患照護行為延續，顯示出「Advancing patient Engagement」重要。
- 2.醫院資訊系統以設計成單一入口，方便不同族群進入查訊與訊息管理，另外也設計多種功能，增加病患使用黏著度。



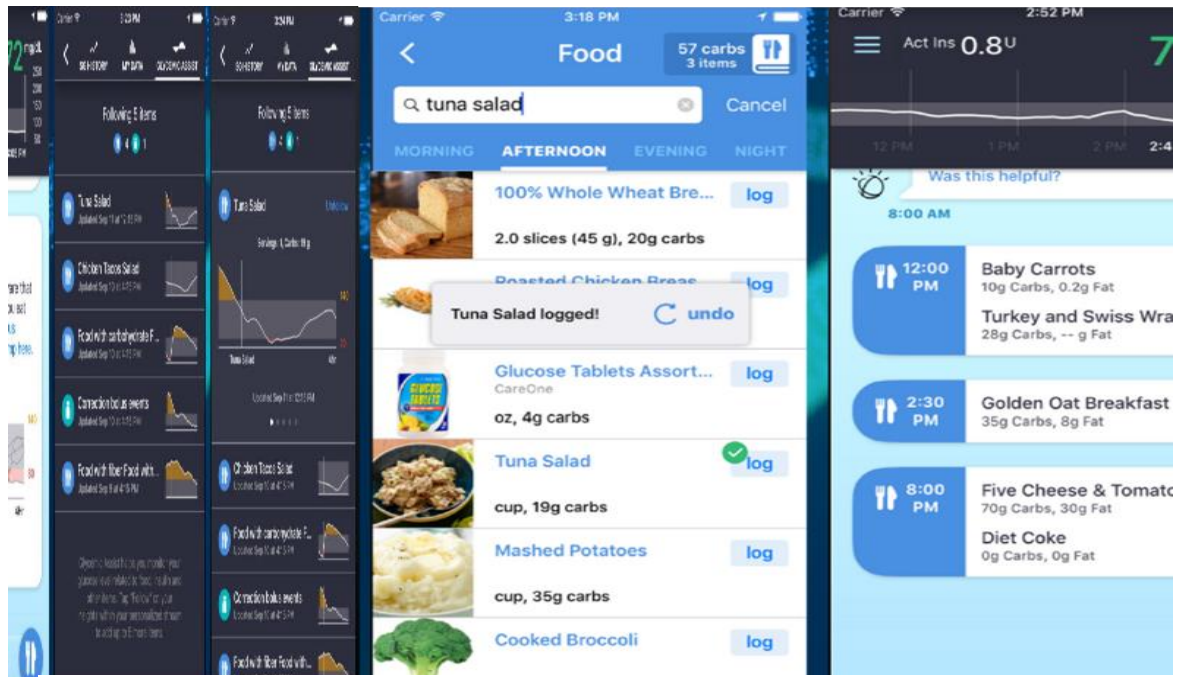
圖九、Ontario Shores Centre 醫院資訊系統功能示意圖

(七) 講題七：**IBM Technology: Sugar. IQ** (主講人：Arthur Panov；IBM Watson Health)

演講重點摘要：

- 1.根據美國疾病管制局資料顯示，全國有 29.1million 民眾罹患糖尿病(11 個人就有 1 個，其中不知自己罹患民眾，4 個人中就有 1 個)。
- 2.過去發展糖尿病照護 App 多以即時傳輸為主，未來應以有效改善或控制糖尿病為目標，增加行為預測等功能。

3.現行開發 Sugar IQ 已包含市面上所有生理量測數據傳輸、運動紀錄以及飲食紀錄等等。最重要功能是能與使用者產生互動，提醒今日飲食熱量預警與各項長期趨勢統計等。



圖十、Sugar IQ 功能畫面

肆、心得及應用建議

一、引用 HIMSS Health IT Value Suite ，進行 e-Health 系統平台規劃

本次研討會發現每位演講者對於所報告內容，均遵循 HIMSS Health IT Value Suite(如圖十一，詳如附錄三)呈現，該價值系統有效呈現具體設計概念與推動步驟框架，使開發者與使用者於資訊專案成立與推動時，有所遵循，亦可快速專案目標與績效成果。後續將配合本年度 eHealth 政策計畫推動，參考該協會制定 HIMSS Health IT Value Suite 與專案團隊共同腦力激盪研訂出專案目標。



The HIMSS Health IT Value Suite is a robust library of value-focused, evidence-based use cases framed by HIMSS' multifaceted Health IT Value STEPS™. Encompassing thought leadership, education tools and opportunities for knowledge sharing among peers, this growing resource classifies health IT value in terms of:

- S**atisfaction
- T**reatment/Clinical
- E**lectronic Data/Information
- P**revention and Patient Education
- S**avings

圖十一、HIMSS Health IT Value Suite

二、Health IoT，萬物皆可連，邁向智能照護時代

台積電張忠謀董事長曾說過：「物聯網(IOT)是 Next Big Thing」。當全球邁向 i 產業時代，健康產業應用與場域間健康促進合作越發重要，本次研討會提到所有公共衛生領域重視健康社會決定因子及健康 IOT 運用，可以做為本署推動「營造全場域支持性環境」政策之借鏡與參考。另外智能醫院與智慧醫療照護方面，本次研討會仍是以慢性病照護為主流研發產品(尤其以糖尿病產品開發最多)，此部分也可提供本署推動糖尿病共同照護網政策參考。而人工智慧(如 VR、影音互動)大多受限於機器模擬人類認知

系統需大量數據演算與建立經驗模組，現階段大多集中於概念與臨床實驗階段，然而此發展趨勢必然成為未來主流，故可持續關注此類技術發展與應用型態。



圖十二、Nurse Sophia

附錄一、HIMSS 簡介

About HIMSS :

HIMSS is a global, cause-based, not-for-profit organization focused on better health through information technology (IT). HIMSS leads efforts to optimize health engagements and care outcomes using information technology. HIMSS, headquartered in Chicago, serves the global health IT community with additional offices in the United States, Europe, and Asia.

HIMSS Vision :

Better health through information technology.

HIMSS Mission :

Globally, lead endeavors optimizing health engagements and care outcomes through information technology.



President and CEO

H. Stephen Lieber, CAE



North America Board of Directors/Chair

Michael H. Zaroukian, MD, PhD, MACP, FHIMSS



Board of Directors/Chair

Dr. Sebastian Krolop



HIMSS Asia Pacific

Chairperson: Dr. Nipit Piravej

資料來源：<http://www.himss.org/>

附錄二、展覽攤位



附錄三、HIMSS Health IT Value Suite

ESSENTIALS GUIDE



Measuring Value: How to Leverage Your HIMSS Value Score in Your HIMSS Davies Award of Excellence Application

The Nicholas E. Davies Award of Excellence represents HIMSS' highest recognition of hospitals, ambulatory practices and clinics, community health organizations and public health organizations that leverage their people, processes and technologies to improve clinical and financial outcomes.

This year, 2017, marks the launch of the HIMSS Value Score as the starting point for your Davies experience. The HIMSS Value Score is a health IT utilization analysis service that allows healthcare provider organizations to measure and manage their strategic decisions regarding the return on their health IT investments, implementations and usage in the pursuit of increased operational productivity, and higher quality clinical outcomes at the unit, department and enterprise level.

1 Complete your HIMSS Value Score

Healthcare organizations wishing to apply for the Davies Awards must now complete the HIMSS Value Score as the start of their application. The survey focuses on how IT has enabled value, as defined by the HIMSS Value STEPS™ Framework. Building from the framework, the Value Score measures a healthcare provider's baseline, perceived, realized and innovative value. Answers and supplied complementary data generate the applicant's value score. Organizations with top value scores will then receive a HIMSS Davies Award site visit to validate how they are leveraging health IT to improve care outcomes and generate value across the enterprise.



2

Prepare for In-Person Davies Committee visit

The one-day, in-person or virtual site visit will enable the Davies Award team to validate the workflows described in the healthcare organization's Value Score report. During the Davies Award visit, applicant organizations present three demonstrations of clinical and business problems that have been improved through the effective management of people, processes and health IT. The site visit team will ask questions, review the governance and workflow, and review trended outcomes data to determine if the site will be selected as a Davies recipient review. In its evaluation, the Davies site visit team focuses on value, sustainability and innovation of the health IT initiative. Applicants must provide a minimum of 12 months of trended data that demonstrates either improved clinical and patient outcomes or business outcomes. Additionally, applicants must directly tie improved sustainable clinical or business outcomes via the trended data with the implementation of health IT solution or health IT-enabled workflow, which is described in their Value Score report.

Keys to a Successful In-Person Davies Committee visit

Healthcare organizations should exhibit the following during their Davies Award visit:

- Improvement plan to address their local problem
- Design and implementation strategies
- Governance structure and selection of the IT solutions highlighted
- Testing and field testing of the IT solution
- Process for the development of workflow supported by IT
- Process for how clinicians and end-users were incorporated into the development of the workflow
- Demonstration of how health IT was utilized
- Value derived from health IT
- Identification of the intended outcome of the IT project

Organizations whose effective management of people, processes and health IT is validated during the Davies site visit team will receive the Davies Award. There are four categories of Davies Award, sorted by care-delivery model:

- Enterprise (hospitals, specialty hospitals and integrated care delivery networks)
- Ambulatory
- Community Health Center
- Public Health

KEY DATES

January 1:
Call for submissions

June 30:
Call for
Submission ends

October 1:
Completion
of site visits
HIMSS will evaluate
the scores as
quickly as possible
and develop analysis
explaining the score.

Applicants that
are awarded site
visits will receive
guidance on
formulating
presentations



To begin to obtain your Value Score, [click here](#).
For more information on the Davies Award application process,
please contact Jonathan French at jfrench@himss.org