FOCUS Thailand's Lesson on Universal Healthcare

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source: Infodent International 4 2020
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As of 2017, the current health expenditure per capita was USD 247, primarily funded by general income tax

Thailand is gaining worldwide recognition for the quality of its healthcare services, after the US magazine CEOWORLD placed Thailand sixth in its 2019 list of countries with the best healthcare systems

One of the five founding members of the Association of Southeast Asian Nations (ASEAN) in August 1967, contributing to the development of the ASEAN Free Trade Area (AFTA) which entered into force on 1 January 2010, eliminating import duties on products manufactured in ASEAN countries

The country's official language is Thai. Buddhism is the main religion (93%)

Siam was renamed Thailand in 1949; and the absolute monarchy was transformed into a constitutional monarchy after the 1932 democracy Revolution. The prime minister is head of government and the monarch is head of state

While moving towards universal healthcare coverage is still a goal for many countries, Thailand is internationally recognized for its successful implementation, where, a well-designed system, a dedicated leadership and sweeping healthcare reform have contributed to efficiency, cost containment, and equity in healthcare

Gross National Income per capita, 2018, current US$ 6,600

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Over the last four decades, Thailand has made remarkable progress in social and economic development, moving from a low-income to an upper-income country in less than a generation. As such, Thailand has been a widely cited development success story, with sustained strong growth and impressive poverty reduction. Lauded globally as among the most prepared to deal with an epidemic, Thailand has been successful in stemming the tide of COVID-19 infections, performing better than much of the sub-region, but the economic impact has been severe and has led to widespread job losses, affecting middle-class households and the poor alike and threatening hard-won gains in poverty reduction. According to the World Bank, 2020 is expected to close with a contraction of economic growth, which is among the sharpest projected declines in the East Asia and Pacific region, due to a decline in external demand affecting trade and tourism, supply chain disruptions and weakening domestic consumption.

In 2001, Thailand introduced the Universal Coverage Scheme (UCS). **Described as one of the most ambitious healthcare reforms ever undertaken in a developing country, the UCS, which spread to all provinces the following year, provides outpatient, inpatient and emergency care, available to all according to need.** By 2011, the program covered 98% of the population. In 10 years, its plan reduced infant mortality, decreased worker sick days and lightened families' financial burdens, including robust healthcare access to rural people.
In 2000 the country was in fact going through a healthcare crisis; about one-quarter of people in Thailand were uninsured, and many other people had policies that granted incomplete protection. As a result, more than 17,000 children younger than five died that year, about two-thirds of them from easily preventable infectious diseases and about 20% of the poorest Thai homes fell into poverty from out-of-pocket healthcare spending. By January 2002, due to huge political pressure, Thailand's UCS was implemented in every province, but this level of comprehensive care had taken decades to develop.
Since the 1970s, high level of continued political commitment, as well as significant and strategic investment in health infrastructure – in particular primary healthcare, district and provincial referral hospitals– and the functioning of the health system through increasing the healthcare workforce, resulted in full geographical coverage in all sub-districts, districts and provinces, contributing to favorable pro-poor outcomes in terms of healthcare utilization, benefit incidence and financial risk protection against catastrophic healthcare expenditure and medical impoverishment. Before, patients paid a fee to their doctors when they visited the hospital. After 2001, the government paid hospitals, including salaries for staff, and financially incentivized medical professionals to serve unpopular rural areas. **With a comprehensive benefit package free at point of service, every Thai citi-**

Thailand has been successful in stemming the tide of COVID-19 infections, performing better than much of the sub-region

Insurance Scheme	Population Coverage	Population Coverage	Financing Source	Mode of provider payment	Access to service
Civil Servant Medical Benefit Scheme (CSMBS)	Government employees plus dependants (parents, spouse and up to two children age <20 years)	7%-9%	General tax, noncontributory scheme	Fee for service, direct disbursement to mostly public providers and DRG for inpatient care	Free choice of public providers, no registration required
Social Health Insurance (SHI)	Private sector employees, excluding dependants	16%-18%	Tripartite contribution, equally shared by employer, employee and the government	Inclusive capitation for outpatient and inpatient services plus additional adjusted payments for accident and emergency and high-cost care, utilization percentile and high-risk adjustment	Registered public and private competing contractors
Universal Coverage Scheme (UCS)	The rest of the population not covered by SHI and CSMBS	73%-75%	General tax	Capitation for outpatients and global budget plus DRG for inpatients plus additional payments for accident and emergency and high-cost care	Registered contractor provider, notably district health system
Private health insurance	Additional health insurance scheme for those who can afford premiums	2.2% (additional insurance)	Health insurance premiums paid by individuals or households	Retrospective reimbursement	Free choice of healthcare providers, either public or private

DRG: diagnosis-related group.
Source: The Kingdom of Thailand, Health System Review (Health System in Transition, Vol. 5 No. 5 2015) / National Health Security Office

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zen is now entitled to essential health services at all life stages, proving that a well-researched system with dedicated leadership can improve health, and in an affordable way.

The Ministry of Public Health (MoPH) is the national health authority responsible for formulating, implementing, monitoring and evaluation of health policy. Such role has changed in the years as several autonomous health agencies were established through legislation. **Among them, the advent of National Health Security Office (NHSO), in 2002, has had a major impact in transforming the integrated model where MoPH plays purchaser and service provision role, to NHSO as purchaser and MoPH as a major service provider.**

By 2002, the entire population was covered by National Health Insurance, overseen by three different schemes: (i) the Civil Servants' Medical Benefit Scheme (CSMBS), which receives funds from the yearly fiscal budget of the Ministry of Finance, covering civil servants, pensioners and their dependents (5.7 million people); (ii) the Social Health Insurance Scheme (SHI), covering private sector employees which gets its budget from employer and employee contributions plus subsidy from the labor ministry (12.3 million people); and (iii) the Universal Coverage Scheme (UCS), under the public health ministry, covering the rest of the population (48.3 million people). All of Thai citizens in the three health coverage schemes get free healthcare cost on conditions and criteria set by the NHSO.

The Thai government allocates around 15-17% of its total budget on public health services, accounting for 4.3-4.6% of its GDP, the highest among ASEAN countries. With the achievement of universal coverage, public expenditure on health significantly increased from 63% in 2002 to approximately 80% of total health expenditure today, with curative expenditure dominating total health spending, about 70% of total. While out-of-pocket (OOP) expenditure reduced from 27.2% to less than 12% of total health spending.

Health insurance schemes cover all essential services in preventive, curative and palliative care for all age groups, with a few exceptions such as cosmetic surgeries, and services of unproven effectiveness.

Extension of coverage to high-cost services, such as renal replacement therapy, cancer therapy, an-

Benefit Packages of the Three Public Health Insurance Schemes

	UCS	SHI	CSMBS
Health service utilization	At contracting unit of primary care (CUP) both public and private	At registered main contractor hospital (>100 beds), public or private	At any public hospital for outpatient services; or private hospital, except accident and emergency. Only public hospitals for admission services
Health service	Ambulatory and inpatient care including accident and emergency and rehabilitation services, and preventive and health promotion services Note: prevention and health promotion for beneficiaries in all three schemes	Both ambulatory and inpatient care, including accident and emergency and rehabilitation services. No preventive services are provided, but NHSO manages prevention and health promotion for beneficiaries in all three schemes	Both ambulatory and inpatient care, including accident and emergency and rehabilitation services. No preventive services are provided, but NHSO manages prevention and health promotion for beneficiaries in all three schemes
Medicines	Limited; only essential drugs (ED)	Limited; only ED	Limited; only ED, but the use of nonessential (NED) can be approved by 3 doctors in the hospitals
Maternity (Delivery)	Limited; only 2 deliveries	Limited; only 2 deliveries and payment in cash (lump sum 13 000 Baht per delivery inclusive of ANC and PNC services)	No limit
Renal replacement therapy (RRT)	Covered and start with peritoneal dialysis, patient must pay if choose haemodialysis	Covered; both haemodialysis and peritoneal dialysis, liable for copayment if beyond the ceiling	Covered; both haemodialysis and peritoneal dialysis, liable for copayment if beyond the ceiling
Antiretroviral therapy for HIV/ AIDS	Included	Included	Included
Organ transplantation	Kidney and bone marrow covered for treatment of certain cancers	Kidney and bone marrow covered for cancer; corneal covered	No exclusion list
Dental care	**Covered, both preventive and curative dental services**	**Reimburse no more than twice a year (max 300 Baht/treatment)**	**Covered, no limitation specified**
Medical devices	Covers 270 items	Covers 88 items	Covers 387 items

Note: UCS = Universal Coverage Scheme; SHI = Social Health Insurance; CSMBS = Civil Servant Medical Benefit Scheme; ANC= antenatal care; PNC = postnatal care.
Source: The Kingdom of Thailand, Health System Review (Health System in Transition, Vol. 5 No. 5 2015)

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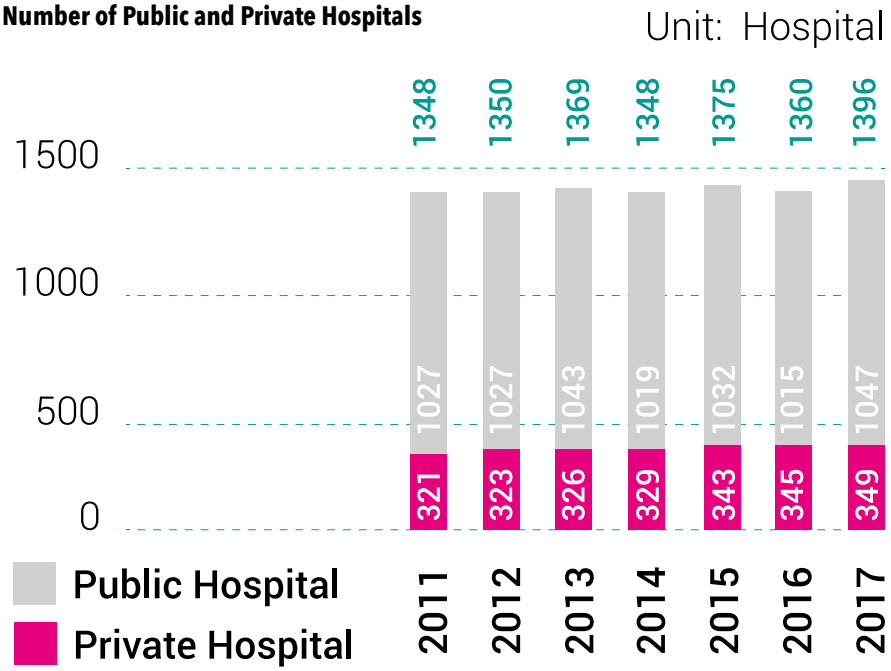
tiretroviral treatment, and stem-cell transplants, has improved financial protection for patients. Well-coordinated district health systems enable individuals to seek care or referral at health units close to home. **The resultant increase in service utilization has contributed to a low prevalence of unmet needs for outpatient and inpatient services.**

The eligibilities of the three benefit packages

Number of Public and Private Hospitals



Source: Ministry of Public Health, Thailand Board of Investment www.boi.go.th

The market growth in the next few years will be driven by expansion of hospitals as well as new players entering the market to meet growing demand.

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are however linked to employment status. Furthermore, they differ from one another because of different paces of historical evolution of the schemes. Although non-competing, each insurance scheme operates under its own legal framework with the inevitable disparities that not all groups of the population have equal access to similar packages of healthcare. Despite its low gross national income per capita a bold decision was made to use general taxation as the most equitable and efficient way to finance the Universal Health Coverage Scheme without relying on contributions from members. Thus, while direct payment by households has consistently declined, the Government significantly increased spending from tax revenues. The cost of the policy (US$ 14 809 million; 17% of the total US$ 89 415 million government expenditure in 2017) is one of the highest among low-and middle-income countries, with the limitation that non-contributory financing via general taxation offers the welfare policy little flexibility to accommodate rising demands in the face of continuing rises in healthcare costs. Furthermore, heavy reliance on general tax runs the risk of incurring shortfalls especially during the cyclical economic crunch. Even if affordability is not currently an issue, though the cost of the program as a proportion of general income tax is rising yearly. Still, the UCS continues to have wide support from the country's government, health workers and wider population.

Top 5 Product Groups Exported and Imported by Thailand

	Export 2018	Import 2018
1st	Single-use Devices	Electro-Mechanical Medical Devices
2nd	Ophthalmic and Optical Devices	In Vitro Diagnostic Devices (IVD)
3rd	Electro- Mechanical Medical Devices	Single-use Devices
4th	Dental Devices	Ophthalmic and Optical Devices
5th	Hospital Hardware	Hospital Hardware

Source: Medical Devices Intelligence Unit, Office of Industrial Economics, Ministry of Industry, as of 2018

The extensive geographical coverage of Ministry of Public Health primary healthcare (PHC) and public hospital services are the foundation for successful implementation of universal health coverage, especially pro-poor health service utilization and public subsidies. Health delivery systems are thus dominated by the public sector with over 1,000 public hospitals, accounting for 75% and 79% of total hospitals and beds. Most private hospitals, around 300, are small, with 69% having fewer than 100 beds. Large private hospitals include some hospital chains registered in the stock market, located in Bangkok, and offer services to mostly international patients. The market growth in the next few years will be driven by expansion of hospitals as well as new players

Number of Healthcare Providers (public and private healthcare, 2017)

Region	Medical Physician	Pharmacist	Registered Nurse	Technical Nurse
Total	35,388	13,728	160,932	5,929
Bangkok	8,865	2,544	32,497	3,264
Central Region (exclude Bangkok)	8,941	2,858	38,239	672
Northern Region	5,627	2,311	27,594	376
North-eastern Region	7,703	3,208	39,246	1,219
Southern Region	4,252	1,807	23,356	398

Source: Thailand Board of Investment www.boi.go.th

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entering the market to meet growing demand.

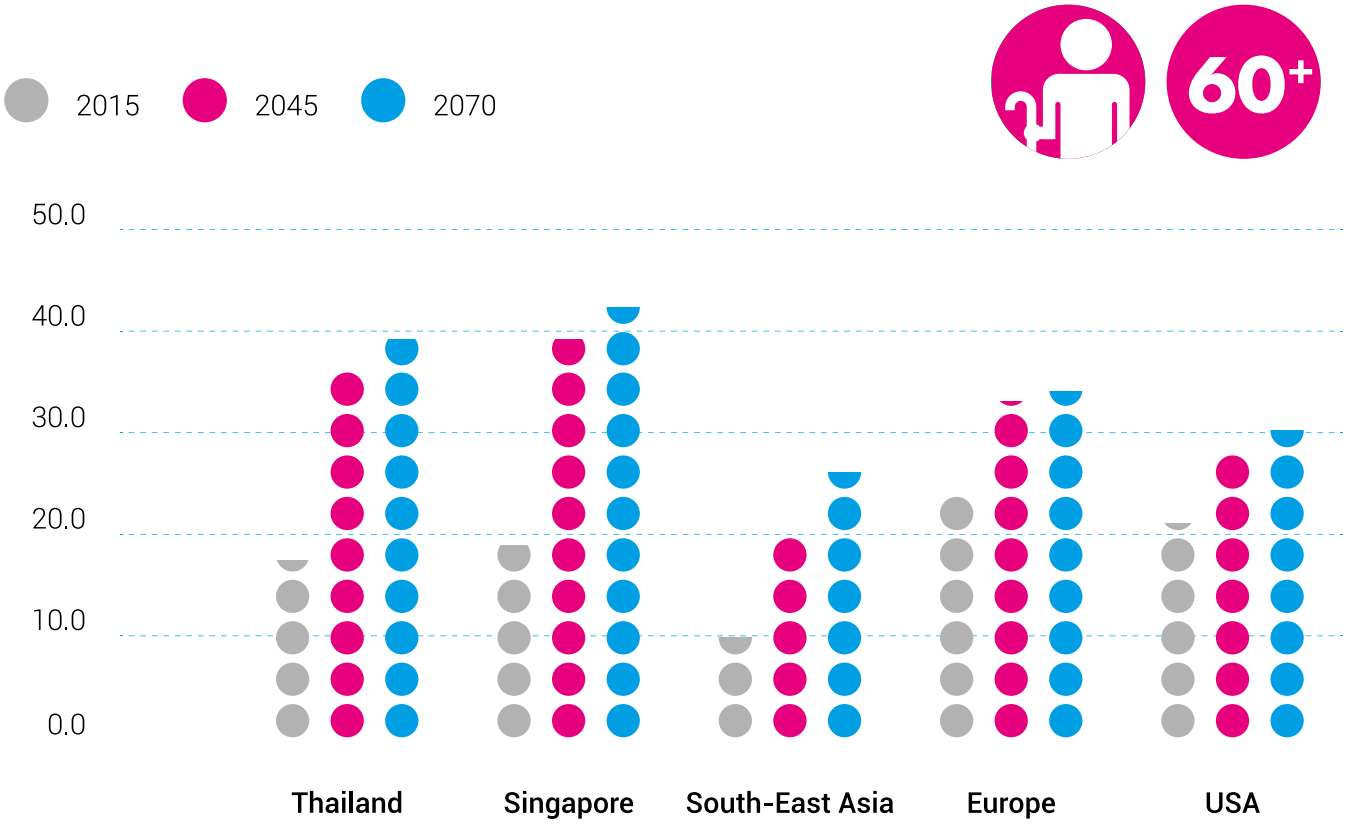
The Thai government considers the healthcare industry to be a priority sector for investment and further development, reiterated in the Ministry of Public Health's 2016-2025 Strategic Plan entitled "Thailand: A Hub of Wellness and Medical Services". Thanks to the government's supportive policies, Thailand has in fact become a medical hub not only for ASEAN, but also for Asia and beyond. Its medical devices sector is the 8th largest market in the Asia-Pacific region, and it is expected to grow 8-10% per year due to aging population, the increasing number of foreign patients who are both medical tourists and expatriates as well as hospital groups that have built new facilities and new players have entered into the market. Thailand ranked as the world's 17th largest exporter of medical devices (mostly single-use devices) and the world's 32nd ranked importer of medical devices. The Thai Medical Device Control Division of the FDA is responsible for regulating, controlling, and monitoring the use of medical devices in Thailand. There is neither a price ceiling nor a reference set for medical devices such as orthopedic instruments or services provided such as computed tomography (CT) scanners. Price is determined entirely by market demand and supply. There is no reimbursement list for medical devices. Their distribution is controlled implicitly by the suppliers. The coverage of use of medical devices varies greatly across the three public health insurance schemes. The CSMBS covers almost all medical devices using a fixed-rate fee-for-service payment, whereas the UCS and SHI schemes include use of medical devices as part of their basic healthcare packages and support based on prepaid capitation. **As a result, inequitable access to and use of expensive medical devices has been widely noted, for example, CT scans, magnetic resonance imaging (MRI) and mammography between CSMBS, UCS and SHI beneficiaries.**

There were an estimated 538 local medical device manufacturers in Thailand at the end of 2017. The market currently comprises of two different types of medical device i.e. consumable and diagnostic imaging devices such as basic medical products / patient aids, and the more sophisticated (and generally imported) devices. It is the latter whereby there is most potential for investment opportunities from foreign manufacturers.

According to Thailand Board of Investment, Thailand's import value of medical devices grew from 735 million USD in 2015 to 962 million USD in 2018. Over the same period, the export value grew from

This has had profound impacts on health- and social-service development and financing, which needed to respond to a rapidly greying society.

Share of Population Aged Over 60



Source: The World Bank: Thailand Economic Monitor - June 2016: Aging Society and Economy. Taken from Thailand Board of Investment www.boi.go.th

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Only 85% of 15-year-olds are expected to live past age 60.

735 million USD to 843 million USD. This trend reflects a growing size of domestic market and the country's importance as an export base. 20.5% of imported medical devices comes from the USA, followed by China (13.2%), Germany (9.8%), Japan (8.8%), and Ireland (6.1%). Local manufacturers of medical devices make mostly single-use devices, such as disposable test kits and syringes, surgical gloves, and catheters. Over 80% of domestic production is exported.

Thailand is also one of the strongest-performing pharmaceutical markets in the Asia-Pacific region, accounting for almost 20% of all domestic health expenditures, with the majority of this being distributed through Thailand's public and private hospital system. Thailand's aging population, as well as its UCS and the continued growth of medical tourism lead to an increasing demand for pharmaceuticals. Except for essential medicines sold to government bodies, prices are governed by market forces.

Thailand is self-reliant in healthcare workforce production with high quality standards. **There is however a geographical and public-private maldistribution of healthcare workforce, worsened by government policy on promoting Thailand as a regional medical hub. As it stands the health system seems to be overburdened and understaffed.** Furthermore, the 2015 emergence of ASEAN Economic Community, facilitates free flows of people, goods and services across ASEAN countries, including the risk of internal and external migration of healthcare professional in response to increased demands for health services by international patients within ASEAN.

Despite the already large healthcare sector, the rise of Thailand's aging population is driving further need for healthcare services in the years to come. **In relation to other ASEAN countries, the proportion of citizens aged over 60 is one of the highest in the region. It is also forecasted that, by 2045, such proportion will exceed that of other regions such as Europe and the United States, further driving domestic healthcare demand in the decades ahead.** In terms of demographics, Thailand has evolved from the status of high fertility and high mortality to low fertility and low mortality, with the fertility level of 1.6 in 2010 being below the replacement level, and the crude mortality being 7.4 per 1000 population. This has had profound impacts on health- and social-service development and financing, which needed to respond to a rapidly greying society. Consequently, financing and service-provision policies for older people remain an issue.

Despite good health at low cost, adult mortality is still high, compared to neighboring countries, given the socioeconomic and health systems development. Thailand has performed better in terms of maternal and child health as compared with other low- and middle-income countries. Its survival rate between ages 15-60 is lower than over half of the countries where such data is available. Over the past 15 years, Thailand's prevalence of diabetes and hypertension have tripled and quadrupled, respectively, and combined with high rates of road injuries, has negatively affected adult survival rate. Only 85% of 15-year-olds are expected to live past age 60. **While rural health services are well established with equitable access and financial risk protection, urban health systems are dominated by hospital-oriented care, private clinics and hospitals, and lack of effective primary healthcare systems catering chronic noncommunicable diseases.**

Thanks to its high reputation of quality medical treatment at reasonable costs, Thailand is a leading Asian country for medical tourism growing over 10% each year. In 2014 there were 2.35 million international patients including medical tourists, general tourists and foreigners working or living in Thailand or neighboring countries and an estimated 3.42 million in 2018. Medical tourists coming to Thailand accounted for 38% of such visitors to Asia.

This high-level of demand from patients from abroad has provided the impetus for a range of technological advances, innovations, and clinical research studies, as well as business opportunities for new medical companies to enter the Thai market. The government actively promoted medical tourism for a decade, but it was implemented mainly by private hospitals with foreigners contributing 30% of private hospitals' revenues in 2017. Recently, many university hospitals have requested additional budget to invest in infrastructure to respond to medical tourists. Civil society groups have expressed concerns on the negative impact of this policy on access to care by Thai citizens, especially when Thailand still has a shortage of physicians. Patients from Japan, China and Myanmar are on the rise, while arrivals from the Middle East are decreasing. Private hospitals are equipped with the latest medical facilities and patients do not have to wait to obtain treatment. Doctors in the country are very well trained in the latest treatments and procedures, and hospitals are outfitted with the most cutting-edge medical technology. As of May 2019, Thailand has 66 hospitals and healthcare institutions certified by the Joint Commission International (JCI). Healthcare in Singapore costs three times and Malaysia costs two times more than Thailand.

Among main sources:
-Extracts from: The Kingdom of Thailand, Health System Review (Health System in Transition, Vol. 5 No. 5 2015). Asia World Health Organization 2015 (on behalf of the Asia Pacific Observatory on Health Systems and Policies).
- Extracts from: "What Thailand can teach the world about universal healthcare" https://www.theguardian.com/health-revolution/2016/may/24/thailand-universal-healthcare-ucs-patients-government-political
- Thailand Board of Investment www.boi.go.th
BOI - The Office of the Board of Investment is a government agency under the Office of the Prime Minister. Its core roles and responsibilities are to promote valuable investment, both investment into Thailand and Thai overseas investment.
-Extracts from "Thailand- Commercial Guide. Medical Equipment", taken from: International Trade Administration, U.S. Department of Commerce
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-World Bank, https://www.worldbank.org/en/country/thailand/overview

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