



## Project Data Sheet

### Project 56095-001

Project Name	Medical Excellence Centers Project
Project Number	56095-001
Country / Economy	Thailand
Project Status	Proposed
Project Type / Modality of Assistance	Loan
Source of Funding / Amount	<b>Loan: Medical Excellence Centers Project</b> Ordinary capital resources US\$ 255.00 million
Operational Priorities	OP1: Addressing remaining poverty and reducing inequalities OP2: Accelerating progress in gender equality OP3: Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability OP6: Strengthening governance and institutional capacity OP7: Fostering regional cooperation and integration
Sector / Subsector	<b>Health</b> / Health sector development and reform
Gender	Effective gender mainstreaming
Description	<p>The project will be aligned with the following impacts: (i) modern public health service system ensuring well-being of all Thais in an effective, fair, sufficient, and sustainable manner developed; and (ii) UHC, including access to essential health care services, sustained. The outcome is: access to quality public hospital services by all in selected provinces improved.</p> <p>Output 1: Health services for five health regions expanded. Under this output, estimated at \$290 million, the project will finance the construction and equipping of UHC-facilitating, socially inclusive, and climate-smart MECs at five public hospitals to expand cancer, cardiac, surgical, and trauma care; and other hospital services that will benefit at least 14 million people in health regions 1, 3, 5, 6, and 9. Output 1 will have strong gender elements by ensuring that the design and construction of the MECs consider the health seeking behavior of women, children, people with disabilities, and other vulnerable populations. Output 1 will also support cross-border and regional cooperation of activities by helping to ensure services are made available for migrant populations. Output 1 will also finance measures to enhance climate change mitigation in the five MECs.</p> <p>Output 2: Expertise of medical, nursing, and other hospital staff in five public hospitals improved. Under this output, estimated to cost \$8 million, the project will finance (i) the training of doctors, nurses, and other health staff on the cardiac, cancer, and other new services, including day surgery, to be provided by the five hospitals (para. 12); (ii) the training of medical students of affiliated medical schools who are being trained in the five hospitals under the CIPRD, for subsequent deployment by the MOPH in designated rural health facilities; and (iii) training on determining and promoting climate change adaptation and mitigation measures, management, and supervision expertise, digital skills, equipment maintenance, coordination of care and care integration, and other needed expertise. Output 2 will also have strong gender elements, which will ensure expanded access by female staff in the training and capacity building programs at the five hospitals. It will support building up management expertise of female health staff, and the eventual deployment of additional female managers in different units of the hospitals. Training on reducing sexual harassment and violence in the workplace will also be supported.</p> <p>Output 3: Climate change mitigation measures in public hospitals enhanced. Under this output, estimated to cost \$2 million, the project will finance studies which will assess the status of climate change mitigation measures in public hospitals (other than the five hospitals supported under outputs 1 and 2) and prepare a strategy and implementation plan for promoting and incorporating climate change mitigation measures in these hospitals.</p> <p>Lessons learned and ADB's value addition. ADB will bring in regional and country-level lessons from its work on UHC, which is one of the priorities of its Strategy 2030. This includes lessons from its previous support to the construction and equipping of hospitals and health facilities, and improving health human resources in other developing member countries, including Bangladesh, Mongolia, and Papua New Guinea. ADB will also help ensure that expanded health services will support climate change adaptation and mitigation by building on ADB's experience in promoting and supporting measures addressing climate change both in the health and other sectors. In coordination with the Digital Technology for Development Unit in the Sustainable Development and Climate Change Department, and building on lessons from digital health adoption initiatives, such as the Tonga digital health project, ADB will facilitate the use of digital tools in the five project hospitals.</p>

Public hospitals and universal health coverage. Public hospitals play a major role in Thailand's health system and in the achievement of universal health coverage (UHC). Public hospitals provide both outpatient and inpatient medical services, ensure continuous and coordinated care as part of referral networks, and offer specialized care for acute and complex conditions. They also provide other health care services beyond hospital-level clinical care, such as health promotion, community outreach services, or support for patients in need of long term and palliative care. Public hospitals provide care with significant financial protection, as they are contracted by the government's three major health financing schemes, which together cover over 98% of the Thai population, including migrant workers. The quality of care is also assured by the Thai HA accreditation system.

Number and distribution of hospitals in Thailand. In 2020, there were 1,356 hospitals of various sizes and ownership in Thailand, with around 2.5 beds per 1,000 population. Of these, 70% (934) were under the Ministry of Public Health (MOPH); 23% (317) were privately owned; and the remainder were run by the Ministry of Defense (61), Ministry of Education (20 teaching hospitals), and the Bangkok Metropolitan Administration (9). The majority of the MOPH hospitals are outside of Bangkok and under the Office of Permanent Secretary, and are classified as regional (34), general (92), and district or community (775) hospitals. The MOPH divides Thailand into 13 "health regions", including the Bangkok health region, with the remaining 12 regions having a population size of around 5 million to 8 million people from three to five neighboring provinces. There is at least one regional hospital per health region, at least one general hospital per province, and at least one district or community hospital per district.

Medical excellence centers. In 2002, the government created medical excellence centers (MECs), initially by upgrading regional hospitals to provide tertiary care services for illnesses and conditions which cause high financial burden and high mortality, such as cardiac diseases, cancer, organ transplantation, neonatal intensive care, and trauma. Currently, MECs are usually located in regional hospitals or general hospitals to ensure larger population catchment areas. MECs have been reducing inequality in access to health services by ensuring availability of tertiary care services for costly and complicated health illnesses and conditions, and decreasing the need for referrals to Bangkok hospitals and other hospitals outside of their respective health region. MECs encourage provision of effective care for patients in rural areas.

Provision of primary care. The regional and general hospitals operate within integrated networks of health care providers which include treating patients referred by district or community hospitals, and subdistrict health centers. Community hospitals are designated as the contracted provider of primary care services under the Universal Coverage Scheme, and work with subdistrict health centers and village health volunteers. As of 2021, there were around 10,000 subdistrict health centers, with health officers providing ambulatory primary care, health promotion, and prevention services. Subdistrict health centers are complemented by over 1 million village health volunteers across the country who provide basic services, undertake health surveys and data collection, maintain family health records, and help carry out disease prevention campaigns. The services of these village health volunteers have been key during the coronavirus disease (COVID-19) pandemic and other outbreaks, especially for contact tracing and monitoring activities. Women comprise about 75% of village health volunteers, which enable them to work closely with women, children, and other vulnerable populations. In a rapidly ageing society, the village health volunteers also provide home health care services to older people.

Hospitals and human resources for health. In addition to providing health care, hospitals help educate health professionals by providing "hands-on" training. Since 1967, Thailand has implemented compulsory 3-year public service for medical graduates under the Collaborative Project to Increase Production of Rural Doctors (CPIRD), offering medical students training in hospitals that are often located outside major cities. Research has shown success of the CPIRD model in increasing supply and retention of physician in rural areas, without compromising medical competency. In addition to medical doctors, hospitals also train nurses and other health professionals in both clinical care and other necessary skills, including digital health, financial management, and maintenance of medical equipment. Despite these initiatives to upskill and fill human resources gaps in health care, challenges remain, including those relating to the lack of women in professional and management positions. Women comprise over 90% of all nurses in Thailand, but less than 50% of all doctors. Fewer than 3 in every 10 managers are women, including in the health sector. Village health volunteers are mostly elderly women who receive token compensation and juggle multiple roles in the community.

Health and climate change. Climate change has resulted in adverse health impacts from increased respiratory and cardiovascular diseases and mental health concerns, premature deaths and injuries from extreme weather events, and risks of food and water-borne illnesses and infectious diseases. In particular, climate change, together with the rapid ageing of the population, has worsened the prevalence of noncommunicable diseases, increasing the demand for diagnostic and treatment facilities for heart-related illnesses, pulmonary diseases, cancer, and mental health illnesses. With two of the five leading cancers (breast and cervical cancers) affecting females specifically, diagnostic and treatment interventions for cancers must be responsive to the needs of women. Attention should be paid to ensure that climate-vulnerable populations, such as migrants who work in Thailand (42% of whom are women), and climate change refugees are able to access care without financial hardship. This is also aligned with Thailand's priority in its National Adaptation Plan for Climate Change Master Plan 2017-2036 to establish "Effective Public Health Systems to Manage Risks and Reduce Impacts from Climate Change."

Limited budget for infrastructure, increasing hospital crowding and lengthening waiting times. Although hospitals take up the largest share of financial and human resources in the health sector, accounting for around 70% of total health expenditure in 2019, MOPH's budget for capital investments is limited. Around B12 billion (\$328 million) of the government annual budget is provided to MOPH for infrastructure investment for all MOPH facilities, comprising equipment purchase (around B4 billion) and construction (around B8 billion). This translates to only around B100 million (\$3 million) per province, which results in investments mostly for minor civil works and equipment, and contributes to the variation in the number of hospitals and the density of hospital beds per population across Thailand's 13 health regions (para. 2). The variation is also reflected in critical hospital resources such as operating rooms, intensive care unit beds, and high-tech equipment. The COVID-19 pandemic tested the limits of Thailand's hospitals. Despite ranking first in Asia and fifth in the world in 2021 for capacity to prevent, detect, and respond to pandemics, Thailand's hospitals saw 58% bed utilization for COVID-19 cases during the pandemic's peak in July 2021, crowding-out routine and critical surgeries and care. Limited budgets, variations in distribution of hospital services, and delayed adoption of digital health tools have all contributed to increasing hospital crowding, longer waiting times, and concerns on inequality in access particularly for the poor, women, children, and other vulnerable populations. Variations in utilization by sex and financing scheme (footnote 2) should also be addressed. Research has found that even though women are more likely to get sick than men, men, on average, use more health resources in all age groups and regions, with longer hospital stays, than women (footnote 12).

Government's plan. The National Strategy for 2018-2037 (the 20-Year Plan) and the 13th National Economic and Social Development Plan (13th Plan) both call for the development of a modern public health system, which promotes well-being by integrating advanced technology and innovation in pursuit of excellence in modern medical and healthcare services. This will help to create equal opportunities, including access to needed health services for all, while ensuring that the country is prepared for future global challenges, including any future pandemics. Specifically, the government is reforming the health care system to intensify health security efforts both at the country-level and region-wide across the Association of Southeast Asian Nations, improve the quality and efficiency of health service delivery, ensure efficient referral systems, and reduce hospital congestion and waiting times. The MOPH is implementing the 20-Year Plan and the 13th Plan through the 20-Year National Strategic Plan for Public Health (2017-2036), which includes increasing the number of MECs.

Modern public health service system ensuring well-being of all Thais in an effective, fair, sufficient and sustainable manner developed

Universal health coverage, including access to essential health care services, sustained

Project Rationale and Linkage to Country/Regional Strategy

Impact

Outcome	Access to quality public hospital services by all in selected provinces improved
Outputs	Health services for five health regions expanded Expertise of medical, nursing, and other hospital staff in five public hospitals improved Climate change mitigation measures in public hospitals enhanced
Geographical Location	Chanthaburi, Chiang Mai, Kanchanaburi, Nakhon Ratchasima, Nakhon Sawan

## Safeguard Categories

Environment	B
Involuntary Resettlement	C
Indigenous Peoples	B

## Summary of Environmental and Social Aspects

Environmental Aspects	Civil works will be undertaken within existing campuses of the five hospitals. Anticipated adverse environmental impacts and risks are limited to the hospital expansion works. These impacts and risks (primarily related to construction waste management, noise and dust, temporary traffic disturbance, and community and occupational health and safety) are anticipated to be highly site-specific, reversible, and of medium significance. These can be addressed through sound construction practices and implementation of standard environment, health and safety protection measures. No significant incremental impacts and risks are anticipated during operation of these facilities. All hospitals will put in place the required infection prevention and control systems as per Thai regulatory framework and will be subject to accreditation by the Thai Healthcare Accreditation Institute (HAI). Proposed medical waste management systems will be reviewed and strengthened, as needed. An IEE including EMP will be prepared.
Involuntary Resettlement	
Indigenous Peoples	Indigenous peoples are likely to live in remote and rural areas, where the project intends to upgrade and construct MECs. There are no expected negative impacts on indigenous people; rather, they will be able to access health care services more easily with the construction of MECs. MECs may be located in rural areas and as such, broad community support will be sought during due diligence, possibly through CSO consultations.

## Stakeholder Communication, Participation, and Consultation

During Project Design	Consultations with the NHSO, hospital workers and their respective associations, VHVs, patients' groups, and organizations of people living with disabilities will be conducted. Social development resource persons will be contracted to support the consultations that will be conducted in the five provinces. Patients groups and VHVs will be contacted during project design. Other CSOs particularly those involved in women's health, migrant health, and climate change, and health will be consulted as well.
During Project Implementation	

## Business Opportunities

Consulting Services The conduct of due diligence including technical and safeguards (including environmental, social development and gender) assessments, economic analysis, financial management and procurement readiness, review of design and appropriateness of health infrastructure and equipment, assessment of climate change impact and natural hazards, and others will be supported by individual consultants who will be contracted from regional transaction technical assistance facility

Procurement The five hospitals under MOPH have good experience in procurement of civil works and consulting services under government-funded projects. Each hospital also has its own procurement unit.

Responsible ADB Officer Banzon, Eduardo P.

Responsible ADB Department Southeast Asia Department

Responsible ADB Division Human and Social Development Division, SERD

Executing Agencies *Ministry of Public Health*  
*Public Debt Management Office*

### **Timetable**

---

Concept Clearance	18 Nov 2022
Fact Finding	05 Jun 2023 to 09 Jun 2023
MRM	02 Aug 2023
Approval	-
Last Review Mission	-
Last PDS Update	08 Mar 2023

© 2023 Asian Development Bank

This page was generated from /projects/56095-001/main on 06 June 2023