SOUTH-EAST ASIA

THE COUNTRY PHARMACY PROFILE SERIES

THAILAND

A country profile of pharmacy practice
in the context of the national healthcare system

Informed by FIP Member Organisation
PHARMACEUTICAL ASSOCIATION OF THAILAND

fip ADVANCING PHARMACY WORLDWIDE

1. OVERVIEW OF THE HEALTHCARE SYSTEM

Thailand has developed a high-performing, predominantly public, tax-funded health system that has sought to provide universal health coverage (UHC) to nearly all residents since 2002.[1,2] The system is underpinned by strong government stewardship and complemented by the regulated use of private providers, particularly in urban areas.[3] It integrates robust public service delivery with three main insurance schemes and strategic purchasing mechanisms to expand coverage while protecting households from financial hardship.[1] Sustained political commitment since the 1970s also supported major investments in primary healthcare infrastructure, district and provincial hospitals, and the health workforce, including incentives to retain health workers in rural areas. These reforms significantly reduced catastrophic health expenditure and medical impoverishment, while autonomous institutions strengthened evidence-based policymaking, health promotion, healthcare quality, and equitable access to services.[4]

Despite the country's strong health system, several challenges remain. Rural–urban disparities persist, with medical personnel and advanced facilities concentrated in Bangkok and major cities, leaving rural areas underserved. Thailand's ageing population is also increasing the burden of non-communicable diseases (NCDs) and long-term care needs, placing growing financial pressure on the health system. At the same time, rising healthcare costs and heavy reliance on general taxation raise concerns about the long-term sustainability of UHC.[1,5] In addition, low health literacy among parts of the population contributes to unhealthy behaviours, poor disease prevention, and inadequate self-care, while the system's continued focus on treatment over prevention increases pressure on healthcare services and costs.[1,5,6]

Healthcare financing model and insurance schemes

Thailand's current healthcare financing model is hybrid with a strong public orientation.

MODEL TYPE	**Hybrid model[1]**	
PRIMARY SOURCES OF FUNDING	Universal Coverage Scheme (UCS)	Under the Ministry of Public Health, this system covers approximately 47.8 million people, or 75% of the population. It is predominantly non-contributory and funded through general government taxation.[1,7] Outpatient services are reimbursed mainly through capitation, while inpatient services are reimbursed using diagnosis-related groups (DRGs).[7]
	Social Health Insurance (SHI)	Under the labour ministry, this system covers 12.3 million people, or 16% of the population. It applies to private employees and is funded through tripartite contribution, equally shared by the employer, the employee and the government.[1,7] Outpatient services are reimbursed mainly through capitation, while inpatient services are reimbursed using diagnosis-related groups (DRGs).[7]
	Civil Servant Medical Benefit Scheme (CSMBS)	Under the Ministry of Finance, this system covers 5.7 million people, or 9% of the population. It is a non contributory, tax funded scheme for government workers and their dependents.[1,7] Outpatient services are reimbursed mainly through the fee-for-service (FFS) model, while inpatient services are reimbursed using diagnosis-related groups (DRGs).[7]
	Out-of-pocket (OOP) payments	OOP health expenditure has been significantly reduced (falling to 8.7% of current health expenditure in 2019).[8]

[1]The hybrid healthcare financing model is described as a system that combines multiple funding sources, such as public funds, private investment, donor contributions, and out-of-pocket payments, to finance healthcare infrastructure and services. Available at: http://bit.ly/4mFQNL2

Types of services provided in community and hospital pharmacies

This section outlines the range of professional services provided by pharmacists in Thailand across community and hospital settings.

Services provided by community pharmacies beyond dispensing*	
Therapeutic substitution (changing dose, formulation, etc)**	Yes, with patient consent after counselling
Adjustment of prescribed treatments**	Limited with patient consent after counselling
Complementary prescribing	✓
Independent prescribing	✓
Prescribing in an emergency	✓
Providing medicines and services in care homes (nursing homes)	✓
Services to hospital and other facilities without a pharmacy	✓
Home deliveries	✓
Home care	✓
Medication reviews/medicines use reviews	✓
Dispensing emergency contraceptive	✓
Applying first aid and arranging follow-up care	✓
HIV testing	✓
Counselling on HIV self-test products	✓
COVID-19 testing	✓
Dispensing prescription renewals for patients with long term conditions authorised with the original prescription	✓

*Data in this table were provided by the Pharmaceutical Association of Thailand

**Therapeutic substitution or adjustment of prescribed treatments is not routine practice among community pharmacists. In general, pharmacists do not intervene when the prescribed therapy is appropriate. Although consultation with the prescribing physician is preferable, it is often not feasible. In such cases, within the scope of independent practice, pharmacists may provide advice and suggest adjustments when a potential issue is identified, with the patient's consent. Short-term dispensing may be provided, when necessary, with advice for the patient to follow up with the prescribing physician.

Services and activities provided by hospital pharmacies*

Validation of prescriptions	✓
Preparing non-sterile medicines	✓
Preparing sterile medicines	✓
Preparing cytotoxic medicines	✓
Preparing nutrition mixtures	✓
Dispensing to outpatients	✓
Pharmacy and therapeutics committees	✓
Multidisciplinary therapeutic decision making	✓
Identifying and reporting non-quality medicines	✓
Managing medication history	✓
Pharmacogenomics testing	✓
Medicines reconciliation	✓
Monitoring medicines use	✓
Pharmacokinetic monitoring	✓
Clinical trials	✓
Managing medicines-related waste	✓
Antibiotic stewardship	✓
Support to emergency departments	✓

*Data in this table were provided by the Pharmaceutical Association of Thailand

Extended scope of practice*

Is **pharmacy-based vaccination available** in the country?	No
Are pharmacists authorised to **administer** vaccines in pharmacies?	No
Are pharmacists authorised to **prescribe** vaccines in pharmacies?	No
Do pharmacists receive vaccination **training**?	Some
At what career stage(s) do pharmacists receive vaccination training?	Voluntary
Is the training **mandatory**?	No

*Data were provided by the Pharmaceutical Association of Thailand

3. PHARMACY HUMAN RESOURCES: EDUCATION AND ENTRY INTO PRACTICE

Education and training of the pharmacy workforce (year 2025)*

23 accredited pharmacy schools/faculties

2000 hours under Pharm.D. curriculum
Minimum duration of experiential/practical training for registration

6 years minimum of full-time undergraduate education

YES Continuing professional development (CPD) **IS** mandatory for pharmacists' licence renewal

YES (100 credits/5 years)** The renewal of pharmacist licensing or registration **IS** based on gaining CPD 'credits' or 'points' or similar credentials

NO CPD **IS NOT** linked with an annual portfolio-type submission (for example, reflective diary entries, or reflective cases)

*Data were provided by the Pharmaceutical Association of Thailand
**Thailand implements a Continuing Professional Education (CPE) system, requiring pharmacists to complete accredited activities, such as approved academic reading and conference participation, totalling 100 credit hours every 5 years, with at least 10 credits annually.

4. COUNTRY'S HEALTHCARE ECONOMIC SNAPSHOT

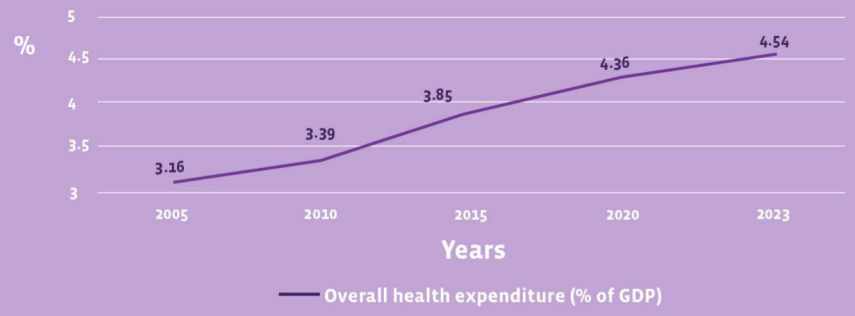
This section provides a macro-level overview of Thailand's health financing indicators and outcomes, including GDP spending, life expectancy, and workforce employment.

World Bank income level category[9]

Thailand: Upper-middle-income economy

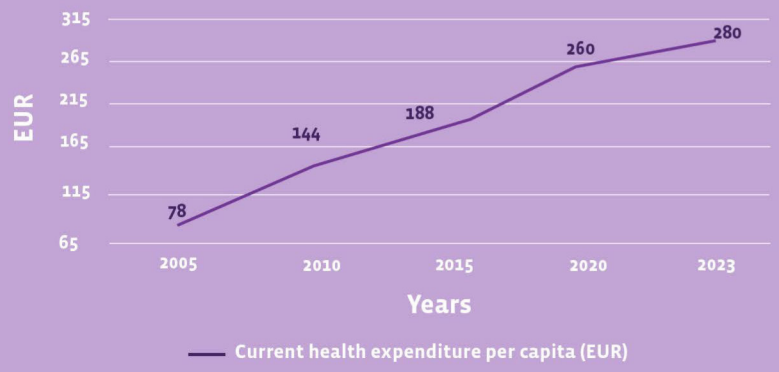
Overall healthcare expenditure as a percentage of GDP[10]

Over nearly two decades (2005 to 2023), Thailand's health expenditure as a share of GDP increased steadily, rising from 3.16% in 2005 to 4.54% in 2023.



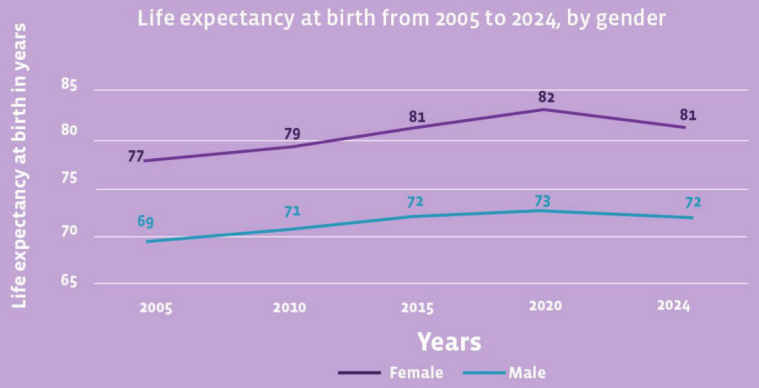
Health expenditure per capita[11]

Across the 2005 to 2023 period, Thailand's current health expenditure per capita increased significantly from EUR 78 to EUR 280, with particularly strong growth between 2015 and 2020.

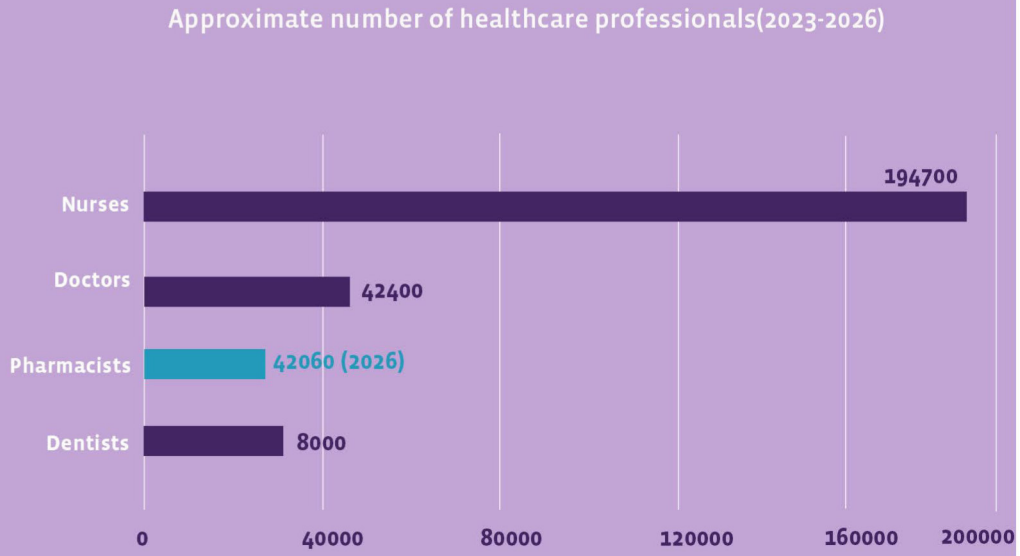


Life expectancy (male/female)[12,13]

Between 2005 and 2024, life expectancy at birth in Thailand increased for both genders before levelling off slightly in recent years. Female life expectancy rose from 77 to 81 years, and male from 69 to 72, both peaking in 2020. Throughout the period, females consistently lived longer than males.



The employment in the healthcare sector[14,15]



5. HEALTH SERVICE STATUS

1. Coverage rates for essential health services

Thailand is a leader in Southeast Asia for Universal Health Coverage (UHC) , with a UHC index of 82 in 2023, consistently among the highest in the region and ranks 25th globally, reflecting extensive access to essential health services.[16, 17] The country has one of the most robust UHC systems in the world and has built near-universal entitlement to a broad package of essential preventive, curative, and palliative services since 2002.[1, 2, 7, 18]

2. Availability and accessibility of health insurance options

Thailand has built a distinctive, tax-funded pathway to UHC. The system has strong public delivery, three major insurance schemes (CSMBS, SHI, and UCS), and strategic purchasing centred on capitation and diagnosis-related groups (DRGs) to expand coverage while protecting households from financial hardship. This architecture has achieved near universal coverage with strong financial protection and modest national spending, but future sustainability depends on continued fiscal commitment, control of high-cost segments, and reinforcement of primary and preventive care.[1, 2, 7, 19]

3. Pharmacy policies and strategies implemented for health promotion and disease prevention

Thailand has built a multifaceted policy environment that supports pharmacists' contribution to health promotion and disease prevention. Since 2001–2002, community pharmacies have been increasingly involved in National Health Insurance System-supported initiatives, including screening, chronic disease management (diabetes, hypertension), and smoking cessation, with demonstrated clinical benefits and acceptable costs. However, many of these services remain project-based rather than fully incorporated into the routine itemised annual health scheme budget for pharmacy services, and some are shared across healthcare professionals rather than being exclusively pharmacist-led. This has been underpinned by the WHO-FIP Good Pharmacy Practice (GPP) regulations and accreditation standards introduced there in 2013–2014, which improved service quality, restricted dispensing of dangerous medicines to pharmacists, and promoted health promotion and community engagement activities.[20, 21]

A national Primary Care Pharmacy (PCP) policy established in 2010 further supported pharmacists' roles in primary care networks, including managing medicine supply, improving medicine dispensary service, contributing to home visits with a multidisciplinary team, contributing to consumer health protection, and supporting self-care and herbal medicine use.[22] Antimicrobial stewardship is supported through the 2017 National Strategic Plan on Antimicrobial Resistance, which adopts a One Health-integrated approach, the "Antibiotic Smart Use" project, and continuing professional development requirements that support Thai pharmacists' appropriate involvement in antimicrobial use.[23]

In addition, the Thai Health Promotion Foundation (ThaiHealth), funded through dedicated tobacco and alcohol taxes, has enabled large-scale prevention and public health initiatives, including tobacco and alcohol control, and smoke-free policies. It has also supported smoking-cessation and tobacco-control services in community pharmacy settings, where pharmacists may contribute alongside other healthcare professionals.[24, 25]

4. Availability and accessibility of patient medical records (including pharmacy access)

Thailand is rapidly modernising its healthcare system through digital transformation initiatives aimed at improving access to patient medical records. Under the 2017–2026 eHealth Strategy, platforms such as Mor Prom, H4U, and Primary Care Cluster (PCC) allow citizens to access health information online, while the Health Link initiative connects hospitals through secure Health Information Exchange (HIE) systems. Private hospitals generally provide more advanced digital access, especially for medical tourists, while public hospitals under the Universal Coverage Scheme are continuing to expand digital record usage.[26, 27] Thailand is also integrating AI, telehealth, and pharmacy networks into healthcare services.

At the same time, pharmacies are becoming more connected to patient record systems through national healthcare initiatives. However, despite significant progress, challenges remain due to fragmented systems and limited interoperability between healthcare providers.[26, 27]

6. PHARMACY WORKFORCE CAPACITY AND DISTRIBUTION

Pharmacy workforce capacity* (Year 2025)

52,000 licensed pharmacists in the country

7.39 pharmacists' per 10,000 population

2,150 new registrants

2,250 pharmacy graduates

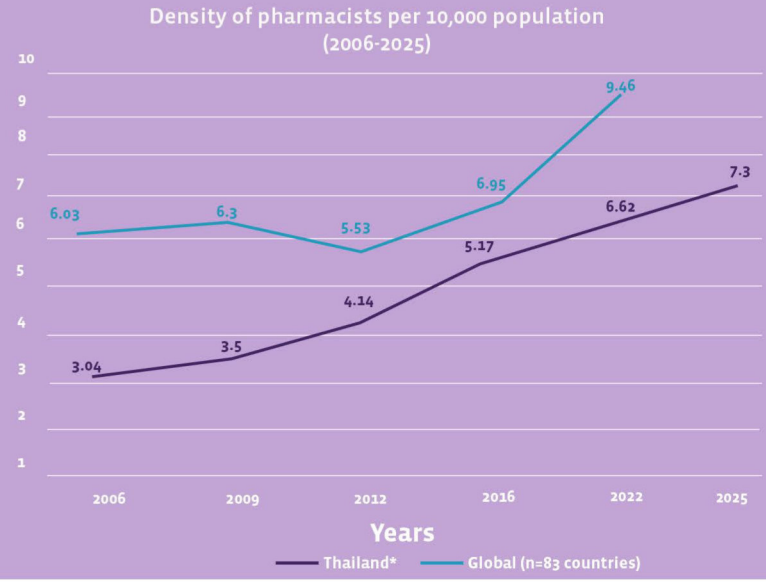
33,139 (2022) female pharmacists in the country

69.9% (2022) female pharmacists in the workforce

*Data were provided by the Pharmaceutical Association of Thailand

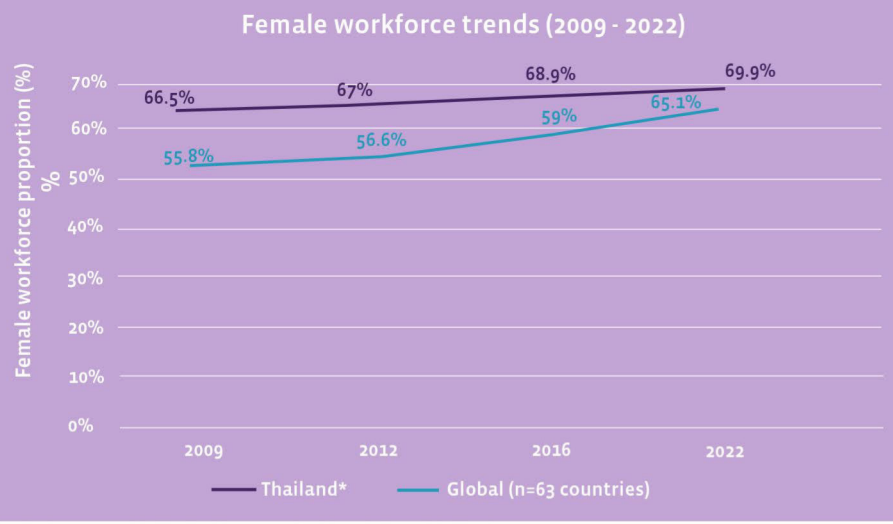
Distribution across the area of practice

Pharmacist density in Thailand grew consistently from 3.04 per 10,000 population in 2006 to 7.3 in 2025, representing more than a two-fold increase over roughly two decades. Throughout the period, Thailand's density remained below the global average, although the gap visibly narrowed in the later years as Thailand's growth accelerated.[28]



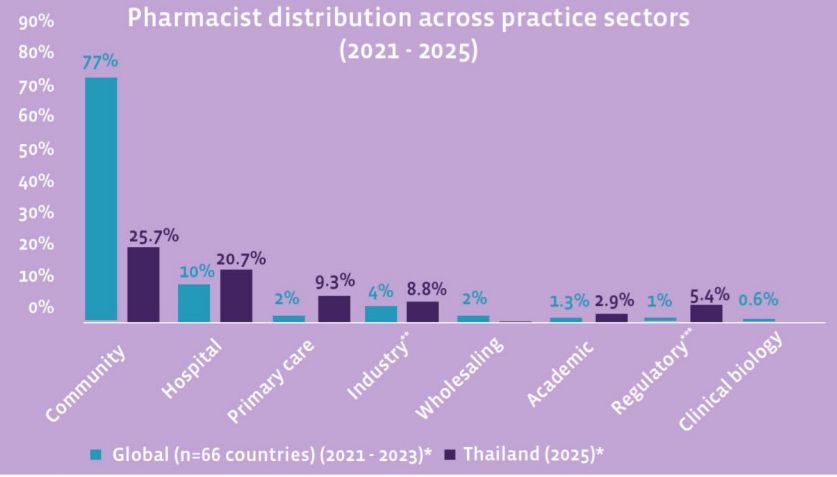
*Data in this chart were provided by the Pharmaceutical Association of Thailand

Thailand's female pharmacist workforce proportion remained consistently above the global average across all four time points observed.[28] Beginning at 66.5% in 2009, Thailand showed a steady but moderate increase to 69.9% by 2022.



*Data in the chart were provided by the Pharmaceutical Association of Thailand

Thailand's pharmacist workforce is distributed differently from the global pattern. Community pharmacy remains the largest sector globally, accounting for 77% of pharmacists, but represents only 25.7% of the workforce in Thailand. Hospital pharmacy plays a much larger role in Thailand, employing 20.7% of pharmacists, compared with 10% globally. Thailand also shows a stronger presence of pharmacists in primary care (9.3%) and in industry, including pharmaceutical and marketing (8.8%). The regulatory sector, including the Provincial Health Office, the Ministry of Public Health, and regulatory affairs, accounts for 5.4%. The academic sector shows similar proportions between Thailand and globally, while no data were available for the wholesaling and clinical biology sectors.[15, 28]



*Data in the chart were provided by the Pharmaceutical Association of Thailand
*Global figures are based on average data from 2021–2023; Thailand's data reflect the most recent available year (2025).
** The industry sector includes the pharmaceutical industry and marketing.
*** The regulatory sector includes the provincial health office, the Ministry of Public Health, and the regulatory affairs.

7. CURRENT POLICIES, URGENCIES AND PRIORITIES WITH PHARMACEUTICAL SERVICES PROVISION

Key insights from the Pharmaceutical Association of Thailand on:

1. Innovative practices that have successfully improved health outcomes and addressed inefficiencies within Thailand's healthcare system

a) Thailand uses health technology assessment (HTA) and economic evaluation (EE) study to guide the decision making for the reimbursement list under the National List of Essential Medicine (NLEM), particularly for high-cost medicines and interventions. This approach helps ensure that medicines reimbursed by public schemes are selected based on clinical benefit, cost-effectiveness, affordability, and public health need.

b) For high-cost conditions or interventions that may create catastrophic financial burden for patients and families, Thailand's public health insurance schemes have developed specific funding mechanisms to support access. These mechanisms help protect patients from very high out-of-pocket payments and allow the health system to manage the budget impact of expensive treatments more systematically. Examples include cancer and rare diseases.

c) Thailand has expanded access to primary care for the Common Illness Service under the Universal Coverage Scheme. Through this service, patients with selected minor ailments can receive assessment, medicines, counselling, and referral when needed from community pharmacists and other primary care settings without having to wait in long queues at hospitals. This model improves convenience for patients, reduces unnecessary outpatient visits, and allows hospital services to increase focus on patients with more complex conditions.

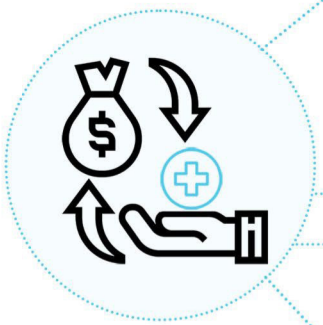
2. Significant challenges currently facing the pharmacy profession in Thailand

a) Community pharmacy services are not yet fully embedded into the national health system as a routine component of primary care. Many services remain project-based or scheme-specific rather than being systematically included in the regular health benefit package or annual health budget.

b) Service reimbursement for community pharmacists remains limited. Current payment mechanisms may not adequately reflect pharmacists' professional roles in patient assessment, counselling, documentation, referral, follow-up, and quality assurance.

c) Telepharmacy and digital pharmacy services remain constrained by outdated regulations, practice guidelines, and information systems. Current rules and guidance have not kept pace with digital health development and do not sufficiently support the role of community pharmacies. In addition, community pharmacy information systems are not yet well integrated with the broader health system, limiting data sharing, continuity of care, referral, follow-up, and quality monitoring.

3. Reimbursed pharmacy services beyond dispensing



The main reimbursed service is the Common Illness Service under the Universal Coverage Scheme. Accredited community pharmacies and other primary care settings provide assessment, counselling, medicines and follow-up. The reimbursement covers the full-service package, including medicines.

Annual chronic disease screening.

Smoking cessation counselling is also reimbursed, mainly on a project-based basis rather than as a routine reimbursed service.

4. Current projects and priorities aligned with FIP Developmental Goals

FIP DG3 (Quality assurance) and DG4 (Advanced and specialist development) are both important for Thailand and the Federation of Asian Pharmaceutical Associations (FAPA) region. DG4 supports advanced and specialist development, while DG3 ensures that such development is supported by credible quality assurance systems.

The FAPA College of Pharmacy (FAPA CP) aims to develop specialisation as part of the pharmacy profession's career progression, not merely to train individual pharmacists as specialists. Pharmacists should be able to progress from entry-level practice to advanced practice, specialist practice, and fellowship-level recognition through a system linked to competencies, scope of practice, service responsibilities, leadership, and health system needs.

At the same time, quality assurance is essential to ensure that training, assessment, certification, and country chapter development are consistent, transparent, and credible. As FAPA CP expands to other countries, DG3 can guide the development of standards for training providers, competency-based curricula, supervised practice, assessment, examiner development, documentation, certification, and periodic review.

DATA SOURCES AND VALIDATION

The data and information presented in FIP case studies are derived primarily from analysis of publicly available sources and relevant documents, complemented by in-house data that FIP has collated. The sources and methods underlying these data are fully cited and referenced to ensure transparency and traceability. Additional data were obtained directly from the respective FIP member organisation (MO). All data were subsequently reviewed and validated by the FIP MO to ensure accuracy, completeness, and reliability.

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