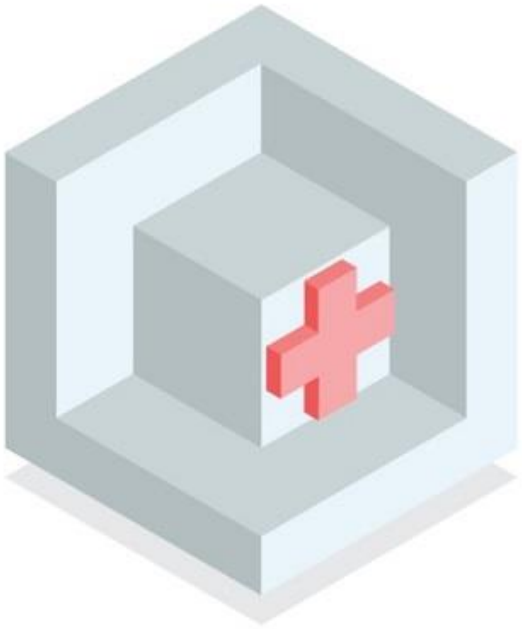
NIHA LDP 2019



Advancing UHC in Asia through the Use of HTA for Health Care Priority Setting and Reimbursement

24 - 28 June 2019
Saw Swee Hock School of Public Health
National University of Singapore

niha+
NUS Initiative to Improve Health in Asia

NUS Initiatives to Improve Health in Asia
Leadership Development Programme 2019

Table of Contents

Executive Summary

Universal health coverage (UHC) ought to be implemented not only fairly but also sustainably with many countries in Asia facing similar challenges in achieving this goal. Amidst increasing societal expectations of public health coverage for new and often expensive health technologies, health technology assessment (HTA) can serve as a powerful tool to support healthcare decision-making in both resource-rich and resource-poor settings.

The National University of Singapore (NUS) Initiative to Improve Health in Asia (NIHA) Leadership Development Programme (LDP) aims to provide senior regulators, health policymakers and practitioners with a comprehensive perspective of applying HTA to advance UHC. The LDP also functions as a valuable platform for networking opportunities and further knowledge exchange of countries' HTA experiences.

The LDP took place in Singapore at the NUS Saw Swee Hock School of Public Health from 24-28 June 2019. The event convened approximately 60 senior regulators, health policymakers and practitioners from across Asia (including Brunei, Bhutan, Cambodia, China, India, Indonesia, Japan, Laos, Malaysia, Philippines, Singapore, Sri Lanka, Taiwan, Thailand and Vietnam) to explore perspectives of applying HTA to advance UHC. Subject experts from renowned institutions such as the World Health Organization (WHO), United Nations Development Programme (UNDP), Ministry of Health (MOH), Singapore, London School of Hygiene and Tropical Medicine (LSHTM), Imperial College London, Health Intervention and Technology Assessment Programme (HITAP) and Saw Swee Hock School of Public Health (SSHSPH) shared their invaluable experiences with participants.

The five-day LDP began with opening remarks by Professor Kishore Mahbubani, Senior Advisor (University & Global Relations) and Professor in the Practice of Public Policy, NUS. The programme continued with interactive panel discussions, case studies (including funding for universal renal dialysis, digital health and vaccinations), and site visits in Singapore to leading health systems and innovator organisations. Topics covered in the LDP included priority benefit setting, value tools to generate evidence to improve efficiency and equity in UHC policies, engaging with the private sector, and how to conduct pricing negotiations.

"Alone we can do so little; together we can do so much." These words from Helen Keller permeated the discussions at the LDP which served as a starting point in our collective journey towards UHC. The shared vision extends beyond the LDP and relies upon the continued participation of countries as a HTA community to shape dialogues together and establish long-term learning partnerships to harness the potential of HTA for UHC advancement in Asia.

The Dean of Saw Swee Hock School of Public Health, Professor Teo Yik Ying, summarized very vividly the purpose of this year's NIHA Leadership Programme *"Through an annual forum, the NIHA LDP presents a unique opportunity for healthcare leaders and HTA practitioners to build capacity and abilities to address the complexities of UHC using evidence. The three words that can be used to summarise NIHA LDP are leadership, education, and networking. It is hoped that the community and efforts made here will continue to strive towards building a practice of HTA for UHC advancement within Asia." – Prof Teo Yik Ying*

NIHA is coordinated by:

NUS National University of Singapore | NUS Global Asia Institute

NIHA LDP 2019 is organised by:

NUS National University of Singapore | Saw Swee Hock School of Public Health

NIHA LDP 2019 is co-hosted by:

THE ACCESS AND DELIVERY PARTNERSHIP | iDSI

Speakers

Dr Antonio Dans
Professor, College of Medicine, University of Philippines

Ms Cecilia Oh
Programme Advisor, Access and Delivery Partnership, United Nations Development Program

Mr Choub Sok Chamreun
Executive Director, KHANA, Cambodia

Dr Daphne Khoo
Executive Director, Agency for Care Effectiveness, Ministry of Health, Singapore

Ms Diana Beatriz Bayani
Head of STEP, Department of Health, Philippines

Dr Diarmuid Murphy
Senior Consultant and Head of Musculoskeletal Trauma Division; Director of Clinical Services, Department of Orthopaedic Surgery, NUH; and Group Chief Value Officer, National University Healthcare Systems

Mr Ed Deng
Co-Founder and Chief Executive Officer, Health2Sync, Taiwan

Mr Eric Woo
Regional Director, ECRI Institute, Asia Pacific office

Dr Jadej Thammatach-aree
Deputy Secretary General, National Health Security Office, Thailand

Assoc Prof James Yip
Senior Consultant and Associate Professor, Group Chief Medical Information Officer, NUHS and Chief Data Advisor, Ministry of Health, Singapore

Dr Jeremy Lim
Chair, Steering Committee, NUS Initiative to Improve Health in Asia

Dr Kalipso Chalkidou
Director, Global Health Policy for the Center for Global Development, London, and Professor of Practice in Global Health at Imperial College London

Prof Kishore Mahbubani
Senior Advisor (University & Global Relations) and Professor in the Practice of Public Policy, National University of Singapore

Prof Mark Jit
Professor, London School of Hygiene & Tropical Medicine (LSHTM), Principal Scientist in the Modelling and Economics Unit of Public Health England (PHE) and visiting professor at the School of Public Health, University of Hong Kong.

Ms Mazda Novi Mukhlisa
Head, Section of Effectiveness and Efficiency Analysis in Health Financing, Ministry of Health, Centre for Health Financing and National Health Insurance, Indonesia

Prof Patrick Finbarr Allen
Dean, Faculty of Dentistry, National University of Singapore and Director of the National University Centre for Oral Health

Dr Piya Hanvoravongchai
Secretary General, Thai National Health Foundation and Program Director, Equity Initiative, CMB Foundation

Dr Piyatida Chuengsaman
Vice Chairman of Peritoneal Dialysis (PD) Subcommittee, Nephrology Society of Thailand and Head of Banphaeo Charoebkrung PD Center, Thailand

Dr Nima Asgari-Jirhandeh
Director, Asia-Pacific Observatory on Health Systems and Policies, World Health Organisation

Dr Nordin bin Saleh
Director, Planning Division, Ministry of Health, Malaysia

Ms Niki O'Brien
Assistant Project Manager, Global Health and Development Group, Imperial College London

Dr Pwee Keng Ho
Senior Principal Analyst, Changi General Hospital

Ms Saudamini Dabak
Technical Advisor, Health Intervention and Technology Assessment Program (HITAP), Ministry of Public Health, Thailand

Mr Shane Pang
Head of Government Affairs, South East Asia, Johnson & Johnson

Dr Shankar Prinja
Additional Professor of Health Economics, Post Graduate Institute for Medical Education and Research (PGIMER) School of Public Health, Chandigarh, India

Ms Shikha Kumari
Assistant Director, National University Hospital

Dr Shin-Ichiro Noda
Director, Division of Global Health Programs, National Centre for Global Health and Medicine, Japan

Mr Suresha Venkataraya
Chief Executive Officer, AWAK Technologies

Dr Suwit Wibulpolprasert
Vice Chair, International Health Policy Program Foundation (IHPF) and Health Intervention and Technology Assessment Program (HITAP) Foundation

Prof Teo Yik Ying
Dean, Saw Swee Hock School of Public Health, National University of Singapore

Dr Tessa Tan-Torres Edejer
Coordinator, Unit on Costs, Effectiveness, Expenditure and Priority Setting, Department of Health Financing and Governance, World Health Organization (WHO)

Mr Tim Oei
Chief Executive Officer, National Kidney Foundation, Singapore

Dr Tran Thi Mai Oanh
Director, Health Strategy and Policy Institute (HSPI), Ministry of Health, Vietnam

Dr Wanrudee Isaranuwatchai
Senior Researcher, Health Intervention and Technology Assessment Program (HITAP), Ministry of Public Health, Thailand and Assistant Professor, University of Toronto

Ms Waranya Rattanavipapong
Researcher, Health Intervention and Technology Assessment Program (HITAP), Ministry of Public Health, Thailand

Asst Prof Wee Hwee Lin
Joint Assistant Professor, Saw Swee Hock School of Public Health and Department of Pharmacy, Faculty of Science, the National University of Singapore

Mr Wei Maoguo
Deputy Director, Hainan Health Reform Office, China

Dr Winston Chin
Director (Programmes), Ministry of Health, Office for Healthcare Transformation, Finance Redesign, Singapore

Dr Yot Teerawattananon
Founding Leader, Health Intervention and Technology Assessment Program (HITAP), Ministry of Public Health, Thailand and Visiting Professor, National University of Singapore

Dr Zhao Kun
Director of Division of Health Policy Evaluation and Technology Assessment in China National Health Development Research Center, Ministry of Health, China

Acronyms and Abbreviations

ADP	Access and Delivery Partnership
CKD	Chronic Kidney Diseases
HITAP	Health Intervention and Technology Assessment Program, Ministry of Public Health, Thailand
HTA	Health Technology Assessment
iDSI	international Decision Support Initiative
LDP	Leadership Development Programme
MOH	Ministry of Health
SSHSPH, NUS	Saw Swee Hock School of Public Health, National University of Singapore
NCDs	Non-communicable Diseases
UHC	Universal Health Coverage
WHO	World Health Organization
UNDP	United Nations Development Programme

Summary of the Opening Session & Keynote Addresses

Opening Keynote Address: Making Universal Healthcare Champions in Asia

1. **Key messages of the session**
   - Nowadays, we live in unusual times where there are rapid changes globally. This raises the question of whether we are ready to adapt to these changes.
   - The rapid changes and global trends can flag the development of UHC and impact its implementation.
   - The global community is tackling 21st century challenges with a 17th century concept – that of the nation state.
   - Taking the example of Singapore, a wealthy country. Its trade and other public policies are not solely independent. The leadership programme is one that showcases how neighbourhood countries' development can contribute to each other's growth. This underscores the importance of balancing between national and global interests.

2. **Major problems & issues raised / discussed**
   - Globalisation has made countries more connected economically, socially and politically. However, countries lack the initiative to think universally to deal with the challenges resulting from the changes. While the Universal Declaration on Human Rights applies to all individuals across the world, Universal Health Coverage/Care is restricted to nations and its citizens.
   - This is the best time for a human being to be alive. There is a small probability of dying in conflict and living in absolute poverty. While there has been tremendous economic growth, with an expanding resource base of governments around the world, allocating resources efficiently in the various sectors remains a challenge.
   - There is a major shift in geopolitics and growing dispute between the two global powers, the United States and China, which risks affecting trade with the rest of the world. This may not relate immediately to the healthcare system and technology but may impact the flow of healthcare delivery where it is needed most. For example, today there are trade restrictions in the telecommunications sector, which may spill over to the health sector.
   - There is a backlash against migrants and other neglected groups around the world as it challenges the notion of identity.

3. **Suggested solutions**
   - Universal declaration of human rights can connect countries and provide a common vision to tackle the challenge of rapid changes and the short sighted, individualistic approach of countries.
   - Political consensus on multilateralism needs to be strengthened, with the United Nations agencies such as the World Health Organization (WHO) taking a lead.
   - Governments should regulate the flow of migrants into countries and expand the investment in the development of countries to protect both the nations and neglected groups.

4. **Quotations**
   - "Real diplomacy happens outside the boardroom." *Dr Jeremy Lim*
   - "Earlier we were billions of people living on different boats based on the organising principle of the nation state. Today, we are no longer living on different boats but in different cabins on the same boat. "*Prof Kishore Mahbubani*
   - "The demand for multilateral institutions is 'sunrise' but the supply is 'sunset'." *Prof Kishore Mahbubani*
   - "Start building relations and trust today to initiate the cooperation for tomorrow." *Prof Kishore Mahbubani*
   - "Do we have the right humanity in us to achieve universal health coverage?" *Prof Teo Yik Ying*

Session Summaries

Session 1 - Universal Health Coverage: From Ideology to Implementation

1. Key messages of the session

- There are four ideologies that support Universal Health Coverage (UHC): human rights ideology, economic ideology, social ideology, and health ideology.
- The challenge of UHC is moving from ideology to implementation. Achieving UHC is a long march that requires a combination of elements including good governance, health system research and regulatory capacity, adequate and equitable health systems based on primary healthcare, S-A-F-E (sustainable, adequate, fair and efficient) financing, as well as political commitment and ownership.
- Importantly, these elements must be supported by strong champions in UHC. Trust and buy-in from committed and motivated health professionals are the key to achieving UHC.
- Achieving UHC requires not just the concept of fairness, but also the concept of sustainability. In the spirit of equitable provision of healthcare, countries need to ensure that migrants and other vulnerable populations are included when implementing UHC.
- The rural-urban divide is a major challenge for equitable implementation of UHC. In this regard, Thailand and Hainan (China) serve as beacons with their high political commitment to building up rural health infrastructure. Nurse practitioners in Thailand and community outreach workers in Cambodia also play an essential role in reaching the vulnerable, marginalised and/or rural populations.
- To adequately address the political economy of UHC, there is a need to consider the broader public discourse. The three main actors to be actively engaged are the media, political establishments and civil society.

2. Major problems & issues raised / discussed

- There are still groups of people who are left behind in the implementation of UHC, such as migrants, marginalised populations (e.g. those with HIV and TB or stateless people) and the poor. Countries need to think of how to design policies and reallocate resources to better support those in need.
- The significant rural-urban divide in the provision of healthcare also presents challenges for the equitable provision of healthcare.
- While the implementation of publicly financed health insurance schemes has been associated with increased healthcare utilisation, equity remains an issue. For example, in India, healthcare utilisation was shown to be lower among low socio-economic groups and there were challenges for insurance schemes to reach out to the poor.

3. Suggested solutions

- Priority at the highest political level is of utmost importance to drive progress in UHC. To make UHC a political priority, we must communicate with the politicians and media, strengthen civil society, and be well-prepared with evidence.
- Institutions need to consistently and constantly carry out monitoring and evaluation locally and internationally. Local evidence is necessary for better decision-making based on the country's own context, because what works in one country's health system may not work in another.
- There is a need for concerted effort to reach out to the poorest and improve health insurance enrolment processes to ensure ease of operability. In addition, with the increased involvement of private health enterprises, it is important to monitor care utilisation in terms of appropriateness, quality and balance billing.
- Countries also need to address the fragmentation in federal governance as well as the fragmentation between the public and private sectors.
- To encourage doctors to serve in rural and difficult areas, both internal motivation (e.g. social recognition and role models) and external incentives (e.g. financial incentives) are needed.

4. Quotations

- "Trust is at the heart of universal health coverage." *Dr Suwit Wibulpolprasert*

- "Be well prepared when approaching politicians. Consider their concerns: Will I get votes? Can I implement it?" *Dr Suwit Wibulpolprasert*
- "We need good doctors with the right heart to work in rural areas. We need champions who never stop moving until the goal is met. One day, we will get there." *Dr Suwit Wibulpolprasert*

Session 2 - Ensuring Effectiveness, Equity, and Sustainability of UHC under the Epidemiological, Economic and Demographic Transitions in Asia

1. Key messages of the session

- Many countries in Asia are experiencing similar major trends: epidemiological transition from infectious diseases to non-communicable diseases (NCDs); demographic transition leading to ageing population in Asia; declining foreign aid and rising healthcare costs.
- Multisectoral responses and mechanisms are crucial to accelerate progress of UHC. In this aspect, governments need to strengthen engagement of Civil Society Organisations and the affected communities. Importantly, the success of multisectoral partnerships in addressing TB, HIV and Malaria in Cambodia offers useful lessons when designing the implementation of UHC.

2. Major problems & issues raised / discussed

- Societies in Asia are shrinking due to demographic transition. Countries such as Japan and Hong Kong have extremely high percentages of population above 65 years old, suggesting the emergence of super-aged societies in Asia.
- Health systems in Asia are struggling to adapt to the epidemiological and demographic transition especially on providing long-term care. Resources are strained as governments in Asia cope with the double burden of disease and ageing population in the face of declining foreign aid.
- There are challenges related to the accessibility, quality, efficiency and sustainability of care in the management and treatment of NCDs. These could lead to growing gaps in health outcomes, worsening financial risk protection and user dissatisfaction. There is increasing private out-of-pocket spending by which the poor are most affected.

3. Suggested solutions

- Risk pooling in health care financing such as national health insurances under UHC, can help to ensure access to healthcare and adequate financial risk protection for everyone.
- There should be a focus on strengthening the primary healthcare system to improve the accessibility, quality, efficiency and sustainability of healthcare.
- Community health workers play a key role in achieving UHC. For example, the integrated monthly community health courses in Indonesia run by community health workers are an important instrument to ensure better access to healthcare and management of NCDs.
- Health systems need to be better designed and equipped to cope with the ageing population in Asia. For example, the emphasis of efficient and high-quality medical care system can be adjusted from acute-focused to chronic-focused bed facilities in hospitals, for example increasing the number of chronic care and recovery beds allocated to treat chronic diseases.
- Health systems need to consider the reality of shrinking societies and achieve a balance between the different sources of assistance such as public and mutual assistance.
- Multisectoral responses and partnerships, including strongly engaged Civil Society Organisations and affected communities, are key to achieving a success UHC.

4. Quotations

- "With an aged population, we have to consider not only quality of life, but also quality of death." *Dr Shin-Ichiro Noda*
- "Public health needs are always and constantly evolving. Health systems need to adapt to such evolving needs." *Ms Cecilia Oh*

Session 3 - Priority setting in UHC: Applications of HTA for UHC in benefit package design, pricing, procurement and reimbursement, resource planning, public empowerment, and policy advocacy

1. Key messages of the session

- Many of the challenges in using HTA to inform the design of UHC benefits package are common across various countries. These include, for example, a lack of political will and stakeholders' support, no formal mechanism to link evidence to policy decisions, inadequate resources and technical capacity to do assessment etc.
- Stakeholder engagement in the process of HTA is critical, from topic selection/prioritisation to development of the technical protocol, to the review of evidence and to the crafting of the recommendation.
- HTA is more than just an incremental cost-effectiveness ratio. HTA should also consider social and ethical implications such as equity, financial risk protection and political economy. Admittedly, HTA has not done a good job of describing the social and ethical considerations of the recommendations to the stakeholders or the public.
- Institutionalisation of HTA is a long-drawn process and requires a shared vision, political commitment, capacity building as well as local and international collaborations.

2. Major problems & issues raised / discussed

- Lack of understanding of the role of HTA by stakeholders, especially healthcare professionals. HTA is often misunderstood as a tool for controlling healthcare costs.
- Political factors often overshadow HTA evidence.
- Delisting obsolete or low-value healthcare interventions from the benefit package is a tricky process. In one country, the law explicitly prohibits delisting any item if it has already been approved in the benefits package. However, it is not impossible. In another country, 22 items were delisted over the period of 2012 to 2018.

3. Suggested solutions

- Extensive stakeholder engagement and capacity building. This may include presenting at clinical conferences to reach out to the right audience.
- Institutional strengthening. There should be good governance as well as rigour and transparency of processes and methods.
- Local and international collaborations. All presenters acknowledged the critical support of iDSI and HITAP in their initial years of institutionalising HTA within their own countries. Long-term partner support is needed as capacity building always takes time. One of the roles of international partners may be to empower and encourage local collaborations. Regional collaborations may be in the form of information dissemination of good practices as well as codifying lessons learnt, conferences that provide a safe environment for junior staff to learn from one another, and working groups to tackle a common methodological challenge such as the need for a context-specific outcome measure or to push the scientific frontier such as developing regional guidelines.
- Re-channel the incentives to tackle the challenge of delisting. This may be in the form of reducing (not removing) coverage or providing attractive coverage for the cost-effective option. What is critical is to ensure that market access is not blocked for any item that has been successfully delisted (i.e. patients have alternative option(s) of accessing better care than the delisted item).

Session 4 - Making decisions about new vaccine introduction based on complex evidence

1. Key messages of the session

- Vaccines are one of the most cost-effective public health interventions available, and they have been shown to contribute to the key aims of universal health coverage (UHC), including improving both health and household financial protection. However, the face of vaccines has changed. In the early days, vaccines were cheap and effective. They targeted common infections and were often delivered to infants or young children. In what is quoted as the second golden era of vaccines, vaccines are now more expensive, treat

less common infections, have partial or waning vaccine efficacy and are increasingly offered to non-traditional risk groups including adults and adolescents.
- Economic evaluations of vaccines to inform health technology assessments need to consider the changing face of vaccines in order to adequately capture the value of the newer vaccines.
- Critical evaluation of clinical evidence is essential, particularly if there is major conflict of interests (e.g. sponsors of clinical trials are the ones designing and conducting the trials, analysing the trial results and reporting the trial findings).
- Rather than protect vaccine confidence, it is more critical to earn vaccine confidence.

2. Major problems & issues raised / discussed
- Political and social values may override HTA evidence.
- The cost of vaccines is becoming unaffordable. The uneven distribution of vaccine supply and disproportionate differential pricing of vaccines is an issue.
- There has been eroding public confidence in vaccines as a result of the Dengvaxia saga in the Philippines.

3. Suggested solutions
- Strengthening capacity in economic evaluation can help countries determine reasonable prices to pay for vaccines. Economic evaluation may also be used to inform alternatives that do not involve vaccination. For example, increasing cervical cancer screening rate may achieve the same benefits of HPV vaccination at a lower cost.
- There should also be capacity building in the challenges posed by the political economy of HTA.
- Increasing public awareness of the complexity of evaluating vaccine safety and cost-effectiveness may also help in addressing some of the challenges.
- Competitive tendering and pooled procurement can enhance countries' bargaining power when negotiating vaccine prices.
- There should be sufficient time to evaluate the long-term outcomes of vaccines before mandating any vaccine as a national immunisation programme.
- In the face of political pressure, it is important to emphasise that HTA is used to inform resource allocation at the national level, not to limit the choices of individuals. While a vaccine may not be cost-effective at the population level, individuals may still pay for the vaccine out of pocket.
- Conflict of interests should be managed. Delinking of research and development from vaccine or drug pricing is a sensible solution that has been proposed for a long time, but implementation requires political will.

Session 5 - Political Economy of UHC and HTA

1. Key messages of the session
- Politics is involved in almost everything. Adopting UHC is not a function of a country's wealth but a country's politics.
- Political economy is a study of which and how "moral judgments are made on particular issues" (Dictionary of Economic Terms). It seeks to explain how political institutions, the political environment and the economic system (capitalist, socialist, communist or mixed) influence each other.
- There is no such thing as free healthcare. Health is a right but someone has to pay for it.
- Affordability is a key factor for the success of UHC.
- It is crucial to work with the decision-makers who may not be in the health sector, such as the Ministry of Finance.
- HTA is a mechanism to make sense of what the government spends its money on. It has potential to be a game changer in health care.

2. Major problems & issues raised / discussed
- Health care model in the UK:
    - The UK has been operating the National Health Services (NHS) since 1948.

    - The three main principles of NHS are that it is: (1) free at the point of delivery, (2) for all, and (3) based on need, not ability to pay.
    - The theory of utilitarianism, which seeks to provide the greatest good for the greatest number, serves as the foundation of NHS. It is still a viable theory today.
    - The British people are extremely proud of the NHS and no politician dares to touch it despite the significant challenges in sustaining it.
- Healthcare model in the Singapore:
    - Singapore started out with an NHS model but then moved towards a model of shared responsibility. Co-payments are a central feature of Singapore's health financing philosophy.
    - The current 3M model consists of Medisave (a personal savings scheme), Medishield (a catastrophic insurance scheme), and Medifund (a government subsidy scheme for lower income patients).
    - A newspaper article titled "The moral case for health insurance for all" by Dr Jeremy Lim sparked a public discussion over about 2 months on the topic and created a social movement advocating a change from 'cover some' to 'cover all'. This, in combination with the effect of the elections, has led to the revision of Medishield that now covers all Singaporeans for life, including those with pre-existing conditions and those over 85 years old (who were previously excluded from the scheme).
- When we accept that health is human right, there is an important shift in mindset from "should we do this (UHC)?" to "how do we do this?"
- There are two types of digital health – electronic and actual. There is a need to recognise the difference between the two and remember not to ignore the real, actual digital health. We need to make sure that we do not lose the human touch.

3. Suggested solutions

- Make a moral case for UHC and engage with the public.
- Create a system with a balance of responsibilities among stakeholders to share accountability.
- Leadership programmes of sub-national public officers can be a powerful means of raising the UHC agenda.
- Each country has a different system. There is no one perfect system for all. Some countries may choose to go for progressive UHC, starting with some diseases or populations.

4. Quotations

- "You are either part of the problem or a part of the solution." *Dr Jeremy Lim*
- "Singapore did the greatest good for the greatest numbers. However, there is an uncalculated cost that we don't see." *Dr Jeremy Lim*
- "UHC is a right but someone must sacrifice for it." *Dr Kelvin Tan*
- "Beyond the rhetoric [of UHC], practical decisions need to be made. HTA is vital for this." *Dr Kalipso Chalkidou*

Session 6 - Advancing UHC through the use of HTA: The case of renal dialysis in Indonesia, the Philippines, Singapore and Thailand

1. Key messages of the session

- Interventions that are lifesaving, costly for patients and have large budget impact are difficult but necessary to deliberate on against the backdrop of UHC. Good evidence such as HTA is useful to bring the discussion on the table and reconcile perspectives from stakeholders (at both national and local levels).
- There always are challenges in designing the benefits package for UHC, especially when a country has to make a decision on high cost and high budget impact technologies. Considerations of feasibility as well as economic, clinical, patient and social implications needed to be taken into account. For example, renal dialysis policy is implemented in many countries with the aims of preventing life-threatening illness and reducing catastrophic expenditures.
- The indicator of an increase in a service coverage or utilisation rate is not sufficient for UHC. The quality of the service and outcomes gained should be considered.

- HTA can direct the policy e.g. peritoneal dialysis (PD) first policy for renal replacement therapy (RRT). HTA is used not only to assess the economic impact of an intervention but also address feasibility as well as social and ethical consequences.

2. Major problems & issues raised / discussed

- Asia has the highest number of patients undergoing RRT in the world now, and this number is estimated to increase further by 2030.
- High cost and high budget impact technology poses a challenge to UHC and the development of its benefit packages. There are concerns surrounding the affordability and sustainability of UHC.
- Ethical and social concerns on dialysis policy include variation in practice between different healthcare schemes, inadequate of hemodialysis (HD) coverage, shortage of PD solution supply, geographical access to health services, indirect costs for patients, as well as providers' and patients' awareness and resistance.
- One of the key challenges of RRT policy is how to make RRT accessible at good quality and efficient for all needed.

3. Suggested solutions

- The concept of 'Triangle that moves the mountain' by Dr Prawase Wasi consists of the three important power streams in the society. These include (1) knowledge power which is belonging to academics, (2) social power which is longing to civil society and (3) political power which is belonging to politicians/decision makers. These power streams can help to move the RRT policy forward.
- Informed, activated patients and professional practice teams are crucial. Resistance to change and education challenges from professional and patient groups can be addressed, for example with professional certifications, awareness campaigns and textbooks.
- High quality evidence promotes acceptability among stakeholders and provides an unbiased perspective. The inclusiveness and transparency of HTA process are important aspects.
- Incentive interventions can promote behaviour change in providers and patients.
- Upstream preventive programmes can complement the RRT policy and discussions on dialysis benefits downstream.
- Knowledge sharing and experiences from neighbourhood countries are beneficial. However, local context and guidelines cannot be disregarded.

4. Quotations

- "Everyone should have their say but it is impossible for everyone to have their way." *Dr Yot Teerawattananon quoting Sir Michael David Rawlins*

Session 7 - Site Visit to National Kidney Foundation: Case Study – Renal Replacement Therapy

1. Key messages of the session

- Emphasis should be on prevention at pre-dialysis stage to reduce the incidence of kidney failure and patient education to allow them to make more informed decisions on treatment modality.
- Philippines and Thailand considered social factors in CEA for new technologies by using EuroQoL 5 dimensions (EQ-5D) and/or Kidney Disease Quality of Life (KDQoL).
- While there might not be any new dialysis machines, China is seeking to evaluate new or more advanced fluid for Peritoneal Dialysis (PD) beyond 7 years as the current reimbursement was based on clinical effectiveness for PD using simple PD fluid.

2. Major problems & issues raised / discussed

- Singapore has the highest rate of diabetes-induced kidney failure in the world, with an average of about 100 new cases per year. Often, these patients are not traceable after being informed of their condition at Chronic Kidney Disease (CKD) Stages 1 to 3, and appear at the emergency room at CKD stage 5 (accounting for 50% of patients), needing dialysis and with little time to prepare.
- The use of PD locally is still modest, and cost is increasing with no end in sight due to better survival in patients. As Singapore does not have a PD-first nor PD-favoured policy, patients often are unaware of the

journey in terms of logistics, cost, space required for storage of PD fluids, and time needed for procedure when making decisions on the type of treatment modality.

- Most dialysis patients report low quality of life due to time spent on dialysis. In addition, the cost to transport patients to dialysis centre is often high and out-of-pocket.
- While dialysis machines have been around for more than 70 years, the innovation in technology has been limited, resulting in dialysis machines that are still too large to bring around. In addition, the amount of fluid required for PD averages to 70L per day, making storage an issue for patients in their home. Currently, there is a new dialysis machine that is portable and uses 2L of fluid per day, allowing patients to carry it on the go for continuous dialysis. However, the journey was long – it took 12 years of experimentation and extensive funding pumped in.

3. Suggested solutions

- NKF has rolled out several education and outreach programmes. For education, they found that by educating the members of the public with post-upper secondary education (approximately at least 8 years of formal education), they were able to influence lifestyle behaviours significantly. They also deployed various mobile education buses tailored to different age groups, namely pre-adolescents and adolescents.
- NKF works closely with the Health Promotion Board (HPB) to avoid duplications for health promotion education and have targeted health screening at mosques and corporations with high-risk groups instead of mass health screening.
- NKF works closely with hospitals to engage patient and their family members together through their "Know right, start right" programme. Patients were also engaged to give talks in the community to share their experiences in this area to increase awareness and better understanding of the daily struggles experienced as a result of the treatment modalities used.
- NKF adopts a 5km philosophy to have centres within 5km reach of the patients. Access to these centres is not strictly based on residential areas, but also the care received by patients or work location. In doing so, they allow patients to re-integrate and their family members to re-integrate easily into the community that they are residing in.
- To facilitate new technology diffusion and uptake, there needs to be more coordination between the regulatory approving authority (Health Sciences Authority, HSA) and the Ministry of Health in Singapore for new technologies as HSA's primary concern is safety and not reimbursement.
- Each centre in NKF only has one brand of machines to facilitate operation by the nurses and manage costs. This helps to reduce training required and the logistic challenges in storage for different consumables at each centre. NKF also calls for a tender every 2 years to ensure that they have the lowest price for consumables. However, they also consider factors such as warehousing of consumables, availability of alternative sources by suppliers and storage in their centres as part of the procurement process.

4. Quotations

- "Healthcare should be seen beyond the health system as a social investment." *Dr Winston Chin*

Session 8 - Experiences of institutionalising HTA systems in Resource-Rich and Resource-Limited Settings

1. Key messages of the session

- Increasing demand for new technology, increasing treatment cost and funding deficits are among the key challenges in health policy development.
- Health Technology Assessment (HTA) serves as a valuable tool to support decision-making on the inclusion of new medicines and services.
- For example, HTA evidence can be used to determine the health benefit package for UHC and inform the subsidy of drugs and medical services, thereby improving access to clinically effective and cost-effective health technologies.
- To advance HTA development, countries need to increase awareness of and commitment to HTA among policymakers, mobilise stakeholder engagement and build human capacity through training and collaboration between local and international HTA institutions.

2. **Major problems & issues raised / discussed**
   - Key barriers to HTA development include lack of funding, lack of well-trained human resources, lack of data, lack of clear guidelines and lack of stakeholder involvement.
   - Conflicts of interest, arising from the way HTA agencies are situated within ministries of health, need to be adequately addressed.

3. **Suggested solutions**
   - Advocacy is needed to increase awareness of and commitment to HTA among policymakers. Strong leadership by ministries of health and clear legislative frameworks are vital to advancing HTA development.
   - Methodology and process guidelines should be developed to regulate and standardise the implementation of HTA. For example, the engagement of stakeholders throughout the whole research process is an essential element of the guidelines in Thailand.
   - Training and collaboration between local and international HTA institutions are required to build human capacity for HTA.

4. **Quotations**
   - "Success is what happens when preparation meets opportunity." *Ms Waranya Rattanavipapong quoting Zig Ziglar*
   - "Resource-rich or resource-limited, all countries face the challenges of infinite needs and finite resources. The needs of the population are always going to exceed the resources you have." *Dr Daphne Khoo*
   - "Our aspiration is to unite various players in healthcare into a world that considers HTA in decision-making." *Dr Daphne Khoo*

Session 9 – Help Me Help You: Role of Hospital-Based HTA

1. **Key messages of the session**
   - Healthcare priority setting and decision-making occur on many levels, including hospitals. The different levels of priority setting and decisions made are based on common criteria, such as effectiveness and value for money.
   - HTA can be applied anywhere where there is need of evidence to ensure that limited resources are allocated with these principles in mind.
   - Hospital level decision-making is specific to the institutional setting and tends to include more time, resource and operational considerations.
   - Hospital-based HTA complements general, 'arms-length' HTA national agency efforts. Main areas where HTA informs decision-making at a hospital level are to estimate an annual budgeting cycle and to assess and monitor the use of new technologies or devices.

2. **Major problems & issues raised / discussed**
   - The impact of rising healthcare costs includes increased reimbursement cost, increased out-of-pocket expenditure, and unstandardized delivery of care, pricing, supplies, implant, capital equipment, etc.
   - Cost is not the only concern; at the level of hospitals, the end goal is demonstrably effective and affordable care with quality outcomes.
   - Although HTA has traditionally been performed at the national level, hospitals are a key entry point for new and innovative health technologies. In addition, these technologies can be introduced in an unplanned manner, wasting resources with inefficient selection. It should be considered whether new technologies are "need based" and "cost effective" before procurement. There is a demand for evidence to inform decision-making at the hospital level.
   - HTA as a methodological tool can address these cost, quality and contextual concerns. However, it is not without its challenges, which are primarily data-related:
     - Data access such as absent linkages, data permission, and nature of the data
     - Data quality such as missing data and wrong codes
     - Cost of data acquisition
     - Patient-reported outcomes, data from wearable devices are still not routinely captured

3. Suggested solutions

- HTA approaches are varied, from rapid review to analytical modelling. Therefore, if there is a limitation on resource, capacity, and data at the hospital level, depending on the context, a rapid review or horizon scanning can be done. The follow-up and more comprehensive analysis can be performed at a later stage to give inputs and validate the program.
- Hospital-based HTA can help to guide the adoption of new technologies and the design of the healthcare services at a hospital level.
- The process and mechanism at the national level can be replicated at a micro level in the hospital. For example, Medical Devices Oversight Committees have been established in hospitals including Changi General Hospital to review and assess medical devices and technology-based procedures, make recommendations on the discontinuation and recall of devices, as well as formulate policies and guidelines.
- Political will (at a hospital level) and network/collaboration can foster the limitation on data and promote the adoption of HTA-based hospital.
- Hospital-based HTA can feed back to promote both hospital and national level HTA by imputing real world data as inputs, such as transitional probabilities and cost for economic evaluation models.
- Price benchmarking platforms can be an input to HTA. However, the main factors are the participation of hospitals and their willingness to share data, the availability of accurate data, and the volume and quality of data. In addition, COI management is essential for collaboration and data sharing.

4. Quotations

- "This has led to a new business paradigm based on frugal innovation, which seeks to do more with less." *Dr Wee Hwee-Lin quoting Mr Lim Chuan Poh, Chairman of A*STAR*
- "Not because I say that it works, but I show that it works." *Dr Pwee Keng Ho*

Session 10 – Site Visit to National University Hospital: NUHS Value Driven Outcomes Initiative

1. Key messages of the session

- A value based approach to health care, as opposed to a cost saving one, provides a standardized and pragmatic framework such that care can be measured in a consistent way across departments and hospitals.
- Increased transparency and accountability encourage stakeholders to develop changes in attitudes to be more cost and quality conscious, and undertake strategic planning to right site clinical services and personnel across the health system.

2. Major problems & issues raised / discussed

- Global spending on health is expected to increase from USD 9 trillion in 2014 to USD 24 trillion in 2040 (Lancet 2017). An estimated 1/3 of current spending is wastage. Several drivers include ageing populations, increasing life expectancy but early onset of chronic disease, overutilization and dependence on technology, as well as newer, more expensive drugs and technologies.
- The challenge for healthcare institutions is how to improve quality and outcomes for patients while rationalising the cost borne by the patients and the institution that is required to do so.

3. Suggested solutions

- Value based health care as "The Strategy That Will Fix Health Care" takes into account both clinical outcomes and patient reported indicators (together, 'quality'), based on the definition by Porter and Teisberg, achieved per dollar spent ('cost').
- The National University Health System developed a methodology (modelled after the University of Utah Health Care) to measure value across 46 disease conditions. Quality outcomes included indices for clinical quality & safety, appropriateness of care and patient experience. Costs of resources used are measured around patient and by condition, over the full cycle of care. These can be visualised and monitored at various levels (patient episode, physician, department, institution). Standard dashboards allow departments to identify best practices, and reduce variation in practice between doctors that influence cost.

- There is a need for leaders to have commitment, be champions for value and frequently engage stakeholders and clinicians.

4. Quotations

- "Value is not about getting cheapest thing. It is about getting the highest quality." *Prof James Yip*

Session 11 - Measuring Impact of UHC through the lens of HTA

1. Key messages of the session

- There are three dimensions to consider when moving towards UHC: (1) the population covered; (2) the services covered; and (3) the cost (and quality) of service provision.
- Monitoring, measuring and evaluating are needed to know whether we have achieved UHC.
- HTA can be used to inform priority setting, decision-making (e.g. of the health benefit package) and price negotiation.
- An Impact Value Chain with a focus on the return on investments can be used to measure the impact of HTA on UHC.
- HTA is broader than just economic evaluation and efficiency; it also includes ethical, legal, and social issues.
- We need to be careful with the power in our hands. We need to consider all consequences, all parts, and all stakeholders. We cannot let HTA become a mechanism to advance inequity.

2. Major problems & issues raised / discussed

- What does Universal Health Coverage (UHC) mean?
    - All people receive quality health services that meet their needs, without being exposed to financial hardship to pay for the services.
    - The essence of UHC is captured in the UHC cube that brings together three dimensions: population covered, services covered and cost of service provision. Quality has increasingly been recognized as another dimension of UHC.
    - UHC is a political process: once one has it, it is hard to take it away. However, healthcare will continue to cost more.
    - Asia is changing and shifting at various speeds towards an older, more urbanised model, which has an impact on access to healthcare.
- How do we measure achievement of UHC?
    - The indicators for the Sustainable Development Goal (SDG) 3.8 can be used to measure UHC (e.g. 3.8.1 – coverage of essential health services, 3.8.2 – catastrophic health expenditure and medical poverty or impoverishment)
- How do we know if HTA contributes to UHC?
    - A logic model can be used to measure the impact of HTA on UHC by monitoring inputs, processes and outputs.
    - To understand the present as a return on investment, analyse and report indicators such as the coverage of essential health services for infectious diseases, NCDs etc.
    - However, examples of HTA in China and India do not indicate a clear link between HTA and UHC outcomes. In the case of India, there is a complicated system of financial transfers that muddles the impact of HTA.
    - Currently, it is difficult to measure the impact of HTA on UHC.
- Equity: Geographical access to health technologies is a major barrier to delivering care. There is a need for good information systems for monitoring, and for data not just to be collected but also used to inform decisions.
- New technologies are being introduced every day, prompting the need to accommodate those changes.

3. Suggested solutions

- Supranational clustering of health services has been used in some countries although it depends on various factors.

    - In some countries, patients may best be treated in another country for the time being.
    - For medical expertise to thrive, it requires a certain volume that calls for the need of supranational initiatives as in the case of BENELUX and Austria, where these countries are doing HTA together. This also allows countries to do price negotiation together as they are able to get volume discounts. Small countries can team up with bigger countries to look up bigger volume and prices.
- HTA will have maximum impact when there are:
    - Functional regulatory mechanisms
    - Pooled procurement for a big enough clout (influence)
    - Strategic purchasing mechanisms
- For HTA to have a strong impact, it is also important to adopt a consultative approach (i.e. a listening ear).
- It is a hard job to create access and reduce catastrophic health expenditure. One can turn to the 'Triangle that moves the mountain' by Dr Prawase Wasi: evidence, participation, policy champions, and apply it to one's own context.
- To conduct HTA properly, one needs to know lowest price available:
    - One should not assume that pharmaceuticals do not do their own HTA: they have their own data on products and in-house capacity.
    - One should not stop at conducting cost-effectiveness analysis for the list price. One should seek to bring down the price. Price negotiation skills are therefore important and can be trained (WHO is offering support on this).

4. Quotations

- "HTA (community), you have a lot of power in your hands; please use it wisely." *Dr Tessa-Tan-Torres Edejer*
- "Do not let HTA become a mechanism to increase inequity." *Dr Tessa-Tan-Torres Edejer*

Session 12 – Reflection and Way Forward Discussion

1. Key messages of the session

- UHC and HTA
    - UHC is always a work in progress. It is important to maintain the momentum of HTA and work towards the goal of UHC.
    - HTA is an approach that offers inputs for complex decisions.
    - Countries do not always need to establish a HTA body. It could be in the form of a committee, working group or process with proper mechanism supported.
    - HTA is a team effort, not an individual effort.
- One ship (world), many cabins (countries)
    - Countries share many common needs, demands and goals.
    - There are potentially common resources available for information sharing and learning purposes. Countries can build their own capacity to act in synergism.
- Public health is a decision for the population, not just an individual. If countries can address the challenges of UHC, it can set the foundation to solve the problems of other specific diseases (whether they are infectious diseases or chronic diseases).
- Multilateral agencies like WHO play a role to support the use of HTA. Their focuses are to set the norm (such as how-to guidance) and working with the country to provide technical support in different areas.

2. Major problems & issues raised / discussed

- There is a need to broaden from point technologies to overall system impact within the context of various financing and delivery models.
- New technologies are developed very quickly, but HTA product and recommendations take time.
- Once new technology is approved at the national level for reimbursement, the power of negotiation with the industry will be limited.
- The trend of technology development will be overlapped and disruptive.

3. Suggested solutions

- Mutual cooperation and collaboration across countries: we (countries) are better together. One country will be able to influence another. Therefore, we need to leverage on collaborations and supports from partners to make a case in our own countries.
- Complex challenges require public-private partnership to solve. Public-private partnership should be strengthened not only between government and private organisations but also within the whole system. The system should be governed in the context of ecosystem and equal partnership.
- Ways to make HTA successful:
    - Need to address different parts of the process accordingly. For example, dialogue is a political part that involves stakeholders, while assessment requires analytic and technical skills.
    - Need to have a better link to the community and private sector. HTA and the private sector can work together in a holistic view to understand the patient's perspective and enhance patient outcomes.
    - Need to shorten the time between market approval and HTA recommendations. There is a potential for rapid HTA e.g. horizon scanning before new technologies are granted marketing authorization, and model default as a starting point for economic evaluation.
- Guide on how to develop an HTA mechanism: establish a mandate, review the legal framework, develop institutional arrangements, manage assessment and appraisal processes, monitor and evaluate. A clear COI guideline and management can help to promote transparency and credibility of HTA.
- HTA should prove itself that it is a useful tool and worth the investment. The value for money of HTA can increase political will. Therefore, during the starting period of HTA, do lesser with higher quality and impact rather than do more with lower quality and impact.
- Solve the challenges and limitation on data by using it. Then, we can learn how to improve and address the data gaps.

4. Quotations

- "HTA does not make decisions; policymakers make decisions." *Dr Jeremy Lim*
- "Do (HTA) well rather than do more." *Dr Tessa-Tan-Torres Edejer*
- "Data is similar to women. The more you pay attention to them, the better it is. If you ignore them, you will be in trouble." *Dr Yot Teerawattananon*

Annex 1 - Programme Structure of NIHA Leadership Development Programme 2019

Programme

Monday, 24th June	
Time (hrs)	**Activity**
1400 – 1700	Attendees check into Park Avenue Rochester Hotel
1700 – 1800	Registration
1800 – 1900	Cocktail Networking session
1900 – 1910	**Welcome Address** **Prof Teo Yik Ying** Dean, Saw Swee Hock School of Public Health National University of Singapore
1910 – 1930	**Opening of NIHA LDP 2019** **Keynote Address: Making Universal Healthcare Champions in Asia** **Prof Kishore Mahbubani** Senior Advisor (University & Global Relations) and Professor in the Practice of Public Policy, National University of Singapore
1930 – 1950	Question & Answer session **Moderated by :** **Dr Jeremy Lim** Chair, Steering Committee NUS Initiative to Improve Health in Asia
1950 – 2100	Welcome Dinner at Park Avenue Rochester Hotel

Tuesday, 25th June	
Time (hrs)	**Activity**
0815 – 0830	Transfer from Hotel to NUS
0845 – 1030	**Topic: Universal Health Coverage: From Ideology to Implementation** **Session Lead:** **Ms Saudamini Dabak** Technical Advisor Health Intervention and Technology Assessment Programme, Thailand **Moderated by :** **Prof Teo Yik Ying** Dean, Saw Swee Hock School of Public Health National University of Singapore **Keynote Speaker :** • **Dr Suwit Wibulpolprasert**, Vice Chair, International Health Policy Program Foundation (IHPF) Health Intervention and Technology Assessment Foundation (HITAF) **Panellists:** • **Ms Sangeeta Singh,** Chief Executive Officer, State Agency for Comprehensive Health and Integrated Services, Government of Uttar Pradesh • **Mr Maoguo Wei**, Deputy Director of Hainan Health Reform Office, China
1030 – 1100	*Tea Break*
1100 –1230	**Topic: Ensuring Effectiveness, Equity, and Sustainability of Universal Health Coverage under the Epidemiological, Economic and Demographic Transitions in Asia** **Session Lead:** **Ms Cecilia Oh** Programme Advisor Access and Delivery Partnership, United Nations Development Programme **Panellists :** • **Dr Nordin bin Saleh**, Director, Planning Division, Ministry of Health Malaysia • **Ms Mazda Novi Mukhlisa**, Head of section of effectiveness and efficiency analysis in health financing, Ministry of Health, Centre for Health Financing and National Health Insurance, Indonesia

	• **Mr Choub Sok Chamreun**, Executive Director, KHANA • **Dr Shin-Ichiro Noda**, Director, Division of Global Health Programs, National Centre for Global Health and Medicine, Japan
1230 – 1240	*Group Photo taking session*
1240 – 1330	*Lunch*
1330 – 1500	**Topic: Priority Setting in UHC: Applications of HTA for UHC in Benefit Package Design, Pricing, Procurement and Reimbursement, Resource Planning, Public Empowerment, and Policy Advocacy** **Session Lead:** **Prof Kalipso Chalkidou** Director of Global Health Policy and Senior Fellow Center for Global Development, Imperial College, London **Panellists:** • **Dr Shankar Prinja**, Assoc Professor at Postgraduate Institute of Medical Education and Research Chandigarh (PGIMER) • **Ms Diana Beatriz Bayani,** Research Fellow, HTA Unit in the Department of Health, Philippines • **Dr Zhao Kun, Director**, Division of Health Policy and Technology Assessment, China National Health Development Research Center, National Health and Family Planning Commission (NHFPC), Beijing, China • **Ms Niki O'Brien**, Assistant Project Manager, Global Health & Development Group at Imperial College London • **Ms Saudamini Dabak**, Technical Advisor, Health Intervention and Technology Assessment Programme, Thailand
1500 – 1530	*Tea Break*
1530 – 1700	**Topic: Making Decisions about New Vaccine Introduction based on Complex Evidence** **Session Lead:** **Prof Mark Jit** Professor of Vaccine Epidemiology, Department of Infectious Disease Epidemiology, London School of Hygiene & Tropical Medicine; Principal Scientist, Modelling and Economics Unit, Public Health England; Visiting Professor, School of Public Health, University of Hong Kong **Panellists :** • **Dr Antonio Dans**, Professor, University of Philippines, College of Medicine.

	Dr Suwit Wibulpolprasert, Vice Chair, International Health Policy Program Foundation (IHPF) Health Intervention and Technology Assessment Foundation (HITAF)
1730	Transfer back to Hotel

Wednesday, 26th June	
Time (hrs)	**Activity**
0830 – 0845	Transfer from Hotel to NUS
0900 – 1030	**Topic: Political Economy of UHC and HTA** **Session Leads:** **Dr Jeremy Lim** Chair, Steering committee NUS Initiative to Improve Health in Asia **Prof Kalipso Chalkidou** Director of Global Health Policy and Senior Fellow Center for Global Development Imperial College, London
1030 – 1100	*Tea Break*
1100 –1230	**Topic: Advancing UHC through the use of HTA: The case of renal dialysis in the Philippines and Thailand** **Session Lead:** **Dr Yot Teerawattananon** Founding Leader, Health Intervention and Technology Assessment Programme, Thai Ministry of Public Health and Visiting Professor, National University of Singapore **Panellists:** • **Ms Diana Beatriz Bayani**, Research Fellow, HTA Unit in the Department of Health, Philippines • **Dr Piyatida Chuengsaman**, Vice Chairman of Peritoneal Dialysis Subcommittee, Nephrology Society of Thailand and Head of Banphaeo Charoebkrung PD Center, Thailand
1230 – 1330	*Lunch*

1330 – 1630	**Site Visit: National Kidney Foundation** **Topic: NKF Case Study – Renal Replacement Therapy** **Session Lead:** **Dr Jeremy Lim** Chair, Steering Committee, NUS Initiative to Improve Health in Asia **Panellists:** • **Mr Tim Oei**, Chief Executive Officer, National Kidney Foundation • **Mr Suresha Venkataraya**, Chief Executive Officer, AWAK Technologies • **Dr Winston Chin**, Director (Programmes), MOH Office for Healthcare Transformation, Finance Redesign
1630	Transfer back to Hotel

Thursday, 27th June	
Time (hrs)	**Activity**
0830 – 0845	Transfer from Hotel to NUS
0900 – 1030	**Topic: Experiences of institutionalising HTA systems in Resource-Rich and Resource-Limited Settings** **Session Lead:** **Dr Daphne Khoo** Executive Director Agency for Care Effectiveness, Ministry of Health Singapore **Panellists**: • **Dr Tran Thi Mai Oanh**, Director, Health Strategy and Policy Institute, Ministry of Health, Vietnam • **Ms Waranya Rattanavipapong,** Researcher, Health Intervention and Technology Assessment Programme, Thailand
1030 – 1100	*Tea Break*
1100 –1230	**Topic: Hospital based HTA** **Session Lead:** **Dr Wanrudee Isaranuwatchai**

	Senior Researcher Health Intervention and Technology Assessment Program, Thailand **Panellists:** • **Asst Prof Wee Hwee Lin**, Saw Swee Hock School of Public Health, National University of Singapore • **Dr Pwee Keng Ho**, Senior Principal Analyst, Changi General Hospital • **Mr Eric Woo**, Regional Director, Asia Pacific, ECRI Institute
1230 – 1400	*Lunch*
1400 – 1730	**Site Visit: National University Hospital** **Topic: NUHS Value Driven Outcomes Initiative** **Session Lead:** **Dr Winston Chin** Director (Programmes), MOH Office for Healthcare Transformation, Finance Redesign **Panellist:** • **Prof Finbarr Allen,** Dean, NUS Faculty of Dentistry and Director of the National University Centre for Oral Health, Singapore. • **Dr James Yip**, Senior Consultant and Associate Professor • **Ms Shikha Kumari**, Assistant Director at National University Hospital • **Dr Diarmuid Murphy**, National University Hospital Group Chief Value Officer, National University Healthcare Systems
1730	Transfer back to Hotel

Friday, 28th June	
Time (hrs)	**Activity**
0830 – 0845	Transfer from Hotel to NUS / Check out from Hotel
0900 – 1030	**Topic: Measuring Impact of UHC through the Lens of HTA** **Session Lead:** **Dr Piya Hanvoravongchai** Secretary General, Thai National Health Foundation and Program Director, Equity Initiative, CMB Foundation

	Panellists: • **Dr Tessa Tan-Torres Edejer**, Coordinator of Unit on Economic Analysis and Evaluation, Dept. of Health Financing and Governance, World Health Organisation, Geneva • **Dr Nima Asgari-Jirhandeh** Director, Asia-Pacific Observatory on Health Systems and Policies, World Health Organisation • **Dr Jadej Thammatach-Aree**, Deputy Secretary General, National Health Security Office, Thailand
1030 –1100	*Tea Break*
1100 – 1230	**Topic: Reflection and Way Forward Discussion** **Session Lead:** **Dr Jeremy Lim**, Chair, Steering committee NUS Initiative to Improve Health in Asia **Panellists:** • **Dr Tessa Tan-Torres Edejer**, Coordinator of Unit on Economic Analysis and Evaluation, Dept. of Health Financing and Governance, World Health Organisation, Geneva • **Mr Shane Pang**, Head of Government Affairs & Policy Southeast Asia, Johnson & Johnson
1230 – 1330	**Closing lunch of NIHA LDP Programme**
1345	Transfer from NUS back to Hotel / Check out from Hotel

Annex 2 - List of Speakers, Panellists, Chairs, Moderators, and Rapporteurs

Lead Rapporteur for NIHA LDP 2019: Assoc Prof Helena Legido-Quigley

Opening Session & Keynote Addresses

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Prof Kishore Mahbubani	Dr Jeremy Lim	Ms Saudamini Dabak, HITAP Ms Waranya Rattanavipapong, HITAP

Session 1 - Universal Health Coverage: From Ideology to Implementation

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Dr Suwit Wibulpolprasert Dr Shankar Prinja Mr Wei Maoguo	Prof Teo Yik Ying	Ms Emeline Han, SSHSPH, NUS Ms Melisa Mei Jin Tan, SSHSPH, NUS

Session 2 - Ensuring Effectiveness, Equity, and Sustainability of UHC under the Epidemiological, Economic and Demographic Transitions in Asia

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Dr Nordin bin Saleh Ms Mazda Novi Mukhlisa Mr Choub Sok Chamreun Dr Shin-Ichiro Noda	Ms Cecilia Oh	Ms Emeline Han, SSHSPH, NUS Ms Melisa Mei Jin Tan, SSHSPH, NUS

Session 3 - Priority setting in UHC: Applications of HTA for UHC in benefit package design, pricing, procurement and reimbursement, resource planning, public empowerment, and policy advocacy

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Dr Zhao Kun Dr Shankar Prinja Dr Nikki O'Brien Ms Saudamini Dabak Ms Diana Beatriz Bayani	Prof Kalipso Chalkidou	Asst Prof Wee Hwee Lin, SSHSPH, NUS Dr Lou Jing, SSHSPH, NUS

Session 4 - Making decisions about new vaccine introduction based on complex evidence

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Dr Antonio Dans Dr Suwit Wibulpolprasert	Prof Mark Jit	Asst Prof Wee Hwee Lin, SSHSPH, NUS Dr Lou Jing, SSHSPH, NUS

Session 5 - Political Economy of UHC and HTA

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Dr Jeremy Lim Mr Ed Deng Prof Kalipso Chalkidou		Ms Wanrudee Isaranuwatchai, HITAP Ms Saudamini Dabak, HITAP

Session 6 - Advancing UHC through the use of HTA: The case of renal dialysis in Indonesia, the Philippines, Singapore and Thailand

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Ms Diana Beatriz Bayani Dr Piyatida Chuengsaman	Dr Yot Teerawattananon	Ms Waranya Rattanavipapong, HITAP Ms Lin Wenxin Lydia, SSHSPH, NUS

Session 7 - Site Visit to National Kidney Foundation: Case Study – Renal Replacement Therapy

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Mr Tim Oei Dr Winston Chin Mr Suresha Venkataraya	Dr Jeremy Lim	Ms Toh Kai Yee Asst Prof Wee Hwee Lin

Session 8 - Experiences of institutionalising HTA systems in Resource-Rich and Resource-Limited Settings

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Dr Tran Thi Mai Oanh Ms Waranya Rattanavipapong	Dr Daphne Khoo	Ms Emeline Han, SSHSPH, NUS Ms Melisa Mei Jin Tan, SSHSPH, NUS

Session 9 – Help Me Help You: Role of Hospital-Based HTA

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Mr Eric Woo Dr Pwee Keng Ho Asst Prof Wee Hwee Lin	Dr Wanrudee Isaranuwatchai	Ms Waranya Rattanavipapong, HITAP Ms Lin Wenxin Lydia, SSHSPH, NUS

Session 10: Site Visit to National University Hospital: NUHS Value Driven Outcomes Initiative

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Prof Patrick Finbarr Allen Assoc Prof James Yip Ms Shikha Kumari Dr Diarmuid Murphy	Dr Winston Chin	Ms Lin Wenxin Lydia, SSHSPH, NUS Ms Melisa Mei Jin Tan, SSHSPH, NUS

Session 11 - Measuring Impact of UHC through the lens of HTA

Speaker/ Panellists	Chair/ Moderator	Rapporteur
Dr Tessa-Tan-Torres Edejer Dr Nima Asgari-Jirhandeh Dr Jadej Thammatach-Aree	Dr Piyatida Chuengsaman	Ms Saudamini Dabak, HITAP Dr Wanrudee Isaranuwatchai, HITAP

Session 12: Reflection and Way Forward Discussion

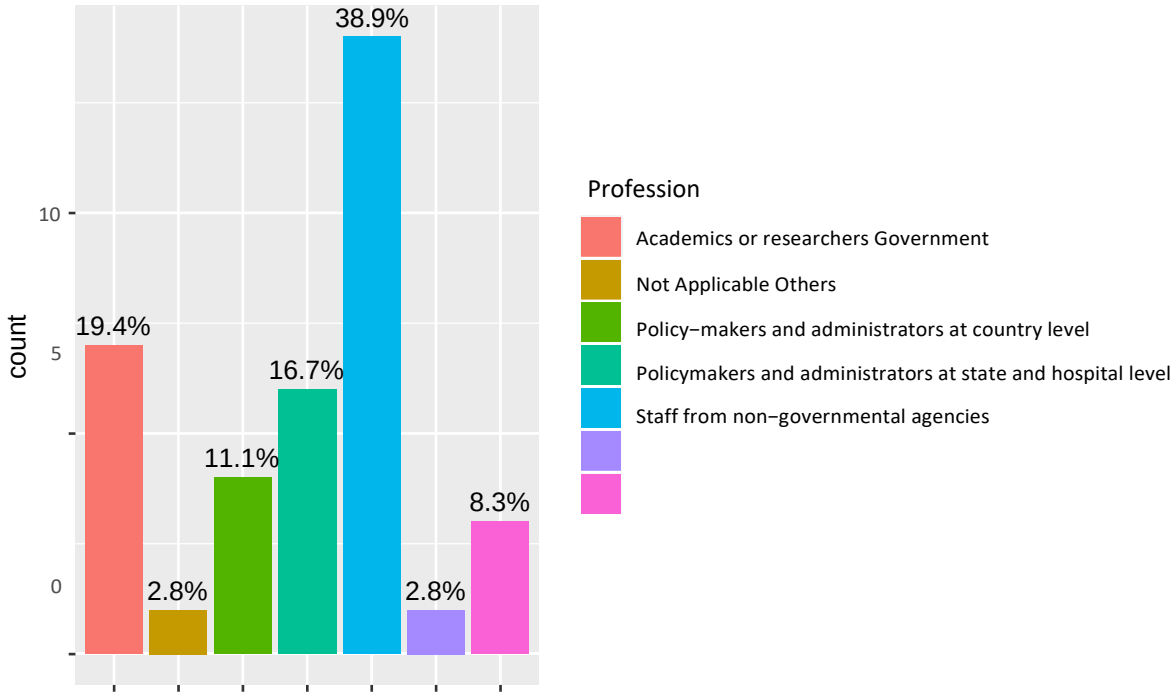
Speaker/ Panellists	Chair/ Moderator	Rapporteur
Dr Tessa-Tan-Torres Edejer Mr Shane Pang	Dr Jeremy Lim	Dr Wanrudee Isaranuwatchai, HITAP Ms Waranya Rattanavipapong, HITAP

Annex 3 - Participant feedback on NIHA LDP

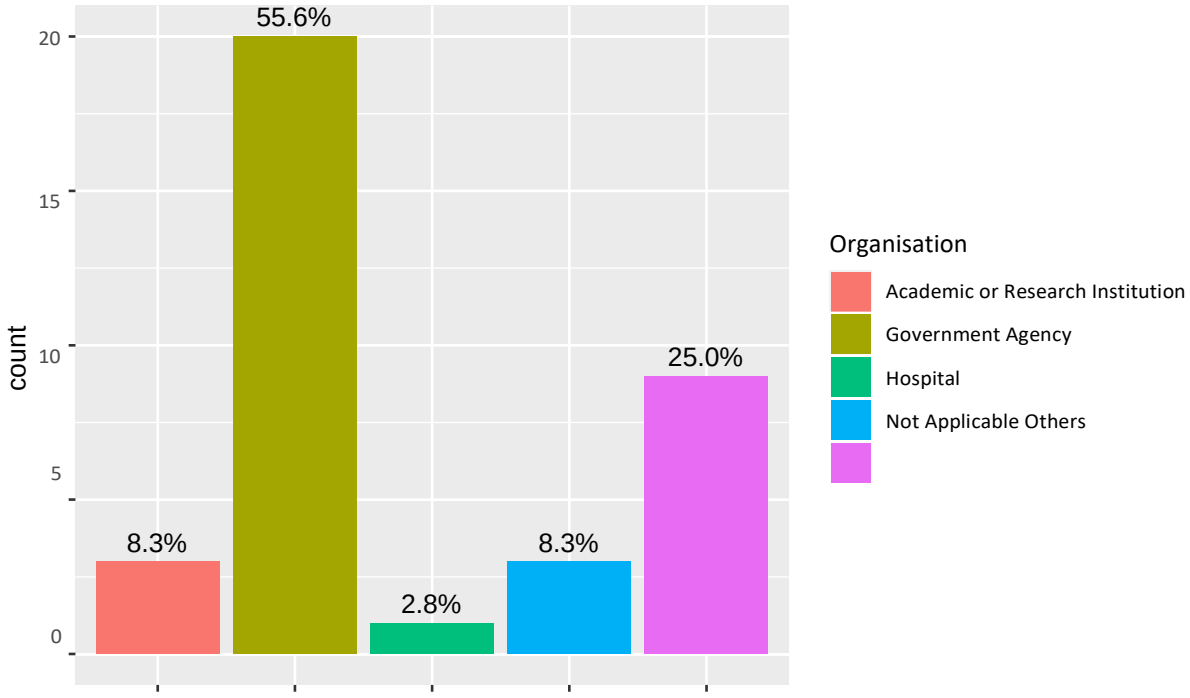
Participant Feedback on NIHA LDP June 2019

Day 1

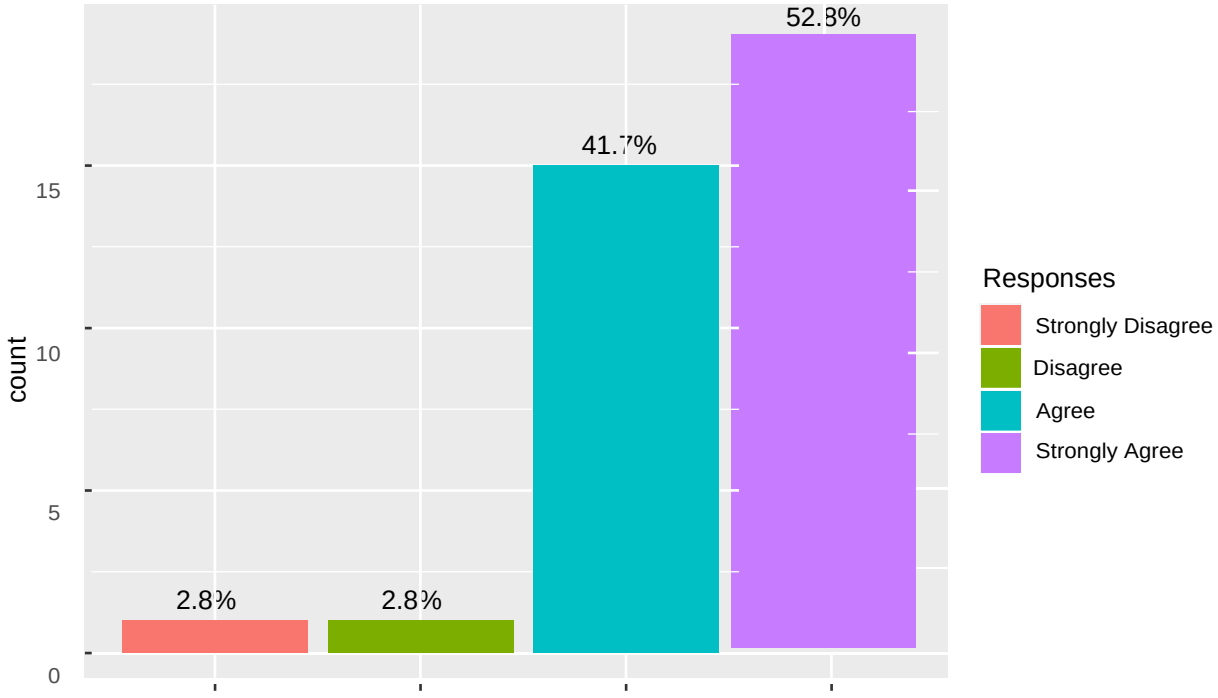
- **Number of forms submitted: 36**
- **Profession**



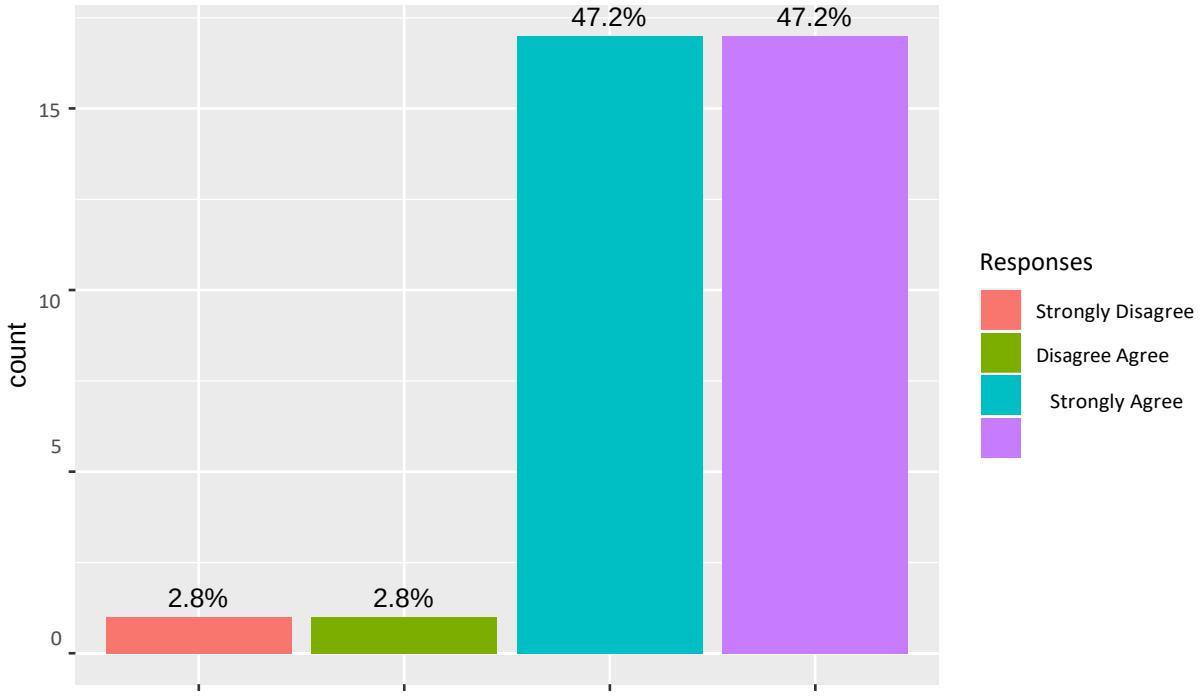
- **Organisation**



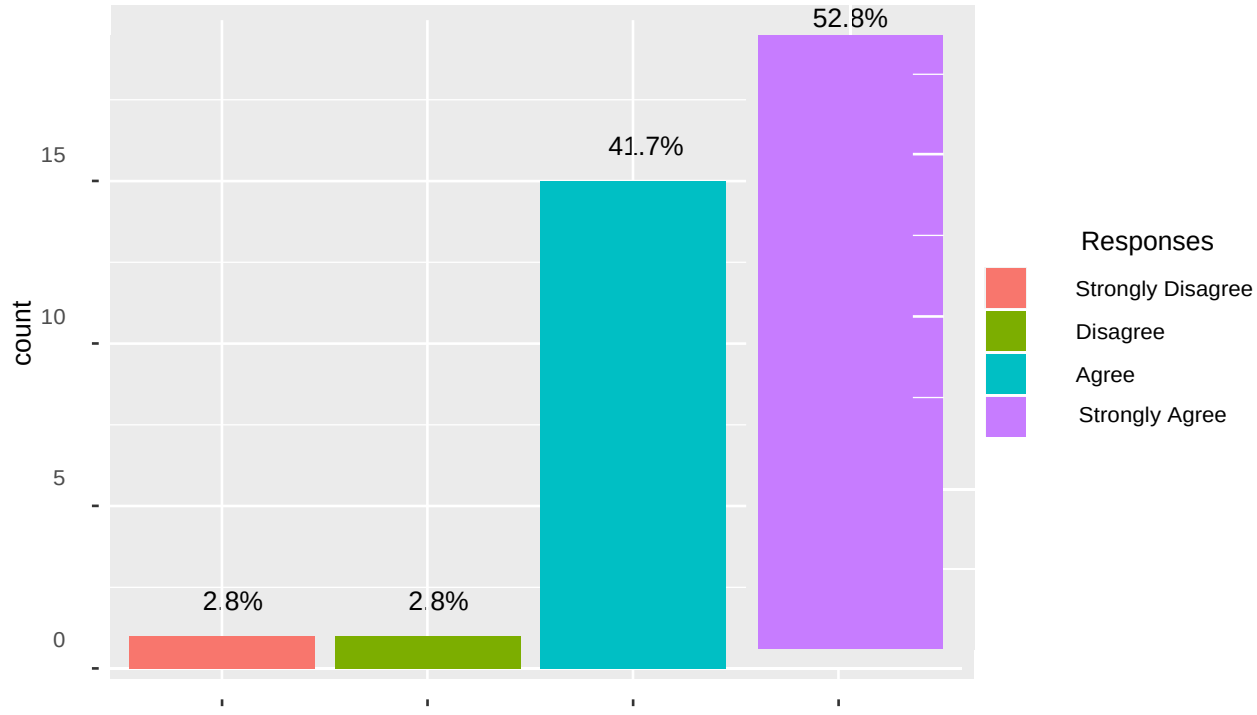
Question 1: The session on Universal Health Coverage: From Ideology to Implementation was useful and deepened my understanding of the topic.



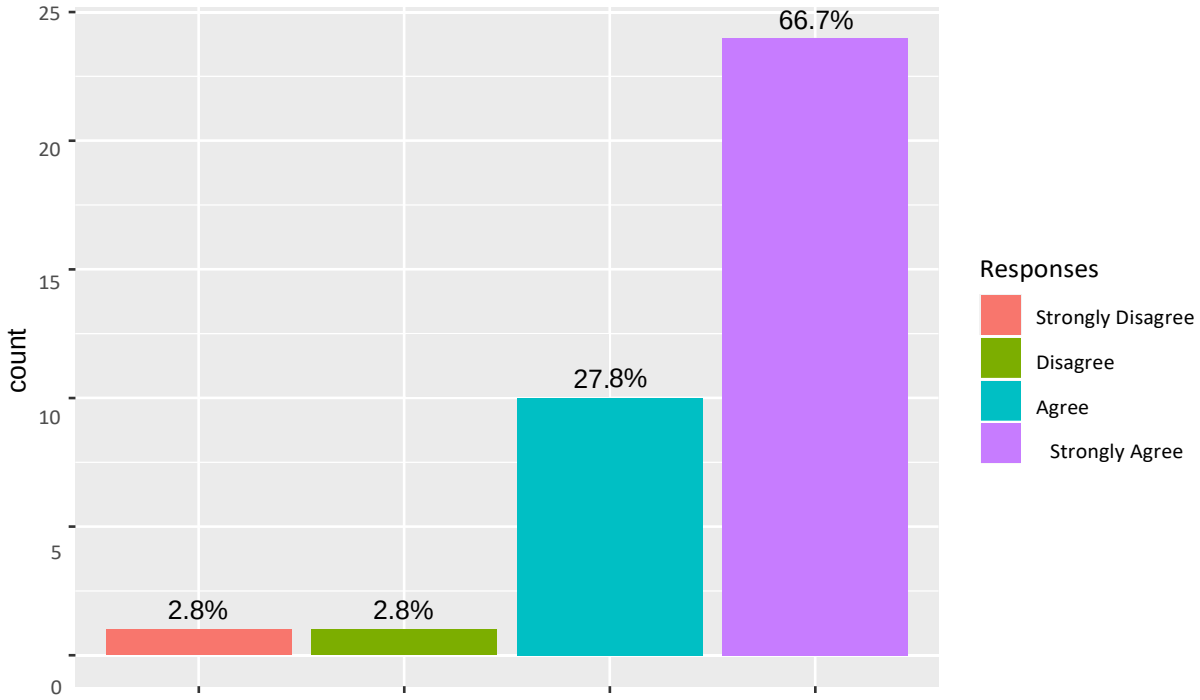
Question 2: The session on Ensuring Effectiveness, Equity, and Sustainability of Universal Health Coverage under the Epidemiological, Economic and Demographic Transitions in Asia was useful and deepened my understanding of the topic.



Question 3: The session on Priority Setting in UHC: Applications of HTA for UHC in Benefit Package Design, Pricing, Procurement and Reimbursement, Resource Planning, Public Empowerment, and Policy Advocacy was useful and deepened my understanding of the topic.



Question 4: The session on Making Decisions about New Vaccine Introduction based on Complex Evidence was useful and deepened my understanding of the topic.



Things I liked about today

- **Programme Content**

Index	Comments
1	Various countries' experience: real/truth examples
2	Courage to express frankly about the hard issues
3	Connections with new faces, new learning from the ideology to practicality and showcases of session 2
4	Presentations from various countries related with their experiences with health sector
5	All sessions are excellent and very helpful for further improvement and healthcare system
6	All of the topics of discussion
7	Experience and learning sharing amongst countries
8	Most of the speakers are well known, experienced and knowledgeable. I really enjoy learning from them
9	Very informative and interactive session, excellent sharing of knowledge and experiences from different countries
10	Topics are very interesting
11	New vaccine econ evaluation effectiveness vs politics was an eye opener and insightful. Overall excellent information and education to a UHC newbie like myself
12	Good overview of healthcare system, UHC and HTA
13	Panel discussion
14	1. Philippines vaccine case study 2. Thailand HPV vaccine case study 3. All arrangements are very good.
15	Specific countries example, focus on link between uhc and political economy
16	Session 4
17	UHC ideology to implementation

- **Session Format**

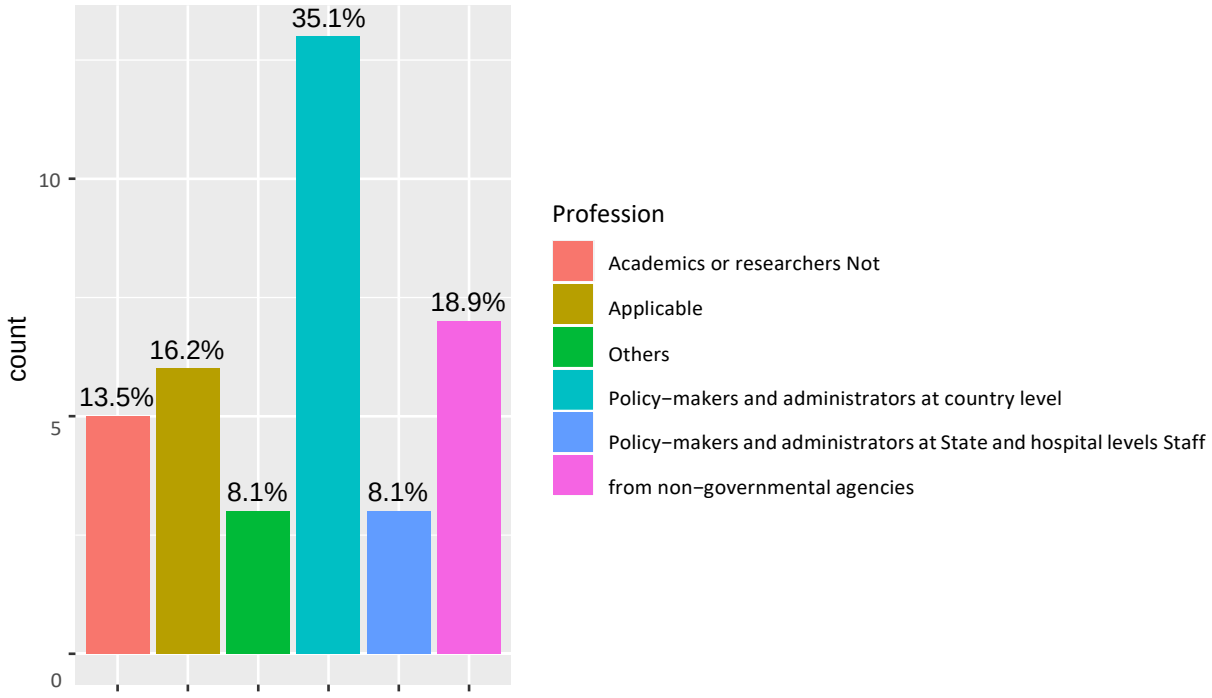
Index	Comments
1	Lecture presenters are excellent
2	Priority setting in UHC and HTA application, panel discussion
3	Interactive session very good, session topic is excellent
4	Fruitful discussion on session 1 and 4
5	Panel discussion was useful and informative

- **Areas that could be improved**

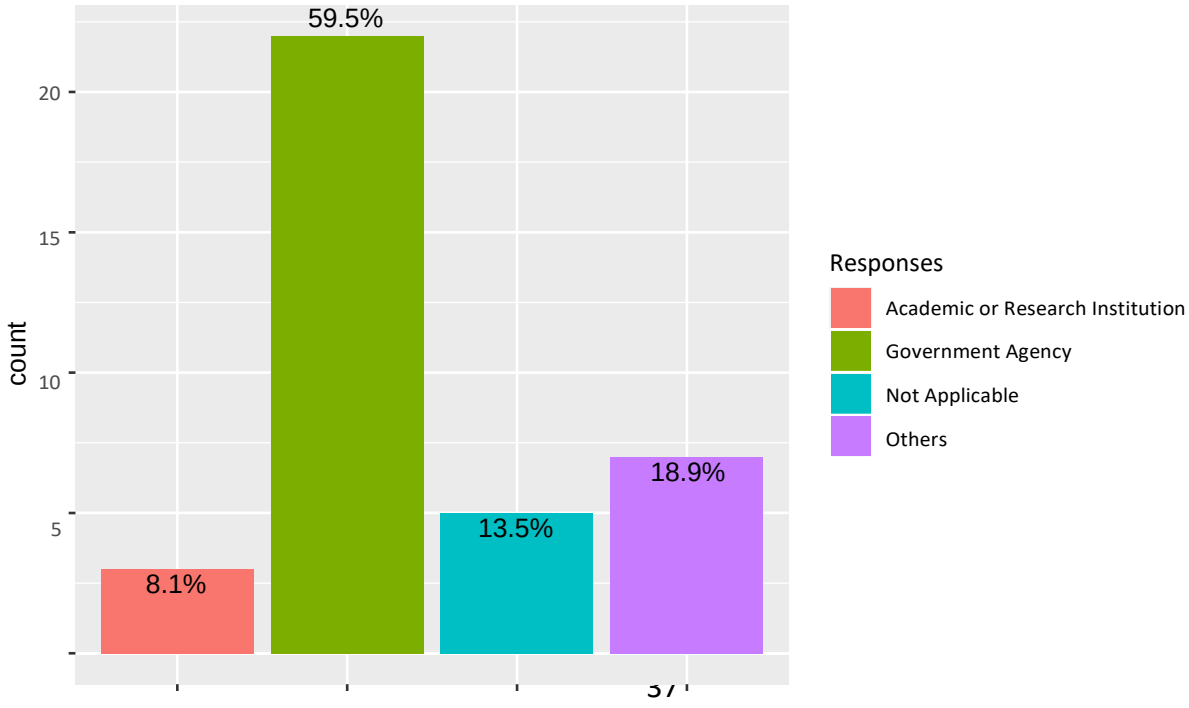
Index	Comments
1	Need more work on integrating results across countries
2	Allocate more time for panel discussion and encourage panelist to expend more on their responses
3	Knowledge of political economic of public goods
4	Talk more on principles on some topics, but we need more details on strategies on best practices

Day 2

- **Number of forms submitted: 37**
- **Profession**

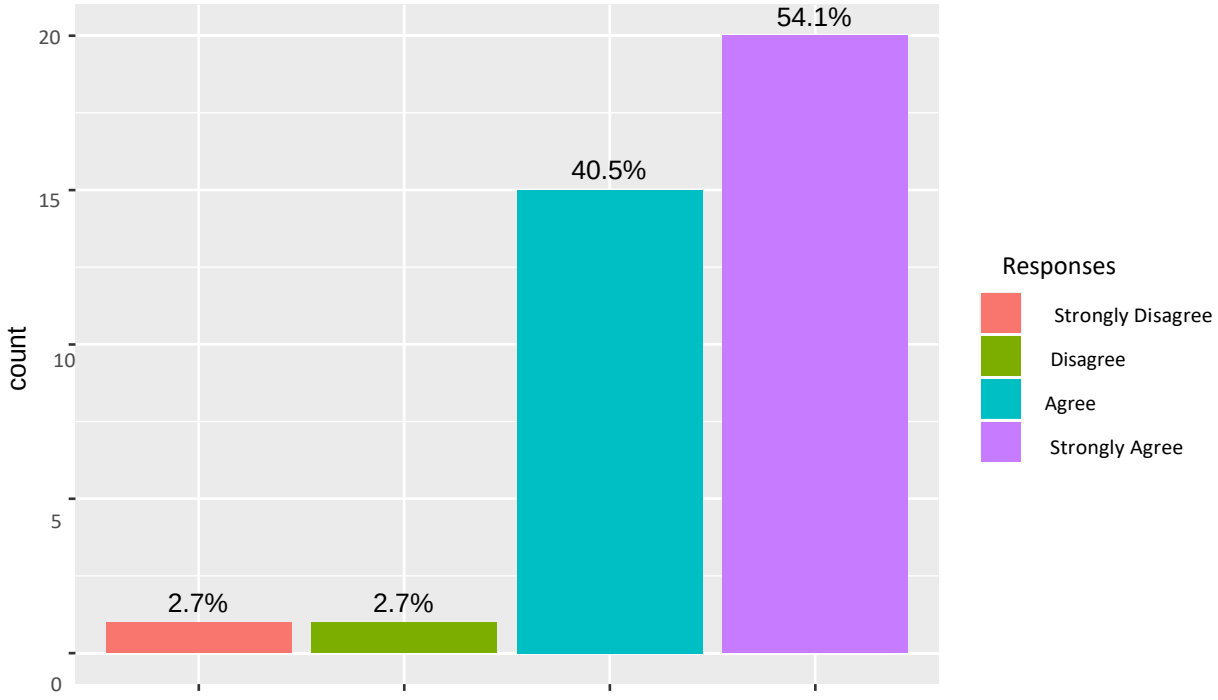


- **Organisation**

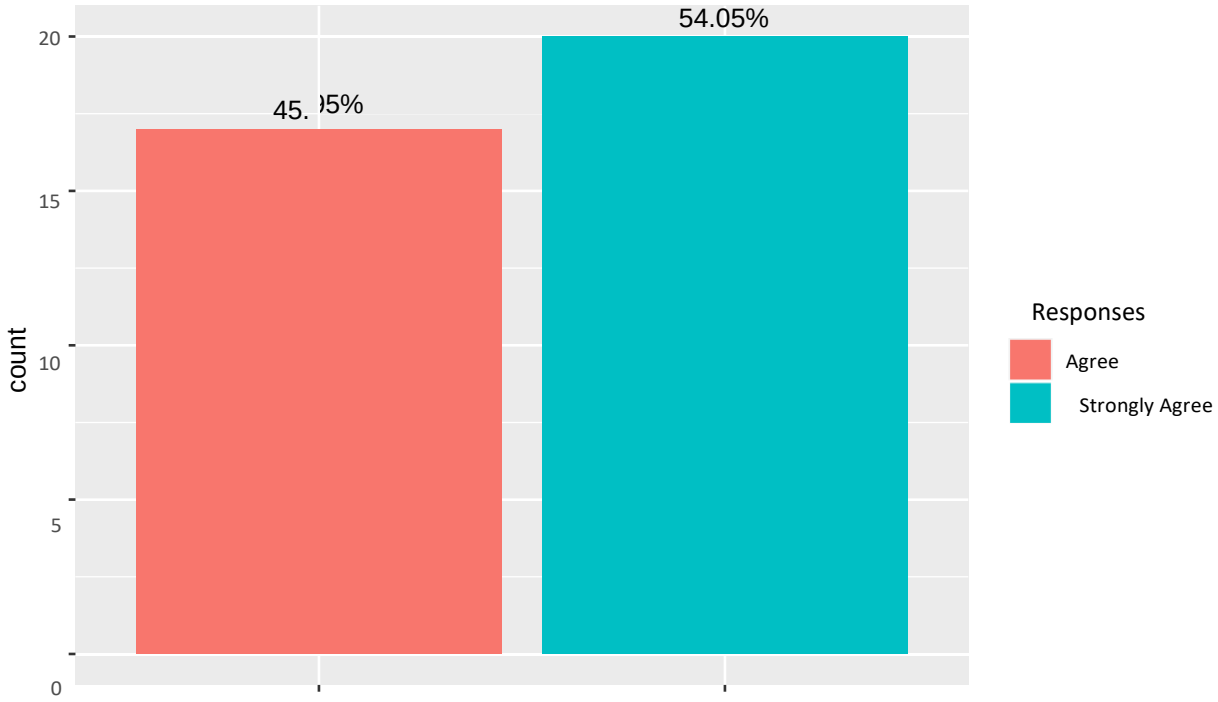


0

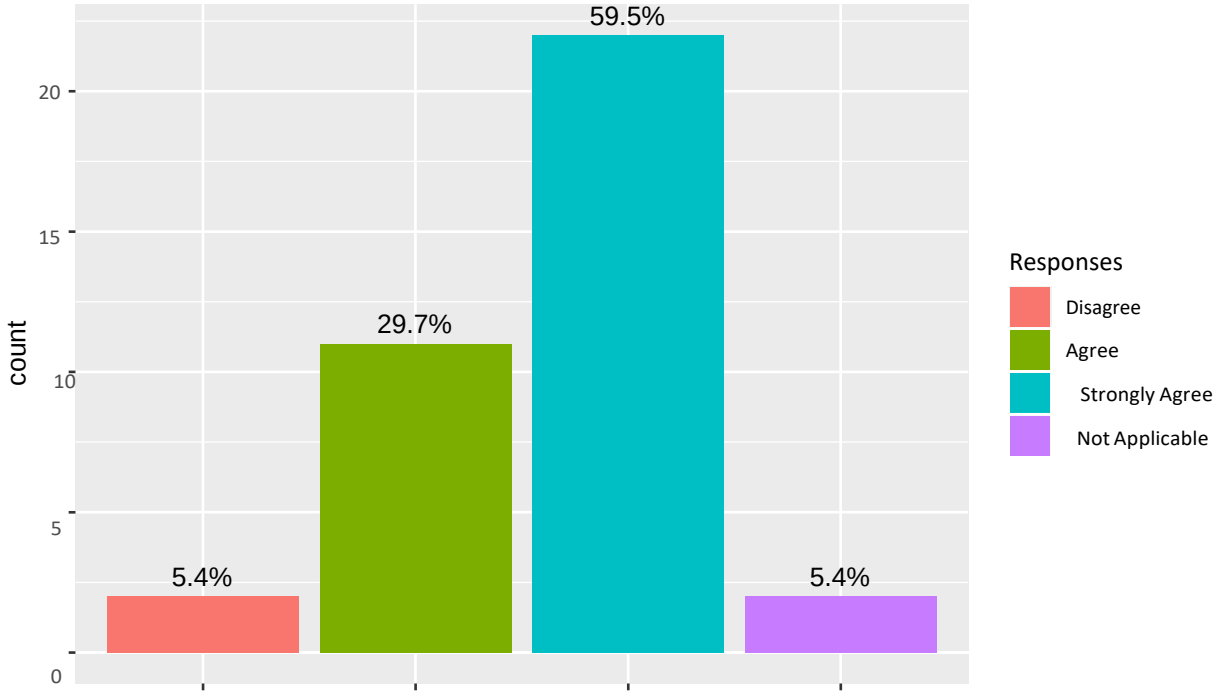
Question 1: The session on Political Economy of UHC and HTA was useful and deepened my understanding of the topic.



Question 2: The session on Advancing UHC through the use of HTA: The case of renal dialysis in the Philippines and Thailand was useful and deepened my understanding of the topic.



Question 3: The site visit to National Kidney Foundation was useful and deepened my understanding of the topic.



Things I liked about today

- **Programme Content**

index	Comments
1	Diversified experience from various countries. Real true stories. Lesson learnt from others to adapt/adopt. Better than first day! Well done!
2	Section 3 and NKF centre visit
3	Politic economy
4	Site visit
5	NKF - strategy of generating awareness right from the pre school and continue with all segments.
6	The tour to NKF
7	Panel discussion, sharing of story and field visits to kidney foundation.
8	Political economy for WHO.
9	I liked the sessions and more than this, nice exposure in NKF
10	Political economic will enlarge my view of HTA implementation and impact beyond healthcare area
11	Session 1
12	Very honest feedback and sharing about the challenges of making decisions on Renal replacement

13	I enjoyed the site visit. It was good to see the topic we discussed in practice.

- **Session Format**

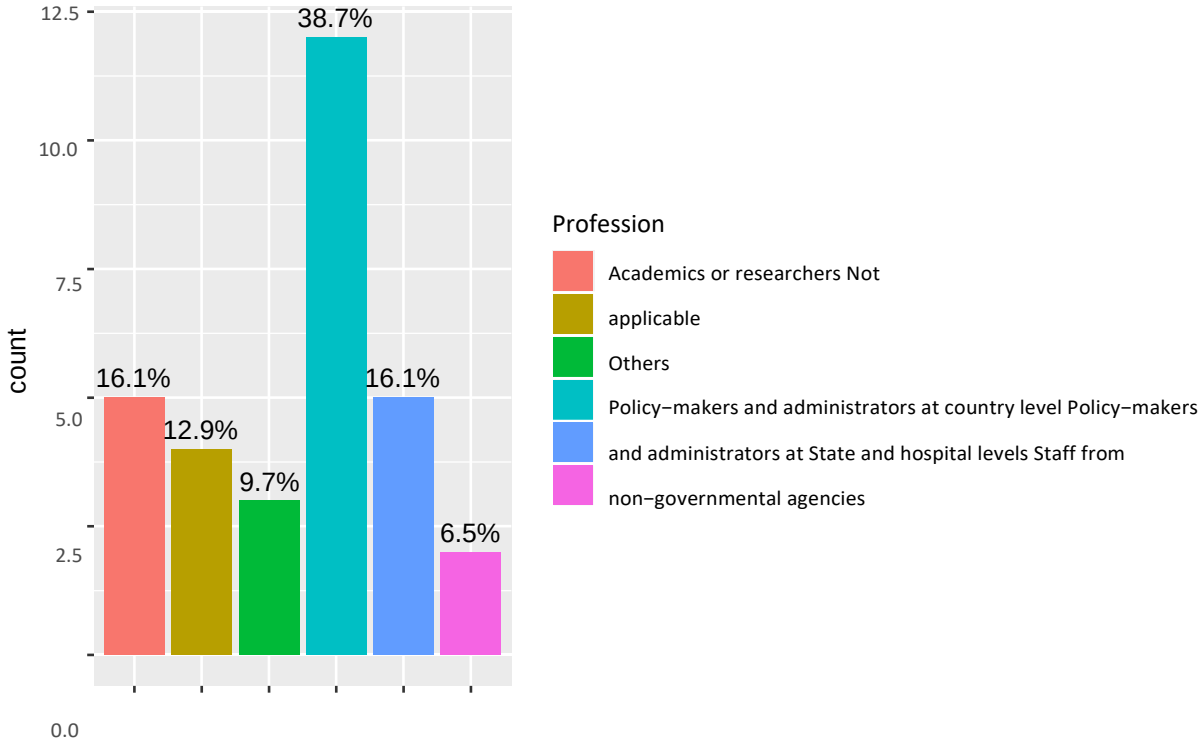
index	Comments
1	Fantastic discussions/learnings from technical to practice levels, particularly the opportunity to speak to a patient. The tour was so rich and educational, making you think about how the disease is impacting people as well as UHC.
2	Links between the real case with HTA in particular how NKF and HTA works
3	Interaction
4	Rich nature of discussions
5	The visit to NKF
6	Panel discussion at site visit

- **Areas that could be improved**

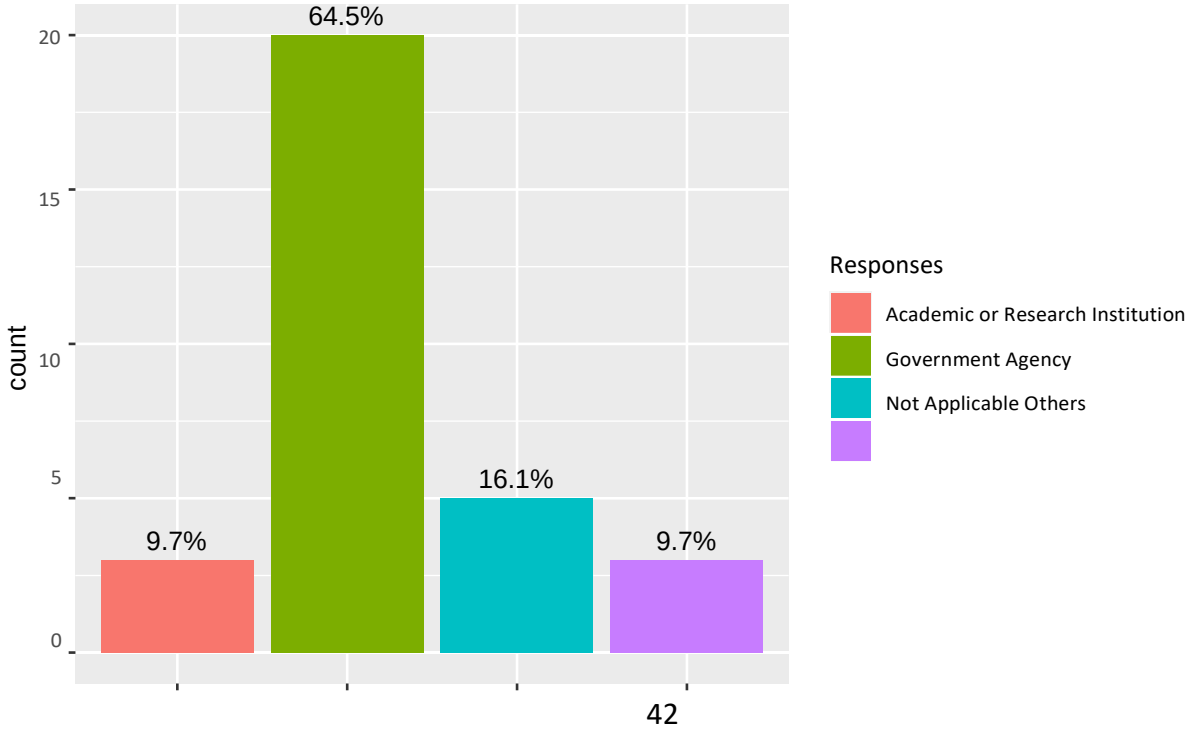
index	Comments
1	Case study: different/other cases in one session
2	Along with the sessions, one specific session on PREVENTION to be structured.
3	Need more exposure or sessions on strategic plan. Provide electronic versions of all sessions need more exposure on innovative technology which can use to take care of PHC
4	Need more case study
5	More time should be allocated for free flow discussions
6	The political economy section could have included a framework + supporting case material. It seemed to be rather anecdotal.
7	A brief overview of political economy would have been helpful.

Day 3

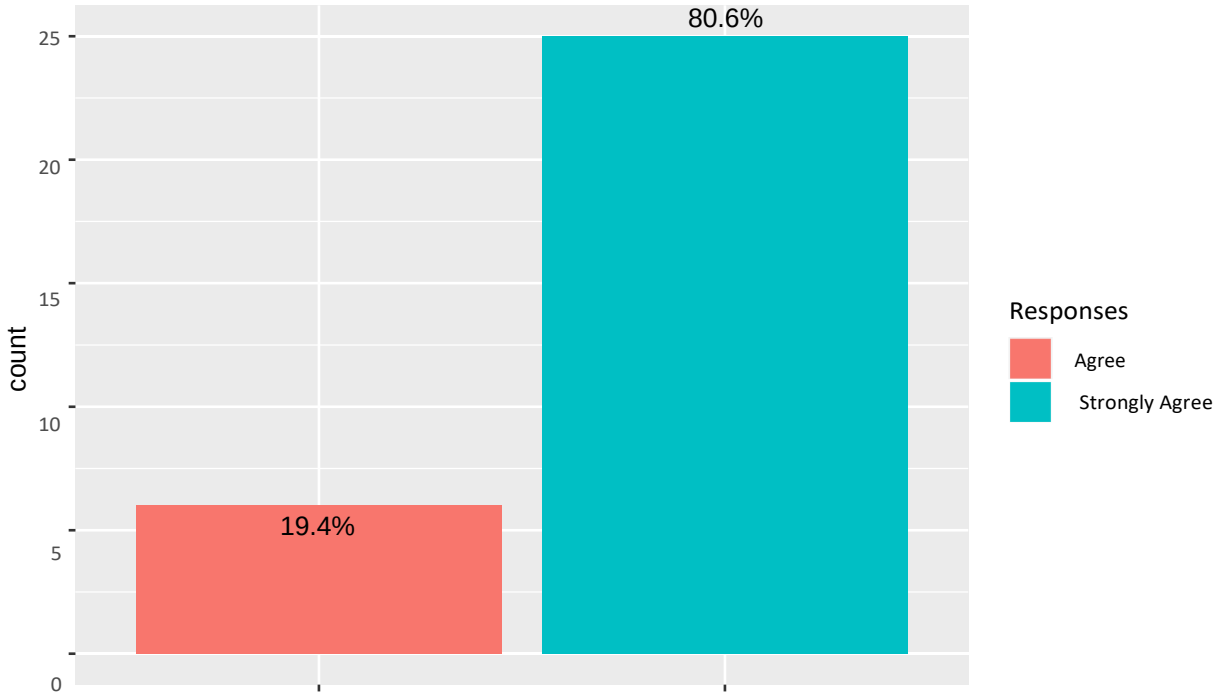
- **Number of forms submitted: 31**
- **Profession**



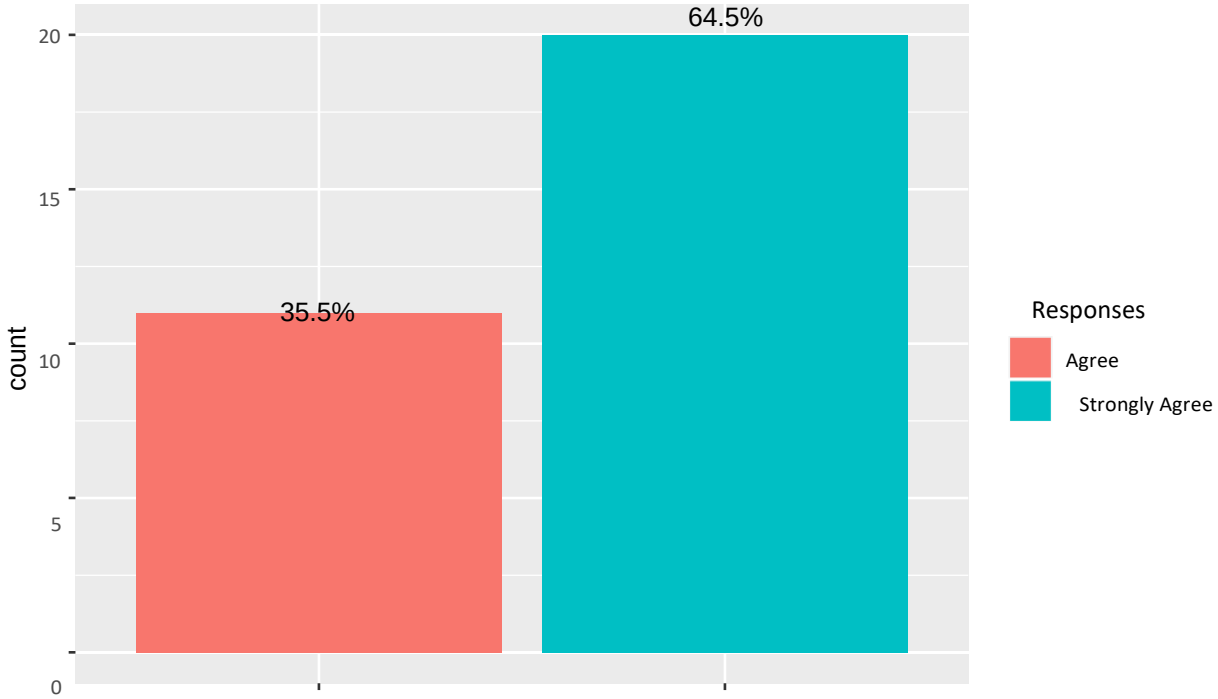
- **Organisation**



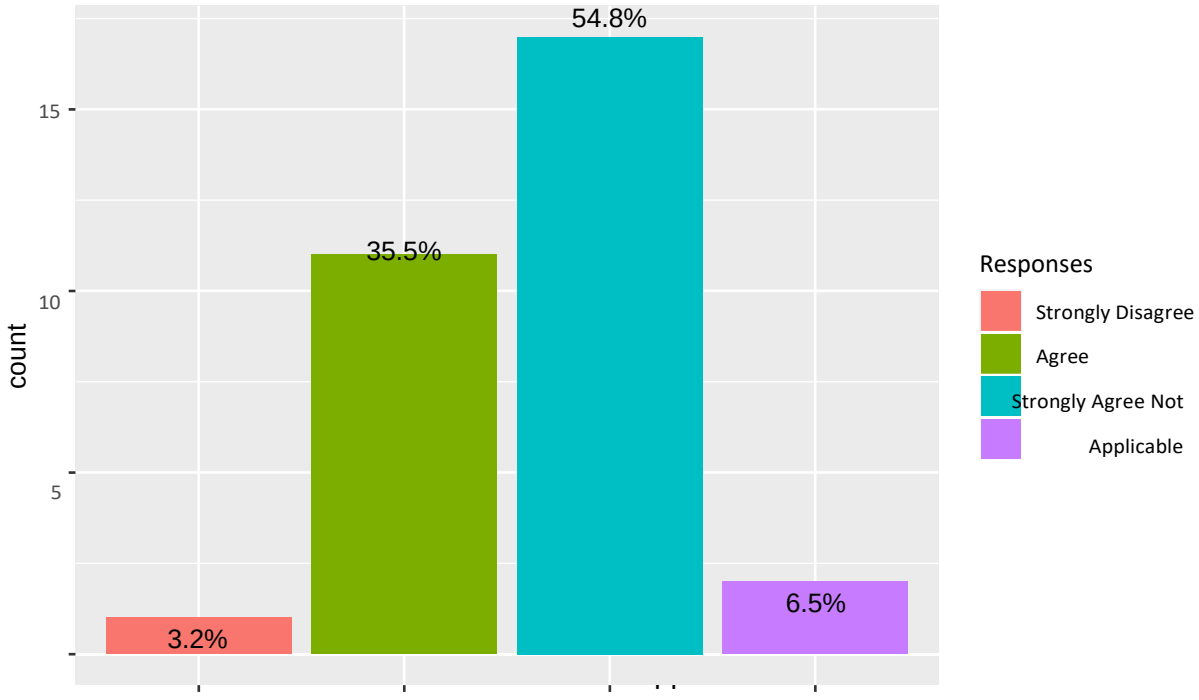
Question 1: The session on Experiences of institutionalising HTA systems in Resource-Rich and Resource-Limited Settings was useful and deepened my un- derstanding of the topic.



Question 2: The session on Hospital based HTA was useful and deepened my understanding of the topic.



Question 3: The site visit to National University Hospital was useful and deepened my understanding of the topic.



Things I liked about today

- **Programme Content**

index	Comments
1	Institutionalising HTA is required a strong political will and leadership of each individual institution
2	Very informative and interactive. Good sharing session of Singapore's new approach toward value based healthcare.
3	Case studies. NUH Performance assessment systems
4	Very interesting session on HTA systems. Pragmatic and excellent presentations at NUH.
5	Concept and area of workscope on HTA are clarified. Strategy based exposure was fine. QnA Session was great. Institute of National Health with advance technology and VDO are both excellent effort.
6	The topics on institutionalising HTA in resource limited setting deepen my understanding on what to make to do in our HTA in the future
7	The visit to NUH Oral Health Institute
8	Hospital-based HTA
9	Very good speaker and interactive session
10	All sessions are interesting
11	Both sessions were very good.
12	Useful practical guidance on how to institutionalize
13	The topic on institutionalizing HTA gave us essential points such as challenges and solutions to overcome in making HTA a part of the system.

- **Session Format**

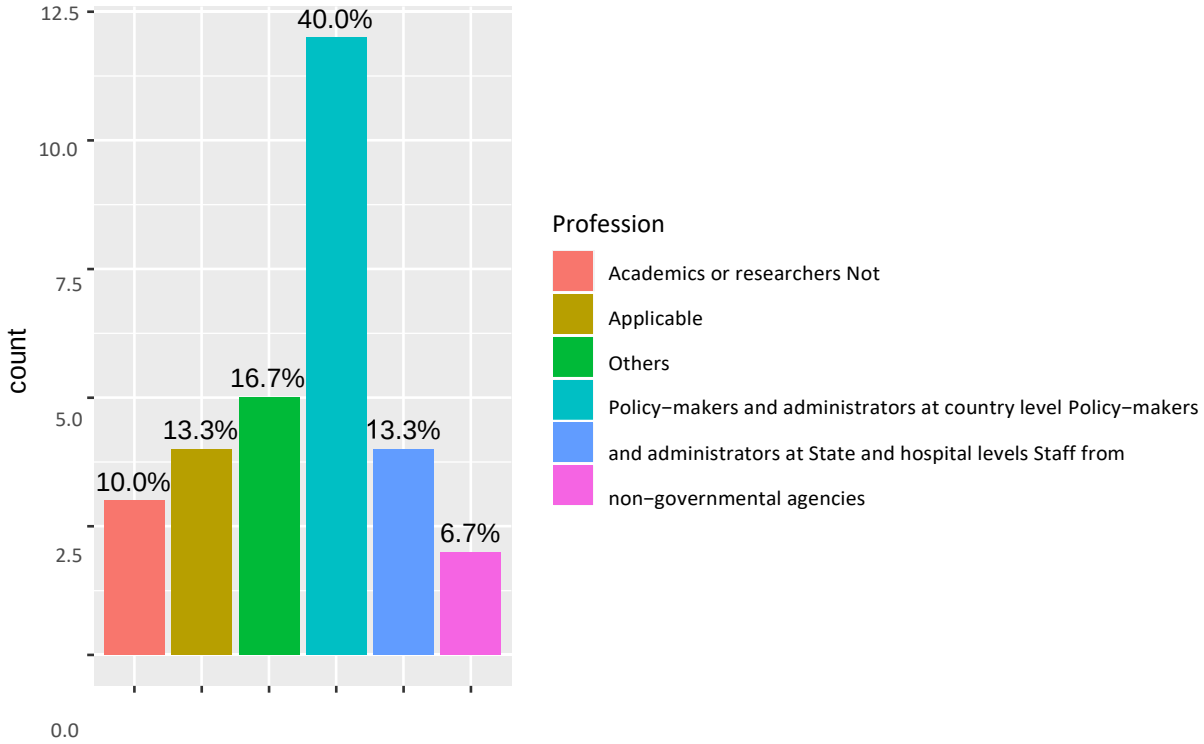
index	Comments
1	Hospital based HTA and site visit to NUH
2	Much better than 1st and 2nd day. More interactive, active and lively. Well Done!
3	Panel discussion, instituitionalization of HTA, field visit and discussion
4	Visit at NUH was very much informative
5	Appreciate details under major concepts

- **Areas that could be improved**

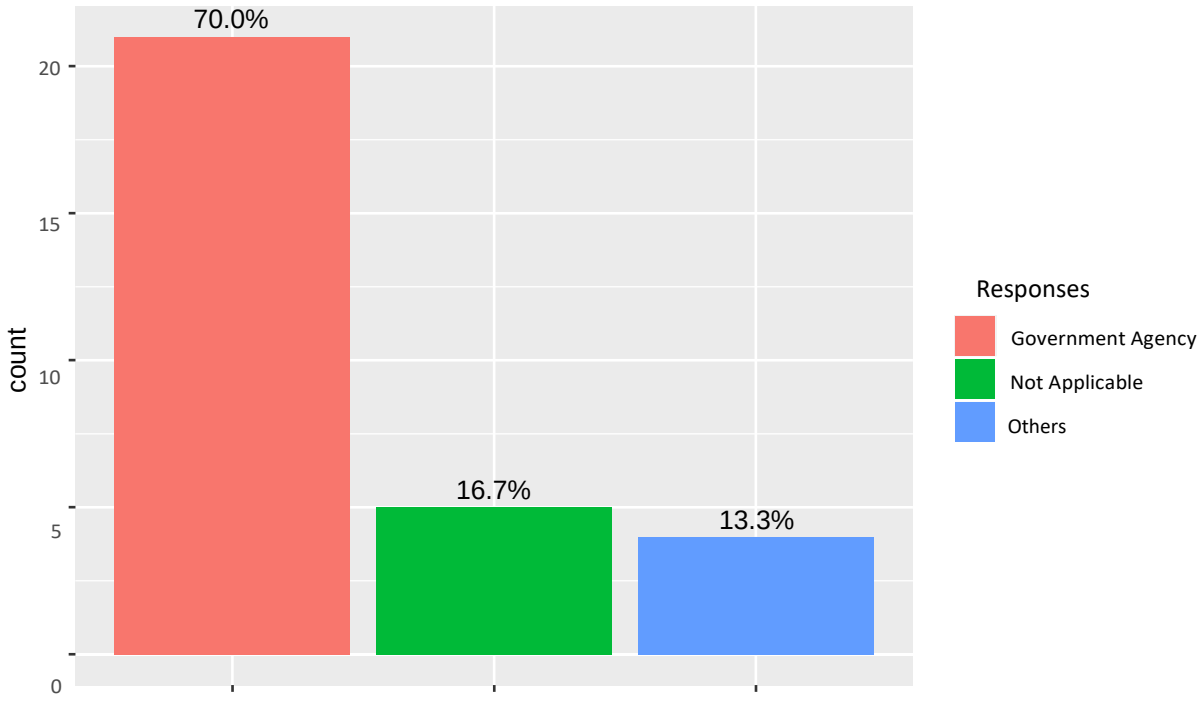
index	Comments
1	A concept note on how to introduce HTA Recommended structure (to begin with) Recommended qualifications
2	Links to community system strengthening.
3	Need to visit more hospitals, basically peripheral hospitals and set up of primary/ healthcare institute in country state
4	The field visit
5	Better link and relevance of hospital/oral care session to the NIHA theme.
6	How to link quality with HTA

Day 4

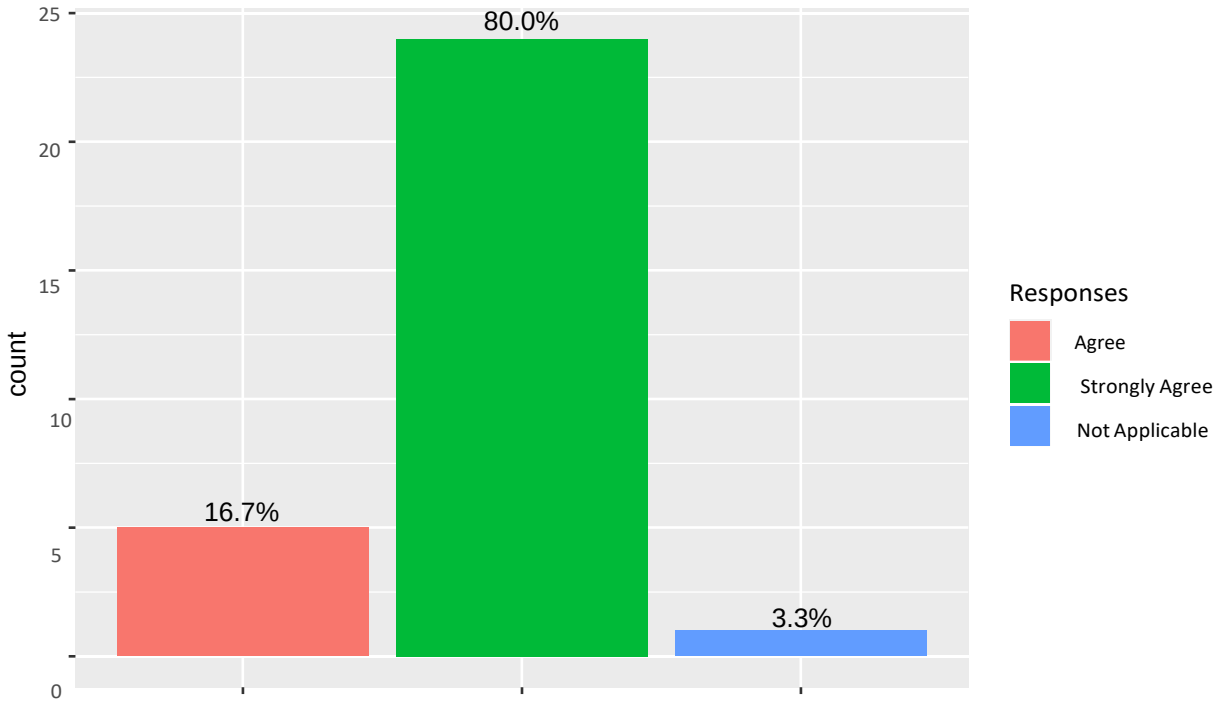
- **Number of forms submitted: 30**
- **Profession**



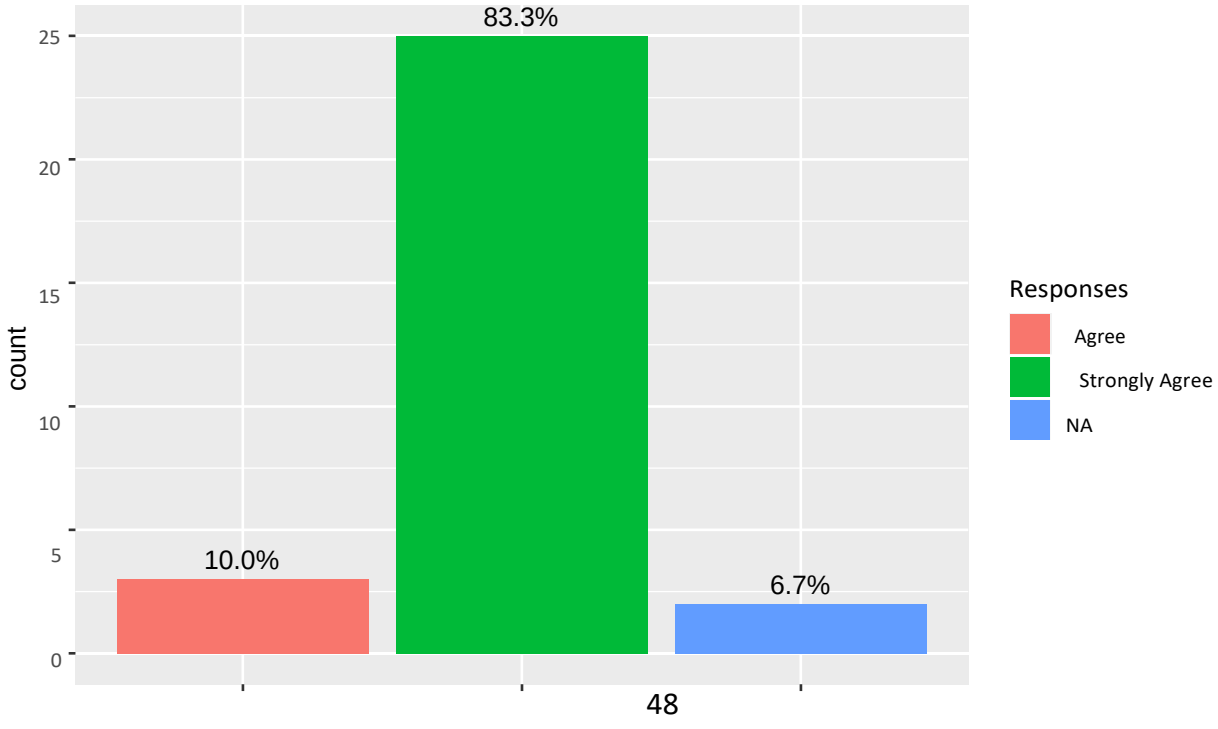
- **Organisation**



Question 1: The session on Measuring Impact of UHC through the Lens of HTA was useful and deepened my understanding of the topic.



Question 2: The session on Reflection and Way Forward Discussion was useful and deepened my understanding of the topic.



Things I liked about today

- **Programme Content**

index	Comments
1	1) HTA is required to link to equity and financial sustainability. 2) Measuring impact of UHC through the lens of HTA.
2	Very much liked the measuring/impact of UHC and its discussion
3	The session on: Measuring impact of UHC through HTA
4	UCBC process in Thailand
5	Measuring impact of HTA
6	Measuring impact of UHC through the lens of HTA
7	Participatory process "The Triangle that move the mountains" from the beginning of HTA to have UHC designed. Thanks to organisers, NUS and other partners from the workshop.
8	Panel discussion and sharing of HTA progression and history, challenges and opportunities
9	Good approach — Global —> regional —> country perspectives.
10	The way importance of HTA in achieving UHC was very nicely highlighted

- **Session Format**

index	Comments
1	The free flowing provocative discussion was a good way to understand different viewpoints.
2	1) Very practical key messages and recommendations 2) Engagement of audience 3) Great summary of discussions! Good job, rapporteur team!
3	Summary of all sessions in one presentation
4	Good recap and tying to overall program objectives
5	Take home messages
6	Great sessions. Overall a great workshop with logical progression. The session on transitional forces on Day 1 provided a great overview/context in which political economy and HTA practices are situated, ending with monitoring and evaluation. Great workshop and thank you very much for all the work behind the scenes.

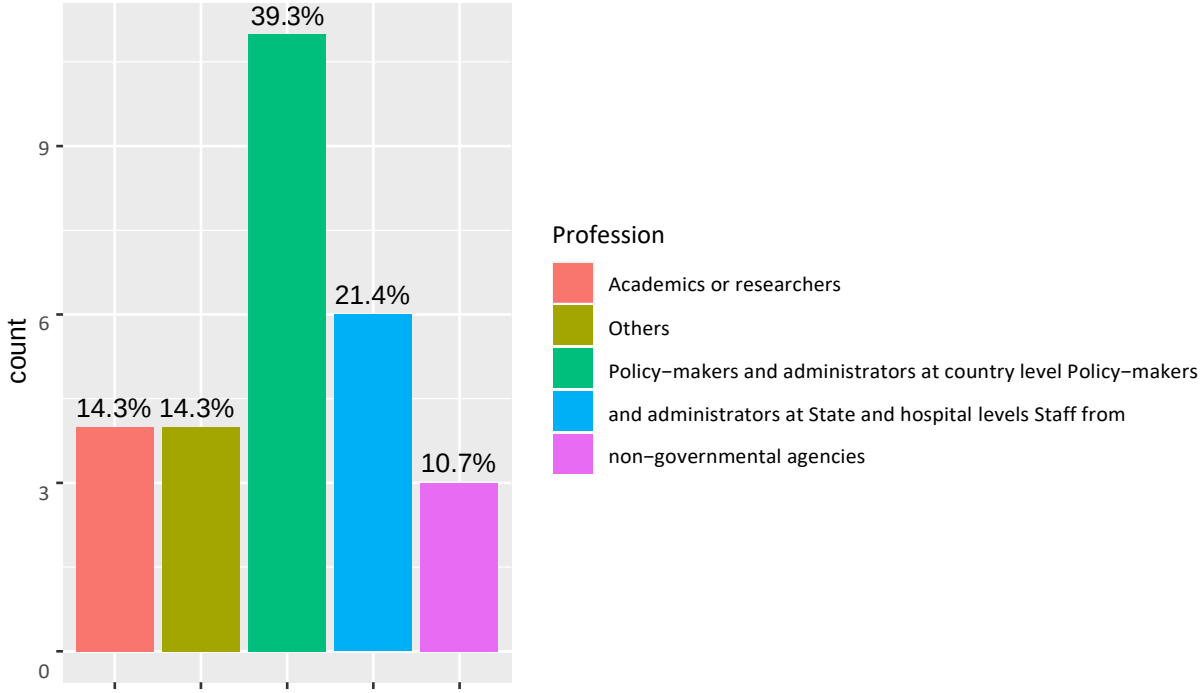
- **Areas that could be improved**

index	Comments
1	This presentation particularly from Dr Tessa should be preferably earlier - on the first day. It gives bird eye view/good initial insight. Avoid repetitive presentations from same country - if have been presented by different speakers from some country during earlier/previous/earlier presentation. Otherwise, well done!

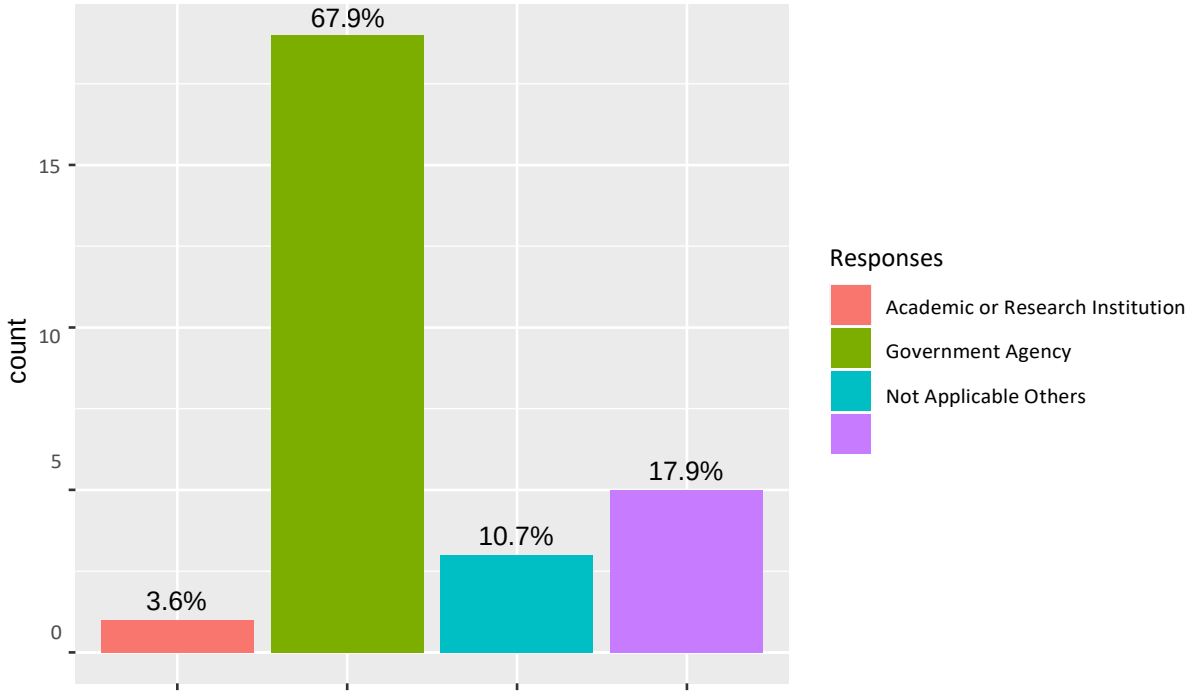
2	- WHO should be stakeholders to achieve the UHC? (session should be) - Role of Pharma/device manufacturing company to achieve the UHC? Can be part to achieve the UHC - under CSR?
3	More information on how to measure HTA impact on UHC
4	All the areas covered this time are extremely relevant. -Please continue and cover all the topics. -Also include a session on how to establish HTA in low income countries
5	Well organised session. So thankful. Thanks to NIHA Team and best wishes for future.
6	"Health system in transition" Cambodia has been depending on external support. Moving towards HTA –> UHC requires a change of mindset (paradigm shift) of leaders in health and non-health sectors
7	How to link quality with HTA
8	Sub country —> approaches also may be included.

General Feedback

- **Number of forms submitted: 28**
- **Profession**



- **Organisation**



General Feedback

Questions	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Applicable
1. I will recommend the Leadership Development Program to others	0 %	0 %	17.9 %	82.1 %	0 %
2. Compared to other leadership programmes I have attended, this programme is valuable	0 %	0 %	32.1 %	50 %	17.9 %
3. I enjoyed this programme	0 %	0 %	39.3 %	60.7 %	0 %

Programme Content

Questions	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Applicable
4. The topics were relevant to my work	0 %	0 %	39.3 %	60.7 %	0 %
5. The topics are relevant to meet current and future healthcare issues faced in countries	0 %	0 %	25 %	71.4 %	3.6 %
6. I am better equipped to inform and meet healthcare challenges in my home country today after completing this programme	0 %	0 %	50 %	46.4 %	3.6 %
7. Faculty was knowledgeable on their respective topics	0 %	0 %	25 %	75 %	0 %

Programme Structure

Questions	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Applicable
8. Overall, the programme was facilitated well and effectively	0 %	3.6 %	32.1 %	64.3 %	0 %

9. I was engaged in active learning during the programme	0 %	0 %	42.9 %	57.1 %	0 %
10. Teaching materials supported my learning	0 %	7.1 %	25 %	67.9 %	0 %
11. The programme provided networking opportunities with fellow participants	0 %	3.6 %	21.4 %	75 %	0 %
12. The networking opportunities (dinners and break sessions) with speakers and participants were valuable	0 %	0 %	39.3 %	60.7 %	0 %
13. The duration of the event was ideal	0 %	0 %	42.9 %	57.1 %	0 %

Overall Organisation

Questions	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Applicable
14. The venues were conducive for the sessions	0 %	0 %	32.1 %	67.9 %	0 %
15. I was satisfied with the travel arrangements for this event	0 %	0 %	25 %	75 %	0 %
16. The programme was well organised	0 %	0 %	17.9 %	82.1 %	0 %
17. I will attend this event again if NUS hosts a follow up meeting next year.	0 %	0 %	32.1 %	67.9 %	0 %

What I liked best about the programme

Index	Comments
1	Panel discussion
2	Policy-makers and administrators
3	- Sharing experiences of various countries of different socio-economic status/geography/economic status - UK, Africa, Asia, WHO, UNDP, - Real/true practical stories - Create new "connectivity" among participants
4	The eclectic mix of faculty and participants.
5	1) Very engaging discussion, use of case studies, site visits. 2) Prof Kishore's talk that helped contextualise HTA/health with broader global objectives.
6	All the content designed for this training course.
7	Well thought of and excellent program covering very important subjects that are relevant to the current healthcare and UHC. Very interactive and allows some discussion.
8	Very much informative and interactive
9	Quality and knowledge of the presenters (of presentation and experience) Comprehensiveness of topics/areas within HTA
10	Performance and quality of speakers/moderators Topics
11	HTA study Implementation of UHC Negotiation of price Site visit
12	- Selection of panelists was excellent. They had practical knowledge and experiences. - Case studies were very accurate and insightful.
13	Making everyone participate and exchange ideas and give examples of each country
14	Experience from other other countries. Networking
15	Sharing of different countries' perspective
16	The topics were relevant to my work. Met other colleagues from other countries and speakers.
17	-Excellent, experienced, experts delivered the session -Organisers, arrangement/hall setup very nice
18	Field visit and panel discussion
19	The efforts of the organising committee in ensuring the best sequence for the participants — from the choices of the attendees, speakers, topics, mechanisms for above audience participation plus the great amenities.
20	All panel session are great.
21	UHC and HTA theme was explained nicely. The states/countries trying to adopt HTA will be benefitted.
22	The topics of the presentation were very well aligned with the objectives of the program.
23	Substance of the discussions absolutely relevant to the audience + objective of the workshop

New things I learned from this programme

Index	Comments
1	HTA
2	One by teaching, one by discussion
3	- Strengths and weaknesses of other countries - Issues and challenges faced by various countries - How do they overcome issues and challenges - Some issues and challenges - but different strategies adopted by different countries. We can adapt and adopt without necessarily reinvent the wheel
4	Deeper insights with respect to progress and challenges in implementing UHC, especially HTA, in other countries.
5	HTA, HTA but not forgetting equity, involvement of all key stakeholders and community in HTA.
6	This program has provided platforms for discussion and sharing of knowledge on UHC and HTA by various countries in Asia.
7	Holistic approach of HTA and its implementation at field level
8	This is not an area of work for me so I learned a tremendous amount
9	RWE
10	Implementation of UHC Negotiation of price HTA study
11	- Interpretation of UHC box, catastrophic expenditure and poverty impact of health spending
12	HTA Price negotiation
13	The importance of HTA
14	Political commitment is the most important thing to implement the UHC and HTA and make them work
15	-Role of HTA and HITEP -Networking, all dimensions related to UHC -Innovation
16	Institutionalisation of HTA
17	The experience in Japan was new to me. The hospital HTA Programme.
18	All topics are new for me in particular HTA approach mechanisms and how it impacts UHC. Challenges of the past experiences from several countries in different stages.
19	Presentation styles. Content focus.
20	The importance of HTA in improving efficiency and cost effectiveness of the health system
21	Political economy of HTA and how it influences decision making

Three things that I will apply from this programme to my work

Index	Comments
1	To initiate HTA in my own country To collaborate with partners I met during the workshop To advocate my MOH leaders on HTA
2	1) Policy-makers 2) Political economy 3) Measuring impact of UHC in Hainan
3	Inspiring, informative, interactive. Well done!
4	Priority setting, price discovery, HTA
5	1) HTA is an essential tool to achieve UHC so health ministries should be committed to institutionalise it. 2) Build trust with my stakeholders along the process. 3) Do not forget vulnerable populations; always have equity considerations.
6	1) UHC for most marginalised and vulnerable population. 2) HTA is not just about economy evaluations. 3) HTA is a tool for supporting UHC rollout for everyone, everywhere.
7	1) Use the HTA principles. 2) Establish HTA unit. 3) Will consider lessons learned for Singapore and Thailand in quality and value services/outcome.
8	HTA in policy, VDO
9	As I take on more of a health financing portfolio in a resource challenged country, there is useful knowledge in evaluating economic evaluation investments/proposals. Criteria for a systematic approach to measuring and applying UHC/PHC
10	HTA RWE Vaccine
11	Implementation of UHC and quality Negotiation of price HTA study
12	- How to initiate HTA process in my country - Examples of HTA development process - example of Thailand
13	Dealing HTA views Price negotiation
14	- Updated/develop HTA roadmap - Expand HTA contribution to medicine pricing - Measure on how HTA contribution to UHC
15	-Advocacy to right approach for UHC -Institutionalisation of HTA -Capacity building for UHC
16	-Prioritisation of UHC packages -Conduction of HTA using many facts -Institutionalisation of HTA and conduction of HTA
17	1. Style of organising the workshop with session leads are so effective as all are experts in their session topics. 2. Active learning experience 3. Secretariat team for summary/reflection (they are well organised)
18	As mentioned above.
19	1. Think globally and locally 2. HTA for enriching the benefit package of UHC 3. Strengthen HTA and create advocacy in any country

How can the programme be improved?

Index	Comments
1	Take some case in the training
2	- 2-3mins break after each session. - Instill one evening city tour/sightseeing of interesting places in Singapore - Some topics/presentation by different speakers from some country are repetitive. Minimise repetitions is much appreciated to optimise time.
3	More strategic discussion around participating countries on the basis of learnings from other countries (not limited to the region).
4	1) More case studies/smaller group activities to engage participants other than Q&A. 2) More emphasis on specific leadership skills needed to push for HTA.
5	More invitees from community in the class to be audiences but also the key speakers.
6	Maybe have mobility break especially in the afternoon session. Feel sleepy!
7	Conduct more in field visits
8	Talk about the pitfalls to avoid for those further behind in the UHC journey
9	More QnA Using online platform for asking questions, it helps to precise the questions (sometimes questions are asked to long)
10	Programme is well organised but some practical session also include and focus on the challenging and solution
11	Keep the content and structure the same.
12	All ppt slides should be given in advance
13	Countries experiences in addressing achieving UHC in low/limited resource setting
14	-Field visit at peripheral facilities -Strategy based session
15	Creating awareness to the policymakers and seeking their support
16	Perhaps consider how expansion of work on HTA can assist in achieving outcomes. Chemical Guidelines, quality medication, price negotiation etc just to show how HTA facilitates these.
17	Excellent enough
18	Add a component of your to hospital to give the overarching idea to participants. This can be done only to participants who are interested — after the planned sessions.

Additional topics to add for future programmes

Index	Comments
1	Every staff introduce the meaning of UHC in their country
2	First few topics/initial topics -please start first with introduction on SDG and UHC ie - definition/concept/measurement/indications/ranking of various countries
3	1) Health impact assessment. 2) Health in all policies/whole of government.
4	Transition leadership in health response.
5	HTA advocacy + Negotiations (to improve funding). Collaborations with other sectors for advancing of HTA in UHC. Collaborations + Negtiations (private) drug and device manufacturers
6	Details about negotiation methods for price
7	Talk more on capacity building at country level for institutionalisation of HTA
8	Costing of health unit
9	How to transform real world data to real world evidence
10	Case study. On the last day, moderator may summarise the points which needs to be emphasised.
11	Absolutely vital to include a broader spectrum of stakeholders especially civil secretary representatives. Health leaders include community members

How will you describe this programme to others from your country?

Index	Comments
1	Excellent
2	Every excellent, teaching and discussion
3	Promote participants from my country to attend future programmes and participate/share our experiences and learn from each other.
4	Not to miss it.
5	LDP is an opportunity to learn collectively together with other health leaders on emerging health related issues and ways to advance UHC in the region.
6	Share the learning, advocating to have more leaders to come to this course.
7	Excellent and informative program that has increased my understanding on UHC and HTA. Very good collaboration opportunities. Excellent speakers.
8	For UHC implementation, we need motivated health professional researchers, involve media to make trust in UHC
9	This programme is excellent and very necessary for teams working in UHC, HTA and Negotiation Team.
10	I will inform and encourage the government officials and Ministry of Health to consider establishing a platform and network on HTA. A starting point is to encourage them to reach out to NUS.
11	Very useful information
12	This programme is very useful and represents what we need now to achieve UHC in implementing HTA. It also can make you meet other colleagues from other countries so that it broadens your network.
13	It is an effective and creating awareness to the bureaucrats and decision makers
14	Good educational and networking programme.
15	It is a great programme that provide so various excellent ideas on how we move.
16	Educative, informative and enjoyable
17	Political commitment, research evidence are important for strengthening the health system and primary health care delivery with quality, efficiency and equity. This is best for our country

If NUS were to host a follow up meeting next year, what are the topics or suggestions you might like the organiser to consider?

Index	Comments
1	Leadership in University Management
2	Learn from NUS
3	Strategies in strengthening/enhancing primary healthcare in achieving UHC, improving access/equity and reducing NCD.
4	1) Suggestive strategies to tackle challenges 2) Case study based discussions 3) Breaking down of how HTA with some actual examples 4) Introduce quality aspects 5) Speakers from provider side on impact of HTA based prices.
5	Health Transition Development and Leadership to address the unmet health needs of everyone, everywhere.
6	Price negotiation.
7	Detailed practical challenge and solution for implementing UHC Also of value to politicians and finance department.
8	Same as today. But with more focus on HTA institutionalisation in poor betting.
9	Quality cost Costing Patients safety
10	The HTA impact on public policy and economy in one country
11	Different countries sharing their accounts of many. Save through? using HTA in the introduction of new technology
12	Please see earlier suggestion
13	Value and quality of care link with UHC
14	Workshop on next steps taken by the countries/states and presentation. — giving feedback to them to strengthen their implementation
15	Evaluation and/or outcome of some of the interventions that have been implemented in regional countries. Return on investments

Other comments

Index	Comments
1	-Be aware participants are from various countries with different levels of status - Some participants are too knowledgeable/some are not - Needs to bring them all together in the same boat although they are from different cabin. - Otherwise, well done!
2	Great hospitality! Thanks to NUS/HITAP/IDSI team.
3	Thanks a lot for all your support, insights and intelligence. I love the course very much.
4	Thank you NIHA for excellent and enjoyable program.
5	More focus on the challenge of private hospitals and pharmaceutical companies Media poison
6	Well done and congratulations
7	All presentations were not available. If available in advance it would be useful
8	This workshop is excellent and focused for policy makers to understand the importance of HTA
9	Very good.
10	A good book introducing HTA. Make available HTAs done in country/province level to all those who want this information.
11	Thank you for your hospitality and a well organised program.

Feedback results compiled by Public Health Minor students attached to Public Health Translational Team, SPH

Names	Department	Supervisor
Ng Chong Kai	Department of Statistics and Applied Probability	Associate Professor (Dr) Jason CH YAP Director, Public Health Translation, School of Public Health
Naasyidah Bte Zulkaflee Tan Yingting, Belinda Wan Tin Hang Rachelle Chua Kar Mun	Department of Biological Sciences	
Muhammad Marzuqi B Nasrullah	Department of Psychology	