

Programme

Day 1: Reimbursement for Medical Devices and Digital Health Technologies Thursday, 23 February 2023

Registration

8.30 AM

Welcome Remarks

9.00 AM

A/Prof Wee Hwee Lin Director, Centre for Health Intervention and Policy Evaluation Research (HIPER), Saw Swee Hock School of Public Health (SSHSPH), National University

of Singapore (NUS), Singapore

How Do We Pay For Healthcare in Singapore? Part 1

9.05 AM

Mr Chan Beng Seng Deputy CEO, ALPS Pte Ltd Advisor, Healthcare Finance Group, Ministry of Health

Coffee Break

10.00 AM

How Do We Pay For Healthcare in

Singapore? Part 2

10.15 AM

Mr Chan Beng Seng

Visual Storytelling as a Tool for Social

Change

11.10 AM

Dr Jack Sim

Founder, World Toilet Organization

Overcoming Pilotitis in Digital Medicine at the Intersection of Data, Clinical Evidence, and Adoption

11.30 AM

Dr Mathias Egermark Executive Visiting Fellow (2021), NUS, Senior Vice President, Disease Area Network Lead, Cardiometabolic, Roche Diagnostics

Lunch 12.00 PM

How Do We Conduct Health Technology Assessment for Medical Devices In Singapore?

1.00 PM

Dr Ju Hong Senior Principal Lead Specialist (Med Tech Evaluation and Horizon Scanning), Deputy Director, Agency for Care Effectiveness, Singapore

Day 1: Reimbursement for Medical Devices and Digital Health Technologies Thursday, 23 February 2023

Why Is It Tricky To Conduct Health Technology Assessment In Digital Health Applications?

1.35 PM

What are the Challenges in Demonstrating the Value of Digital Health Technologies? A Clinical Innovator's Perspective

2.10 PM

Demonstrating the Value of Digital Health Technologies - An Industry Perspective on the Challenges of Valuing Digital Pathology (Session sponsored by Roche) 2.45 PM Dr Wanrudee Isaranuwatchai Program Leader and Senior Researcher of the Health Intervention and Technology Assessment Program (HITAP), Thailand

A/Prof Ngiam Kee Yuan Group Chief Technology Officer, National University Health System

Mr Michael Rivers Vice President and Lifecycle Leader, Digital Pathology, Roche Tissue Diagnostics

Coffee Break 3.20 PM

What are Japan's Pricing and Reimbursement Policies for Digital Health Technologies?

3.50 PM

What are UK's Pricing and Reimbursement Policies for Digital Health Technologies? (via Zoom) 4.10 PM

Panel Discussion: Reimbursement of Digital Health Therapeutics - What Lessons Can We Draw From Around The Globe?

4.30 PM to 5.30 PM

Mr Michael LoPresti Director, Market Access Marketing Insights Division INTAGE Healthcare Inc.

Dr Felix Greaves Director, Science, Evidence and Analytics, National Institute for Health and Care Excellence (NICE)

A/Prof Ngiam Kee Yuan

Prof Yot Teerawattananon Founding Leader, HITAP, Thailand

Mr Michael Rivers

Moderator: A/Prof Wee Hwee Lin

Day 2: Empowering Healthcare Professionals in Health Technology Assessment Friday, 24 February 2023

Registration

8.30 AM

Welcome Remarks

9.00 AM

A/Prof Wee Hwee Lin
Director, Center for Health
Intervention and Policy Evaluation
Research (HIPER), Saw Swee Hock

Research (HIPER), Saw Swee Hock School of Public Health (SSHSPH), National University of Singapore

(NUS), Singapore

What Drives the Technical Appraisal

Committee Nuts?

9.10 AM

Prof Amanda Adler

Professor of Diabetic Medicine and Health Policy, University of Oxford,

United Kingdom

Can the HTA process take

environmental impact into account?

9.50 AM

Prof Gillian Leng

Honorary Visiting Professor, SSHSPH,

NUS; Former Chief Executive of NICE

Coffee Break

10.30 AM

How Do We Incorporate the Patient's

Voice in Health Technology

Assessment?

10.50 AM

Ms Fiona Pearce

Senior Advisor, Agency for Care

Effectiveness (ACE), Ministry of Health,

Singapore

Panel Discussion: Healthcare

Professionals, Why You Need to be

Involved in HTA

11.30 AM

Prof Amanda Adler

Ms Fiona Pearce

Prof Gillian Leng

Moderator: A/Prof Wee Hwee Lin

Short Break

12.20 PM

Day 2: Empowering Healthcare Professionals in Health Technology Assessment Friday, 24 February 2023

Lunch symposium: Incentivising novel

antimicrobial research and

development - Why and How?

12.30 PM

Prof Amanda Adler

How Can Routinely Collected Data Be Used in HTA?

1.10 PM

Prof Amanda Adler

Short Break 1.50 PM

Symposium Workshop: Methods to Demonstrate Value of New Health Technologies 2.00pm - 5.00pm

Workshop 1:

Health Technology Assessment for Medical Devices: Where There Is a Will, There Is a Way Prof Yot Teerawattananon,

HITAP, Thailand

Dr Wanrudee Isaranuwatchai,

HITAP, Thailand

Asst Prof Wang Yi,

SSHSPH

Prof Richard Cookson,

University of York

Workshop 2:

Network Meta-Analysis

Dr David Wu,

Adjunct Assistant Professor, SSHSPH

Ms Dana Bayani

PhD Candidate, SSHSPH

Workshop 3:

When HTA Is Pushed to Its Breaking Point – How Do We Evaluate Cell, Tissue, And Gene Therapy Products? Mr Omar Akhtar,

Guest Lecturer, SSHSPH

Ms Jin Xiaoyan,

Senior Consultant, Ipsos Singapore

WORKSHOP SYNOPSIS

Key Facilitators



Assoc Prof Wanrudee Isaranuwatchai, Health Intervention and Technology Assessment Programme (HITAP)



Dr Yot Teerawattananon, HITAP & Saw Swee Hock School of Public Health



Asst Prof Wang Yi, Saw Swee Hock School of Public Health

Workshop 1: Health Technology Assessment for Medical Devices: Where There Is a Will, There Is a Way

Medical devices play a crucial part in our healthcare system to support essential medical care and to promote healthier populations. These products can assist in the prevention, diagnosis, treatment, and rehabilitation of diseases and illnesses when they are safe and effective. Consequently, the assessment of medical devices is a vital step to ensure the product's clinical safety and performance, and ultimately safeguard patients' benefits. Nevertheless, medical devices have unique characteristics which make them challenging to properly evaluate. For example, since many devices can be parts of complex interventions, their effectiveness and cost-effectiveness usually rely on a series of local factors that are difficult to assess before their real-world use. As such, decision making bodies often request additional information apart from value-for-money evidence when making coverage decisions of medical devices. This session aims to address common challenges encountered when conducting a health technology assessment (HTA) for medical devices. Both concept and real-world examples will be used to deliver this interactive session including hand-on exercises.

The session will start by setting the scene of political economy in making coverage decisions of medical devices. Then, three most common challenges in evaluating medical devices will be discussed. These include: 1) lack of clinical comparative effectiveness data; 2) the generalizability and transferability of clinical and economic data of medical devices across settings; and 3) the need for additional information beyond cost-effectiveness evidence in policy decisions. Facilitators will engage participants through exercises that can be potential solutions of these challenges. Lastly, the session will finish with an introduction to a concept of early HTA which may assist the development and evaluation of medical devices since their early phase.

Workshop 2: Network Meta-Analysis

Network meta-analysis (NMA) is increasingly used in health technology assessment for conducting indirect treatment comparisons (ITC) and mixed treatment comparisons (MTC). NMA is a statistical technique which synthesizes available direct and indirect evidences from clinical studies to inform comparative effectiveness and safety of multiple interventions. In the first part of the workshop, participants will learn the concepts and main principles of NMA, understand and evaluate the assumptions of a NMA, and interpret its results. Its challenges and caveats will also be highlighted. In the second part, participants will learn to perform NMA using R, a free statistical software, with continuous data.

Target audience

This is an intermediate level workshop intended for participants who are familiar with meta-analysis.

Software requirement

Participant must be familiar with R. Each participant must have R (version 4.0.3 or higher) and RStudio (version 1.3.1093 or higher) installed for the workshop.

Key Facilitators



Dr David Wu, Saw Swee Hock School of Public Health



Ms Diana Bayani, Saw Swee Hock School of Public Health

WORKSHOP SYNOPSIS

Key Facilitators



Mr Omar Akhtar, Guest Lecturer, Saw Swee Hock School of Public Health



Ms Jin Xiaoyan, Ipsos, Singapore

Workshop 3: When HTA Is Pushed to Its Breaking Point - How Do We Evaluate Cell, Tissue, And Gene Therapy Products?

Cell and gene therapies represent the bleeding edge of therapeutics. Derived from human genes, tissues and cells, these treatments are commonly a one-time, curative intervention for otherwise intractable rare or ultrarare diseases. CAR-Ts and gene therapies for spinal muscular atrophy are prototypical of the class. In theory, such advanced therapies may provide transformational health gains, prolong human life, and avert a lifetime of chronic care costs. Beyond treating rare genetic disorders, such therapies may provide regenerative benefits to burn victims or in the musculoskeletal setting.

The HTA, pricing, and reimbursement of cell and gene therapies may represent serious challenges to healthcare systems.

- Unsurprisingly, trial design, length, and comparators become an art. Evidence synthesis becomes challenging.
- Price-tags for such therapies are frequently in the millions of dollars per intervention.
- Are conventional QALYs, ICERs and budget impact evaluations sufficient?
 Or is this truly a special case?
- Suboptimal decision-making comes with more catastrophic risk than conventional therapies especially since rare diseases in aggregate are not rare, and there are >250 such therapies in phase III trials.

In this session, we will explore the approaches taken by a handful of countries to evaluate and fund such therapies (spoiler alert - they diverge considerably). After getting our bearings, we will dive into the evidence (clinical and economic) for a hypothetical gene therapy. We'll go through the clinical evidence, economic evidence, and demonstrate practically with a CEA/BIM what drives clinical and economic outcomes. We will also discuss additional aspects of value, decision/recommendation frameworks, and what financing might look like.

Ultimately - we may come to some conclusions or generate some useful questions as Singapore and the region at large come to reckon with cell and gene therapies.

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