

# HimSS AsiaPac 17

11 – 14 September 2017 | Sands Expo and Convention Centre, Singapore

Pre-Conference Day: 11 September

Main Conference Days: 12-13 September

Post-Conference Day: 14 September

Organized by: **HimSS** Asia Pacific

In Collaboration With: **HimSS CHIME**  
INTERNATIONAL

Population Health  
Collaborative Care



**TEAM-BASED CARE:**  
Unifying Patients and Providers

Data and Technology  
Value-Based Care

## Wednesday, 13 September 2017

08:30 - 09:00

Registration and Coffee

09:00 - 09:45

### **Keynote Session 3: The New Era of Cyber Threats: The Shift to Self-Learning and Self-Defending Networks**

Sanjay Aurora, Managing Director, Darktrace, Asia Pacific, Singapore

With machines fighting machines and increasingly sophisticated human attackers, we are now entering a new era of cyber-threats. The battle is no longer at the perimeter but inside of our organizations, and no security team can keep up with its speed. Cyber-attackers are quickly becoming silent and stealthy, and cyber defense has turned into an arms race.

This new wave of cyber-threats has seen skilled attackers that may lie low for weeks or months. By the time they take definitive steps, their actions blend in with the everyday hum of network activity. These attacks call for a change in the way we protect our most critical assets.

Self-learning and self-defending systems are now being deployed to continually assess business environments. Known as 'immune system' defense, this approach is used to uncover threats that have already penetrated the network border, and then automatically fight back. Unlike legacy approaches, which rely on rules or signatures, these technologies work autonomously, enable the security team to focus on high-value tasks, and can counter even fast-moving, automated attackers.

In this session, learn about:

- The new age of silent, stealthy attacks that lie low in networks for weeks and months
- Why legacy approaches, like rules and signatures, are proving inadequate on their own

- How new 'immune system' technologies based on advanced mathematics and machine learning are being deployed today

09:45 - 10:30

**Keynote Session 4: From Digital Reinvention to a Cognitive Future: How New Technologies Are Transforming the Industry for a Healthier Tomorrow**

Farhana Nakhoda, Director, Healthcare & Social Services, IBM Asia Pacific, Singapore

Dr. Desmond Quek MMed(Ophth), FRCS(Ed), FAMS, MBA, Consultant, General Cataract and Comprehensive Ophthalmology Department, Singapore National Eye Centre, Singapore

The digitization of healthcare, accelerated by the deployment of electronic medical records, is now being exploited and augmented with technologies such as mobile, social, cloud computing and cognitive capabilities. This digital revolution has opened up new opportunities for engaging individuals in their health, optimizing workflow execution, improving quality and population health.

As data continues to expand exponentially, the need to gain insight into vast reservoirs of data – in particular images -- can be overwhelming. Healthcare institutions are already embarking on this journey to reinvent their organizations with new technologies. In this session you will hear how a leading provider, from the ophthalmology domain of medicine, is staying on top of these trends and securing the best tools and strategies to address these growing data challenges. Learn how organizations, like your own, can master the challenges at each stage- to transform and to reap the full benefits of inter-operable and interdisciplinary workflows, improve clinical confidence and ultimately create more efficient systems.

This session is sponsored by:



10:30 - 11:00

Networking Coffee Break

11:00 - 11:45

**Keynote Session 5: Improving Team-Based, Collaborative Care and Physician Efficiency Through an EHR Optimization Strategy**

Dr. Michael A. Pfeffer M.D, FACP, Assistant Vice Chancellor and Chief Information Officer, UCLA Health Sciences, Associate Program Director, Clinical Informatics Fellowship Program, Associate Clinical Professor of Medicine, David Geffen School of Medicine, UCLA, USA

Electronic health records (EHR) are powerful platforms that have the potential to provide significant value for our patients and clinicians. By approaching the optimization of the EHR systematically with a focus on the physician, organizations can achieve efficiencies and improve clinical process outcomes.

The systematic optimization strategy is based on the idea that there is an "optimal fixed cost" of work that must be done by the physician in the EHR--this is the ideal amount of time a physician should spend per patient encounter. The "variable costs" of work fall into three categories: physician optimization, systems optimization, and platform optimization. Each of these categories offer ample opportunities for optimization and can be done in parallel by the organization's informatics team.

In this session, learning topics include:

- Defining value in healthcare related to electronic health records
- Discussing a systematic optimization strategy focused on the physician
- Exploring clinical decision support optimization that encourages team-based care
- Next steps for informatics teams on tackling electronic health record optimization

11:45 - 12:30

**Keynote Session 6: The Move to Value-Based Healthcare**

Bob White, Senior Vice President & President, Asia Pacific, Medtronic, Singapore

Value-based healthcare (VBHC) seeks to achieve better health outcomes while improving the efficiency of care delivery in health systems. Health policymakers, payers, hospitals, physicians, service providers, and manufacturers are expanding efforts to transition the concept into practical and actionable measures to manage health system costs while improving service delivery, effectiveness and patient outcomes.

Data systems with analytics are needed to track and assess the outcomes achieved and costs incurred for services delivered through a VBHC program. This enables visibility and accountability for the value (e.g., outcomes achieved for the investments made) and provides the necessary intelligence for decision making. To successfully implement VBHC programs, outcomes must be clear and measurable and an infrastructure must be in place to support the accurate collection of data and analytics for developing insights that lead to action.

This session is sponsored by:



12:30 - 13:30

Networking Lunch

13:30 - 16:45

**Data & Technology (Simpor Jr Ballroom - Plenary Room)**

**Session D1: Powering the Genomic Revolution: Tackling the Big Data Bottleneck in Next-Generation Sequencing**  
 Charles Sevier, Chief Technology Officer, Unstructured Storage Division, Dell EMC, APJ, Australia

Next-generation DNA sequencing technologies are revolutionizing the way care is delivered. This new technology is scaling significantly faster than Moore’s law, and it promises to catapult the launch of many molecular diagnostic applications. However, most organizations do not have access to expertise, budget, or infrastructure that enables them to operate efficiently at petabyte scale. During this session we will summarize the latest approaches to computing and storage technologies that can be used to advance state-of-the-art research and analysis. The session will also highlight use cases that demonstrate the Edico Genome platform and will also provide best practices when setting up a genomics IT

**Collaborative Care (Roselle-Simpor Ballroom 4604)**

**Session C1: Charting the Road to Clinical Effectiveness**  
 Dave Patnaik, Vice President & General Manager - International , Clinical Effectiveness, Wolters Kluwer, Singapore

Between unsustainable costs, aging populations, and evolving healthcare reform, it is becoming increasingly difficult for hospitals and healthcare systems to provide high quality care while keeping costs in check. Yet, the digitization of healthcare represents an untapped opportunity that could help solve many healthcare challenges. Join us and learn how Advanced Clinical Decision Support (ACDS) can be harnessed to work in an integrated and harmonized way to transform healthcare from a siloed, clinician-centric model to one that

**Value-Based Care (Roselle-Simpor Ballroom 4804)**

**Keynote Session V1: Case Studies in Value-Based Healthcare: From Theory to Implementation**  
 Dr. Hsien-Hsien Lei, Vice President, Communications and Value-Based Healthcare, Asia Pacific, Medtronic, Singapore

Value-based healthcare (VBHC) has been gathering momentum around the world yet implementation has remained challenging. This session will focus on case studies that have successfully established one or more of the following foundational VBHC components:

- Strategic plan for healthcare delivery demonstrating shared commitment to move away from volume to value
- Data systems with analytics to track and assess outcomes and costs, enable visibility and accountability,

environment.

This session is sponsored by:



enters on the patient and ensures consistency of care across the continuum of care.

This session will discuss the following topics:

- Why is transforming healthcare so hard and the cost of clinical ineffectiveness
- Why patient-centered care is important for healthcare providers to succeed
- The roadmap to Clinical Effectiveness
- How healthcare technology can play an important role in improving clinical effectiveness

This session is sponsored by:



and provide intelligence for decision making

- Bundled care within defined requirements, timeframe, and costs
- Integrated care pathways to improve efficiencies and outcomes
- Provider payment models to reward stakeholders for achieving value
- Integrated provider networks to coordinate care over time and settings

This session is sponsored by:



**Session D2: Protect Your Hospital IT, Protect Your Patient**

John Leon, Vice President, Business Development, ExtraHop, USA

**Session C2: The Siemens Healthineers Digital Ecosystem**

Dr. Thomas Friese, Vice President, Digital Ecosystem Platform, Siemens Healthineers, Germany

14:00 - 14:15

14:15 - 14:30

Healthcare is being disrupted by the Internet of Things (IoT), whether it is the introduction of smart medical devices or orchestrating the movement of patient and medical data between devices and applications to automate clinical workflows. With this disruption comes challenges for healthcare organizations. How do they discover and manage all of these new devices? How do they ensure their workflows between devices, apps and users are operating effectively? And how do they make sure all of this is secure?

This session will discuss how Healthcare IT Analytics can provide the visibility, and peace of mind needed to ensure that the disruption caused by IoT takes the form of improved clinician workflows and time savings across the organization, and does not take the form of security breaches, finger pointing and IT headaches.

This session is sponsored by:



Does digitalization already help you to bring better care to your patients? Are your peers just one click away, no matter where they are? Can you monitor your performance in real time and gain actionable insights from this data? Join Dr Thomas Friese to see how Siemens Healthineers is answering to these questions by building a digital ecosystem that brings together healthcare professionals, patients and solution providers in a secure environment. The cloud-based network 'teampay' aspires to become the biggest virtual imaging team worldwide and provides tools to tackle big data and the challenges of increasing cost pressure.

This session is sponsored by:



### Session V2: Reducing Clinical Variation Through Analytics

Charlie Farah, Director, Market Development - Healthcare & Public Sector APAC, Qlik, Asia Pacific, Australia

Clinical variation is one of the greatest drains on a healthcare organization's resources, adding to costs by as much as 30 percent. Every healthcare organization seeks to leverage visual analytics to improve patient care and reduce costs. According to the NHS Atlas of Variation in Healthcare, "Awareness is the first important step in identifying and addressing unwarranted variation; if the existence of variation is unknown, the debate about whether it is unwarranted cannot take place". Qlik's visual analytics platform has enabled organizations to explore their data to readily uncover best practices, drive efficiency, and engage clinicians in reducing this variation. Come hear and see how!

This session is sponsored by:



14:30 - 14:45

### Session D3: IoT-Based Healthcare Services and Incubation Project

Dr. Jongtae Park, Professor, School of Electronics Engineering, Kyungpook National University, Director, Daily Healthcare Demonstration Complex Construction Agency, Korea  
Yoonseok Ko, Director, National Information

### Keynote Session C3: Establishing a Big Data Platform for Intelligent Connectivity Between Patients & Provider

Dr. Edward Cheng, CIO, University of Hong Kong (HKU), CIO & GMIT, HKU-Shenzhen Hospital, China

Society Agency, NIA, Department of ICT Convergence, Healthcare & Welfare Team, South Korea

The Korean Government has initiated a project to deploy IoT-based healthcare services at Daegu Metropolitan City in South Korea to promote IoT-based healthcare services industry.

This initiative focuses on real-time monitoring of one's health using its developed services. Some of its services include General Health Management, Chronic Disease Management and Airforce Pilot Combat Force Management focuses on monitoring and management of one's health on a daily basis. This highly improves the quality of life of South Korean citizens by getting to know their health status at any time.

In this session, attendees can expect to learn about:

The University of Hong Kong-Shenzhen Hospital has established a blueprint for digital health implementation of a Big Data platform that focused on enabling the connections between patients and the medical team. This Big Data platform includes clinical data, mobile and IoT data, and has the capacity to extend to include phenotype data as well as genome sequencing data in the future. It is deployed as an open and extensible Cloud solution architecture that is transferable to other hospitals. Today HKU-Shenzhen Hospital provides a high quality healthcare service on this platform to over 5,500 outpatients everyday along with 1,500 inpatients.

In this session, Dr. Edward Cheng will share the HKU experience in developing and managing a hospital in China as well as the process of deploying an open Big Data system architecture that enables a connected healthcare service between patients and providers.

**Session V3: Solving the Perennial Conundrum of Access, Cost & Quality in SingHealth Polyclinic - Value Care Through Disruptive Innovation**

Dr. Juliana Bahadin, Clinic Director, SingHealth Polyclinic - Bedok, Singapore

The triple impact of an ageing society, increasing burden of chronic conditions and rising patient attendances has resulted in the need to transform our care delivery system and services to meet changing and increasing medical needs of the nation. SingHealth Polyclinic aims to deliver value care to balance cost, access and quality of care. At SingHealth Polyclinic Bedok (SHP-Bedok), Dr. Juliana and her team pioneered the initial steps towards SHP Care Transformation (SCT). It was an apt opportunity to pilot transform care delivery efforts through the use of disruptive innovation initiatives as the facility is re-locating to a new site. The pilot efforts have resulted in improved patient care outcomes and right siting efforts.

In this session, join Dr. Juliana as she shares how she led her team to transform care delivery through the usage of disruptive innovation initiatives to counter the challenges we're facing in healthcare globally.

- Improving quality of life of the population through IoT-based healthcare services
- Supporting business incubation scheme with better regulatory support
- Reaching out to potential service providers with identified demands to create and promote technology enabled care service market

15:00 - 15:15

**Session D4: #PutData2Work**

Michael Cornwell, Chief Technology Officer, Asia Pacific and Japan, Pure Storage, Singapore

In today's healthcare climate, monetizing your data is critical to success. Healthcare data organizations need to start putting the hard-won data trapped in their systems to use in decision making. The demand for real time data means more and more health systems are putting big data technology behind all of their reports and analytics, allowing them to combine sources to create actionable insights that help improve service line operations, advance clinical performance, identify new markets and opportunities, and drive patient and provider satisfaction. In short, we need to #PutData2Work.

This session is sponsored by:



15:15 - 15:30



Coffee Break

15:30 - 15:45

Coffee Break

**Session C4: Using Analytics to Support Integrated Care**

Michael Draheim, Chief Information Officer, Metro South Health, Australia

Princess Alexandra Hospital, Brisbane at over 1000 beds, became the first large scale digital hospital in Australia in 2015 and achieved the HIMSS EMRAM Stage 6 certification in May 2017. This session will explore the journey to using analytics and data to support collaborative care and the benefits the hospital has achieved in moving to an integrated EMR.

This session is sponsored by:



**Session V4: Value-Based Care = (Quality ÷ Cost) x Patient Engagement**

Tim Morris, Product & Partnership Director, EMEALAAP, Elsevier, UK

Patients are demanding more of their healthcare at a time when costs for basic care, procedures, drugs and management of long term conditions grow. Additionally, with increasing awareness on obesity, smoking, and alcohol, and with the introduction of the Internet of Health Things (IoHT), patients are in the embryonic phase of taking control of their own health and wellness. With the move to value-based care, patient engagement is becoming increasingly important. True value in healthcare can only be measured when quality over cost is delivered with patient engagement in the decision making process, resulting in compliance to treatment plans, and their overall satisfaction in health outcomes. This can be achieved through the delivery of consistent, sustainable, high value care, with the use of current, credible, evidence-based information and guidance.

This session is sponsored by:



**Keynote Session D5: How Healthy is Blockchain Technology?**

Stephen Wilson, Vice President and Principal Analyst, Constellation Research Inc., Australia

Blockchain captured the imagination with a basket of attractive and topical security promises. Many of its properties – like decentralization, security and “trust” – are highly prized in healthcare, and as a result, interest is building in the health sector. But on close inspection, first generation blockchain technology is not a solid fit for e-health.

Born from the anti-establishment cryptocurrency movement, public blockchains remove ‘people’ and ‘process’ from certain types of transactions, but they degrade in regulated settings where people and process are realities. Having inspired a new wave of innovation, blockchain technology needs a lot more work to address the needs of the health sector. This presentation first recaps what blockchain was for, what it does, and what it cannot do, and closes off with advice for how eHealth professionals should engage with this evolving family of technologies.

**Session C5: Healthcare Everywhere**

Dr. Eric Mbuthia Kanyi, Technology Director, Access Afya, Kenya

Access Afya runs a collaborative care model in the slums of Nairobi, Kenya. Our care teams look different than one would in the developed world: patients receive care at clinics, in schools, at factories and after church. IT links together these interactions, providing data on provision of care, quality of care, and patient outcomes.

The OECD average ratio of physicians to people is 3 to 1,000 and beds to people is 4.9 to 1,000. Kenya has 0.2 physicians and 1.3 beds per 1,000 people. Developing countries such as Kenya need doctors and hospitals but we are not going to have enough capital and time to fix this ratio fast enough to get care to people who really need it. New models focused on prevention, group care, and community health workers have the potential to keep more people healthier with fewer doctors and hospital beds. Access Afya is developing this model to showcase how collaborative community based primary care can work in some of the lowest income populations.

**Session V5: Panel Discussion: The Road to Value Based Healthcare - Achieving High Quality Care and Reducing Healthcare Wastages**

Dr. Keith Lim, Assistant Dean, Yong Loo Lin School of Medicine, National University of Singapore, Group Chief Value Officer, National University Health System, Singapore

Dr. Jeremy Lim, Partner & Head of Health & Life Sciences, Asia Pacific, Oliver Wyman, Singapore

Dr. Michael A. Pfeffer M.D, FACP, Assistant Vice Chancellor and Chief Information Officer, UCLA Health Sciences, Associate Program Director, Clinical Informatics Fellowship Program, Associate Clinical Professor of Medicine, David Geffen School of Medicine, UCLA, USA

Moderator: Bob White, Senior Vice President & President, Asia Pacific, Medtronic, Singapore

Healthcare systems globally are struggling with rising costs and the increasing prevalence of chronic diseases. Pressure on healthcare leaders to reduce costs and improve quality are also likely to continue. Value-based care has proven to be the single most effective approach for slowing the rise in healthcare expenditure while improving patients' outcomes and overall healthcare experience.

Healthcare systems in the UK and US have been working towards value-based care in the recent decades. However, the transition from volume-based to value-based care

**Session D6: If You Build It, They Will Come: Machine Learning Delivered Via an Ideal Organizational Structure**

Saif Ahmed, Chief Technology Officer, DocHuddle, USA

The joke within the analytics community is that analytics is 80 percent data gathering and 20 percent actual analysis. With larger datasets in the big data realm, and especially with unstructured data, data gathering, pipeline, engineering and preparation efforts can approach 95% of the effort. Interestingly, a growing community of technologists revel at the opportunity to work on these initial data engineering efforts, a role which is simultaneously, often reviled by researchers as a trough of despair in the path of research. The obvious solution is to better structure organizations and teams to focus on their core competencies.

Well structured medical data gathers researchers like bees to flowers. The wild success of several popular public medical datasets such as the diabetic retinopathy dataset, the lung cancer dataset and the breast cancer dataset are evidence of vast research interest which remains sadly underutilized by the medical community. Of course, hospitals will not generally make their internal medical datasets public, but even just internal usage is likely to foster internal research. Further, it is likely to attract highly motivated doctors and researchers to forward-leaning organizations and help differentiate technological and research leaders from traditional hospitals. Retention is also likely to increase. Research volume and impact are likely to increase, and commercial opportunities will even be realized by some leading players. The success of such centralized efforts is widely

**Session C6: Continuum of Care at Home: Navigating Complex Care Pathways from the Comfort of One's Home**

Dr. Oommen John, President, Indian Association for Medical Informatics (IAMI), Senior Research Fellow, The George Institute for Global Health, India

With increasing life expectancy and maturing healthcare systems, there is a growing population of people who develop chronic conditions that require long term care. In most settings, people with chronic conditions seek care from hospitals or standalone specialty centres. A person with multiple chronic conditions therefore would make several hospital or specialty clinic visits which add a huge burden to people who are aging and live on limited resources. As hospitals are primarily design to provide acute episodic care, there are immense opportunities for innovating around newer care pathways for chronic conditions.

This presentation aims to provide a comprehensive overview on the rationale for a technology assisted home based care provision that ensures the continuum of care. The talk would cover established models for ensuring the continuum of care in the home setting, specific focus would be on the technological innovations in this area and how these approaches could be evaluated for clinical outcomes.

delivery in the Asia Pacific region has been slow.

So what is holding it back in practice?

In this session, join speakers from Asia Pacific and the United States as they share valuable experiences on their journey towards value-based care. Learn about their approaches in delivering patient-centered care and eliminating waste in their care settings.

touted as one of the key differentiators at high-performing firms like Google, Facebook, Uber, Goldman Sachs, AQR Capital, and Citadel; Saif is driving efforts to bring these best practices to hospitals and clinical research organizations.

17:00 - 17:10

Session Transition

17:10 - 17:55

**Closing Keynote Session 7: Humanizing Health Care: Innovation as a Strategic Imperative**

Dr. Rasu Shrestha, Chief Innovation Officer, University of Pittsburgh Medical Center; Executive Vice President, UPMC Enterprises, University of Pittsburgh Medical Center, USA

There is nothing more humane than the pursuit of providing care to our patients, and leading them towards wellness. Yet, even as we have been leveraging technology to aid us in this pursuit, we have tremendous opportunities to innovate and use technology as an *enabler* of care (vs an *impediment* to better care). Indeed, innovation if done right, essentially makes technology "invisible" - and brings out the most human aspects of empathy, trust and shared decision making.

This keynote aims to take a critical look to the "culture clash" that exists today in healthcare redesign, and the evolution of health IT amidst the changing landscape of health care. As we evolve new care models that span the balance from precision medicine to population health, with collaborative care models and team based approaches to care that accentuate the core attributes of value based care, it's critical to balance powerful capabilities such as Artificial Intelligence and Machine Learning with the right approaches and mind-shift. This talk aims to shine an inspiring spotlight to the art of the possible: in leveraging innovation and innovative approaches to health care redesign to truly humanize health care.

17:55 - 18:00

Closing