

# 2016 Kyoto Global Conference for Rising Public Health Researchers

## “Universal Health Coverage and Health Economics”

**December 14-15, 2016**

Inamori Hall & Yamauchi Hall, ShiranKaikan,  
Kyoto University



Top Global University Project / Japan Gateway Kyoto University Top Global Program  
Registration unnecessary / No participation fee / English only  
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Kyoto University School of Public Health

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# Message from the Vice-President of Kyoto University

**Masao Kitano, PhD**

**Executive Vice-President for Education,  
Information Infrastructure, and Evaluation  
Kyoto University**



The Top Global University Project was launched in 2014, based on the Ministry of Education, Culture, Sports, Science and Technology November 2013 national university reform plan. This project aims to strengthen the international competitiveness of higher education in Japan by prioritizing support, for a period of 10 years, of universities carrying out a thorough internationalization and university reform, including universities conducting top level research education, and those encouraging the internationalization of universities in Japan through challenging, pioneering attempts.

Under this scheme, Kyoto University presented the “Japan Gateway: Kyoto University Top Global Program (JGP)” . Through internationalization of undergraduate education, starting with the employment of 100 international faculty members at the Institute of Liberal Arts and Sciences, and taking advantage of Kyoto University’ s strengths in basic and applied research, with a number of world-class researchers including awardees of the Nobel Prize and Fields Medal, JGP aims to establish agreements with world-class universities and implement international joint-education and joint-degree programs to produce a new generation of world-class researchers and further strengthen the international competitiveness of research and graduate education.

Aiming to be between the top 10 universities in the world, Kyoto University is increasing the proportion of international co-authored papers and the promotion of joint research. In order to do so we are looking to stimulate the exchange of students, faculty and research-

ers by implementing, through the Super Global Courses, more international education programs, such as Joint/Double Degree Programs and international conferences and workshops.

In 2014, Kyoto University launched four project units: Mathematics, Human Biosciences, Chemistry and Chemical Engineering, and Social Sciences and Humanities, expanding programs in 2015 with Global Environmental Studies, and Public Health.

The School of Public Health, which has been participating in strengthening the university’ s global expansion, introducing in 2014 double degree programs, has presented JGP with this project. Currently, they are actively working towards expanding joint and double degree programs in order to internationalize the education of our university.

This international conference is part of such efforts, inviting rising public health researchers from 5 universities to exchange knowledge in the very important topic of “Health Economics and Universal Health Coverage” . I hope this project contributes not only to making Kyoto University one of the centers of global network for public health research, but also to making a meaningful contribution to the improvement of human health through the construction and development of a platform for long-term, concrete joint research cooperation. I am confident this international conference, starting with Kyoto University’ s JGP, is another big step into internationalizing the research education of each and every one of the universities present today.

## Message from the Dean of Graduate School of Medicine Kyoto University

**Shinji Uemoto, MD, PhD**

**Dean, Graduate School of Medicine  
Professor, Department of Hepatobiliary  
Pancreatic Surgery and Transplantation  
Kyoto University**



Kyoto University Graduate School of Medicine, symbolized by the fact that it has produced a number of international prize winners, such as the Nobel Prize in Physiology or Medicine, and the Albert Lasker Award, is striving in its applications to advanced medical care and disease prevention of findings in the fields such as fundamental principle of life phenomena, and biomedical mechanisms and risk factors of diseases. While pushing forward to expand such world top-level researches, Kyoto University Graduate School of Medicine also endeavors to develop human resource with high ethical standards and rich international mindset, having not only deep knowledge in a specific area but broad transdisciplinary scope covering basic biology, clinical medicine, and social medicine.

In order to further develop such social mission, the Graduate School of Medicine participates in the "Kyoto University Japan Gateway Initiative (JGP)" as the Human Bioscience Subunit since 2014, while actively promoting efforts to the development of international joint education and degree programs targeting world-class research institutions such as McGill University, Imperial College London, Pasteur Institute, Bordeaux University, and others. Through these efforts, by encouraging activate exchanges with overseas researchers and students and fostering an environment that can be friendly competitive with the world's top researchers, we aim to cultivate talent with international competitiveness, who can contribute to the development of innovative pharmaceuticals, medical equipment and regenerative medicine products in Japan, and so aiming to further enhance the international reputation of the university. The host of this conference, the Kyoto University School of Public Health, as the first and to date the largest School of Public Health in Japan since its founding in 2000, has been boasting remarkable achievements representing our country, such as up to 1800 peer-reviewed papers and the acquisition of 16 billion yen in competitive funds.

They have been actively working on making their education and degree programs international as well as interdisciplinary, with active participation in university-wide cross-disciplinary education programs and introducing an international double degree program. The Kyoto University School of Public Health is also actively engaged in the development of international joint education and degree programs in public health field since entering the JGP in 2015.

This international conference is part of such efforts, bringing together rising public health researchers from universities from all around the world. I also must congratulate the School of Public Health for their success on the second KGC this year. The theme of this year is "Health Economics and Universal Health Coverage." This is an extremely important topic, as it is essential to pay the utmost attention to those most in need of healthcare, vulnerable and burdened by ill-health, limited from services or affected by poverty and inequity. It is therefore important, as this conference allows us to gather here today, to share and exchange experience on how to address the basic determinants and prerequisites for health in order to promote health for all while also learning from each other, encouraging knowledge transfers from developed and developing countries, of the best models or what works for healthcare system of each specific settings including the discussions on cost-effective treatment. The associated programs, such as poster session between students from KU and invited universities, as well as the exchanges between researchers and students, will also be a very important opportunity to foster future researchers with international competitiveness. Finally, I am very much confident that this event will not only create a global network for public health researchers with Kyoto University at its center, but also develop a platform for long-term research cooperation and development of joint research projects.

## Message from the Dean of Kyoto University School of Public Health

**Takeo Nakayama, MD, PhD**

**Dean, Kyoto University School of Public Health  
Professor, Department of Health Informatics**



The 2016 Kyoto Global Conference for Rising Public Health Researchers (KGC) invites elites in public/global health including rising young researchers, and students from leading academic institutions around the world. Our project is part of the Japan Gateway Kyoto University Top Global Program (JGP) sponsored by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan. This program aims to enhance international competitiveness of Kyoto University by promoting international collaborative research projects and globalization of educational programs.

Our annual KGC this year focuses on "Universal Health Coverage and Health Economics", which is an important topic, globally challenging both developed and developing countries in their own different context.

During the last several decades, Japan has experienced long-lasting economic recession, rapid socio-cultural changes, expanding social disparity, and the disproportionately growing aging population. These transformations inextricably affect Japanese society in many aspects, especially the healthcare system, challenging the assurance of universal health coverage among the elderly and economically impoverished population amidst Japan's limited resources.

Though rapid economic growth and advancement in scientific and medical technologies have been achieved worldwide during the past decades, the topic still deserves great attention as the global community has not yet been able to pursue the balance in ensuring

better healthcare services and the quality of life, and the escalating medical costs associated with the innovations in medical technologies. Millions of people particularly in low- and middle- income countries are still unable to access appropriate prevention and healthcare services. This inequity further exacerbates their vulnerability to multitudes of adverse health outcomes, which are majorly preventable. The global community, including low- and middle-income countries, is also currently facing the rapid population aging, the rise of non-communicable diseases, along with the unfinished agenda of maternal and child health and communicable diseases. Healthcare system is thus one of the areas greatly challenged by this health transition.

Health is a human right. We, Kyoto University School of Public Health, along with other global actors, would like to contribute to the improvement of the health and well-being for all, in believing that this KGC will be a platform to promote the exchange of research, experience, challenges and hope for the future.

Along with the dialogue of these crucial global health concerns, I would like all participants to enjoy their stay in Kyoto, a city which features both classic and innovative components of Japanese culture and surely will be a place for you to enjoy and to be inspired. I believe this conference will create lively discussions on these key global issues among current and future leaders of public/global health, as well as build new networks for innovative research, education and global leadership.

# Schedule

## December 14 (Wednesday)

Opening Session – Welcome addresses	
9:00 - 9:10	Vice President, Kyoto University Masao Kitano
9:10 - 9:20	Dean, Graduate School of Medicine, Kyoto University Shinji Uemoto
9:20 - 9:30	Dean, Kyoto University School of Public Health Takeo Nakayama
Keynote Speeches	
Session chairs: Takeo Nakayama (Kyoto University) and Masahiro Kihara (Kyoto University)	
9:30 - 10:15	Achieving Universal Health Coverage: The Contribution of Health Economics Anne Mills: Deputy Director & Provost and Professor of Health Economics and Policy London School of Hygiene & Tropical Medicine
10:15 - 11:00	Achieving Universal Health Coverage in Light of Ageing Populations: Health Economic and Political-economy Considerations Alex Ross: Director, WHO Centre for Health Development, Kobe
- Break 15 minutes -	
Session 1 – Universal Health Coverage: Japan	
Session chairs: Alex Ross (WHO Centre for Health Development) and Tosiya Sato (Kyoto University)	
11:15 - 11:45	Sustainable Development of Japanese Health Care System under the Universal Health Coverage Tetsuya Otsubo: Kyoto University
11:45 - 12:15	Visualization and Reform of Health and Social Care Systems in a Super-Aging Society Yuichi Imanaka: Kyoto University
- Lunch break 1.5 hour -	

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Session 2 – Universal Health Coverage: Emerging Economies (1)	
Session chairs: Maznah Dahlui (University of Malaya) and Akio Koizumi (Kyoto University)	
13:45 - 14:15	Universal Health Coverage: Experience from Thailand Sathirakorn Pongpanich: Chulalongkorn University
14:15 - 14:45	Satisfaction with Universal Health Coverage Use Among Thais in Bangkok Metropolitan Area, Thailand Sukhonta Siri: Mahidol University
Session 3 – Poster Presentation	
14:45 - 16:00	Poster Presentation
Session 4 – Universal Health Coverage: Emerging Economies (2)	
Session chairs: Anne Mills (London School of Hygiene & Tropical Medicine) and Toshiaki Furukawa (Kyoto University)	
16:00 - 16:30	Universal Health Coverage in Malaysia Maznah Dahlui: University of Malaya
16:30 - 17:00	Health Care Systems in Taiwan: Current Problems to Future Challenges Yawen Cheng: National Taiwan University
17:00 - 17:30	The Impact of Community Based Health Insurance in Enhancing Better Accessibility and Lowering the Chance of Having Financial Catastrophe Due to Health Service Utilization: A Case Study of Savannakhet Province, Laos Somdeth Bodhisane: Chulalongkorn University
18:00~	Dinner Reception at Restaurant "La Tour", Clock Tower, Kyoto University

# Schedule

## December 15 (Thursday)

### Session 5 – Cost-effectiveness of Health Care (1)

Session chairs: John Cairns (London School of Hygiene & Tropical Medicine) and Chang-Chuan Chan (National Taiwan University)

9:30-10:00	<b>Utilization of Reproductive Health Services: Time Trends &amp; Equity</b> Jenny Cresswell: London School of Hygiene & Tropical Medicine
10:00-10:30	<b>Financial Difficulty and Catastrophic Health Expenditure for Colorectal Cancer Treatment</b> Tin Tin Su: University of Malaya
10:30-11:00	<b>Treatment Cost of Genital Warts on Provider and Patient Perspectives vs Government Expenditure Analysis on Prevention Control and Treatment of the Sexually Transmitted Disease (STDs) in Thailand</b> Sukhontha Kongsin: Mahidol University

### Session 6 – Poster Presentation

11:00-12:00	<b>Poster Presentation</b> Voting for “Best Poster Presentation” award closes at 13:00
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- Lunch Break 1 hour -

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### Session 7 – Cost-effectiveness of Health Care (2)

Session chairs: Sathirakorn Pongpanich (Chulalongkorn University) and Tetsuya Otsubo (Kyoto University)

13:00-13:30	<b>Beyond Accuracy: Assessing and Projecting the Public Health Impacts of New Diagnostics for Tuberculosis</b> Hsien-Ho Lin: National Taiwan University
13:30-14:00	<b>Using Cost-effectiveness Evidence to Inform Health Care Decision Making</b> John Cairns: London School of Hygiene & Tropical Medicine
<b>Closing</b>	
14:00-15:00	<b>Panel Discussion</b> Facilitated by John Cairns (London School of Hygiene & Tropical Medicine) and Yuichi Imanaka (Kyoto University)
15:00-16:00	<b>Best Poster Presentation Award Ceremony and Closing</b> Moderated by Takeo Nakayama (Kyoto University)

## Achieving Universal Health Coverage: The Contribution of Health Economics

### Anne Mills

Deputy Director and Provost, London School of Hygiene & Tropical Medicine  
Professor, Department of Global Health and Development  
London School of Hygiene & Tropical Medicine / UK

Anne has researched and published widely in the fields of health economics and health systems in low and middle income countries. She continues to be involved in research on universal coverage developments in Tanzania, South Africa and Thailand, and on strengthening services for mothers and children. She has had continuing involvement in supporting capacity development in health economics in low and middle income country universities and research institutes. She has advised multilateral, bilateral and government agencies on numerous occasions; was a member of WHO's Commission on Macroeconomics and Health; and co-chaired one of the two Working Groups for the 2009 High Level Taskforce on Innovative International Finance for Health Systems co-chaired by Gordon Brown.

In 2006 she was awarded aCBEfor services to medicine and elected Foreign Associate of the US Institute of Medicine. In 2009 she was elected Fellow of the UK Academy of Medical Sciences and received the Prince Mahidol Award in the field of medicine. She was President of the International Health Economics Association (IHEA) for 2012-13. In 2013 she was elected a Fellow of the Royal Society and in 2015 she was made a Dame in the Queen's New Year's Honours, for services to international health.

### ABSTRACT

Economics was termed the 'dismal' science by Thomas Carlyle in the 19th century. However, in the 20th century it has been harnessed in the interests of improving public policy. This talk reviews how health economics has developed since the late 1960s, and especially draws out its contribution to the design of universal health coverage arrangements. Areas of health economics covered include economic evaluation, and the ways of financing and organising a health system, including topics such as the impact of paying for health care on households, the relative merits of various ways of ensuring financial protection, the role of the private sector, and the value of contractual relationships.

Keynes wrote that 'the ideas of economists....both when they are right and when they are wrong, are more powerful than is commonly understood'. Providing helpful health policy advice, and in a form that decision makers can act on, has been one of the less dismal contributions of economics.

## Achieving Universal Health Coverage in Light of Ageing Populations: Health Economic and Political-economy Considerations

### Alex Ross

Director  
World Health Organization Centre for Health Development  
(WHO Kobe Centre) / Japan



Dr. Alex Ross is the Director of the WHO Centre for Health Development in Kobe, Japan (WKC). As a WHO global centre, it focuses on research into health, social, and economic factors that contribute to health and development. WKC is leading work on universal health coverage, innovation and ageing. One ongoing initiative is encouraging more frugal technological and social innovations for ageing populations.

Dr. Ross is a public health policy expert trained at the University of California in Los Angeles (UCLA) with specializations in health systems. Prior to his joining the Centre, he served as Director for Partnerships and UN Reform at WHO Headquarters (Geneva), as well as in senior advisory posts to Assistant Director-Generals for Communicable Diseases and for HIV/AIDS, TB and Malaria. Dr. Ross led development of WHO's partnerships policy, nurtured WHO's engagement with global health initiatives, UN agencies, non-governmental organizations and the private sector. Dr. Ross was very involved in developing innovative health financing approaches, such as the Solidarity Tobacco Contribution and financing component of the Pandemic Influence Preparedness Framework. Dr. Ross was also very engaged in the creation of the Global Fund to Fight AIDS, TB and Malaria and UNITAID. Before joining WHO, Dr. Ross served in senior domestic and international health positions for the UK Department for International Development between 2001 and 2003 (health policy and systems), and in several U.S. Government agencies between 1987 and 2001 (USAID, US Department of Health and Human Services, and US Congress as a professional staff).

### ABSTRACT

The SDG Target on Universal Health Coverage (UHC) presents major opportunities for countries and communities to deliver, in an equitable manner, a broad range of quality health services for all people and communities, without creating financial hardship. Health financing and economics play a central role in ensuring the attainment of UHC through use of many approaches, incentives, and financial protection mechanisms.

The SDGs and UHC have also elevated the focus on understanding and addressing health inequities, inclusive of their various determinants. Country planning for UHC that is sustainable must consider the impact of emerging demographic and epidemiologic trends. Rapid, and unprecedented, population ageing will fundamentally alter how countries design, implement, structure, regulate and finance their health and social systems, assistive health technologies, health workforce, as well as manage competing pressures on resource allocation. Japan provides many insights and lessons from its nearly six decades of experience that achieved UHC, equity, and significant increases in healthy longevity. As a super aged

society, Japan faces many challenges in managing increasing costs associated with health/social services, technologies, whilst ensuring care and support for the 40% of the population that will be over 65 by 2050. Japan is by no means alone, with countries such as Korea, Germany, Finland, China just behind—and where 90% of future rapid ageing will take place in middle income countries. Planning for UHC is compounded by the rapid speed of population ageing occurring in the next 15-20 years for many countries. Decisions taken today on the structure of systems, financing, and availability of services will have enormous impact on all aspects of UHC and health system strengthening tomorrow and in the future.

This talk will discuss the key health economic and political-economy issues that countries are and will be facing over the next 15-35 years. It will draw from examples of Japan, Asian, European and middle income countries, as well as from WHO, World Bank, OECD, Asian Development Bank perspectives. Priority issues requiring greater attention will be presented for further discussion.

# Sustainable Development of Japanese Health Care System under the Universal Health Coverage

## Tetsuya Otsubo

Assistant Professor  
Department of Healthcare Economics and Quality Management  
School of Public Health, Graduate School of Medicine, Kyoto University / Japan

Dr. Tetsuya Otsubo is an Assistant Professor at the Department of Healthcare Economics and Quality Management, School of Public Health, Graduate School of Medicine, Kyoto University, Japan. He obtained a Masters of Engineering degree from Waseda University, Japan, and completed his Doctoral degree in Public Health (Healthcare Economics and Quality Management) at Kyoto University. He then worked for one year as Assistant Professor by Special Appointment before being appointed as an Assistant Professor in 2010. His primary research focus is the use of an applied systems approach in the field of health economics and policy. Specifically, these interests include the economics of health care delivery systems, national health insurance, health care utilization, cost accounting and management, and health care financing. His research is broadly based on the manipulation of administrative databases, such as claims data. Dr. Otsubo has supported local governments in the design of regional health care system from 2009. His current research interests include investigating regional variations in spending, outcomes, and access of care. Research results are consistently provided in feedback to hospitals and local governments, and in-depth discussions with clinicians, hospital management staff, and policymakers supports a dynamic approach to research themes; ensuring that research with real-world applications is conducted. He was on academic sabbatical at The Dartmouth Institute for Health Policy & Clinical Practice from January to June 2014. He studied at the Institute for Clinical Evaluative Sciences in Toronto from July until Dec 2014.

### ABSTRACT

The main components of universal health coverage are the simultaneous achievement of quality, essential health service coverage and financial protection coverage and the extension both to the whole population. Furthermore, the system needs to be maintained to reflect social conditions in each period.

Japan is experiencing unprecedented population aging, which is changing the constitution of healthcare demand. In addition, birth rates are decreasing, and severe population decline is predicted. Therefore, within the context of limited healthcare resources, the reengineering of a sustainable healthcare system with a positive synergy between healthcare quality and health economics is an urgent issue.

In recent years in Japan, the market oriented improvement is expected to reshape health care delivery through sharing visions and temporal goals shaped by national and local governments. In this political movement, knowledge and evidence become more important to support the autonomy of stakeholders.

This session will introduce the Japanese healthcare system and discuss the outlook of health services research in Japan.

# Visualization and Reform of Health and Social Care Systems in a Super-Aging Society

## Yuichi Imanaka

Professor  
Department of Healthcare Economics and Quality Management  
School of Public Health, Graduate School of Medicine, Kyoto University / Japan

Yuichi Imanaka, MD, PhD is Professor and Head of the Department of Healthcare Economics and Quality Management, School of Public Health, Graduate School of Medicine, Kyoto University (<http://med-econ.uim.ac.jp/int/>) since 2000. He was trained in the University of Tokyo (M.D., DrMedSci), and the University of Michigan (MPH, Ph.D). Clinically trained in internal medicine, with certification for pathological autopsy practice.

His main theme is to visualize and design the health social care system and its future, particularly in this super-aged and rapidly-aging society. He is engaged in several national and wide-regional projects which methodologically include large-scale database analytics, system design and simulation, multidimensional performance measurement and improvement of institutions and of regions.

He has been actively engaged in international collaboration and has accepted graduate students from Singapore, Korea, China, Thailand and the United States. He is an Executive Board Member (1997-2003, 2015-current) of the International Society for Quality in Health Care, and has been an Executive Board Member of Japan Council for Quality Health Care (2000-current). He is also on the boards of national academic societies for Health Administration, Public Health and Health Economics. He served as a member of OECD ageing-related diseases projects, International Hospital Federation & WHO study group on hospital sector reform, and as a member of OECD & WHO Health Care Quality Improvement Network in the Asia Pacific Region.

### ABSTRACT

**Background and Aims:** In the super aged and aging society with financial and resource constraints, the Japanese health and social care systems need to be effectively reformed for their sustainability and continuous improvement. On the other hand, the performance of regional health and social care systems is dependent on multiple regional factors including socioeconomic, demographic and resource variables. Visualization of regional performance variation and clarification of the mechanisms of its performance is the key to manage multifaceted, complicated and uncertain processes of reforming health and social care systems. Our studies aim to visualize performance of health and social care systems at each region, and to develop frameworks to link information creation to system re-designing process by large-scale administrative database analytics and multi-stakeholder collaboration.

**Methods:** The databases used were administrative data of health care and social care (long-term care) of the national and regional levels in Japan. In addition, a database integrating socioeconomic, demographic and healthcare resource indicators of regions were constructed. Quality indicators were measured at each regional level, including process quality indicators and risk-adjusted outcome indicators. Their associations with social and resource indicators were also examined at regional levels.

**Results and Discussion:** Region's healthcare quality indicators were often correlated with resource intensity and inversely with the rurality of the regions. This relationship was quantitatively

well illustrated in AMI care and ischemic stroke care in Japan. On the other hand, there are some cases when centralization and networking of professional resources were realized effectively.

On the other hand, region's social-care quality Indicators were not inversely correlated with rurality. It can be very high or very low in rural areas. Some new towns with growing population did not show high social care quality. Some rural towns that have strong emphasis on community policies and activities including landscape conservation and dementia supporter caravan showed high social care performance. Health care quality indicators of regions are considered to be related to regional economic/demographic indicators, with substantial modification due to the resource deployment such as centralization and networking. Social-care quality indicators do not seem to be related, but can be linked to community's organized activities.

**Conclusions and Implications:** Quality of health and social care systems can be measured at regional levels and are found to be substantially varied. The variations are considered to be dependent at least on resources and their deployment. For effective and efficient regional healthcare and social care systems, although these two systems were inter-connected and partially overlapped, we should recognize that approach foci are considered different between the two systems, and that stakeholder collaboration is required among providers, governments and citizens based on the common understanding the visualized performance of regional systems.

## Universal Health Coverage: Experience from Thailand



**Sathirakorn Pongpanich**

Professor  
College of Public Health Sciences  
Chulalongkorn University / Thailand

Sathirakorn Pongpanich, Ph.D. is a Professor in Health Economics and Dean at the College of Public Health Sciences, Chulalongkorn University and is also invited to be a visiting professor at Brown University, School of Public Health and has served there as thesis external examiner since 2010. He has authored and edited 3 books, as well as numerous research articles. In addition, he conducted many researches in Public Health for Thailand Ministry of Public Health, Thai Health Promotion Foundation, World Health Organization (WHO) and others. His areas of interest include Cost of Treatment of Diseases, National Health Account, Universal Health Coverage, Tobacco Reduction Campaign, Negotiation and Public Health Administrations, Free Trade Agreement on Health and etc. He is, as well, known as one of experts in negotiation who is participating in important national and international negotiation arenas and offering negotiation training to health professionals in South and Southeast Asian regions. He is currently an editor of Journal of Health Research at College of Public Health Sciences, Chulalongkorn University. Professor in Health Economics. Post Doctoral Training (Health Policy and National Health Account), Harvard University. Ph.D.(Health Services and Health Economics), University of California, Los Angeles (UCLA). MA (Health Economics), Johns Hopkins University. B. Econ, Chulalongkorn university

### ABSTRACT

Before 2002, 30% of the entire Thai population of 63 million people remained uninsured. With the advent of the Universal Coverage Scheme (UCS) that combined a medical welfare low income card scheme and a government-subsidized voluntary health card scheme with a coverage extension to the remaining uninsured, Thailand achieved the status of universal health coverage (UHC) in 2002 in terms of insurance entitlement, when the gross national income per capita was US\$ 1,900.

Since then, Thailand has received widespread international recognition as one of several middle-income countries that have made enormous progress in building a UHC system and in achieving "good health at low cost". Although its per capita GDP is low, Thailand has not only massively improved

health outcomes (e.g. infant mortality 9.8/1 000) but made great improvements in social security objectives (>99% population coverage, high level of financial risk and impoverishment protection). It has low out-of-pocket payments and health-related catastrophic expenditure has fallen from 2.7% to 0.49%, but there is some room for improvement for urban poor populations.

## Satisfaction with Universal Health Coverage Use Among Thais in Bangkok Metropolitan Area, Thailand



**Sukhontha Siri**

Assistant Professor  
Department of Epidemiology, Faculty of Public Health  
Mahidol University / Thailand

Dr. Sukhontha Siri is an Assistant Professor in the Department of Epidemiology. She obtained a Bachelor of Public Health (second class honors) and completed a PhD in Tropical Medicine at Mahidol University, Thailand. She has since been working at the Department of Epidemiology, Faculty of Public Health, Mahidol University. With nearly 10 years of research experience, she has been conducting public health research in mental health and quality of life among Thais, access to health services and health seeking behavior. She has many publications in topics such as prevalence and association between activities and cognitive impairment among the elderly, factors related with cervical cancer screening test among Thai Muslim women in Satun province and community participation of cross-border migrants for primary health care in Thailand, health policy plan, and others.

### ABSTRACT

This descriptive research was conducted to examine levels of satisfaction towards universal health coverage (UC) use among Thai residents in Bangkok. Data concerning health insurance and satisfaction with UC regarding perception of coverage, availability, accessibility, accommodation, affordability and acceptability were collected using self-reporting questionnaires from 10,000 subjects with multi-stage sampling.

The median age of subjects was 43 years (IQ2, IQ3:18, 56). Approximately 62.5% of Bangkok residents had a health insurance scheme and about 13.7% didn't know their types of health insurance. About the residents, 52.7% hold UC and 15.2% hold social security scheme. About 75% of UC holders used it during the past year and 71.5% reported they

were satisfied with it. UC customers were most satisfied with UC information provided by health workers, accommodation and acceptability and the least satisfied concerning affordability and coverage. Factors associated with satisfaction of UC use included sex, age, education, income and physical and mental health status ( $p < 0.05$ ).

Satisfaction with UC among Bangkok residents was high. However, the Bangkok Metropolitan Administration should emphasize advocacy to increase understanding and expand perceptions regarding UC affordability and coverage.

**Keywords:** satisfaction, universal health coverage, Thai residents, Bangkok

## Universal Health Coverage in Malaysia



**Maznah Dahlui**

Professor  
Department of Social and Preventive Medicine, Faculty of Medicine  
University of Malaya / Malaysia

Professor Dr Maznah Dahlui is a Public Health Medicine Specialist who had served for several years with the Ministry of Health, Malaysia and was an Entrepreneur before becoming an academician in the University of Malaya. Her speciality is health economics, with a major interest in the evaluation of health programs. She had conducted many economic evaluations of the country's policies and programs, working with various ministries in Malaysia such as Ministry of Health, Ministry of Labor and Prime Minister's Department. She has good linkages with international institutions such as the UNFPA, UNESCO, World Bank, WHO which have led to several consultancy projects centered on the evaluation and monitoring of health programs.

Maznah's research interest extends to cancer screening, infectious diseases such as HIV and Hepatitis C, adolescents health and obesity prevention; applying the economic evaluation approaches. She has been actively engaging NGOs (such as Breast Cancer Welfare Society and MAKNA) and the communities (the urban poor community and rural populations) for breast cancer screening and combating chronic diseases such as hypertension and diabetes. Her international research experiences include working with collaborators from Sanger Institute, University Cambridge, United Kingdom on the Salt Reduction Study, Kirby Institute, University of New South Wales, Australia on Return of Investment of Harm Reduction Program, University of Usmanu Danfodia, Sokoto, Nigeria on sexual reproductive health issues under the auspices of the Africa-Asia Development University Network (AADUN), and several others.

Maznah was appointed as the Regional Director of APACPH (Asia Pacific Academic Consortium for Public Health) in 2013 and used this as an avenue for her to initiate research collaborations on community obesity prevention with several of the 87 APACPH member institutions. With the backing of her university, in 2012 the APACPH Secretariat was successfully transferred to the University of Malaya where she had been the Secretary until now. Her appointment as the Chair for the National Clearinghouse for Adolescent Health in Malaysia is an acknowledgment of her close working relationship with the Ministry of Health.

Her outstanding contributions to public health in such a short span of time contributed significantly to her election as a Fellow of Public Health Medicine Specialist Association, Malaysia and of the Faculty of Public Health, Royal College of Physicians in the UK, one of only a handful of fellows from Malaysia. Maznah's leadership capabilities has been acknowledged by the university with her appointment as the head of department of public health (2011 to 2016), and her recent promotion as the Deputy Dean of Faculty of Medicine.

### ABSTRACT

Malaysia has a dual healthcare system with the public and private sectors contribute to almost the same proportions in achieving a fairly acceptable health status of a middle income country. The current health financing for public sectors relied heavily on taxation while healthcare services are mainly provided by the government. Financing of healthcare has a progressive distribution and average household out-of-pocket payments are relatively small, especially for poorer households. Overall, the population enjoys high levels of financial risk protection and the use of public healthcare services is equitably distributed. The poor

are spared a high burden of out-of-pocket payments due to the extensive network of public health facilities which provides a wide range of very cheap healthcare services to those in need. Direct household out-of-pocket health payments are in fact almost exclusively for the purchase of private care. The changing demographics and the poor lifestyles of the people poses great challenges in maintaining the health status should there be no innovations in the health financing system. It is about time that to consider social health insurance as another means of financing healthcare in Malaysia.

## Health Care Systems in Taiwan: Current Problems to Future Challenges



**Yawen Cheng**

Professor  
Institute of Health Policy and Management, College of Public Health,  
National Taiwan University / Taiwan

Dr. Cheng obtained her doctoral degree of epidemiology from the Harvard School of Public Health. She has been a faculty member in the Institute of Health Policy and Management of NTU since 2003. Combining social epidemiology and policy analysis approaches, Dr. Cheng has consistently devoted to research concerning job stress, psychosocial hazards at work, social determinants of health, and occupational safety and health policies. Measurement scales developed by her research team have been widely used both locally and internationally in Chinese speaking populations. In Taiwan, these scales have been incorporated into national surveys, aiding the government to better comprehend the extent of job stress problems, the distributions of major psychosocial work hazards and high risk groups of stress-related health problems.

### ABSTRACT

The National Health Insurance (NHI) system of Taiwan was established in 1995, which was a political decision undertaken during the time of democratization. Over the past 21 years, the NHI has been regarded as one of the most widely supported social policies in Taiwan. The key features of Taiwan's NHI include compulsory social insurance, universal coverage, single-payer system, revenue based on insurers' ability to pay, equal access to comprehensive and high quality health care services, uniform benefits, low co-payments, easy access, short waiting time, no gatekeeper and active participation of interested parties in decision making process. However, the NHI faces many challenges. The major challenge has been the rising health care expenditures due to rapidly aging population, advance in medical technology and over use problems facilitated by easy access without a gate keeper mechanism. Cost pressure imposed by cost-containment policies on health care providers is passed down to front-line

health care workers, resulting in heavy workloads and stressed out workers especially in tertiary medical centers. Furthermore, an increasing trend of privatization and a profit-oriented tendency of health care providers along with the diminishing role of the government in providing direct health services have greatly undermined the fundamental principles of social equity and economic efficiency in health care services.

## The Impact of Community Based Health Insurance in Enhancing Better Accessibility and Lowering the Chance of Having Financial Catastrophe Due to Health Service Utilization: A Case Study of Savannakhet Province, Laos

### Somdeth Bodhisane

Postdoc Researcher  
College of Public Health Sciences  
Chulalongkorn University / Thailand

Somdeth Bodhisane Ph.D., earned his bachelor and master degree in economics from Faculty of Economics, Chulalongkorn University, where his study focused on international trade and industrial organization respectively. He started working in the public health field in 2011 by pursuing a doctor of philosophy degree in public health. His research is mostly focus on health financing which includes a Ph.D. dissertation entitled "Social insurance policy formation on financial protection and health service utilization: A study of Community Based Health Insurance (CBHI) in Savannakhet province, Lao P.D.R." He is currently working as a post-doctoral researcher in College of Public Health Science (CPHS), Chulalongkorn University, in which his research emphasizes on Lao health care system, hospitalization, and Laos' CBHI policy formation to ensure the improvement of risk pooling condition and financial sustainability in the long run.

### ABSTRACT

**Background:** Lao population is mostly relying on out-of-pocket expenditures for health care services. This study aims to determine the role of CBHI in health care services accessible as well as preventing financial catastrophe resulting from personal payment for IPD services.

**Method:** A cross-sectional study design was applied in this research. The data collection process was retrieved from 126 insured and 126 uninsured households in the identical study sites. Two logistic regression models were used to predict and compare the probability of hospitalization and financial catastrophe occurred in both insured and uninsured households within the previous year.

**Result:** The findings show that the insurance status does not significantly improve accessibility and financial protection against catastrophic expenditure. The reason for this is relatively simple, as catastrophic health expenditure refers to a total out-of-pocket payment equal to or more than 40% of

households income minus subsistence. When household income declines as a result of inability to work due to illness, the 40% threshold is quickly reached.

**Conclusion :** Despite the result suggests that the insured households do not significantly better off from CBHI scheme. However, compared to the uninsured households, insured households do have better accessibility and lesser probability of reaching financial catastrophe threshold.

## Utilization of Reproductive Health Services: Time Trends & Equity

### Jenny Cresswell

Research Fellow  
Maternal Health Epidemiology  
London School of Hygiene & Tropical Medicine

Dr Jenny Cresswell is an epidemiologist with a background in demography based in the MARCH Centre for Maternal, Adolescent, Reproductive & Child Health at the London School of Hygiene & Tropical Medicine. Her research interests include the prevention of unintended pregnancies and measurement of maternal morbidity and quality of care outcomes, with a particular focus on vulnerable populations such as adolescents. Currently, Dr Cresswell is predominantly working on two research projects: a DFID-funded evaluation of large-scale programme aiming to prevent maternal deaths from unwanted pregnancies in fourteen African and Asian countries through increased use of contraception and reduced recourse to unsafe abortion, and a cluster-randomised trial evaluating the impact of the Alive & Thrive intervention to promote exclusive breastfeeding among infants under six months in Burkina Faso. Other recent and ongoing projects include a mixed-methods prospective cohort study on the relationship between women's work, reproductive health and family planning in Burkina Faso, an evaluation of the impact of government policies to remove or subsidise fees for maternity care in West Africa on utilisation and quality of care, and systematic reviews of the burden of maternal morbidity and the impact of maternal morbidity on health-related functioning.

### ABSTRACT

**Background:** The Sustainable Development Goals have a target to achieve Universal Health Coverage (UHC) by 2030. This includes protection from financial barriers to use of care and access to care which is of high quality. In order to measure progress towards achieving UHC, the WHO and World Bank have suggested a number of indicators: two of which are health service coverage, and equity across the population. In this talk I shall discuss what UHC means in the context of reproductive health: measuring coverage of emergency obstetric care, typically done through caesarean rates, is particularly challenging since there is no consensus on the appropriate caesarean rate to meet "necessary" care. I focus on case studies of Benin and Morocco. Each country has recently introduced government policies to remove financial barriers in the form of user fees for caesarean delivery in the public sector.

**Methods:** I use two sources of data: nationally-representative household surveys and routine statistics compiled by the respective Ministries of Health. Analysis focuses caesarean delivery rates; overall and stratified by geographic region, relative wealth quintile and public/private sector. Segmented regression was used to assess whether trends changed at key events such as policy introduction.

**Findings:** In Benin in 2001, 2% of all deliveries were by caesarean. Before the exemption policy was introduced in 2009, the caesarean rate was increasing by an

average of 0.2% per year. After the user fee exemption, the caesarean rate significantly increased by a further 0.3% per year over and above the pre-existing secular trend ( $p=0.016$ ). In Morocco, caesarean delivery increased across all wealth groups between 1987 to 2012. There was a significant interaction between time and relative wealth quintile ( $F = 2.91$ ;  $P = 0.0207$ ) with caesarean rates rising relatively faster among the poorest. However, by 2012 the caesarean rate had reached 28% among the richest quintile, most caesareans in this group took place in the private sector.

**Conclusions:** In both Benin and Morocco, coverage of caesareans is increasing. However, inequity remains with differential utilisation among population subgroups. In particular, in Morocco, impressive progress has been made among the poorest women although more still needs to be done. The poorest women tend to be the least educated and live in the most remote parts of Morocco, with long distances to health facilities and poor transport systems. Health system improvements beyond financial barriers, such as strengthening the availability of qualified medical staff in remote areas and further improving referral links need to remain a priority. Although the optimal caesarean rate remains a matter of debate, a rate of 28% among the richest is likely to reflect a substantial number of medically unnecessary caesarean sections.

# Financial Difficulty and Catastrophic Health Expenditure for Colorectal Cancer Treatment

## Tin Tin Su

Head, Centre for Population Health  
Associate Professor, Health Policy and Management  
Department of Social and Preventive Medicine / Faculty of Medicine, University of Malaya

Tin Tin Su is a public health specialist and health economist. She is an Associate Professor for the Health Policy and Management discipline at the Department of Social and Preventive Medicine. Tin Tin Su graduated from the Institute of Medicine (I), Yangon in 1991. She has a Master of Community Health and Health Management degree (2001) and a Doctor of Medicine (2006) from the School of Medicine, Heidelberg University, Germany. She has working and research experiences in Myanmar, Germany, Nepal, Burkina Faso and Malaysia.

Her research interest includes health economics, health system and policy, social determinants of health, cancer awareness and health literacy, and community health development. She is a founding member of the Centre for Population Health (CePH) and appointed as Head of the research centre since March 2011. She is an executive board member for Asia Health Literacy Association and elected as a vice president since 2014.

## ABSTRACT

**Background:** Increasing incidence of colorectal cancer (CRC) and its economic burden are becoming a significant public health problem among low- and middle-income countries. In Malaysia, the healthcare system consists of a government-run universal healthcare system and a co-existing private healthcare system. However, with high and ever rising healthcare spending on cancer management, cancer patients and their families are likely to become vulnerable to a healthcare-related financial burden. Moreover, they may have to reduce their working hours and lose income. To better understand this issue, this study aims to assess the financial difficulty and catastrophic health expenditure among colorectal cancer patients and their families in the first year following diagnosis.

**Methods:** Data were collected prospectively from 138 colorectal cancer patients at University of Malaya Medical Centre, Kuala Lumpur, Malaysia in 2013. Newly diagnosed adults with colorectal cancer (ICD: 18-20), throughout the year 2013 were included in the study. Patients were interviewed face to face by using a structured questionnaire at the time of the diagnosis. And telephone interviews were carried out at six months and twelve months following diagnosis. The socio-demographic information of colorectal cancer patient, household data, health care expenditure, and illness and treatment data were collected. The patient cost data consisted of direct out-of-pocket payments for medical-related expenses such as hospital stays, tests, and treatment and for non-medical

items such as travel and food associated with hospital visits. In addition, indirect cost data related to the loss of productivity of the patient and caregiver(s) was assessed. The patient's perceived level of financial difficulty and types of coping strategy were also explored.

**Results:** Throughout one year of treatment for colorectal cancer, the mean CRC management cost was RM 8,306.9 (USD 2,595.9), and 47.8% of patients' families experienced catastrophic health expenditure. The main predictors of catastrophic health expenditure were "economic status of the families, female household head and the likelihood of patient undergoing surgery". Similarly 42% of patients perceived paying for their healthcare as difficult. The most frequently used financial coping strategy was a combination of current income and savings.

**Conclusion:** Despite the high subsidisation in public hospitals, the management of colorectal cancer imposes a substantial financial burden on patients and their families. The result of this study presents a significant message to stakeholders and policy makers to provide financial protection against the consequences of cancer, a costly illness that often require prolonged treatment.

**Keywords:** Colorectal cancer, catastrophic health expenditure, perceived financial difficulty, cost of illness, financial risk protection, Malaysia

# Treatment Cost of Genital Warts on Provider and Patient Perspectives vs Government Expenditure Analysis on Prevention Control and Treatment of the Sexually Transmitted Diseases (STDs) in Thailand

## Sukhontha Kongsin

Associate Professor  
Health Economics, Department of Public Health Administration  
Mahidol University / Thailand

Sukhontha Kongsin, Ph.D., is an Associate Professor in Health Economics in the Department of Public Health Administration at Mahidol University in Bangkok, Thailand, where she is also the Director of Research Centre for Health Economics and Evaluation at the Faculty of Public Health, Mahidol University, Thailand. Sukhontha's research focuses on the evaluation and optimisation of health- and health system-related strategies and interventions in developing countries. Specifically, she has worked to identify health costs and economic impacts of HIV/AIDS at both the national level and international level. Her expertise includes demand-side incentives and financing of Thailand's public sector HIV/AIDS services, with a specific focus on patient access and utilisation of services. Sukhontha has worked on projects with the Thai Ministry of Public Health and has coordinated numerous regional workshops on issues related to disease burden and health economics in Southeast Asia. She has extensive experience in the field of HIV and with vulnerable populations such as key affected populations.

Sukhontha received the Young Investigator Award from the International AIDS Conference in Vancouver (1996), awarded the Franz Redeker Prize at the 29th World Conference of the IUATLD (1998) and Prof Harald Zur Hausen Award from AOGIN – 2012 Conference of Asia Oceania Research Organisation on Genital Infectious and Neoplasia for the Best Research Paper, awarded of outstanding performance and academic integrity in 2014.

Sukhontha is currently the President of the AIDS Society of Asia and the Pacific Foundation (ASAPF) and was a member of the AIDS Strategic and Action Plan (ASAP) Training Consortium for Asia and the Pacific Region. She served as an abstract mentor for the IAS and as a member of the Technical Review Committee of the Red Ribbon Award in 2008 and 2010 for the 17th and 18th International AIDS Conferences. She has served as abstract reviewer for the International AIDS Conferences and the IAS conference on HIV Pathogenesis, Treatment and Prevention for many years.

## ABSTRACT

**Background:** Commercial sex and its related epidemics of sexually transmitted diseases (STDs) are becoming an increasing problem. Effectiveness and sustainability of STD prevention intervention targeting sex workers and their clients are important. Comprehensive interventions comprise improved STD care services, promoting health care seeking behaviours and condom use. Outreach has been taken for the targeted establishments by STDs Cluster. The study objectives were to assess cost of genital warts on provider and patient perspectives and to estimate the government expenditure on prevention, control and treatment of the National STDs Prevention and Control Plan.

**Methods:** Cost data that include direct and indirect costs of providing clients with warts at a special STD hospital, Bangkok, Thailand were collected using activity-based costing (ABC). There are 4 clinics: clinical research women, clinical research men, women health clinic and male health clinic. Secondary data were collected from government agencies on resource and budget in the situation under the universal coverage (UC) and other related to STDs programs. Sources of the entire allocated budget to each province were mainly compiled and analysed to estimates of total resource needs.

**Results:** There were 72 patients in this study. The total direct cost was 111,167.08 Baht. Thirty one percent of the total cost was from the woman research clinic (34,427.40 Baht) followed by men health clinic, men research clinic and woman health clinic. Specimen collection (4 specimens per patient were collected for diagnosis of warts) was the main activity account for the highest total cost of 20,033.63 Baht (275.25 Baht/person). The second main activity was assessing patients, the total cost was 19,335.09 Baht (269.36 Baht/person).

Surprisingly, activity on medical service accounted for the lowest total cost of 1,626.09 Baht (22.92 Baht/person). The highest cost per activity unit (292.04 Baht/visit) was from cervical cancer/rectum check-up which included preparing material, registration, specimen collection, record the results and transfer to cancer institute so it made this activity high labour and material cost and the second highest was counselling (120.59 Baht/visit). Indirect costs of patients and their caregivers/follower include opportunity cost, patient food cost and patient transportation cost. Average patient's transportation cost was 73.89 Baht/visit (the highest was 430). Average patient's food cost was 44 Baht/visit (the highest was 250). Average patient's opportunity cost (patients were absent from work or stop working to receive treatment) was 760.92 Baht/visit (the highest was 1,800). Average caregiver transportation cost was 34.25 Baht/visit (the highest was 58). Average caregiver food cost was 53 Baht/visit (the highest was 75).

Regarding the actual of government program expenditure for STDs was USD 24,893,460 compared with the total resource need estimation was USD 81,956,897. This was 30.37% of this actual spending on STDs from government agencies.

**Conclusions:** Evaluation of the treatment cost due to genital warts could be used to the develop direction of targeted services at the most appropriate. National resource needs estimates are important for the country to provide comprehensive interventions for the prevention, control and treatment by government agencies and other key stakeholders.

**Key Words:** Warts, Activity-Based Costing (ABC), direct cost, indirect cost, government expenditure, STD clinic

# Beyond Accuracy: Assessing and Projecting the Public Health Impacts of New Diagnostics for Tuberculosis

## Hsien-Ho Lin

Associate Professor  
Institute of Epidemiology and Preventive Medicine  
National Taiwan University / Taiwan

Dr. Hsien-Ho Lin received his M.D. from National Taiwan University (2001) and completed the training in Family Medicine from Hualien Mennonite Christian Hospital (2001-2005). He completed his Sc.D. in Epidemiology from Harvard School of Public Health (2009). His research interest involves using epidemiological studies to assist the control and prevention of tuberculosis. He has used dynamic transmission models to assess the potential impact of tuberculosis interventions that are being considered by policy makers, including new diagnostics in Tanzania and tuberculosis control programs in China and Taiwan. He has been studying risk factors and determinants of tuberculosis, including active smoking and passive smoking, diabetes, and indoor and ambient air pollution, using population-based cohort studies and meta-analysis. He is also actively involved in the National Bureau of Disease research project in Taiwan.

### ABSTRACT

In the past few years, a number of new diagnostic tools for tuberculosis have been introduced. At the same time, national tuberculosis programs face the challenge of choosing the appropriate diagnostic option that is most suitable for the country-specific epidemiologic situation and available resources. We developed an integrated modeling approach ( "Virtual Implementation" ) to assess and project the potential impacts of a new diagnostic tool at the patient level, health system level, and the population level. The integrated model included a transmission modeling component (developed by the National Taiwan University team) and the operational modeling component (developed by the Liverpool School of Tropical Medicine team); the two components were linked dynamically in order to account for the complex interactions among the impacts at different levels. Using the integrated model, we worked with the Tanzania National Tuberculosis Program to evaluate the potential effects and cost-effectiveness of eight different diagnostic options that were considered by the

program, including the new diagnostic tool of Xpert MTB/RIF and light-emitting diode (LED) fluorescence microscopy. We found that, under the optimistic operational condition, the full rollout of Xpert is a cost-effective option for tuberculosis diagnosis and has the potential to substantially reduce the national tuberculosis burden. It also estimates the substantial level of funding that will need to be mobilised to translate this into clinical practice. On the other hand, sensitivity analyses from our models indicates that the impact of new diagnostics depends on the context of the health care system where the tool is implemented. For example, the impact of a new diagnostic tool would critically depend on whether the diagnosis of a new tuberculosis patient could be linked to adequate treatment and case management. This highlights the importance of addressing health system weaknesses when introducing a new technology into a resource-constrained setting.

# Using Cost-effectiveness Evidence to Inform Health Care Decision Making

## John Cairns

Professor  
Department of Health Services Research and Policy  
London School of Hygiene & Tropical Medicine

John Cairns graduated MA(Hons) in Economic Science from the University of Aberdeen. After a year of graduate study at the University of York he spent two years as a research fellow in the Institute for Social and Economic Research. This was followed by a return to the University of Aberdeen where he spent eleven years as a lecturer in the Department of Economics. In 1989 he took up a post as senior research fellow in the Health Economics Research Unit and was appointed director in 1993. He was awarded a personal chair in 2002. He took up his current post in May 2004. He has been a member of the NICE technology appraisal committee since 2003 and a member of the advisory committee on the Safety of Blood, Tissues and Organs since 2008.

### ABSTRACT

Evidence regarding the cost-effectiveness of different interventions is widely used in the UK to inform health care decision making. Examples include the National Screening Committee, the Joint Committee on Vaccination and Immunisation, the committee on the Safety of Blood, Tissues and Organs, and the National Institute for Health and Care Excellence (NICE). In the case of NICE economic evidence is important with respect to decisions regarding the health technologies (particularly drugs) that the NHS should routinely use but also informs the development of public health guidance, and to a lesser extent the development of clinical guidelines.

Notions of a cost-effectiveness threshold lie at the heart of any attempt to use cost-effectiveness evidence to inform decisions as to which health services to provide. Cost-effectiveness thresholds are important whenever an organisation is concerned with obtaining value for money from its health care spending. They may be of particular relevance with respect to public expenditure because they can increase the transparency and accountability of decision making.

There are three main challenges when using cost-effectiveness thresholds

to inform decisions regarding which services to fund. First, how is the appropriate cost-effectiveness threshold or threshold range to be determined, or indeed should there be a single threshold or multiple thresholds? Second, how can the valuation of health benefits be refined so as to better capture the value of treatments to patients and to the economy as a whole? Third, how is the tension between cost-effectiveness, and the affordability and sustainability of health services to be managed? These questions are of course linked, for example, weighting QALYs and using a threshold cost per weighted QALY and having multiple thresholds for different groups of QALYs (defined for instance by severity of the underlying condition) are alternative means of recognising that not all QALYs have the same value.

While high income countries must grapple with these challenges, they are also relevant to low and middle income countries, for example, when deciding what services to include in the benefits package. Albeit that the thresholds at which services are deemed cost-effective will be substantially lower, and these countries face a more fundamental challenge in terms of developing and sustaining HTA decision making processes.

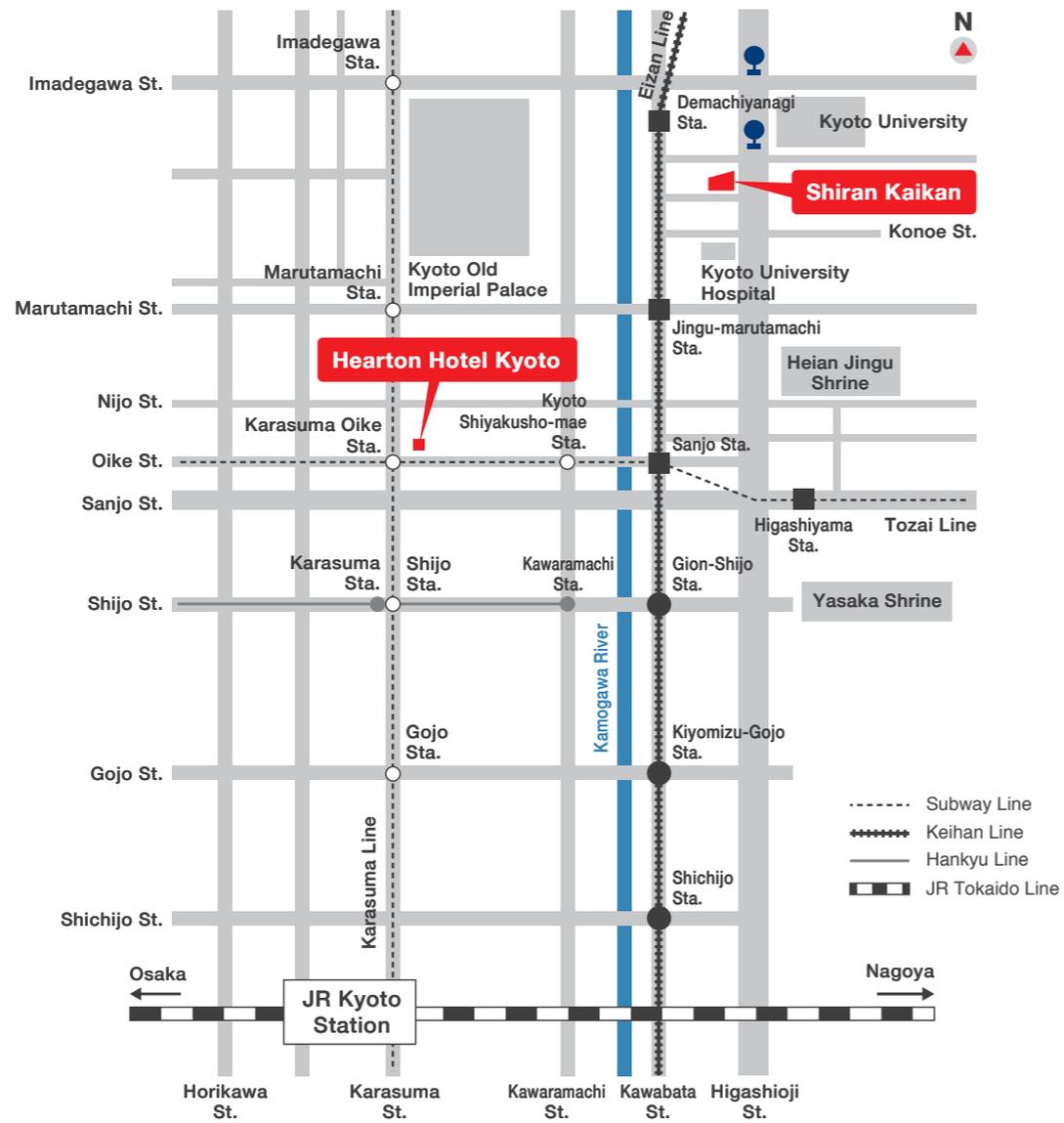
# Poster Presentation

University	No.	Presenter Name	Poster Title
Kyoto University	01	Ayako Kohno	A Mixed-method Study Protocol on the Prevalence of Child Marriage in Malaysia and their Health Status and Gender Norms
	02	Chiawen Wang	A Qualitative Study on Cyberbullying and Traditional Bullying among Taiwanese High School Students: Exploring Experiences, Perceptions, and Mental Health Aspects
	03	Christina Abduljabar El-saaidi	A Cross-sectional study on Knowledge, Attitude and Practice of Infection Control Among Students of Public Dental Schools in Egypt
	04	Hironori Uematsu	Disease Burden of Antimicrobial-Resistant Infections in Japanese Inpatients
	05	Koji Hara	Physician Geographic Distribution in Japan: Is it Improving or Worsening when Healthcare Demand is Adjusted?
	06	Naoki Takashi	A Qualitative Study on the Support to Community Dwelling for Male Elderly with Stroke in Shizuoka City
	07	Nurul Syafika AH	Psychological Stress among Southeast Asian International Students in Japan: A Qualitative Study
	08	Omid Dadras	What Happened in Tanzania During Last Decade?: A Response to HIV Epidemic Between 2003-2011
	09	Phayong Thepaksorn	Occupational Noise Exposure and Hearing Defects among Sawmill Workers in the South of Thailand
	10	Pilar S. Suguimoto	Qualitative Study of the Access to Health Care of Children Under-five in an Andean Region of Peru and Health Beliefs of their Caregivers
	11	Shinomi Takahashi	Perception towards Diabetes among Community-dwelling Diabetes/Non-diabetes Japanese Elderly: A Qualitative Study
	12	Takayo Nakabe	Informal Care Costs and Out-of-Pocket Payments of Dementia Care in Japan
	13	Wilunda Calistus	Caesarean Delivery and Anaemia Risk in Children in Low- and Middle- Income Countries: Propensity-score Weighting and Meta-analysis of Demographic and Health Survey Data
	14	Yoshitaka Nishikawa	Transition of Emergency Medical Services in a Resettled Homeland After the Fukushima Nuclear Disaster: A Retrospective Observational Study
	15	Yukiko Tateyama	Socio-epidemiological Study on Risk Factors of Non-communicable Diseases among Adult Population in Rural Zambia: A Mixed Method Study (Phase II quantitative study )
Chulalongkorn University	16	Noor Alis Setiyadi	How Indonesian Stakeholders Perceive their 2014: National Health Insurance Implementation
	17	Prichavijy Promjak	"Modified-Continuous Ambulatory Peritoneal Dialysis (CAPD) Patient's Handling Process" among Healthcare Providers at Primary Care Level
	18	Wachiraporn Wilaiwan	Status and Trend of Mobile Communication Devices and Applications Usages in Senior Citizens, Thailand: Case Study on Health Effects

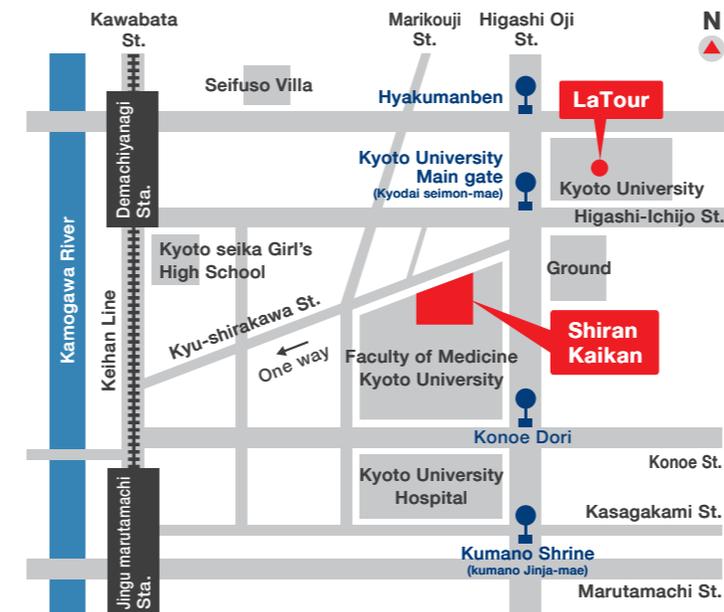
December 14-15, 2016

University	No.	Presenter Name	Poster Title
London School of Hygiene & Tropical Medicine	19	Daiane B Machado	Providing Universal Health Coverage in Mental Health Settings: Impact of the Brazilian Mental Health Services on Suicide, Hospitalisations by Attempted Suicide, by Psychiatric and by Alcohol Problems.
	20	Katherine Theiss-Nyland	Investigating the Gap between Policy and Practice in Continuous Distribution of LLINs through ANC and EPI
	21	Kerry Wong	The Spatial Dimension of Health Service Access and Coverage: Systematic Review of Distance and Travel Time as Barriers of Attaining Universal Skilled Care at Childbirth in Sub-Saharan Africa
	22	Noemia Siqueira-Filha	Costs of Treatment of HIV/AIDS and HIV/Tuberculosis Co-infection in a Referral Hospital in the City of Recife, Brazil
	23	Rachel Braithwaite	Ethnic Differences in Smoking in the Netherlands and the Contribution of Socio-economic Factors: the HELIUS Study
Mahidol University	24	Orapan Sa-ringkan	Higher Adherence of Antiretroviral Therapy (ART) in Community Hospitals than in Regional Hospitals: A Cohort Study Under The Universal Coverage in Thailand
	25	Ratchaya Jirapong	Job Stress among Thai Police Officers in Prachinburi Province
National Taiwan University	26	Chia-Lin Tseng	Social Solidarity in East Asian Health Care Systems: Exploring Universal Health Insurance Schemes in Japan, Korea, and Taiwan from 1990 to 2014
	27	Chih-Hsiang Shun	Study on Serum Metal Levels of Residents Living Near a Petrochemical Complex in Taiwan
	28	Jessica Tsay	Using Genetic and Spatial Data to Investigate Clusters of Multidrug-resistant Tuberculosis in Taiwan
	29	Jung-Chi Chang	Spatial Variation of Selected PM2.5 Elements in an Urban Area
	30	Po-Wei Chu	Tuberculosis Disease Risk Assessment in DM Patients
	31	Shun-Hua Ho	Exposure of PM2.5 at the Roadside Bike Express Lanes in Taipei
	32	Tzong-gang Wu	Concentrations of Airborne Fine Particles and Benzene at Bus Stops in Taipei, Taiwan
	33	Tzu Ting Tsai	Impact of Meteorology on Particle-bound Polycyclic Aromatic Hydrocarbons in Taipei Area
	34	Yi-Lun Tsai	Sources and Consequences of the Fear of Malpractice among Physicians in Taiwan
	University of Malaya	35	Roshidi Ismail
36		Raymond Seow	Gender Disparities in Prevalence of Overweight and Obesity among University Students

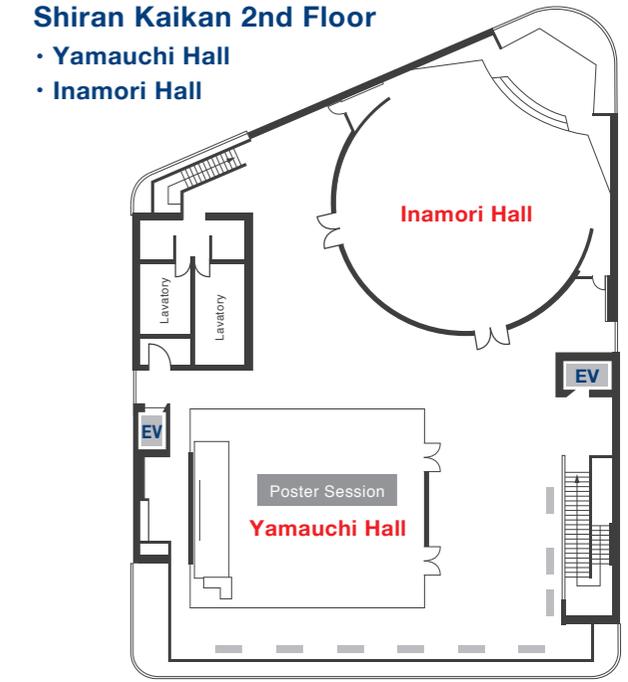
### Kyoto City Map



### Local Map



### Floor Map



### Access

Main Railway station	Route	Terminal
Kyoto Station JR. Kintetsu Railway	City Bus #206 bound for Kitaoji bus terminal via Higashiyama St.	Kyodaiseimon-mae
Hankyu Railway Kawaramachi Station	City Bus #201 bound for Gion, Hyakumanben City Bus #31 bound for Kumano, Iwakura	Kyodaiseimon-mae
Karasuma Subway line Marutamachi Station	City Bus #202 bound for Kumano jinjya, Gion City Bus #204 bound for Higashi Tenno-cho, Kinrin Shako-mae	Kumano jinjya-mae (and change to above bus lines)
Keihan Railway Jingu-marutamachi Station	10 minutes walk north-east from No.5 exit	



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London School of Hygiene and Tropical Medicine

Mahidol University

National Taiwan University

University of Malaya

WHO Centre for Health Development, Kobe