IAAHS Health

Global Funding Approaches For Population Health Care

Nations rising to meet the challenge of meeting health maintenance and improvement needs in light of financial limitations

Sheeren Sayre, ASA, MAAA

Mason Choy, FSA

The International Actuarial Association Health Section

Connecting Like-Minded Actuaries with a Passion for Global Insight & Learning

Research Opportunities:

- Comparative Health Systems
- Artificial Intelligence & Digital Solutions for Health
- Health Risk Capital & Risk Management
- Medical Expenses
- Health Care Inflation

Email: secretariat@actuaries.org

The International Actuarial Association Health Section

INVITATION TO JOIN

BENEFITS:

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- Actuview Access

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Home (actuaries.org) Be sure to indicate you are an IAI member.

POLLING QUESTION

#1 In which of the following health financing areas do you practice (multiple selection may occur):

a. None
b. Government budgeting
c. Government-provider negotiations
d. Insurance Solutions/Design/Pricing
e. Provider side
f. Employee Benefits/Employer Provision
g. Public Health

Presentation Limitations

- The opinions and presentation shared today are those of Shereen Sayre and Mason Choy, and not those of the IAI, IAA, SOA or American Academy of Actuaries.
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The International Actuarial Association Health Section's Global Health Care Funding Report

Partners

- The Society of Actuaries International Section
- The American Academy of Actuaries Health Practice International Committee (HPIC)
- The International Actuarial Association Health Section (IAAHS)
- Actuarial Volunteers around the globe who have generously dedicated time to develop charts and the report format, in addition to review of the final product

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Featured Countries

North America (2)
- Canada
- United States
  - Private Insurance
  - Public Insurance

Latin America (6)
- Argentina
- Brazil
- Chile
- Colombia
- Mexico
- Uruguay

Asia/Oceania (10)
- Australia
- China
- Chinese Taipei
- Hong Kong
- India
- Indonesia
- Japan
- Republic of Korea
- Singapore
- Sri Lanka

Africa / Middle East (7)
- Egypt
- Ghana
- Israel
- Kenya
- Nigeria
- Saudi Arabia
- South Africa

Europe (11)
- France
- Germany
- Ireland
- Italy
- Netherlands
- Poland
- Romania
- Spain
- Switzerland
- Turkey
- UK - England

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Purpose

- Provide a Visual Tool for the Public to Understand Funding Flows
- Enable Dialog Within and Among Nations to Consider Funding Approaches for Improvement and Transitions as They Attempt to Meet Health Care Funding Needs
- Assist Actuaries to See Potential for Development of New Products & to Identify Potential Needs

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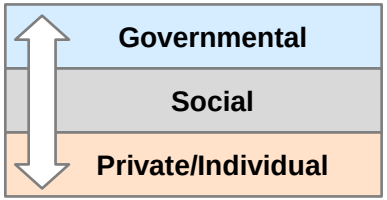
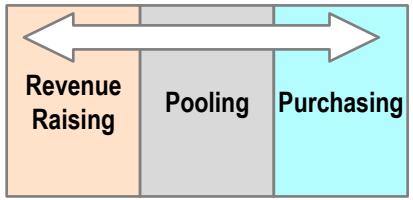
FORMAT

Entities (top to bottom)



Functions (left to right)



Relationships (arrows)

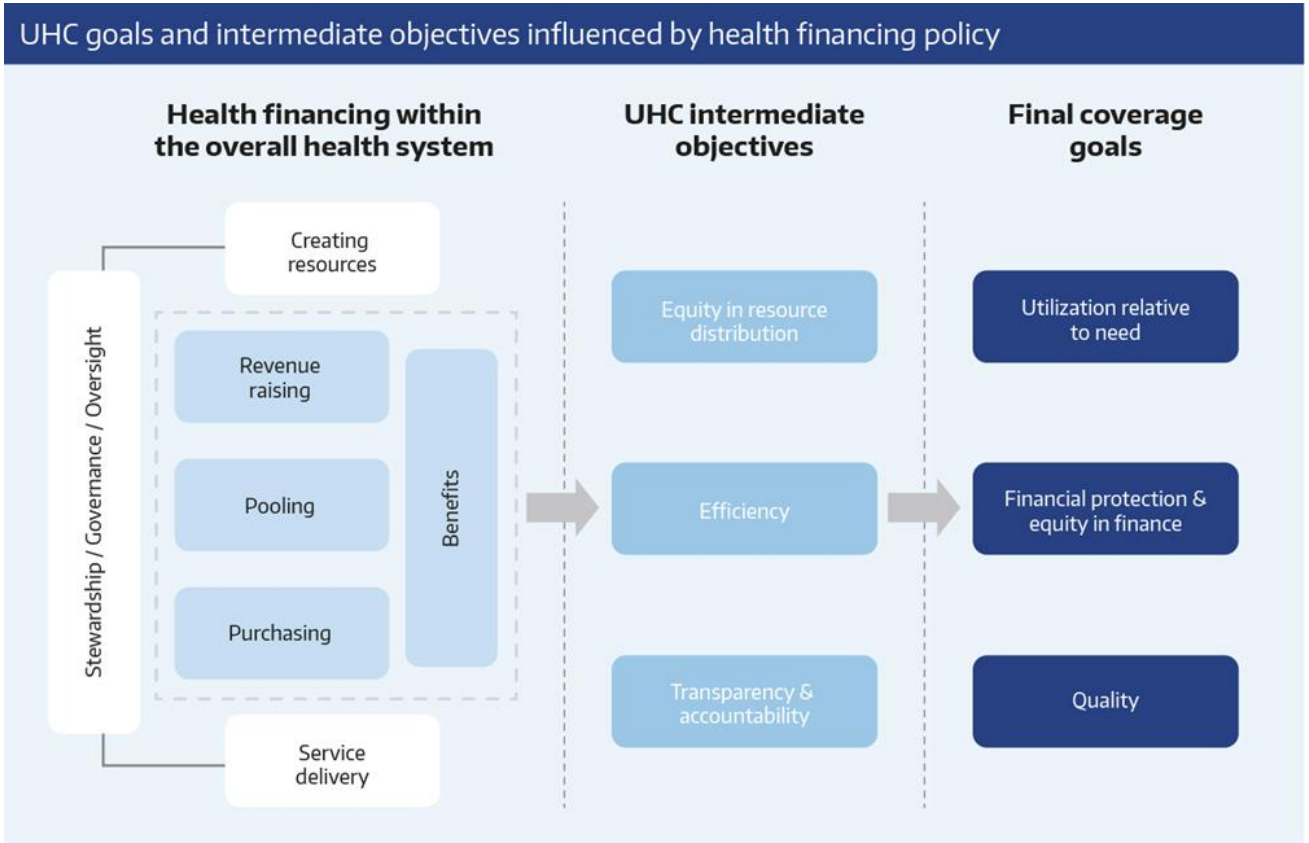
Government financing via taxes & mandatory contributions

Transfer within systems

Coordination and oversite

Private

WHO Framework: Health Financing



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- TYPICAL REFERENCES TO SYSTEMS YOU MAY SEE:
  - Beveridge (Germany, Belgium, France, Japan, Netherlands, Switzerland, some of Latin America)—mandatory purchase of Statutory Health Insurance
  - Bismarck (United Kingdom, Italy, Spain)—provision of social health insurance for the entire population
  - Canadian "Douglas" Plan aka "Medicare" (Canada, Australia, Taiwan, South Korea)—Tax Funded, may be Taxes+Premiums
  - The Russian Federation's Semashko Model—"Free" for all, now supplemented by Mandatory Health Insurance purchase

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- BUT…Most systems are highly complex, as is illustrated in our 36 country report
- Reference the following Classification of Health Care Financing Schemes

  A System of Health Accounts 2011: Revised edition | en | OECD

  Pages 155-192

  PART I Chapter 7 Classification of Health Care Financing Schemes (ICHA-HF)

Example of Healthcare Financing/Expenditures from 2017 in our 2020 Report

North America

		Canada	United States of America
Gov't Schemes	Government schemes	69.1%	26.3%
	Compulsory contributory health insurance schemes	1.5%	58.3%
	Compulsory Medical Saving Accounts (CMSA)	0.0%	0.0%
	Other government/compulsory schemes	0.0%	0.0%
Voluntary Schemes	Voluntary health insurance schemes	13.2%	0.0%
	NPISH financing schemes	1.1%	0.0%
	Enterprise financing schemes	0.9%	0.2%
	Other Voluntary health care payment schemes	0.0%	4.3%
OOP	Household out-of-pocket payment	14.2%	11.0%
Foreign	Rest of the world financing schemes (non-resident)	0.0%	0.0%
Other	Other Financing Schemes	0.0%	0.0%

Values shown as a % of Current Health Expenditure (CHE) in 2017
Source: World Health Organization Global Health Expenditure Database (https://apps.who.int/nha/database)

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The United Nations' Sustainable Development Goals

- Universal Health Care
  - Is not a prescribed set of services
  - Health Needs-based
  - Access considerations
  - Sufficient Quality
  - Restoration of and maintenance of health
  - Limited financial burden to the individual/family
  - Supports economic and societal prosperity (My addition)

Limitations

- Financial Limitations
- Human Capital
- Consensus
- Cultural
- Community
- Individual

POLLING QUESTION

#2 Which of the following issues are you most concerned about?

a. Pharmaceuticals
b. Facilities Infrastructure
c. Providers
d. Basic Services
e. Supplemental Services
f. Consumers

The 1948 Universal Declaration of Human Rights, Article 25

- *"(1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.*

- *(2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection."*

Considerations for Universal Health Care – The Role of Public Health Measures

Population Quality of Life via

- Health Promotion
- Disease Prevention
- Stable, Safe, Supportive Communities & Residences
- Employment promoting Financial Independence
- Education
- Disaster Recovery
- Pandemic/Outbreak Response & Capacity

Benefit to financing and provider systems

The Business of Financing Health Care

Measures:

- Morbidity Improvement
- Mortality Improvement
- Disability Adjusted Life Years (DALYs)
- Quality Adjusted Life Years (QALYs)
- Cost Impact in terms of Services, Productivity, Economic Goals
- Poverty resulting from medical needs expenditures
- Prevention Strategies/Value
- Treatment Outcomes Measures

Notice that true measures of value are long-term.

Health financing expenditures easily tend to have a short-term focus.

Considerations for Policy at a National Level

- LONGITUDINAL Measures for the Long-Term Game
  - Impact of inflationary scenarios
  - Impact of health improvements
  - Health Technology Assessment

RESOURCES

POLITICAL WILL

TRAINING & RESEARCH

DATA

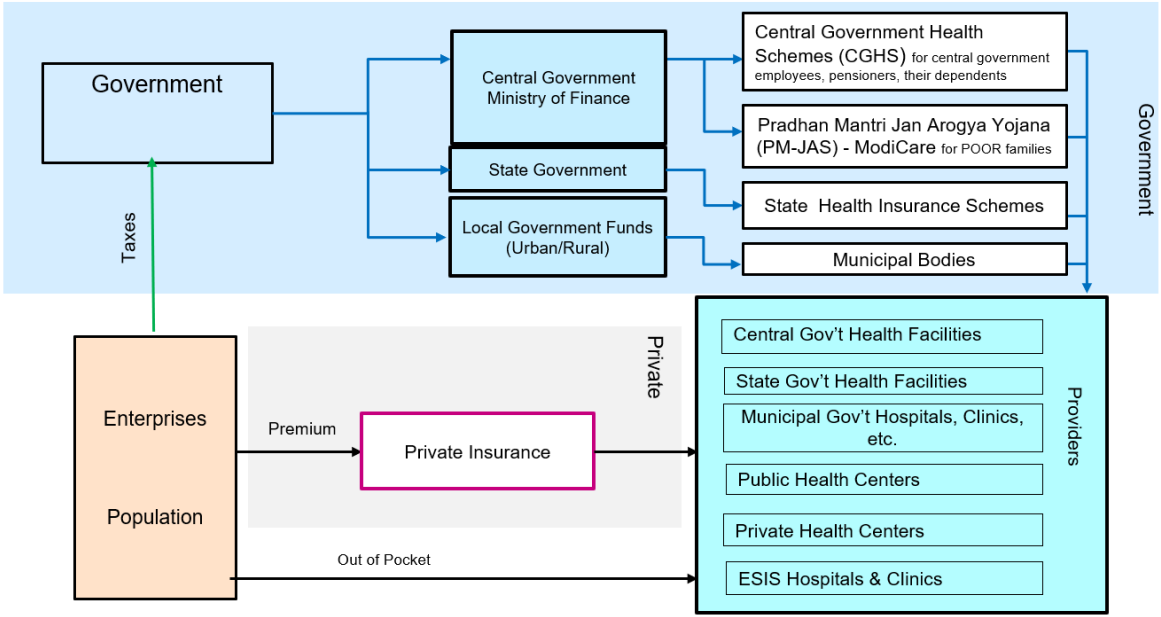
PROVIDER BUY-IN/COOPERATION/ENGAGEMENT/LEADERSHIP

UNIQUE NEEDS AMONG AND WITHIN STATES/TERRITORIES

LIMITING COSTS OF ADMINISTRATION & FRAUD

Our IAAHS Health Care Funding Chart for India

India



- In August 2018, the Government of India has approved Ayushman Bharat-National Health Protection Mission (AB-NHPM) as a centrally Sponsored Scheme contributed by both centre and state government at a ratio of 60:40 for all States, 90:10 for hilly North Eastern States and 60:40 for Union Territories with legislature. The centre will contribute 100 per cent for Union Territories without legislature.
- In Sept. 2018, Government of India launched Pradhan Mantri Jan Arogya Yojana (PMJAY) under AB-NHPM, to provide health insurance worth INR 500,000 (US$ ~7,000) to over 100 million **families** every year.

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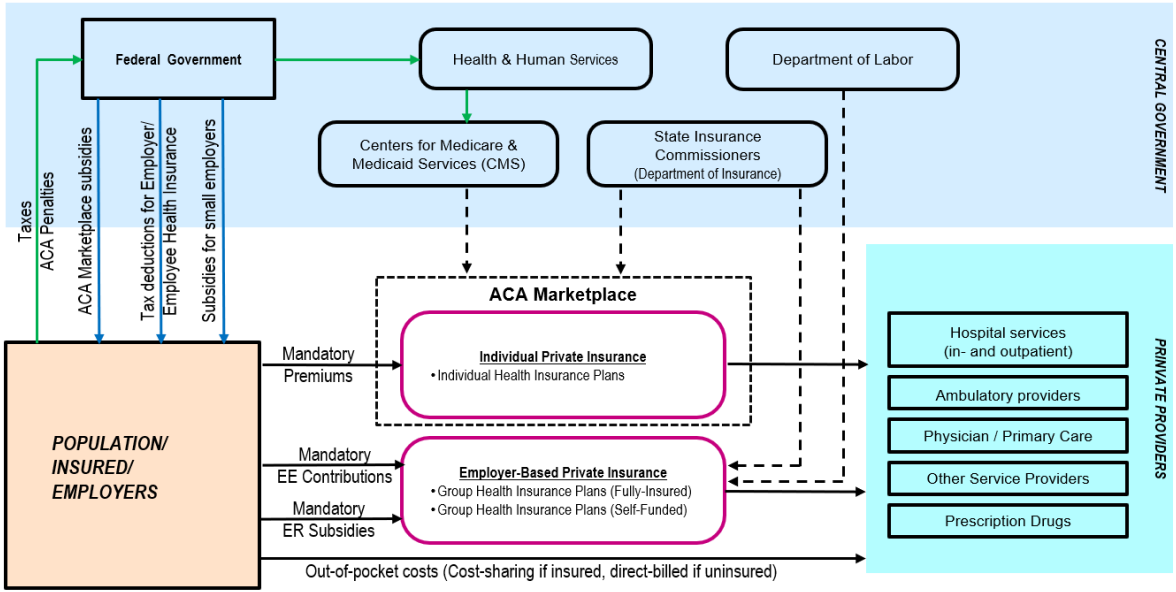
Our IAAHS Health Care Funding Chart for the United States

United States (Private Insurance)



The Employer-Based Group Insurance Model

- Employers with 50 or more employees may incur a penalty if they do not provide adequately subsidize employee health insurance.
- The employer selects the insurance carrier(s) and plan(s) available to its employees and their families, individuals typically elect coverage during an annual enrollment period.
- For fully-insured coverage, the employer will deduct employee medical contributions directly from payroll. The employer then pays the full plan premium to the insurer.
- Large employers may choose to self-insure. Rather than paying a premium to an insurer, the organization will assume responsibility to pay for its employees claims. These arrangements often continue to pay an administrative fee to an insurer who will manage the plan, process claims, and negotiate costs with providers.

The Individual Insurance Market

- The Affordable Care Act (ACA) made it mandatory that individuals have insurance, though the penalty for not having coverage has subsequently been reduced to $0
- Those without affordable employer-based coverage, may be eligible for subsidized private insurance through online state/federal ACA Marketplaces (there is no public insurance option)
- Individual and Small group plans are guarantee-issue, community-rated, subject to underwriting rules/State DOI oversight, and subject to a state-level risk-adjustment scheme
- Employees who are self-employed can purchase individual coverage through the ACA marketplace or directly from private insurers

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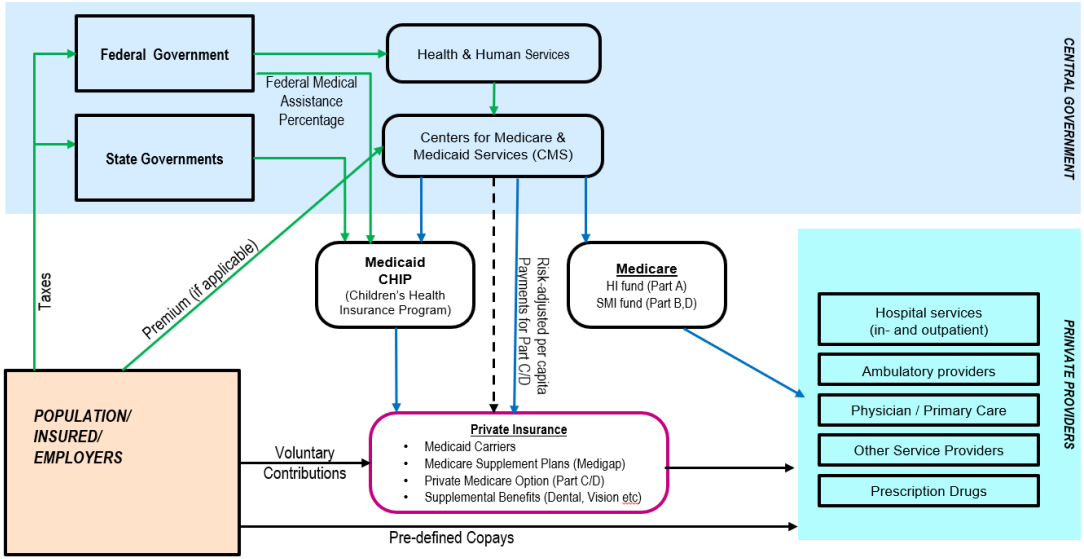
Our IAAHS Health Care Funding Chart - USA

United States (Public Insurance)



Medicare is a government run single payer system for the aged and disabled. It was created by Congress in 1965 (extended in 1997-2003 to additional private payers)

- Medicare (for age 65+) is funded primarily from general revenues (43%), payroll taxes (36%), and beneficiary premiums (15%)
- 'Original Medicare' is divided into Part A (Hospital Insurance), Part B (Supplemental Medical Insurance), and Part D (Prescription Drug coverage)
- There is also Part C (Medicare Advantage) which offers Medicare-type plans through Private Insurers, and Medigap which covers out-of-pocket costs which Original Medicare does not.
- The Medicare trust fund comprises two separate funds. The hospital insurance (HI) trust fund is financed mainly through payroll taxes on earnings and income taxes on Social Security benefits. The Supplemental Medical Insurance (SMI) trust fund is financed by general tax revenue and the premiums enrollees pay.

Medicaid is a means-tested system managed by states and administered through private insurers. It was also created in 1965, and has been expanded

- Nationally, about 60% of the program is federally funded (the Federal Medicaid Assistance Percentage varies by state), with the remainder being funded by the state.

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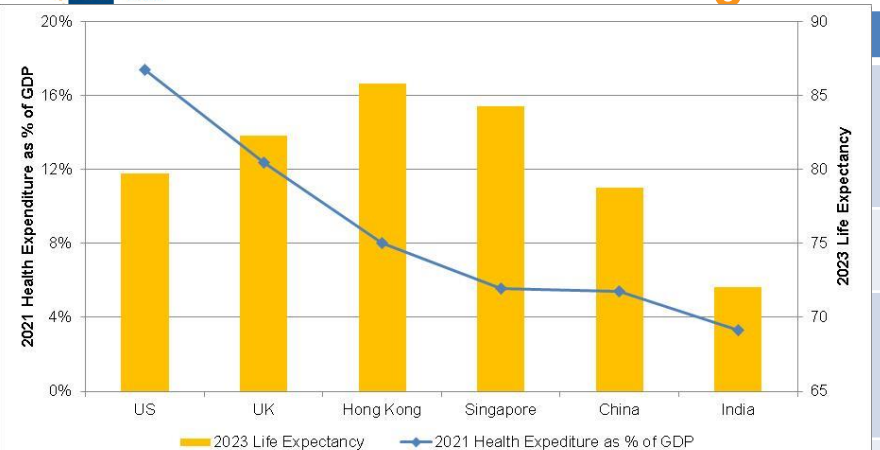
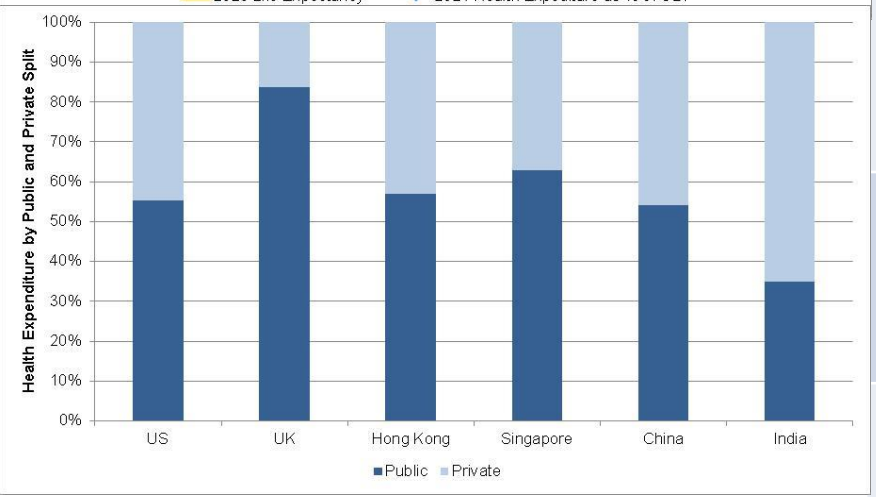
POLLING QUESTION

#3 What is the top challenge that India's healthcare financing is facing?

a. High medical inflation reducing affordability
b. Healthcare staffing shortages
c. Difference in geographical accessibility to healthcare services
d. Increase in disease burden due to lifestyle changes
e. Others

Healthcare Funding Models in Selected Markets





Market	Model	Key Challenges
US	Private Health Insurance (PHI) + Medicare/ Medicard	• Healthcare is unaffordable without insurance • PHI sustainability and affordability is also questionable
UK	National Health System (NHS)	• NHS faces under-funding challenges • Long waiting time for most services in NHS
Hong Kong	Mix of NHS + PHI	• Public hospitals have long waiting time • No control in charges in Private hospitals and doctors, leading to PHI sustainability and affordability challenges
Singapore	Mix of NHS + National Health Insurance + PHI	• Right balance across various systems • Encourage those who can afford to pay more (e.g. means-tested subsidies at public hospitals; purchase top-up insurance to go to private hospitals)
China	Social Health Insurance (SHI) + PHI	• Public hospitals have most expertise with good clinical quality but long waiting time; offer “private department” as alternative • Limited control in costs in private hospitals and private department of public hospitals, leading to PHI sustainability and affordability challenges
India	SHI + PHI	• Public hospitals are crowded with varying quality • High inflation leading to PHI sustainability and affordability challenges

Source: WHO Global Health Expenditure Database: https://apps.who.int/nha/database/ViewData/Indicators/en; Hong Kong Domestic Health Account: https://www.healthbureau.gov.hk/statistics/en/dha.htm; World Life Expectancy: https://www.worldometers.info/demographics/life-expectancy/

QUESTIONS & ANSWERS

International Actuarial Association
99 Metcalfe Street, Suite 1203
Ottawa, Ontario K1P 6L7 Canada
iaasections@actuaries.org