



Strengthening Universal Health Coverage in Asia:

Opportunities for Innovation in Private Health Insurance

Acknowledgements

This report was commissioned by:

Pfizer Inc
235 East 42nd Street
New York, NY10017

Authors

Sejal Mistry, Regional Director
ACCESS Health International Southeast Asia

This report was written by:

ACCESS Health International Southeast Asia
Limited
90 Eu Tong Sen St #03-02B
Singapore 059811

A Vigneswari, Consultant
ACCESS Health International Southeast Asia

With Support From

Abegale Escolano
Program Associate
ACCESS Health International Southeast Asia

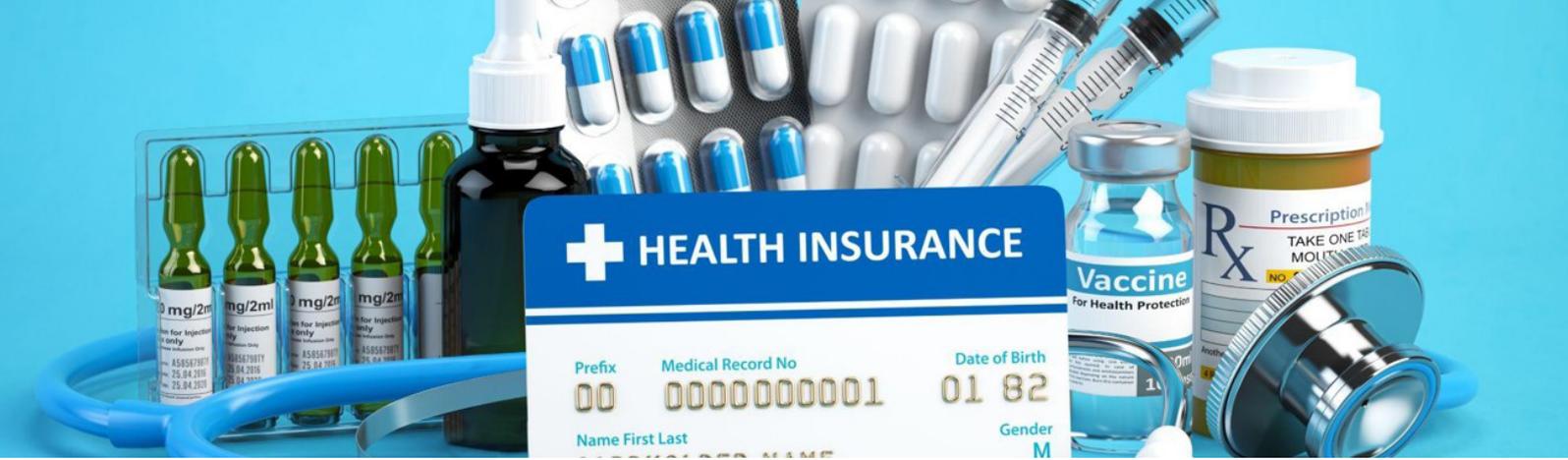
Tanya Sharma, Gauri Saxena, Damion Horn
Interns
ACCESS Health International Southeast Asia

The authors and team thank Pfizer for their support.

The authors and team acknowledge the contributions from:

Mr Reynold D'Silva, MILVIK BIMA
Mr Sanjiv Dwivedi, Bajaj Allianz
Ms Tran Thi Van Anh, Bao Viet Insurance
Mr Sachin Aggarwal, Care Insurance
Ms Khue Dinh, Chubb
Mr Aditya Pratama, Cigna
Mr Hazwan Najib, DoctorOnCall
Dr Anucha Panoi, Doctor A to Z
Mr Chetan Gupta, ICICI Lombard
Mr Shwetank Verma, Leo Capital & India
Insurtech Association
Mr Mark O' Dell, Life Insurance Association of
Malaysia
Mr Augustine Kwan, Manulife
Ms Hoang Minh Trang, MB Ageas Life
Insurance
Mr Jimeet Jain, MetaMorphoSys
Ms Nadia Suttikulpanich, Muang Thai Life
Assurance

Ms Huong Tran, MyDoc
Mr Hung Phan, Papaya
Mr Brendan Batanghari, PasarPolis
Dr Dian Budiani, Prudential Indonesia
Mr Andrew Wong, Prudential Corporation
Asia
Mr Anuj Jindal, SureClaim
Ms Girija Biyani, Swiss Re
Ms Hueyfang Chen, Swiss Re
Ms Lauren Liang, Swiss Re
Ms Nguyen Thuy Linh, Tokio Marine
Dr Adipat Chaichanasakul, True Digital
Mr Chris Leung, Qoala
Dr Hasbullah Thabrany, Indonesia Health
Economic Association
Dr Khor Swee Kheng, Independent Health
Policies Specialist
Dr Nasir Ismail, Independent Healthcare
Consultant



Executive summary

In 2015, world leaders committed at the United Nations Sustainable Development Summit the goal of Universal Health Coverage (UHC) - the vision that all people have access to the health services they need, when and where they need them, without facing financial hardship¹. The ambitious principles underlying UHC respond to the dire and urgent situation faced by millions of the world's population – a cycle of impoverishment and ill health due to the high costs to access and receive quality healthcare services. Over 100 million people worldwide face poverty due to health expenditures².

The central strategy to implement national UHC in most countries rests on the design and system of health financing. The predominant mechanisms of national health financing are 1) taxation-based models where governments set budgets and provide funding for public healthcare delivery and 2) social health insurance models where the government pools funding nationally through individual healthcare contributions that raises the revenue for health financing and distributes the health risk of populations.

Through health systems and financing reforms, countries are moving towards universal access to healthcare that is delinked from financial status or wealth of the individual.

Countries are making significant progress towards UHC, but the future sustainability of UHC is precarious. In the context of increased longevity and lifestyle changes, most countries are facing a significant acceleration in the burden of noncommunicable and chronic diseases. Accordingly, the demand for medical services, their complexity, and costs are also rising, especially against the backdrop of COVID-19.³ Worldwide, medical inflation stood at 8% in 2020, compared to the average of 1.94% inflation of general goods and services.⁴ In the countries studied for this report – **India, Indonesia, Malaysia, Thailand and Vietnam** - we identified three specific challenges to achieving and sustaining UHC:

1 WHO. (2021, April 1). *Universal health coverage (UHC)*. [https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-\(uhc\)](https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc))

2 Khokhar, T. (2017, December 13). *Chart: 100 Million People Pushed into Poverty by Health Costs in 2010*. <https://blogs.worldbank.org/opendata/chart-100-million-people-pushed-poverty-health-costs-2010>

3 Jansen, L., Furstenthal, L., Cohen, D. (2020, November 25). Industry innovation: How has COVID-19 changed global healthcare?. *World Economic Forum*. Retrieved from <https://www.weforum.org/agenda/2020/11/healthcare-innovation-covid-coronavirus-pandemic-response-health>.

4 Aon. (2021). *2021 global medical trend rates report*. <https://insights-north-america.aon.com/research/2021-global-medical-trend-rates-report>

Challenges to the achievement and sustainability of UHC

1. The tenuous balance of access, coverage, and cost of UHC

Countries are prioritizing population coverage of national UHC schemes without sufficiently strengthening service coverage and affordability.

2. Fiscal commitments that are needed to achieve and sustain UHC

Universal access to high quality healthcare without financial hardship on the individual transfers a great deal of the financial burden to governments. Many governments face current or looming fiscal deficits in their UHC programs. The global COVID-19 pandemic has exacerbated these deficits and weakened the ability of countries to deliver on UHC.

3. A growing noncommunicable disease burden threatens to destabilize and derail progress on UHC

Worldwide, the incidence of noncommunicable diseases have increased dramatically, with noncommunicable diseases comprising 7 of the world's top 10 causes of death in 2019, an increase from 4 causes in 2000⁵. Most UHC schemes have rightly focused on prevention strategies and primary healthcare management, but the system is unable to urgently address the current noncommunicable disease burden today where people face the greatest health and financial risks.

Innovative models of private health insurance to support UHC

For UHC to be successful today and sustainable in the future, new approaches are needed to buttress national schemes. In this paper, we argue that private health insurance (PHI) is an important, but underutilized, mechanism of health financing that can support the achievement and sustainability of UHC in low- and middle-income countries. The opportunity is significant in these countries where uptake of private health insurance is still low (and hence has room to grow), digital use and penetration is high, and government policies are supportive of innovation.

From this research, we identified patterns of innovation and enabling policies that can create an insurance innovation ecosystem. Drawing from global case studies, primary and secondary research, we further delineate seven models of insurance innovation (see Figure 1) that can support UHC in these countries by:

1. Sustaining national UHC schemes

Supplementary and complementary PHI schemes can provide greater service coverage and reimbursement beyond what publicly financed UHC initiatives may offer. In the five markets studied, governments have been exploring supplemental packages with private insurers. Supplemental UHC schemes do not need to originate in the public sector. In China, comprehensive coverage mass insurance schemes have become popular in recent years due to the efforts of major digital technology companies.

2. Addressing the current significant burden of noncommunicable diseases

The five countries in this report are facing an unresolved burden of infectious disease along with a rise in noncommunicable diseases.

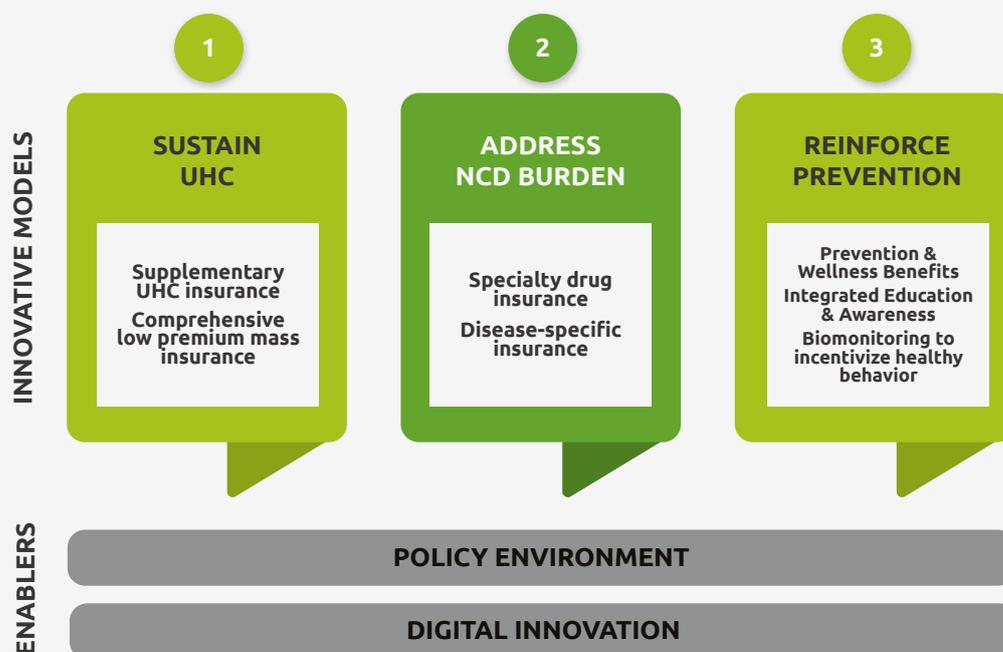
5 UN News. (2020, December 10). *Non-communicable diseases killing more people than ever before: UN health agency*. <https://news.un.org/en/story/2020/12/1079722>

For complex conditions like cancer, cardiovascular disease, and diabetes, many health systems and UHC financing schemes fall short of providing adequate care and treatment to those in need. The resulting treatment and care gap will worsen as each country is projected to have significant increases in noncommunicable disease in line with the global estimate of a 17% increase in noncommunicable diseases in the next decade⁶. Critical illness insurance has become a standard private insurance offering and has had reasonable commercial success. Insurers have also explored other disease or condition-specific innovative insurance models, such as cancer insurance. Specialty drug insurance that is complementary to UHC schemes can further target the noncommunicable disease burden to address the noncommunicable disease treatment gap in countries.

3. Reinforcing national strategies on disease prevention and wellness

In response to the growing noncommunicable disease burden and rising costs of healthcare services, all five countries have prioritized noncommunicable disease prevention strategies. Similarly, commercial health are repositioning themselves as health and wellness partners, recognizing that preventing illness is an important business and social goal. Innovative insurance models include health and wellness education for primary and secondary prevention and in advanced models, linkages between healthy behavior and financial incentives (e.g. reduced insurance premiums).

Figure 1: Innovative models of Private Health Insurance to support achievement and sustainability of Universal Health Coverage



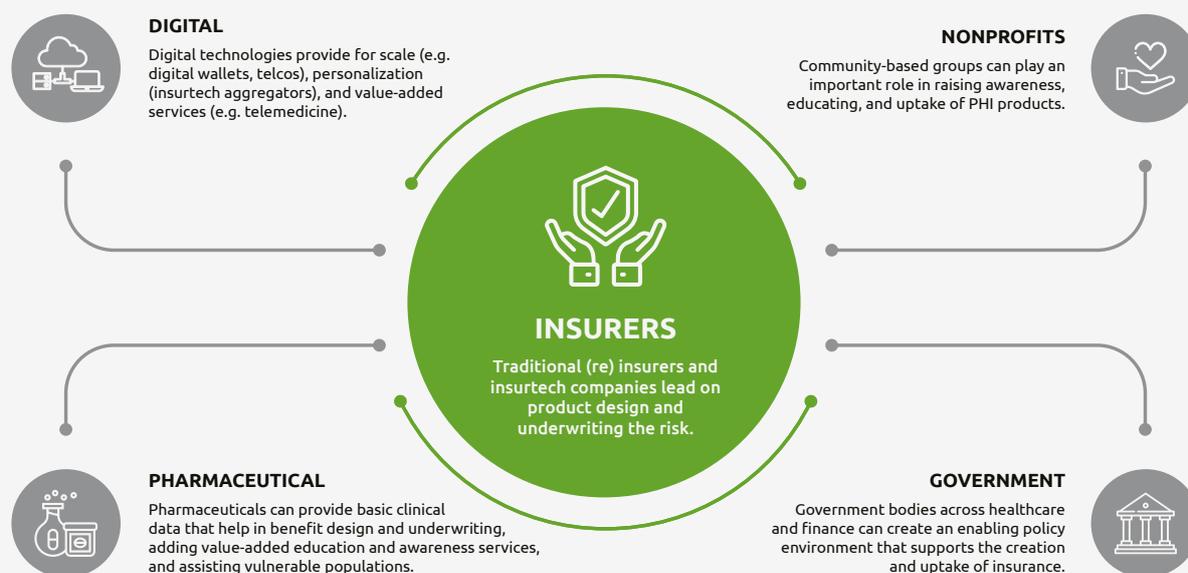
⁶ Wang, Y. & Wang, J. (2020, June 1). Modelling and Prediction of Global Non-Communicable Diseases. *BMC Public Health*, 20. <https://doi.org/10.1186/s12889-020-08890-4>

Executive Summary

The success of innovative insurance models, however, is contingent on a multistakeholder approach that is anchored on private insurance with important contributions from digital entities, civil society, and pharmaceutical companies that ensure the creation, adaptation, and adoption of these models.

For UHC to move beyond aspiration to achievement, governments cannot work alone. We describe the current and potential role of each stakeholder in the insurance innovation ecosystem to drive the uptake and adaptation of private health insurance to local contexts.

Figure 2: An insurance innovation ecosystem can enable the uptake of new models of Private Health Insurance



A multistakeholder approach (see Figure 2) can fully realize the potential of PHI to support the goals of Universal Health Coverage to bring financial protection for needed healthcare services to the masses. To this end, we make the following recommendations:

Recommendation 1: Countries should explore, adapt, and adopt innovative models of insurance that provide health financial protection for the masses.

In the five countries studied, the insurance innovation ecosystem is rapidly growing, aided by advances in digital technology, enabling policies, and new models of partnerships. In this paper, we present seven innovative insurance models that countries can adopt and adapt to their local context.

In countries with robust UHC insurance schemes, (1) supplemental UHC and (2) comprehensive mass insurance

models should be considered to “top up” national UHC schemes to provide more comprehensive service coverage, faster access to healthcare services, and the expedited access to therapeutic innovations when needed.

Supplemental commercial insurance models, like those found in China and Singapore, ensure that governments provide a basic standard of financial protection and

Executive Summary

healthcare access for all people while private insurers can offer a more comprehensive range or tailored options for consumers who need it. Comprehensive mass insurance should be considered in countries where the timeline for public-private partnership or government-led health systems changes would be very long. Mobile wallets, telecommunications companies, insurtech, and major traditional insurers can work together to expand emerging models of affordable microinsurance towards more comprehensive coverage of healthcare.

To address the rising burden of noncommunicable diseases in the five countries, new insurance models are needed to provide improved clinical standards of care and treatment for noncommunicable diseases. We noted two types of innovative insurance models that can provide specificity to financial protection for noncommunicable diseases: (3) disease-specific insurance, and (4) specialty drug insurance.

All five countries provide critical illness insurance and have incorporated some form of disease-specific insurance (e.g. cancer), as standalone insurance or insurance riders. Specialty drug insurance, which does not yet exist in any of the five countries, can be designed to offer therapeutics that are not widely available through UHC schemes or generally affordable out-of-pocket.

In response to the rising costs of healthcare, traditional insurers are developing insurance platforms that support healthy lifestyles and prevent the onset of illness: (5) prevention and wellness programs linked to insurance can provide information and tools to support healthy behavior while other similar insurance models focus on (6) education and awareness solutions that help people to prevent the onset or worsening of health conditions. Lastly, the next iteration of the prevention and wellness models are beginning to (7) integrate financial rewards and incentives to healthy behaviors.



Recommendation 2: National governments can function as steward and enabler for the uptake of effective private health insurance.

The rapid development of the insurance and digital ecosystem in the five countries have been greatly aided by supportive policies and oversight. There are several actions that governments can take or strengthen to enable the uptake of private health insurance for the broader population.

A whole-of-government approach is needed to support uptake of PHI

The strategic guidance, if not the regulatory purview, of private health insurance for the masses requires coordination and discussion between several government bodies. The Ministry of Health, Ministry of Finance, Central Banks and other insurance regulatory authorities, as well as digital authorities can be convened in a whole-of-government approach to support the uptake and effectiveness of private insurance for the population in support of UHC goals.

Promote awareness and acceptance of PHI

Governments play a critical role in informing, educating, and incentivizing the public towards private health insurance. Currently, private health insurance is considered to be a luxury for wealthier salaried people and not a product for the masses. This perception has changed considerably with new insurtech platforms and aggregators providing mass insurance, a growing digitally savvy middle class, and a heightened awareness of insurance due to the COVID-19 pandemic.

Governments can help to change the perception that insurance is merely for “rich people” and educate the general public how, when, and for whom insurance is needed. Governments also play an important role in representing public interests by also encouraging insurers to provide clear and simplified insurance policies so that consumers can make well-informed choices. Lastly, tax deductions and other financial incentives can also be an important lever to encourage general uptake of private health insurance among the general population.

Scale successful “proof of concepts” developed in the private sector

Governments can directly work with private counterparts in insurance, digital, and healthcare ecosystems to pilot test innovative models. Indirectly, they can support ecosystem partners who are testing these models by establishing regulatory “sandboxes” or other innovation spaces. Through these mechanisms, the government can observe what models are working, the extent to which they achieve intended social and business goals and determine which models should be catalyzed through supportive policies. Models that demonstrate success in pilot stages or by individual actors can be further supported by governments to scale nationally or to extend the reach to underserved populations.

Recommendation 3: Private insurance ecosystem actors can develop, test, and iterate existing and new insurance models.

The success of any traditional and innovative insurance model rests on the design, uptake, and distribution of insurance and its effective use by policyholders. Our research and interviews reveal that launching a product alone is not enough to ensure uptake. Traditional insurers have been teaming up with health system actors – telemedicine, pharmaceuticals and pharmacies, and private hospitals – as well as digital actors – telecommunications, digital wallets, e-commerce – to strengthen the insurance value chain. Such trends are encouraging for the development of innovative models in the five markets.

An anchor partner – typically insurance or insurtech – can seek out potential partners to increase the value proposition, sales, and distribution of the product to ensure that the new models provide value to the consumer. Digital players have broken new ground in “user experience” that designs and tests products rapidly to solve consumer “pain points.” This strategy serves the healthcare sector well where ecosystem actors have been shifting towards person-centric or patient-centric value-based care. By developing solutions that directly consider the user’s healthcare and insurance experience, the innovation ecosystem can develop solutions that have a greater probability of success upon full launch.

Conclusion

By deliberately shaping and incentivizing new models of private health insurance, countries have a new tool in UHC strategy to bring high quality healthcare to the masses so that people receive the healthcare they need without facing financial hardship. The advances in healthcare, insurance and digital innovation provide new opportunities for cross-sectoral work that places people firmly at the center of solutions. An ecosystem approach to innovation will entail partnerships, which even in the best of circumstances, can take time for alignment of purpose, success metrics, and value proposition. However, it is through this approach that individual or small-scale innovation can be transformative. The pursuit of Universal Health Coverage is indeed a mission of transformation, and it will take no less than entire support of society, industry, and government to realize this vision.

Table of contents

Abbreviations	14
Glossary	16
CHAPTER 1: The principles and progress of Universal Health Coverage	19
1.1 The Universal Health Coverage commitment	20
1.2 Regional progress of Universal Health Coverage	24
1.3 Country-specific progress of Universal Health Coverage	28
1.4 Challenges to the sustainability and achievement of Universal Health Coverage	60
CHAPTER 2: Private Health Insurance Landscape in Emerging Markets	62
2.1 How governments are enabling the uptake of Private Health Insurance	63
2.2 Overview of the Private Health Insurance landscape in the five markets	67
2.3 Opportunities to increase the uptake of Private Health Insurance	73
2.5 Conclusion	81
CHAPTER 3: Private Health Insurance Innovation Models	82
3.1 Approach 1: Sustaining UHC	84
3.2 Approach 2: Addressing noncommunicable disease burden	90
3.3 Approach 3: Reinforcing primary and secondary prevention	95
CHAPTER 4: Private Health Insurance Innovation Ecosystem	103
4.1 An ecosystem approach to design insurance and ensure its uptake	104
4.2 The role of digital enablers across the insurance value chain	108
4.3 The role of pharmaceuticals in designing and enhancing value proposition of PHI innovation	114
4.4 The role of nonprofit organizations to facilitate understanding and uptake of PHI innovation	120
4.5 The role of governments in creating an enabling environment for PHI innovation	123
CHAPTER 5: Making PHI work for UHC goals and people	127
5.1 Recommendation 1: Countries should explore, adapt, and adopt innovative models of insurance that provide health financial protection for the masses	128
5.2 Recommendation 2: National governments can function as steward and enabler for the uptake of effective private health insurance.	130
5.3 Recommendation 3: Private insurance ecosystem actors can develop, test, and iterate existing and new insurance models.	132
5.4 Conclusion	132
Bibliography	133

List of figures

Figure 1: Innovative models of Private Health Insurance to support achievement and sustainability of Universal Health Coverage	5
Figure 2: An insurance innovation ecosystem can enable the uptake of new models of Private Health Insurance	6
Figure 3: The three dimensions of Universal Health Coverage	21
Figure 4: UHC commitments and architecture	22
Figure 5: Percentage of population covered by UHC	24
Figure 6: Breakdown of Service Coverage Index scores by fourteen indicators of health service coverage	25
Figure 8: OOP expenditures and health protection gaps	27
Figure 9: India's health financing type by population segment and income	31
Figure 10: Financing of India's total current health expenditure	33
Figure 11: Indonesia's health financing type by population segment and income	37
Figure 12: Financing of Indonesia's total current health expenditure	39
Figure 13: Malaysia's health financing type by population segment and income	43
Figure 14: Financing of Malaysia's total current health expenditure	45
Figure 15: Thailand's health financing type by population segment and income	50
Figure 16: Financing of Thailand's total current health expenditure	52
Figure 17: Vietnam's health financing type by population segment and income	56
Figure 18: Financing of Vietnam's total current health expenditure	58
Figure 19: Health expenditure as a share of GDP across the five countries against global average	59
Figure 20: Health financing type across the five countries	59
Figure 21: Proportion of national health expenditure borne by different payors across the five countries	60
Figure 22: Stress factors hindering the achievement of UHC	60
Figure 23: Longevity and growing noncommunicable disease burden	61
Figure 24: Digital uptake and enabling policies and regulations for digitization	75
Figure 25: Presence of PHI partnerships with digital players across the five markets	76
Figure 26: PHI partnerships with digital ecosystem in India	77
Figure 27: PHI partnerships with digital ecosystem in Indonesia	78
Figure 28: PHI partnerships with digital ecosystem in Malaysia	79
Figure 29: PHI partnerships with digital ecosystem in Thailand	80

Figure 30: PHI partnerships with digital ecosystem in Vietnam	81
Figure 31: Presence of success factors that enable Approach 1	88
Figure 32: Presence of success factors that enable Approach 2	93
Figure 33: Presence of success factors that enable Approach 3	101
Figure 34: Key stakeholders involved in the PHI innovation ecosystem	104
Figure 35: Private Health Insurance innovation value chain	105
Figure 36: Role of digital enablers in PHI innovation value chain	108
Figure 37: Roles of key players in digital innovation	109
Figure 38: Digital innovation and key partnerships in Indian PHI market	110
Figure 39: Digital innovation and key partnerships in Indonesian PHI market	111
Figure 40: Digital innovation and key partnerships in Malaysian PHI market	112
Figure 41: Digital innovation and key partnerships in Thai PHI market	113
Figure 42: Digital innovation and key partnerships in Vietnamese PHI market	114
Figure 43: Drug coverage on National List of Essential Medicines compared to WHO Model list	116
Figure 44: Role of pharmaceuticals in PHI innovation value chain	117
Figure 45: Role of nonprofit organizations in PHI innovation value chain	123
Figure 46: Role of governments in PHI innovation value chain	124
Figure 47: Recommendations to make PHI work for UHC health system goals and for people	128

List of tables

Table 1: India's PMJAY service coverage	32
Table 2: Indonesia's JKN service coverage	38
Table 3: Malaysia's public healthcare service coverage	44
Table 4: Thailand's social health insurance service coverage	51
Table 5: Vietnam's social health insurance service coverage	57
Table 6: Types of Private Health Insurance offered in emerging markets	67
Table 7: Comparison between social and Private Health Insurance in India	68
Table 8: Comparison between social and Private Health Insurance in Indonesia	69
Table 9: Comparison between public healthcare and Private Health Insurance in Malaysia	70
Table 10: Comparison between social and Private Health Insurance in Thailand	71
Table 11: Comparison between social and Private Health Insurance in Vietnam	73

List of boxes

Box 1: India's UHC – Ayushman Bharat Yojana	30
Box 2: Indonesia's UHC – Jaminan Kesehatan Nasional	36
Box 3: Malaysia's UHC – Tax-financed Public Healthcare System	42
Box 4: Thailand's UHC – Three social health insurance schemes	49
Box 5: Vietnam's UHC – Social health insurance scheme	55
Box 6: Case Study: Singapore's Integrated Shield Plan	85
Box 8: Case Study: China's Specialty Drug Insurance	91
Box 10: Case Study: Prudential Pulse	96
Box 11: Case Study: MSIG Insurance-Singapore Cancer Society Partnership	97
Box 12: Case Study: MSIG Malaysia Gluco SafeGuard	99
Box 13: Key classes of drug coverage on WHO's Model List of Essential Medicines	115

Abbreviations

AB	Ayushman Bharat
AI	Artificial Intelligence
AIA	American International Assurance Company
BPJS	Badan Penyelenggara Jaminan Sosial
BPL	Below Poverty Line
CBHI	Community-based health insurance
CBIRC	China Banking and Insurance Regulatory Commission
CHAS	Community Health Assist Scheme
COB	Coordination of Benefits
CPF	Central Provident Fund
CPHC	Comprehensive Primary Health Care
CSMBS	Civil Servant Medical Benefit Scheme
GDP	Gross Domestic Product
GIS	Geographic Information System
HWC	Health and Wellness Centers
IP	Integrated Shield Plan
IRDAI	Insurance Regulatory and Development Authority of India
JKN	Jaminan Kesehatan Nasional
MOH	Ministry of Health
MoHFW	Ministry of Health and Family Welfare
MOU	Memorandum of Understanding
NCD	Noncommunicable Diseases
NLEM	National List of Essential Medicines
NHA	National Health Authority
NRDL	National Reimbursement Drug List

OECD	Organization for Economic Co-operation and Development
OOP	Out-of-pocket payment
PHI	Private Health Insurance
PMJAY	Pradhan Mantri Jan Arogya Yojana
RSBY	Rashtriya Swasthya Bima Yojana
SAFE	Sustainability, Adequacy, Fairness, Efficiency
SCS	Singapore Cancer Society
SDG	Sustainable Development Goals
SHI	Social Health Insurance
TPA	Third Party Administrator
UCS	Universal Coverage Scheme
UHC	Universal Health Coverage
VAT	Value added Tax
VSS	Vietnam Social Security
WHO	World Health Organization

Glossary

Bancassurance	Partnership arrangement between a bank and an insurance company, whereby the insurance company is allowed to leverage on the bank's client base to sell insurance products. ⁷
B40	Income classification used in Malaysia pertaining to lower-income group with monthly household income lower than RM4,850 (USD \$1160); abbreviation of B40 ⁸
Community-based health insurance	A type of microinsurance, distinguished by the community involvement in driving its setup and in its management.
E-Wallets	Electronic devices that allow a consumer to store payment information electronically enabling online payments.
National List of Essential Medicines	"Essential medicines are intended to be available within the context of functioning health systems at all times in adequate amounts, in the appropriate dosage forms, with assured quality, and at a price the individual and the community can afford ⁹ ."
Financial Hardship	Experiencing strain due to catastrophic payments.
Financial Risk Protection	Ensuring people are protected from the financial consequences associated with paying for health services out of their pockets.
Fintech	New technology that seeks to improve and automate the delivery and use of financial services. ¹⁰
Fiscal Deficit	Fiscal deficits are caused by the difference between the expenses the healthcare budgets have and the investments that are necessary to achieve a UHC. They also include the trade-offs governments need to make when meeting healthcare needs and economic goals.
Health Financing	The means by which healthcare expenditure is borne.
Health Protection Gap	The amount of financial stress households face that include both the direct out-of-pocket medical expenses as well as unaffordable expenses avoided by households. ¹¹

7 Banton, C. (2021, July 7). Bancassurance. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/b/bancassurance.asp>

8 Romeli, R.H. (2021). Income Classification in Malaysia: What is B40, M40, and T20. *iProperty.com.my*. Retrieved from <https://www.iproperty.com.my/guides/what-is-b40-m40-t20-in-malaysia/>

9 World Health Organization. (2021). Signpost: WHO essential medicines. *Reproductive Health Essential Medicines*. Retrieved October 10, 2021 from https://www.who.int/rhem/signpost/essential_medicines/en/

10 Kagan, J. (2020, August 27). Financial Technology – Fintech. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/f/fintech.asp>

11 Swiss Re (2018). *Asia's Health Protection Gap: Insights for Building Greater Resilience*. Retrieved October 4, 2021 from https://www.swissre.com/dam/jcr:05411fab-a11a-4537-b16f-baa77da564f9/Asia's+Health+Protection+Gap_Regional+Infographics.pdf

Healthtech	“The application of organized knowledge and skills in the form of medicines, medical devices, vaccines, procedures and systems developed to solve a health problem and improve quality of life ¹² .”
Insurtech	The use of technology innovations designed to squeeze out savings and efficiency from the current insurance industry model ¹³ .
Medical Inflation	Increasing costs associated with healthcare.
Microinsurance	Microinsurance refers to products that feature pricing, coverage and distribution that are designed to be appropriate for low-income customers. ¹⁴
Missing Middle	Refers to parts of the populations who do not benefit from the health coverage and protection provided due to a certain occupational or socioeconomic reason.
Multi-Stakeholder approach	An approach that is anchored on private insurance with important contributions from digital entities, civil society, and pharmaceutical companies that ensure the creation, adaptation and adoption of insurance models. It capitalizes on the strengths of those in different healthcare sectors.
Population Coverage	Entails all individuals and communities being able to access services that address the most significant causes of death and disease.
Private Health Insurance	“Any health insurance plan that is not run by the federal or state government. Private insurance can be purchased from a variety of sources: an employer, a state or federal marketplace, or a private marketplace ¹⁵ .”
Regulatory Sandbox	Regulatory sandboxes refer to the “live testing of new products in a controlled regulatory environment.”
Service Coverage	The breadth and quality of healthcare services.
Single-Payer Design	Single-payer design systems include a government entity operating the public health plan, the population contributing towards financing the system, receipts and expenditures appearing in the government budget and a role by private insurers in providing supplemental coverage. ¹⁶

12 World Health Organization Europe. (2021). Health technology assessment. *Euro.who.int*. Retrieved October 27, 2021 from <https://www.euro.who.int/en/health-topics/Health-systems/health-technologies-and-medicines/policy-areas/health-technology-assessment>

13 Hargrave, M. (2020, August 27). Insurtech. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/i/insurtech.asp>.

14 Gopalakrishna, I. (2020, July 9). The Third Wave of Microinsurance. *Insurance Asia News*. Retrieved from <https://insuranceasianews.com/the-third-wave-of-microinsurance/>

15 Policygenius. (2021). What is private insurance?. *Policygenius*. <https://www.policygenius.com/health-insurance/private-health-insurance/>

16 Congressional Budget Office. (2019). *Key Design Components and Considerations for Establishing a Single-Payer Health Care System*. Retrieved from <https://www.cbo.gov/system/files/2019-05/55150-singlepayer.pdf>

Social Health Insurance

Government pools funds nationally through individual healthcare contributions that raises the revenue for health financing and distributes the health risk of populations.

Takaful

Takaful is a “type of Islamic insurance wherein members contribute money into a pool system to guarantee each other against loss or damage.

Taxation-based Models

Model in which governments set budgets and provide funding for public healthcare delivery.

Telemedicine

Allow health care professionals to evaluate, diagnose and treat patients at a distance using telecommunications technology.

UHC Service Coverage Index

Measures the extent of coverage of essential health services, which include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases and service capacity and access, among the general and most disadvantaged population.

Universal Health Coverage

The vision that all people have access to the health services they need, when and where they need them, without facing financial hardship.



CHAPTER 1: **The principles and progress of** **Universal Health Coverage**

1.1 The Universal Health Coverage commitment

“In countries with fragile health systems, we focus on technical assistance to build national institutions and service delivery to fill critical gaps in emergencies. In more robust health system settings, we drive public health impact towards health coverage for all through policy dialogue for the systems of the future and strategic support to improve performance.”

- World Health Organization

Universal Health Coverage is the principle that “all people can access health services that they need, when they need it and where they need them, without experiencing financial hardship¹⁷.” This principle has been included in the Sustainable Development Goals 2030 agenda and has been affirmed by world leaders in all 193 member states of the United Nations¹⁸. In essence, UHC can be broken down to three central pillars: population access, service coverage, and affordability.

Access: UHC involves providing access to the full spectrum of essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care across the life course. Under this pillar, all individuals and communities must be able to access the services that address the most significant causes of death and disease.

Service Coverage: Beyond population access, the breadth and quality of these healthcare services should be robust enough to improve the health of those who receive them. WHO uses 16 essential health services in four categories as indicators of the level of service coverage in countries: reproductive and maternal health, infectious diseases, noncommunicable diseases, including prevention and treatment of raised blood pressure and glucose and screenings for cancer, and service capacity access, which includes basic hospital access, health security, and access to essential medicines (WHO). An important dimension of the service coverage index is equity in health service access, recognizing that lower income, minority, and other vulnerable populations are often underserved by and left out of health systems. An equity lens to health services ensure that the same level of care can be accessed by all segments of the population regardless of their income or station in society.



17 WHO. (2021, April 1). *Universal health coverage (UHC)*. [https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-\(uhc\)](https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc))

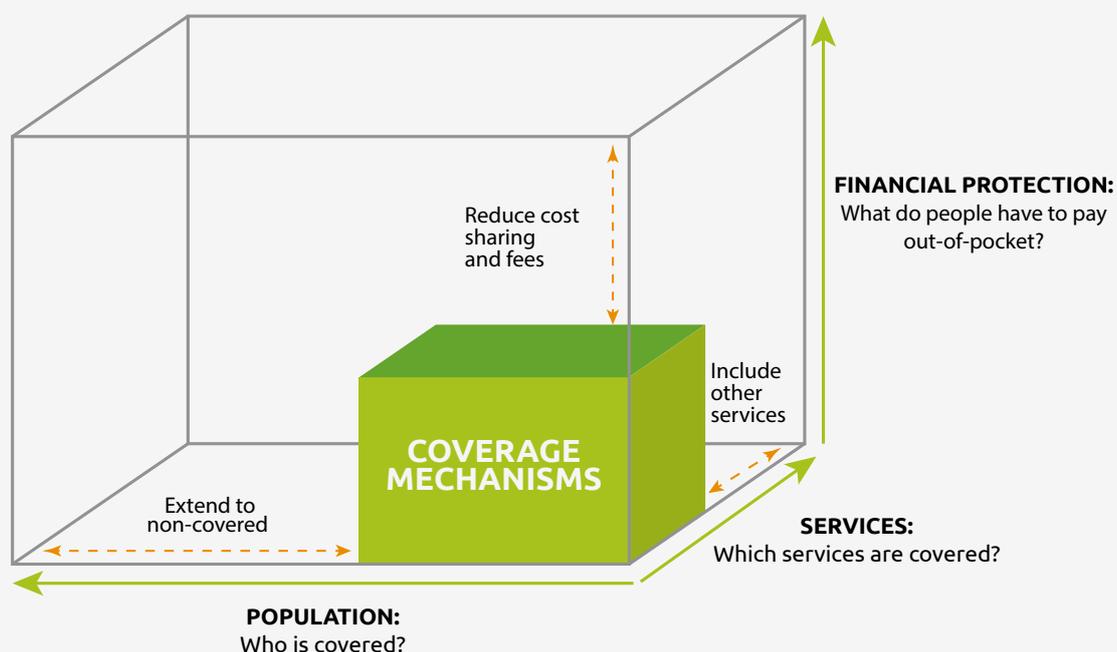
18 UHC2030. (2021). *Our Mission*. Retrieved October 20, 2021 from <https://www.uhc2030.org/our-mission/>.

CHAPTER 1: The principles and progress of Universal Health Coverage

Affordability: UHC requires protecting people from the financial consequences associated with paying for health services. Within systems where people have to pay for most health services, low income households are often unable to obtain services they need or face impoverishment due to healthcare costs. Similarly, middle to upper income households may be exposed to financial hardships in the face of critical illness.

Importantly, the principles of UHC have been reflected in ambitious national commitments made at the highest levels of government. Beyond being a mere “health” issue for Ministries of Health to solve, UHC is a commitment made by heads of states – presidents, prime ministers, ministers and monarchs - who have adopted the banner of UHC as a basic right for its citizens.

Figure 3: The three dimensions of Universal Health Coverage



Source: World Health Organization, 2015.

Figure 4: UHC commitments and architecture

 INDIA	
LEGAL FOUNDATION	The Right to Life, established in Article 21 of the Indian Constitution, includes the right to livelihood, better standard of life, and hygienic conditions in workplace & leisure. Universal Health Coverage is considered to be consistent with Article 21 granting citizens with access to quality health services that address the most significant causes of disease and death.
NATIONAL UHC SCHEME	In 2018, India's Prime Minister Narendra Modi rolled out the Ayushman Bharat (AB) program. The Ayushman Bharat has two main components: the establishment of nationwide Health and Wellness Centers (HWCs) and the Pradhan Mantri Jan Arogya Yojana (PMJAY) insurance scheme for low-income populations. Together, these two components aim to provide the entire population with accessible and affordable healthcare. While the former tackles the problem of inaccessible health services by transforming existing Sub-centers and Primary Health Centers to deliver Comprehensive Primary Health Care (CPHC) closer to people's homes, the latter is a health insurance scheme providing support for secondary and tertiary care hospitalization. The AB program is widely regarded as India's pathway to universal health.
 INDONESIA	
LEGAL FOUNDATION	The Basic Health Law of 1960 in Indonesia maintains that all citizens had a right to be physically, mentally and spiritually healthy. This law provides the basis for the adoption of UHC in Indonesia.
NATIONAL UHC SCHEME	In 2014, Indonesian President Joko Widodo rolled out the Jaminan Kesehatan Nasional (JKN), a social health insurance scheme as a part of Indonesia's Social Security System. The scheme aims to provide healthcare access to the entire population, with special focus to the poorer populations in the country in addition to improving the management of its health system. The system was designed to be flexible to provinces' diverse needs while focusing on equity and improved access to healthcare services. Under JKN, residents are entitled to receive services in public health facilities, including routine antenatal care, with primary care facilities acting as a gateway for more specialized care.
 MALAYSIA	
LEGAL FOUNDATION	Malaysia's commitment to healthcare is detailed under the Harapan Manifesto. The Harapan Manifesto, under the Nine Promises, stated that the government would improve access and quality of health services to all communities with special attention to the under-privileged group in the bottom 40% household income range, otherwise known as B40.
NATIONAL UHC SCHEME	Malaysia's public healthcare scheme is unique among the countries as it is financed through general taxation and not a public insurance scheme. Today, the public healthcare system provides access to an extensive list of low-cost healthcare services. The scheme allows services provided by the public facilities to be heavily subsidized to the extent that annual cost recovery is estimated to be 3% to 5%. The nation also employs the use of additional schemes such as the mySalam scheme and PekaB40 scheme that were rolled out in 2019 to provide additional financial protection. While mySalam serves to help the poor and needy overcome financial difficulties in the unexpected event of a critical illness, Peka B40 aim to sustain the healthcare needs of the B40 group by focusing on preventive health efforts for noncommunicable diseases such as offering free health screening.

Sources: Agustina, et al., 2018; Bernama, 2018; Khurana, 2019; Long, 2008; Mathiharan, 2003; mySalam, 2021; Ng, 2015; Nguyen, 2013; Nugraheni, et al., 2020; Peka B40, 2021; Republic of Indonesia, 1992; World Health Organization, Legal Access, 2019;



THAILAND

LEGAL FOUNDATION

Thailand's commitment to achieving UHC is reflected in several articles in its constitution. Prominently, Section 47 of the Thai constitution stipulates that every person is granted the right to access public health services provided by the state. This principle is reinforced in Section 55 of the Constitution that reiterates the right to UHC and mandates the state to provide health promotion and preventative services.

NATIONAL UHC SCHEME

The Thai Universal Health Care Coverage Scheme was launched in 2002 by then prime minister Thaksin Shinawatra. Thailand's UHC comprises of three different tax-financed schemes, that collectively covers all Thai citizens. The schemes provide free equitable access to healthcare services, medicines and full financial protection to its citizens. With a comprehensive health package without any co-payment, there was a substantial reduction on household spending on healthcare. For ease of monitoring and gatekeeping, the Thai government leveraged technology extensively and established the national civil registration database to ensure that a beneficiary cannot enroll in two schemes at once.



VIETNAM

LEGAL FOUNDATION

Article 38 of Vietnam's Constitution details the equal right of every citizen to the provision of healthcare and protection. Moreover, Article 58 mandates that the state has the responsibility to make investment in the development of the protection and care of people's health, exercise health insurance for entire people as well as exercise a priority policy of healthcare for certain groups.

NATIONAL UHC SCHEME

Vietnam instituted the Social Health Insurance (SHI) program in 1992, which was implemented in 5 stages by the Vietnam Health Insurance Agency until 2014. The SHI is regarded as the main method of public financing for healthcare and requires contributions from participants through tiered premiums. Participation in the SHI is compulsory for some groups, such as formal-sector workers and voluntary for other groups. For the vulnerable populations such as children under the age of 6 years old, elderly, poor and the near-poor, the government automatically enrolls them and fully subsidizes their premiums. The benefit packages provided to participants of the SHI include inpatient and outpatient services at all healthcare levels.

World Health Organization, Health financing in Viet Nam, 2021.

1.2 Regional progress of Universal Health Coverage

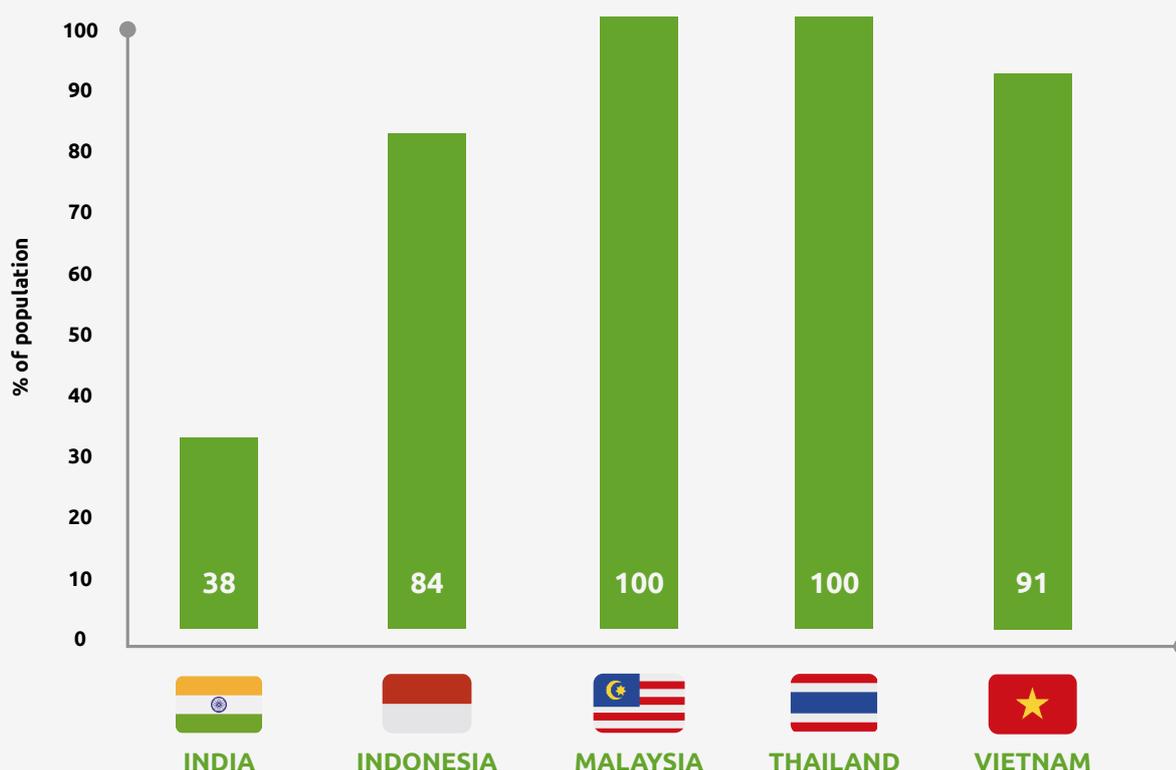
In efforts to put their national commitments the five countries have achieved varying levels of success across the three pillars of UHC, namely population access, service coverage and financial protection.

Pillar 1: Population Access - How many people are covered?

In all the countries have prioritized the universality of UHC programs to rapidly extend coverage for the entire nation. Malaysia and Thailand emerge at the top with the entire population covered by one or more national UHC programs. Other countries with high levels of coverage include Vietnam (91%) and Indonesia (84%).

India has achieved 38% population coverage, through coverage of lowest income Indians as part of its Ayushman Bharat-PMJAY scheme and supplemental state-level government health insurance schemes.

Figure 5: Percentage of population covered by UHC



Sources: Godha & Arjun, 2020; National Institutes of Health Ministry of Health Malaysia, 2020; Oanh, Phuong & Tuan, 2021; Sumriddetchkajorn, et al., 2019; Trisnantoro, 2020.

Pillar 2: Service Coverage - Which services are provided and for whom?

The WHO monitors the achievement of UHC across countries by scoring them on the UHC service coverage index (SCI). The indicator measures the extent of coverage of essential health services, based on the following components (a) reproductive, maternal, newborn and child health, (b) infectious diseases, (c) noncommunicable diseases and (d) service capacity and access, among the general and most disadvantaged populations. The indicator is an index reported on a unitless scale of 0 to 100, which is computed as the geometric mean of 14 indicators of health service coverage¹⁹.

Based on the SCI, Thailand provides the most comprehensive service coverage with a score

of 90 and no prominent service coverage gaps (indicator score of less than 50) Vietnam achieved a score of 75, performing well across most of the areas, with prominent service coverage gap (indicator score of less than 50) in tobacco control. Malaysia follows closely behind with a score of 73, with a prominent service coverage gap in HIV anti-retroviral treatment.

In contrast, Indonesia and India scored much lower at 57 and 55 respectively. Indonesia significantly lacks effective treatment for infectious diseases such as tuberculosis and HIV. Similarly, India's prominent service coverage gaps lies in treatment for infectious diseases and service capacity and access.

Figure 6: Breakdown of Service Coverage Index scores by fourteen indicators of health service coverage

	 INDIA	 INDONESIA	 MALAYSIA	 THAILAND	 VIETNAM	
Reproduction, Maternal, Newborn and Child Health	Family planning demand satisfied with modern methods	67	79	53	91	79
	Antenatal care, 4+ visits	51	84	74	91	74
	Child immunization (DTP 3)	89	79	99	99	94
	Care seeking behavior for child pneumonia	78	75	88	80	81
Infectious Diseases	Tuberculosis effective treatment	45	46	70	61	76
	HIV antiretroviral treatment	34	14	46	68	61
	At least basic sanitation	60	73	100	99	84
Noncommunicable Diseases	Normal blood pressure	72	100	81	100	100
	Mean fasting plasma glucose	49	53	54	55	53
	Tobacco non smoking	76	38	56	59	49
Service Capacity and Access	Hospital bed density	29	67	100	100	100
	Health worker density	36	40	72	70	60
	International Health Regulations core capacity index	95	99	97	97	95
	RMNCH	70	79	76	90	82
SCI Components	Infectious diseases	45	36	68	74	73
	NCDs	64	58	62	69	64
	Service capacity and access	46	65	89	88	83
	UHC Service Coverage Index (SDG 3.8.1)	55	57	73	80	75

Source: World Health Organization, UHC Index of Service Coverage, 2020

19 WHO (2020, October 13). *UHC Index of Service Coverage (SCI)*. Retrieved October 4, 2021 from <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage>

CHAPTER 1: The principles and progress of Universal Health Coverage

In addition to the SCI, an assessment of National List of Essential Medicines (NLEM) list can also provide important information on the extent of service coverage, as medications represent a significant portion of health service intervention and cost. Figure 6 summarizes the five countries' performances in service coverage. Despite its relatively lower SCI score, Indonesia in particular has

approved and added a significant number of medicines (177) to its NLEM in a span of just five years. The other countries have gradually approved and added medicines to their NLEM lists, ranging from 28 new medicines in India, to 44 new medicines in Vietnam. With a greater number of medicines approved on the NLEM, people have access to a larger portfolio of medicines to its citizens.

Figure 7: Service Coverage Index scores and expansion of essential medicines under UHC

	 INDIA	 INDONESIA	 MALAYSIA	 THAILAND	 VIETNAM
WHO Service Coverage Index Score	55	57	73	80	75
Change in # of drugs on NLEM	+28 (2011 to 2015)	+177 (2008 to 2013)	+39 (2014 to 2019)	+33 (2018 to 2019)	+44 (2014 to 2019)
Average Yearly % Change of drugs on NLEM	+2.01%	+10.96%	+2.44%	+3.67%	+2.36%

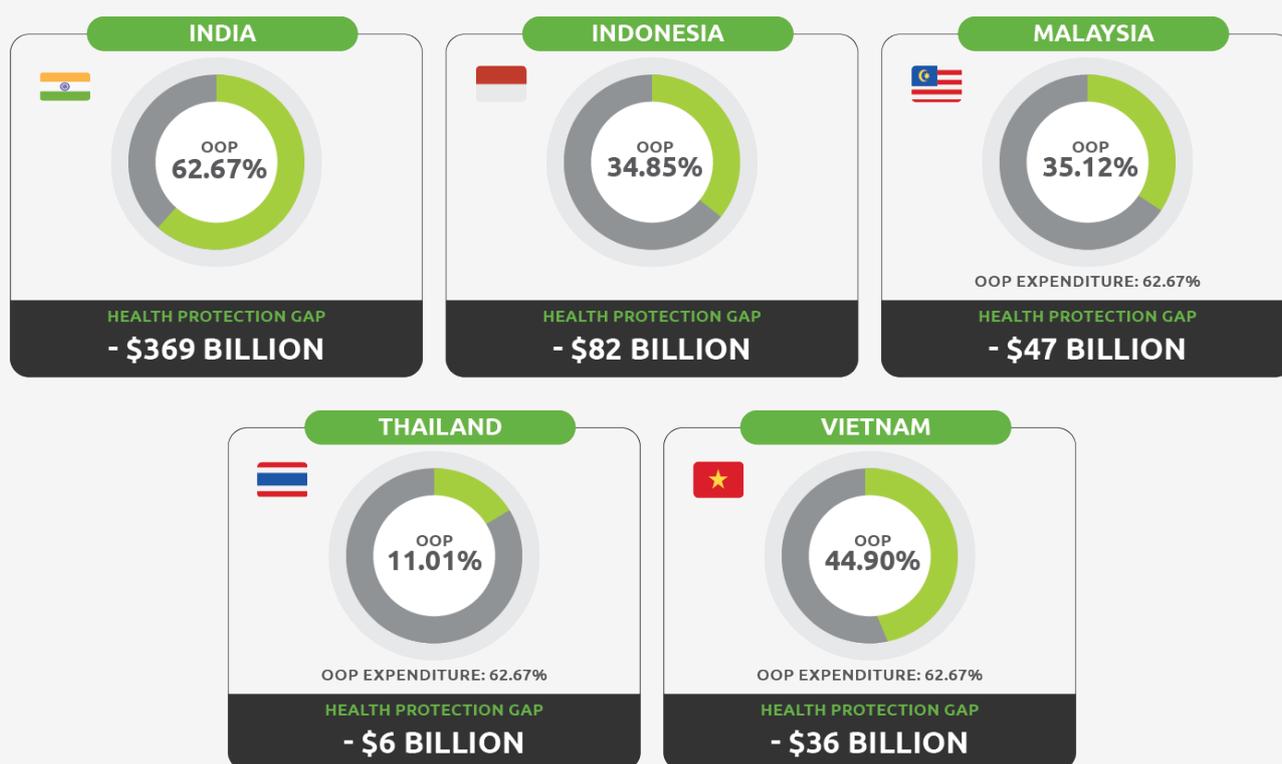
Sources: MIMS Thailand, 2019; Ministry of Health Indonesia, 2008; Ministry of Health Malaysia, 2019; Ministry of Health Vietnam, 2018; National Health Portal of India, 2015; Pharmaceutical Services Programme, 2019; World Health Organization, Model List of Essential Medicines, 2019.

Pillar 3: Financial Protection – How well is the individual protected from financial hardship?

Out-of-pocket (OOP) payments refer to “the portion of the bill that the insurance company doesn’t cover and that the individual must pay on their own. Out-of-pocket healthcare expenses include deductibles, co-pays, and coinsurance²⁰.” Of the five countries, Thailand has the lowest OOP rates of 11%. The remaining countries have significant levels of OOP spending with the next lowest in Indonesia (34%) and Malaysia (35%). In the region, India has amongst the highest levels of OOP at 62%²¹.

Another type of assessment conducted by the Swiss Re Institute looks at financial vulnerability due to healthcare costs. The “health protection gap” is defined as the sum of direct OOP medical expenses and unaffordable medical expenses avoided by households. The health protection gap determines the amount of financial stress households are facing.²² The estimated health protection gap across the countries varied significantly in the five countries from USD \$6 billion in Thailand to USD \$369 billion in India.

Figure 8: OOP expenditures and health protection gaps



Sources: Swiss Re, 2018; The World Bank, Out-of-pocket, 2021.

20 J. Kagan. 2021. Out-of-Pocket Expenses. *Investopedia*. 14 June. <https://www.investopedia.com/terms/o/outofpocket.asp>

21 World Bank, World Development Indicators (2021). *Out-of-Pocket Expenditure (% of Current Health Expenditure)*. Retrieved October 4, 2021 from <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS>.

22 Swiss Re (2018). *Asia's Health Protection Gap: Insights for Building Greater Resilience*. Retrieved October 4, 2021 from https://www.swissre.com/dam/jcr:05411fab-a11a-4537-b16f-baa77da564f9/Asia's+Health+Protection+Gap_Regional+Infographics.pdf.

1.3 Country-specific progress of Universal Health Coverage



India's UHC

Understanding India's healthcare context

India has the second largest population in the world with 1.4 billion people²³. With nearly 18% of the world's population, India often accounts for the largest burden of death and disability due to poor health²⁴.

The country faces a “triple burden of disease” due to epidemiological transition in India. While the initial mission of addressing major communicable diseases remains incomplete, there is a growing burden of noncommunicable diseases and injuries. This can be seen by the contribution of noncommunicable diseases to the total disease burden increasing from 30% in 1990 to 55% in 2016. The proportion of deaths due to noncommunicable diseases has also increased from 37% in 1990 to 61% in 2016²⁵.

These trends have led to an increasing demand for healthcare over time.

As of 2020, India spends Rs ₹613.98 billion (USD \$8.27 billion) on healthcare expenditures, comprises approximately 1.3% of the country's GDP²⁶. This is significantly less than the OECD average of around 8.8% of GDP being spent on healthcare²⁷.

Due to the rising demand for healthcare coupled with low levels of healthcare financing, India faces significant health system supply-side challenges – in workforce, infrastructure, availability of medical goods and services.

23 Worldometer. (2021). India Population (2021)—Worldometer. <https://www.worldometers.info/world-population/india-population/>

24 WHO Cancer Today. (2020). *Cancer today*. <http://gco.iarc.fr/today/home>

25 NHP. (2019). *Non-communicable Diseases | National Health Portal Of India*. <https://www.nhp.gov.in/healthyliving/ncd2019>

26 Statista. (2019, July). *Estimated value of public health expenditure in India from financial year 2017 to 2020*. Retrieved October 25, 2020 from <https://www.statista.com/statistics/684924/india-public-health-expenditure/>

27 Organisation for Economic Co-operation and Development. (2021, July). *Health Expenditure*. Retrieved from <https://www.oecd.org/els/health-systems/health-expenditure.htm>

As of 2020, the doctor-patient ratio in India was estimated to be 1 doctor for every 1456 people compared to the WHO recommendation of 1 doctor per 1000 individuals²⁸. Deficiencies in infrastructure are evident with 25% of health sub-centers not having regular water supply as well as 8% of government primary healthcare centers without regular electricity²⁹. Healthcare services are also underregulated and concentrated in urban areas leaving quality of care varied and healthcare inaccessible for rural populations³⁰.

India's Commitment to UHC

In 2018, Prime Minister Narendra Modi announced the world's largest UHC scheme with the launch of **Ayushman Bharat** (AB), that aims to holistically address healthcare needs by covering prevention, health promotion and ambulatory care at the primary, secondary and tertiary levels³¹. The AB program comprises of two components that collectively underpins India's continuum of care approach to UHC, namely establishment of health and wellness centers (HWCs) and a social insurance scheme for the poor, the **Pradhan Mantri Jan Arogya Yojana** (PMJAY).

The health and wellness centers provide free comprehensive primary healthcare to all Indians, with an emphasis on a community-based approach. PMJAY aims to provide health protection cover to a subset of Indians who are deemed to be the most vulnerable to financial risk from catastrophic health episodes. PMJAY aims to reach some 500 million beneficiaries who form the poorest 40% of the Indian population.

AB-PMJAY builds on the previous central government social health insurance schemes and longstanding state insurance schemes, such as the **Rashtriya Swasthya Bima Yojana** (RSBY), that was launched in 2008, to provide coverage to the population below the poverty line. RSBY was subsequently subsumed under AB-PMJAY. As the healthcare system in India is decentralized to state levels, state authorities are responsible for implementation of healthcare service, including the maintenance upgrade, and inception of new healthcare schemes and projects.

28 Goel, S. (2020, January 31). The doctor-population ratio in India is 1:1456 against WHO recommendation. *Deccan Herald*. <https://www.deccanherald.com/business/budget-2020/the-doctor-population-ratio-in-india-is-11456-against-who-recommendation-800034.html>

29 Atroley, N., Varma, N., & Gyani, G. J. (2016). *Healthcare in India: Current state and key imperatives*. 60.

30 National Health Authority. (2018). *About Pradhan Mantri Jan Arogya Yojana (PM-JAY) | Official Website Ayushman Bharat Pradhan Mantri Jan Arogya Yojana | National Health Authority*. <https://pmjay.gov.in/about/pmjay>

31 Ministry of Health and Family Welfare. (2016). *Ayushman Bharat Yojana*. Retrieved October 25, 2021 from https://www.nhp.gov.in/ayushman-bharat-yojana_pg

Box 1: India's UHC – Ayushman Bharat Yojana

India's national UHC scheme, Ayushman Bharat Yojana, was launched in 2018 with two components: the establishment of 1) Health and Wellness Centers and the 2) PMJAY insurance scheme.



TARGET GROUP

- 1. Health and Wellness Centers** aim to provide free comprehensive primary health care services (CPHC) to all Indians, with a target of 150,000 HWCs to be established nationwide
- 2. PMJAY** provides free social health insurance cover of Rs ₹500,000 (USD \$6,732) per family per year to support secondary and tertiary care hospitalization. The Ayushman Bharat PMJAY insurance scheme aims to reach 107.4 million poor and vulnerable families, amounting to about 500 million beneficiaries that encompass the bottom 40% of the Indian population.



PARTICIPATION MODES

- 1. Health and Wellness Centers** – No enrollment necessary. Available for all Indians.
- 2. PMJAY** - Beneficiaries are identified based on “deprivation categories” defined by the government. The scheme has different criteria for families from rural and urban areas. Rural area criteria look at the household in terms of infrastructure and number of family members while urban area categories are based on source of incomes and occupations.



HEALTH FINANCING MODES

All costs of the Health and Wellness Centers and PMJAY are shared between Central and State governments without user costs or co-payments by individuals.



SCOPE OF BENEFIT

1. Health and Wellness Centers

All users of HWC receive free and universal comprehensive primary health care in the following areas: maternal and child health care, care for noncommunicable diseases, palliative and rehabilitative care, Oral, Eye and ENT care, mental health and first level care for emergencies and trauma, including free essential drugs and diagnostic services.

2. PMJAY

The benefits for beneficiaries under the PMJAY insurance scheme include:

- Government provided health insurance coverage of up to Rs. 500,000 (USD \$6,732) per family, per year.
- Free treatment available at all public and empaneled private hospitals in times of need.
- Coverage of secondary and tertiary care hospitalization.
- Availability of 1,593 medical packages covering surgery, medical and day care treatments, cost of medicines and diagnostics.
- Coverage of pre-existing diseases with regulations to ensure hospitals cannot deny treatment.
- Beneficiaries are provided cashless and paperless access to quality health care services that suit their financial constraints and accessibility.
- Covers up to 3 days of pre-hospitalization and 15 days of post-hospitalization expenses such as diagnostics and medicines
- Hospitals are not allowed to charge any additional money from beneficiaries for the treatments they offer them.

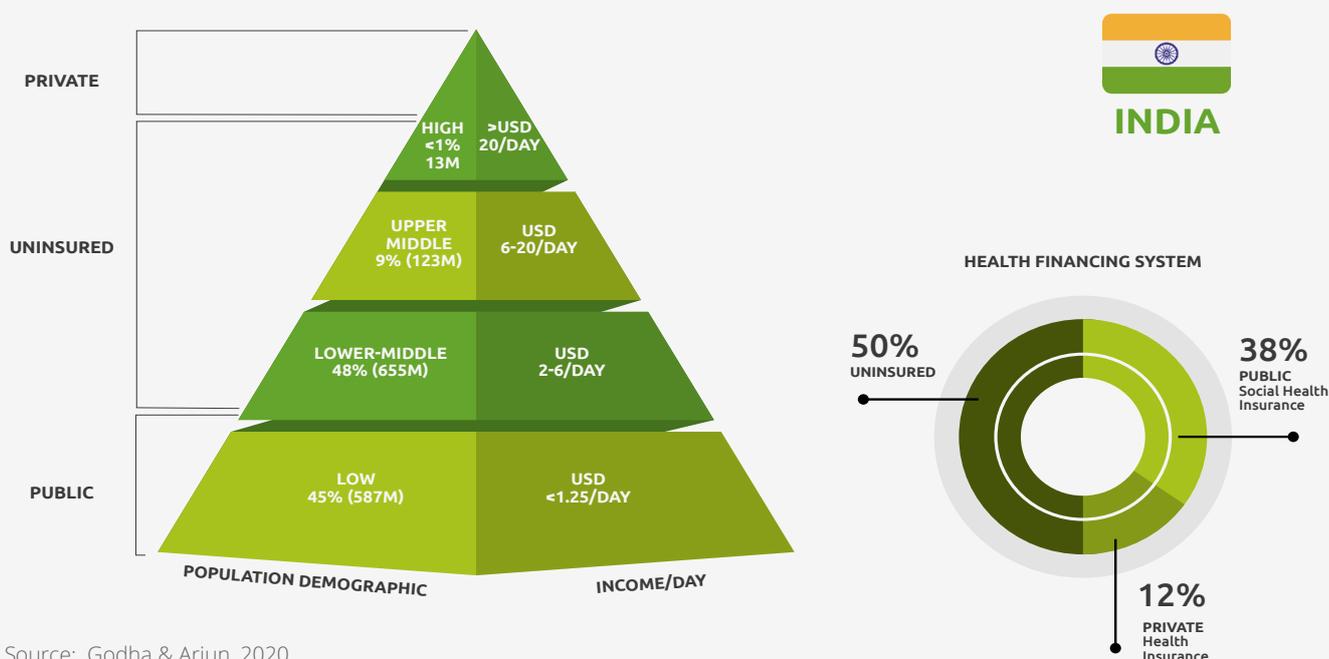
India's UHC progress

This section examines India's progress across the three pillars of UHC – financial protection (cost), coverage of services, and population coverage since its inception 2018. Although we consider India in aggregate, the progress of India's UHC is varied across states given variations in local resources and administration.

Assessing UHC access in India – Who is being covered?

The social insurance scheme of Ayushman Bharat, PMJAY, does not currently target the entire Indian population, but focuses on financially vulnerable populations who are often left behind by health systems. Together with ongoing state health insurance schemes, AB-PMJAY cover approximately 38% of the population. On the upper end of the income pyramid, 12% of the population hold group or individual health insurance schemes³².

Figure 9: India's health financing type by population segment and income



Source: Godha & Arjun, 2020.

Currently, half of the Indian population does not carry any form of insurance. Termed the “missing middle,” approximately 700 million low and middle income people do not carry any form of health insurance nor would not be eligible for PMJAY by the current criteria³³. To address the “missing middle,” the

Government of India plans to expand the PMJAY scheme to the “near-poor population”, made up of 450 million people, who are not covered by any government or private schemes. Coverage would be offered on a self-pay basis with a reduced insurance premium at one-third of the retail price³⁴.

32 Godha, S. & Arjun N. (2020, August 18). Health Insurance Thematic: Pivot of Future's Profitable Growth. *Spark Capital*.

33 Khuntia, S. C., & Rathor, S. (2020, November 18). 'The middle class population of 70 crore is the “missing middle” in the insurance sector.' *Times of India Blog*. <https://timesofindia.indiatimes.com/blogs/the-interviews-blog/the-middle-class-population-of-70-crore-is-the-missing-middle-in-the-insurance-sector/>

34 Dey, S. (2020). Govt to expand Ayushman Bharat to cover “missing middle” | *India News—Times of India*. <https://timesofindia.indiatimes.com/india/govt-to-expand-ayushman-bharat-to-cover-missing-middle/articleshow/77555939.cms>

Assessing UHC quality and coverage in India – What is being covered?

Table 1: India's PMJAY service coverage

SERVICE COVERAGE UNDER PMJAY

Pre-Existing Diseases	✓
Secondary Care	✓
Tertiary Care	✓
Approved Medicines	✓
Cancer	✓
Rare Diseases	✓
Outpatient Care	✓
Drug Rehabilitation	✗
Organ Transplants	✗
Fertility Treatments	✗
Accidents	✓
Emergencies	✓

PMJAY provides cover for interventions that are likely to impose catastrophic expenses on households, including pre-existing diseases, secondary care, tertiary care, approved medicines, cancer and rare diseases, outpatient care, accidents, and emergencies. However, the insurance scheme does not provide coverage for drug rehabilitation, organ transplants, and fertility treatments (See Table 1).

Overall, India obtained a UHC Service Coverage Index (SCI) score of 55 out of 100, ranking last and significantly lagging behind its regional peers – Indonesia, Malaysia, Vietnam and Thailand – in the development of its essential universal healthcare service³⁵. When broken down into components of the index, India scored 46 in service capacity and access, 64 in noncommunicable diseases, and 45 in infectious diseases. Reflecting structural shortfalls in Indian healthcare system, these metrics suggest that India should further build strengthen its capacity and service provision of healthcare services.

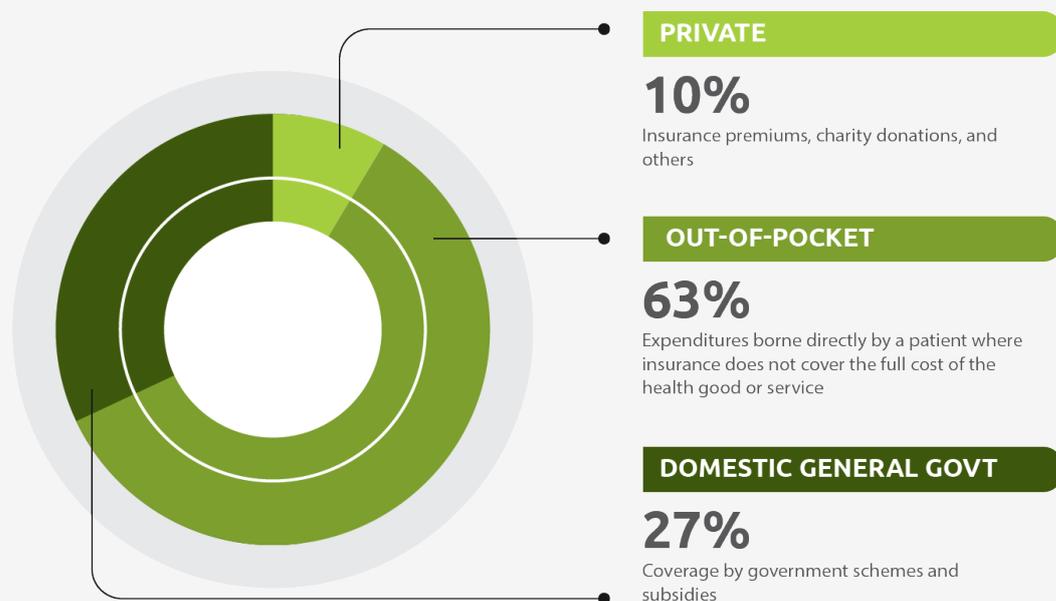
State-level resources and implementation efforts in service coverage will also largely determine the availability of healthcare services and therapeutics. States with higher levels of poverty and disease burden tend to have lower levels of empanelment and accreditation of hospitals. Despite efforts by the National Health Authority of India to ensure the delivery of a minimum standard of care by Standard Treatment Guidelines, the implementation of these guidelines face challenges including, inadequate dissemination, persistence of outdated guidelines, and a shortage of experts to clarify guidelines³⁶.

35 WHO. (2020, October 13). *UHC Index of Service Coverage (SCI)*. Retrieved October 4, 2021 from <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage>.

36 National Health Authority. (2020). *Ayushman Bharat Lessons Learned 2019-20*. pmjay.gov. https://pmjay.gov.in/sites/default/files/2020-10/Lesson-Learned-Booklet-FINAL_1.pdf.

Assessing UHC financial protection in India – How much is being covered?

Figure 10: Financing of India's total current health expenditure



Sources: The World Bank, Out-of-pocket, 2021; The World Bank, Domestic general government, 2021; The World Bank, Domestic private health, 2021.

In India, 73% of total health expenditure are incurred by private entities which include private insurers and individuals who bear out-of-pocket expenses while less than a third of expenditures are borne by the government (see Figure 10).

The Swiss Re Institute estimates that overall health financial protection gap to be \$369 billion, the largest health protection gap amongst the countries in this study, and 4.5 times greater than Indonesia, the next most vulnerable country in this study.

Out-of-pocket expenditure on health services is high in India representing 63% of all health costs³⁷.

Swiss Re attributes this shortfall to rise in costs of healthcare services, as well as significant under-insurance of India's population³⁸.

The overall out-of-pocket expenditure on health services is high in India representing 63% of all health costs³⁹. This is below the global average of 18.2%⁴⁰, and demonstrates institutional and structural shortfalls of the Indian UHC system. In the past 20 years, OOP expenditure of on healthcare decreased from 71% to 62.6%, however this decrease was not linear, as India was already able to achieve 63% OOP spending in 2011. From 2011 to 2021, there was no significant progress in OOP rates, suggesting that the results of AB-PMJAY in reducing OOP expenditures remains to be seen.

37 The World Bank, World Development Indicators. (2021). *Out-of-pocket expenditure (% of current health expenditure)*. Retrieved October 27, 2021 from <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS>

38 The Economic Times. (2016, March 3). *India's health protection gap among biggest in Asia: Report*. Retrieved from <https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/indias-health-protection-gap-among-biggest-in-asia-report/articleshow/51244717.cms?from=mdr>

39 The World Bank, World Development Indicators. (2021). *Out-of-pocket expenditure (% of current health expenditure)*. Retrieved October 27, 2021 from <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS>

40 Ibid.



Indonesia's UHC

Understanding Indonesia's Healthcare Context

An archipelago of roughly 17,500 islands, Indonesia hosts a population of around 270 million people, the fourth largest in the world. Indonesia has an economic growth rate of about 1.07% per annum⁴¹ and an average life expectancy of 63 years⁴².

Like many other countries in the region, Indonesia faces a fast-growing burden of noncommunicable diseases. According to Indonesia's Ministry of Health Information Centre the mortality rate is dominated by noncommunicable diseases. Significant changes in lifestyle prompted by rapid economic development also changed patterns of diseases in Indonesia, leading to a rising noncommunicable disease burden. Top diseases in the countries include stroke (21.1%), heart disease (12.9%), diabetes mellitus (6.7%), tuberculosis (5.7%), complications of high blood pressure (5.3%),

and chronic lung disease (4.9%)⁴³. It is estimated that noncommunicable diseases will cost Indonesia upwards of USD \$4.47 trillion, or USD \$17,863 per capita, from 2012 through 2030⁴⁴.

Indonesia spends approximately 2.9% of its GDP on healthcare expenditure as compared to the OECD average of 8.8%⁴⁵ and global average of 9.8%⁴⁶. Following major health system reform in 1990, health services are currently decentralized to provincial and district government. This shifts the responsibility of planning and managing of the healthcare facilities to local governments. Services are divided between provincial and district/municipality levels. The Ministry of Health heads national health-specific programs, such as immunizations or campaigns to counter noncommunicable diseases.

41 Worldometer (2021). *Indonesia Population*. Retrieved October 5, 2021 from: <https://www.worldometers.info/world-population/indonesia-population/>

42 The World Bank, World Development Indicators. (2021). *Mortality rate, infant (per 1,000 live births) – Indonesia*. Retrieved October 25, 2021 from <https://data.worldbank.org/indicator/SP.DYN.IMRT.IN?locations=ID>

43 Purnamasari, D. (2018). The Emergence of Non-communicable Disease in Indonesia. *Acta Med Indones* 50 (4). <https://pubmed.ncbi.nlm.nih.gov/30630990/>

44 Bloom, D. et al. (2015). Economics of Non-Communicable Diseases in Indonesia. *World Economic Forum*. https://www.researchgate.net/publication/329934956_Economics_of_Non-Communicable_Diseases_in_Indonesia

45 OECD. (2020). *OECD Health Statistics 2020—OECD*. <https://www.oecd.org/els/health-systems/health-data.htm>

46 World Bank. (2018). *Current health expenditure (% of GDP) | Data*. <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS>

CHAPTER 1: The principles and progress of Universal Health Coverage

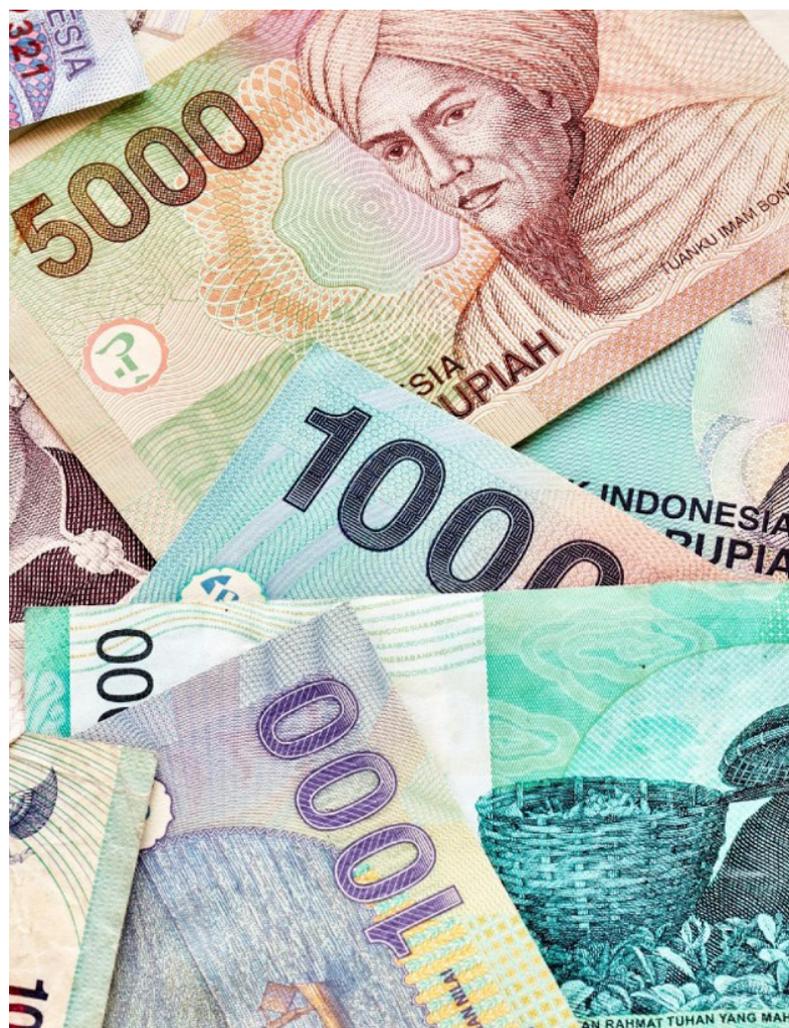
Healthcare efforts are complemented by national supporting agencies, such as the Family planning Board, Social Security Agency, and Food and Drug Control Agency⁴⁷.

Indonesia's Commitment to UHC

Law No. 9/1960 on Principles of Health (also known as the Basic Health Law of 1960) was established in legislation, stating the right of all citizens to be physically, mentally and spiritually healthy⁴⁸. Moreover, Indonesia's commitment to healthcare is enshrined in its legislative Act No. 36 of 2009 that states health to be a human right. The act in 2009 further elaborates on health development aims to improve the awareness, willingness and ability for everyone to attain a healthy living in terms of leading healthy lifestyles and improving health outcomes⁴⁹.

Indonesia's commitment to universal healthcare coverage was demonstrated with the launch of the **Jaminan Kesehatan Nasional** (JKN) universal healthcare program in 2014. When launched in 2014, the scheme had a goal to provide health insurance to all of the country's 250 million population within 5 years. The JKN is also a significant milestone for the country's state-insurance programs as it consolidated all the various state-owned health insurance schemes into a single-payer, quasi-government organization known as **BPJS-Health**⁵⁰.

With the current president, Joko Widodo prioritizing the enhancement of JKN, the government has increased its healthcare budget with it at IDR Rp132.2 trillion (USD \$9.240 million) in 2020 to double the amount in Joko Widodo's first year as president in 2015⁵¹.



47 Mahendradhata Y, Trisnantoro L, Listyadewi S, Soewondo P, Marthias T, Harimurti P, & Prawira J. (2017). The Republic of Indonesia Health System Review (Health Systems in Transition, Vol-7 No.1). WHO Regional Office for South-East Asia; WHO IRIS. <https://apps.who.int/iris/handle/10665/254716>

48 Pisani, E., Olivier Kok, M., & Nugroho, K. (2017). Indonesia's road to universal health coverage: A political journey. *Health Policy and Planning*, 32(2), 267-276. <https://doi.org/10.1093/heapol/czw120>

49 Mahendradhata Y, Trisnantoro L, Listyadewi S, Soewondo P, Marthias T, Harimurti P, & Prawira J. (2017). The Republic of Indonesia Health System Review (Health Systems in Transition, Vol-7 No.1). WHO Regional Office for South-East Asia; WHO IRIS. <https://apps.who.int/iris/handle/10665/254716>

50 The Economist Intelligence Unit. (2014). Indonesia launches universal healthcare. Eiu.com. Retrieved 16 June 2021, from <https://www.eiu.com/industry/article/1071418091/indonesia-launches-universal-healthcare/2014-01-13>.

51 DBS. (2020). Indonesia Industry Focus Indonesia Healthcare [Ebook].

Box 2: Indonesia's UHC – Jaminan Kesehatan Nasional

The Universal Health Coverage scheme of Indonesia, JKN, was introduced in 2014 as a national health insurance program.



TARGET GROUP

The JKN aims to cover all residents in Indonesia with the Presidential Regulation No.82 of 2018 concerning health insurance stating that Indonesian citizens and foreign nationals that have been a resident of the country for 6 months or longer are to register for the scheme.



PARTICIPATION MODES

Residents in Indonesia are required to register for the health insurance program by themselves or through their employers. The registration for the scheme has been described as simple with only an ID, employment details and a photograph needed to receive a card.



HEALTH FINANCING MODES

As a consolidated version of prior social health insurance schemes, the JKN insurance scheme has different financing models for different categories of beneficiaries. The rates for coverage depend on the socio-economic position of the individuals. The system has fixed premiums for low-income segments, informal sector workers, and self-employed individuals, and salary-subsidized automatic coverage for current or retired public sector employees.



SCOPE OF BENEFIT

The JKN is implemented in accordance with a referral-based healthcare system with the first point of contact for non-emergency health services at primary health facilities. A patient would need a referral from a primary facility to access specialist care or interventions in secondary or tertiary hospitals.

The benefits under the scheme's coverage can be segmented to those applicable at primary care facilities and those at hospitals. In primary care facilities, patients can receive coverage for the following health services:

1. Medical examination, treatment and medical consultancy
2. Medical treatment is not included in the field of specialist competency
3. Blood transfusion in accordance with medical requirement
4. First-level laboratory diagnostic supporting examination
5. In-patient care according to medical indications

If a patient requires further treatment and is referred to a higher-level facility such as a hospital that has a collaboration arrangement with the BPJS, patients would be able to obtain coverage on the following services:

1. Medical examination, treatment and medical consultancy with a specialist doctor
2. Medical treatment from a specialist in accordance with medical indication
3. Medical rehabilitation and blood transfusion
4. Inpatient care in either a non-intensive or an intensive room.

Sources: Nugraheni, et al., 2020; Razavi, 2015; The Economist Intelligence Unit, 2014; The Jakarta Post, 2020.

Indonesia's UHC progress

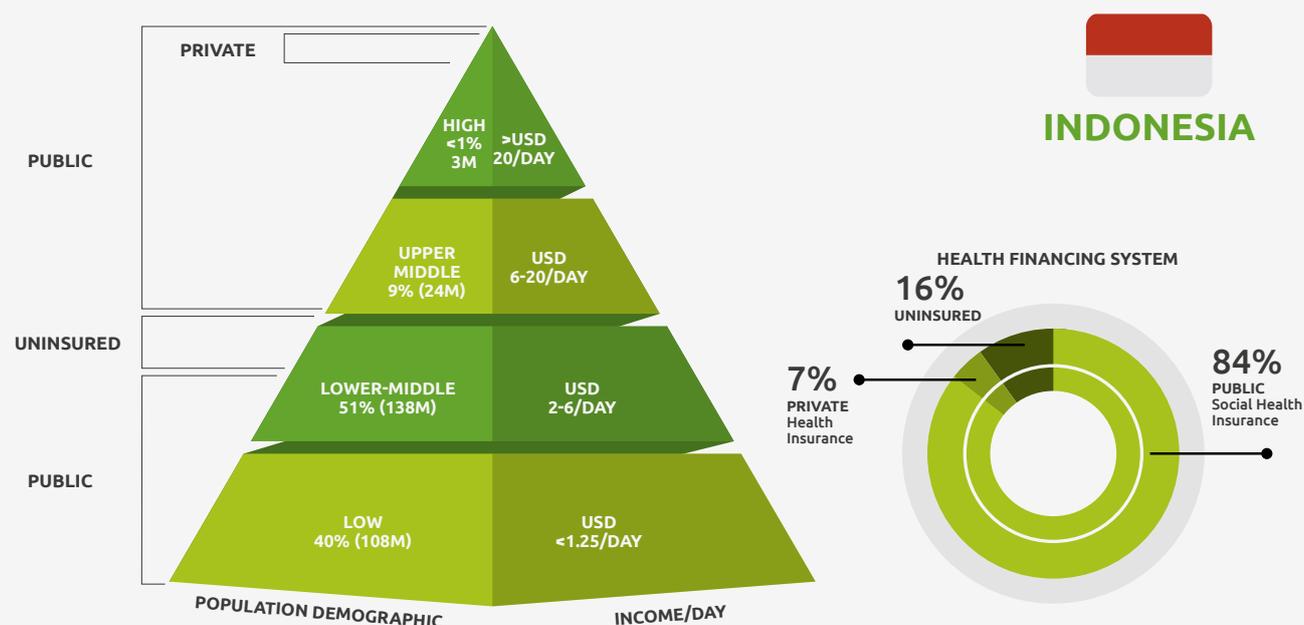
In the past 10 years, Indonesia has made considerable progress in improving access, quality and cost of its universal healthcare services to its population. This section examines Indonesia's progress, based on population coverage, service coverage and financial protection.

Assessing UHC access in Indonesia – Who is being covered?

Since its implementation in 2014, the JKN has been successful in obtaining a population coverage of 84% of the population as of 2019⁵².

Roughly 7% of the population is covered by private health insurance provided by private insurance providers⁵³, leaving about 16% of the population uninsured, who need to spend out of pocket on healthcare (see Figure 11 below)

Figure 11: Indonesia's health financing type by population segment and income



Sources: Medina, 2020; Trisnantoro, 2020.

JKN covers low-income populations as well as the majority of the middle-income populations. However, there is a substantial segment of the population that has not enrolled in JKN due to lack of awareness of the program or access to nearby health facilities⁵⁴. The unenrolled population tend to hail from the lower-middle income bracket, and often those who are employed informally.

While formal workers in the country are automatically enrolled in the scheme, informal workers must enroll themselves. Consequently, many do not realize that they are eligible for JKN or know how to enroll. Figure 11 illustrates the health financing mechanism for each population segment.

52 Trisnantoro, L. (2020, December 14). *Essential health services for all, a mission impossible?: Jakarta Post contributor, Asia News & Top Stories—The Straits Times*. <https://www.straitstimes.com/asia/essential-health-services-for-all-a-mission-impossible-jakarta-post-contributor>

53 Medina, A. F. (2020, July 30). *Indonesia's Healthcare Industry: Growing Opportunities for Foreign Investors. ASEAN Business News*. <https://www.aseanbriefing.com/news/indonesias-healthcare-industry-growing-opportunities-foreign-investors/>

54 Prabhakaran, S. et al. (2019). *Financial Sustainability of Indonesia's Jaminan Kesehatan Nasional: Performance, Prospects and Policy Options*. Washington, DC: Palladium, Health Policy Plus, and Jakarta, Indonesia: Tim Nasional Percepatan Penanggulangan Kemiskinan (TNP2K).

Assessing UHC quality and coverage in Indonesia – What is being covered?

While the JKN UHC covers secondary care, tertiary care, approved medicines, cancer, rare diseases, outpatient care, organ transplants, accidents and emergencies, the scheme does not provide coverage for drug rehabilitation and fertility treatments (see Table 2).

Table 2: Indonesia's JKN service coverage

SERVICE COVERAGE UNDER JKN	
Pre-Existing Diseases	✓
Secondary Care	✓
Tertiary Care	✓
Approved Medicines	✓
Cancer	✓
Rare Diseases	✓
Outpatient Care	✓
Drug Rehabilitation	✗
Organ Transplants	✓
Fertility Treatments	✗
Accidents	✓
Emergencies	✓

Though primary prevention interventions are not covered under the JKN, the country has established a unit at the directorate level to lead and manage noncommunicable disease prevention in the country. These programs include preventive efforts like awareness groups, early screening and detection of disease⁵⁵.

Overall, Indonesia has obtained a UHC Service Coverage Index score of 57 out of 100⁵⁶, falling behind its regional peers such as Malaysia, Thailand and Vietnam in essential service coverage.

When assessed against the three components of the coverage index, Indonesia scored 36 in infectious diseases, 64 in service capacity and access, and 59 in noncommunicable diseases. Infectious diseases control, treatment and prevention is an area where Indonesia lags significantly behind the other countries assessed, suggesting that more needs to be done to address the burden of infectious diseases in Indonesia.

Indonesia's service capacity and access score reveals that Indonesia faces supply-side constraints that has led to there being a great disparity in health workforce, facilities and equipment that leads to a lack of equality of access to health between regions. Rural and remote areas are heavily disadvantaged as they have fewer health facilities and workers, and struggle to retain them⁵⁷.

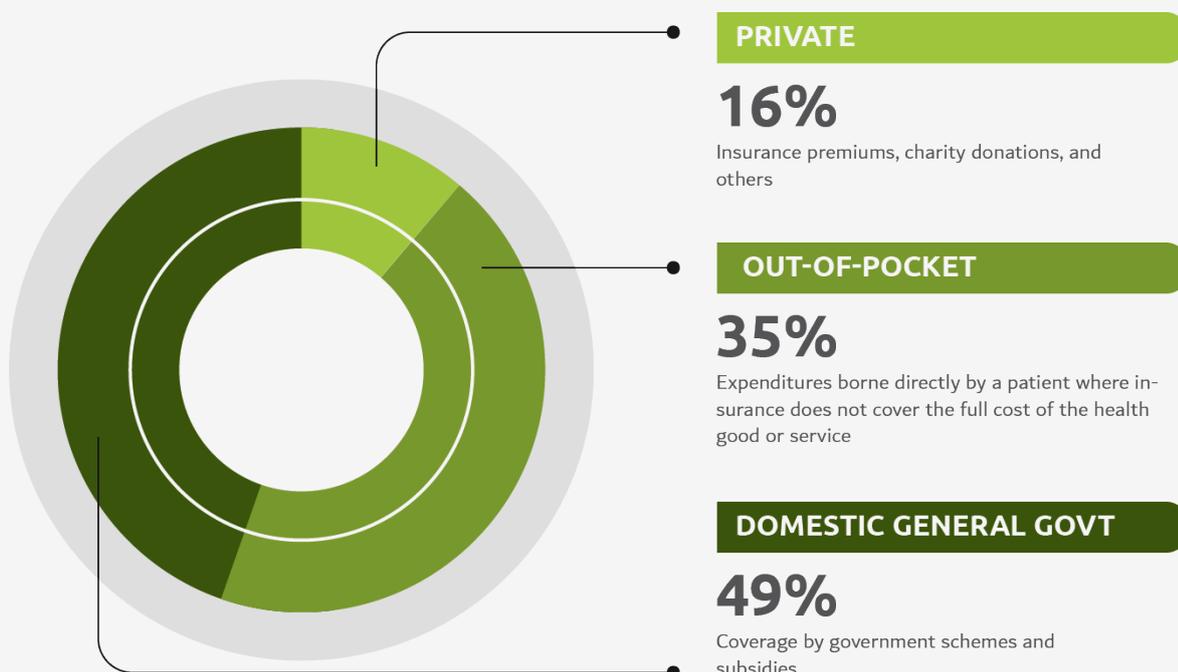
55 Mahendradhata Y, Trisnantoro L, Listyadewi S, Soewondo P, Marthias T, Harimurti P, & Prawira J. (2017). *The Republic of Indonesia Health System Review* (Health Systems in Transition, Vol-7 No.1). WHO Regional Office for South-East Asia; WHO IRIS. <https://apps.who.int/iris/handle/10665/254716>

56 WHO. (2020, October 13). *UHC Index of Service Coverage (SCI)*. Retrieved October 4, 2021 from <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage>.

57 Mahendradhata Y, Trisnantoro L, Listyadewi S, Soewondo P, Marthias T, Harimurti P, & Prawira J. (2017). *The Republic of Indonesia Health System Review* (Health Systems in Transition, Vol-7 No.1). WHO Regional Office for South-East Asia; WHO IRIS. <https://apps.who.int/iris/handle/10665/254716>

Assessing UHC financial protection in Indonesia – How much is being covered?

Figure 12: Financing of Indonesia's total current health expenditure



Sources: The World Bank, Out-of-pocket, 2021; The World Bank, Domestic general government, 2021; The World Bank, Domestic private health, 2021.

In the context of rising healthcare needs, Indonesia faces challenges with nominal health spending steadily increasing from 2009 to 2017 by 222%. As of 2018, the government contributes to 49% of the total amount of health expenditures, while the rest is covered by private financing, primarily in the form of out-of-pocket expenditures⁵⁸.

Indonesia's overall health protection gap is estimated to be \$82 billion⁵⁹, the second largest gap amongst the countries studied, and 1.7 times greater than the next most vulnerable country in this study – Malaysia.

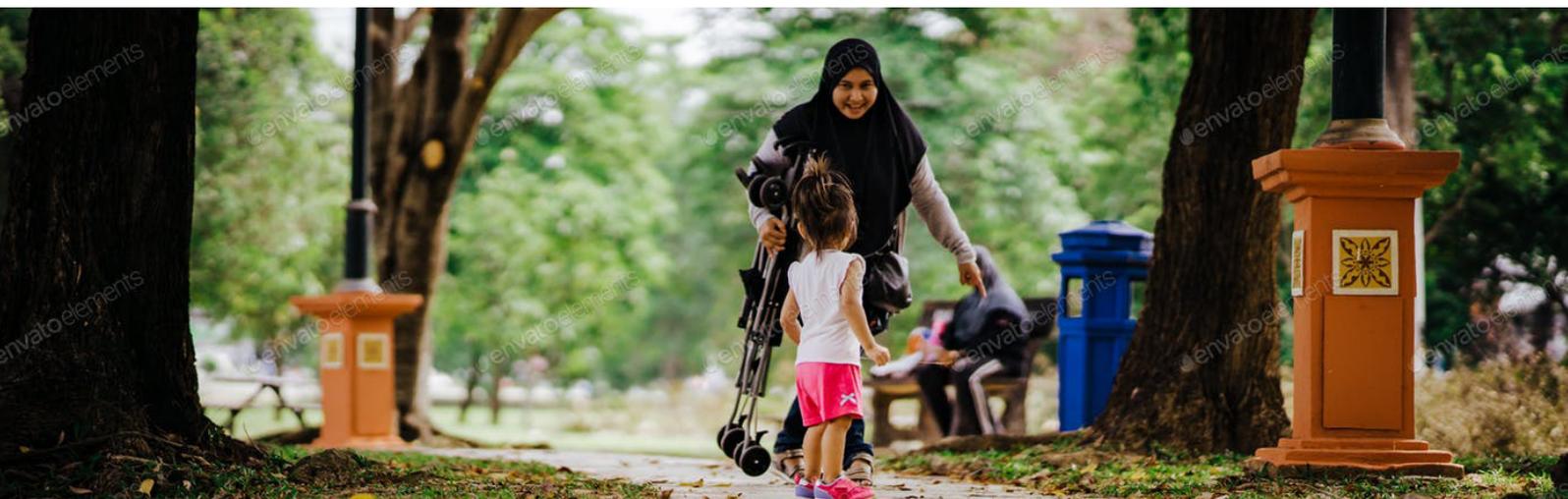
Indonesia has experienced a steady decrease in the OOP expenditure as a percentage of current health expenditure with a decrease from 42.5% in 2014 when the policy was launched to 35% in 2018⁶⁰. While Indonesia has made positive progress with the decreasing trend in OOP, its OOP expenditure is still significantly high when compared to the OECD average of about 20%⁶¹.

58 Mahendradhata Y, Trisnantoro L, Listyadewi S, Soewondo P, Marthias T, Harimurti P, & Prawira J. (2017). *The Republic of Indonesia Health System Review* (Health Systems in Transition, Vol-7 No.1). WHO Regional Office for South-East Asia; WHO IRIS. <https://apps.who.int/iris/handle/10665/254716>

59 Swiss Re (2018). *Asia's Health Protection Gap: Insights for Building Greater Resilience*. Retrieved October 4, 2021 from https://www.swissre.com/dam/jcr:05411fab-a11a-4537-b16f-baa77da564f9/Asia's+Health+Protection+Gap_Regional+Infographics.pdf.

60 World Bank, World Development Indicators. (2018). *Current health expenditure (% of GDP)* | Data. <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS>

61 OECD. (2017). *Out-of-pocket medical expenditure*. 92–93. https://doi.org/10.1787/health_glance-2017-26-en



Malaysia's UHC

Understanding Malaysia's Healthcare Context

Malaysia has a population of about 32.7 million people⁶². In the past 10 years, it has improved its life expectancy at birth from 74.68 years in 2011 to 76.15 in 2019, according to the World Bank Data⁶³.

The nation faces epidemiological shifts with decreasing incidence of communicable diseases and increasing incidence of noncommunicable diseases, particularly diabetes and hypertension. According to the National Health and Morbidity Survey 2019, an estimated 1 in 5 adults in Malaysia have diabetes, amounting to about 3.9 million people aged 18 years and above with diabetes. Moreover, 3 in 10 Malaysians, or 6.4 million Malaysians are estimated to have hypertension⁶⁴. The rising noncommunicable disease burden is accompanied by a rapidly aging population.

In 2014, noncommunicable diseases accounted for 67% of premature deaths in Malaysia, and over 70% of the burden of disease in 2014. With the population expected to age further, the share and burden of noncommunicable diseases is expected to rise⁶⁵.

Spending on health systems remains low at 2.2% of Malaysia's GDP despite an increase of MYR RM 2 billion (USD \$478.5 million) in the 2019 budget allocation⁶⁶. Similar to other countries in the region, the country's investment into healthcare in proportion to its GDP is much lower than the OECD average of 8.8%. Structurally, Malaysia's health system is divided among public and private sectors. Public sector health facilities provide 82% of all inpatient care and 35% of ambulatory care in the country.

62 Department of Statistics Malaysia. (2021, July 15). Current Population Estimates, Malaysia, 2021. Department of Statistics Malaysia. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemebycat&cat=155&bul_id=ZjjOSnpjR21sQWVUcUp6ODRudm5JZz09&menu_id=L0pheU43NWJwRWVSZklWdzQ4TIhUUT09.

63 The World Bank, World Development Indicators. *Life Expectancy at Birth, total (years)* – Malaysia. Retrieved October 26, 2021 from <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=MY>

64 National Institutes of Health. (2019). *National Health and Morbidity Survey 2019*. Selangor: Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia. https://iptk.moh.gov.my/images/technical_report/2020/4_Infographic_Booklet_NHMS_2019_-_English.pdf

65 Chandran, A. et al. (2021). Non-communicable Disease Surveillance in Malaysia: An Overview of Existing Systems and Priorities Going Forward. *Front Public Health* 9. doi: 10.3389/fpubh.2021.698741.

66 Yusof, T. A. (2019, May 13). Dr Dzulkefly: "Ensuring health for all." NST Online. <https://www.nst.com.my/news/nation/2019/05/487947/dr-dzulkefly-ensuring-health-all>.

The Malaysian government offers a comprehensive range of services – health promotion, disease prevention, curative and rehabilitative care services - delivered through public sector clinics and hospitals. Overall, the public sector-provided healthcare services are centrally administered by Ministry of Health, with Ministry of Higher Education and Ministry of Defense complementing the system with university teaching hospitals, and military hospitals and medical centers respectively⁶⁷.

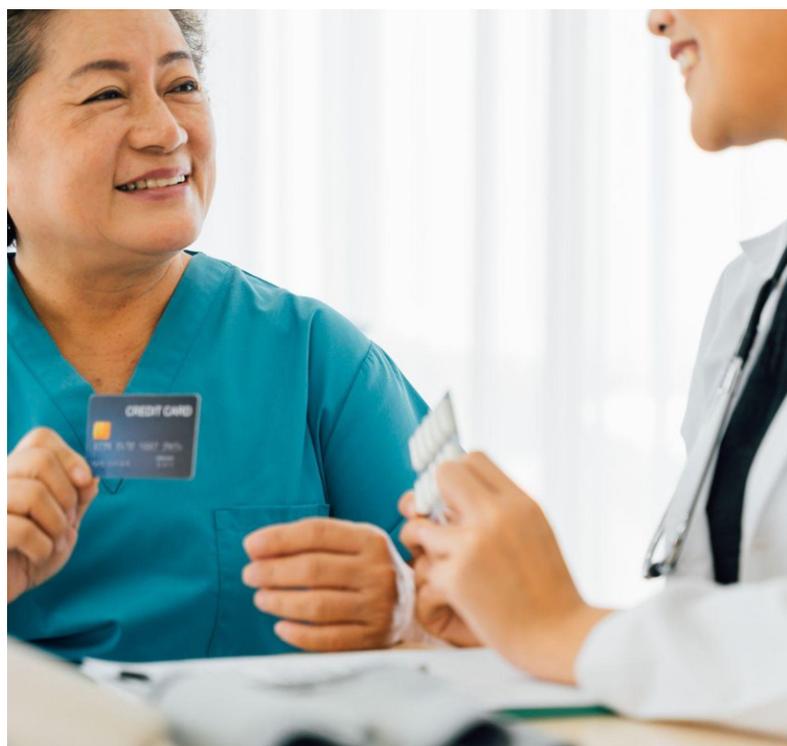
The country also faces supply issues with an insufficient number of clinicians and healthcare workforce to address growing healthcare demands in the 154 public hospitals⁶⁸ and 2,900 public primary care facilities⁶⁹ nationwide. Approximately 45% of registered doctors work in the public sector despite providing services to approximately 65% of the population. Moreover, while government hospitals have four times the number of admissions as private hospitals, they only spend 1.25 times more than their private counterparts.

Malaysia's Commitment to UHC

Malaysia demonstrated a commitment towards healthcare shortly after independence through its constitution. Article 5(1) of Part II (Art.5-13) of the Federal Constitution of Malaysia states that individuals cannot be deprived of their lives or personal liberty in accordance with the law. Thus, any individual in Malaysia who claims to be deprived of enjoying his or her life due to the lack of access to healthcare, can claim their right through the courts.

Funded through taxation, Malaysia has gradually expanded and transformed its healthcare system to meet the healthcare needs of Malaysians without posing financial hardship on citizens. The system of 154 public hospitals⁷⁰ and 2900 public primary care facilities receive their annual budget directly from the government. The MOH maintains a legislated fee schedule for all public sector health provision, which kept healthcare costs affordable to the general public despite significant increases in healthcare costs to the providers and the government.

Malaysia also adopts a dual-tiered system of healthcare services - government-led and funded public healthcare system co-existing with a privatized healthcare system, mainly reimbursed by private health insurance or out-of-pocket payments.



67 Jaafar, S., et al. (2013). Malaysia Health System Review. *Health Systems in Transition 3 (1)*. Geneva. World Health Organization. <https://apps.who.int/iris/rest/bitstreams/1246601/retrieve>.

68 Hirschmann, R. (2021, April 7). Number of public and private hospitals in Malaysia from 2013 to 2019. *Statista*. Retrieved October 26, 2021 from <https://www.statista.com/statistics/794860/number-of-public-and-private-hospitals-malaysia/>

69 Lum, M. (2019, February 5). The state of primary healthcare in Malaysia. *The Star*. Retrieved from <https://www.thestar.com.my/lifestyle/health/2019/02/05/the-state-of-primary-healthcare-in-malaysia>

70 Hirschmann, R. (2021, April 7). Number of public and private hospitals in Malaysia from 2013 to 2019. *Statista*. Retrieved October 26, 2021 from <https://www.statista.com/statistics/794860/number-of-public-and-private-hospitals-malaysia/>

Box 3: Malaysia's UHC – Tax-financed Public Healthcare System

With its longstanding commitment to through the provision of subsidized healthcare for all Malaysians, Malaysia implemented public healthcare scheme early in the 1990s. The success of the public healthcare scheme has set an expectation for high quality and affordable healthcare for all people.



TARGET GROUP

While the subsidized services at public healthcare facilities are available for all who use them, two recent schemes, mySalam and Peka B40, provide additional support for medical costs.

The mySalam scheme is a free takaful income assistance scheme by the government that targets individuals who are either aged between 18 to 65 and have a spouse, single individuals aged 40 to 65 with an income of lesser than MYR RM24,000 (USD \$5,742) per year or disabled individuals aged 18 to 65 with an income of less than MYR RM24,000 (USD \$5,742) per year.

The Peka B40 scheme is offered to Malaysian citizens in the bottom 40% household income range. To be eligible, they must be recipients of Livelihood Assistance (BSH). Individuals and their spouses also have to be above the age of 40 to enjoy the benefits of the scheme. They also must undergo a free health screening before gaining access to other benefits.



SCOPE OF BENEFIT

With 38% of hospitals (as of 2019) making up the highly subsidized public sector, Malaysians can enjoy affordable access to healthcare.

Recipients of mySalam are able to benefit from a one-time MYR RM8,000 (USD \$1,914) cash payout upon being diagnosed with one of the 40 critical illnesses. They can also benefit from a RM50 daily hospitalization income replacement that can be claimed up to a limit of MYR RM700 (USD \$167.5) per year at any government, military or university hospital.

Those under Peka B40 coverage receive four main benefits that include health screening assistance, medical equipment assistance, incentive for completing cancer treatment as well as transport cost incentives.



PARTICIPATION MODES

The subsidized rates at public facilities are available to all and require no special registration. For the mySalam scheme, those eligible will be notified by SMS. Those automatically eligible for the Peka B40 scheme will also be automatically enrolled and no special registration if required.



Malaysia finances its healthcare system to provide services at subsidized rates for all at public hospitals. The government makes the largest contribution in overall health financing with federal government revenues consisting of tax and non-tax sources that compromise 55% of total health expenditures.

Sources: Hirschmann, 2021; Kagan, 2021; Keng, et al., 2021; mySalam, 2021; Peka B40, 2021.

Malaysia's UHC progress

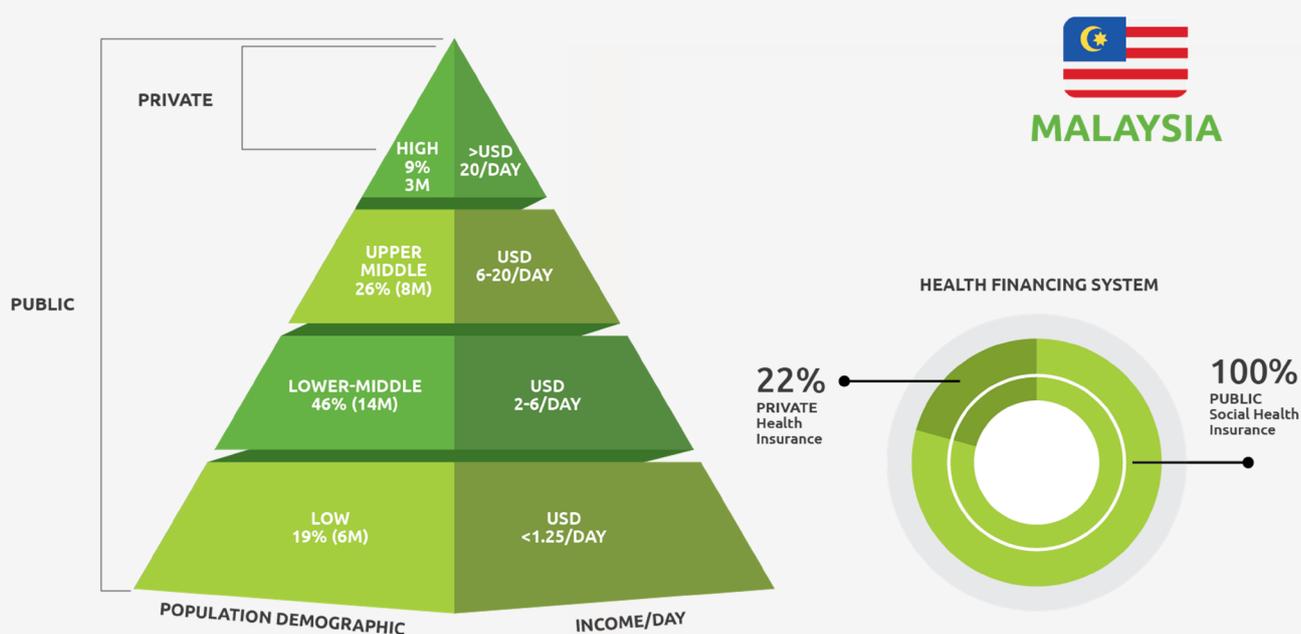
Malaysia has made considerable progress in improving healthcare services, as well as in expanding the coverage of its public healthcare schemes. This section examines Malaysia's progress, based on population coverage, service coverage and financial protection.

Assessing public healthcare access in Malaysia – Who is being covered?

Malaysia's health care system fully covers the resident Malaysian population through its taxation-based financing system. The system is further strengthened and complemented by initiatives such as **mySalam** and **Peka B40**⁷¹.

The entirety of the population is supported via tax-based financing, and in addition, 22% of the population are also covered by private, commercial health insurance plans. Under the assumption that every Malaysian has access to healthcare, there should be no citizens without financial protection against medically-incurred expenditures. It has also been successful in reaching out to low-income populations in rural areas and minority ethnic groups who often face difficulties in availing health care services. Figure 13 illustrates the health financing mechanism for each population segment.

Figure 13: Malaysia's health financing type by population segment and income



Sources: CodeBlue, 2020; Jaafar, et al., 2013; National Institutes of Health Ministry of Health Malaysia, 2020.

Despite having a robust and longstanding publicly financed health system, there are significant healthcare access disparities based on income status of the individual.

In Malaysia, private health sector services tend to provide a more comprehensive range of services and treatments and associated with higher real or perceived quality of care, with significantly shorter wait times.

71 Jaafar, S., et al. (2013). Malaysia Health System Review. *Health Systems in Transition 3 (1)*. Geneva. World Health Organization. <https://apps.who.int/iris/rest/bitstreams/1246601/retrieve>

CHAPTER 1: The principles and progress of Universal Health Coverage

The choice of a public or private, healthcare provider regardless of the severity of the condition, depends heavily on the socioeconomic status. The bottom 20% of the income segment chose government-funded healthcare services for the majority

of its services - 72.8% and 87.9% for mild and severe conditions respectively. In contrast, the top 20% of the income segment chose government-funded services for 25% and 51.6% for mild and severe cases respectively⁷².

“Any plans for UHC in Malaysia should be more ambitious. We are helping the B40 which is great, and the T20 or Top 20 can take care of themselves, which is also great. But the M40 are always going to be the sandwich class because they are too rich to qualify for aid but too poor to pay out-of-pocket expenses and pay for themselves in the private system. So, the sandwich problem will always exist and must be equally prioritized.”

- Dr Khor Swee Kheng - Independent Health Policies Specialist

Assessing public healthcare quality and coverage in Malaysia – What is being covered?

While the Malaysian health system covers pre-existing diseases, secondary care, tertiary care, approved medicines, cancer, rare diseases, outpatient care, accidents and emergencies, the scheme does not provide coverage for drug rehabilitation, organ transplants and fertility treatments (see Table 3).

Overall, Malaysia has obtained a UHC Service Coverage Index (SCI) score of 73⁷³ out of 100, ranking third out of the five countries in this study. When assessed against the components of the SCI, Malaysia excels in service capacity and access, scoring 89, but lags in its management of noncommunicable diseases and infectious diseases, scoring 62 and 68 respectively.

Table 3: Malaysia's public healthcare service coverage

SERVICE COVERAGE UNDER PUBLIC HEALTHCARE

Pre-Existing Diseases	✓
Secondary Care	✓
Tertiary Care	✓
Approved Medicines	✓
Cancer	✓
Rare Diseases	✓
Outpatient Care	✓
Drug Rehabilitation	✗
Organ Transplants	✗
Fertility Treatments	✗
Accidents	✓
Emergencies	✓

72 Khazanah Research Institute. (2020). Social Inequalities and Health in Malaysia: The State of Households 2020 Part III. http://www.krinstitute.org/assets/contentMS/img/template/editor/KRI%20-%20Full%20Report%20-%20Social%20Inequalities%20and%20Health%20in%20Malaysia_latest.pdf

73 WHO. (2020, October 13). *UHC Index of Service Coverage (SCI)*. Retrieved October 4, 2021 from <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage>

CHAPTER 1: The principles and progress of Universal Health Coverage

Recognizing that more needs to be done in the noncommunicable disease area, the MOH has issued national protocols for noncommunicable disease management in its clinics⁷⁴ as well as through their series of national strategic plans for noncommunicable diseases.

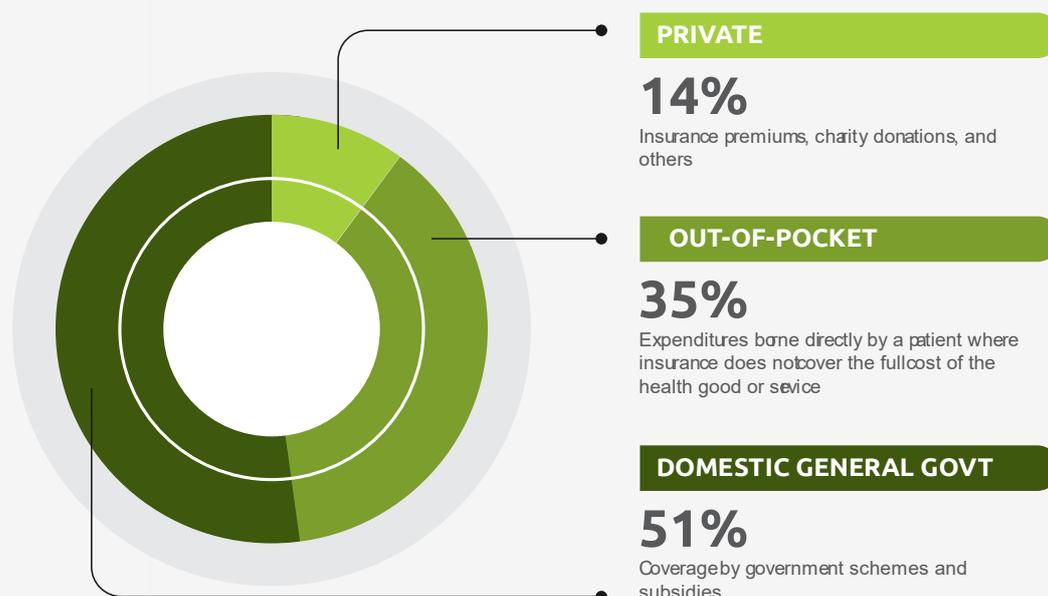
In the 2016-2025 plan, the nation has included objectives such as strengthening health systems to address the prevention and control of noncommunicable diseases through primary healthcare and public healthcare coverage⁷⁵.

Despite widespread coverage of public health services, the public systems and infrastructure in Malaysia are stretched,

leading to patients opting for faster and better services in the private sector. Not only are wait times longer in public facilities⁷⁶, but some treatments such as those for rare diseases and medical equipment are not fully subsidized by the public sector, which creates a significant financial burden on individuals. Acknowledging the high cost of treatment for rare diseases, Malaysia has formed a National Rare Disease Committee that oversees the implementation of the National Framework of Rare Diseases. Furthermore, as part of the Strategic Framework Medical Programme 2021-2025, holistic rare disease management program in Malaysia is featured as a key initiative⁷⁷.

Assessing public healthcare financial protection in Malaysia – How much is being covered?

Figure 14: Financing of Malaysia's total current health expenditure



Sources: The World Bank, Out-of-pocket, 2021; The World Bank, Domestic general government, 2021; The World Bank, Domestic private health, 2021.

74 Bloom, G. (2018, August 26). Full article: Service Delivery Transformation for UHC in Asia and the Pacific. <https://www.tandfonline.com/doi/full/10.1080/23288604.2018.1541498>

75 Department of Public Health Ministry of Health Malaysia. (2016). Medium Term Strategic Plan to Further Strengthen the NCD Prevention and Control Program in Malaysia (2016-2025). Putrajaya: Non-Communicable Disease (NCD) Section, Disease Control Division, Ministry of Health. https://extranet.who.int/nutrition/gina/sites/default/filesstore/MYS_2016_NSP%20NCD%202016-2025_0.pdf

76 Keng, Z., Saw, Y., Thung, S., Chong, W., Albert, A., Kariya, T., Yamamoto, E., & Hamajima, N. (2021). Rate of achievement of therapeutic outcomes and factors associated with control of non-communicable diseases in rural east Malaysia: Implications for policy and practice. *Scientific Reports*, 11. <https://doi.org/10.1038/s41598-021-83168-2>

77 MOH Malaysia. (2020). *Strategic Framework of the Medical Programme Ministry of Health Malaysia 2021-2025*. Retrieved from https://www.moh.gov.my/moh/resources/Pelan_Strategik_KKM.pdf

CHAPTER 1: The principles and progress of Universal Health Coverage

Overall, 49% of total health expenditures was incurred by private entities that include components such as private insurers and out-of-pocket expenses while 51% of expenditure was borne by the government. Malaysia's government has prioritized access and affordability of healthcare services such that revenues collected from patients only amounted to about 3-5% of the MOH's annual budget allocated for healthcare service provision (see Figure 14).

The health protection gap in Malaysia is estimated to be at USD \$47 billion, the third largest gap amongst the countries studied, and 1.3 times greater than Vietnam, the next most vulnerable country in this study. In recent decades, an increasing number of Malaysian are accessing healthcare services through the private sector, leading to higher levels of OOP expenses at 35.1% in 2018, compared to 32.5% in 2009⁷⁸.

78 World Bank. (2018). *Current health expenditure (% of GDP)* | Data. <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS>



Thailand's UHC

Understanding Thailand's Healthcare Context

Thailand has a total population nearing 70 million people⁷⁹. Thailand has made good overall progress in health outcome indicators. The life expectancy from birth in Thailand rose in the past 10 years, from 74.6 in 2011, to 77.1 in 2019⁸⁰ while infant mortality/child mortality stands at 7.7 per 1000 live births in 2019, steadily declining from 11.2 in 2011.

Thailand now faces a fast-ageing population as the World Bank's estimates that over 25% of Thailand's population will be 65 years or older by 2040. With the elderly being more susceptible to developing chronic and critical diseases, these demographic changes will further increase the prevalence of noncommunicable diseases in Thailand. Noncommunicable diseases, such as cardiovascular diseases and cancers, are the most common causes of death in

Thailand, accounting for 23% and 18% of mortality respectively⁸¹. An increasingly aging population coupled with a decrease in the proportion of the working population has led to greater pressure on Thailand's economy and public welfare systems. The Thailand Development Research Institute estimates that Thailand's aging population could push healthcare costs to THB ฿1.4 trillion (USD \$41.770 million) per year within the next 15 years⁸².

Thailand spends approximately 3.8% of its GDP on healthcare, lower than the 8.8% OECD average⁸³. The Ministry of Public Health (MOPH) is the main government body responsible for disease control and prevention, health promotion, treatment and rehabilitation. Government Provincial Health offices (PHO) oversee regional and general and district hospitals.

79 The World Bank, World Development Indicators. (2021). *Population, total – Thailand*. Retrieved October 26, 2021 from <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=TH>

80 The World Bank, World Development Indicators. (2021). *Life expectancy at birth, total (years) – Thailand*. <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=TH>

81 AstraZeneca. (2021). Thailand. *Young Health Programme*. Retrieved from <https://www.younghealthprogrammeyhp.com/programmes/thailand.html>

82 Chan, A. (2021, March 8). The Challenges of Thailand's Public Healthcare System in 2021. *Pacific Prime Thailand's Blog*. <https://www.pacificprime.co.th/blog/the-challenges-of-thailands-public-healthcare-system/>

83 Manakitsomboon, H. (2021). Health expenditure as a share of gross domestic product in Thailand 2007 to 2018. *Statista*. Retrieved October 26, 2021 from <https://www.statista.com/statistics/780865/health-expenditure-share-of-gdp-thailand/>

Following the reforms of 1975, the MOPH has a long history of decentralization of implementation, and de-concentration of health management.

Thailand's Commitment to UHC

Thailand's commitment to healthcare is enshrined in Section 47 of the Thai Constitution which grants to citizens the right to access public health services provided by the state wherein people in impoverished settings should be able to attain access to preventative and curative health services free of charge. The government's explicit role in healthcare is also stated in section 71 that reinforces the state's obligation to promote population health while section 258(g)(5) confers responsibility upon the government to establish a primary health care system with an adequate number of family physicians⁸⁴.

Launched in 2002, Thailand's universal health coverage scheme is deemed to be one of the best models in the world to provide comprehensive affordable healthcare for all people⁸⁵. Thailand has continually demonstrated its commitment to UHC despite significant political and economic turbulence since its inception in the aftermath of the 1997 Asian financial crisis⁸⁶. Despite a decade-long political instability in Thailand – comprising of a military coup in 2006, dissolution of the then ruling party government in 2018, a military crackdown in 2010, political succession of a pro-army party in 2019, and continued protests in 2020 – achieving UHC had always been a longstanding commitment to Thai citizens by the respective governments.

84 Bosch, S. (2019). Legal access rights to health care. Switzerland: World Health Organization. <https://apps.who.int/iris/rest/bitstreams/1273535/retrieve>

85 Wangkiat, P. (2019, December 9). "Populist" UHC now a feather in Thailand's cap. <https://www.bangkokpost.com/opinion/opinion/1811469/populist-uhc-now-a-feather-in-thailands-cap>

86 Sumriddetchkajorn, K., Shimazaki, K., Ono, T., Kusaba, T., Sato, K., & Kobayashi, N. (2019). Universal health coverage and primary care, Thailand. *Bulletin of the World Health Organization*, 97(6), 415–422. <https://doi.org/10.2471/BLT.18.223693>

Box 4: Thailand's UHC – Three social health insurance schemes

Introduced in 2002, Thailand's system of Universal Health Coverage entails three public health insurance schemes that serve to cover the whole population: 1) the Civil Servant Medical Benefit Scheme (CSMBS), 2) the Social Security Scheme (SSS), and 3) as well as the Universal Coverage Scheme (UCS).



TARGET GROUP

The three insurance schemes, covering different target population, encompass the entire country's residents. The CSMBS is targeted at public sector employees and their dependents, the SSS is targeted to private sector employees and the UCS is targeted to the rest of the population.



PARTICIPATION MODES

Thai nationals who are not covered by the CSMBS or SSS schemes are eligible for automatic enrollment into the UCS scheme. Individuals in Bangkok can register at district offices while citizens outside of Bangkok can register at health centers, public hospitals or provincial health offices. The UCS works with CSMBS and SSS by identifying the remaining population that are eligible UCS beneficiaries on the basis of the civil registration system, the house registration system as well as the national identification number.



HEALTH FINANCING MODES

While general tax revenue is used to finance the CSMBS and the UCS, the SSS is funded by tripartite payroll contributions from government, employers and employees, each contributing 1.5% of payroll, amounting to a total of 4.5%. As of 2016, the costs of the insurance schemes were at 15,000 Baht (USD \$448) per capita for the CSMBS, 2,500 Baht (USD \$75) per capita for the SSS and 3,344 Baht (USD \$100) per capita for the UCS.



SCOPE OF BENEFIT

The CSMBS allows individuals the free choice of public providers. It also extends to individuals the choice of private providers in the case of some services, such as emergency and elective surgeries. The SSS allows for the annual choice of public and private hospitals, with more than 100 beds, as main healthcare providers. Under the UCS, individuals are given the choice of mostly public primary-care based providers with referral systems to other facilities that are mostly public.

In terms of benefits provided under each scheme, the government has standardized the benefit packages between the 3 schemes in order to prevent the gaps of inequity across different schemes observed in the past.

Sources: Hanvoravongchai, 2013; Tangcharoensathien, et al., 2012; Thaiprayoon and Wibulpolpraset, 2017.

Thailand's UHC progress

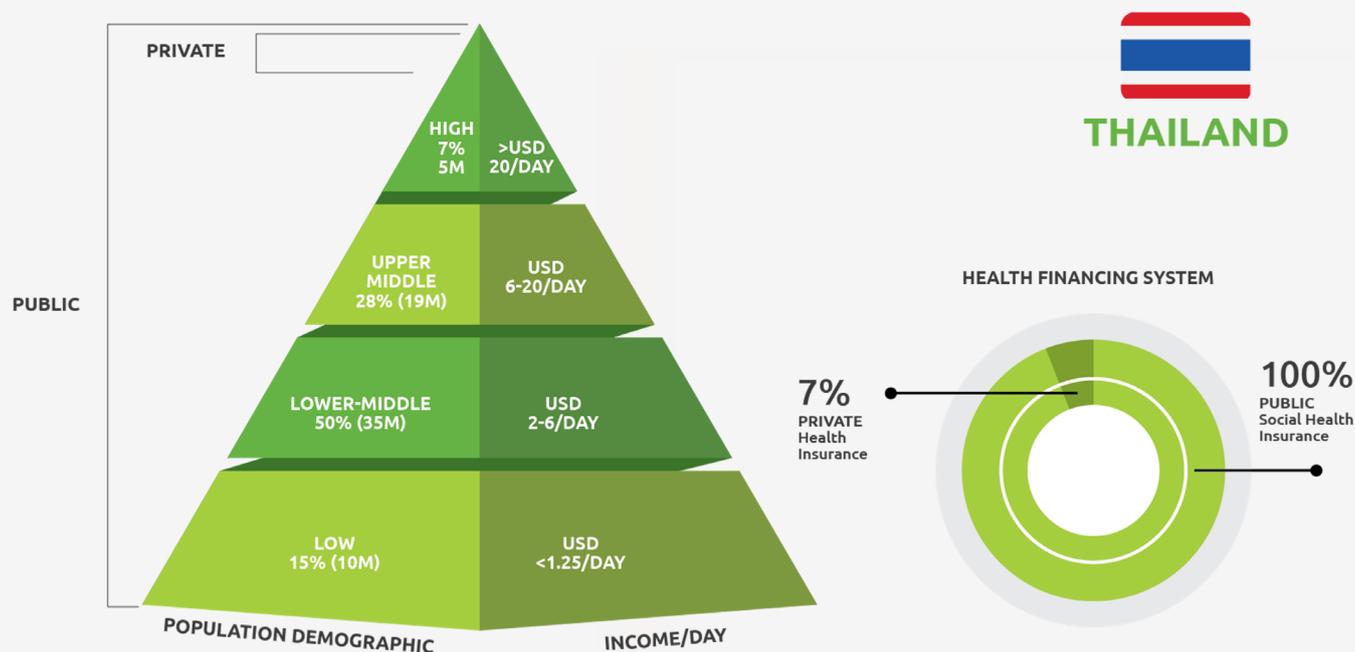
Thailand has one of the most developed universal healthcare systems in the region. This section further examines these developments through examination of population and service coverage, as well as financial protection of citizens.

Assessing UHC access in Thailand – Who is being covered

Thailand's set of three UHC schemes is configured such that no Thai citizen is left uninsured. The lowest and lower-middle income populations have access to extensive services without making financial contributions through compulsory premiums.

The UCS scheme covers the majority of the population, including the low, lower-middle, and parts of the upper-middle income groups. While parts of the upper-middle and high-income populations are covered under the Civil Servant Scheme (CSS) and Social Security Scheme (SSS), 7% opt for private health insurance⁸⁷. Overall, Thailand has reached a coverage of 100% percent of the population through the UCS, CSS and SSS⁸⁸. Figure 15 illustrates the health financing mechanism for each population segment.

Figure 15: Thailand's health financing type by population segment and income



Sources: Jongudomsuk, 2015; National Statistics Office, Ministry of Digital Economy and Society, 2018; Tangcharoensathien, 2007.

Assessing UHC quality and coverage in Thailand – What is being covered?

Thailand's UHC schemes cover a wide range of services including pre-existing diseases, secondary care, tertiary care, approved medicines, cancer, rare diseases, outpatient care, drug rehabilitation, organ transplants, fertility treatments, accidents, and emergencies (See Table 4).

87 Axelson, H., & Goursat, M. (2019). A review of country experiences to inform Viet Nam's revision of the Health Insurance Law [Ebook]. ILO. Retrieved 17 June 2021, from http://ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-hanoi/documents/publication/wcms_724963.pdf.

88 Tangcharoensathien, V., Tisayaticom, K., Suphanchaimat, R., Vongmongkol, V., Viriyathorn, S., & Limwattananon, S. (2020, September 21). *Financial risk protection of Thailand's universal health coverage: Results from series of national household surveys between 1996 and 2015* | *International Journal for Equity in Health* | Full Text. International Journal for Equity. <https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-020-01273-6>

CHAPTER 1: The principles and progress of Universal Health Coverage

Overall, Thailand has obtained a UHC Service Coverage Index score (SCI) of 80 out of 100 – the highest score amongst countries in this study⁸⁹. Thailand scored 74 in the infectious diseases component, as well as 88 in service capacity and access, and 69 in noncommunicable diseases respectively. This further highlights challenges Thailand faces from the burden brought on by noncommunicable diseases.

This includes expansion of noncommunicable disease research capabilities⁹⁰, as well as a general, multi-sectoral approach in education, finances, information and communications, and others. Some examples of such measures include featuring of noncommunicable diseases and their causes in education curricula, fiscal incentives, mass information campaigns, and others.

Table 4: Thailand's social health insurance service coverage

SERVICE COVERAGE UNDER SHI

Pre-Existing Diseases	✓
Secondary Care	✓
Tertiary Care	✓
Approved Medicines	✓
Cancer	✓
Rare Diseases	✓
Outpatient Care	✓
Drug Rehabilitation	✓
Organ Transplants	✓
Fertility Treatments	✓
Accidents	✓
Emergencies	✓

Thailand has undertaken a range of measures to address the shortfalls of its essential healthcare coverage, identified by the components of the SCI index.

These measures are shown to have an impact on reduction of the noncommunicable disease prevalence⁹¹, yet little is done to improve healthcare coverage of these conditions from the supply side. Many lower-income Thais, especially from poorer regions had less opportunities for their noncommunicable diseases to be diagnosed and treated. This also exacerbates vulnerability of certain groups such as urban refugees and asylum seekers⁹².

Despite high levels of population and service coverage, there are still significant inequities in healthcare capacity and quality of services between urban and rural areas, between genders, and age groups⁹³. To address the issue of insufficient capacity and quality, the government undertook multiple measures to raise capacity and quality of the healthcare provided, investing significant amounts in timely care, training and facilities. However, the effectiveness of such investments are yet to be realized⁹⁴.

89 WHO. (2020, October 13). *UHC Index of Service Coverage (SCI)*. Retrieved October 4, 2021 from <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage>.

90 Potempa, K. (2019). Impact of using a broad-based multi-institutional approach to build capacity for non-communicable disease research in Thailand. *Health Research Policy and Systems* 17 (62). <https://doi.org/10.1186/s12961-019-0464-8>

91 UNDP. (2020). Multi-Sectoral Approaches to NCDs in Thailand. *UNDP.org*. Retrieved from <https://www.undp.org/publications/multi-sectoral-approaches-ncds-thailand#modal-publication-download>

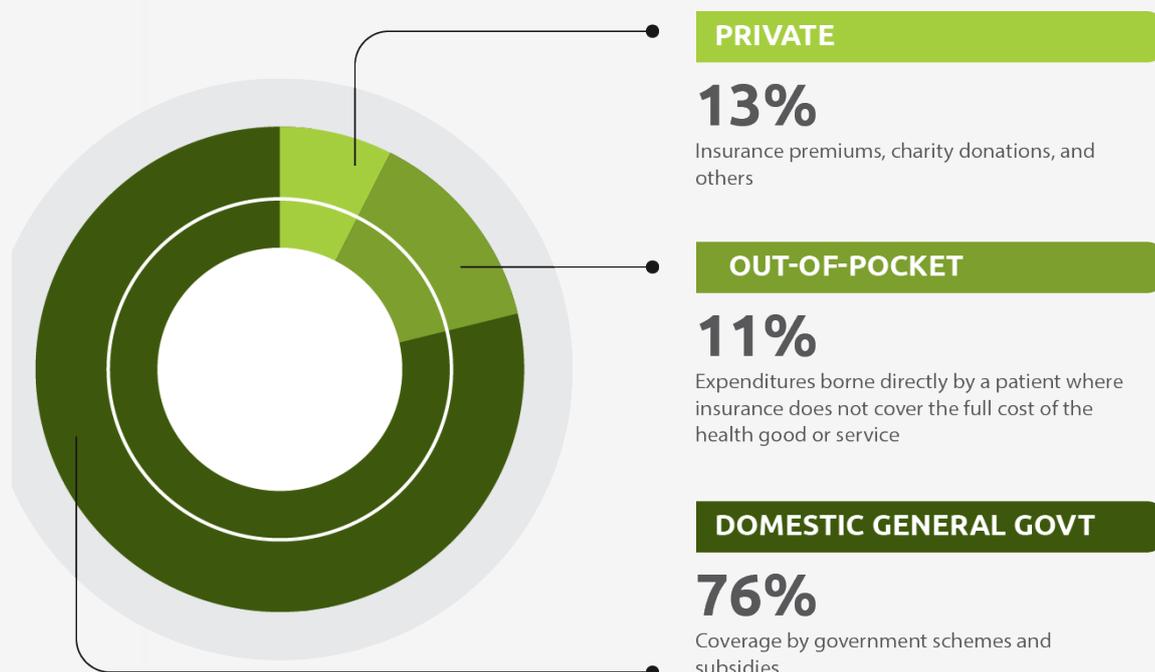
92 Phaiyaron, M. et al. (2021). Access to Non-Communicable Disease (NCD) Services Among Urban Refugees and Asylum Seekers, Relative to the Thai Population, 2019: A Case Study in Bangkok, Thailand. *Risk Manag Health Policy*. <https://doi.org/10.2147/RMHP.S314090>

93 Chandoeuwit, W., Phatchana, P. (2019, March 27). Addressing the male-biased gender health gap. *Bangkok Post*. Retrieved from <https://www.bangkokpost.com/opinion/opinion/1651764/addressing-the-male-biased-gender-health-gap>

94 Sasiwongsaroj, K., Burasit, Y. (2019, April). Managing Thailand's Ageing Population. *Think-Asia*. Retrieved from <https://think-asia.org/handle/11540/9989>.

Assess UHC financial protection in Thailand– How much is being covered?

Figure 16: Financing of Thailand's total current health expenditure



Sources: The World Bank, Out-of-pocket, 2021; The World Bank, Domestic general government, 2021; The World Bank, Domestic private health, 2021.

Thailand's healthcare financing distribution is shown in Figure 16. Twenty-four percent of total health expenditure was incurred by private entities that include components such as private insurers and out-of-pocket expenses while 76% of expenditure was borne by the government. Thailand also spends a low percentage of the GDP of 3.79% dedicated to healthcare compared to the OECD average of 8.8%⁹⁵ and global average of 9.84%⁹⁶.

Through the implementation of UHC, Thailand has managed to achieve an OOP expenditure of 11% of all health costs⁹⁷ compared to 35% OOP health expenditures in 2000. While Thailand demonstrates a significant level of UHC coverage, the total health protection gap is estimated to be at USD \$6 billion⁹⁸. Compared to the other countries in this study, Thailand has the narrowest gap to overcome and has largely succeeded in preventing citizens from incurring catastrophic healthcare expenditures.

95 OECD. (2020). *OECD Health Statistics 2020—OECD*. <https://www.oecd.org/els/health-systems/health-data.htm>

96 World Bank. (2018). *Current health expenditure (% of GDP) | Data*. <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS>

97 Ibid.

98 Swiss Re (2018). *Asia's Health Protection Gap: Insights for Building Greater Resilience*. Retrieved October 4, 2021 from https://www.swissre.com/dam/jcr:05411fab-a11a-4537-b16f-baa77da564f9/Asia's+Health+Protection+Gap_Regional+Infographics.pdf



Vietnam's UHC

Understanding Vietnam's Healthcare Context

Vietnam has a population of approximately 97.3 million people and is one of the fastest-growing economies in Southeast Asia. The life expectancy in Vietnam is at 75.4 years in 2019⁹⁹.

While Vietnam's health system has delivered good population health outcomes in recent years, it faces a rising noncommunicable disease burden and the needs of an aging population. Noncommunicable diseases are estimated to account for 77% of all deaths in Vietnam¹⁰⁰. There has also been an increase in risk factors observed as the percentage of adults that were overweight and obese increased from 2.3% in 1993 to 15% in 2015, while those with hypertension increased from 15% in 2002 to 20% in 2015¹⁰¹.

Vietnam spends approximately 5.9% of its GDP on healthcare expenditures compared to the global average of 8.8%¹⁰². Being partly de-centralized, Vietnam's healthcare system is comprised out of four administrative levels, including central, provincial, district and commune. The Ministry of Health manages all levels of care, however people's committees on provincial, district and commune levels are responsible for allocation of finance and human resources. Provincial and district health departments are responsible for professional competence under the Ministry of Health¹⁰³.

The Vietnam public sector facilities face significant supply side challenges with a shortage of medical staff, obsolete equipment for surgery and in intensive care units and overcrowding and long wait times for patients¹⁰⁴.

99 The World Bank, World Development Indicators. (2021). Life expectancy at birth, total (years) – Vietnam. Retrieved October 26, 2021 from <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=VN>

100 World Health Organization. (2018). Noncommunicable Diseases Country Profiles. *World Health Organization*. https://www.who.int/nmh/countries/vnm_en.pdf?ua=1.

101 Nguyen, T. T., & Hoang, M. V. (2018). Non-communicable diseases, food and nutrition in Vietnam from 1975 to 2015: The burden and national response. *Asia Pacific Journal of Clinical Nutrition*, 27(1), 19–28. <https://doi.org/10.6133/apjcn.032017.13>

102 OECD. (2020). *OECD Health Statistics 2020—OECD*. <https://www.oecd.org/els/health-systems/health-data.htm>

103 Le, D.C. et al. (2010). Health Care System in Vietnam: Current Situation and Challenges. *Asian Pacific Journal of Disease* 4. DOI:10.7223/apjdm.4.23

104 Das, K. (2018, September 14). Vietnam: Growing Demand for Healthcare Services. *Vietnam Briefing*. Retrieved from <https://www.vietnam-briefing.com/news/vietnam-growing-demand-healthcare-services.html/>

Although introduction of more efficient digital data management tools in hospitals were shown to improve the bandwidth of hospitals, the extent of deployment of such tools is still limited to the capital Ho Chi Minh city.

Vietnam's Commitment to UHC

Vietnam has expressed its commitment to healthcare in its Constitution and party documents¹⁰⁵. Article 38 of the Constitution of the Socialist Republic of Vietnam details the equal right of every citizen to the provision of healthcare and protection. Additionally, Article 58 mandates the State's responsibility to develop the protection and care of people's health, exercise health insurance for the entire population, as well as prioritize healthcare for certain groups¹⁰⁶.

The UHC scheme of social health insurance (SHI) in Vietnam is managed by the Vietnam Social Security (VSS), a government agency that manages the social insurance and health insurance fund and collects contributions from employees and employers. The SHI comprises of three sub-schemes, the compulsory SHI, the voluntary SHI and SHI for the poor.

Compulsory participation applies to all public sector employees (active and retired), as well as salaried workers in the private sectors. The voluntary SHI group consist largely non-poor informal sector workers, such as individuals engaged in the agriculture, forestry, and fisheries sector¹⁰⁷. Finally, the lowest income members amongst the population are under the "SHI for the poor" scheme.

Vietnam's current focus on subsidized healthcare for low income populations stems from past challenges. In the late 1980s, policy shifts regarding the healthcare system attributed to Vietnam's renovation policy, commonly known as "Doi Moi", led to the liberalization and privatization of the healthcare and pharmaceutical markets. Consequently, out-of-pocket (OOP) payments significantly increased by the early 1990s, comprising 70% of health financing. In response, the government issued policies to expand healthcare coverage, with special attention to the poor and other vulnerable groups, through the 1990s and 2000s. These initiatives included a series of voluntary non-private health insurance schemes that were piloted between 1989 and 2002¹⁰⁸.

105 Ministry of Health Vietnam. (2016). Social Health Insurance Scheme in Vietnam Achievements and Challenges [Ebook]. Ministry of Finance Japan. Retrieved 16 June 2021, from https://www.mof.go.jp/pri/research/seminar/fy2016/tff2016_s1_04.pdf.

106 Nguyen, S. (2013). Final Constitution of the Republic of Vietnam [Ebook]. Socialist Republic of Vietnam. Retrieved 16 June 2021, from <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/94490/114946/F114201808/VNM94490%20Eng.pdf>.

107 Nguyen, L.H., Hoang, A.T.D. (2017). Willingness to Pay for Social Health Insurance in Central Vietnam. *Front Public Health* 5 (89). doi: 10.3389/fpubh.2017.00089

108 Somanathan, A. et al. (2014) Moving toward Universal Coverage of Social Health Insurance in Vietnam: Assessment and Options. *Directions in Development – Human Development*. <https://doi.org/10.1596/978-1-4648-0261-4>

Box 5: Vietnam's UHC – Social health insurance scheme

Since the 1990s, Vietnam's UHC has undergone a series of stages towards expansion of benefits and financial protection. Stages 1 to 3 laid the foundation for both the compulsory and voluntary schemes, benefit package and co-payment mechanism. The final two stages (Stage 4 and Stage 5) were the most significant for UHC. During stage 4, (2008 to 2014) Vietnam enacted the Health Insurance Law, which led to the creation of the Social Health Insurance (SHI) program. The final stage (stage 5) began in 2014, with the amendment of the first Health Insurance Law, to reclassify the eligibility categories, eliminate the voluntary scheme, and schedule premium increases.



TARGET GROUP

Vietnam's Social Health Insurance scheme targets all Vietnamese citizens as participation in the social health insurance scheme became mandatory through Vietnam's 2008 Health Insurance Laws well as the law's amendment in 2014.



PARTICIPATION MODES

While all citizens are eligible, enrollment into the social health insurance depends on the target subgroup. Social health insurance enrollment is mandatory for all active and retired civil servants and pensioners, with voluntary enrollment for individuals in non-poor, informal sectors (such as workers in agriculture, forestry, and fisheries sector). The poorest members of the population receive their own set of subsidized coverage and are mandated to enroll into the scheme.



HEALTH FINANCING MODES

The SHI covers all participants and charges all participants varying premium rates, according to the scheme that they are enrolled in. Private households are responsible for paying their premiums under this single-payer system, with the aid of a varying level of government subsidies according to the participant's economic status.

Premiums are mandatory for all except for the poor, children below six, the elderly above 80 years old, war veterans and people under other social protection schemes; these groups receive full government subsidies. Certain groups such as students or agriculture workers get subsidized rates. Additionally, households where all members are enrolled are entitled to premium discounts.

Co-payment is characteristic to the system but is mostly kept low for poorer members of society like pensioners and near poor at around 5%. Co-payments and premiums are exempted for the poorest members of the population, as well as children under 6 and special groups such as people with merit (e.g. military personnel)

The rest of the insured population typically are co-payments of 20% of their healthcare bill.



SCOPE OF BENEFIT

Enrolled participants are entitled to medical examinations and treatments. These treatments can include cancer treatments, rehabilitation, prenatal care and delivery, screenings, transportation for travel from the district level facilities to higher levels of health care for vulnerable groups or when inpatient treatment requires higher-level technical and professional services.

Sources: Le, et al., 220; Cheng, 2014.

Vietnam's UHC progress

Since its inception in 2014, SHI in Vietnam has made significant strides towards UHC. In this section, we assess Vietnam's progress, based on population coverage, service coverage and financial protection.

Assessing UHC access in Vietnam – Who is being covered?

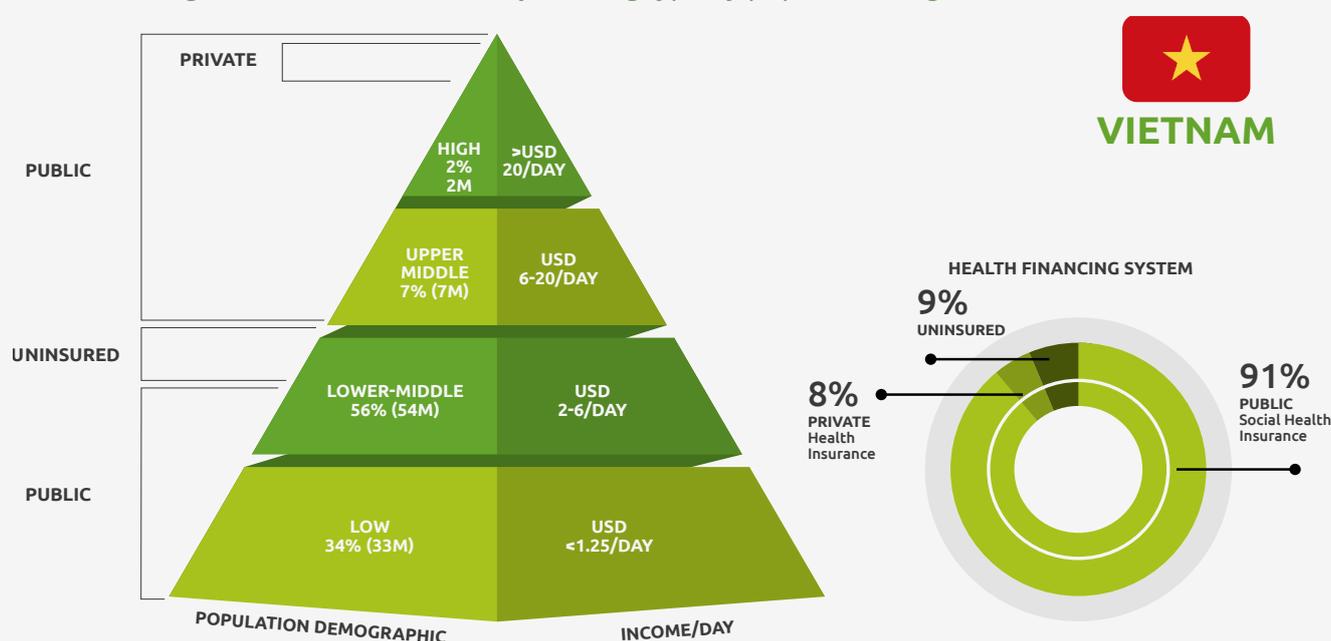
Vietnam has seen remarkable success with a rapid increase in enrollment rates as well as the emergence of the single-payer design of the Social Health Insurance (SHI) system. By 2011, SHI coverage reached 64.8%¹⁰⁹ further increasing to 90.8%, as of 2020¹¹⁰. Currently, the majority of low, middle class, and high-income Vietnamese are enrolled in the SHI. However, 9% of the population remain uninsured.

This segment likely hail from lower income and informally employed segments of society. On the other end of the income spectrum, approximately 8% of the population¹¹¹, opt for private health insurance.

“For the middle class, many of those who have national health insurance tend not to use it frequently, as they wish to demand higher quality of care and service. So, they buy the supplemental private insurance instead.”

- Ms Tran Thi Van Ann, Insurer (Director, Health & Benefits Division, BaoViet Insurance)

Figure 17: Vietnam's health financing type by population segment and income



Sources: Oanh, Phuong & Tuan, 2021; Prudential Vietnam, n.d.

109 Ibid.

110 Oanh, T., Phuong, N., & Tuan, K. (2021). Sustainability and Resilience in the Vietnamese Health System [Ebook]. Health Strategy and Policy Institute, Vietnam. Retrieved 17 June 2021, from http://www3.weforum.org/docs/WEF_PHSSR_Vietnam_Report.pdf.

111 Prudential Vietnam. (n.d.). Google Translate. Retrieved June 17, 2021, from <https://translate.google.com/translate?hl=en&sl=vi&tl=en&u=https%3A%2F%2Fwww.prudential.com.vn%2Fvi%2Fblog-nhip-song-khoe%2Fbao-hiem-nhan-tho-bao-hiem-y-te-khac-nhau-nhu-the-nao%2Findex.html&prev=search>

Currently, Vietnam’s health system is oriented towards provision of tertiary care. While there have been efforts to ensure a standardized quality of care provided, the commune (local community)¹¹² health stations at the grassroots levels in the rural areas¹¹³ often fall short of the knowledge and services for basic treatment and management of noncommunicable diseases¹¹⁴. With limited knowledge and capacity at the primary level, patients are more likely to access noncommunicable disease services at higher-level hospital where they can incur higher co-payments as well as inconvenience.



Assessing UHC quality and coverage in Vietnam – What is being covered?

Table 5: Vietnam’s social health insurance service coverage

SERVICE COVERAGE UNDER SHI	
Pre-Existing Diseases	✓
Secondary Care	✓
Tertiary Care	✓
Approved Medicines	✓
Cancer	✓
Rare Diseases	✗
Outpatient Care	✗
Drug Rehabilitation	✗
Organ Transplants	✗
Fertility Treatments	✗
Accidents	✓
Emergencies	✓

While Vietnam’s SHI covers pre-existing diseases, secondary care, tertiary care, approved medicines, cancer, accidents and emergencies, the scheme does not provide coverage for rare diseases, outpatient care, drug rehabilitation, organ transplants and fertility treatments, (See Table 5). Many of these services, especially those related to rare diseases¹¹⁵, incur high costs which presents another significant coverage gap even for those enrolled.

112 Nguyen, T.H. et al. (2020). Primary care quality in Vietnam: Perceptions and opinions of primary care physicians in commune health centers – a mixed-methods study. *PLoS ONE* 15 (10). <https://doi.org/10.1371/journal.pone.0241311>

113 Luong, H. V. (2019, April 8). *Strengthening Commune Health Centers in Vietnam* | *Atlantic Philanthropies*. The Atlantic Philanthropies. <https://www.atlanticphilanthropies.org/research-reports/strengthening-commune-health-centers-in-vietnam>

114 The World Bank. (2016). *Quality and Equity in Basic Health Care Services in Vietnam: Findings from the 2015 Vietnam District and Commune Health Facility Survey*. Washington, DC: World Bank Group.

115 Viet Nam News. (2016, February 29). Treatment of rare diseases in VN is expensive. *Viet Nam News*. Retrieved from <https://vietnamnews.vn/society/282956/treatment-of-rare-diseases-in-vn-is-expensive.html>

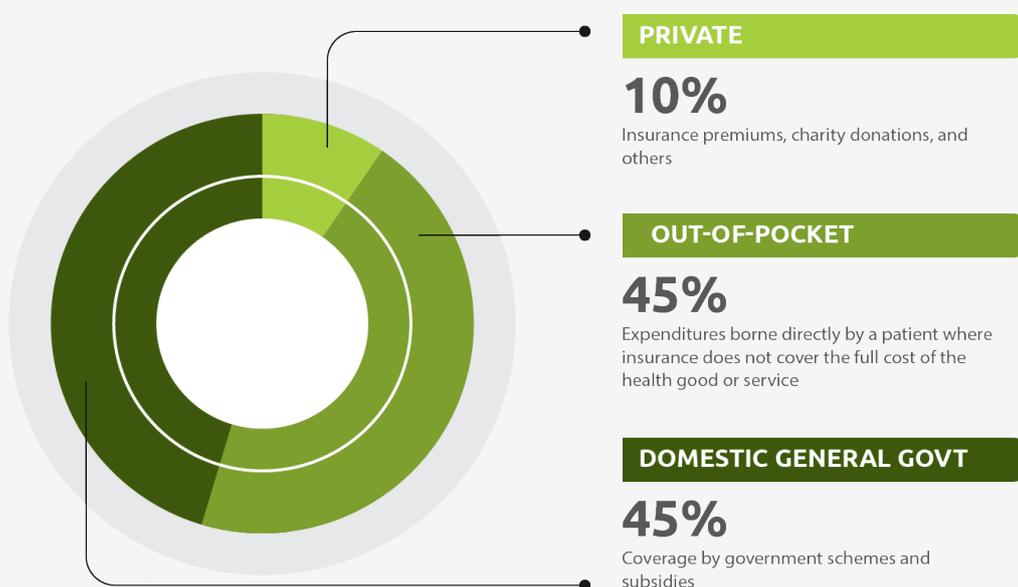
CHAPTER 1: The principles and progress of Universal Health Coverage

Overall, Vietnam obtained a UHC Service Coverage Index (SCI) score of 75, ranking second amongst the countries in its study. Amongst the components of the SCI, Vietnam scores well in service capacity and access and infectious diseases with scores of 83 and 73 respectively, yet lags behind in its progress with dealing with noncommunicable diseases (64).

In assessing healthcare equity in Vietnam, residents in remote areas had a high prevalence of health problems and faced challenges in accessing healthcare services. Health services utilization also differed based on ethnicity, with minorities attending public health services less frequently¹¹⁶.

Assessing UHC financial protection in Vietnam – How much is being covered?

Figure 18: Financing of Vietnam's total current health expenditure



Sources: The World Bank, Out-of-pocket, 2021; The World Bank, Domestic general government, 2021; The World Bank, Domestic private health, 2021.

In terms of healthcare financing, 55% of total health expenditure is incurred by private entities, which include private insurers and individuals paying out-of-pocket expenses. The remaining 45% of health expenditures is borne by the government.

Vietnam's health protection gap is estimated at USD \$36 billion¹¹⁷.

Despite the advent of mandatory SHI in 2008, OOP payments represent 44.9% of total health expenditures, marking an increase from 37.1%¹¹⁸ in 2000. (See Figure 18). The increase in OOP suggests a prevailing impact of aging, medical inflation, and noncommunicable disease burden on healthcare costs.

116 Tran, B. X., Nguyen, L. H., Nong, V. M., & Nguyen, C. T. (2016). Health status and health service utilization in remote and mountainous areas in Vietnam. *Health and Quality of Life Outcomes*, 14(1), 85. <https://doi.org/10.1186/s12955-016-0485-8>

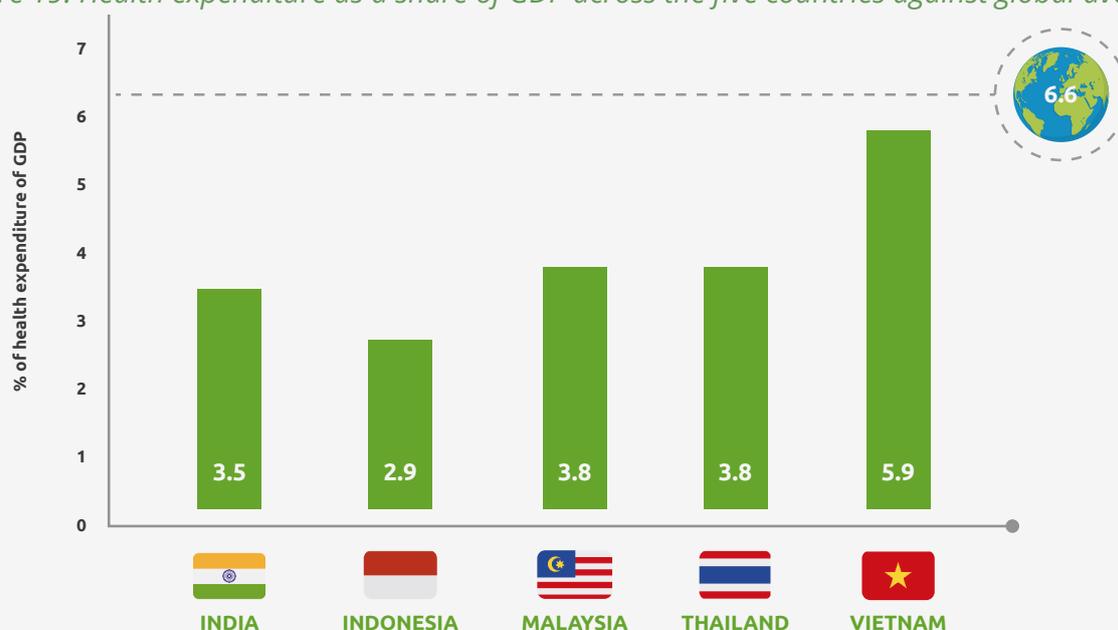
117 Swiss Re (2018). *Asia's Health Protection Gap: Insights for Building Greater Resilience*. Retrieved October 4, 2021 from https://www.swissre.com/dam/jcr:05411fab-a11a-4537-b16f-baa77da564f9/Asia's+Health+Protection+Gap_Regional+Infographics.pdf.

118 World Bank. (2018). *Current health expenditure (% of GDP) | Data*. <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS>

Summary of key figures and indicators on the progress of UHC across the five countries

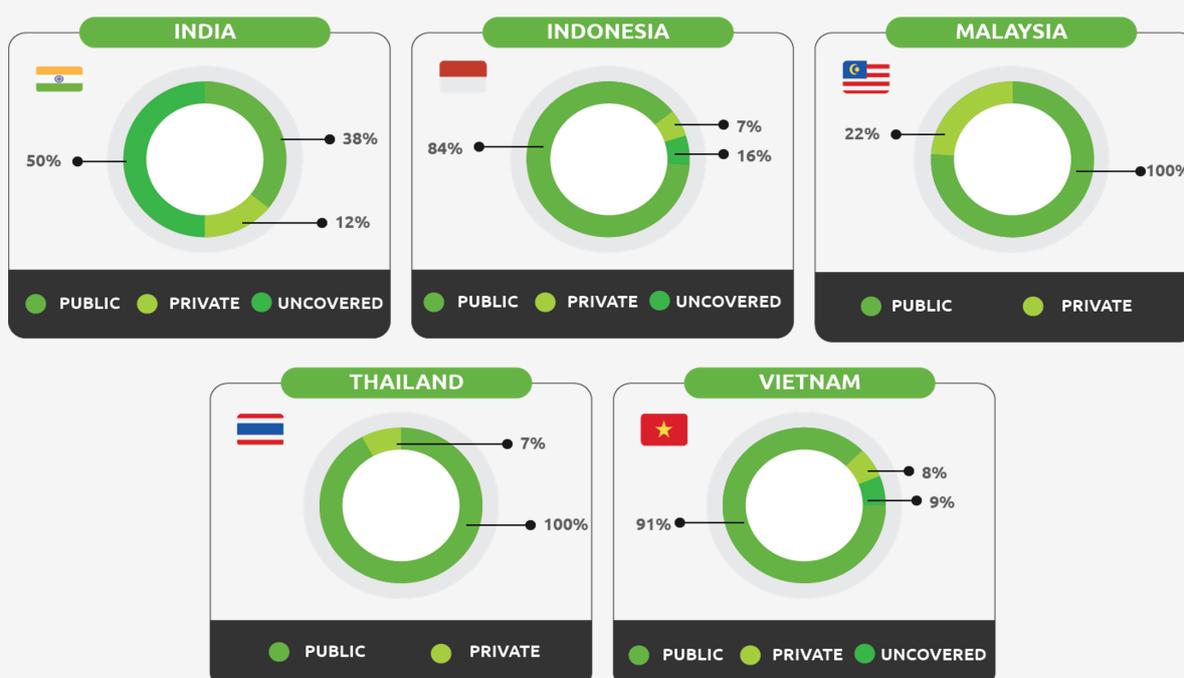
We summarise and compare the key figures and indicators mentioned earlier in Chapter 1. Figure 19 reflects health expenditure as a percentage of GDP across the five countries; Figure 20 illustrates the breakdown of health financing by public, private and uninsured; and Figure 11 shows the breakdown of national health expenditure borne by the various payors.

Figure 19: Health expenditure as a share of GDP across the five countries against global average



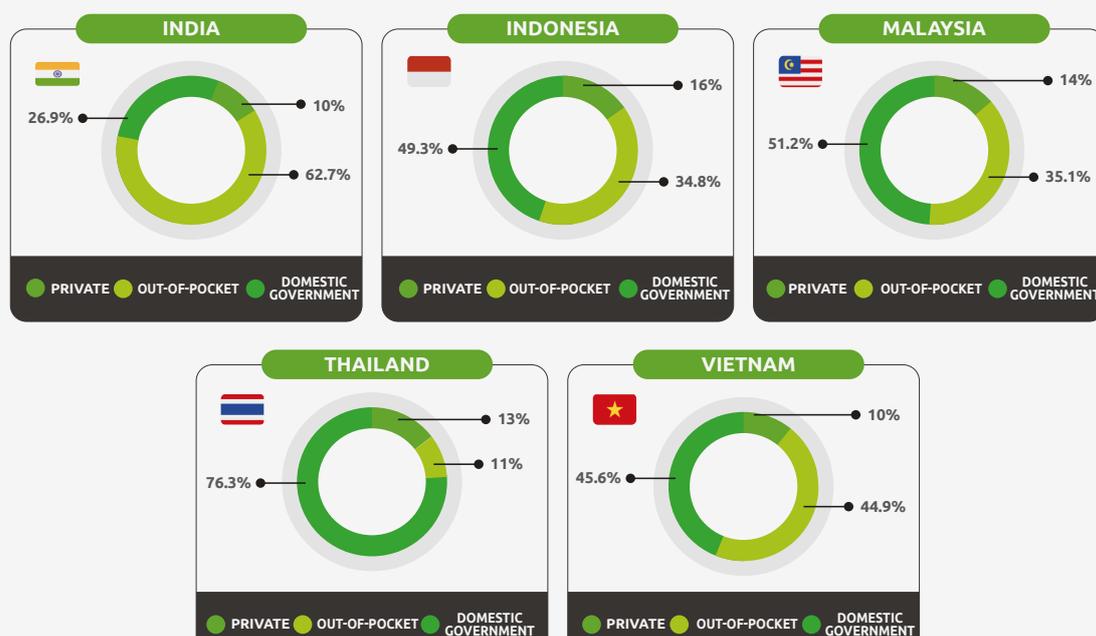
Source: The World Bank, Current Health Expenditure, 2018.

Figure 20: Health financing type across the five countries



Sources: CodeBlue, 2020; Godha & Arjun, 2020; Jaafar, et al., 2013; Jongudomsuk, 2015; Medina, 2020; National Institutes of Health Ministry of Health Malaysia, 2020; National Statistics Office, Ministry of Digital Economy and Society, 2018; Oanh, Phuong & Tuan, 2021; Prudential Vietnam, n.d.; Tangcharoensanthien, 2007; Trisnantoro, 2020.

Figure 21: Proportion of national health expenditure borne by different payors across the five countries



Sources: The World Bank, Out-of-pocket, 2021; The World Bank, Domestic general government, 2021; The World Bank, Domestic private health, 2021.

1.4 Challenges to the sustainability and achievement of Universal Health Coverage

1. Achieving UHC requires a balanced approach across the three pillars

The vision of UHC to provide healthcare services that are simultaneously easily accessible, high quality, and affordable is a direct challenge to the concept of the “iron triangle of healthcare”, wherein the achievement of one goal requires trade-offs in one or more of the other goals¹¹⁹. Countries that do manage to achieve these three Universal Health Coverage pillars for the population transfer the financial burden for its achievement from the individual to the state. With finite and increasingly strained budgets, the fundamental constraints are reflected in the contours of each country’s UHC program and the choices that are made.

2. Countries are facing strained UHC budgets with most facing significant deficits

The rising costs of healthcare and noncommunicable diseases are contributing to fiscal strains that threaten the sustainability of UHC and leading to deficits, as in the case of India, Indonesia, Thailand and Vietnam. Coupled with efforts required to manage the COVID-19 pandemic, UHC systems are pushed into precarious positions and the sustainability of UHC is put into question. Figure 22 describes the fiscal deficits and stress factors hindering the achievement of UHC in the five countries.

¹¹⁹ Delaronde, S. (2019). The Iron Triangle of Health Care: Access, cost and quality. *Inside Angle*. Retrieved from <https://insideangle.3m.com/his/blog-post/the-iron-triangle-of-health-care-access-cost-and-quality/>

CHAPTER 1: The principles and progress of Universal Health Coverage

Figure 22: Stress factors hindering the achievement of UHC

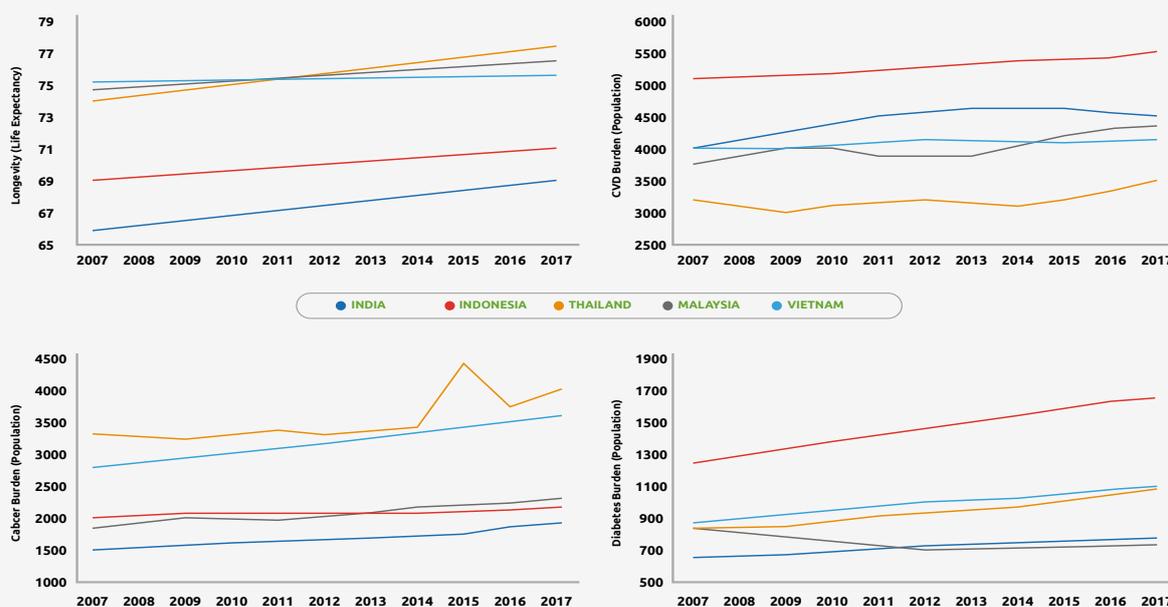
	 INDIA	 INDONESIA	 MALAYSIA	 THAILAND	 VIETNAM
INDICATION OF FINANCIAL CHALLENGES	USD \$268 million (Rs20 billion) budget in 2018-19 is insufficient to cover 100 million families it promises to cover under PMJAY	USD \$771 Million (10.98 Trillion Rupiah) National Health Insurance Deficit in 2018	Public debt up to 7% of GDP is expected in 2021 after factoring in COVID-19 response	Public debt to GDP ratio at 49.6% Increased from 41% in 2019—more than 8% in a year	USD \$13.8 to 14.2 Billion Estimated budget deficit in 2020, equivalent to 5-5.6% of GDP
STRESS FACTORS TO UHC	High costs due to lack of supply, manpower and accountability, lack of accessibility and awareness	Resources needed to provide health insurance for poor under JKN + Poor economic growth	Changing levels of health needs, ageing population, changing disease types, costs of medicines, shortages	Aging population, Rising patients, greater costs for malpractice insurance, drugs, machines, etc.	Shortage of medical staff, overcrowded hospitals, obsolete medical equipment, limited state budget

Sources: Goncalvez, 2020; Kneoma, n.d.; Ministry of Finance Malaysia, 2021; Nugraheni, et al., 2020; Sehgal, 2018; Thuy, 2020.

3. The growing tide of noncommunicable diseases threaten to overwhelm health systems

Noncommunicable diseases, which include heart diseases and strokes, cancers, chronic lung diseases, and diabetes, represent a significant burden for individuals, governments, and societies (see Figure 23). Already noncommunicable diseases are among the leading causes of disability and deaths in the five markets and are projected to increase in the coming decades. While all five countries have emphasized NCD prevention and management, they fall short in providing adequate healthcare treatment and coverage for people who facing these conditions today. Without a robust strategy to providing service coverage and financial protection for NCD care for the populations of today and tomorrow, UHC programs will face a growing treatment gap.

Figure 23: Longevity and growing noncommunicable disease burden



Source: Institute for Health Metrics and Evaluation, 2020.



CHAPTER 2: Private Health Insurance Landscape in Emerging Markets

“The private sector has a huge role to play in emerging markets in Asia, especially around private health insurance”

**- Mr Reynold D’Silva, Health Tech
(Managing Director Asia, MILVIK BIMA)**

The previous chapter outlined the goals of UHC, and the challenges that UHC systems face, namely, striking a balance between access, affordability, and service coverage; financial sustainability of UHC; and the threat of the noncommunicable disease burden derailing the progress countries have made towards UHC.

In this chapter, we introduce Private Health Insurance as a complementary lever to support UHC, and as an important mechanism to improve financial protection that can alleviate public financing pressure. PHI meets the gaps in the public health financing system by not only providing additional coverage and benefits, especially for noncommunicable diseases, but also offering access to better quality of care through greater service coverage. While some governments have been looking to PHI to provide coverage to ‘missing middle’ populations, this mechanism is still underutilized, given that the rates of PHI adoption across all the five markets are relatively low, ranging from as low as 7% to 22% of the population.

2.1 How governments are enabling the uptake of Private Health Insurance

Insurance penetration in these emerging markets have remained low over the past decade¹²⁰. Fundamentally, consumers tend to find insurance design hard to understand and especially so for information embedded in fine print and are uncertain of its benefits such as whether or when they are getting the benefits. As such, they may not be able to appreciate the value of insurance products or see a compelling reason to pay for it.

“Healthcare is one of the top-of-mind concerns, however many people do not necessarily purchase the right health insurance product. In a market like Vietnam where savings and investment insurance products are popular, people sometimes question the value of health and protection insurance products, as they have the perception that they do not get back the money paid for health insurance premiums if they do not encounter health issues. As a result, the health protection gap in Vietnam is high.”

**- Ms Khue Dinh, Insurer
(Country President, Chubb Vietnam)**

120 OECD. (n.d.). *Insurance indicators: Penetration*. Retrieved June 16, 2021, from <https://stats.oecd.org/Index.aspx?QueryId=25444>

Nevertheless, governments have recognized the complementary role of PHI in providing financial protection to the masses and have come up with deliberate strategies to counteract these factors and incentivize the uptake of insurance. These strategies are, providing guidelines on clarity and standardization, promoting tax incentives or deductions, establishing regulatory sandboxes to allow for a 'safe space' for innovation and establishing public-private partnerships with PHI players. These strategies encourage PHI players to innovate and form collaborations across stakeholders to increase penetration and uptake.

Providing guidelines on clarity and standardization

In India, the government is using policy levers to increase uptake of insurance aimed at the middle class. The Insurance Regulatory and Development Authority of India (IRDAI) has set out two compulsory health insurance plans that must be offered by all insurance providers: **Arogya Sanjeevani** and **Corona Kavach**. The former, **Arogya Sanjeevani**, is a basic health insurance product that primarily covers pre- and post- hospitalization expenses, daycare procedures, ICU or room charges, **AYUSH** treatments, which refer to alternatives such as Ayurveda or homeopathy, as well as certain surgeries¹²¹.

Corona Kavach is specifically designed to cover the hospitalization and medical expenses arising out of COVID-19 treatment¹²². The standardization of these policies by IRDAI ensures that the terms and conditions, coverage levels, and plans remain the same across providers, eliminating confusion and increasing the

convenience of obtaining health insurance. Such standardization also leads to a better understanding of the product by the layman, which can then lead to increased insurance penetration.

Such policy levers also take the form of legislation that mandates the provision of medical insurance to workers by employers, which intends to raise insurance penetration in the formal sector. In 2020, the COVID-19 epidemic spurred insurance regulators in India to allow telemedicine charges to be claimed under insurance policies. This not only opened access to healthcare services in the midst of the global pandemic amidst mobility restrictions, but also facilitated greater access to underserved communities who are not within the vicinity of a physical healthcare facility.



121 Policybazaar.com. (2021). *Arogya Sanjeevani Policy*. Retrieved October 20, 2021 from <https://www.policybazaar.com/health-insurance/arogy-sanjeevani-policy/>

122 Policybazaar.com. (2021). *Corona Kavach Policy*. Retrieved October 20, 2021 from <https://www.policybazaar.com/health-insurance/corona-kavach-policy/>

Promoting tax incentives or deductions

Thailand and Vietnam have adopted a consumer-centric approach to incentivize customers to buy insurance by providing tax deductions on health insurance premiums. In Thailand, health insurance premiums of up to a maximum of THB ฿25,000 (approximately USD \$750) paid for one's own health qualify as deductibles from one's taxes¹²³. Similarly, Vietnam allows for deductions of the mandatory health insurance contributions from personal income tax calculations. By doing so, the governments create conducive conditions for PHI uptake, since consumers are encouraged by the tax deductions¹²⁴.

“Some governments offer incentives to encourage people to subscribe or buy private medical insurance policies, in order to channel some of the healthcare demand from the public sector to the private sector.”

**- Mr Andrew Wong, Insurer
(Chief Health Officer, Prudential Corporation Asia)**

Establishing regulatory sandboxes for innovation

Governments across all the countries studied here have developed an enabling policy environment for innovation through the establishment of fintech and insurtech regulatory sandboxes and an easing of regulations for insurtech products. Regulatory sandboxes refer to the “live testing of new products in a controlled regulatory environment”.

These sandboxes facilitate innovations in the insurance sector and improve insurance penetration, by allowing PHI and/or insurtech players to pilot test innovations¹²⁵.

In India, the IRDAI set up a regulatory sandbox in February 2019, that allows insurance providers and insurtech companies to test new products within a protected environment, which facilitates innovation and greater insurance penetration. In a similar fashion, Thailand implemented an insurtech regulatory sandbox in 2017, which was backed up by further easing of policies to allow for insurance companies, brokers and insurance start-ups to put forward insurtech innovation for a “test run” as well as accommodations to allow for public comments on draft guidelines and to ease difficulties in the existing project approval processes.

Indonesia, Malaysia and Vietnam have also established fintech regulatory sandboxes. Malaysia was first to act in 2016, establishing the Financial Technology Enabler Group before setting up a regulatory sandbox to enable the experimentation of fintech solutions in a live environment, subject to appropriate safeguards and regulatory requirements. In 2018, the Indonesian government also allowed fintech companies to register legally through the regulatory sandbox process, allowing them to test out new products. Vietnam as well has been encouraging the growth of fintechs, by putting forth a draft decree in 2020 on the setting up regulatory sandboxes to test fintech and insurtech products, much like all the other markets.

123 PricewaterhouseCoopers. (2021, July 6). Thailand. *PwC*. Retrieved from <https://taxsummaries.pwc.com/thailand>

124 PricewaterhouseCoopers. (2021, August 9). Vietnam. *PwC*. Retrieved from <https://taxsummaries.pwc.com/vietnam>

125 Panda, S. (2020, December 17). After payments, WhatsApp to roll out insurance and pension products. *Business Standard India*. https://www.business-standard.com/article/companies/after-payments-whatsapp-to-roll-out-insurance-and-pension-products-120121700031_1.html#:~:text=It%20is%20partnering%20with%20the,the%20end%20of%20the%20year.

Establishing public-private partnerships with PHI players

In Indonesia, policymakers developed “Coordination of Benefits” (COB) that allow PHI insurance companies to develop insurance offerings that directly supplement the national health scheme. These policies help to offer financial coverage and healthcare services beyond what JKN provides to people who need or would prefer such coverage. Such a policy creates space for public-private partnerships, where PHI can supplement the gaps faced by JKN as well as offer better quality services.

Similarly in Malaysia, the government has leveraged on public-private partnerships to successfully implement health support schemes for lower-income populations. The advent of the **mySalam** scheme in 2019, which supports the lower-income and disabled through income assistance, signaled the government’s recognition of the rising costs of medical care for chronic diseases and critical illnesses. The **mySalam** and **Peka B40** policy set up a national financial protection scheme for the B40 group, focused on preventive health and management of chronic care conditions. This policy, then, could encourage public-private partnerships. For instance, while Great Eastern – a PHI provider – is the sole contributor to **mySalam**, **Peka B40** taps into networks of private general practitioners.

2.2 Overview of the Private Health Insurance landscape in the five markets

Across the five markets, there are four main types of health insurance offered, namely general health insurance, condition-specific insurance, population-specific insurance and health riders, as reflected in Table 6 below.

Table 6: Types of Private Health Insurance offered in emerging markets

01	<p>GENERAL HEALTH INSURANCE</p> <p>Typically covers covering pre-and post-hospitalization, day-care, and outpatient care expenses for individuals</p> <p>It can either reimburse the patient for medical expenditures through lump-sum payments or as charged</p>
02	<p>CONDITION-SPECIFIC INSURANCE</p> <p>Designed to provide comprehensive coverage or lump sum payouts for critical illnesses such as cancer or diabetes</p> <p>Often accompanied with health screening and compassionate benefits</p>
03	<p>POPULATION-SPECIFIC INSURANCE</p> <p>Offers targeted support designed especially for the needs for specific groups, such as women, senior citizens, cardiac patients, or millennials</p>
04	<p>HEALTH RIDERS</p> <p>Can be coupled with an existing general or condition-specific health insurance plan</p>

PHI Landscape in India

The PHI landscape in India plays an important role in offering financial protection coverage for complex conditions, such as diabetes, cancer, and COVID-19 through a range of private insurance providers. Although these private insurance providers only cover about 12% of the total population¹²⁶, they have moved towards adopting innovative methods such as online distribution channels to increase ease of access and uptake rates for PHI. The Indian PHI market primarily consists of domestic insurance providers. Top players in the

Indian PHI market: Star Health and Allied Insurance, HDFC Ergo, ICICI Lombard, Bajaj Allianz, Care, SBI General, and Max BUPA. PHI in India can play a significant role in coverage population coverage and financial protection gaps in India. Table 7 below details how PHI provides additional protection, on top of India's PMJAY program. PHI provides support for organ transplants, which are left out by the SHI. At the same time, it is important to note that neither the primary PHI providers or SHI in India supports drug rehabilitation or fertility treatments.

126 Godha, S. & Arjun N. (2020, August 18). *Health Insurance Thematic: Pivot of Future's Profitable Growth*. Spark Capital.

Table 7: Comparison between social and Private Health Insurance in India

SERVICE	SOCIAL HEALTH INSURANCE	PRIVATE HEALTH INSURANCE
Pre-Existing Diseases	✓	✓
Secondary Care	✓	✓
Tertiary Care	✓	✓
Approved Medicines	✓	✓
Cancer	✓	✓
Rare Diseases	✓	✓
Outpatient Care	✓	✗
Drug Rehabilitation	✗	✗
Organ Transplants	✗	✓
Fertility Treatments	✗	✗
Accidents	✓	✓
Emergencies	✓	✓

PHI Landscape in Indonesia

The Indonesian PHI market is still relatively nascent, where PHI only an estimated 7% of the population is covered by PHI¹²⁷. Most major players in the Indonesian market offer health insurance as a rider to life insurance or investment linked products. In recent years, takaful insurance products, which are founded on Islamic Shariah principles, helped to boost the understanding and acceptability of insurance within Indonesia. Unlike the Indian PHI market, where most insurance providers are domestic companies, the top players in the Indonesian PHI market are international insurance firms such as Allianz, AXA, AIA, Prudential, and Manulife, with only a few domestic firms, such as Sinarmas, BNI Life, and Astra Life.

Among the top insurance companies, most provide insurance for critical illnesses, including cancer, while only some insurance companies cover general health, hospital and surgical care insurance. None of the major insurers offered targeted population insurance for families, women, or the elderly. PHI in Indonesia also plays an extremely important role by providing coverage for outpatient expenses and organ transplants, which are not targeted by the national insurance scheme.

Table 8 highlights the features of the JKN social health insurance program and PHI in Indonesia, showing the additional benefits that PHI offers in that context. Indonesia too, like India, does not provide coverage for drug rehabilitation or fertility treatments through either SHI or PHI.

127 Medina, A. F. (2020, July 30). Indonesia's Healthcare Industry: Growing Opportunities for Foreign Investors. *ASEAN Business News*. <https://www.aseanbriefing.com/news/indonesias-healthcare-industry-growing-opportunities-foreign-investors/>

Table 8: Comparison between social and Private Health Insurance in Indonesia

SERVICE	SOCIAL HEALTH INSURANCE	PRIVATE HEALTH INSURANCE
Pre-Existing Diseases	✓	✓
Secondary Care	✓	✓
Tertiary Care	✓	✓
Approved Medicines	✓	✓
Cancer	✓	✓
Rare Diseases	✓	✓
Outpatient Care	✓	✓
Drug Rehabilitation	✗	✗
Organ Transplants	✓	✓
Fertility Treatments	✗	✗
Accidents	✓	✓
Emergencies	✓	✓

PHI Landscape in Malaysia

The private health insurance industry in Malaysia is the most advanced of the five research markets, offering more specialized and integrated solutions. Penetration of the private health insurance industry, however, is still low at approximately 22% (nearly 50% for life insurance) due to the strength of the public system¹²⁸. This presents, again, large room for growth in the market.

The majority of plans include general health as well as critical illness coverage. Some plans include more specific coverage in areas such as diabetes and specific populations (babies, women, elderly, etc.). Currently, 71% of the poorest 20% of the population do not have any means of supplementary financial coverage for medical treatment.

This demonstrates a large financing gap as well as a big opportunity for private insurers. Currently, wealthy citizens and expats are the largest consumer segment of private health insurance. The market players in Malaysia are balanced between domestic and international players, such as Great Eastern Takaful, Allianz, and AXA among others. International and local players tend to offer similar types of insurance such as generalized insurance, critical illness insurance and health riders. Drivers of private health insurance penetration in Malaysia include an overburdened public system, desire for better quality care, desire for faster access to care, and the increasing role of technology-driven access. However, the popular and comprehensive public healthcare system limits private insurance penetration to the masses.

128 National Institutes of Health (NIH) Ministry of Health Malaysia. (2020). *National Health and Morbidity Survey (NHMS) 2019*. Retrieved from: https://iptk.moh.gov.my/images/technical_report/2020/4_Infographic_Booklet_NHMS_2019_-_English.pdf

CHAPTER 2: Private Health Insurance Landscape in Emerging Markets

Malaysia's healthcare system shows a very close alignment in the services that are covered by PHI and the services offered (and financially subsidized) by government run health facilities. The PHI further supplements coverage of accidents and emergencies. These overlaps and variations between the characteristics of Malaysia's PHI and public health insurance are given below in Table 9.

Table 9: Comparison between public healthcare and Private Health Insurance in Malaysia

SERVICE	PUBLIC HEALTHCARE	PRIVATE HEALTH INSURANCE
Pre-Existing Diseases	✓	✓
Secondary Care	✓	✓
Tertiary Care	✓	✓
Approved Medicines	✓	✓
Cancer	✓	✓
Rare Diseases	✓	✓
Outpatient Care	✓	✗
Drug Rehabilitation	✗	✗
Organ Transplants	✗	✓
Fertility Treatments	✗	✗
Accidents	✓	✓
Emergencies	✓	✓

PHI Landscape in Thailand

PHI is a relatively small industry in Thailand attributed to their robust national UHC schemes that provide low cost and comprehensive care. Private health insurance is largely bought by wealthy citizens and international expatriates and others who wish to utilize premium facilities rather than those offered by the government's social health insurance.

One interesting feature of the PHI industry is that insurance coverage is extended to seniors (persons above the age of 60) as well, with at least 10 PHI providers who offer insurance products to retirees¹²⁹.

Penetration of private health insurance in Thailand is currently estimated to be at 7% of the population¹³⁰. Most insurance plans in Thailand cover general, accident, and cancer care while some offerings are population or disease – specific.

129 ThaiEmbassy.com. (2020, August 20). Health Insurance Thailand: New Requirement for Retirees. *Thai Embassy*. Retrieved from <https://www.thaiembassy.com/travel-to-thailand/health-insurance-thailand-for-retirees>

130 National Statistics Office (NSO) Ministry of Digital Economy and Society. (2018). Almost 5 Million Thai Hold Health Insurance [Presentation]. Pfizer Emerging Markets.

CHAPTER 2: Private Health Insurance Landscape in Emerging Markets

Some players offer special benefits to specifically layer onto social health insurance (e.g., hospital room upgrades). In general, private health insurance is utilized to cover alternative and premium-quality care. The market contains both domestic and international players, such as Aetna, Pacific Cross Health Insurance, and AXA with some working on innovations targeted at travelers.

Under UHC, Thailand has developed a comprehensive social health insurance system, which covers almost all services except drug rehabilitation and fertility treatments. PHI makes up for this gap by also providing coverage for fertility treatment, offering greater choices to patients. Table 10 below compares the offerings of the PHI and SHI, showing key gaps and overlaps.

Table 10: Comparison between social and Private Health Insurance in Thailand

SERVICE	SOCIAL HEALTH INSURANCE	PRIVATE HEALTH INSURANCE
Pre-Existing Diseases	✓	✓
Secondary Care	✓	✓
Tertiary Care	✓	✓
Approved Medicines	✓	✓
Cancer	✓	✓
Rare Diseases	✓	✓
Outpatient Care	✓	✓
Drug Rehabilitation	✓	✗
Organ Transplants	✓	✓
Fertility Treatments	✓	✗
Accidents	✓	✓
Emergencies	✓	✓

PHI Landscape in Vietnam

Private health insurance penetration is extremely low in Vietnam and the market is consolidated with a few companies dominating market share. Like Thailand, the low penetration of private insurance has been attributed to a strong social health insurance system provided by the government that offers fully subsidized care for some population groups and low co-payments for others.

This has restricted insurance plans primarily to wealthy groups that seek premium care and facilities. Only 8% of the Vietnamese population is covered by life insurance, but the healthcare industry in Vietnam is one of the fastest growing in the region. Primarily domestic companies, such as BaoViet, Post and Telecommunication Stock Insurance Corporation, and Bao Minh, make up the top players and commonly offer general, critical illness/cancer, and accident insurance.

CHAPTER 2: Private Health Insurance Landscape in Emerging Markets

Some also offer insurance plans for specific population groups (e.g. families, elderly). It is common for these companies to offer outpatient treatment and cash allowance top-ups as riders to other insurance plans.

“Typically, health Insurance can be categorized into two types – medical insurance and supplemental health insurance. Medical insurance reimburses actual medical expenses up to a limit, and supplemental health insurance, typically provides cash benefit disregarding the actual medical expenses. It is common that the life insurance market offers health insurance as a rider, i.e. an extension of a main product; and the general insurance market offers health insurance as a standalone product.”

**- Ms Khue Dinh, Insurer
(Country President, Chubb Vietnam)**

The penetration of private insurance (life) in the country current stands at 8%, and is increasing due to COVID-19 and digital innovation, like others in the region. Constraints include lack of affordable plans for low and middle-income populations and a lag in insurance innovation despite a fast-growing fintech sector¹³¹.

Comparing traditional PHI offerings with the social health insurance scheme, there are a few notable differences. Social health insurance covers pre-existing diseases, secondary and tertiary care, medicines, and cancer treatment, while not offering support for rare diseases, organ transplants, drug rehabilitation, fertility treatments or accidents and emergencies. PHI partially makes up for these, by offering coverage for rare diseases and outpatient care, but falls short because it does not provide coverage for pre-existing conditions, like the SHI does. Table 11 provides a more comprehensive look at the key features of the PHI and SHI in Vietnam.

¹³¹ Prudential Vietnam. (n.d.). *Google Translate*. Retrieved June 17, 2021, from <https://translate.google.com/translate?hl=en&sl=vi&tl=en&u=https%3A%2F%2Fwww.prudential.com.vn%2Fvi%2Fblog-nhip-song-khoe%2Fbao-hiem-nhan-tho-bao-hiem-y-te-khac-nhau-nhu-the-nao%2Findex.html&prev=search>

Table 11: Comparison between social and Private Health Insurance in Vietnam

SERVICE	SOCIAL HEALTH INSURANCE	PRIVATE HEALTH INSURANCE
Pre-Existing Diseases	✓	✗
Secondary Care	✓	✓
Tertiary Care	✓	✓
Approved Medicines	✓	✓
Cancer	✓	✓
Rare Diseases	✗	✓
Outpatient Care	✗	✓
Drug Rehabilitation	✗	✗
Organ Transplants	✗	✗
Fertility Treatments	✗	✗
Accidents	✓	✓
Emergencies	✓	✓

2.3 Opportunities to increase the uptake of Private Health Insurance

While key PHI players have developed product offerings localized within the context of each market, there has been minimal variation to traditional PHI products. This is evidenced by both low uptake rates of PHI, and the relative stagnation of PHI penetration rates across the last 7 years, with a 1.9% non-life insurance penetration in Asia-Pacific in 2013 that only marginally increased to 2.1% in 2018¹³². Nevertheless, these emerging markets are experiencing three trends that allows for more effective use of PHI and present PHI with the opportunity in playing an integral role in filling a massive financial protection gap, namely (a) growing middle class, (b) COVID-19 effect and (c) governments' commitments to UHC and digitization.

Growing Middle Class

Southeast Asia and India are large growing markets with a rapidly expanding middle class that is demanding a better healthcare experience with faster access to healthcare services, greater coverage of existing and innovative therapies, and access to private health facilities, all of which can be covered by PHI. The middle class, here, is defined as those households with daily expenditures between USD \$10 and USD \$100 per person in purchasing parity dollars. A study from the Brookings Institution estimates the size of the "global middle class" to increase from

132 Ernst & Young Global Limited. (2019). *2020 Asia-Pacific Insurance Outlook*. Retrieved from https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/insurance/insurance-outlook-pdfs/ey-global-insurance-outlook-asia-pacific.pdf

1.8 billion in 2013 to 3.2 billion in 2020 to 4.9 billion in 2030¹³³. Similar shifts are expected in the ASEAN region, where the middle class is expected to more than double from constituting 24% of the ASEAN population in 2020 to 51% in 2030¹³⁴.

These dramatic shifts in the population of the middle class translate into increased opportunities for both the healthcare and health insurance industries. Such patterns have already been observed in Indonesia, where the growth of the middle class led to a higher demand of premium health insurance products that had new features such as access to both local Indonesian private clinics as well as access to facilities abroad¹³⁵. As the middle class grows in other parts of the world, there is likely to be a corresponding demand for insurance due to higher ability to pay as well as demand for more convenient and comprehensive health services. Across all 5 countries, a fast-growing middle class in urban centers are seeking choice and quality. They are empowered digitally and will pay for a quality (private) healthcare experience. PHI can meet these needs, and, in the process, help to fill financial protection and health service gaps in these markets.

COVID-19 Effect

In addition to the growing middle class, the COVID-19 pandemic has also increased people's awareness about PHI and created favorable perceptions towards the need for commercial insurance. Not only has there been a rise in consumer sentiments for PHI, but there has also been a corresponding increase in opportunities for insurers.

“Especially in the age of COVID-19, many people now care about their health, and are looking for health insurance — not only for themselves, but also for their families.”

**- Ms Tran Thi Van Anh, Insurer
(Director, Health & Benefits Division,
BaoViet Insurance)**

According to a Swiss Re COVID-19 consumer survey conducted across four markets (Indonesia, Malaysia, Thailand, Vietnam) in this study, as many as 76% of consumers vouched for insurance's role in easing their financial burden, and over 51% said that they would prioritize medical insurance post COVID-19. This greater awareness of insurance itself is a huge opportunity for insurers, pointing towards a need to quickly meet the newly emerging demands. These include greater flexibility to customize insurance plans by consumers, for instance by combining medical, life, and accident insurance, which 67% of respondent consumers were interested in. In addition to increasing consumer willingness to purchase insurance, COVID-19 also disrupted lifestyle patterns with many consumers moving online to manage their everyday needs. This shift online is especially relevant for insurers, since it also signals the consumers' ability and willingness to buy insurance and make claims online, which over 68% consumers were shown to value.

133 Kharas, H. (2010). The Emerging Middle Class in Developing Countries. *OECD Development Centre*, 285. Retrieved from <https://www.oecd.org/development/pgd/44457738.pdf>

134 US-ASEAN Business Council. (2019, 22 July). Growth Projections. Retrieved from <https://www.usasean.org/why-asean/growth>

135 Oxford Business Group. (2021). Indonesia's large and growing middle class boosts insurance sector. *Oxford Business Group*. Retrieved October 21, 2021 from <https://oxfordbusinessgroup.com/overview/capture-market-large-and-growing-middle-class-could-unlock-profits>

CHAPTER 2: Private Health Insurance Landscape in Emerging Markets

The rise of private health insurance coverage can be further enabled by governments through policies that encourage PHI uptake by those populations who are able and willing to pay for PHI as a complement or substitute to UHC-funded health services¹³⁶.

“COVID-19 has raised people’s awareness of the need for insurance and additional health coverage, as they observe the strain the pandemic has placed on public healthcare systems. Middle class consumers are starting to purchase more health insurance products.”

**- Mr Augustine Kwan, Insurer
(Lead, External Communications Asia,
Manulife)**

Rapid digital transformation

Government commitment to digitization is creating an enabling environment for PHI

innovation that brings access to insurance to populations who were traditionally underserved. Throughout the region, a rapidly increasing number of mobile connections and internet users have fueled the digitization of basic services across industries. Moreover, all five countries have instituted policies that have further accelerated digitization and enabled its use. Regarding fintech and insurtech policies for insurance industry innovation, Indonesia has put in place extensive policies, targeting insurance, insurtech, and fintech. Similarly, India’s digital and insurance policies are aimed at increasing access to insurance and insurtech. On the other hand, Malaysia, Thailand and Vietnam are concentrating their efforts in the growth of fintech, which can also enable insurtech innovation. Government commitments and actions through policies and regulations that create enabling environments are the impetus to the successful PHI penetration within these markets, and correspondingly in achieving UHC goals.

Figure 24: Digital uptake and enabling policies and regulations for digitization

						
		INDIA	INDONESIA	MALAYSIA	THAILAND	VIETNAM
DIGITAL UPTAKE	% MOBILE CONNECTION	78%	157%	127%	134%	150%
	% INTERNET USERS	50%	64%	83%	75%	70%
ENABLING POLICIES AND REGULATIONS	INSURANCE	✓	✓	✓	✓	✓
	INSURTECH	✓	✓	✗	✓	✗
	FINTECH	✓	✓	✓	✓	✓

Source: We are Social & Hootsuite, 2020.

136 Swiss Re (2020). COVID-19 Consumer Survey Southeast Asia. Retrieved from https://www.swissre.com/dam/jcr:3117a8bb-8668-4fec-b43e-7b43f0df47d9/ZRH-20-05609-P1_Consumer-Survey_COVID-19_Infographic_A4_SEA.pdf

2.4 Private Health Insurance innovations with digital players

Growing economies, increased demand for insurance in a COVID-19 world, and an enabling digital environment have resulted in a changing PHI landscape across the five markets. Digital incumbents and third-party players are spurring new microinsurance products for dengue, typhoid, pregnancy, and cancer genomic riders. Further, traditional distribution channels – agents, brokers, and banks – are rapidly moving to digital platforms and large insurtech aggregators are emerging that allow comparison and purchase of tailored products.

The top insurers are now responding with in-house innovations and partnerships with digital players, such as fintech.

Although traditional insurers still dominate, the five emerging markets show the increasing presence of various digital innovations through a rise in PHI-digital partnerships, and an improving policy environment through the establishment of regulatory sandboxes and pilot testing in some countries. However, there is not yet significant disruption by insurtech to compete on insurance offerings given barriers to entry.

The degree of development of digital innovation within the countries also corresponds to the level of maturity within their PHI system, where countries such as India, Indonesia, and Malaysia have a higher number of actors and partnerships within the PHI-digital space as well as policies encouraging digitization, while Vietnam and Thailand still have room to grow. At the same time, the effects of COVID-19 have led to increased growth within the field, specifically in telehealth, as people move to virtual consultations with doctors and insurance providers are including these services for reimbursement. Figure 25 summarizes the presence of PHI partnerships with digital players across the five markets.

Figure 25: Presence of PHI partnerships with digital players across the five markets

	 INDIA	 INDONESIA	 MALAYSIA	 THAILAND	 VIETNAM
 E-Wallets	✓	✓	✓	✗	✓
 Telehealth	✓	✓	✓	✓	✓
 E-Commerce	✓	✓	✗	✗	✗
 Insurtech	✓	✓	✓	✓	✗

PHI-Digital partnerships in India

The government has encouraged the establishment of a conducive policy environment through the IRDAI's policies towards creating an insurtech regulatory sandbox as well as the move towards recognizing telemedicine as claimable under insurance. The regulatory sandbox, which was set up in February 2019 by IRDAI, allows insurance providers and insurtech companies to test new products within a protected environment. Similarly, a recognition of telemedicine through an advisory by the IRDAI is significant, since it facilitates greater access to healthcare services especially in rural areas that otherwise lack the relevant medical infrastructure as well as in times of COVID-19, when many individuals cannot access the existing medical infrastructure.

“The insurance industry is on the cusp of massive change in the next 10 years. Everything is up for grabs, basically.”

**- Mr Shwetank Verma
(Co-founder, Leo Capital and India
Insurtech Association)**

As a result of these encouraging policies, innovation has emerged as a notable aspect of the private health insurance sector in India (see Figure 26). All of the top players in the market have introduced digital distribution and many have begun to partner with teleconsultation platforms. Telemedicine, in fact, is at the forefront of overall health expenditure growth in the country. The telemedicine market size in India was around USD \$830 million in 2019 and is projected to increase to USD \$5.5 billion by 2025. Other tech companies have partnered with Indian insurance companies in product development, sales and distribution, price and underwriting, operations, and claims.

Figure 26: PHI partnerships with digital ecosystem in India

Star Health and Allied Insurance	 PhonePe	Partnered with PhonePe to make Arogya Sanjeevani policy easily accessible via their app
	 Paytm	Partnered with Paytm to offer insurance packages to their customers and provide a method of e-payment for those policies
Bajaj Allianz	 Flipkart	Partnered with Flipkart to offer customised group health insurance covered by Bajaj Allianz for medical and hospitalisation expenses
Aditya Birla Health Insurance	 MobiKwik	Partnered with Mobikwik to offer affordable cancer health insurance for middle-class consumers
ICICI Prudential	 Paytm	Partnered with Paytm to assist customers in paying premiums through mobile wallets
	 Toffee	Partnered with Toffee to offer insurance products
HDFC Ergo	 Toffee	Partnered with Toffee to offer insurance products
	 Policy Bazaar	Partnered with PolicyBazaar to allow insurance comparison and purchase on PolicyBazaar directly
Tata AIA Life Insurance Company	 Practo	Partnered with Practo to provide their customers access to Practo's digital healthcare platform and offer Tata AIA's insurance offerings on Practo
Religare Health Insurance	 OlaMoney	Partnered with OlaMoney to make low-cost insurance purchase and claiming more accessible under their Hospicash program
 E-Wallets  Telehealth  E-Commerce  Insurtech		

PHI-Digital partnerships in Indonesia

Indonesia has taken several initial steps towards encouraging digital innovation through policy and regulatory efforts.

In August 2018, the Indonesian government allowed for the registration of fintech companies through regulatory sandbox processes, which allow them to test out new products. This was followed up with the setting up of “Infinity”, a digital financial innovation center that monitors and helps lead collaborations surrounding fintech¹³⁷.

In a context of supportive regulatory policies and digital advances, technology companies are partnering with insurance companies for innovations in product development, sales and distribution, operations, and claims processing. Moreover, insurtech firms, such as Qoala and Pasarpolis are trying to fill the gaps with simple, affordable products, such as hospicash and to provide supplemental support to JKN. In Indonesia, digital wallets, **Gojek** Pay and **Ovo**, and e-commerce sites like **Bukalapak** are also partnering with insurers (see Figure 27). These types of partnerships are likely to increase and expand in terms of service offering.

Figure 27: PHI partnerships with digital ecosystem in Indonesia

AIA	 Gojek	Partnered with Gojek through providing start-up funding to distribute life and health insurance products to its users, drivers, and merchants
	 Pasarpolis	Partnered with Pasarpolis to distribute their policy products via Pasarpolis's online insurtech platform
Great Eastern	 Qoala	Partnered with Qoala to enhance policy sales and distribution, as well as digital claiming on insurance policies.
AXA	 Qoala	Partnered with Qoala to enhance policy sales and distribution, as well as digital claiming on insurance policies.
	 Pasarpolis	Partnered with Pasarpolis to distribute their policy products via Pasarpolis's online insurtech platform
	 Alodokter	Partnered with Alodokter to develop a hospital cash offering, to complement social health insurance in Indonesia.
Prudential	 Halodoc	Partnered with Halodoc to offer medical services as part of AXA's digital platform
	 Ovo	Partnered with OVO to develop new digital propositions encompassing wellness, health, and financial products and services, such as e-payments, e-claims, and access to the Prudential hospital network.
	 Pasarpolis	Partnered with Pasarpolis to distribute their policy products via Pasarpolis's online insurtech platform
	 Halodoc	Partnered with Halodoc to offer medical services as part of Prudential's digital platform
 E-Wallets  Telehealth  E-Commerce  Insurtech		

137 OpenGov Asia. (2019, September 5). Online system to monitor development of fintech in Indonesia. *OpenGov Asia*. <https://opengovasia.com/online-system-to-monitor-development-of-fintech-in-indonesia/>

PHI-Digital partnerships in Malaysia

Out of the five emerging markets, Malaysia has the most developed insurance partnerships with fintech and healthtech entities. Malaysia’s favorable policy environment is also met with strong insurer interest in PHI innovation as well as a presence of the relevant digital capabilities. The digital health ecosystem in Malaysia is vibrant with telemedicine and health smart apps that are aiming to shape the way Malaysians track and monitor their health. These digital health companies are working with insurers to provide value-added services

to insurance policyholders towards an integrated healthcare experience. Due to the rapid rates of medical inflation in Malaysia, private health insurers are greatly interested in digital strategies that can lower costs for the consumer and the company.

Current partnerships in digital innovation are concentrated in product development, sales and distribution, price, underwriting and operations. These partnerships have notably increased access to health insurance through comprehensive digital distribution, and this is likely to improve given the rise of technology players in the field (see Figure 28).

Figure 28: PHI partnerships with digital ecosystem in Malaysia

AIA	 Policy Street	Partnered with Policy Street to offer insurance products by AIA on its platform
	 Holmusk	Partnered with Holmusk to digitally deliver a range of coaching tools and solutions to AIA's customers by leveraging the Holmusk's data-driven approach
Great Eastern	 Policy Street	Partnered with Policy Street to offer insurance products by Great Eastern on its platform
	 DoctorOnCall	Partnered with DoctorOnCall to offer telemedicine via as an optional benefit in Great Eastern's health insurance packages.
	 Aspirasi	Partnered with Aspirasi to launch microinsurance underwritten by GE to provide affordable, accessible, on-demand insurance to Malaysians
Prudential	 DoctorOnCall	Partnered with DoctorOnCall to offer telemedicine via as an optional benefit in their health insurance packages.
	 Ouch!	Partnered with Ouch! develop new digital propositions encompassing services such as e-payments, e-claims, and access to Prudential's network.
AXA	 Fi	Partnered with Fi to distribute insurance products as well as to develop an e-medical card and other health insurance products
	 Policy Street	Partnered with Policy Street to offer insurance products by AXA on its platform
Allianz	 DoctorOnCall	Partnered with DoctorOnCall to provide teleconsultation and other healthcare solutions to its corporate members.
	 Policy Street	Partnered with Policy Street to offer insurance products by Allianz on its platform



E-Wallets



Telehealth



E-Commerce



Insurtech

PHI-Digital partnerships in Thailand

Although Thailand has a robust UHC system, it lags behind the other markets in insurtech innovation, with few players or partnerships in the field. To expand the consumer base of insurance and provide convenience, insurers are providing value-added digital services, out of which telemedicine has been most common strategy (see Figure 29).

Partnerships between insurance and telemedicine not only provides convenience as well as a necessary service amidst the COVID-19 pandemic but is seen as important tool for cost containment to keep healthcare costs and claims low.

Figure 29: PHI partnerships with digital ecosystem in Thailand

Pacific Cross Health Insurance	 Doctor A to Z	Partnered with Doctor A to Z to telemedicine as part of its insurance package directly
Muang Thai	 Gettgo	Partnered with Gettgo to further expand its platform by adding support for data-driven product for customers with different needs
	 Samitivej Hospital	Partnered with Samitivej Hospital and BNH Hospital to launch a 24-hour online virtual hospital
Krungthai Panich Insurance	 Go! Insurance	Partnered with Go! Insurance to use technology to customize their products
	 Emma by AXA	Partnered with AXA to expand insurance coverage and create an application with insurtech and digital health services.
AIA Thailand	 True Digital Group & Samitivej Hospital	Partnered with True Digital Group and Samitivej to launch virtual COVID-19 clinic, for those who may display symptoms of COVID-19 or at high risk of contracting the virus.

 **E-Wallets**
 **Telehealth**
 **E-Commerce**
 **Insurtech**

PHI-Digital partnerships in Vietnam

The private health insurance industry as well as digital innovations within the field are at a relatively early stage in Vietnam. However, the government regulations have been encouraging private insurers to develop and distribute insurance plans for the masses. This is supported by Vietnam's fintech and digital health ecosystem, where health tech players primarily work directly with insurers.

Private health insurers have notably partnered with especially telemedicine companies to innovate by providing value-added services to policyholders, particularly during the COVID-19 epidemic where digital consultations have grown rapidly (see Figure 30). Beyond telemedicine, further innovation is needed in Vietnam in areas like sales and distribution to bring PHI to the general population.

Figure 30: PHI partnerships with digital ecosystem in Vietnam

Bao Viet	 Momo	Partnered with Momo to sell Bao Viet's insurance products on MoMo wallet
	 Jio Health	Partnered with Jio Health to provide digital healthcare and health insurance in Vietnam through comprehensive protection and healthcare solutions
	 MyDoc	Partnered with MyDoc to offer a cashless digitally integrated clinic service to Bao Viet's health insurance policyholders nationwide
Bao Minh	 Doctor Anywhere	Partnered with Doctor Anywhere to offer consumers a suite of online and offline healthcare services, doctor video-consultation and medication delivery, online health and wellness shopping marketplace, home-based healthcare services
Prudential	 MyDoc	Partnered with MyDoc offer consumers access to value-added health services on their mobile phones

 E-Wallets
 Telehealth
 E-Commerce
 Insurtech

2.5 Conclusion

Recognizing the importance of the digital sphere in increasing insurance's accessibility, governments across all countries have been invested in building a supportive policy ecosystem. An analysis of the digital innovations in the PHI landscape in the five emerging markets shows that the benefits of digital innovations, namely affordability, convenience, customization, and potential to bundle, align closely with private insurers and governments' goals of cost-containment, greater protection for the middle class, and improving digital capabilities. These shifts in digitization have been strongly impacted and accelerated by COVID-19, which have further encouraged insurance providers and governments to innovate the delivery of these services.



CHAPTER 3: Private Health Insurance Innovation Models

“The more that we expand our wings, the better. We need to spread across the value chain and work together with several stakeholders to develop the value proposition together.”

**- Mr Brendan Batanghari, Insurtech
(Vice President, Strategic
Partnerships, Pasarpolis)**

The evolving PHI landscape, digital growth, and rising middle class present new opportunities to leverage the advantages and expertise from the commercial insurance sector to support Universal Health Coverage goals. A significant uptake in PHI, aided by innovation, can tackle the three issues identified that can undermine the achievement and sustainability of UHC:

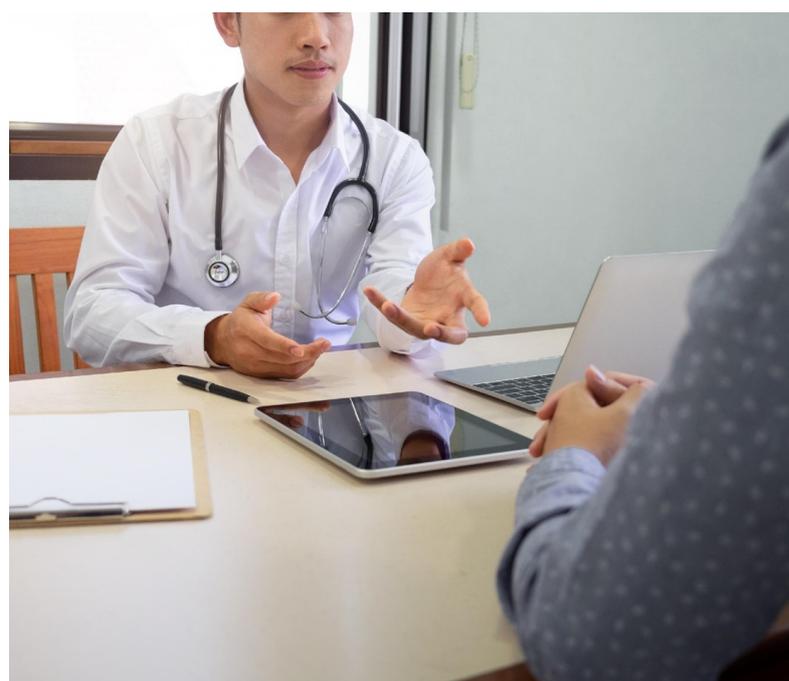
1. Current and projected fiscal deficit of publicly-financed UHC systems,
2. The trade-off in meeting universal population access while providing high quality and affordable care, and
3. A significant and growing burden of noncommunicable diseases.

To address the first issue, nations can consider sustaining UHC through the uptake of traditional and innovative private health insurance models that appeal to and cover the needs of the masses. Supplementary UHC insurance options developed through government-private insurer dialogues can provide greater financial protection than UHC alone, and enable risk-sharing between private and public insurance. New models of digitally-enabled comprehensive low premium mass insurance are also now allowing people to attain greater coverage above the basic national insurance benefits via affordable policies.

Next, nations can consider innovative insurance models to address the issue of inadequate service coverage and financial protection of noncommunicable and chronic diseases while still meeting population coverage goals.

These models include specialty drug insurance that provide financial assistance for innovative treatments as well as disease-specific insurance that provide coverage upon diagnosis of a particular condition or illness. With targeted insurance policies, there is greater financial support and specificity to manage the costs and course of illness.

Third, nations can reinforce prevention strategies to address the growing noncommunicable disease burden that threatens to derail the progress of UHC. Innovative insurance models include prevention and wellness benefits that encourage healthier lifestyles, integrated education and awareness that promote primary and secondary prevention, and insurance that links healthy habits and biomonitors to financial rewards and incentives.



The success of innovative insurance models is dependent on an enabling policy environment to facilitate the implementation of the model, the insurer interest and confidence in the viability of the models, and the level of digital capability in the country required to embark on such initiatives. We provide an assessment of the strength of these three factors in each of these models and across the five markets, later in this chapter. For the first factor on policy environment, we consider whether there are policies that support or hinder the implementation of the model and rank these

policies on a scale of low (restrictive policy), medium (neutral policy, or policy currently unstated) and high (supportive policy). Next, for insurer interest, we assess insurers' views or current insurance innovations that support the model, ranked on a scale of low (low interest or opposed views), medium (cautiously supportive) and high (enthusiastic, already doing). Finally, we assess digital capability based on whether there are local companies that can support the model, ranked on a scale of low (do not exist), medium (exist, but nascent), and high (exist, several companies present).

3.1 Approach 1: Sustaining UHC

These innovative models help to address the issue on financial sustainability of UHC by providing comprehensive insurance to the masses. Model 1, the supplemental UHC insurance package, gives people the option to buy supplemental or "top-up" insurance that is more affordable than traditional private insurance packages. Through this mechanism, consumers can access a wider range of health services without having to incur large OOP payments. Model 2 is a private-sector led comprehensive low premium mass insurance that enables affordable and effective financial protection for low to middle income populations.

Model 1: Supplemental UHC Coverage

Since the global movement of UHC has strengthened over the last decade, many countries have launched social health insurance models in which the state provides mandatory state insurance with compulsory premiums in exchange for a minimum level health coverage for all citizens.

In a supplementary UHC model, private insurers can build upon benefits provided under national plans by covering benefits that are not covered by public schemes, providing faster access to health products and services through the private sector, and greater levels of financial reimbursement. Such plans allow policy holders to purchase plans that provide them with access to higher end health services or access to higher-tiered hospital benefits and additional benefits.

A key feature of this model allows people to combine the benefits of state insurance with private insurance. One such example in Asia is the Singapore system of public-private insurance scheme, the Integrated Shield Plan (see Box 6).

Box 6: Case Study: Singapore's Integrated Shield Plan

The Integrated Shield Plan (IP) builds on the mandatory state insurance, Medishield Life, in Singapore to provide supplemental coverage. Singapore citizens pay Medishield Life or the optional IP (inclusive of Medishield Life) using their mandatory health savings (Medisave).



KEY FEATURES

There are two features to Singapore's supplemental insurance model:

1. Medishield Life (minimum coverage provided by State)

In Singapore, Medishield Life serves as a compulsory insurance scheme for all citizens for which premium payments are made by the individuals to the state. Medishield life is designed to be used for subsidized treatment in public hospitals and pegged at lower tier wards. Choosing to stay in higher tier wards or in a private hospital would lead to the customer incurring extra charges that can be paid via Medisave or out-of-pocket. In addition to hospitalization charges, the scheme covers outpatient surgical procedures and other outpatient treatment for certain diseases such as cancer up to a predetermined cap on costs.

2. Integrated Shield (supplementary coverage provided by private insurers)

The Private Medical Insurance Scheme allows Singapore residents with a social security account called the Central Provident Fund, to use Medisave savings (state-mandated savings) to buy IPs for themselves or their family members. Purchasing these supplementary policies would allow policyholders to choose higher class wards, coverage of costs before and after hospitalization as well as a claim limit of up to SGD \$2 million (USD \$1.5 million). Additionally, an IP rider can be purchased to cover co-payments and deductibles.

3. Purchasing and claiming insurance

Customers can purchase such insurance plans by discussing them and determining the right plan for them with insurance agents. To claim expenses, policyholders would have to submit claims to private insurers who will process the claims and directly reimburse customers with the whole amount. The private insurers would then claim the appropriate amount from the state's social security board, called the Central Provident Fund.



WHY IS THIS MODEL SUCCESSFUL?

1. Direct health financing reform measures were in place.

The Singapore government initiated the process of IP and outreach to private insurers when it was observed that Singaporeans were seeking options for greater coverage that was only offered by private insurers then. The government then established a policy environment that favors PHI uptake and a mechanism for cooperation between the State and private insurance.

2. Insurers are confident and clear of their role.

In Singapore, there is high level of government and private insurer engagement on adapting the IP provisions in accordance with socioeconomic and health trends. For example, in 2021, the state's health minister appointed a committee to look into the selection criteria for more specialists to be included in IPs, which allows clients to seek treatment from a greater number of specialists and still be covered by insurance.

Sources: Cheng, 2021; Central Provident Fund Board, 2020; Ministry of Health Singapore, MediShield Life, 2020; Ministry of Health Singapore, MediShield Life Benefits, 2021

Model 2: Comprehensive Coverage Mass Insurance

Comprehensive coverage mass insurance policies are offered by private insurers and act as middle-end protection products, that provide affordable comprehensive health service coverage. These policies help fill the gap between basic state health insurance and premium high-end medical policies. This model is enabled by digital technologies that allow for rapid and low-cost customer acquisition as well as the reduction or elimination of agent broker sales channels. Moreover, the policy is able to provide coverage by requiring high deductibles upfront that are paid by the beneficiary.

Box 7: Case Study: China's Million RMB Insurance

Example: "Good Medical Insurance" by PICC Health



KEY FEATURES

China's Million RMB Insurance encompasses 4 key features that enable it to fill the gap between state insurance and high-end medical policies

1. This insurance plan includes providing a high sum insured, of between RMB ¥1 to ¥3 million (between USD \$155,000 to USD \$465,000) while keeping premiums low at an average of RMB ¥550 (USD \$85) per annum.
 - For example, the Good Medical Insurance by PICC insures up to RMB ¥2,000,000 (USD \$310,000) for general medical sum and up to RMB ¥4,000,000 (USD \$321,000) 100 illnesses for critical illnesses. On the other hand, the premiums kept low, varying with age, at RMB ¥609 (USD \$94)/year (0 y/o), RMB ¥259 (USD \$40)/year (30 y/o), RMB ¥1568 (USD \$243)/year (60 y/o).
2. These policies also provide a more comprehensive coverage above basic medical insurance by guaranteeing reimbursement of higher medical expenses that may arise from hospitalization and malignancy treatment. As such, such policies are especially important to vulnerable social groups, such as the low- to middle-income groups that have a weaker ability to withstand catastrophic health expenditure.
 - For example, the Good Medical Insurance by PICC provides a comprehensive coverage of up to 100% reimbursement for surgery costs, medication costs, specialist check ups and medical expenses for 7 days before and 30 days after hospitalization. It can also provide coverage for chemotherapy, accidents and other illnesses.

3. Lastly, such policies feature higher deductibles with most deductibles ranging between RMB ¥5,000 (USD \$777) to RMB ¥20,000 (USD \$3,108). This helps insurers to mitigate the amount and frequency of claims and allows them to sustain their business model for the masses.
 - For example, the Good Medical Insurance by PICC has a general deductible of RMB ¥10,000 (USD \$1,552) (within 6 years) and a RMB ¥0 (USD \$0) deductible for critical diseases.
4. The enrollment and claims process for these policies heavily capitalize on technology and collaboration with other players. These policies can be purchased by individuals online via mediums such as WeSure, a part of Wechat, and use online payment methods such as WeChat Pay. PICC capitalizes on a partnership with Ant Insurance for aid in product design and use of their online sales platform. This also enables the use of AliPay insurance platform as a preferred platform for purchase and payment.



WHY IS THIS MODEL SUCCESSFUL?

1. **Pro-technology, fintech and insurtech environment is present.**
In China, the funding for insurtech amounts to EUR €4.0bn (USD \$3.45) with significant government support for the development of technology.
2. **Insurers have access to data for underwriting and means to reach scale.**
PICC partnered with China Re Life to create product design based on data, and Ping An Insurance to leverage on a wide-reaching sales platform.
3. **Insurtech distribution platforms are present.**
In China, as more technology companies, like Tencent, enter the healthcare and insurance space, they are able to reach mass distribution and service efficiencies. Tencent's Insurance platform, WeSure, co-designs and markets affordable and innovative insurance products, leveraging on insurtech from Tencent's distribution and data capabilities. These products

Sources: Cetin, et al., 2019; Consultative Group to Assist the Poor, 2019; DayDayDay News, 2020; PICC Health Insurance Company Limited, 2018; Sheehan, 2019; The Fintech Power 50, 2020; Wong, 2019.

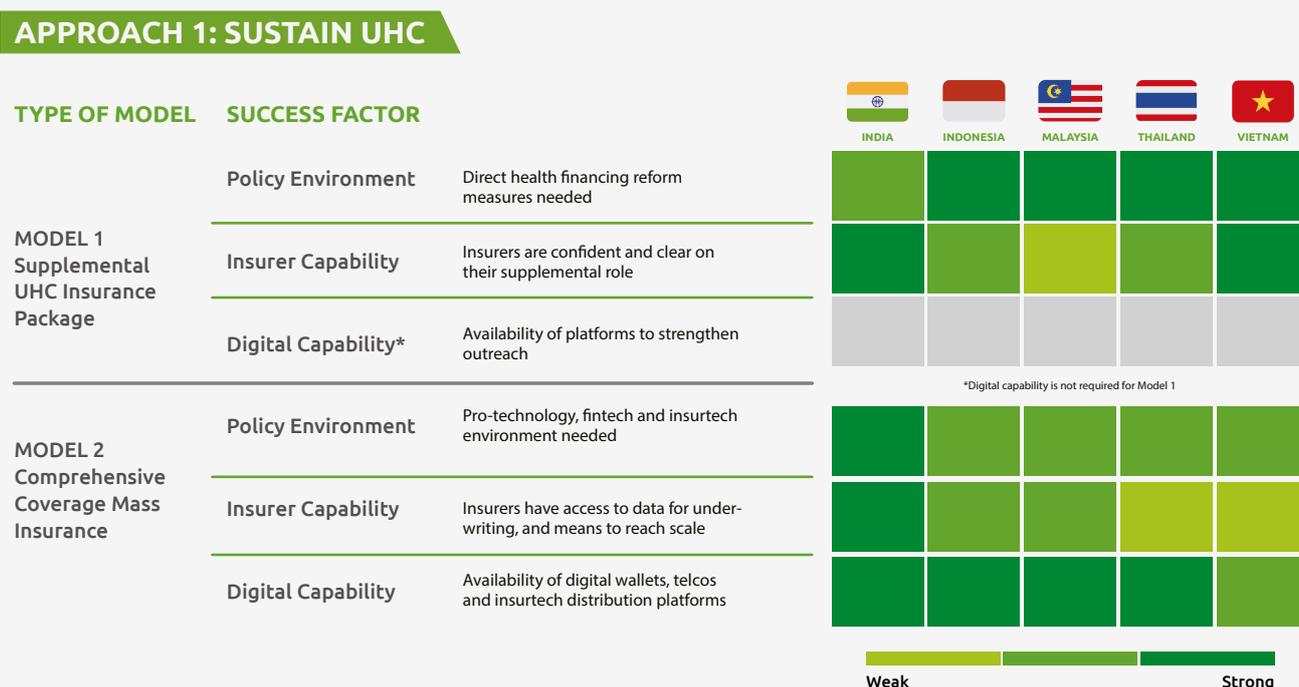
Success Factors

For Model 1 to be successful, health financing legislative or policy measures are needed to create a direct mechanism for public-private insurance partnership. This model will require direct government action to both drive the implementation of the model, and delineate the benefit package and engagement terms with the private sector. Private insurers need to be confident and clear on their supplemental role, what is the benefit design, the mechanism for coordination with public sector schemes, and the financial sustainability of supplemental offerings. Digital capabilities, such as ecommerce and digital wallets that have significant market penetration can be used to achieve scale, though it is not compulsory for the success of Model 1, can be used to strengthen outreach.

A private sector-driven comprehensive mass insurance model (Model 2) requires a policy environment that enables general technology fintech and insurtech innovation. As scale is a key component of this model, it is necessary for insurers to have access to data for underwriting for the population at large, as well as the means to reach scale through digital distribution platforms such as digital wallets, telecommunication providers and insurtechs. As volume is a key aspect in the design of Model 2, without government support to scale, the digital environment must be the enabler for widespread reach. As all five markets have a thriving digital environment and ecosystem, Model 2 we deem to be feasible for pilot and expansion even in the short-term.



Figure 31: Presence of success factors that enable Approach 1



Adaptability of Models to Emerging Markets

The policy environment and dialogue for Model 1 are in various stages across the different markets, which can be broadly categorized into three phases: 1) an action phase, 2) a dialogue phase, and 3) an intention phase. In the action phase, several states have worked directly with private insurers to implement or supplement government insurance schemes. The Coordination of Benefits (COB) scheme in Indonesia that encourages private insurers to provide supplemental insurance to the JKN has seen 23 insurers implementing the scheme¹³⁸. Vietnam and Thailand are in the dialogue phase with active conversations on innovative financing and insurance

models to supplement UHC¹³⁹. Vietnam has been boosting public-private partnership discussions with a PPP law effective since 2021. State-owned top insurer Bao Viet is currently engaged in discussions with the Vietnamese government on supplementary UHC. Since 2012, there have been active multi-stakeholder dialogues on supplementary UHC insurance models in Thailand¹⁴⁰. Although successive attempts have been made in Malaysia to introduce social health insurance, a national health insurance nor a supplementary insurance system has been successfully enacted in legislation.

138 Humas. (2017, March 22). BPJS Kesehatan Encourage State-owned Enterprises to reach 100%. *BPJS Kesehatan*. Retrieved from <https://bpjs-kesehatan.go.id/bpjs/index.php/post/read/2017/443/BPJS-Kesehatan-Dorong-Kepesertaan-BUMN-100/berita-umum>

139 Asia-Pacific Economic Cooperation. (2017, August). Joint Statement of the 7th APEC High-Level Meeting on Health & the Economy. Retrieved October 22, 2021 from https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Health/2017_health_him

140 Supakankunti, S., Herberholz, C., Witvorapong, N., & Pradithavanij, P. (2012, December 28). *Sustainable Financing and Reform of National Health Insurance System in Thailand*. Thailand: Chulalongkorn University.

CHAPTER 3: Private Health Insurance Innovation Models

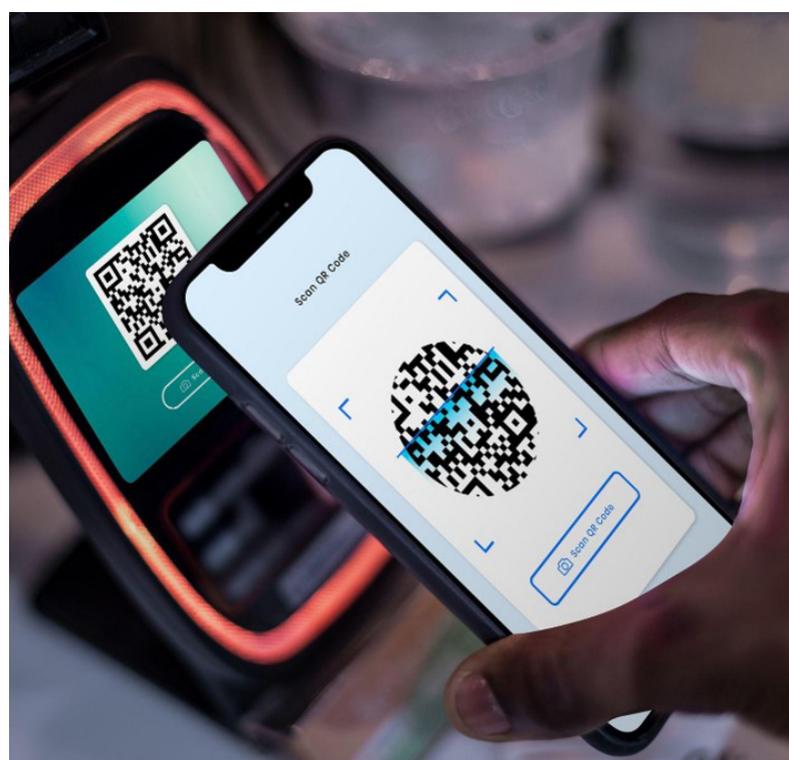
Efforts to introduce reform and changes to Malaysia's system of health financing has faced significant public and civil society opposition who consider the current system of very low cost and comprehensive publicly funded health services as a constitutionally-mandated entitlement¹⁴¹.

The introduction of Model 2, comprehensive mass insurance, is reliant on strong digital capabilities and market penetration, and an enabling policy environment for innovation. India, Indonesia and Thailand have established fintech and/or insurtech sandboxes which provide the regulatory space for innovation with government oversight and dialogue.

From the perspective of traditional insurers, our interviews did not reveal a strong interest in replicating Model 2 with a few respondents remarking the scarcity of data or infrastructure needed to profile the risk and reach the masses. However, digital platforms, particularly insurtech aggregators, have already started to market microinsurance models for the masses. Given the importance of data for risk underwriting and population penetration, Model 2 may be driven by a digital entity expanding into insurance or partnering with a traditional insurer.

In Thailand, a partnership between Axa, a major insurer and AIS, a local telecommunications company provides basic free insurance that covers death, disability and hospitalization for mobile phone subscribers along with data packages¹⁴².

In Indonesia, insurtech companies, like Pasarpolis and Qoala, are already reaching middle-class Indonesians with affordable and simple insurance products. These channels may be an important precursor for comprehensive insurance solutions. In Vietnam, an active and growing fintech industry is reaching the masses with convenient integrated finance and lifestyle solutions that serve as a platform for introducing insurance to the masses. In Malaysia, traditional insurers are concerned with cost containment strategies to curb medical inflation; however, digital players with significant market reach may find an opportunity to provide mass insurance while keeping operational costs low compared to traditional insurance providers. In all the five markets, there is large volume and potential to scale for digital entities like digital wallets, e-commerce, telcos and insurtech distribution platforms.



141 Shepard, D. S., Savedoff, W., Hong, P.K. (2002, October 16). Health care reform initiatives in Malaysia. *World Health Organization*. Retrieved from https://www.who.int/health_financing/documents/malaysia-reform-initiatives.pdf

142 Atlas Magazine. (2019, April). AXA-AIS partnership : Free insurance by topping-up the phone. *Atlas Magazine*. Retrieved October 22, 2021 from <https://www.atlas-mag.net/en/article/axa-ais-partnership-free-insurance-by-topping-up-the-phone>

3.2 Approach 2: Addressing noncommunicable disease burden

Governments of all the five countries have drawn up national noncommunicable disease strategies that focus on a health systems response to tackle therapeutic areas such as chronic diseases, cancers, cardiovascular and lung diseases. Against this backdrop of a growing noncommunicable disease burden in the region, Model 3 on specialty drug insurance and Model 4 on disease-specific insurance serve to address the issues of weak service coverage and financial protection through national schemes, by offering products that provides access to specialty drugs necessary for treatment, and comprehensive coverage for specific diseases.

Model 3: Specialty Drug Insurance

Innovative therapies can transform the treatment of devastating diseases that have few or no alternatives, that lead to better patient outcomes. Without access to treatment for diseases, patients have to either bear costs for treatment out-of-pocket or do not seek treatment at all – both of which resulting in catastrophic consequences. Approved medicines on national lists typically do not include innovative therapies that are associated with high costs.

Key elements of this model include low premiums that further the aim of making healthcare more affordable, collaboration between multiple entities, direct compensation and the provision of value-added services.

Box 8: Case Study: China's Specialty Drug Insurance

While China has a National Reimbursement Drug List (NRDL), a lot of targeted drugs with good efficacy are not included in it. This results in a heavy economic burden on patients with tumors and other critical illnesses. Having specialty drug insurance allows patients access to expensive drugs that are necessary for treatment for major disease and have no alternatives. This is especially crucial for patients in critical conditions requiring innovative therapies. It addresses the challenge of the demands of out-of-hospital purchase drugs that are not usually covered by the general consumptive private health insurance plans.



Examples: Yaoshenbao Anti-cancer Special Drug Security Plan by WeSure, Taikang Online and MediTrust Health



KEY FEATURES

There are 4 key features of Chinese specialty drug insurance policies that enable it to increase access to expensive drugs necessary for treatment for major diseases:

1. The average premiums of specialty drug insurance are kept very low at only several tens of RMB (RMB ¥10 = USD \$1.55) per year thus furthering the policy's aim of making healthcare more affordable and accessible.
 - For example, the Yaoshenbao Anti-cancer Special Drug Security Plan has a premium of 12 yuan per year for those aged 0-50 years old on its basic plan that cover 12 anti-cancer drugs outside the NRDL. The upgraded version of the policy also has a relatively low premium of RMB ¥96 (USD \$15) /year (0-year-old), RMB ¥156 (USD \$24) /year (30 years old), RMB ¥2280 (USD \$354)/year (60 years old) and covers anti-cancer drugs marketed in China.
2. The insurance policy does not directly provide compensation for expense, but instead converts it into drug services provided for customers that include direct compensation as well as value-added services such as drug distribution, disease progress tracking and green passage. This is innovative as it converts the traditional claim service into specialty drug services, which provides a new idea for the business innovation combining the insurance industry with drug supply chain, and indirectly improves the sales and recognition of drugs.
 - For example, for the Yaoshenbao Anti-cancer Special Drug Security Plan, after submitting a medication application, Meixin Health will complete the prescription review within one working day, arrange to receive the medication, or deliver to the door according to the patient's appointment request. Patients are thus not required to make a payment.

3. A collaboration between multiple entities to combine expertise and successfully implement the policy. Cooperation among Third Party Administrators (TPA), reinsurers and direct insurers, where the three parties play their roles in product design, data support, specialty drug services and insurance implementation respectively, is needed.
 - For example, in the Yaoshenbao Anti-cancer Special Drug Security Plan, four companies collaborated to form different features of the insurance product. MediTrust Health designed and developed the drug list in addition to providing specialty drug services. China Re Life participated in the product design and provides reinsurance services. Taikang takes charge of sales and implements insurance items. Lastly, WeSure provides an online sales channel on WeChat for effective distribution.
4. Enrollment into this policy is convenient and entails a few clicks on the WeSure Insurance platform under We Chat. To activate the insurance plan, patients need to submit a medication application after being diagnosed by a professional medical institution and being issued a compliant prescription.



WHY IS THIS MODEL SUCCESSFUL?

1. Product innovation has obtained regulatory approval.

The chairman of China Banking and Insurance Regulatory Commission (CBIRC) has rolled out measures that promote the opening of the insurance sector.

2. Insurers are clear and have awareness on national formulary.

The Yaoshenbao Anti-cancer Drug Specialty Plan addresses clear gaps in China's National Reimbursement Drug List, and is able to offer greater value, coupled with increased affordability and accessibility.

Sources: Yuhan, 2019; Huang, 2019.

Model 4: Disease-specific Insurance

Disease specific insurance policies allow insurance companies to provide comprehensive coverage for specific illnesses. These plans can be tailored to the specific needs of the patient and required healthcare services to manage or treat the condition. By providing reimbursement or lump sum pay-outs upon diagnosis and treatment, such policies can provide financial protection where high medical bills, inability to work and loss of income are probable. Key features of this policy include easing financial burden during recovery and value-added services that are tailored to the needs of the patient and their condition.

Box 9: Case Study: Singapore's FWD Cancer Insurance

While the case study below has details from the cancer insurance plan FWD offers in Singapore, the company offers similar products in Malaysia (FWD Care Direct), Vietnam (FWD Cancer Care), Hong Kong (CANSurance), Thailand (Cancer Fighter Health Insurance) and Indonesia (FWD Cancer Protection).



KEY FEATURES

FWD offers an insurance plan specifically catered to cancer with 6 key features:

- 1. 100% payout for all cancers, even at early stages**
FWD offers a full pay-out for all stages of cancer thus catering to the comfortable and peaceful recovery of the disease by easing financial burden. Financial payouts at early stages encourages early detection and treatment that is observed to improve survival rates.
- 2. Medical second opinion service**
The policy also provides a medical second opinion service that allows one to have the best medical practitioners around the globe to evaluate the policyholder's diagnosis and treatment plans. Provision of such value-added services provide a better experience and assurance of quality treatment when fighting the disease.
- 3. Simplicity in policy attainment**
The policy is relatively simple to get as it only requires customers to conduct one simple health declaration without any medical examination to apply for complete cancer coverage. This makes the experience of purchasing the policy easier.
- 4. Comprehensive yet affordable**
While offering a coverage of up to SGD \$50,000 (USD \$36,800), the premiums required by the policy can go as low as being SGD \$7 (USD \$5) a month for a non-smoker male customer.
- 5. Fast Quotation**
The insurance policy also affords its customers convenience in the purchasing process by providing a quick quote. In order to receive a quote, interested customers provide their age, gender, smoking status and desired coverage amount.
- 6. Death Benefits**
The plan comes with a death benefit of SGD \$5,000 (USD \$3,700) that adds to the comprehensive coverage provided by the policy. Offering a death benefit helps policy holders to protect their family from financial burden after their demise.



WHY IS THIS MODEL SUCCESSFUL?

- 1. Product innovation has obtained regulatory approval.**
Government support and approval for cancer-specific insurance policies like FWD's is likely in Singapore given that disease-specific insurance is already an approved product category, and several insurers offer disease-specific insurance at present.
- 2. Insurers have means for product differentiation.**
As a high-income country, with a healthcare context of an aging population and increasing noncommunicable disease burden, penetration of health insurance is high in Singapore. Insurers like FWD have managed to differentiate their products by keeping premiums low and coverage high, for a standalone product like the aforementioned cancer insurance.

Sources: FWD, 2019; Chan, FWD Cancer, 2021.

Success Factors

For both models to be successful, the policy environment must have the necessary regulations to allow for the product innovations to be in the market. While this usually takes the form of policy regulation or legislation, there may be opportunities for such products to be pilot tested in regulatory sandbox environments.

On the insurer end, insurers need to have clarity and awareness of the national formulary to design a product innovation for the specialty drug insurance. For disease-specific insurance, these are products already available in the all the markets but have no experienced significant uptake according to interviews with insurers.

Insurers need to have a means for product differentiation and promote uptake of the product at a wider scale. In this regard, for both models, digital capability can be used to strengthen sales and distribution.

Model 3 ranks low in feasibility in the short term as it is not available currently in all five markets given that enabling regulations are yet to be in place. On the other hand, Model 4 is highly feasible and prevalent in all five markets and take the forms of both noncommunicable disease-specific insurance such as cancer and diabetes, and tropical disease insurance localized within the context of the market, like malaria and dengue for instance.

Figure 32: Presence of success factors that enable Approach 2

APPROACH 2: ADDRESS NCD BURDEN

TYPE OF MODEL SUCCESS FACTOR

MODEL 3
Specialty Drug
Insurance

Policy Environment Product innovations must gain regulatory approval

Insurer Capability Insurers are clear and have awareness on national formulary

Digital Capability* Availability of platforms to strengthen sales and distribu-

MODEL 4
Disease-specific
Insurance

Policy Environment Product innovations must gain regulatory approval

Insurer Capability Insurers have means for product differentiation

Digital Capability* Availability of platforms to strengthen sales and distribution



Adaptability of Models to Emerging Markets

Applying the models to the context of the five markets, we have not found evidence that governments and insurers are actively exploring Model 3. This could be due to limited awareness of the model, insurer assessment of the low viability of Model 3 in the market, and competing priority areas for innovation (e.g. mass distribution of traditional products).

However, the success in China of specialty drug insurance plans may encourage exploration and innovation of these models in the 5 markets where many innovative therapies are out of reach for the majority of the population.

Model 4 is prevalent in the markets, with supportive regulations allowing these products to be launched and scaled. The markets are constantly evolving the product offerings that are offered as part of Model 4. For instance, India has mandated all insurers to offer COVID-19 insurance as part of their suite of products.

Insurances for noncommunicable diseases such as cancer are either offered on a standalone basis, or as part of riders to a critical illness package across all markets. As previously mentioned, the digital ecosystem includes major players offering digital wallets, e-commerce, and insurtech distribution platforms at a mass scale – these platforms can be tapped on to strengthen sales and distribution of both Models 4 and 5.



3.3 Approach 3: Reinforcing primary and secondary prevention

Prevention and health promotion feature prominently in all the public health strategies against noncommunicable diseases across the five markets. With increasing medical inflation rates and healthcare expenditures, the focus on prevention helps to reduce the occurrence of illness, encourage people to maintain healthy, productive lives, and reduces the financial and service strain on the healthcare system.

Recognizing the importance of sustaining UHC systems, several governments have engaged in multisectoral approaches to promote primary and secondary prevention, such as population level health screenings for specific diseases such as noncommunicable diseases.

The innovative models in Approach 3 are in line with governments' health policy priorities and serve to reinforce primary and secondary prevention efforts. The models focus on lifestyle behaviors in mitigating the risk of onset or progression. Model 5 on prevention and wellness benefits serve to empower people with the knowledge to drive ownership of their personal health and is further supported by Model 6 on integrated education and awareness that serves to engage stakeholders on proactive health management and advance public awareness to minimize risk of disease progression.

Models 5 and 6 can be used to complement existing insurance plans to increase overall contribution towards disease management efforts. While Models 5 and 6 rely on self-driven behavior, Model 7 adds a new dimension by leveraging biomonitoring to financially incentivize healthy behavior.

Model 5: Prevention and Wellness Benefits

Digital tools can empower people to take better charge of their health by providing real-time and individualized health information and recommendations for health management. Such tools can help insurers play a role on the preventive front of healthcare as well and help prevent large claims related to the onset of a condition and resulting medical intervention.

Key features of this model include applying technological capabilities to enable users to self-manage their health by providing personalized information and access digital healthcare services and products.

Box 10: Case Study: Prudential Pulse

Prudential Pulse is a free mobile application available to users in 13 markets in Asia (Cambodia, China, Hong Kong, India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Taiwan, Thailand, Vietnam) and in Africa



KEY FEATURES

The app has 10 unique features that contribute to having greater awareness of one's health.

1. My Wearables

With this feature, users can connect Pulse to health apps such as Apple Health or Fitbit and track their fitness through the app. This will allow the app to track steps, distance, active minutes and calories if the information is available.

2. Symptom Checker (Powered by Babylon Health³)

The symptom checker allows users to ask questions about symptoms via a chatbot interface. It suggests possible causes of symptoms and recommends next steps. The symptom checker service is continuously gauged for accuracy and refinement, and is customized to the country.

3. Healthcheck (powered by Babylon)

Healthcheck is a digital questionnaire curated to give users a better understanding of future disease risks. It also provides recommendations on the changes they can make to reduce their risks and improve their long-term health. The questionnaire requires personal information such as medical history, family history, diet, lifestyle and mental health and represents its projection of disease risk over the next 5 years through the "Digital Twin". The Digital Twin is a graphical representation of the human body, from which users can better understand their risks and factors affecting them.

4. BMI Recorder

Users can take a selfie of their face and upper body to receive a quick estimation of their age and BMI.

5. Wrinkle Mirror

Similar to the BMI recorder feature, this feature works by calculating estimated age and wrinkle index based on a selfie. Additionally, the Pulse app leverages technology and collaboration with relevant expertise to enable convenient access to healthcare services and products as seen in the 3 following features.

6. Video Consultation with a doctor

This feature allows users to consult a nationally-licensed doctor over a video call at any time of the day and on all days of the week. Licensed doctors will review the user's symptoms and advice on any necessary treatment required after the consultation. They also have the ability to issue electronic medical certificates as well as medicine prescriptions. This feature, where present, is made possible via a collaboration with local telemedicine providers.

7. Clinic Locator

The clinic locator is a feature that contains a directory of clinics and hospitals located near the user. Enabling the app to access the user's location would allow the app to provide recommendations for the nearest healthcare facility to the user.

8. PruShoppe

The app also offers a digital platform for the sale of microinsurance products at affordable premiums that provide coverage for different purposes, such as coverage against side effects of COVID-19 vaccination, dengue, prostate cancer and breast cancer. Microinsurance products such as the dengue policy have relatively shorter terms of 3 months.

9. My Health Content

This feature delivers simplified easy-to-understand health information in the form of articles and videos with recommendations on how to lead a balanced and active lifestyle.

10. Wealth Channel

By employing an AI digital assistant, this feature offers educational content on financial management and its various aspects. Content areas include saving, investing, borrowing and spending wisely.



WHY IS THIS MODEL SUCCESSFUL?

1. Policies that support and promote wellness are in place.

In India, where Prudential Pulse is available, the insurance regulatory authority (IRDAI) has established guidelines governing the provision of wellness and preventive health care features under health insurance policies, encouraging policyholders to improve and maintain their health and lifestyle.

2. Product offerings by insurers incorporate prevention and wellness.

Through Pulse, Prudential bundles its insurance products with prevention services, shifting the narrative from just financial coverage to holistic health and self-management of health. Through Pulse, Prudential has another distribution platform to sell its product while helping clients to prevent ill-health.

3. The population is equipped with smartphones, and is familiar with application-usage.

With Pulse, Prudential managed to broaden its customer base, with the average age of Pulse user by market being 30, compared to the average age of existing customer (of traditional Prudential products) being 40. This population is digitally savvy and well-acquainted with application usage.

Note: ³Babylon Health is a UK-based digital healthcare app for AI-powered diagnosis and video appointments.

Sources: Jenkins, Bahukhandi, & Ramakrishan, 2020; Prudential PLC, 2021; Pulse by Prudential, 2021.

Model 6: Integrated Education and Awareness

These models serve to engage policyholders on proactive health management with the aim to minimize risk of disease and prevent disease progression.

A key feature of this model includes leveraging technology to educate consumers and increase awareness of disease prevention and progression strategies. This model typically entails a partnership with a relevant nonprofit health organization, health provider, or healthcare company to integrate information and disease management support services.

Box 11: Case Study: MSIG Insurance-Singapore Cancer Society Partnership

MSIG Insurance partnered Singapore Cancer Society to offer integrated education and awareness services bundled with insurance.



KEY FEATURES

There are 3 key features that contribute to the partnership's aim of increasing awareness of cancer and minimizing the risk of cancer:

1. MSIG and Singapore Cancer Society (SCS) have entered a long-term collaboration of 3-years to advance public awareness on cancer risks. The long-term partnership between the insurer and the social organization builds a relationship and thus facilitates more sustainable collaboration on the issue of cancer.
2. The collaboration includes virtual seminars with content specifically tailored to different target audiences. Specifically targeting content allows such seminars generate greater impact and become more effective in educating Singaporeans on the commonly diagnosed cancers in Singapore
3. In addition to seminars, MSIG also pledges to donate USD \$10 for every CancerCare Plus policy sold to SCS. By partnering SCS, a relevant social organization MSIG promotes the importance of disease education and demonstrates support for SCS' cancer programs and patient care service.
 - If interested in being part of MSIG's efforts in the cancer social space, individuals can sign up for virtual seminars hosted by the insurer or purchase the CancerCare Plus policy the insurer sells.



WHY IS THIS MODEL SUCCESSFUL?

1. Policies that promote disease awareness and management exist.

The MSIG-SCS partnership was possible against the backdrop of a strong policy environment with government support for cancer awareness, education, and financial protection. Government organizations like the Health Promotion Board regularly engage in cancer related programs with nonprofits in the space (HPB, 2018).

2. Insurers want to drive value and uptake of their disease-specific offerings.

Like several insurers in Singapore, MSIG offers comprehensive cancer insurance. Its most recent cancer-related product is CancerCare Plus, a digital product released in 2020. By having and expanding on product offerings in disease areas such as cancer, MSIG is motivated to further engage with disease education and awareness efforts in cancer.

3. Digital channels to expand outreach are present.

MSIG leveraged technological capabilities to host virtual webinars in Singapore, that enables clients to attend the sessions with greater convenience and accessibility.

Source: MSIG, 2020.

Model 7: Biomonitoring to Incentivize Healthy Behavior

By employing digital tools that allow for monitoring of health behaviors and vital signs, insurers can promote autonomous health management and provide recommendations to help policyholders manage their pre-existing conditions. Better health management also helps to decrease the risk of illness and disease and their corresponding healthcare costs that would need to be claimed.

Additionally, an insurance plan specific to those with pre-existing diseases provides greater peace of mind to patients with the disease who may have previously faced additional uncertainties, costs, and exclusions from health insurance. Such policies also provide comprehensive coverage for the wide variety of illnesses and treatments that normal health insurance plans do, but with additional protection and assurance for patients with disease.

Key features of this model include providing comprehensive coverage with additional protection and assurance for those with the disease, providing access to technology that allows for self-monitoring, providing lifestyle and dietary recommendations and providing financial incentives related to insurance premiums as incentives for good performance.



Box 12: Case Study: MSIG Malaysia Gluco SafeGuard

The MSIG Gluco SafeGuard insurance provides comprehensive coverage for the wide variety of illnesses and treatments similar to normal health insurance plans, but with additional protection and assurance for diabetic patients through incorporating biomonitoring.



KEY FEATURES

MSIG Malaysia's Gluco SafeGuard Plan comes with 7 key features that further the model's aims (MSIG, n.d.):

1. Upon purchasing the plan, policyholders receive complimentary premium access to a Digital Diabetes Management App called Health2Sync that empowers policyholders to manage their diabetes better and keep it under control.
2. To incentivize better diabetes management, policyholders are offered a 20% entry discount on their premium for good blood glucose level during enrollment
3. To maintain good diabetes management after purchase of the policy, MSIG provides a discount of up to 40% on the next premium upon the next policy renewal if users are able to achieve requirements.
4. Policyholders are allowed to choose between 4 insurance plans that offer differing levels of benefits to better balance their medical needs and their financial constraints.
5. The policy also provides additional benefits such as accidental outpatient alternative medical treatment, nutritional allowance and compassionate care allowance.
6. Policyholders are also afforded financial flexibility via the premium installment payment plan offered under this insurance policy as they can choose to pay premiums in 6- or 12-month installments.
7. Users are also able to enjoy a better healthcare experience via the MSIG Assist Card they are entitled to under the policy. This card would allow them early admission into any of MSIG's panel hospitals in Malaysia.



WHY IS THIS MODEL SUCCESSFUL?

1. Policies that support and promote wellness exist.

In Malaysia, the regulatory environment allows for healthy behaviors to be linked to financial rewards or incentives. Furthermore, the government has demonstrated interest in promoting wellness and strengthening noncommunicable disease prevention and control, by implementing national strategic plans.

2. Insurers are adopting new ways to incorporate prevention in product offerings.

Malaysia has one of the highest rates of diabetes in the world. In response, MSIG designed the Gluco Safeguard to provide financial cover for people with diabetes, incentivizing users to manage their health by biomonitoring.

3. The target audience is equipped with smartphones.

As the Digital Diabetes Management App is central to the design of Gluco Safeguard, high levels of digital literacy and use such as smartphone and application usage is a key criteria for its clients. The smart phone penetration in Malaysia stands at 88% as of 2020, signifying Malaysian readiness for digital solutions like Gluco Safeguard.

Sources: Ministry of Health Malaysia, 2016; Muller, 2021.



Success Factors

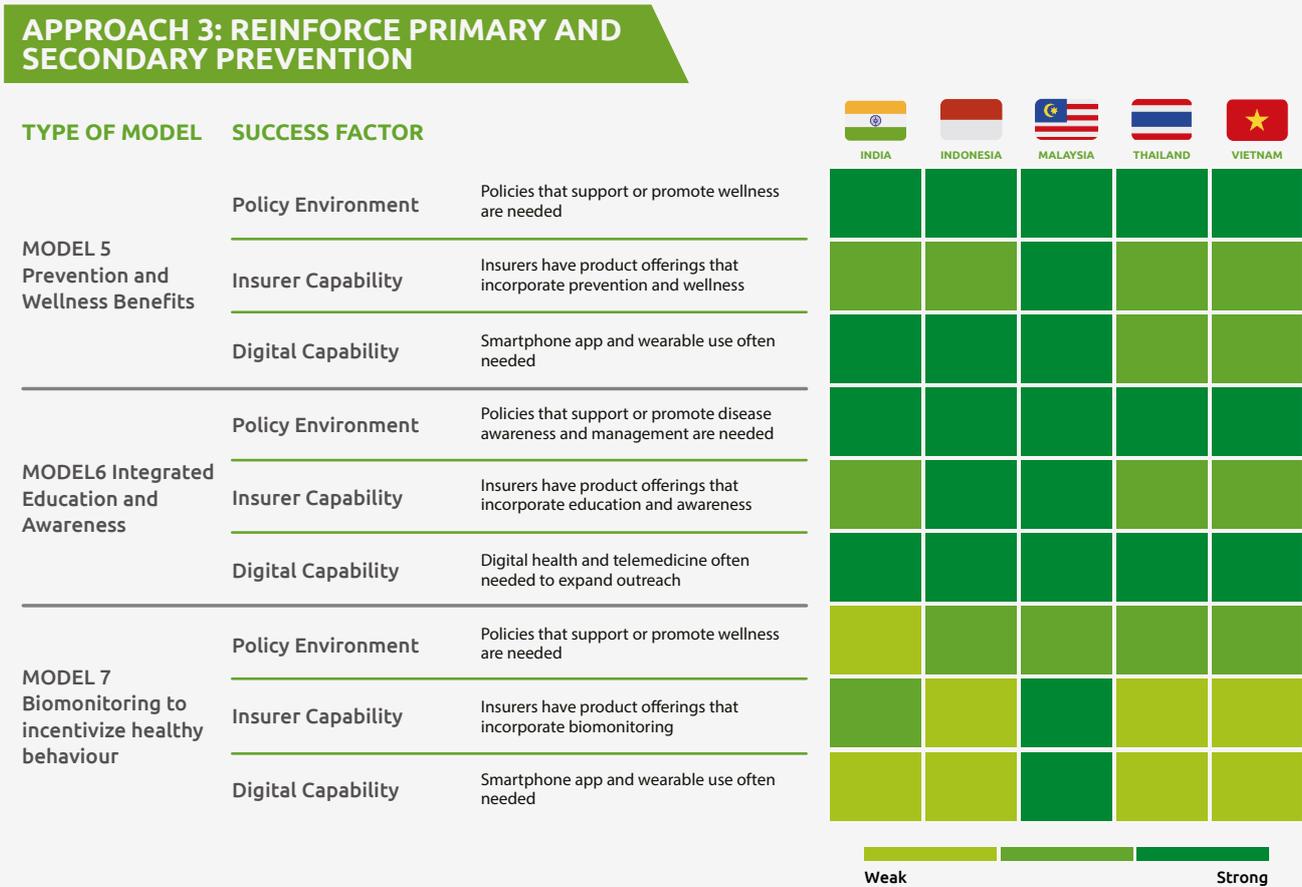
An enabling policy environment that supports or promote wellness, disease awareness and management can promote uptake and interest of these models. In recent years, prevention and wellness offerings have gained traction with large insurers, who are moving beyond the role of financial intermediary to the role of “wellness partner”. Insurers seeking to incorporate these models need to provide in-house solutions or partner with digital platforms that can incorporate prevention and wellness, education and awareness, and biomonitoring services.

Another key component of this model is the involvement of nonprofits and pharmaceuticals, to provide value-added education and awareness services about insurance products.

Nonprofits have the benefit of being close to the community and pharmaceuticals bring deep scientific expertise in disease areas.

Finally, the digital ecosystem must be sufficiently mature to enable smartphone apps and wearable technology connectivity and use. Tapping on digital health players and telemedicine helps to expand outreach for these models. The models in this approach have low barriers to entry and can be seen as quick wins, making them highly feasible. Nevertheless, comparatively, Model 7 requires more effort than Models 5 and 6 as this models is the newest in the market and may require regulatory approval for insurance platforms to offer financial rewards linked to be linked to healthy behaviors products.

Figure 33: Presence of success factors that enable Approach 3



Adaptability of Models to Emerging Markets

In all five markets, Models 5 and 6 are quick wins as they are highly feasible, have low barriers to entry and can be rapidly implemented in the short-term. The major insurers in these markets have adopted various strategies to advance their prevention and wellness policy agendas through these models.



CHAPTER 3: Private Health Insurance Innovation Models

These models can be supported by governments. India has released draft guidelines on wellness and preventive features in health insurance. Further supported by the regulatory sandbox, insurers in India are increasingly partnering and piloting with health techs.

The Vietnamese government is directly leading disease prevention initiatives in noncommunicable diseases in general, and breast cancer specifically¹⁴³, that would support Model 6.

In other instances, efforts to adopt these models are directly advanced by insurers themselves. Some regional insurers have already implemented these models. AXA has launched a LaughforHealth campaign in Malaysia¹⁴⁴ while Swiss Re has partnered with a local insurer for dynamic pricing and disease management insurance as part of biomonitoring in Thailand¹⁴⁵. Indonesia and Malaysia have effectively attracted both regional and local players such as AIA, Prudential and Sinarmas, who are actively building smart apps for prevention and wellness¹⁴⁶.

The digital ecosystem in this approach allows for bundled services with insurance products that provide consumer value. In some markets such as Vietnam and Thailand, telemedicine partnerships with insurers are also on the rise, paving the way for effective implementation of the models in this approach. In other markets like Malaysia, there are emerging partnerships between ecosystem players, such as pharmaceuticals and telehealth providers.

For instance, Pfizer has partnered with telehealth provider, DoctorOnCall, to launch a digital therapeutics platform addressing three key therapeutic areas namely smoking cessation, vaccination, and heart health. The platform empowers Malaysians to own and manage their health on their own. Insurers can leverage on partnerships such as these as a precursor to further develop these models.

143 Jenkins, C., Ngan, T. T., Ngoc, N. B., Phuong, T. B., Lohfeld, L., Donnelly, M., Minh, H. V., Murray, L. (2019, January 30). Strengthening breast cancer services in Vietnam: a mixed-methods study. *Global Health Research and Policy* 4(2). <https://ghrp.biomedcentral.com/articles/10.1186/s41256-019-0093-3>

144 Travel Impact Newswire. (2018, July 27). Insurance company engages Malaysians to live healthier through #Laughforhealth Campaign. *Travel Impact Newswire*. Retrieved from <https://www.travel-impact-newswire.com/2018/07/insurance-company-engages-malaysians-to-live-healthier-through-laughforhealth-campaign/>

145 DigFin. (2018, June 13). Muang Thai, Swiss Re and Prenetics pilot chronic-disease cover. *DigFin*. Retrieved from <https://www.digfingroup.com/insurtech-insurance-8/>

146 Reuters. (2012, June 19). UPDATE 2-Insurance giants jostle for slice of Southeast Asia market. *Reuters*. Retrieved from <https://www.reuters.com/article/aviva-cimb-insurance-idINL3E8HI5GX20120619>



CHAPTER 4: Private Health Insurance Innovation Ecosystem

4.1 An ecosystem approach to design insurance and ensure its uptake

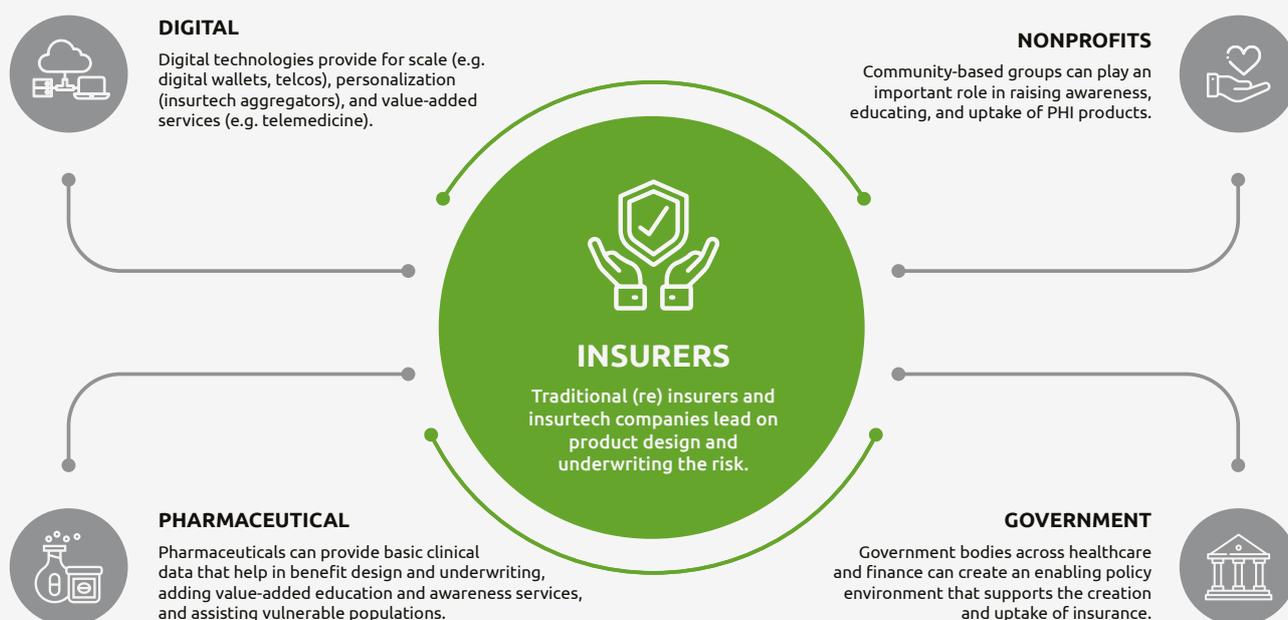
While the seven innovative insurance models can support UHC, building the insurance product alone is insufficient. An ecosystem approach that addresses the entire insurance value chain is needed to ensure success at every stage. To implement this approach, both a network of partners and an enabling policy environment are required to launch, test, and iterate to ensure matching of insurance product to the needs of the masses.

The multistakeholder approach entails coordination or direct partnerships with ecosystem entities along the insurance value chain and in different insurance models. There are five stakeholders to consider in developing the insurance innovation ecosystem - insurers, digital firms, pharmaceuticals, nonprofit organizations, as well as governments (See Figure 34).

“Together with patient support, cultural sensitivity is incredibly important. We need to provide the right insurance solutions to the right market. This then translates to better health protection for local customers— for example, in terms of financial coverage and pay-outs for different critical illnesses, hospitalization needs, and out-patient clinical services.”

**- Mr Augustine Kwan, Insurer
(Lead, External Communications Asia, Manulife)**

Figure 34: Key stakeholders involved in the PHI innovation ecosystem



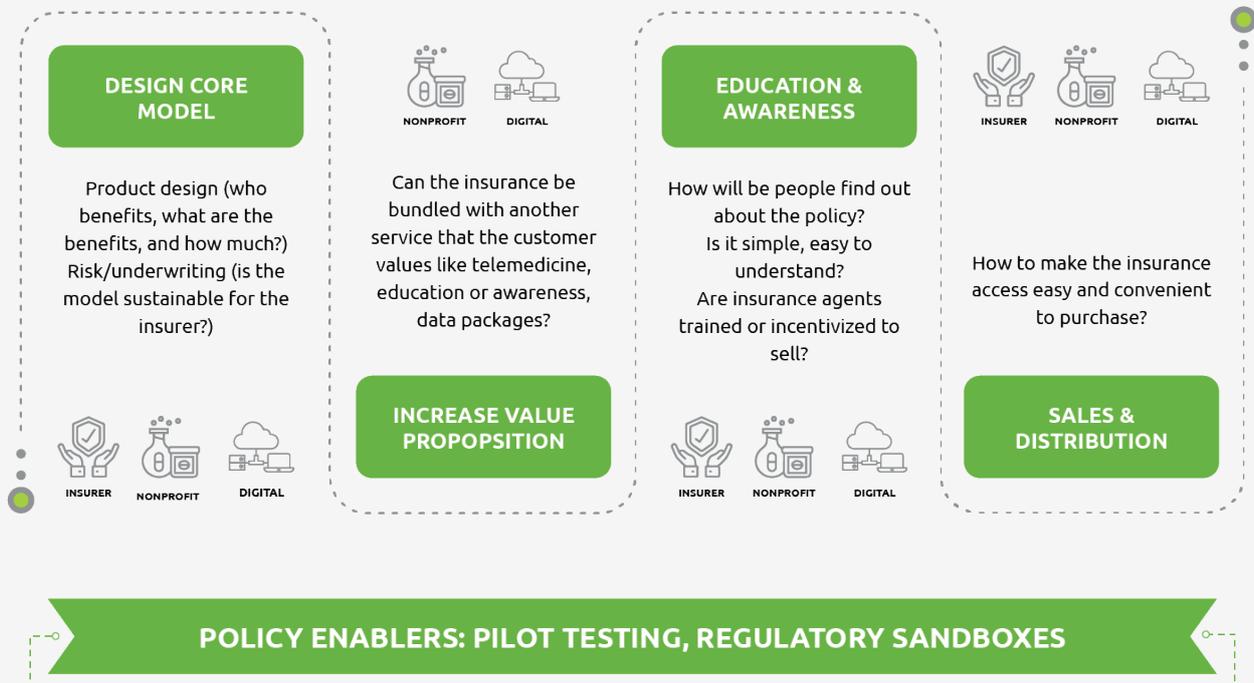
CHAPTER 4: Private Health Insurance Innovation Ecosystem

1. Insurers refer to the traditional insurers, reinsurers and insurtech companies that take a leading role in product design and underwriting the risk of providing an insurance plan.
2. Digital partners refer to firms that assist in providing digital technologies for greater scale and value-added services. Such partners can contribute to scale by increasing outreach and convenience through digital wallets, telecommunications companies and personalization with insurtech aggregators.
3. Pharmaceuticals can provide basic clinical data that could assist insurance in design and underwriting, add value-added education and awareness services due to their expertise into diseases as well as assisting the vulnerable populations through discounts.
4. Nonprofits refer to community-based healthcare groups that can play an important role in raising awareness, educating and increasing the uptake of PHI products due to their close connection to communities and health conditions (e.g. national cancer societies).
5. Government bodies are enablers and stewards of the insurance innovation ecosystem and can span the purview of the Ministries of Health, Ministries of Finance, Central Banks, digital authorities, and insurance regulatory authorities.

PHI Value Chain

There are four stages in the insurance value chain: designing the core model, increasing its value proposition, education and awareness, and sales and distribution (see Figure 35).

Figure 35: Private Health Insurance innovation value chain



STAGE 1: Design Core Model

The first stage of designing the core model includes product design as well as risk and underwriting. Product design includes deciding who the insurance policy should benefit, what benefits should be offered, as well as the level and mechanisms of reimbursement (e.g. lump sum pay-out, annual cap on claims). Actuarial expertise and data sets are critical for risk and underwriting particularly of new models whose viability and consumer acceptance have not yet been tested in the market.

Typically, the commercial insurer would be the lead in product design and risk underwriting. Increasingly insurtech platforms are leading in product design, but still rely on the actuarial expertise and licensed insurers. As models of risk underwriting are being refined to include populations who are not well profiled by standard data sets, insurers and insurtech platforms are turning to alternative data sources that gauge consumer behavior through digital wallets, telecommunication companies, and mobile GIS locations. In low- and middle-income countries in Asia, there is a dearth of clinical data to guide actuarial expertise. Partnerships with pharmaceutical companies can provide both clinical expertise to guide product development and locally relevant data to assist in risk underwriting.

“To develop underwriting innovation, we need data sets that are being naturally generated across a broad segment of consumers, particularly under-served segments. In Asia, where smart phone penetration is very high and continues to increase, these data sets can often times be found on mobile phones and the apps installed on those phones.”

**- Ms Lauren Liang, Reinsurer
(Head, Customer and Partnership
Solutions Asia, Swiss Re)**

STAGE 2: Increase value proposition to consumers

After product development, insurance ecosystem partners should develop strategies and offerings to increase the value proposition of insurance to consumers. As previously discussed, insurance is not well-understood nor seen as an essential purchase by most people in the five markets studied. Value-added services that incentivize or increase the attractiveness of the purchase of insurance should be pursued.

These value-added services could include bundled telemedicine consultations, free health information services, and data packages. For example, AXA Thailand has partnered with the major telecommunications provider AIS to provide free basic insurance covering death, disability, and hospitalization for mobile subscribers that sign up to a specific data plan¹⁴⁷.

¹⁴⁷ Atlas Magazine. (2019, May 4). AXA-AIS partnership: Free insurance by topping-up the phone. Retrieved from <https://www.atlas-mag.net/en/article/axa-ais-partnership-free-insurance-by-topping-up-the-phone>.

Pharmaceutical-insurance partnerships can provide support for health education and awareness services for insurance policyholders. Insurers may also work with these companies to provide preferable or discount pricing, particularly for vulnerable populations.

STAGE 3: Education and Awareness

Third, the sales and awareness process involves how to communicate the value of the product and how people would be able to find out about the policy.

“From consumers’ perspective, they might not know exactly what a particular drug does by its name, how it is being used, and when they would need it. Structuring a drug insurance coverage that’s appealing to customers is thus a hurdle that needs to be addressed.”

**- Ms Hueyfang Che, Reinsurer
(Head of Health Solutions Asia, Swiss Re)**

Insurers are moving towards simplification and clarity to drive the uptake of policies. Insurance agents, who are the main channel for sales in many countries, should be sufficiently trained to understand the value of the insurance product and incentivized to sell.

“For now, for Indonesians, insurance is something that needs to be sold by a person or at least through a virtual face to face. It needs to be explained as not a lot of people have enough insurance knowledge.”

**- Dr Dian Budiani (MBA, FLMI, FLHC),
Insurer (Chief Operations & Health
Officer, Prudential Indonesia)**

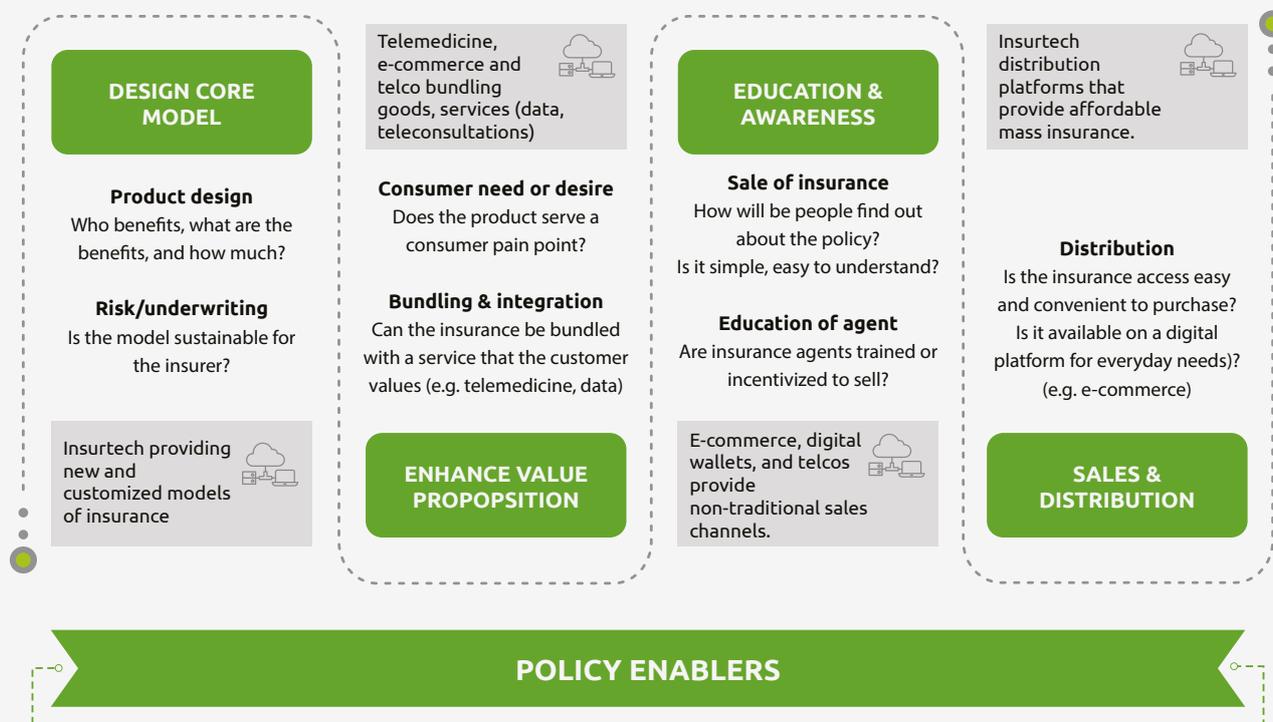
In the five countries studied, private insurance penetration is not common amongst middle and lower middle-income households. Nonprofit health organizations can partner with the insurance ecosystem to promote the value of specific insurance products and reach communities directly.

STAGE 4: Distribution

Lastly, the distribution process includes understanding how to make the insurance policy simple and convenient to purchase. Insurtech aggregators, telecommunications, and other distribution platforms that serve the general market have accelerated the distribution of microinsurance and financing solutions. In the 5 markets studied, the insurance innovation ecosystem is most rapidly evolving at the point of distribution. Partnerships between digital players, insurers, and nonprofit organizations can similarly spur outreach.

4.2 The role of digital enablers across the insurance value chain

Figure 36: Role of digital enablers in PHI innovation value chain



The move towards digitization has played a transformative role in increasing access to services across all sectors. New entrants into the healthcare insurance ecosystem include insurtech, e-wallets, e-commerce platforms, and telehealth consultation providers. These changes are taking place at a swift rate globally, with over USD \$6.37 billion flowing into the insurtech industry in 2019¹⁴⁸, and a predicted seven-fold growth in telehealth by 2025¹⁴⁹.

Within the five emerging markets, PHI-digital partnerships are changing the user experience by offering customized, bundled, affordable, and convenient solutions (see Figure 36). First, the use of digital enablers,

such as insurtech, allows for customized offerings of insurance products, which can allow the users to select which insurance options or add-ons best suit their needs. The digital space, further, allows for significant cost-cutting options, which makes them affordable to a wider range of customers. Finally, the increased internet and mobile penetration rates in emerging markets have also made digital enablers extremely convenient for users.

148 Willis Towers Watson Public Limited Company. (2020, January 30). 2019 InsurTech investment reaches all-time high with one-third of historic total – almost \$2 billion invested in Q4 alone. *Globe Newswire*. Retrieved from <https://www.globenewswire.com/news-release/2020/01/30/1977329/0/en/2019-InsurTech-investment-reaches-all-time-high-with-one-third-of-historic-total-almost-2-billion-invested-in-Q4-alone.html>.

149 Healthcare IT News. (2020, May 15). Telehealth set for “tsunami of growth,” says Frost & Sullivan. <https://www.healthcareitnews.com/news/telehealth-set-tsunami-growth-says-frost-sullivan>

Figure 37: Roles of key players in digital innovation

		FEATURES				
ROLE		CUSTOMIZED	BUNDLED	AFFORDABLE	CONVENIENT	REACH
	E-Wallets Software-based system that securely stores users' payment information or money, enabling them to complete transactions via their phone Example: Grab, Gojek (Indonesia), Paytm (India)	✗	✗	✗	✓	✓
	E-Commerce Refers to the buying and selling of goods/services online. Example: Policy Bazaar, Flipkart (India), Lazada (Malaysia), Shopee (Thailand)	✗	✓	✗	✓	✓
	Telehealth The practice of administering medical care remotely, which has become hugely popular during the pandemic Example: SehatQ (Indonesia), vHealth (Thailand), DoctorAnywhere (Vietnam)	✓	✓	✓	✓	✗
	Insurtech Insurtech, or insurance technology, refers to the use of new technology to boost efficiency at various points in the insurance value chain Example: Papaya (Vietnam), Qoala (Indonesia), TurtleMint (India)	✓	✓	✓	✓	✓

Digital Innovation Ecosystem in the five markets

Although traditional insurers still dominate, the five emerging markets show the increasing presence of various digital innovations through a rise in telehealth, PHI-digital partnerships, and an improving policy environment through the establishment of regulatory sandboxes and pilot testing in some countries. However, there is not yet significant disruption by insurtech to compete on insurance offerings. The degree of development of digital innovation within the countries also corresponds to the level of sophistication within their PHI system, where countries such as India, Indonesia, and Malaysia have a higher number of actors and partnerships within the PHI-digital space as well as policies encouraging digitization, while Vietnam and Thailand have a further way to go.

At the same time, the effects of COVID-19 have led to increased growth within the field, specifically in telehealth, as people moved to virtual consultations with doctors and insurance providers began including these within mainstream insurance packages.

An analysis of the digital innovations in the PHI landscape in the five emerging markets shows that the benefits of digital innovations, namely affordability, convenience, customization, and potential to bundle, align closely with private insurers and governments' goals of cost-containment, greater protection for the middle class, and improving digital capabilities.

Digital Innovation Landscape in India

The Indian PHI market presents opportunities for rapid digital innovation, aided by a supportive policy environment and robust digital innovation (see Figure 38).

CHAPTER 4: Private Health Insurance Innovation Ecosystem

There has been a national move towards meeting the needs of the “missing middle”, as emphasized by the extension of the PMJAY program as well as through larger efforts to encourage the uptake of private health insurance. Digital innovation is key to reaching the middle class through simplified, accessible, and affordable distribution channels.

With booming fintech and insurtech sectors, India presents significant opportunities for innovation in the insurance ecosystem. India’s rapidly growing fintech industry consists of over 2,100 fintech firms, of which 67 per cent have been set up over the last 5 years alone¹⁵⁰.

Similarly, insurtech in India funding grew steadily at a three-year compound annual growth rate of 225% to reach USD \$376 million in 2019¹⁵¹.

Currently, insurance innovation in India is focused on sales and distribution of existing and derivative insurance products. Microinsurance products, also termed “sachet” insurance, have been proliferating in India¹⁵², offering coverage to lower-income individuals who have little savings¹⁵³. Leading insurtech companies, e-wallets, super-apps, and ecommerce provide a ready platform of mass distribution. While India carries a significant noncommunicable disease burden, comprehensive private insurance coverage of cancer and other noncommunicable diseases are typically reserved for premium insurance policies. Digital players can add value by bringing affordable noncommunicable disease products to the masses.

Figure 38: Digital innovation and key partnerships in Indian PHI market

 Flipkart	India’s biggest online store for Mobiles, Fashion (Clothes/Shoes), Electronics, Home Appliances, Books, Home, Furniture, Grocery, Jewelry, Sporting goods, and more.
 Paytm	Paytm is India’s leading financial services company that offers full-stack payments & financial solutions to consumers, offline merchants and online platforms. They have also begun to offer both life and general insurance independently.
 PhonePe	One app for all things money. Pay bills, recharge, send money, buy gold, invest and shop at your favourite stores.
 MobiKwik	MobiKwik is India’s largest issuer-independent digital financial services platform.
 Ola Money	Ola Money works as a digital wallet, credit card and bills post-payment portal. It has 300+ partners and brands accessible through its app.
 Razorpay	Razorpay is a digital payment solution that allows users to access various payment modes including credit and debit card, internet banking and e-wallets such as JioMoney, MobiKwik, and Ola Money,
 JioHealthHub	JioHealthHub is an all-around healthcare platform offering services across fitness and healthcare—from teleconsultation, laboratory test appointment to medical images storage and
 PolicyBazaar	PolicyBazaar.com is India’s prominent online life insurance and general insurance aggregator.
 Toffee	Toffee Insurance provides accessible and affordable insurance policies contextual to the user’s

 **E-Wallets**

 **Telehealth**

 **E-Commerce**

 **Insurtech**

150 The Financial Express. (2021, March 13). India’s FinTech industry valuation estimated at USD 150-160 bn by 2025: Report. <https://www.financialexpress.com/industry/indias-fintech-industry-valuation-estimated-at-usd-150-160-bn-by-2025-report/2211960/>

151 Shah, A., Mehrotra, P., Sinha, S., & Shah, J. (2021). India Insurtech landscape and trends. Boston Consulting Group. <https://web-assets.bcg.com/23/25/6f7a462249139f8e197f8e420ae0/bcg-insurtech-report-v33.pdf>

152 Chowdhury, S. (2019, April 6). Bite-size Insurance: Is It Really Worth It?. *Mint*. Retrieved from <https://www.livemint.com/insurance/news/bite-size-insurance-is-it-really-worth-it-1554522549134.html>

153 Kagan, J. (2021, September 17). Microinsurance. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/m/microinsurance.asp>

Digital Innovation Landscape in Indonesia

Indonesia, with the largest population in Southeast Asia, also has the largest (USD \$27 Billion in 2018) and fastest-growing (49% CAGR 2015-2018) internet economy in Southeast Asia¹⁵⁴. The digital financial services, which includes the fintech and insurtech scene is growing a 34% annual rate¹⁵⁵, with leading players such as Pasarpolis, Qoala, Bukalapak, and OVO (see Figure 39).

Figure 39: Digital innovation and key partnerships in Indonesian PHI market

	Halodoc	HaloDoc is a healthcare network platform that connects users to a network of doctors, pharmacies, and medical laboratory services.
	Alodokter	Alodokter is a digital health platform that provides an end-to-end digital solution to patients including telemedicine and doctors.
	Bukalapak	Bukalapak operates an e-commerce shopping portal intended to offer a wide range of consumer products across Indonesia.
	GoTo	GoTo is an ecosystem of e-commerce, ride-hailing, food delivery, and financial services, formed through the merging of Gojek and Tokopedia.
	Ovo	OVO is a leading Indonesian payments, rewards and financial services platform.
	Qoala	Qoala is a micro-insurance startup leverages big-data, machine learning, IoT and blockchain.
	Pasarpolis	PasarPolis is an insurtech startup that provides an online insurance comparison platform for

 **E-Wallets**

 **Telehealth**

 **E-Commerce**

 **Insurtech**

154 Google & Temasek. (2018). E-Conomy SEA 2018. Retrieved from https://www.thinkwithgoogle.com/_qs/documents/6730/Report_e-Conomy_SEA_2018_by_Google_Temasek_v.pdf

155 Fintechnews.Indonesia. (2021, October 14). Booming Indonesian Digital Finance Sector to See Revenues Reach US\$8.6B by 2025. *Fintech News Singapore*. Retrieved from <https://fintechnews.sg/42150/indonesia/booming-indonesian-digital-finance-sector-to-see-revenues-reach-us8-6b-by-2025/>

Digital Innovation Landscape in Malaysia

Malaysia has a flourishing fintech and insurtech sector with a range of regional and domestic players partnering with health insurers across the value chain. The outlook for the digital economy in Malaysia is promising, with an estimated valuation over the next 5 years at USD \$26 billion¹⁵⁶.

With the maturity of the insurers in the Malaysian market and the high levels of market penetration, the types of partnerships can go beyond simply sales and distribution. In Malaysia, partnerships between insurers and digital technology support prevention, wellness, and cost containment (See Figure 40).

Telemedicine and health tech apps are aiming to shape the way Malaysians track and monitor their health. These digital health companies are working with several insurers to provide value-added services. Additionally, there has also been a strong focus on cost containment for health insurance products, which are driving up loss ratios for insurers. Digital health tools can help drive affordability and cost-savings for insurers by providing some health services (e.g. health information and services) online.

Figure 40: Digital innovation and key partnerships in Malaysian PHI market

 Aspirasi	Aspirasi is the microfinancing and microinsurance brand by Axiata Digital, the digital services arm of Axiata Group.
 Policy Street	Largest insurtech in Malaysia offering vehicle, medical, employee, and life insurance products.
 Ouch	Ouch! will provide a distribution partnership to its partners.
 Fi	Largest online term life insurance platform in Malaysia, facilitating over RM600 million life insurance coverage nationwide.
 BookDoc	Mobile app that connects patients with clinicians via an online healthcare platform; first in Malaysia.
 DoctorOnCall	Largest online term life insurance platform in Malaysia, facilitating over RM600 million life insurance coverage nationwide.
 Speedoc	Speedoc is a one-stop shop for medical consultations offering teleconsultation 24/7, scheduling home visits, and remote monitoring of chronic diseases.
 Naluri	Naluri is an integrated wellness platform which features digital health coaching supported both by human and artificial intelligence, for people with chronic diseases and mental health conditions.
 Healthmetrics	Healthmetrics is a truly-digital platform which assists companies end-to-end delivery of their employee health benefits.

 E-Wallets
 Telehealth
 E-Commerce
 Insurtech

¹⁵⁶ Swiss Re (2020). *Going Digital: Insights to optimise consumer appetite for online insurance in Indonesia and Malaysia*. Retrieved from <https://www.swissre.com/dam/jcr:f36f25e2-bdb1-431c-ba98-ef3d11c8c5d5/swissre-institute-digital-platform%20solutions-insurance-indonesia-malaysia.pdf>

Digital Innovation Landscape in Thailand

Thailand's digital innovation environment is rapidly growing, though it lags in insurtech compared to its peers in the region with few players or partnerships in the field. However, government policies have encouraged the growth of the fintech sector, which as of 2021, consisted of 96 start-ups¹⁵⁷.

As private insurance in Thailand remains targeted to expatriates and upper-middle class Thais, digital innovations largely cater to this subset of the population rather than the general population. Telemedicine is leading the digital health front, and telehealth firms are actively partnering with insurers and other health ecosystem players to provide access to low-cost and convenient healthcare services (See Figure 41).

Figure 41: Digital innovation and key partnerships in Thai PHI market

 Doctor A to Z	A digital medical gateway providing SME and corporate healthcare management.
 Gettgo	Online platform for buying & selling any type of insurance products.
 Go! Insurance	A Thai digital insurance broker offering digital insurance.
 FairDee / Qoala	Indonesia based insurtech Qoala acquired largest Thai insurtech.
 Sunday	A Thai digital insurance company with strong AI component, and the first to offer ride-hailing insurance coverage.

 E-Wallets
  Telehealth
  E-Commerce
  Insurtech

Digital Innovation Landscape in Vietnam

While Vietnam has a booming fintech industry, the insurtech scene remains nascent. Vietnam's insurtech industry has shown rapid growth, with the number of fintech start-ups increasing from 44 in 2017 to 118 in 2020¹⁵⁸. Papaya, an insurtech provider, is emerging as a key player in digitizing insurance claim procedures for employees.

Since PHI is not prevalent within Vietnam, there are few partnerships between fintech or insurtech firms and PHI providers. Digital wallets and e-commerce tools, such as MoMo, are growing in popularity and are currently untapped for insurance distribution (See Figure 42).

“COVID-19 has placed telehealth in the express lane.”

- Ms Huong Tran, Telehealth (Country Manager, MyDoc)

157 Fintech News Singapore. (2020, August 21). *Booming Indonesian digital finance sector to see revenues reach us\$8. 6b by 2025*. <https://fintechnews.sg/42150/indonesia/booming-indonesian-digital-finance-sector-to-see-revenues-reach-us8-6b-by-2025/>

158 Fintech News Singapore. (2020, August 21). *Booming Indonesian digital finance sector to see revenues reach us\$8. 6b by 2025*. <https://fintechnews.sg/42150/indonesia/booming-indonesian-digital-finance-sector-to-see-revenues-reach-us8-6b-by-2025/>

Figure 42: Digital innovation and key partnerships in Vietnamese PHI market

	MoMo	MoMo is an e-wallet in Vietnam with 5 million users and with more than 70% of the market share.
	Papaya	Papaya offers a mobile app that gives users access to a virtual insurance card, digital check-in at hospitals and clinics, and a cloud-based claims management platform.
	INSO	INSO is an insurance app that aims to shorten the time and process for buying and claiming insurance for customers.
	LUMA	LUMA offers comprehensive health care solutions fitting both expat and local lifestyles in Vietnam.
	Jio Health	Jio operates an "ecosystem" of technology-driven healthcare services, including telemedicine, digital medical records and home doctor visits in Vietnam.
	MyDoc	MyDoc is the most established gateway to 24/7/365 world-class coordinated outpatient care, designed to remove systemic inefficiencies which are causing issues for patients, healthcare providers, health insurers, employers and governments around the world.

 E-Wallets

 Telehealth

 E-Commerce

 Insurtech

4.3 The role of pharmaceuticals in designing and enhancing value proposition of PHI innovation

Pharmaceutical companies can play an important role in addressing the treatment gap that results from an increasing burden of noncommunicable diseases and insufficient financial protection that prevents access to treatment. At the individual level, addressing adequate financial security for medication expenditures is vital. The WHO estimates that a third of the world's population lack access to medicines, vaccines, diagnostic tools and other health products. Low access to quality health products is health- and life-threatening, endangering both patients and fueling drug resistance. Given this challenge, WHO has elevated expanding access to medicines to one of 13 the urgent health challenges for the next decade¹⁵⁹.

Furthermore, data from the World International Property Organization reveals that the vast majority of medicines found on WHO's model list of essential medicines are off-patent¹⁶⁰.

While there is no robust data on the number of people who receive treatment for noncommunicable diseases across countries, most low- and middle-income countries face significant challenges in the availability of drugs or frequency of stockouts for innovative therapies to treat major and common noncommunicable diseases, such as cancer, stroke/hypertension, diabetes, and cardiovascular disease¹⁶¹.

159 World Health Organization. (2020, January 13). Urgent health challenges for the next decade. *World Health Organization*. <https://www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade>

160 Brachmann, S. & Quinn, G. (2016, September 12). 95 percent of WHO's essential medicines are off-patent. *IPWatchdog.com*. <https://www.ipwatchdog.com/2016/09/12/essential-medicines-off-patent/id=72542/>

161 Mukundiyukuri, J. P., Irakiza, J. J., Nyirahabimana, N., Ng'ang'a, L., Park, P. H., Ngoga, G., El-Khatib, Z., Nditunze, L., Dusengeyezu, E., Rusangwa, C., Mpunga, T., Mubuligi, J., & Hedt-Gauthier, B. (2020). *Availability, Costs and Stock-Outs of Essential NCD Drugs in Three Rural Rwandan Districts*. *Annals of Global Health*, 86 (1). doi: 10.5334/aogh.2729

While the NLEM have expanded significantly in each country, all 5 countries still lack access to the full list of medical oncology treatments recommended by the WHO. This effect of this difference is reflected in the disparities in health outcomes - between high- and low-income individuals and populations. The 2015 ACTION study, found that in Southeast Asia that within the first year of diagnosis of breast cancer, 75% of women faced death or bankruptcy. In contrast, in the US and Europe, the 5-year survival rates of breast cancer are 80%¹⁶². Treatments that are provided as the clinical standard of cancer in high income countries are often unavailable in lower income countries, and the gap between survival rates will likely persist if treatment disparities are unaddressed.

Box 13: Key classes of drug coverage on WHO's Model List of Essential Medicines

To understand the coverage of essential medicines in the NLEM lists, we identified and compared medicines across six key classes of medicine from the WHO Model List of Essential Medicines.¹⁶³ The six classes are: medicines for palliative care, anti-infective medicines, medicines affecting the blood, cardiovascular medicines, immunological medicines and medicines for mental and behavioral disorders (See Figure 43).

In the countries studied, on average across the six classes, Malaysia had the greatest number of drugs (65%) listed on its NLEM in comparison to the WHO list; Thailand's, Vietnam's, and India's NLEM lists have approximately 60% of the WHO- recommended essential medicines. Indonesia has the largest gap, with less than half (48%) of drugs of WHO list present on its NLEM list.

When comparing across the individual classes of medicine, on average across the five countries, most of the medicines

(95%) for mental and behavioral disorders on WHO's list are present on the NLEM lists. In fact, all the drugs on the WHO list for mental and behavioral disorders are present in the NLEM lists of Malaysia, Thailand and Vietnam. Similarly, significant proportions of medicines for pain and palliative care and medicines affecting the blood on the WHO are also present on the NLEM lists, at 76% and 70% respectively. However, there are large gaps of medicines covered when anti-infective medicines, cardiovascular medicines and immunological medicines are concerned. 57% of anti-infective medicines and 53% of cardiovascular medicines that on the WHO list are present on NLEM lists. The largest gap is found for immunological medicines, with only 41% of drugs from WHO's list present on NLEM lists. In fact, immunological medicines have the least coverage in NLEM lists, as none of the countries studied have 50% or more of immunological medicines on WHO list present on their NLEM lists.

¹⁶² Kelland, K. (2018, January 31). Global cancer survival rates improve, but wide gaps remain. *Reuters*. Retrieved from <https://www.reuters.com/article/us-health-cancer-survival-idUSKBN1FJ34R>

¹⁶³ WHO. (2019). World Health Organization Model List of Essential Medicines [Ebook] (21st ed.). WHO. Retrieved 17 June 2021, from <https://apps.who.int/iris/bitstream/handle/10665/325771/WHO-MVP-EMP-IAU-2019.06-eng.pdf>

CHAPTER 4: Private Health Insurance Innovation Ecosystem

Figure 43: Drug coverage on National List of Essential Medicines compared to WHO Model list

DRUGS PRESENT ON NLEM LISTS THAT CORRESPOND TO DRUGS PRESENT ON WHO'S MODEL LIST OF ESSENTIAL MEDICINES						
CLASS OF MEDICINE	 INDIA	 INDONESIA	 MALAYSIA	 THAILAND	 VIETNAM	AVERAGE ACROSS COUNTRIES
MEDICINES FOR PAIN AND PALLIATIVE CARE	73%	64%	82%	86%	77%	76%
ANTI-INFECTIVE MEDICINES	58%	45%	59%	66%	57%	57%
MEDICINES AFFECTING THE BLOOD	83%	50%	83%	58%	75%	70%
CARDIOVASCULAR MEDICINES	60%	45%	80%	15%	65%	53%
IMMUNOLOGICALS	37%	30%	48%	44%	44%	41%
MEDICINES FOR MENTAL AND BEHAVIORAL DISORDERS	82%	91%	100%	100%	100%	95%
TOTAL NO OF DRUGS ACROSS CLASSES	60%	48%	65%	62%	61%	

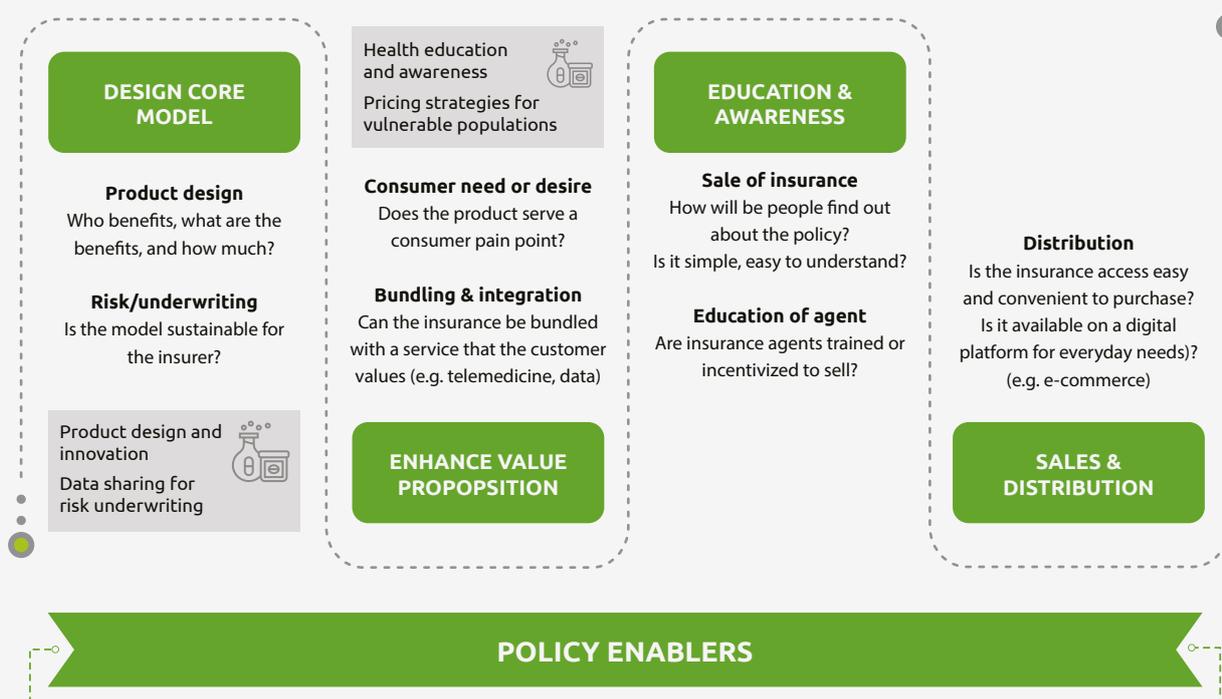
Note: Red: 50% or less drugs present on the WHO Model list are present on the NLEM lists

Sources: MIMS Thailand, 2019; Ministry of Health Indonesia, 2008; Ministry of Health Malaysia, 2019; Ministry of Health Vietnam, 2018; National Health Portal of India, 2015; Pharmaceutical Services Programme, 2019; World Health Organization, Model List of Essential Medicines, 2019.

In the context of a rising noncommunicable disease burden and concomitant healthcare costs, insurers face significant challenges to ensure business viability, while addressing the health financial protection needs of the population. The role of pharmaceutical companies warrants specific attention as a non-traditional player whose significant clinical science and healthcare research and capabilities can be powerfully employed to design and refine insurance for the masses.

While pharmaceutical-insurance partnerships are not yet widespread, there is merit in aligning the strengths of financial and clinical expertise of both players to provide value to people. We identified four types of partnership strategies between insurance and pharmaceutical companies to help address the noncommunicable disease burden and align with Universal Health Coverage principle (See Figure 44). Within an ecosystem approach, pharmaceutical sector collaborations can be directly leveraged for product design and innovation (Stage 1) and enhanced customer value proposition (Stage 2).

Figure 44: Role of pharmaceuticals in PHI innovation value chain



Partnership Strategy 1: Health education and awareness

The onus of noncommunicable disease and chronic disease management is typically left to individual and family members. Outside of hospital and outpatient settings, patients and their families are expected to take a proactive role in symptom monitoring, treatment adherence, lifestyle changes, and healthcare information seeking. Increasingly, policymakers and the healthcare system of actors are moving to community-based care models towards collaborative patient-centric healthcare management.

In line with this approach, private health insurance companies are seeking to move beyond the role of financial intermediary, and to a greater involvement in healthcare management. The better their policyholders manage their health – whether preventing illness for the first time or the progression

of existing conditions – the less likely they will need costly healthcare services to treat severe illness. When a patient is facing an illness or health condition, more insurers are stepping up to provide health education support through their partnerships with pharmaceutical companies.

Ultimately, the combined value of the pharmaceutical-insurance partnership experience reduces the fragmentation that typifies most patient healthcare journeys. People can receive healthcare support from multiple ecosystem actors to support their health.



Partnership Strategy 2: Strategic pricing for vulnerable populations

The health and financial burden of noncommunicable and chronic diseases fall disproportionately on low-income and other vulnerable populations. Early screening and diagnosis – of cancer, diabetes, cardiovascular, respiratory illnesses – can prevent serious healthcare and financial consequences. However, vulnerable populations often seek health care when their illness or condition is severe enough to undergo the expense of travel and medical care.¹⁶⁴ The severity of illness and complexity of healthcare interventions entail a significant healthcare expenditure.

To promote health equity, pharmaceutical and insurance partnerships can work to address the financial needs and support of vulnerable populations. In line with patient support programs that pharmaceutical companies offer, many have worked with private and public insurers to directly provide discounted pricing on treatments to address healthcare inequities. This arrangement also helps to bypass the significant markups on medicines that providers and distributors may also impose¹⁶⁵.

164 Janungo, S., Bhowmik, K., Mahapatra, T., Mahapatra, S., Bhadra, U., Sarkar, K. (2015, May 12). Perceived Morbidity, Healthcare-Seeking Behavior and Their Determinants in a Poor-Resource Setting: Observation from India. *Plos One* 10 (5). <https://doi.org/10.1371/journal.pone.0125865>

165 Langenbrunner, J. & Somanathan, A. (2011). *Financing Health Care in East Asia and the Pacific*. Washington, D.C.: *The World Bank*.

Partnership Strategy 3: Data sharing for risk underwriting

In the context of a rising noncommunicable disease burden and its accompanying healthcare costs, insurers face significant challenges to ensure business viability, while addressing the health protection needs of the population. Interviews with insurers elicited a common concern on minimizing “loss ratios,” or the ratio of paid insurance claims and adjustment expenses to premiums earned¹⁶⁶. While there has been an increase in the sales of healthcare policies since COVID-19, insurers in these markets are struggling to balance increased demand and rising medical inflation. The actuarial expertise underpinning insurance benefit design and the calculation of premiums faces limitations when it comes to healthcare in emerging markets. In India, high loss ratios of health insurance were seen throughout 2020¹⁶⁷. This is particularly concerning for insurers, since it might lead to potential strains on company profits and solvency in the long term¹⁶⁸.

To offer meaningful financial protection while ensuring business model viability, insurers are turning to alternative data sources to better assess risk profiles of the populations. Pharmaceutical companies can work with insurers to share clinical data on varying diseases and populations that can be used to better refine risk modelling for insurers.

Partnership Strategy 4: Insurance product and benefit design

Clinical data and expertise can be leveraged not only for risk underwriting but can also support the design and launch of specific insurance products that directly address healthcare conditions of high public health priority and public concern. Scientific innovation in diagnostics and treatments in genomic therapy, targeted therapies, immunology have provided greater tools for healthcare providers in the treatment and care of their patients that have become standard clinical protocol in higher income countries, but in low- and middle-income countries these innovations are not widely available or affordable.

Increasingly, insurance companies are looking to provide additional value by providing much needed financial protection for newer innovations. This is particularly the case for premium insurance products for wealthier segments of the population. To democratize access to essential therapies, insurance and pharmaceutical companies can work together to develop and design insurance products that address unmet population treatment needs for specific conditions. Disease-specific insurance and specialty drug insurance innovative models can specifically target financial protection against conditions that are associated with high health service and financial need.

166 Hayes, A. (2020, November 15). Loss Ratio. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/l/loss-ratio.asp>

167 Khanna, A. (2020, September 21). India: Loss ratios for health insurers to remain high for rest of the financial year. *Asia Insurance Review*. Retrieved from <https://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/73730/type/eDaily/India-Loss-ratios-for-health-insurers-to-remain-high-for-rest-of-the-financial-year>

168 AIR Team. (2021, May 3). India: Health insurers' underwriting results lag behind growth of business. *Asia Insurance Review*. Retrieved from <https://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/76449/Type/eDaily/India-Health-insurers-underwriting-results-lag-behind-growth-of-business>

4.4 The role of nonprofit organizations to facilitate understanding and uptake of PHI innovation

Nonprofit organizations can play an important role in increasing the uptake of PHI products and achieving UHC goals. Along the insurance value chain, community-based groups can strengthen sales and education (stage 3) by raising awareness about PHI products and educating the consumer. The distribution stage (stage 4) to increase the uptake of PHI products, through their ability to reach remote and vulnerable populations.

At the education and awareness stage, nonprofits or community-based groups can educate on the relevance and value of insurance. Furthermore, they can also break down complicated details within insurance guidelines into simple, easy to understand information for the consumer. They can also play a role in improving the efforts of insurance agents, by helping them cater their product sales to specific interest groups. For instance, the efforts can be especially relevant for groups such as senior citizens or underprivileged communities, which often need healthcare most urgently but are the furthest removed from the current systems. Furthermore, New India Assurance Health Insurance partnered with nonprofit Indian Cancer Society to offer a membership-linked cancer insurance policy that offers the society's members and their spouses a cancer insurance coverage of Rs 50,000 (USD \$673) or Rs 200,000 (USD \$2693)¹⁶⁹.

Nonprofit organizations also play an essential role at the distribution stage by extending the reach of PHI to remote populations. This is particularly important in the context of rural areas with lower levels of infrastructure development, where traditional distribution methods, such as online, bancassurance¹⁷⁰, or even sales agents, have low penetration. To meet such challenges, nonprofit entities have played a crucial role in formulating, implementing, and popularizing new models of insurance. Out of these models, microinsurance and community-based insurance are widespread among the five emerging markets and have revolutionized access to insurance for large populations. An example of such a nonprofit that supports distribution of insurance products is reach52, a tech social enterprise that aims to connect the low-income and vulnerable to accessible health services they need. Through the reach52 marketplace service that was launched in 2020, reach52 was able to provide affordable health insurance for a 150,000 rural people across Karnataka. While the health insurance products were underwritten and provided by Aditya Birla Sun Life Insurance Company, reach52's non-governmental partners such as MYRADA and MYKAPS drive awareness of the new service and support residents in purchasing the insurance products¹⁷¹.

169 Indian Cancer Society. (2021). Cancer Insurance. *Indian Cancer Society*. Retrieved October 21, 2020 from <https://www.indiancancersociety.org/what-do-we-do/cancer-insurance-schemes.aspx>

170 Partnership arrangement between a bank and an insurance company, whereby the insurance company is allowed to leverage on the bank's client base to sell insurance products

171 Reach52. (2021). reach52 launches health services on the ground in India. *Reach52*. Retrieved October 22, 2021 from <https://reach52.com/reach52-launches-health-services-on-the-ground-in-india/>

How nonprofit organizations promote the uptake of microinsurance

Microinsurance refers to products that feature pricing, coverage and distribution that are designed for low-income customers¹⁷². Nonprofit organizations, historically, have played a significant role in the distribution and popularization of microinsurance products.

These products are well developed in India, which has a vibrant nonprofit sector working with vulnerable populations, and they have also been officially recognized by the Insurance Regulatory and Development Authority (IRDAI). The popularization of microinsurance has also led to specialized offerings by traditional PHI providers, such as AVIVA, ICICI Prudential, and TATA AIA, among others¹⁷³.

In Indonesia, too, there have been a series of partnerships between PHI providers and local nonprofit organizations that have led to the development of instantly accessible insurance products. In Indonesia, Allianz partnered with nonprofit microfinance organization, VisionFund to distribute its savings-linked life insurance endowment product, Tamadera, to VisionFund's clients.

Tamadera is priced at a premium of USD 1 per week for 50 weeks a year, with coverage for death and five critical illnesses (cancer, heart attack, stroke, kidney failure and major burns).

Following the policy maturity after 5 years, the USD 250 accumulated in premiums will be returned to clients in entirety, as long as no claim has been made prior¹⁷⁴.

In Thailand, microinsurance services are primarily offered by PHI providers, but instead of partnering with nonprofit organizations, they have partnered with convenience stores such as 7-Eleven to increase the accessibility of low-priced insurance products¹⁷⁵. In Vietnam, nonprofits organizations play the dual role of providing commercial insurance and social welfare by offering their own insurance products.



172 Insurance Asia News. (2020, July 9). *The third wave of microinsurance*. <https://insuranceasianews.com/the-third-wave-of-microinsurance/>

173 IRDAI - Insurance Regulatory and Development Authority of India. (2015, July 1). *Microinsurance Product list*. https://www.irdai.gov.in/ADMINCMS/cms/NormalData_Layout.aspx?page=PageNo271&mid=26.2

174 Impact Insurance. (2017, June). TAMADERA - Savings and protection for a prosperous future -- Allianz Life Indonesia. *Impact Insurance*. Retrieved from <http://www.impactinsurance.org/practitioner-lessons/tamadera-savings-and-protection>.

175 Banchongduang, S. (2013, March 11). Insuring the masses. *Bangkok Post*. Retrieved from <https://www.bangkokpost.com/business/339816/insuring-the-masses>

These are often executed by Mutual Assistance Funds or existing microfinance institutions¹⁷⁶. Notable among these, are socio-political organizations such as women's unions that were given permission by the Vietnam Prime Minister to offer microinsurance through their own organization, TYM (Tinh Thuong Microfinance Institution)¹⁷⁷.

How nonprofit organizations promote the uptake of community-based health insurance

Community-based health insurance (CBHI) is a type of microinsurance, distinguished by the community involvement in driving its setup and management. CHBI function on a nonprofit basis, with voluntary involvement from its members to pool their health risks and funds within a community or a group of people who share common characteristics, such as geographical location or occupation. Membership premiums are typically kept at a flat rate and independent of individual health risks¹⁷⁸. CBHI is widespread in India. One of the best-known examples in India is SEWA, a nonprofit organization that provide economic and social empowerment schemes for women within a community setting. Throughout their work, SEWA has also formed partnerships with PHI providers, such as L&T General Insurance¹⁷⁹ and the

United India Insurance Company (NMJI) to offer support to their women members for medical treatments and gynecological care. SEWA also offer microinsurance products to women through their product known as vimoSEWA¹⁸⁰. Partnerships between PHI and nonprofit organizations can drive widespread uptake of health insurance for the masses as they leverage upon the nonprofits' existing reach and trust within communities, including rural households, women, and senior citizens (See Figure 45).

The advent of digitization and the incoming digital transformation holds great promise for collaborations between nonprofit organizations and PHI providers, especially in terms of microinsurance and community-based insurance. Digitization can help bring in greater standardization within policy offerings as well as increase the overall scope of microinsurance beyond simply low-income consumers. This change is already underway, as insurtech companies such as Gramcover in India have pioneered and adopted an innovative tech-driven approach for insurance distribution in rural India. By designing customized and affordable rural insurance products and leveraging technology for paperless onboarding, Gramcover helps insurers maximize penetration amongst the rural population in India¹⁸¹.

176 Aristotle, J., Navarro, E., & Catibog, M. (2009). *Status of Microinsurance in Southeast Asia: (The Cases of Cambodia, the Philippines and Vietnam)*. APRACA FinPower Program. <https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-status-of-microinsurance-in-southeast-asia-the-cases-of-cambodia-the-philippines-and-vietnam-2010.pdf>

177 The Mutual Exchange Forum on Inclusive Insurance (MEFIN) Network . (n.d.). Vietnam: *Delivering Microinsurance to Women by Viet Nam Women's Union: The Role of Regulation in Pilot Testing*. Vietnam Ministry of Finance Insurance Supervisory Authority, Women's Union, and the German Development Cooperation - Regulatory Framework Promotion of Pro-poor Insurance Markets in Asia (GIZ-RFPI Asia) . https://www.mefin.org/files/businessmodels/FactSheet%20on%20Microinsurance%20Fund%20Business%20Model%2021Feb.2017_VN_Final.pdf

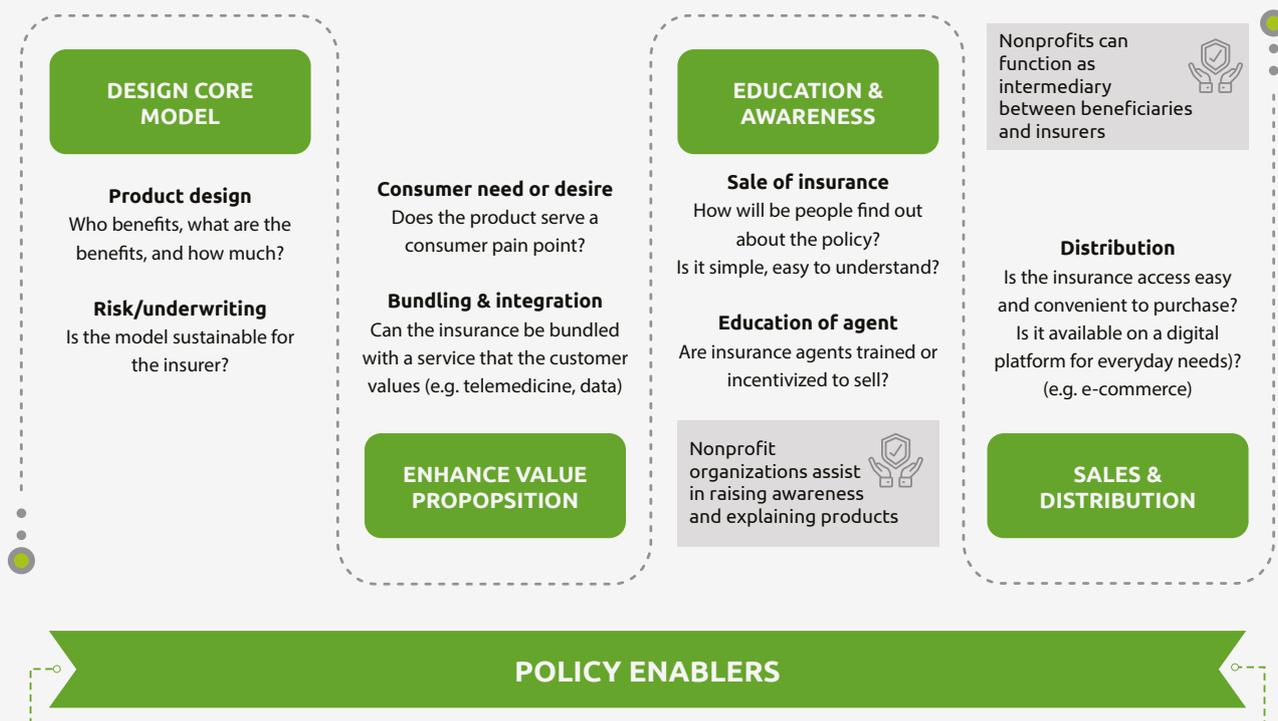
178 World Health Organization. (2020, March 7). Community-based health insurance. *World Health Organization*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/community-based-health-insurance-2020>

179 My Insurance Club. (2012, February 13). L&T General Insurance partners with Vimo Sewa for micro insurance. *Myinsuranceclub.com*. Retrieved from <https://www.myinsuranceclub.com/insurance-news/l-t-general-insurance-partners-with-vimo-sewa-for-micro-insurance>

180 Impact Insurance. (2015, September 29). Balancing social and financial goals – Vimo SEWA. *Impact Insurance*. Retrieved from <http://www.impactinsurance.org/practitioner-lessons/vimo-sewa>

181 GramCover. (2021). *Our Story: GramCover—India's Gateway to Rural Insurance*. Retrieved October 22, 2021 from <https://www.gramcover.com/about/our-story/>

Figure 45: Role of nonprofit organizations in PHI innovation value chain



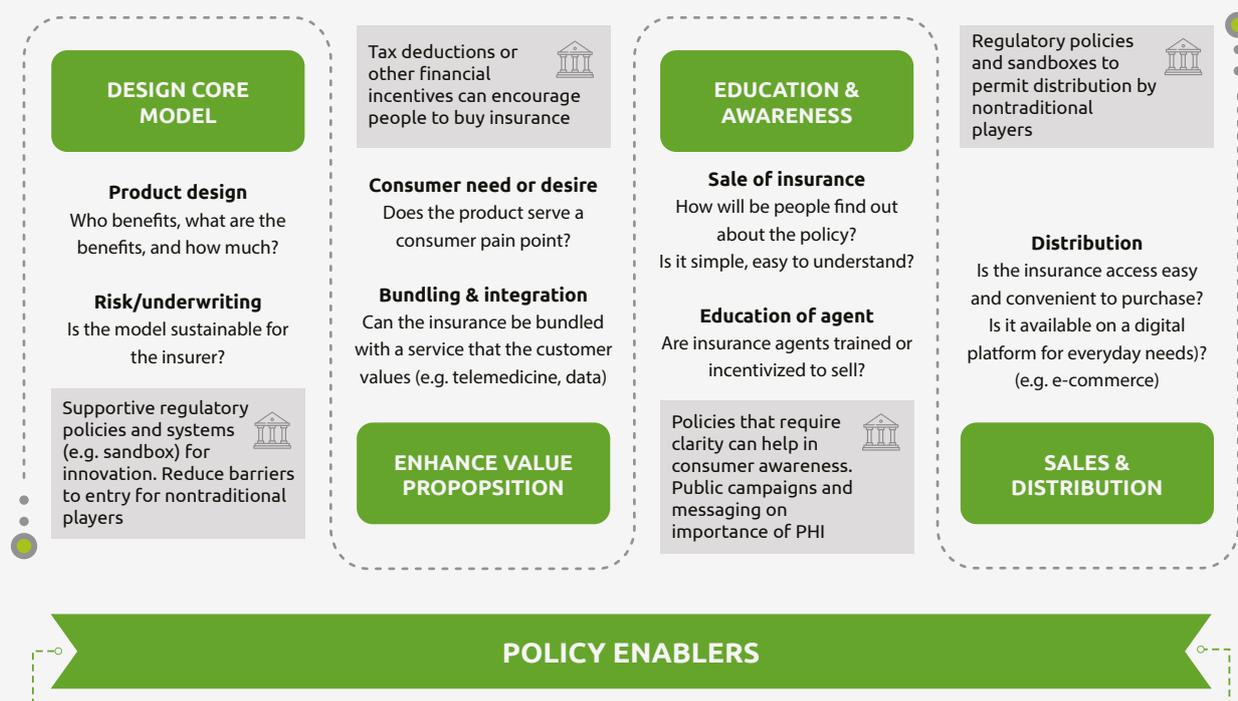
4.5 The role of governments in creating an enabling environment for PHI innovation

Across the five countries, governments play an enabling role for the insurance innovation ecosystem while also safeguarding public interests in health and in financing. Legislative, policy, and regulatory actions from different government actors – health agencies, finance and insurance agencies, and digital agencies or authorities - have significant impact on the health insurance ecosystem.

We identified several key actions of governments that are shaping the insurance innovation ecosystem (see Figure 46).



Figure 46: Role of governments in PHI innovation value chain



ACTION 1: Enabling policies and regulatory sandboxes

Across the 5 markets, regulatory authorities have developed enabling policies and insurtech or fintech regulatory sandboxes that allow for testing and deployment of new strategies and models of insurance with government oversight.

In India, the Insurance Regulatory and Development Authority (IRDAI) established an insurtech regulatory sandbox in 2019. Insurers have found the sandbox and innovation environment important for accelerating product launch and testing. Similarly, in response to the COVID-19 pandemic, IRDAI stipulated the inclusion of telemedicine for reimbursement.

Indonesia has taken several initial steps towards encouraging digital innovation that align with their financial inclusion and insurance inclusion agenda.

In August 2018, the Indonesian government permitted the registration of fintech companies through a regulatory sandbox that allowed them to simultaneously register and test new products. This was followed up with the setting up of “Infinity,” a digital financial innovation center that monitors and leads collaborations in fintech to foster a friendly fintech ecosystem in Indonesia at large¹⁸². In addition, the Indonesian government has also established rules for the marketing of insurance products digitally, including insurer diligence to ensure accountability of distribution partners.

The Thai government established a regulatory sandbox for fintech in 2016, followed by one for insurance in 2017, to support the growth of the fintech sector.

¹⁸² OpenGov Asia. (2019, September 5). Online system to monitor development of fintech in Indonesia. *OpenGov Asia*. <https://opengovasia.com/online-system-to-monitor-development-of-fintech-in-indonesia/>



These have been backed up by further easing of policies to allow for insurance companies, brokers or insurance start-ups to present its insurtech innovation for a 'test run' (2018) as well as accommodations to allow for public comments on draft guidelines and to ease difficulties in the existing project approval process (2021).

In Vietnam, the private health insurance industry as well as digital innovations within the field are at relatively nascent stages but are being supported by the government. In 2017, the Government of Vietnam established the Steering Committee on fintech to develop plans for accelerating FinTech development. In 2020, the government put forth a draft decree on setting up regulatory sandboxes to test fintech and insurtech products¹⁸³. Both of these policies signal Vietnam's prioritization of digital innovation.

In 2016, the Government of Malaysia began to foster the fintech industry through the establishment of the Financial Technology Enabler Group, which was set up by the Central Bank, Bank Negara Malaysia, to support innovations to improve the quality, efficiency and accessibility of financial services. Soon after, the Financial Technology Regulatory Sandbox Framework set up a regulatory sandbox within Malaysia to support the development of fintech solutions in a real-world environment. The regulations and fintech sandbox have set the foundation for insurtech innovation, which is also overseen Bank Negara Malaysia.

183 Chi, D. L. & Thuy, P. M. N. (2021) *Vietnam's Evolving Regulatory Framework for Fintech*. *Researchers at ISEAS – Yusof Ishak Institute Analyse Current Events*, 75 (2021). Retrieved from https://www.iseas.edu.sg/wp-content/uploads/2021/05/ISEAS_Perspective_2021_75.pdf

ACTION 2: Tax and financial incentives to insurance uptake

Governments can further encourage insurance uptake through tax and financial incentives. This has been seen in the case of Thailand and Vietnam, where the countries' revenue departments have enacted policies surrounding tax deductions for insurance.

In Thailand, the Revenue Department of Thailand has legislated policies to facilitate the adoption of life and health insurance. Currently, individual income earners can exercise tax benefits from life insurance policies up to THB 300,000 (USD \$8,951) per year. Apart from life insurance policies, health insurance rider premium is also subjected to tax deduction benefits. Similarly, citizens can also obtain deductions from health insurance premiums, up to a maximum of THB 25,000 (USD \$749), paid to a life or non-life insurance company for their own health.

These policies, however, are only applicable on certain insurance policies that have been pre-approved by the regulatory bodies.

Vietnam has adopted similar policies to increase the uptake of health insurance through the exemption of value added tax (VAT) on life insurance products. In addition to exempting insurance purchases from indirect taxation, the mandatory contributions made by social and health insurance by Vietnamese citizens are further subject to deductions are overall taxation. By implementing such deductions, governments can eradicate additional costs that may be associated with insurance purchases and make insurance accessible for their citizens.

ACTION 3: Increase awareness and education on insurance

Achieving greater insurance penetration and UHC outcomes requires a shift in perceptions of insurance from being a "rich" person product to an "everyone" product. This is an especially pressing concern for markets such as India and Indonesia where PHI policies remain concentrated in the middle and upper-middle class communities.

Governments can play an essential role in spearheading this change by spreading awareness about insurance products and enacting policy for the same.

In India, the Arogya Sanjeevani policy compels all private insurers to offer a wide coverage of health services at affordable premium levels and standardizes the cover as well as terms and conditions across insurers¹⁸⁴. The standardization, simplification, and the widespread availability of the policy makes it easier for individuals to understand and purchase insurance.

184 N. Nathan. (2020). What is Arogya Sanjeevani health insurance policy?. *The Economic Times*. Retrieved from https://economictimes.indiatimes.com/wealth/insure/health-insurance/what-is-arogy-sanjeevani-health-insurance-policy/articleshow/74254954.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst



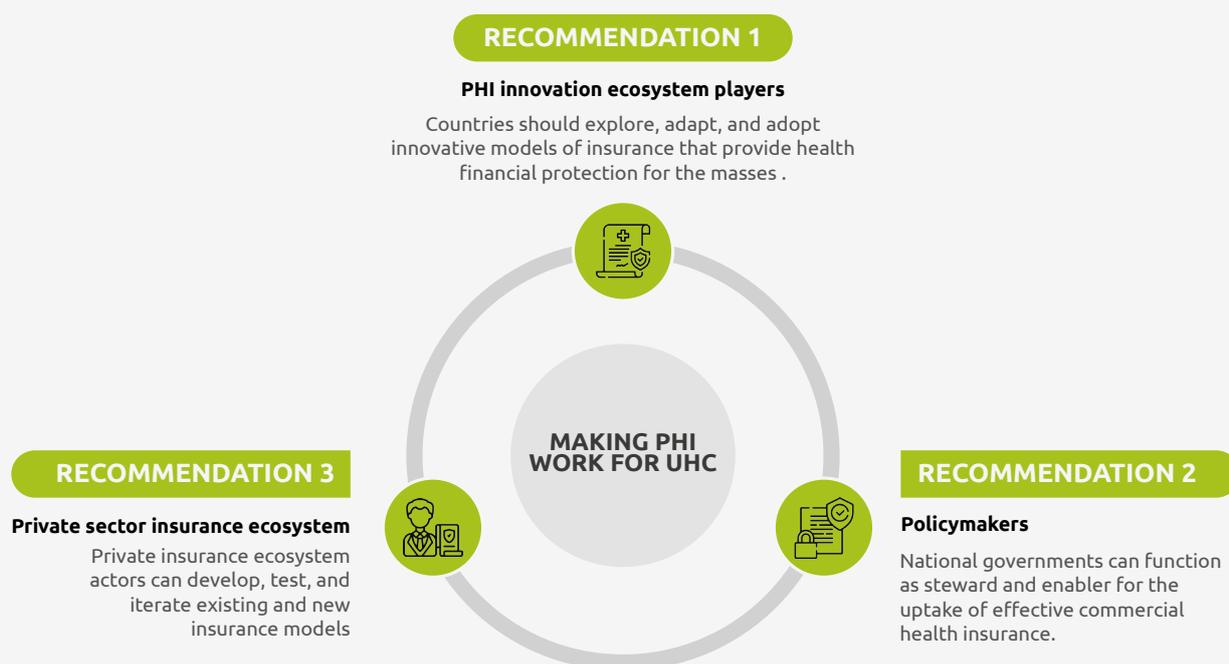
CHAPTER 5: Making PHI work for UHC goals and people

CHAPTER 5: Making PHI work for UHC goals and people

For UHC to move beyond aspiration to achievement, governments cannot work alone. An insurance innovation ecosystem based on collaborations and partnerships are important to drive the uptake and adaptation of private health insurance to local contexts.

From an assessment of the current innovation and future innovation opportunities in PHI, a multistakeholder approach can fully realize the potential of PHI to support the goals of Universal Health Coverage to bring financial protection for needed healthcare services to the masses. In this endeavor, we make the following recommendations, as illustrated in Figure 47.

Figure 47: Recommendations to make PHI work for UHC health system goals and for people



5.1 Recommendation 1: Countries should explore, adapt, and adopt innovative models of insurance that provide health financial protection for the masses.

In the five countries studied, the insurance innovation ecosystem is rapidly growing, aided by advances in digital technology, enabling policies, and new models of partnerships.

In countries with robust UHC insurance schemes, (1) supplemental UHC and (2) comprehensive mass insurance models should be considered to “top up” national UHC schemes to provide more comprehensive service coverage, faster

access to healthcare services, and the expedited access to therapeutic innovations when needed.

Supplemental private health insurance models allow governments to provide a basic standard of financial protection and healthcare access for all people while bringing in private insurers to offer a more comprehensive range of tailored options for consumers who need it.

CHAPTER 5: Making PHI work for UHC goals and people

Direct partnerships between social health insurance and private health insurance companies, like in Singapore and China, can provide for close alignment, coordination, and cooperation on supplementary insurance.

Comprehensive mass insurance should be considered in countries where the timeline for public-private partnership or government-led health systems changes would be very long. In large markets with a thriving digital ecosystem, like in Indonesia and India, the “proof of concept” for affordable and effective mass insurance and begin in the private sector.

Mobile wallets, telecommunications companies, insurtech, and major traditional insurers can work together to expand emerging models of affordable microinsurance towards more comprehensive coverage of healthcare.

Reflecting global trends, the five countries face significant and growing rates of noncommunicable diseases that are challenging their health systems and financial resources. While they cover noncommunicable diseases, UHC schemes across the five countries face a significant lag in the providing the clinical standards of care and treatment that wealthier countries can support.

Consequently, OOP payments for noncommunicable diseases are significant. The financial and healthcare burden falls disproportionately on the lowest income individuals – who either face debt, impoverishment, or forego healthcare altogether because of the affordability and availability of healthcare services.

While private insurance is not the only nor primary means for addressing the noncommunicable disease burden, countries can consider how both UHC and PHI models can contribute to protecting individuals from health and financial hardship due to noncommunicable diseases.

We noted two types of innovative insurance models that can provide specificity to financial protection for noncommunicable diseases: (3) disease-specific insurance, and (4) specialty drug insurance. All five countries provide critical illness insurance and have incorporated some form of disease-specific insurance (e.g. cancer,) as standalone insurance or insurance riders. Specialty drug insurance, which does not yet exist in any of the 5 countries, can be designed to offer therapeutics that are not widely available through UHC schemes or generally affordable out-of-pocket. In China, critical illness and now specialty drug insurance packages have become popular with the general public, whereas a decade ago, these products were scarcely known, much like the situation in the five countries today. Partnerships with digital platforms can help to raise awareness and distribution of noncommunicable disease-targeted insurance products at scale.

In response to the rising costs of healthcare, traditional insurers are developing insurance platforms that support healthy lifestyles and prevent the onset of illness: (5) Prevention and wellness programs that are linked to insurance can provide information and tools to support healthy behaviors while other similar insurance models focus on (6) education and awareness solutions that help people to prevent the onset or worsening of health conditions.

Lastly, the next iteration of the prevention and wellness insurance models are beginning to (7) integrate financial rewards and incentives to healthy behaviors. Pharmaceutical companies, nonprofit organizations, and digital ecosystem players can work with insurers to develop and distributed evidence-based health information to policyholders.

Policymakers are taking note of insurance industry trends in support of prevention and wellness. In India, IRDAI released and updated guidelines for prevention and wellness products that stipulate the types of products, incentives, and partnerships that are permissible by the insurance industry. Similarly, other policymakers can consider how to support these innovative models to achieve prevention and health goals, support the insurance industry, and safeguard consumer interest.

5.2 Recommendation 2: National governments can function as steward and enabler for the uptake of effective private health insurance.

The rapid developments and growth of the insurance innovation and digital ecosystem in the five countries have been greatly aided by supportive policies and oversight. There are several actions that governments can take or strengthen to enable the uptake of private health insurance for the broader population.

Whole-of-government approach for collaborative innovation with regulatory oversight

The uptake of private health insurance to support UHC goals requires coordination between several government bodies. The Ministry of Health, Ministry of Finance, Central Banks, and other insurance regulatory authorities, as well as digital authorities can be convened in a whole-of-government approach to support the uptake and effectiveness of private insurance for the population. The pace of digital and insurance innovation often outstrips the regulatory capacity to monitor the latest developments. Insurance policymakers in all five markets have supported real-time collaboration through the formation of regulatory

sandboxes. The involvement of health and digital regulatory authorities in these sandboxes can further promote innovative PHI models for UHC.

Promote awareness and acceptance of PHI

Governments play a critical role in informing, educating, and incentivizing the public towards private health insurance. Currently, private health insurance in these countries are often considered to be a luxury for wealthier people. This perception has changed considerably with new insurtech platforms and aggregators that provide choice, affordability and convenience; a burgeoning digitally-savvy middle class, and a heightened awareness of insurance due to the COVID-19 pandemic. Governments can accelerate PHI uptake by engaging in a series of dialogues and cooperation with the insurance innovation ecosystem to address the barriers to insurance uptake and low willingness to purchase. Governments can further change public perception that insurance is for “rich people” and educate the general public how, when, and for whom insurance is needed.

Governments play an important role in representing and protecting public interests by also encouraging or mandating insurers to provide clear and simplified policies to consumers to make well-informed choices. The IRDAI in India took important steps in their 2020 legislation to standardize and clarify insurance for the average consumer and to mandate employer-based insurance.

“If the product refers to some government/third-party standardized lists of coverages that are deemed credible and stable, it will increase consumers’ confidence in purchasing the product.”

**- Ms Hueyfang Chen, Reinsurer
(Head of Health Solutions Asia, Swiss Re)**

Lastly, tax deductions and other financial incentives can also be an important lever to encourage general uptake of private health insurance among the general population. In Thailand, the government allows individuals to deduct their private health insurance premiums from tax obligations, and in Vietnam, they do so for mandatory social health insurance contributions.

Such incentives, coupled with education, can play an important role in persuading people to invest their money in health financial protection.

Scale successful “proof-of-concepts” developed in the private sector

Governments can directly work with private counterparts in insurance, digital, and healthcare ecosystem to pilot test innovative models. Indirectly, they can support ecosystem partners who are testing these models. As in a regulatory sandbox, government can observe what models are working, how they are achieving intended social and business goals to determine which models should be further catalyzed through supportive policies or through scale. Innovative insurance models need scale to ensure sufficient distribution of risk (risk-pooling) while providing effective health benefits. Models that demonstrate success in pilot stages or by individual actors can be further supported by governments to scale nationally or to extend the reach to underserved populations.



5.3 Recommendation 3: Private insurance ecosystem actors can develop, test, and iterate existing and new insurance models.

The success of any traditional and innovative insurance model rests on the design, uptake, and distribution of insurance and its effective use by policyholders. Our research and interviews reveal that launching a product alone is not enough to ensure uptake. Traditional insurers have been teaming up with health system actors – telemedicine, pharmaceuticals and pharmacies, and private hospitals – as well as digital actors – telecommunications, digital wallets, e-commerce – to strengthen the insurance value chain. Such trends are encouraging for the development of innovative models in the five markets.

An anchor partner – typically insurance or insurtech – can seek out potential partners to increase the value proposition, sales, and distribution of the product to ensure that the new models provide value to the consumer.

Digital players have broken new ground in “user experience” that designs and tests products rapidly to solve consumer “pain points.” This strategy serves the healthcare sector well where ecosystem actors have been shifting towards person-centric or patient-centric value-based care. By developing solutions that directly consider the user’s healthcare and insurance experience, the innovation ecosystem can develop solutions that have a greater probability of success upon full launch. This ecosystem approach lays the groundwork for pilot testing and providing the “proof of concept” for further industry innovation and scale, and potential government policy shaping to support UHC goals.

5.4 Conclusion

Advances in healthcare, insurance and digital innovation provide new opportunities for cross-sectoral work that places people firmly at the center of solutions. By deliberately shaping and incentivizing new models of private health insurance that complement a UHC agenda, countries can ensure that people receive the healthcare they need, when they need it, without facing financial hardship.

An ecosystem approach to innovation relies on partnerships, which - even in the best of circumstances - can take time for alignment of purpose, success metrics, and value proposition. However, it is through this approach that individual or small-scale innovation can be transformative. The pursuit of Universal Health Coverage is indeed a mission of transformation, and it will take no less than entire support of society, industry, and government to realize this vision.

Bibliography

- Agustina, R., et al. (2018). Universal Health Coverage in Indonesia: Concept, Progress, and Challenges. *The Lancet*. 393 (10166). pp. 75-102.
- AIR Team. (2021, May 3). India: Health insurers' underwriting results lag behind growth of business. *Asia Insurance Review*. Retrieved from <https://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/76449/Type/eDaily/India-Health-insurers-underwriting-results-lag-behind-growth-of-business>
- Aon. (2021). *2021 global medical trend rates report*. <https://insights-north-america.aon.com/research/2021-global-medical-trend-rates-report>
- Aristotle, J., Navarro, E., & Catibog, M. (2009). Status of Microinsurance in Southeast Asia: (The Cases of Cambodia, the Philippines and Vietnam). *APRACA FinPower Program*. <https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-status-of-microinsurance-in-southeast-asia-the-cases-of-cambodia-the-philippines-and-vietnam-2010.pdf>
- Asia-Pacific Economic Cooperation. (2017, August). Joint Statement of the 7th APEC High-Level Meeting on Health & the Economy. Retrieved October 22, 2021 from https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Health/2017_health_him
- AstraZeneca. (2021). Thailand. *Young Health Programme*. Retrieved from <https://www.younghealthprogrammehp.com/programmes/thailand.html>
- Atlas Magazine. (2019, April). AXA-AIS partnership : Free insurance by topping-up the phone. *Atlas Magazine*. Retrieved October 22, 2021 from <https://www.atlas-mag.net/en/article/axa-ais-partnership-free-insurance-by-topping-up-the-phone>
- Atroley, N., Varma, N., & Gyani, G. J. (2016). *Healthcare in India: Current state and key imperatives*. 60.
- Axelson, H., & Goursat, M. (2019). A review of country experiences to inform Viet Nam's revision of the Health Insurance Law [Ebook]. ILO. Retrieved 17 June 2021, from http://ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-hanoi/documents/publication/wcms_724963.pdf.
- Banchongduang, S. (2013, March 11). Insuring the masses. *Bangkok Post*. Retrieved from <https://www.bangkokpost.com/business/339816/insuring-the-masses>
- Banton, C. (2021, July 7). Bancassurance. Investopedia. Retrieved from <https://www.investopedia.com/terms/b/bancassurance.asp>
- Bernama. (2018, January 11). *Health care scheme for B40 group a 'game changer'—Dzulkefly*. Malaysiakini. <https://www.malaysiakini.com/news/506734>
- Bloom, D. et al. (2015). Economics of Non-Communicable Diseases in Indonesia. *World Economic Forum*. https://www.researchgate.net/publication/329934956_Economics_of_Non-Communicable_Diseases_in_Indonesia
- Bloom, G. (2018, August 26). Full article: Service Delivery Transformation for UHC in Asia and the Pacific. <https://www.tandfonline.com/doi/full/10.1080/23288604.2018.1541498>
- Bosch, S. (2019). Legal access rights to health care. Switzerland: World Health Organization. <https://apps.who.int/iris/rest/bitstreams/1273535/retrieve>
- Brachmann, S. & Quinn, G. (2016, September 12). 95 percent of WHO's essential medicines are off-patent. *IPWatchdog.com*. <https://www.ipwatchdog.com/2016/09/12/essential-medicines-off-patent/id=72542/>
- Central Provident Fund Board. (2020). CPF Board | Private Medical Insurance Scheme. *Government of Singapore*. <https://www.cpf.gov.sg/Members/Schemes/schemes/healthcare/private-medical-insurance-scheme>
- Cetin, N., Dib, G., Holzhausen, A., Subran, L., & Theinert, S. (2019, December 11). Is China winning the insurtech race?. *Euler Hermes Global*. https://www.eulerhermes.com/en_global/news-insights/economic-insights/Is-China-winning-the-insurtech-race.html
- Chan, A. (2021, June 14). FWD Cancer Insurance Review (2021). *SingSaver Blog - We Compare, You Save*. <https://www.singsaver.com.sg/blog/fwd-cancer-insurance-review>;
- Chan, A. (2021, March 8). The Challenges of Thailand's Public Healthcare System in 2021. *Pacific Prime Thailand's Blog*. <https://www.pacificprime.co.th/blog/the-challenges-of-thailands-public-healthcare-system/>
- Chandoevrit, W., Phatchana, P. (2019, March 27). Addressing the male-biased gender health gap. *Bangkok Post*. Retrieved from <https://www.bangkokpost.com/opinion/opinion/1651764/addressing-the-male-biased-gender-health-gap>

Bibliography

- Chandran, A. et al. (2021). Non-communicable Disease Surveillance in Malaysia: An Overview of Existing Systems and Priorities Going Forward. *Front Public Health* 9. doi: 10.3389/fpubh.2021.698741.
- Cheng, I. (2021, April 3). *Government committee to be set up to look into management of Integrated Shield Plans, panel doctors*. CNA. <https://www.channelnewsasia.com/news/singapore/integrated-shield-plan-government-committee-koh-poh-koon-moh-14550610>
- Cheng, T. M. (2014, November). *Vietnam's Health Care System Emphasizes Prevention And Pursues Universal Coverage | Health Affairs*. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1141>
- Chi, D. L. & Thuy, P. M. N. (2021) Vietnam's Evolving Regulatory Framework for Fintech. *Researchers at ISEAS – Yusof Ishak Institute Analyse Current Events*, 75 (2021). Retrieved from https://www.iseas.edu.sg/wp-content/uploads/2021/05/ISEAS_Perspective_2021_75.pdf
- Chowdhury, S. (2019, April 6). Bite-size Insurance: Is It Really Worth It?. *Mint*. Retrieved from <https://www.livemint.com/insurance/news/bite-size-insurance-is-it-really-worth-it-1554522549134.html>
- Consultative Group to Assist the Poor. (2019, September). China: A Digital Payments Revolution. *CGAP*. Retrieved June 17, 2021, from <https://www.cgap.org/research/publication/china-digital-payments-revolution>
- CodeBlue. (2020, June 2). Nearly Half Of Malaysians Lack Health Coverage Beyond Public Care. *CodeBlue*. <https://codeblue.galencentre.org/2020/06/02/nearly-half-of-malaysians-lack-health-coverage-beyond-public-care/>
- Congressional Budget Office. (2019). *Key Design Components and Considerations for Establishing a Single-Payer Health Care System*. Retrieved from <https://www.cbo.gov/system/files/2019-05/55150-singlepayer.pdf>
- Das, K. (2018, September 14). Vietnam: Growing Demand for Healthcare Services. *Vietnam Briefing*. Retrieved from <https://www.vietnam-briefing.com/news/vietnam-growing-demand-healthcare-services.html/>
- DayDayNews. (2020, May 28). "Good Medical Insurance" released its first life-long renewable anti-cancer insurance. How can Internet celebrity health insurance products develop?. *DayDayNews*. <https://daydaynews.cc/en/technology/588157.html>
- DBS. (2020). Indonesia Industry Focus Indonesia Healthcare [Ebook].
- Delaronde, S. (2019). The Iron Triangle of Health Care: Access, cost and quality. *Inside Angle*. Retrieved from <https://insideangle.3m.com/his/blog-post/the-iron-triangle-of-health-care-access-cost-and-quality/>
- Department of Public Health Ministry of Health Malaysia. (2016). Medium Term Strategic Plan to Further Strengthen the NCD Prevention and Control Program in Malaysia (2016-2025). Putrajaya: Non-Communicable Disease (NCD) Section, Disease Control Division, Ministry of Health. https://extranet.who.int/nutrition/gina/sites/default/filesstore/MYS_2016_NSP%20NCD%202016-2025_0.pdf
- Department of Statistics Malaysia. (2021, July 15). Current Population Estimates, Malaysia, 2021. Department of Statistics Malaysia. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=155&bul_id=ZjJOSnpJR21sQWVUcUp6ODRudm5JZz09&menu_id=L0pheU43NWJwRWV5ZklWdzQ4TlhUUT09.
- Dey, S. (2020). *Govt to expand Ayushman Bharat to cover "missing middle" | India News—Times of India*. <https://timesofindia.indiatimes.com/india/govt-to-expand-ayushman-bharat-to-cover-missing-middle/articleshow/77555939.cms>
- DigFin. (2018, June 13). Muang Thai, Swiss Re and Prenetics pilot chronic-disease cover. *DigFin*. Retrieved from <https://www.digfingroup.com/insurtech-insurance-8/>
- Economic Times. (2018, December 31). *Ayushman Bharat Scheme | Ayushman Bharat health insurance: Who all it covers, how to apply | Complete Guide*. <https://economictimes.indiatimes.com/wealth/insure/ayushman-bharat-how-to-check-entitlement-and-eligibility/articleshow/65422257.cms>.
- Ernst & Young Global Limited. (2019). *2020 Asia-Pacific Insurance Outlook*. Retrieved from https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/insurance/insurance-outlook-pdfs/ey-global-insurance-outlook-asia-pacific.pdf
- Fintech News Singapore. (2020, August 21). Booming Indonesian digital finance sector to see revenues reach us\$8. 6b by 2025. <https://fintechnews.sg/42150/indonesia/booming-indonesian-digital-finance-sector-to-see-revenues-reach-us8-6b-by-2025/>
- Fintechnews.Indonesia. (2021, October 14). Booming Indonesian Digital Finance Sector to See Revenues Reach US\$8.6B by 2025. *Fintech News Singapore*. Retrieved from <https://fintechnews.sg/42150/indonesia/booming-indonesian-digital-finance-sector-to-see-revenues-reach-us8-6b-by-2025/>
- FWD. (2019). Buy Cancer Insurance Plan Online. *FWD Singapore*. <https://www.fwd.com.sg/cancer-insurance/>

Bibliography

- Godha, S. & Arjun N. (2020, August 18). *Health Insurance Thematic: Pivot of Future's Profitable Growth*. Spark Capital.
- Goel, S. (2020, January 31). *The doctor-population ratio in India is 1:1456 against WHO recommendation*. Deccan Herald. <https://www.deccanherald.com/business/budget-2020/the-doctor-population-ratio-in-india-is-11456-against-who-recommendation-800034.html>
- Goncalves, P. (2020, January 16). Medical insurance premiums to go up by 30% in Malaysia. International Investment. Retrieved from <https://www.internationalinvestment.net/news/4009194/medical-insurance-premiums-malaysia>
- Google & Temasek. (2018). E-Conomy SEA 2018. Retrieved from https://www.thinkwithgoogle.com/_qs/documents/6730/Report_e-Conomy_SEA_2018_by_Google_Temasek_v.pdf
- Gopalakrishna, I. (2020, July 9). The Third Wave of Microinsurance. *Insurance Asia News*. Retrieved from <https://insuranceasianews.com/the-third-wave-of-microinsurance/>
- GramCover. (2021). Our Story: GramCover—India's Gateway to Rural Insurance. Retrieved October 22, 2021 from <https://www.gramcover.com/about/our-story/>
- Hanvoravongchai, P. (2013). Health Financing Reform in Thailand: Toward Universal Coverage under Fiscal Constraints [Ebook]. The World Bank. Retrieved 16 June 2021, from <https://openknowledge.worldbank.org/bitstream/handle/10986/13297/75000.pdf>.
- Hargrave, M. (2020, August 27). Insurtech. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/i/insurtech.asp>.
- Hayes, A. (2020, November 15). Loss Ratio. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/l/loss-ratio.asp>
- Healthcare IT News. (2020, May 15). Telehealth set for "tsunami of growth," says Frost & Sullivan. <https://www.healthcareitnews.com/news/telehealth-set-tsunami-growth-says-frost-sullivan>
- Hirschmann, R. (2021, April 7). Number of public and private hospitals in Malaysia from 2013 to 2019. *Statista*. Retrieved October 26, 2021 from <https://www.statista.com/statistics/794860/number-of-public-and-private-hospitals-malaysia/>
- Huang, R. (2019). *2020 China Insurance Outlook Trends and imperatives shaping the life and non-life markets* [Ebook]. EY. Retrieved 17 June 2021, from https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/insurance/insurance-outlook-pdfs/ey-global-insurance-outlook-china.pdf.
- Humas. (2017, March 22). BPJS Kesehatan Encourage State-owned Enterprises to reach 100%. *BPJS Kesehatan*. Retrieved from <https://bpjs-kesehatan.go.id/bpjs/index.php/post/read/2017/443/BPJS-Kesehatan-Dorong-Kepesertaan-BUMN-100/berita-umum>
- Impact Insurance. (2015, September 29). Balancing social and financial goals – Vimo SEWA. *Impact Insurance*. Retrieved from <http://www.impactinsurance.org/practitioner-lessons/vimo-sewa>
- Impact Insurance. (2017, June). TAMADERA - Savings and protection for a prosperous future -- Allianz Life Indonesia. *Impact Insurance*. Retrieved from <http://www.impactinsurance.org/practitioner-lessons/tamadera-savings-and-protection>.
- Indian Cancer Society. (2021). Cancer Insurance. *Indian Cancer Society*. Retrieved October 21, 2020 from <https://www.indiancancersociety.org/what-do-we-do/cancer-insurance-schemes.aspx>
- Institute for Health Metrics and Evaluation. (2020, October 15) GBD Compare. *University of Washington*. Retrieved October 4, 2021 from <http://www.healthdata.org/data-visualization/gbd-compare>.
- Insurance Asia News. (2020, July 9). The third wave of microinsurance. <https://insuranceasianews.com/the-third-wave-of-microinsurance/>
- IRDAI - Insurance Regulatory and Development Authority of India. (2015, July 1). *Microinsurance Product list*. https://www.irdai.gov.in/ADMINCMS/cms/NormalData_Layout.aspx?page=PageNo271&mid=26.2
- J. Kagan. 2021. Out-of-Pocket Expenses. *Investopedia*. 14 June. <https://www.investopedia.com/terms/o/outofpocket.asp>
- Jaafar, S., et al. (2013). Malaysia Health System Review. *Health Systems in Transition* 3 (1). Geneva. World Health Organization. <https://apps.who.int/iris/rest/bitstreams/1246601/retrieve>.
- Jansen, L., Furstenthal, L., Cohen, D. (2020, November 25). Industry innovation: How has COVID-19 changed global healthcare?. *World Economic Forum*. Retrieved from <https://www.weforum.org/agenda/2020/11/healthcare-innovation-covid-coronavirus-pandemic-response-health>.

Bibliography

- Janungo, S., Bhowmik, K., Mahapatra, T., Mahapatra, S., Bhadra, U., Sarkar, K. (2015, May 12). Perceived Morbidity, Healthcare-Seeking Behavior and Their Determinants in a Poor-Resource Setting: Observation from India. *Plos One* 10 (5). <https://doi.org/10.1371/journal.pone.0125865>
- Jenkins, C., Bahukhandi, A., Ramakrishan, S. (2020, October 2). India: Wellness And Preventive Features In Health Insurance: IRDAI Guidelines. *Mondaq*. Retrieved from <https://www.mondaq.com/india/insurance-laws-and-products/990592/wellness-and-preventive-features-in-health-insurance-irdai-guidelines>
- Jenkins, C., Ngan, T. T., Ngoc, N. B., Phuong, T. B., Lohfeld, L., Donnelly, M., Minh, H. V., Murray, L. (2019, January 30). Strengthening breast cancer services in Vietnam: a mixed-methods study. *Global Health Research and Policy* 4(2). <https://ghrp.biomedcentral.com/articles/10.1186/s41256-019-0093-3>
- Jongudomsuk, O. et al. (2015). The Kingdom of Thailand Health System Review. *Health Systems in Transition* 5 (5). https://apps.who.int/iris/bitstream/handle/10665/208216/9789290617136_eng.pdf?sequence=1&isAllowed=y
- Kagan, J. (2020, August 27). Financial Technology – Fintech. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/f/fintech.asp>
- Kagan, J. (2021, July 21). Takaful. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/t/takaful.asp>
- Kagan, J. (2021, September 17). Microinsurance. *Investopedia*. Retrieved from <https://www.investopedia.com/terms/m/microinsurance.asp>
- Kelland, K. (2018, January 31). Global cancer survival rates improve, but wide gaps remain. *Reuters*. Retrieved from <https://www.reuters.com/article/us-health-cancer-survival-idUSKBN1FJ34R>
- Keng, Z., Saw, Y., Thung, S., Chong, W., Albert, A., Kariya, T., Yamamoto, E., & Hamajima, N. (2021). Rate of achievement of therapeutic outcomes and factors associated with control of non-communicable diseases in rural east Malaysia: Implications for policy and practice. *Scientific Reports*, 11. <https://doi.org/10.1038/s41598-021-83168-2>
- Khanna, A. (2020, September 21). India: Loss ratios for health insurers to remain high for rest of the financial year. *Asia Insurance Review*. Retrieved from <https://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/73730/type/eDaily/India-Loss-ratios-for-health-insurers-to-remain-high-for-rest-of-the-financial-year>
- Kharas, H. (2010). The Emerging Middle Class in Developing Countries. *OECD Development Centre*, 285. Retrieved from <https://www.oecd.org/development/pgd/44457738.pdf>
- Khazanah Research Institute. (2020). Social Inequalities and Health in Malaysia: The State of Households 2020 Part III. http://www.krinstitute.org/assets/contentMS/img/template/editor/KRI%20-%20Full%20Report%20-%20Social%20Inequalities%20and%20Health%20in%20Malaysia_latest.pdf
- Khokhar, T. (2017, December 13). *Chart: 100 Million People Pushed into Poverty by Health Costs in 2010*. <https://blogs.worldbank.org/opendata/chart-100-million-people-pushed-poverty-health-costs-2010>
- Khuntia, S. C., & Rathor, S. (2020, November 18). *The middle class population of 70 crore is the “missing middle” in the insurance sector*. Times of India Blog. <https://timesofindia.indiatimes.com/blogs/the-interviews-blog/the-middle-class-population-of-70-crore-is-the-missing-middle-in-the-insurance-sector/>
- Khurana, D. (2019, September 13). Thailand’s Universal Healthcare Coverage Model: 5 lessons for Asia. *Health Analytics Asia*. Retrieved from <https://www.ha-asia.com/thailands-universal-healthcare-coverage-model-5-lessons-for-asia/>
- Kneoma. (n.d.) Thailand – General Government Gross Debt in % of GDP). *Kneoma*. Retrieved October 4, 2021 from <https://knoema.com/atlas/embed/Thailand/topics/Economy/Financial-Sector-General-Government-finance/Government-debt-percent-of-GDP>.
- Langenbrunner, J. & Somanathan, A. (2011). Financing Health Care in East Asia and the Pacific. Washington, D.C.: The World Bank.
- Le, D.C. et al. (2010). Health Care System in Vietnam: Current Situation and Challenges. *Asian Pacific Journal of Disease* 4. DOI:10.7223/apjdm.4.23
- Le, Q.N., Blizzard, L., Si, L., Giang, L.T., & Neil, A. L. (2020). The evolution of social health insurance in Vietnam and its role towards achieving universal health coverage. *Health Policy Open* 1. <https://doi.org/10.1016/j.hpopen.2020.100011>
- Long, Giang Thanh. (2008). Social Health Insurance in Vietnam: Current Issues and Policy Recommendations. Vietnam: Social Health Insurance: Current Issues and Policy Recommendations. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/

Bibliography

wcms_secSOC_6614.pdf

Lum, M. (2019, February 5). The state of primary healthcare in Malaysia. *The Star*. Retrieved from <https://www.thestar.com.my/lifestyle/health/2019/02/05/the-state-of-primary-healthcare-in-malaysia>

Luong, H. V. (2019, April 8). *Strengthening Commune Health Centers in Vietnam* | *Atlantic Philanthropies*. The Atlantic Philanthropies. <https://www.atlanticphilanthropies.org/research-reports/strengthening-commune-health-centers-in-vietnam>

Mahendradhata Y, Trisnantoro L, Listyadewi S, Soewondo P, Marthias T, Harimurti P, & Prawira J. (2017). *The Republic of Indonesia Health System Review* (Health Systems in Transition, Vol-7 No.1). WHO Regional Office for South-East Asia; WHO IRIS. <https://apps.who.int/iris/handle/10665/254716>

Manakitsomboon, H. (2021). Health expenditure as a share of gross domestic product in Thailand 2007 to 2018. *Statista*. Retrieved October 26, 2021 from <https://www.statista.com/statistics/780865/health-expenditure-share-of-gdp-thailand/>

Mathiharan, K. (2003). Health and Law: The Fundamental Right To Health Care. *Indian Journal of Medical Ethics* 11 (4). P. 123. <https://ijme.in/articles/the-fundamental-right-to-health-care/?galley=html>

Medina, A. F. (2020, July 30). Indonesia's Healthcare Industry: Growing Opportunities for Foreign Investors. *ASEAN Business News*. <https://www.aseanbriefing.com/news/indonesias-healthcare-industry-growing-opportunities-foreign-investors/>

MIMS Thailand. (2019). *THAILAND NATIONAL LIST OF ESSENTIAL MEDICINES (NLEM)* [Ebook]. MIMS. Retrieved 17 June 2021, from [https://pubmiddleware.mims.com/resource/document/B3E5D074-DFF7-4D38-8DF7-A52200A5680E/pdf/A15_A120_MIMS_4_2020_NLEM_WEB.pdf?client=MIMS%20Publication-Topic&email=&country=Thailand&referenceld=Thailand%20National%20List%20of%20Essential%20Medicines%20\(NLEM\)](https://pubmiddleware.mims.com/resource/document/B3E5D074-DFF7-4D38-8DF7-A52200A5680E/pdf/A15_A120_MIMS_4_2020_NLEM_WEB.pdf?client=MIMS%20Publication-Topic&email=&country=Thailand&referenceld=Thailand%20National%20List%20of%20Essential%20Medicines%20(NLEM)).

Ministry of Finance Malaysia. (2021). Malaysia's 2021 fiscal deficit to hover between 6.5-7 pct of GDP. *Ministry of Finance Malaysia*. Retrieved from <https://www.mof.gov.my/en/news/press-citations/malaysia-s-2021-fiscal-deficit-to-hover-between-6-5-7-pct-of-gdp>

Ministry of Health and Family Welfare. (2016). *Ayushman Bharat Yojana*. Retrieved October 25, 2021 from https://www.nhp.gov.in/ayushman-bharat-yojana_pg

Ministry of Health Indonesia. (2008). *National List of Essential Medicines 2008* [Ebook]. WHO. Retrieved 17 June 2021, from https://www.who.int/selection_medicines/country_lists/idn_eml_2008.pdf?ua=1.

Ministry of Health Malaysia. (2016). National Strategic Plan for Non-Communicable Disease. Putrajaya: Ministry of Health Malaysia. https://www.iccp-portal.org/system/files/plans/MYS_B3_NSP%20NCD%202016-2025%2C%20FINAL.pdf

Ministry of Health Malaysia. (2019). *National Essential Medicines List* [Ebook] (5th ed.). Ministry of Health Malaysia. Retrieved 17 June 2021, from <https://www.pharmacy.gov.my/v2/sites/default/files/document-upload/151119-draf-neml-5th-ed-v13-final-clean.pdf>.

Ministry of Health Malaysia. (2020). *Strategic Framework of the Medical Programme Ministry of Health Malaysia 2021-2025*. Retrieved from https://www.moh.gov.my/moh/resources/Pelan_Strategik_KKM.pdf

Ministry of Health Singapore. (2020, December 21). *MOH | MediShield Life*. <https://www.moh.gov.sg/cost-financing/healthcare-schemes-subsidies/medishield-life>

Ministry of Health Singapore. (2021, August 17). *MOH | MediShield Life Benefits*. <https://www.moh.gov.sg/home/our-healthcare-system/medishield-life/what-is-medishield-life/what-medishield-life-benefits>

Ministry of Health Vietnam. (2016). Social Health Insurance Scheme in Vietnam Achievements and Challenges [Ebook]. *Ministry of Finance Japan*. Retrieved 16 June 2021, from https://www.mof.go.jp/pri/research/seminar/fy2016/tff2016_s1_04.pdf.

Ministry of Health Vietnam. (2018). *Issuance of a List of Essential Drugs*. Retrieved from <https://thuvienphapluat.vn/van-ban/The-thao-Y-te/Thong-tu-19-2018-TT-BYT-danh-muc-thuoc-thiet-yeu-393919.aspx>.

MSIG. (2020, September 15). Gluco Safeguard Insurance Insurans Gluco Safeguard [Ebook]. *MSIG Malaysia*. Retrieved 17 June 2021, from <https://www.msig.com.my/MSIG%20Gluco%20SafeGuard%20Insurance%20Brochure%20with%20PDS.pdf>.

Bibliography

- Mukundiyukuri, J. P., Irakiza, J. J., Nyirahabimana, N., Ng'ang'a, L., Park, P. H., Ngoga, G., El-Khatib, Z., Nditunze, L., Dusengeyezu, E., Rusangwa, C., Mpunga, T., Mubuligi, J., & Hedt-Gauthier, B. (2020). Availability, Costs and Stock-Outs of Essential NCD Drugs in Three Rural Rwandan Districts. *Annals of Global Health*, 86 (1). doi: 10.5334/aogh.2729
- Muller, J. (2021, August 17). Smartphone penetration rate as share of the population in Malaysia from 2010 to 2020 and a forecast up to 2025. *Statista*. Retrieved October 22, 2021 from <https://www.statista.com/statistics/625418/smartphone-user-penetration-in-malaysia/>
- My Insurance Club. (2012, February 13). L&T General Insurance partners with Vimo Sewa for micro insurance. *Myinsuranceclub.com*. Retrieved from <https://www.myinsuranceclub.com/insurance-news/l-t-general-insurance-partners-with-vimo-sewa-for-micro-insurance>
- mySalam. (2021). *mySalam National Health Protection Scheme—FAQ About mySalam*. <https://www.mysalam.com.my/b40/info/?url=FAQ-EN>
- Nathan, N. (2020). What is Arogya Sanjeevani health insurance policy?. *The Economic Times*. Retrieved from https://economictimes.indiatimes.com/wealth/insure/health-insurance/what-is-arogy-sanjeevani-health-insurance-policy/articleshow/74254954.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- National Health Authority. (2018). About Pradhan Mantri Jan Arogya Yojana (PM-JAY). *Official Website Ayushman Bharat Pradhan Mantri Jan Arogya Yojana | National Health Authority*. <https://pmjay.gov.in/about/pmjay>
- National Health Authority. (2018). Benefits of PM-JAY. *Official Website Ayushman Bharat Pradhan Mantri Jan Arogya Yojana | National Health Authority*. <https://pmjay.gov.in/benefits-of-pmjay>
- National Health Authority. (2018). Home. *Official Website Ayushman Bharat | PMJAY | National Health Authority*. <https://pmjay.gov.in/>
- National Health Authority. (2020). Ayushman Bharat Lessons Learned 2019-20. *pmjay.gov*. https://pmjay.gov.in/sites/default/files/2020-10/Lesson-Learned-Booklet-FINAL_1.pdf.
- National Health Portal of India (2015). *National List of Essential Medicines 2015*. Retrieved from <https://www.nhp.gov.in/NHPfiles/NLEM%2C%202015.pdf>.
- National Health Portal of India. (2019). *Non-communicable Diseases | National Health Portal Of India*. <https://www.nhp.gov.in/healthyliving/ncd2019>
- National Institutes of Health (NIH) Ministry of Health Malaysia. (2020). *National Health and Morbidity Survey (NHMS) 2019*. Retrieved from: https://iptk.moh.gov.my/images/technical_report/2020/4_Infographic_Booklet_NHMS_2019_-_English.pdf
- National Statistics Office (NSO) Ministry of Digital Economy and Society. (2018). Almost 5 Million Thai Hold Health Insurance [Presentation]. *Pfizer Emerging Markets*.
- Ng, C. W. (2015). *Universal Health Coverage Assessment Malaysia*. Retrieved from http://gnhe.org/blog/wp-content/uploads/2015/05/GNHE-UHC-assessment_Malaysia-1.pdf.
- Nguyen, L.H., Hoang, A.T.D. (2017). Willingness to Pay for Social Health Insurance in Central Vietnam. *Front Public Health* 5 (89). doi: 10.3389/fpubh.2017.00089
- Nguyen, S. (2013). *Final Constitution of the Republic of Vietnam* [Ebook]. Socialist Republic of Vietnam. Retrieved 16 June 2021, from <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/94490/114946/F114201808/VNM94490%20Eng.pdf>.
- Nguyen, T. T., & Hoang, M. V. (2018). Non-communicable diseases, food and nutrition in Vietnam from 1975 to 2015: The burden and national response. *Asia Pacific Journal of Clinical Nutrition*, 27(1), 19–28. <https://doi.org/10.6133/apjcn.032017.13>
- Nguyen, T.H. et al. (2020). Primary care quality in Vietnam: Perceptions and opinions of primary care physicians in commune health centers – a mixed-methods study. *PLoS ONE* 15 (10). <https://doi.org/10.1371/journal.pone.0241311>
- Nugraheni, W., Hikmatuz, A., Hartono, R., Nugraha, R., & Bae, C. (2020). National Health Insurance Deficit in Indonesia: Identification of Causes and Solutions for Resolution. *Global Journal of Health Science*, 12. <https://doi.org/10.5539/gjhs.v12n13p58>
- Oanh, T., Phuong, N., & Tuan, K. (2021). *Sustainability and Resilience in the Vietnamese Health System* [Ebook]. Health Strategy and Policy Institute, Vietnam. Retrieved 17 June 2021, from http://www3.weforum.org/docs/WEF_PHSSR_Vietnam_Report.pdf.

Bibliography

- OpenGov Asia. (2019, September 5). Online system to monitor development of fintech in Indonesia. OpenGov Asia. <https://opengovasia.com/online-system-to-monitor-development-of-fintech-in-indonesia/>
- Organisation for Economic Co-operation and Development. (n.d.). *Insurance indicators: Penetration*. Retrieved June 16, 2021, from <https://stats.oecd.org/Index.aspx?QueryId=25444>
- Organisation for Economic Co-operation and Development. (2017). *Out-of-pocket medical expenditure*. 92–93. https://doi.org/10.1787/health_glance-2017-26-en
- Organisation for Economic Co-operation and Development. (2020). *OECD Health Statistics 2020—OECD*. <https://www.oecd.org/els/health-systems/health-data.htm>
- Organisation for Economic Co-operation and Development. (2021, July). Health Expenditure. Retrieved from <https://www.oecd.org/els/health-systems/health-expenditure.htm>
- Oxford Business Group. (2021). Indonesia's large and growing middle class boosts insurance sector. *Oxford Business Group*. Retrieved October 21, 2021 from <https://oxfordbusinessgroup.com/overview/capture-market-large-and-growing-middle-class-could-unlock-profits>
- Panda, S. (2020, December 17). After payments, WhatsApp to roll out insurance and pension products. *Business Standard India*. https://www.business-standard.com/article/companies/after-payments-whatsapp-to-roll-out-insurance-and-pension-products-120121700031_1.html#:~:text=It%20is%20partnering%20with%20the,the%20end%20of%20the%20year.
- Peka B40. (2021). *PeKa B40*. <https://www.pekab40.com.my/eng/soalan-lazim>
- Phaiyarom, M. et al. (2021). Access to Non-Communicable Disease (NCD) Services Among Urban Refugees and Asylum Seekers, Relative to the Thai Population, 2019: A Case Study in Bangkok, Thailand. *Risk Manag Health Policy*. <https://doi.org/10.2147/RMHP.S314090>
- Pharmaceutical Services Programme, Ministry of Health Malaysia (2019, December 26). *National Essential Medicine List (NEML)*. Retrieved from <https://www.pharmacy.gov.my/v2/en/documents/national-essential-medicine-list-neml.html>
- PICC Health Insurance Company Limited. (2018, May 10). Good medical insurance · Long-term hospitalization medical insurance plan. *PICC Health*. <http://www.picchealth.com/tabid/2202/Infoid/14997/Default.aspx>
- Pisani, E., Olivier Kok, M., & Nugroho, K. (2017). Indonesia's road to universal health coverage: A political journey. *Health Policy and Planning*, 32(2), 267–276. <https://doi.org/10.1093/heapol/czw120>
- Policybazaar.com. (2021). *Arogya Sanjeevani Policy*. Retrieved October 20, 2021 from <https://www.policybazaar.com/health-insurance/arogy-sanjeevani-policy/>
- Policybazaar.com. (2021). *Corona Kavach Policy*. Retrieved October 20, 2021 from <https://www.policybazaar.com/health-insurance/corona-kavach-policy/>
- Policygenius. (2021). What is private insurance?. *Policygenius*. <https://www.policygenius.com/health-insurance/private-health-insurance/>
- Potempa, K. (2019). Impact of using a broad-based multi-institutional approach to build capacity for non-communicable disease research in Thailand. *Health Research Policy and Systems* 17 (62). <https://doi.org/10.1186/s12961-019-0464-8>
- Prabhakaran, S. et al. (2019). *Financial Sustainability of Indonesia's Jaminan Kesehatan Nasional: Performance, Prospects and Policy Options*. Washington, DC: Palladium, Health Policy Plus, and Jakarta, Indonesia: Tim Nasional Percepatan Penanggulangan Kemiskinan (TNP2K).
- PricewaterhouseCoopers. (2021, August 9). Vietnam. *PwC*. Retrieved from <https://taxsummaries.pwc.com/vietnam>
- PricewaterhouseCoopers. (2021, July 6). Thailand. *PwC*. Retrieved from <https://taxsummaries.pwc.com/thailand>
- Prudential PLC. (2021, March 3). Prudential PLC 2020 Full Year Results. Retrieved from https://www.prudentialplc.com/~/_media/Files/P/Prudential-V3/presentations/2021/full-year-2020-results-presentation.pdf
- Prudential Vietnam. (n.d.). *Google Translate*. Retrieved June 17, 2021, from <https://translate.google.com/translate?hl=en&sl=vi&tl=en&u=https%3A%2F%2Fwww.prudential.com.vn%2Fvi%2Fblog-nhip-song-khoe%2Fbao-hiem-nhan-tho-bao-hiem-y-te-khac-nhau-nhu-the-nao%2Findex.html&prev=search>
- Pulse by Prudential. (2021). *Pulse by Prudential*. <https://prudential.com.sg/wedopulse/faqs>

Bibliography

- Purnamasari, D. (2018). The Emergence of Non-communicable Disease in Indonesia. *Acta Med Indones* 50 (4). <https://pubmed.ncbi.nlm.nih.gov/30630990/>
- Razavi, L. (2015, May 15). Indonesia's universal health scheme: One year on, what's the verdict? *The Guardian*. <http://www.theguardian.com/global-development-professionals-network/2015/may/15/indonesias-universal-healthcare-insurance-verdict>
- Reach52. (2021). reach52 launches health services on the ground in India. *Reach52*. Retrieved October 22, 2021 from <https://reach52.com/reach52-launches-health-services-on-the-ground-in-india/>
- Republic of Indonesia. (1992). *Law Of The Republic Of Indonesia No. 23/1992*. Jakarta: Republic of Indonesia
- Reuters. (2012, June 19). UPDATE 2-Insurance giants jostle for slice of Southeast Asia market. *Reuters*. Retrieved from <https://www.reuters.com/article/aviva-cimb-insurance-idINL3E8HI5GX20120619>
- Romeli, R.H. (2021). Income Classification in Malaysia: What is B40, M40, and T20. *iProperty.com.my*. Retrieved from <https://www.iproperty.com.my/guides/what-is-b40-m40-t20-in-malaysia/>
- Sasiwongsaroj, K., Burasit, Y. (2019, April). Managing Thailand's Ageing Population. *Think-Asia*. Retrieved from <https://think-asia.org/handle/11540/9989>.
- Sehgal, R. (2018, September 25). PMJAY Scheme Has Impressive List of Benefits, But 'Flawed Model', Lack of Funds Have Medical Experts Sceptical. *Firstpost*. Retrieved September 25, 2018 from <https://www.firstpost.com/india/pmjay-scheme-has-impressive-list-of-benefits-but-flawed-model-lack-of-funds-have-medical-experts-sceptical-5260481.html>
- Shah, A., Mehrotra, P., Sinha, S., & Shah, J. (2021). India Insurtech landscape and trends. *Boston Consulting Group*. <https://web-assets.bcg.com/23/25/6f7a462249139fbe197f8e420ae0/bcg-insurtech-report-v33.pdf>
- Sheehan, M. (2019, December 12). WeSure insurance platform from Tencent hits 55mn users— Reinsurance News. *Reinsurance News*. <https://www.reinsurancene.ws/wesure-insurance-platform-from-tencent-hits-55mn-users/>
- Shepard, D. S., Savedoff, W., Hong, P.K. (2002, October 16). Health care reform initiatives in Malaysia. *World Health Organization*. Retrieved from https://www.who.int/health_financing/documents/malaysia-reform-initiatives.pdf
- Somanathan, A. et al. (2014) Moving toward Universal Coverage of Social Health Insurance in Vietnam: Assessment and Options. *Directions in Development – Human Development*. <https://doi.org/10.1596/978-1-4648-0261-4>
- Statista. (2019, July). *Estimated value of public health expenditure in India from financial year 2017 to 2020*. Retrieved October 25, 2020 from <https://www.statista.com/statistics/684924/india-public-health-expenditure/>
- Sumriddetchkajorn, K., Shimazaki, K., Ono, T., Kusaba, T., Sato, K., & Kobayashi, N. (2019). Universal health coverage and primary care, Thailand. *Bulletin of the World Health Organization*, 97(6), 415–422. <https://doi.org/10.2471/BLT.18.223693>
- Supakankunti, S., Herberholz, C., Witvorapong, N., & Pradithavanij, P. (2012, December 28). *Sustainable Financing and Reform of National Health Insurance System in Thailand*. Thailand: Chulalongkorn University.
- Swiss Re (2018). *Asia's Health Protection Gap: Insights for Building Greater Resilience*. Retrieved October 4, 2021 from https://www.swissre.com/dam/jcr:05411fab-a11a-4537-b16f-baa77da564f9/Asia's+Health+Protection+Gap_Regional+Infographics.pdf.
- Swiss Re (2020). *COVID-19 Consumer Survey Southeast Asia*. Retrieved from https://www.swissre.com/dam/jcr:3117a8bb-8668-4fec-b43e-7b43f0df47d9/ZRH-20-05609-P1_Consumer-Survey_COVID-19_Infographic_A4_SEA.pdf
- Swiss Re (2020). *Going Digital: Insights to optimise consumer appetite for online insurance in Indonesia and Malaysia*. Retrieved from <https://www.swissre.com/dam/jcr:f36f25e2-bdb1-431c-ba98-ef3d11c8c5d5/swissre-institute-digital-platform%20solutions-insurance-indonesia-malaysia.pdf>
- Tangcharoensathien, V., Prakongsai, P., Patcharanarumol, W., & Jongudomsuk, P. (2007). *Achieving Universal Coverage in Thailand: What lessons do we learn?* [Ebook]. WHO. Retrieved 16 June 2021, from https://www.who.int/social_determinants/resources/csdh_media/universal_coverage_thailand_2007_en.pdf.
- Tangcharoensathien, V., Suphanchaimat, R., Thammatacharee, N., & Patcharanarumol, W. (2012). Thailand's Universal Health Coverage Scheme. *Economic and Political Weekly*, 47.
- Tangcharoensathien, V., Tisayaticom, K., Suphanchaimat, R., Vongmongkol, V., Viriyathorn, S., & Limwattananon, S. (2020, September 21). Financial risk protection of Thailand's universal health coverage: Results from series of national household surveys between 1996 and 2015 | International Journal for

Bibliography

- Equity in Health | Full Text. *International Journal for Equity*. <https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-020-01273-6>
- Teo, H. S., & Huong, D. L. (2020, July). *Improving Efficiency in the Health Sector: An Assessment of Vietnam's Readiness for Integration of Care*. Washington, DC: World Bank Group.
- ThaiEmbassy.com. (2020, August 20). Health Insurance Thailand: New Requirement for Retirees. *Thai Embassy*. Retrieved from <https://www.thaiembassy.com/travel-to-thailand/health-insurance-thailand-for-retirees>
- Thaiprayoon, S., & Wibulpolprasert, S. (2017). *Political and Policy Lessons from Thailand's UHC Experience*. 174, 16.
- The Economic Times. (2016, March 3). *India's health protection gap among biggest in Asia: Report*. Retrieved from <https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/indias-health-protection-gap-among-biggest-in-asia-report/articleshow/51244717.cms?from=mdr>
- The Economist Intelligence Unit. (2014). Indonesia launches universal healthcare. Eiu.com. Retrieved 16 June 2021, from <https://www.eiu.com/industry/article/1071418091/indonesia-launches-universal-healthcare/2014-01-13>.
- The Financial Express. (2021, March 13). India's FinTech industry valuation estimated at USD 150-160 bn by 2025: Report. <https://www.financialexpress.com/industry/indias-fintech-industry-valuation-estimated-at-usd-150-160-bn-by-2025-report/2211960/>
- The Fintech Power 50. (2020). WeSure. *The Power 50*. Retrieved October 22, 2021 from <https://www.thepower50.com/profile/wesure/#:~:text=WeSure%20is%20Tencent's%20insurance%20platform,among%20insurance%20WeChat%20Mini%2DPrograms>.
- The Jakarta Post. (2020, May 13). Jokowi raises BPJS Kesehatan Premiums, Again. *The Jakarta Post*. Retrieved from <https://www.thejakartapost.com/news/2020/05/13/jokowi-raises-bpjs-kesehatan-premiums-again.html>
- The Mutual Exchange Forum on Inclusive Insurance (MEFIN) Network . (n.d.). Vietnam: Delivering Microinsurance to Women by Viet Nam Women's Union: The Role of Regulation in Pilot Testing. *Vietnam Ministry of Finance Insurance Supervisory Authority, Women's Union, and the German Development Cooperation - Regulatory Framework Promotion of Pro-poor Insurance Markets in Asia (GIZ-RFPI Asia)* . https://www.mefin.org/files/businessmodels/FactSheet%20on%20Microinsurance%20Fund%20Business%20Model%2021Feb.2017_VN_Final.pdf
- The World Bank. (2016). *Quality and Equity in Basic Health Care Services in Vietnam: Findings from the 2015 Vietnam District and Commune Health Facility Survey*. Washington, DC: World Bank Group.
- The World Bank, World Development Indicators. (2018). *Current health expenditure (% of GDP) | Data*. <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS>
- The World Bank, World Development Indicators. (2021). *Domestic general government health expenditure (% of GDP)*. Retrieved October 27, 2021 from <https://data.worldbank.org/indicator/SH.XPD.GHED.GD.ZS>.
- The World Bank, World Development Indicators. (2021). *Domestic private health expenditure (% of current health expenditure)*. Retrieved October 27, 2021 from <https://data.worldbank.org/indicator/SH.XPD.PVTD.CH.ZS>
- The World Bank, World Development Indicators. (2021). *Life Expectancy at Birth, total (years) – Malaysia*. Retrieved October 26, 2021 from <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=MY>.
- The World Bank, World Development Indicators. (2021). *Life expectancy at birth, total (years) – Thailand*. <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=TH>
- The World Bank, World Development Indicators. (2021). *Life expectancy at birth, total (years) – Vietnam*. Retrieved October 26, 2021 from <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=VN>
- The World Bank, World Development Indicators. (2021). *Mortality rate, infant (per 1,000 live births) – Indonesia*. Retrieved October 25, 2021 from <https://data.worldbank.org/indicator/SP.DYN.IMRT.IN?locations=ID>
- The World Bank, World Development Indicators. (2021). *Out-of-pocket expenditure (% of current health expenditure)*. Retrieved October 27, 2021 from <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS>
- The World Bank, World Development Indicators. (2021). *Population, total – Thailand*. Retrieved October 26, 2021 from <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=TH>

Bibliography

- Thuy, N. (2020, October 21) COVID-19 Pushes Vietnam Fiscal Deficit to Nearly 6% of GDP. *Hanoi Times*. Retrieved October 4, 2021 from <http://hanoitimes.vn/covid-19-pushes-vietnam-fiscal-deficit-to-nearly-6-of-gdp-314586.html>.
- Tran, B. X., Nguyen, L. H., Nong, V. M., & Nguyen, C. T. (2016). Health status and health service utilization in remote and mountainous areas in Vietnam. *Health and Quality of Life Outcomes*, *14*(1), 85. <https://doi.org/10.1186/s12955-016-0485-8>
- Travel Impact Newswire. (2018, July 27). Insurance company engages Malaysians to live healthier through #Laughforhealth Campaign. *Travel Impact Newswire*. Retrieved from <https://www.travel-impact-newswire.com/2018/07/insurance-company-engages-malaysians-to-live-healthier-through-laughforhealth-campaign/>
- Trisnantoro, L. (2020, December 14). *Essential health services for all, a mission impossible?: Jakarta Post contributor, Asia News & Top Stories—The Straits Times*. <https://www.straitstimes.com/asia/essential-health-services-for-all-a-mission-impossible-jakarta-post-contributor>
- UHC2030. (2021). *Our Mission*. Retrieved October 20, 2021 from <https://www.uhc2030.org/our-mission/>.
- UN News. (2020, December 10). *Non-communicable diseases killing more people than ever before: UN health agency*. <https://news.un.org/en/story/2020/12/1079722>
- UNDP. (2020). Multi-Sectoral Approaches to NCDs in Thailand. *UNDP.org*. Retrieved from <https://www.undp.org/publications/multi-sectoral-approaches-ncds-thailand#modal-publication-download>
- US-ASEAN Business Council. (2019, 22 July). Growth Projections. Retrieved from <https://www.usasean.org/why-asean/growth>
- Viet Nam News. (2016, February 29). Treatment of rare diseases in VN is expensive. *Viet Nam News*. Retrieved from <https://vietnamnews.vn/society/282956/treatment-of-rare-diseases-in-vn-is-expensive.html>
- Wang, Y. & Wang, J. (2020, June 1). Modelling and Prediction of Global Non-Communicable Diseases. *BMC Public Health*, *20*. <https://doi.org/10.1186/s12889-020-08890-4>
- Wangkiat, P. (2019, December 9). *“Populist” UHC now a feather in Thailand’s cap*. <https://www.bangkokpost.com/opinion/opinion/1811469/populist-uhc-now-a-feather-in-thailands-cap>
- We are Social & Hootsuite (2020, January 30) Digital 2020: Global Digital Overview. *Datareportal*. Retrieved from <https://datareportal.com/reports/digital-2020-global-digital-overview>
- Willis Towers Watson Public Limited Company. (2020, January 30). 2019 InsurTech investment reaches all-time high with one-third of historic total – almost \$2 billion invested in Q4 alone. *Globe Newswire*. Retrieved from <https://www.globenewswire.com/news-release/2020/01/30/1977329/0/en/2019-InsurTech-investment-reaches-all-time-high-with-one-third-of-historic-total-almost-2-billion-invested-in-Q4-alone.html>
- Wong, C. (2019, May 24). China will increase support, subsidies for tech firms, official says. *South China Morning Post*. <https://www.scmp.com/news/china/politics/article/3011715/china-will-increase-support-subsidies-tech-firms-official-says>
- World Health Organization. (2014). Global Status Report on NonCommunicable Diseases. *World Health Organization*. Retrieved from http://apps.who.int/iris/bitstream/handle/10665/148114/9789241564854_eng.pdf;jsessionid=5FFB06DAF8B3423A6538252CB55F91CD?sequence=1
- World Health Organization. (2015). *Tracking Universal Health Coverage: First Global Monitoring Report*. WHO Press. Retrieved October 4, 2021 from http://apps.who.int/iris/bitstream/handle/10665/174536/9789241564977_eng.pdf.%20Accessed%2007%20March%202017;jsessionid=6A612C97A3F9FB71A725DD584B34531B?sequence=1.
- World Health Organization. (2018). Noncommunicable Diseases Country Profiles. *World Health Organization*. https://www.who.int/nmh/countries/vnm_en.pdf?ua=1.
- World Health Organization. (2019). *Legal Access to Health Care Country Profile: Thailand*. Geneva: World Health Organization.
- World Health Organization. (2019). *World Health Organization Model List of Essential Medicines* [Ebook] (21st ed.). WHO. Retrieved 17 June 2021, from <https://apps.who.int/iris/bitstream/handle/10665/325771/WHO-MVP-EMP-IAU-2019.06-eng.pdf>
- World Health Organization. (2020, January 13). Urgent health challenges for the next decade. *World Health Organization*. <https://www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade>
- World Health Organization. (2020, March 7). Community-based health insurance. *World Health Organization*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/community-based-health->

Bibliography

insurance-2020

World Health Organization. (2020, October 13). *UHC Index of Service Coverage (SCI)*. Retrieved October 4, 2021 from <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage>.

World Health Organization. (2021). Health financing in Viet Nam. *World Health Organization*. Retrieved 19 October 2021 from <https://www.who.int/vietnam/health-topics/health-financing>.

World Health Organization. (2021). Signpost: WHO essential medicines. *Reproductive Health Essential Medicines*. Retrieved October 10, 2021 from https://www.who.int/rhem/signpost/essential_medicines/en/

World Health Organization. (2021, April 1). *Universal health coverage (UHC)*. [https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-\(uhc\)](https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc))

World Health Organization Cancer Today. (2020). *Cancer today*. <http://gco.iarc.fr/today/home>

World Health Organization Europe. (2021). Health technology assessment. *Euro.who.int*. Retrieved October 27, 2021 from <https://www.euro.who.int/en/health-topics/Health-systems/health-technologies-and-medicines/policy-areas/health-technology-assessment>

Worldometer (2021). *Indonesia Population*. Retrieved October 5, 2021 from: <https://www.worldometers.info/world-population/indonesia-population/>

Worldometer. (2021). *India Population (2021)—Worldometer*. <https://www.worldometers.info/world-population/india-population/>

Yuhan, D. (2019, May 16). Low-priced Internet health insurance is easy to insure and difficult to claim-Consumer Channel-People's Daily Online. *People.com*.. <http://xiaofei.people.com.cn/n1/2019/0516/c425315-31087466.html>

Yusof, T. A. (2019, May 13). Dr Dzulkefly: "Ensuring health for all." *NST Online*. <https://www.nst.com.my/news/nation/2019/05/487947/dr-dzulkefly-ensuring-health-all>.