

VBH taskforce for the 9th APAC

Confidentiality Statement

The document is prepared to report the activity of VBH-TH for the APAC 9th. The distribution is limited to the stakeholders of the APAC concerned groups and individuals.

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Summary

Value based healthcare - taskforce (VBH-TF) summarizes the comparison table for VBH related topics in the Philippines, Thailand and Japan. The team recognized some common challenges in social security system of Thailand and Japan due to aging society, whereas the Philippines and Thailand see same challenges concerning healthcare environment. The stance to data health (or eHealth) which is expected to provide a solution for the effectiveness of healthcare was common to the three countries. Further research and discussion are expected by the participation of experts and administrators in the future APAC to elucidate practical issue and future direction of VBH as well as data health.

	Philippines	Thailand	Japan
Demo-graphics	<p>Population in 2017: 104.92 million 0-25 years (52.6%), 25-64 years (43.03%), ≥65 years (4.5%) The median age of the population is 23.5 years, and the percentage of younger population is high</p>	<p>Population in 2017: 69.04 million 0-15 years (16.9%), 15-25 years (14.2%), 25-55 years (46.3%), 55-65 years (10.6%) Thailand is in a direction of aging, and the percentage of aged 65 years or older population is in the top 12.0% in ASEAN.</p>	<p>Population in 2017: 126.71 million 0-14 years; 15.59 million (12.3%), 15-64 years; 75.96 million (60.0%), ≥65 years; 35.15 million (27.7%)</p>
Medical Insurance system	<p>The Philippine Health Insurance Corporation (PhilHealth) operates a nationwide public health insurance, and the Philippine government aims to include all citizens in PhilHealth.</p> <p>Limited support - in terms of depth (amount of support covered) and breadth (conditions covered), delays in the reimbursement process</p>	<p>Three different public health insurance system, CSMBS, SSS, and UC, cover almost all citizens. Some Thai people also purchase Private Insurance additional to his/her basic healthcare scheme above. This covers around 5% of the population.</p> <p>The sustainability of the healthcare system is an issue due to the increasing financial demand of an aging society and broad access.</p>	<p>All citizens are enrolled in “public health insurance”, and the coverage by public health insurance has been achieved</p> <p>Due to an increase in medical expenses by an increase in the elderly population and a decrease in the working-age population, tax revenues are suffering, and therefore, the sustainable universal health insurance is at risk. Medical expenses are expected to grow faster than GDP due to rapid aging of population and advancement of medical care</p>

PhilHealth: The Philippines Health Insurance Corporation was founded in 1995 as a Government Owned and Controlled Corporation (GOCC) with the goal of “ensuring a sustainable national health insurance program for citizens in the Philippines”.

CSMBS: Civil Servant Medical Benefit Scheme
SSS: Social Security Scheme
UC: Universal Coverage

Healthcare Environment	<p>General hospitals are divided into 3 management systems: national hospitals, public hospitals, and private hospitals. Private hospitals are equipped better with medical facilities private hospitals are greater in number (2/3 of all hospitals are private) Public and national hospitals are always crowded due to low medical care costs compared to private hospitals and primary care is yet to be established (i.e. even for less serious cases, patients prefer hospital services)</p>	<p>Advanced medical care for some areas has been provided in the core public hospitals</p> <p>The annual budget for public hospitals is insufficient, and there are restrictions on the use of drugs, etc.</p> <p>Doctors must examine many patients in a short time, and they cannot share adequate time and resource for each patient</p>	<p>High quality medical care can be provided at the same self-pay burden rate at any hospital</p>
Healthcare system reform	<ul style="list-style-type: none"> Promote care-point registration programs; make it possible for people who can only be treated at public hospitals (class C-3) to become members who can receive medical aid Primary care package: It provides free of charge drugs for 10 common diseases that can be treated within the scope of primary care. <p>In 2019, two landmark legislations were passed: the “Universal Healthcare Act” and the National Integrated Cancer Control Act. These laws provide for various reforms but is projected to be implemented in 10 years.</p> <p>Focusing care for low income people</p>	<ul style="list-style-type: none"> Enforce prescription of generic drugs in public hospitals. Promote parity of benefits between the 3 enrollment systems and parity of medical services (contents of treatment) between urban and provincial areas and between national hospitals and municipal hospitals. <p>A working group for Healthcare Reform was established in 2017 to cover the following areas:</p> <ol style="list-style-type: none"> Healthcare Administration: Technology, Information and Man Power Healthcare Service System: Primacy Care Service, Thai Medicines and Herbal Products, Emergency Medical System, Health Promotion and Disease Prevention Healthcare Financing: Universal Coverage on Health Literacy, Equity to Healthcare Services, Affordable Expenditures <p>Focusing to correct inequality</p>	<ul style="list-style-type: none"> Provide health care services that extend healthy life expectancy and enhance quality of life Establishment of a sustainable and stable medical insurance system with public endorsement Discussing “Social security reform for all generations” facing the era of 100 years of life which is advanced aging society with low birthrate, how to between the supporting side and the supported side. <p>Focusing to maintain present high level medical system and environment</p>

Digital Health

UHC Act passed 2019

puts emphasis on data driven health system.

- The DOH is tasked to set standards for interoperable systems of health facilities and healthcare professionals, who are in turn required to maintain various health information such as eHealth records, ePrescription, logistics management information, resource planning, among others.

The DOH and PhilHealth are yet to establish guidelines for these, and it is expected an update to the Philippine eHealth Strategic Framework and Plan to meet the policy.

Thailand eHealth Strategy 2017 -2026

1. Establish a central organization for eHealth management and cooperation.
2. Develop and improve enterprise architecture and infrastructure that are available to support eHealth services to the public.
3. Establish standards of Health Information System, effective data integration and interoperability.
4. Promote and develop eHealth innovation, services and applications which provide benefits to health care delivery system and patients, consumer protection including licensing regimes.
5. Establish Laws, regulations, compliances and standards of ICT in Healthcare System.
6. Develop Human Capital in eHealth and ICT Knowledge Management in medical and healthcare for Citizens

Data health reform policy (MHLW 2019)

Accelerate efforts from the perspective of the public, patients, and users.

- Thorough implementation of measures for protection of personal information and security, also taking into account the viewpoints of cost-effectiveness.
- Promote development of genomic medicine and utilization of AI.
- Personal health record (PHR) linking personal data to support lifestyle improvement, etc.
- Promote utilization of Information in practical Medical/Nursing Care field
- Promotion of effective utilization of database

1 Reflection of 8th APAC VBH

The concept of VBH was acknowledged at the eighth APAC General Assembly or conference, and encouraged to be continued to ninth APAC. Keynote lecture summarized innovations in healthcare and pointed out importance of rewarding innovation. Panel discussion delivered message for continuing development of valued medicine and social systematic endorsement for sustainable healthcare system.



Fig.1 Outcome of VBH in the 8th APAC.

At the 8th APAC convention, HKAPI kindly offered support to VBH for constructing concept for the next year. The team talked with HKAPI and was introduced Prof. Wang, UHK, who has been working for clinical data analysis and application to medical efficiency (proper use of drugs e.g. anticoagulants, antidepressants, and antibiotics). A teleconference was held and lecture was given. Dr. Wang introduced researches using big data (Figure. 2)

First published study on effects of new anticoagulant effect on bone fracture

JAMA | Original Investigation

Association Between Dabigatran vs Warfarin and Risk of Osteoporotic Fractures Among Patients With Nonvalvular Atrial Fibrillation

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IMPORTANCE The risk of osteoporotic fracture with dabigatran use in patients with nonvalvular atrial fibrillation (NVAF) is unknown.

OBJECTIVE To investigate the risk of osteoporotic fracture with dabigatran vs warfarin in patients with NVAF.

DESIGN, SETTING, AND PARTICIPANTS Retrospective cohort study using a population-wide database managed by the Hong Kong Hospital Authority. Patients newly diagnosed with NVAF from 2010 through 2014 and prescribed dabigatran or warfarin were matched by propensity score at a 1:2 ratio with follow-up until July 31, 2016.

EXPOSURES Dabigatran or warfarin use during the study period.

MAIN RESULTS AND MEASURES Risk of osteoporotic hip fracture and vertebral fracture was compared between dabigatran and warfarin users using Poisson regression.

Supplemental content

CME Quiz at jamanetwork.com and CME Questions page 1172

Using innovative methodology to solve confounding issues

RESEARCH

BMJ

Cardiovascular outcomes associated with use of clarithromycin: population based study

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ABSTRACT
STUDY QUESTION What is the association between clarithromycin use and cardiovascular outcomes?

METHODS In this population based study the authors compared cardiovascular outcomes in adults aged 18 or more receiving oral clarithromycin or amoxicillin during 2005-09 in Hong Kong. Based on age within five years, sex, and calendar year at use, each clarithromycin user was matched to one or two amoxicillin users. The cohort analysis included patients who received clarithromycin (n=108 988) or amoxicillin (n=217 793). The self controlled case series and case crossover analysis included those who received Helicobacter pylori eradication treatment containing clarithromycin.

The primary outcome was myocardial infarction. Secondary outcomes were all cause, cardiac, or non-cardiac mortality, arrhythmia, and stroke.

1.90 excess myocardial infarction events (95% confidence interval 1.30 to 2.68) per 1000 patients.

WHAT THIS STUDY ADDS Current use of clarithromycin was associated with an increased risk of myocardial infarction, arrhythmia, and cardiac mortality short term but no association with long term cardiovascular risks among the Hong Kong population.

FUNDING, COMPETING INTERESTS, DATA SHARING It was funded by grants from the Medical Research Council for this project. IS was funded by a grant from the Wellcome Trust. The authors have no competing interests. No additional data are available.

INTRODUCTION Clarithromycin is a commonly prescribed macrolide antibiotic, indicated for respiratory tract infections, Mycobacterium avium complex disease in patients with

Fig.2 Dr. Wang’s research on data for medical efficiency and value.

As the idea of the VBH 9th APAC, “Big Data is a Big Tool to Support HTA” has been suggested. Prof. Wang pointed out clinical data utilization varies country to country and areas (insurance claim, registry, and others).



Clinical Data Analysis and Reporting System (CDARS) database in Hong Kong

- Electronic patients record of the Hong Kong Hospital Authority (HA).
- HA is the sole public-funded healthcare provider of Hong Kong.
- HA is serving a population of over seven million through 42 hospitals, 47 Specialist Outpatient Clinics, and 73 General Outpatient Clinics. All data are stored in one single system

Clinical Data Analysis & Reporting System database

- Diagnosis and procedures
- Drug prescribing and dispensing history
- Admission and discharge details
- Laboratory and pathology results
- Mother and baby link
- Currently contains 11 million people data

Fig.3 Dr. Wang’s Presentation for clinical data analysis and database

It was considered discussion on anticancer drugs impacting health care finance would be interesting to the audience.

2 PRELIMINARY DISCUSSION

Following Prof. Wong’s suggestion, team envisaged artificial intelligence (AI) engineering and legal perspective for medical data could be the discussion point in the 9th APAC VBH; how AI structure medical data network and what legal discussion about data security ongoing. Team thought digitized/electronized medical data would be utilized for major

part of future outcome evaluation and payment decision as well as establishing innovative medical care and standardization.

As a background discussion, 2019 was the year Japan officially introduced HTA for adjusting drug prices based on cost-effectiveness assessments, and eminent scholars wrote in newspaper articles pointed out the assessment is not for price reduction but to reform healthcare system and attain sustainable innovation creating society. They emphasized HTA should be expanded to medical fees as the next level healthcare system reform.

2.1 The team perceived – Asian economies and VBH

In the course of such discussions, when returning to APAC’s Charter on contributing health care (promoting access to innovative medicines) for Asian people, opinion emerged that the team should stare the possibility that the elements of the access to medicine represented by architecture, affordability, availability, and adoption, may differ among APAC member economies, and that it would not be possible to determine the direction of VBH without clarifying this.

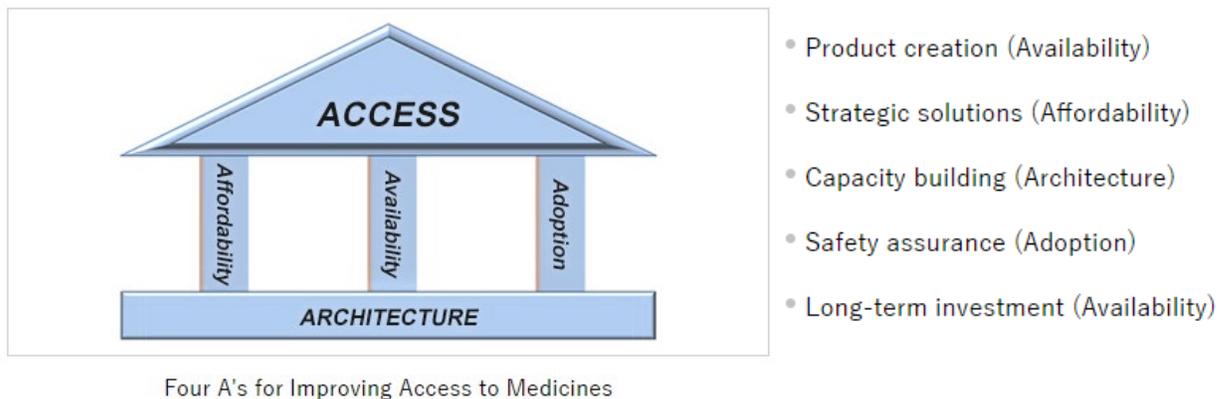
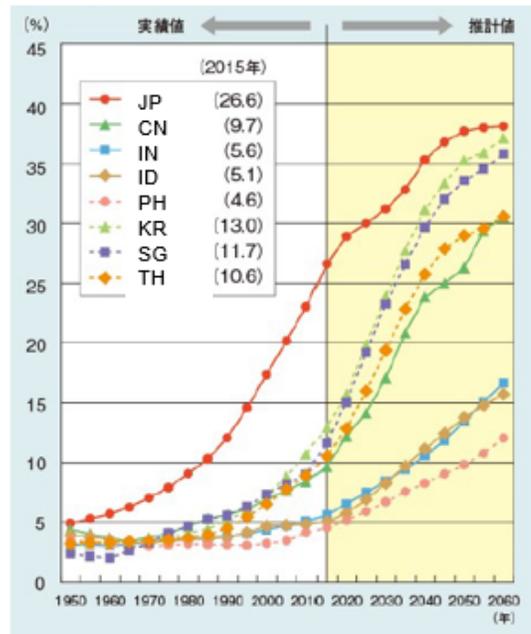


Fig. 4. The four A's for access (<https://atm.eisai.co.jp/english/atm/>)

The demographic snapshot of Asian countries was considered to choose objectives.



Ratio of people 65 years old or more

White paper on elderly society (2018), Cabinet office, Government of Japan, quotation from UN World Population Prospects: The 2017 Revision

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Team members started researches to advance the concept on current status of member economy's viewpoint on access to medicine and VBH. The trends of pricing and payment model were also included into the research point.

2.2 Preliminary Research on Each Country VBH

2.2.1 Thailand

Thailand has been working on a VBH since 2015, and the Public Health Service has set up a subcommittee and promoted. The roadmap seeks to find a healthcare providing mode that balances costs and outcomes after introducing medical guidelines aimed at improving primary care, and ultimately bring a contract payment model based on the SAFE concept

2.2.2 Philippines

In the Philippines, only about 30% of medical expenses are covered by insurance and national and local budgets; more than 50% are paid out of pocket (OOP). The immediate goal is to make the OOP payment less than 20%. On the other hand, the government's e-health vision aims to transform into high-quality medical care and apply medical data to its evaluation.

2.2.3 Indonesia

In Indonesia, universal citizen insurance (BPJS) has been introduced since 2014, but due to problems such as the vast national land and the inability to maintain transportation infrastructure, services combining online medical treatment and drug delivery have rapidly developed and ride share service giant Go-Jek has launched Halodoc, a company that connects medical services to the company's mobile screen, and has gained recognition shortly after launching a partnership with BPJS.

2.3 Communications with Associations of Each Country

We contacted the Associates of each country about the validity of our research and requested the support of each country. The team contacted candidate Japanese speakers.

2.3.1 Indonesia

Mr. Parulian, IPMG, ID, contacted the CEO of GrabHealth (competitor to Halodoc) and kindly coordinated meeting the delegates of JPMA APAC to the CEO during their visit to ASEAN countries (Nov, 2019), but the meeting was suspended by the news about the tie-up of BPJS and Halodoc.

2.3.2 Thailand

PReMA (TH) contacted Dr. Srilatanavan of Chucharonkorn University and Dr. Sriratanavan readily agreed to attend the VBH session at 9th APAC.

2.3.3 Philippines

PHAP (PH) contacted Dr. Banzon, who is in charge of health care at the Asian Development Bank (ADB) asking presentation at VBH session, but the circumstances did not allow Dr. Banzon's attendance. Ted of PHAP offered to present at VBH session about the VBH in Philippines.

2.4 Japan Panelists and Moderators

The team visited Dr. Takeda, Boston consulting and councilor to MHLW, asking to act as moderator of the VBH session and to hear his opinion about possible Japanese presenter to the session. Dr. Takeda suggested discussion on finance and policy is more engaging topic of interest than improvement of legal basis for healthcare data, and the team should consider inviting MHLW administrator. He also suggested it will be a good idea to invite Prof. Miyata and ask presentation about recent progress of VBH continuing on from the last time.

Dr. Takeda later liaised the team to Mr. Miura, counselor of MHLW.

The team visited Mr. Miura and was accepted the team's request of Miura-san's presenting data health reform, which is his current task of MHLW, at the VBH session. Mr. Miura commented that it would be interesting as a theme of APAC VBH to review on the history of Japan's medical policy.

We visited Professor Miyata of Keio University, and Prof. Miyata consented his delivering presentation and participation to the panel discussion. His presentation topic would be about significance of reforming Japan's healthcare based on Japan's current medical data analysis, as well as examples from foreign countries.

3 CONTENTS OF VBH SESSION AT 9TH APAC - CONSIDERED

Start the session with presentations about VBH in the Philippines and Thailand representing countries population continue to increase and society turning to greying; VBH they are considering and policy they are working out would be shared.

Presentations by Japanese speakers follows touching data healthcare reform and its significance in the society of changing population structure to its declining.

3.1 VBH team perspectives could be shared

Team researched and summarized healthcare issue of each country in case the discussion with the presenters/panelists of each country necessary.

3.1.1 Philippines



Healthcare issues
in the PH (Japane

3.1.2 Thailand



Healthcare issues
in TH (Japanese).

3.1.3 Japan



Healthcare issues
in JP (Japanese).ç

3.2 Takeaways to the audience - expected

The team expected to shed light how the three countries are tackling healthcare reform and trying not to miss digital health movement, on the background of commonality and difference of demographics, health insurance system and healthcare environment of each country. VBH is not a special concept for countries have attained UHC, but there are various aspirations based on the situations each country encountering.

- The VBH team see health insurance system situation in Japan and Thailand comparable both challenging to establish sustainable reform.
- Disparity of healthcare quality provided by public and private operations is the common issue for Thailand and Philippines.
- On the other hand, digital health initiatives of the three countries focusing same direction.

Unfortunately, there is no certain conclusion and feedback obtained as this was a focusing point of the panel discussion during the APAC VBH session.

It should be planned for establishing common concept of valued medicine, discussions sharing practical issues emerged at each country and further policy updated in the future APAC VBH session.

(end of report)