SECTOR ASSESSMENT (SUMMARY): HEALTH

A. Sector Road Map

1. Sector Performance, Problems and Opportunities

1. **Sector performance.** Among Southeast Asian countries, Thailand's healthcare system is relatively strong, ranking 35th of 167 countries globally,[1] having achieved universal health coverage. The Universal Coverage Scheme ensures health services for 75% of the total Thai population, while the Civil Servants Medical Benefit Scheme covers 9% of the population and the Social Health Insurance (provided by the Social Security Scheme) covers roughly 16%.[2] Coverage has delivered widespread health improvements and decreased out-of-pocket payments, but significant economic losses are still incurred from expenditures treating increasing numbers of non-communicable diseases.[3]

Table 1: Selected Health Indicators (with ASEAN[a] comparison in [ ])

Year	1990	2000	2010	2018
Life expectancy at birth, total (years)	70	71	74	77
Under-5s Mortality rate (per 1,000 live births)	13 [79]	12 [49]	10 [33]	9
Prevalence of underweight children (% of children under 5)	16.3	-	9.2	6.7
Incidence of tuberculosis (per 100,000 people)	-	52 [178]	49 [146]	-
Prevalence of HIV, total (% of population 15-49)	0.6	2.0	1.5	1.1

ASEAN = Association of Southeast Asian Nations.
Source: World Development Indicators database; ASEAN. 2017. *ASEAN Statistical Report on Millennium Development Goals 2017*. Jakarta.

2. **Development issues in health.** Globally, Thailand ranks 76th of 195 countries on the 2018 Healthcare Access and Quality Index.[4] The density of doctors and nurses in Thailand was 3.1/1000 in 2017,[5] below the World Health Organization (WHO) recommended threshold of 4.45/1000 with inequitable distribution of doctors between urban and rural areas.[6] The healthcare delivery system is dominated by public health facilities; only 21% of total beds are in private hospitals.[7] 78% of the healthcare workforce is female. There are approximately 166,000 nurses (approximately 95% are female), and 60,000 doctors (approximately 48% are female) and 149,641 beds in 1,305 hospitals, including 347 private hospitals. Fewer outpatients see a doctor in public facilities: in 2013, there were 27.26 million outpatient doctor visits at public facilities compared with 74.56 million doctor visits at private facilities.[8]

3. **Pressures on health service provision given Thailand's strategic location**. There is a marked disparity in gross domestic products and health resources across different countries of the Greater Mekong Subregion. Thailand is a high-profile tourist destination, and cross-border mobility is increasing due to regional integration. Thailand scores 2/5 for

[1] Legatum Institute. 2019. *The Legatum Prosperity Index 2019*. London.
[2] S. Paek, N. Meemon, and T. Wan. 2016. Thailand's universal coverage scheme and its impact on health-seeking behavior. *SpringerPlus*. 5 (1).
[3] P. Jongudomsuk et al. 2015. *The Kingdom of Thailand Health System Review.* Vol. 5. Geneva: WHO Press.
[4] *The Lancet*. 2018. Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. 391. pp. 2236–2271.
[5] T. Noree. 2017. *Policy options for the human resources for health planning in the next decade*. Nonthaburi: Human Resources for Health Research and Development Office.
[6] T. Noree et al. 2016. Medical Tourism in Thailand: a cross sectional study. *Bulletin of the World Health Organization.* 94 (1). pp. 30–36.
[7] W. Patcharanarumol et al. 2018. Chapter 10. Thailand. In H. Legido-Quigley and N. Asgari-Jirhandeh. Eds. *Resilient and people-centered health systems: Progress, challenges and future directions in Asia*. New Delhi: WHO, Regional Office for South-East Asia.
[8] Personal communication with MOPH and N. Pagaiya et al. 2019. Forecasting imbalances of human resources or health in the Thailand health service system: application of a health demand method. *Human Resources for Health*. 17 (4).

pandemic preparedness (indicator: priority public health risks and resources are mapped and utilized) and 3/5 for points of entry capacities (effective public health response at points of entry) in 2017.[9] Migrants, mobile populations, and minority groups in border areas have greater vulnerability to communicable diseases for reasons linked to work conditions, cultural beliefs, and social marginalization.[10] Migrants with work visas are eligible for the Social Health Insurance Scheme. Documented and undocumented migrants can join a parallel Migrant Health Insurance Scheme, but many remain uncovered by either scheme.[11] Thailand is signatory to a number of cross-border and regional disease control initiatives, including regional cooperation, strengthening disease surveillance and response, and improving quality of laboratory services.[12]

4. **Inequitable distribution of medical equipment, private sector high-end care dominance in Bangkok, and weak urban healthcare system.** Bangkok Metropolitan Region has a number of super-tertiary hospitals providing high-end care, in part, catering to medical tourists, and, overall, has a higher concentration of medical equipment than the national average and all other provincial areas (footnote 3). In urban areas, healthcare is dominated by hospitals and private clinics leaving primary healthcare systems under-resourced (footnote 3). Rural areas, prioritized for universal health care, have stronger primary healthcare. Informal workers, who make up 62% of the workforce and include many of the 4.9 million migrants largely from neighboring countries, lack the "employee" status as defined under the Labor Protection Act and, therefore, have limited access to insurance or other safety nets.[13]

5. **Thailand is a rapidly aging society.** Currently, according to the National Research Council, Thailand has 4.7 million seniors over 70 years old. The number of people aged above 60 increased from 1.5 million in 1960 to 10.7 million in 2015, or 16% of the total population. This number is projected to reach 20 million by 2035, over 30% of the population, outnumbering children under age 15 for the first time. Women make up a disproportionate share, constituting 55% of persons aged 60 or older and 61% of those aged 80 or older.[14] Thailand's aging demographic raises challenges relating to financing and service provision for elderly care and heightens age-related vulnerability associated with coronavirus disease (COVID-19) symptoms, co-morbidities, and related health threats.[15]

6. **COVID-19 in Thailand.** Thailand registered its first case of COVID-19 in mid-January 2020.[16] By 18 June 2020, 3,141 cases and 58 deaths had been confirmed in 68 of 77 provinces, including 108 healthcare workers (3.6% of all cases, including 22 doctors, 45 nurses, 22 nurse aides[17]). According to the Department of Disease Control, the median age of confirmed cases is 37, and there is a 1.19:1 ratio of male to female. The mortality rate for males is 2.7% and for females, 0.7%; for those aged 70 or over it is 12.1%.[18] The positive

[9] WHO. 2017. *Joint External Evaluation of IHR Core Capacities of the Kingdom of Thailand*. Geneva: WHO.
[10] IOM. 2019. *Thai migration report 2019*. Bangkok.
[11] V. Tangcharoensathien, A. Thwin, and W. Patcharanarumol. 2017. Implementing health insurance for migrants, Thailand. *Bulletin of the World Health Organization*. 95 (2). pp. 146–151.
[12] Regional Cooperation and Integration (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).
[13] P. Kongtip et al. 2015. Informal Workers in Thailand: Occupational Health and Social Security Disparities. *HHS Public Access*. 25 (2). pp. 189–211.
[14] J. Nodal et al. 2015. The situation of Thailand's older population: An update based on the 2014 Survey of Older Persons in Thailand. Chiang Mai: HelpAge International.
[15] COVID-19 and older people in Thailand (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).
[16] E. Cheung. 2020. Wuhan pneumonia: Thailand confirms first case of virus outside China. *South China Morning Post*. Hong Kong, China.
[17] V. Tangcharoensathien. 2020 Policy support to HCW's responses to COVID 19: Thailand experiences. WHO. 14 May 2020. Webinar.
[18] WHO Thailand. 2020. *Coronavirus disease 2019: WHO Thailand Situation Report – 17 April 2020*. Bangkok.

rate of those tested was 1.9% from 7 to 30 April.[19] Assessments in other countries suggest that COVID-19 mortality rates can be well above hospital-reported fatalities.[20]

7. **Thailand's preparedness for ongoing COVID-19 transmission.** Modelling conducted by the Ministry of Public Health (MOPH) in mid-March 2020 charted three possible scenarios for COVID-19 spread. Scenario 1, or the 'worst case' scenario, projects almost 17 million symptomatic cases based on the patterning of the viral spread in Wuhan, People's Republic of China. Scenario 2 posits 7.3 million cases by the end of 2020, suggesting inability of healthcare system resources to cope. Scenario 3, the 'best case' scenario, estimates 20,000 possible cases by the end of 2020 as a result of coordinated use of national, provincial, and district healthcare resources, coupled with strong public commitment to social distancing. When travel bans and social distancing regulations are lifted, there is a significant risk of a second wave of infections due to large numbers of tourists (39 million in 2019) and returning Thai citizens and migrant workers. Ports of entry have capacity to screen incoming travelers, but porous borders facilitate large-scale informal movement with neighboring countries.[21]

2. Government Sector Strategy

8. **National strategy and COVID-19 preparedness plan.** Thailand's National Strategic Plan for Emerging Infectious Disease Preparedness, Prevention and Response, 2013–2016 details strategies to prevent and control emerging diseases utilizing government, private sector, and community responses.[22] The Prime Minister declared a national emergency from 26 March, with 26 associated measures including travel restrictions for both Thais and foreigners, nationwide curfew, semi-lockdowns, and regulations on social distancing. The MOPH has implemented emergency response activities covering surveillance, contact tracing, clinical management, and provision of medicines and medical supplies.[23] Health workforce benefit packages and other economic and social impact mitigation measures have been established. Doctors and nurses have been deployed to assist in the government's "state quarantine" and "home quarantine" policies with monitoring support from over a million health volunteers.[24] Gradual relaxation of emergency measures began on 17 May 2020. Modelling of second wave infections based on degree of relaxation shows potential for large surge of daily cases by September 2020 if all restrictions are lifted.[25]

9. **Policy changes and budget allocations.** Thailand established the Center for COVID-19 Situation Administration, which includes the Medical and Public Health Emergency Center under the MOPH. The government is making regular updates to its preparedness, prevention, and control plans. Outpatient visits are being shifted to non-hospital based primary healthcare settings alongside increased use of telemedicine, including online mental health services[26] and a contact tracing mobile application. COVID-19 activities are funded through the central budget allocation for emergency cases ($3 billion in fiscal year 2020) managed by the Bureau of the Budget. By 31 March 2020, $2.5 billion of this fund had been allocated for COVID-19-related activities.[27] The government has guaranteed reimbursement of all COVID-19-related costs by insurance schemes, including costs at private hospitals.[28]

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[19] WHO Thailand. 2020. *Coronavirus disease 2019: WHO Thailand Situation Report – 4 May 2020*. Bangkok.
[20] *The Economist*. 2020. Tracking covid-19 excess deaths across countries. London.
[21] P. Duigan. 2018. *Migrant Health Financing Roundtable*. Bangkok.
[22] Summary of Strategies for COVID-19 (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).
[23] WHO Thailand. 2020. *Coronavirus disease 2019: WHO Thailand Situation Report – 5 April 2020*. Bangkok.
[24] WHO Thailand. 2020. *Coronavirus disease 2019: WHO Thailand Situation Report – 22 April 2020*. Bangkok.
[25] Per discussion with WHO.
[26] WHO Thailand. 2020. *Coronavirus disease 2019: WHO Thailand Situation Report – 12 April 2020*. Bangkok.
[27] *Thai Publica*. 2020. Looking for an emergency budget to fight the Covid-19 limit of 96,000 million baht. Bangkok.
[28] *Bangkok Post.* 2020. Hospitals warned not to bill for Covid-19 care. Bangkok.

10. **Procurement responses**. In a report by WHO Thailand, the national public hospital bed capacity for COVID-19 is 4,820 beds; of which, 3,800 are currently available. There are 2,263 hospital beds available in Bangkok Metropolitan Region and surrounding provinces and further 522 rooms in 'hospitels'. Nationwide, there are over 10,000 ventilators for use in intensive care units.[29] WHO Thailand confirmed that, by 22 April 2020, 41,566,850 surgical masks had been distributed nationwide, along with 193,060 N95 masks and 78,462 sets of personal protective equipment. Local production of N95 and surgical masks will begin in June 2020 (footnote 17). By 18 June 2020, over 468,000 COVID-19 samples had been tested;[30] daily testing capacity exceeds 20,000 samples.[31]

11. **Patients suffering from non-COVID-19 illnesses are also at risk.** With the attention and fiscal support being diverted towards COVID-19, some patients, according to WHO, are less likely to be able to access routine health services (vaccinations, pre-natal checkups), or have medical attention for acute and chronic conditions (strokes, heart attacks, bacterial infections, accidents, mental illness, and trauma), thereby risking larger sectors of the general population. Surveys show increasing levels of stress due to COVID-19 (footnote 25),[32] growing use of mental health hotlines, and increasing numbers of suicides.[33]

B. Major Development Partners: Strategic Foci and Key Activities

12. The United States Agency for International Development has provided approximately $2 million for building capacity to prevent, detect, and respond to infectious diseases.[34] Collaboration between the government and the United States Centers for Disease Control and Prevention has ongoing projects examining flu vaccine efficacy. The Government of the People's Republic of China provided Thailand with masks, personal protective equipment sets, and COVID-19 test kits. ADB is assisting the MOPH in procurement of critical medical equipment and supplies under a complementary technical assistance project.[35] Thailand will join a multi-country clinical study for potential treatments for COVID-19.

C. Institutional Arrangements and Processes for Development Coordination

13. There is currently no coordination mechanism for development partners to support the MOPH on COVID-19 response, but the MOPH plans to set up a partners' committee, potentially led by WHO.

D. ADB Experience and Assistance Program

14. Thailand has been participating in the Working Group on Health Cooperation, which, supported by a technical assistance from ADB, has endorsed the Greater Mekong Subregion Health Cooperation Strategy, 2019–2023.[36] Thailand has received technical assistance for long-term care (footnote 15).

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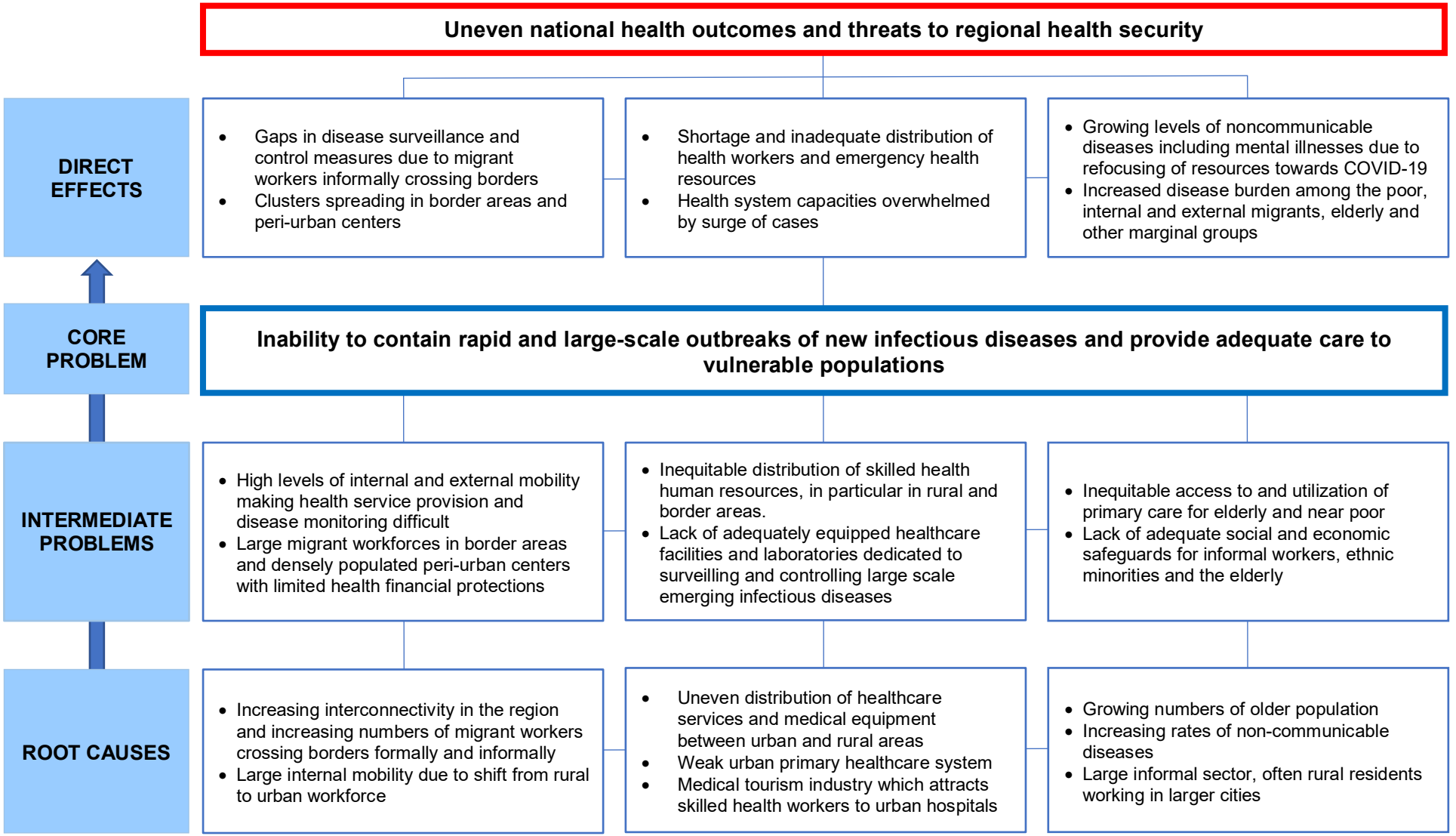
[29] Government of Thailand, MOPH. *Covid-19 pandemic: Review of exit strategies.* Bangkok. 15 April 2020.
[30] Per discussion with MOPH.
[31] K. Samaphutthi and C. Charoenchai. 2020. Covid-19: Little or well controlled. What makes the number of new HIV infected people in Thailand decrease? *BBC.* 30 April.
[32] UNICEF. 2020. *8 in 10 youth worried about their family income due to COVID-19*. Bangkok.
[33] *Prachatai English*. 2020. 38 suicides and attempted suicides reported as virus control also kills people. Bangkok.
[34] United States Embassy, Bangkok. 2020. *U.S. Provides Additional Assistance to Thailand to Respond to Coronavirus Disease 2019 (Covid-19)*. Bangkok.
[35] Development Coordination (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).
[36] ADB. Regional: Strengthening Regional Health Cooperation in the Greater Mekong Subregion; and ADB. 2019. *Greater Mekong Subregion Health Cooperation Strategy 2019–2023*. Manila.

Problem Tree for Health



Source: Asian Development Bank.