

PUBLIC HEALTH SERVICE DELIVERY MODELS



UNDER THE UNIVERSAL COVERAGE SCHEME (UCS) IN BANGKOK



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1

INTRODUCTION

The organization of the public health service system in Bangkok under the National Health Security Fund is complex and differs from other regions due to its status as a densely populated metropolis. It includes service units under various authorities and features distinct geographic and demographic characteristics. These factors necessitate a service system design that is appropriately tailored to the local context.

1.1

CONTEXT OF PUBLIC HEALTH SERVICES IN BANGKOK

The public health service system under the National Health Security Fund in the Bangkok Metropolitan Area is overseen by the NHSO Bangkok Regional Office, which has operated since the establishment of the National Health Security Office (NHSO) in 2002. As a regional office, NHSO Bangkok acts as a local purchaser, procuring healthcare services on behalf of the public to ensure access for Bangkok residents covered by the Universal Coverage Scheme (UCS).

Service procurement must consider accessibility, quality, and standards for selecting service units (i.e., healthcare facilities integrated into the UCS). Once a healthcare facility becomes a service unit, it is subject to ongoing supervision, monitoring, and quality assurance to maintain standards. These mechanisms are essential to ensure effective management, service quality, fairness, and responsiveness to the population's actual needs.¹ The service delivery system in Bangkok differs significantly from NHSO Regions 1–12 due to the city's unique status as a municipality.^a It has the largest population of any

province, with high mobility and a large number of unregistered residents. As of May 1, 2025, data from the NHSO Bangkok Dashboard showed a total population of 7.8 million (based on entitlement under state health insurance). Of these:

- 3.5 million (45%) were covered under the UCS,
- 3.4 million (44%) under the Social Security Scheme,
- 0.62 million (8%) under the Civil Servants Medical Benefit Scheme,
- 0.12 million (2%) under other schemes (e.g., Private School Teacher Welfare, Local Government Officials' Welfare, Political Officials' Welfare),
- 0.06 million (1%) had no state-based entitlement, including those without coverage or in the process of transferring their rights.

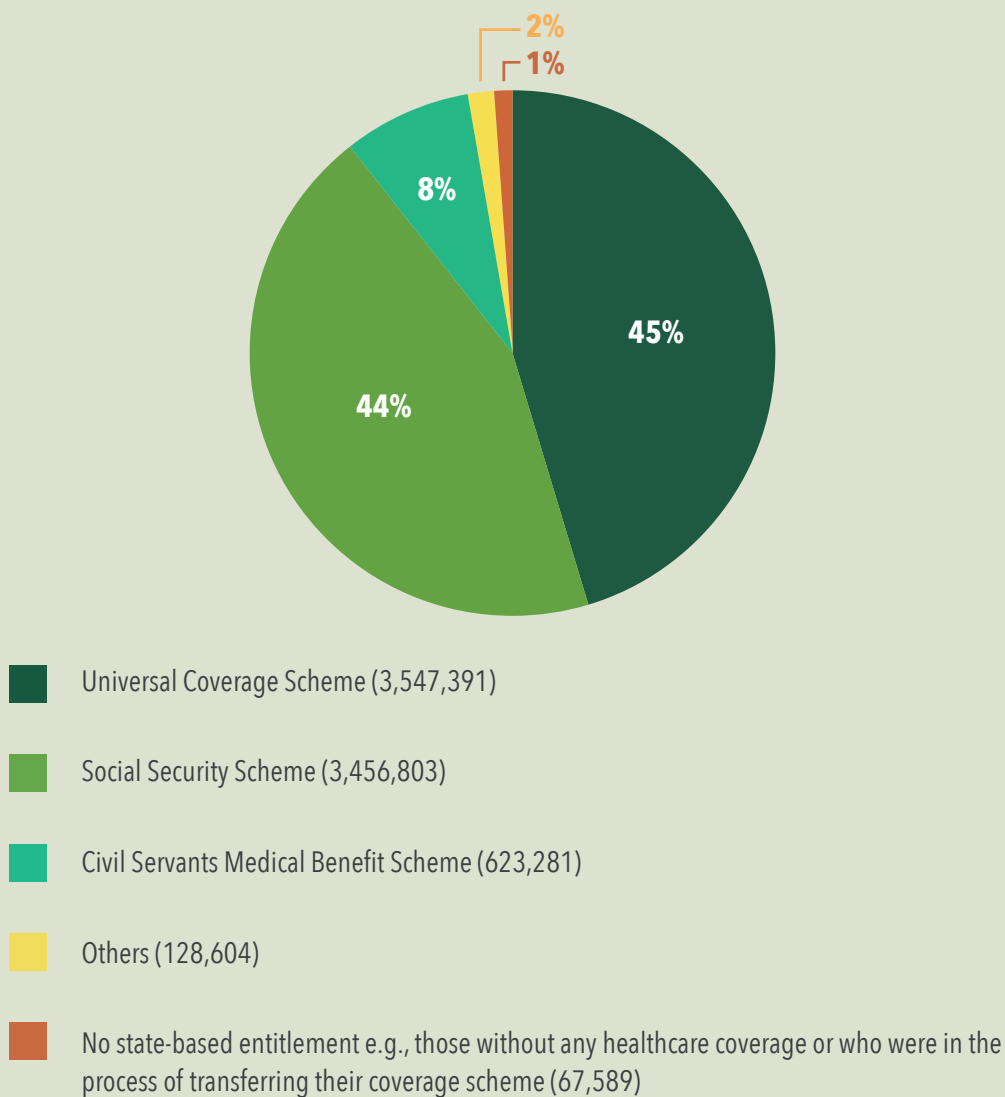
This data reflects entitlement registration. Therefore, individuals with household registration in other provinces who have registered to receive healthcare services in Bangkok are included. Some local administrative staff have also registered their entitlements in Bangkok and are counted in this dataset.

^a Details of the operations of the National Health Security Office Regions 1–12 can be found in: Pattaporn Chuenglertsiri. (2024). Operation of NHSO Regional Offices. National Health Security Office.

Figure 1: Population data by Healthcare Entitlement from the NHSO Bangkok Dashboard

POPULATION DATA BY HEALTHCARE ENTITLEMENT FROM THE NHSO BANGKOK DASHBOARD

(Bangkok population counted by healthcare entitlements: 7,823,668 people)



1.2

BANGKOK'S SERVICE UNITS AND UTILIZATION PATTERNS

Bangkok's UCS network includes both public and private service units. Public providers fall under various authorities, such as:

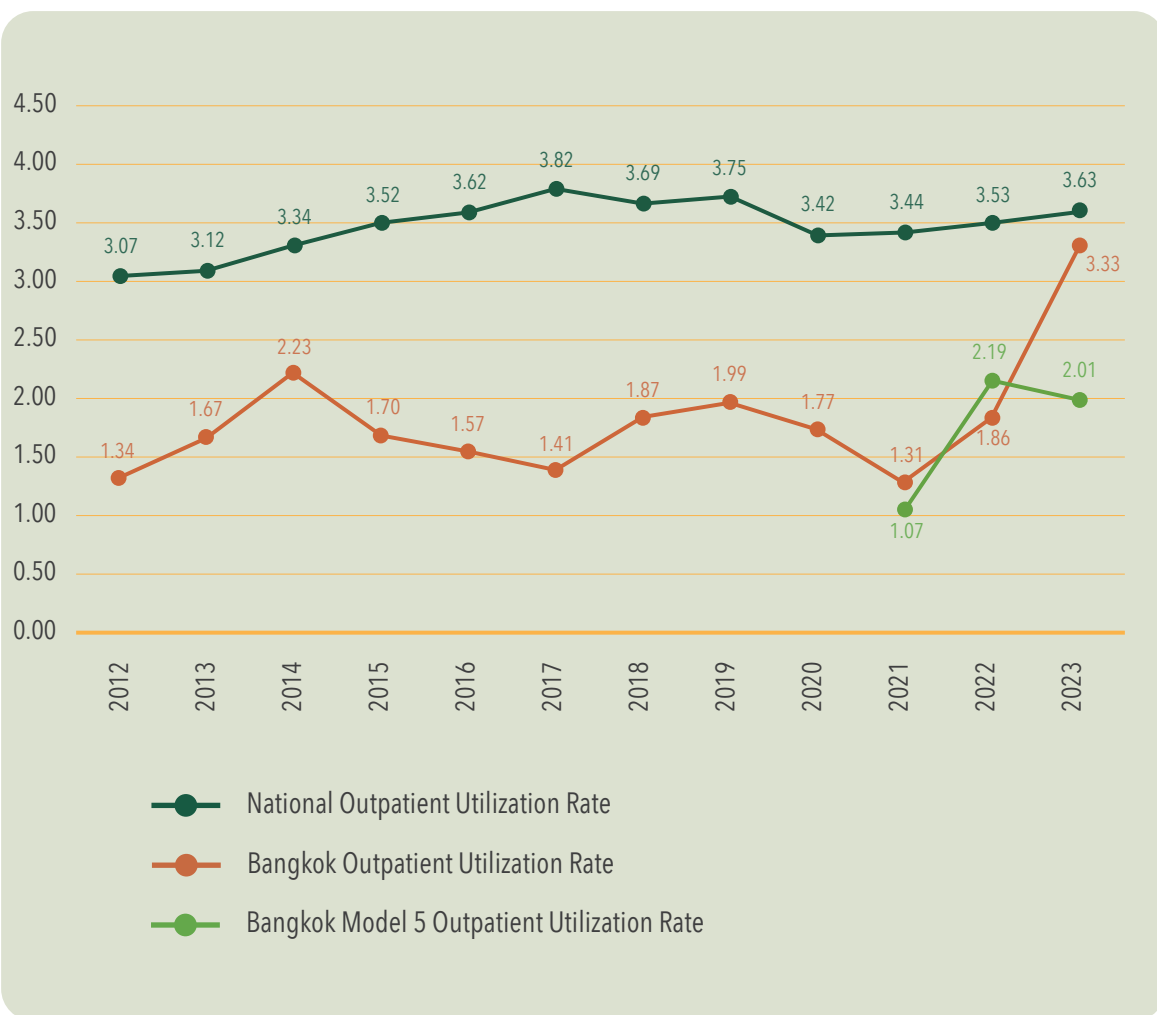
- 1 University hospitals
- 2 Hospitals under the Ministry of Public Health (MOPH)
- 3 Hospitals under the Ministry of Defense
- 4 Hospitals under the Bangkok Metropolitan Administration (BMA)
- 5 Public health centers under the BMA's Department of Health

Private providers include private hospitals and Warm (Ob-Un) Community Clinics. The existence of service units under multiple authorities, each with different administrative chains, creates challenges for coordination and management.

A key difference from other regions is that private providers play a leading role in Bangkok's healthcare system. The city also houses the most advanced medical technologies in the country. However, despite the presence of multiple authorities and advanced facilities, data on UCS beneficiaries shows that outpatient utilization rates (OP UR) have consistently been below the national average, reflecting persistent issues with service accessibility.

Until 2023, Bangkok's OP UR was nearly half the national average. However, it increased from 1.86 visits per person in 2022 to 3.33 in 2023. This improvement resulted from shifting the provider payment model from capitation to a fee schedule based on service performance, alongside increased service utilization following the COVID-19 pandemic.

Figure 2: Trends of National and Bangkok Outpatient Utilization Rate (times/person/year) 2012-2023



DISTRIBUTION AND CAPACITY OF PRIMARY CARE

Bangkok currently faces challenges in the distribution and capacity of service units:

- 1** There are 374 Primary Care Units citywide, serving as the frontline of healthcare delivery.
- 2** However, some districts remain underserved, and Wang Thonglang District lacks a Primary Care Unit entirely.
- 3** Bangkok's inpatient unmet need is nearly double the national average:
 - a. 28 per 10,000 people in Bangkok vs. 15 per 10,000 nationally.
 - b. The main reasons are lack of time among patients (33%) and limitations within service units (30%).
- 4** Bangkok also has a shortage of inpatient beds:
 - a. 110.74 beds per 100,000 people, compared to 151.51 in other regions.

CORE CONCEPTS AND STRATEGY

As a large, complex metropolis, Bangkok must overcome multiple barriers to ensure equitable healthcare access. The core strategy of NHSO Bangkok is to provide comprehensive, standard-quality services to those covered by the UCS. This includes:

- Designing an inclusive service network structure,
- Creating payment and reimbursement models that attract providers,
- Ensuring services meet standards of accessibility and governance.

Since 2002, NHSO Bangkok has continuously refined the structure of the public health service system and reimbursement models—progressing from Model 1 to Model 5. These efforts aim to address the diverse needs of both users and providers. However, key challenges persist, especially in:

- Building trust in the Primary Care Network (Primary Care Trust)
- Ensuring good governance among service units.

2

STRUCTURE OF THE PUBLIC HEALTH SERVICE SYSTEM UNDER THE UCS IN BANGKOK

The structure of Bangkok's public health service system must account for the diversity of service units, including both public and private providers. Clear classification is essential to building an efficient service network that covers primary, secondary, and tertiary levels of care.

NHSO Bangkok is responsible for establishing and managing the UCS in the Bangkok Metropolitan Area. Due to its status as the capital and its complex healthcare landscape, the system here is structured differently from other NHSO regions. Under the UCS, service units are categorized into three main types:

PRIMARY CARE UNITS (PCUS)

These are healthcare facilities registered as primary care providers within the network of a Main Contracting Unit. They provide comprehensive primary-level services, including general medicine, basic dentistry, health promotion, disease prevention, diagnosis, treatment, and rehabilitation. Individuals registered with a Main Contracting Unit are entitled to receive services from any PCU within that network. PCUs are eligible for reimbursement either through the Main Contracting Unit or directly from the fund, as determined by the NHSO Board. Bangkok has 374 PCUs, including 103 public and 271 private units.

MAIN CONTRACTING UNITS (MCUS)

These are healthcare facilities or networks registered as main providers. They deliver a full range of primary healthcare services including health promotion, disease prevention, diagnosis, treatment, and rehabilitation and maintain a referral network for services beyond their capacity. Individuals may register with the MCU of their choice. MCUs receive capitation payments and other reimbursements directly from the UCS fund. They are also responsible for paying other units within their referral network. Bangkok has 102 MCUs, consisting of 99 public and 3 private facilities.

REFERRAL UNITS

These facilities are registered to provide secondary, tertiary, or specialized services. Patients are eligible to receive care at Referral Units after being referred by an MCU or with NHSO approval. Referral Units may be reimbursed either by the MCU or directly by the NHSO Fund, as determined by the governing board. Bangkok has 54 Referral Units, including 41 public and 13 private facilities.

Healthcare facilities under the UCS in Bangkok operate under a range of public authorities and include:

2.1

PUBLIC SECTOR PROVIDERS

- 1** Ministry of Public Health (MOPH): Facilities under the Department of Medical Services, Department of Health, and Department of Mental Health.
- 2** Bangkok Metropolitan Administration (BMA): Hospitals under the Department of Medical Services and 69 public health centers under the Department of Health.
- 3** University Hospital Network (UHOSNET): Tertiary and super tertiary hospitals affiliated with medical schools and universities, primarily under the Ministry of Higher Education, Science, Research and Innovation. These hospitals serve as Super Tertiary Care centers, offering the highest level of medical services. They are also teaching hospitals for training medical personnel and conducting research in Bangkok.
- 4** Ministry of Defense: Veterans General Hospital, Bhumibol Adulyadej Hospital (Air Force), and Somdet Phra Pinklao Hospital.
- 5** Royal Thai Police: Police General Hospital.
- 6** Ministry of Justice: Corrections Hospital.

2.2

PRIVATE SECTOR PROVIDERS INCLUDE PRIVATE HOSPITALS AND WARM (OB-UN) COMMUNITY CLINICS, WIDELY DISTRIBUTED ACROSS BANGKOK

Table 1: Number of Public Healthcare Facilities Registered as Service Units under the UCS in Bangkok, by Affiliation (FY 2025)

SERVICE UNIT	HEALTH CENTERS	PRIMARY CARE UNITS	HOSPITALS	TOTAL
BMA	69	2	9	80
MOPH	-	4	16	20
Ministry of Higher Education, Science, Research and Innovation (MHESI) or UHOSNET	-	2	8	10
Other Ministries (Defense, Justice) and the Royal Thai Police	-	1	9	10
Total	69	9	42	120

Table 2: Number of Private Healthcare Facilities Registered as Service Units under the UCS in Bangkok (FY 2025)

HEALTHCARE FACILITIES	NUMBER
Hospitals	13
Clinics	269
Total	282

Table 3: Number of Public and Private Healthcare Facilities Registered as Service Units under the UCS in Bangkok, by Type of Service Unit (FY 2025)

SERVICE UNIT	PUBLIC	PRIVATE	TOTAL
Primary Care Unit	103	271	374
Main Contracting Unit	99	3	102
Referral Unit	41	13	54

Note: Some healthcare facilities are registered under more than one type of service unit

3

PUBLIC HEALTH SERVICE DELIVERY MODELS AND PAYMENT MODELS 1-5

Since the establishment of the NHSO in 2002, Bangkok's public health service delivery system has undergone continuous development. Multiple service and payment models have been implemented to meet the evolving needs of both service users and providers.

Models 1 through 5 reflect changes in:

- 1 The structure of service networks,
- 2 The roles of Main Contracting Units (MCUs),
- 3 The payment and reimbursement mechanisms.

Note: Model 3 is not used in Bangkok, as it was designed for inter-provincial border areas.^b

The overarching goal is to ensure service coverage and incentivize a variety of healthcare providers to join the UCS network. Monitoring and evaluation mechanisms have also been established to ensure quality and equitable access.

Each model has two key components:

- 1 Service delivery structure, and
- 2 Payment mechanism.

^b Model 3 is not used in Bangkok because it is a service delivery model designed for provincial areas, which is no longer in use. This model involved referrals between hospitals across provinces. For example, a patient's registered residence might be in Udon Thani Province, where they receive treatment at a community hospital (Main Contracting Unit). However, if the patient needs to be referred for further treatment, they may be sent to a hospital in Khon Kaen Province (Referral Unit) because it is closer to their location. In Model 3, the community hospital received capitation payments and was responsible for reimbursing the referral unit.

MODEL 1

INITIAL REGISTRATION AND NETWORK FORMATION (2002)

Model 1 was implemented following the establishment of the National Health Security Office (NHSO) in 2002, with a primary focus on registering the population under the Universal Coverage Scheme (UCS) in Bangkok. To facilitate service delivery, NHSO divided the city into 14 health zones, each anchored by a main hospital. These hospitals served as lead providers and formed networks comprising:

- Public health centers designated as Primary Care Units (PCUs), and
- Selected private clinics contracted as sub-providers through agreements with the hospitals.

Under this model, UCS beneficiaries could access care directly at either hospitals or PCUs without a referral form. The typical service network structure followed a three-tier model:

- Hospital – Hospital – Hospital
- Private Clinic – Hospital – Hospital
- Health Center – Hospital – Hospital

PAYMENT MECHANISM

Capitation funds were allocated by NHSO directly to the hospitals acting as Main Contracting Units (MCUs). These hospitals were responsible for managing their budgets and reimbursing PCUs for services rendered, handling financial transactions internally within their respective networks.

MODEL 2

EXPANDED REGISTRATION AND PRIMARY CARE ACCESS (2003)

In October 2003, the Universal Coverage Scheme in Bangkok entered its second phase with the introduction of Model 2. This was driven by a new policy initiative under Article 6 of the National Health Security Act, which states: "Any person wishing to exercise their right under Article 5 shall submit a registration request to the Office or an agency designated by the Office to choose a Main Contracting Unit."

At that time, most Bangkok residents with formal household registration had already enrolled in the UCS. However, a large segment of the population remained "unregistered", particularly internal migrants from

MODEL 2

(CONTINUE)

other provinces who had not changed their household registration to Bangkok and were thus ineligible for services in their actual place of residence.

To accommodate this population and expand access to primary care, additional Main Contracting Units (MCUs) were introduced. Private clinics were now allowed to contract directly with the NHSO, not only as Primary Care Units (PCUs) but also as MCUs. This structural change aimed to decentralize access and bring services closer to communities. The service network model evolved from the previous Hospital–Hospital–Hospital configuration under Model 1 to include more diverse combinations, such as:

1. Clinic – Clinic – Hospital
2. Health Center – Clinic – Hospital
3. Health Center – Health Center – Hospital

Model 2 placed strong emphasis on primary care gatekeeping. Individuals were required to first seek care at a health center or clinic, and only visit hospitals after obtaining a referral. This measure was intended to reduce overcrowding at hospitals and shift care closer to the community level.

However, despite its intentions, payment mechanisms under Model 2 created challenges. The NHSO continued using a flat-rate capitation system, which led to unintended provider behavior. Some clinics strategically registered large numbers of healthy individuals (e.g., students or residents of housing estates) to limit their treatment burden, while redirecting sick patients to public health centers—resulting in financial strain on the latter.

Further, issues with outpatient referrals (OP Refer) became pronounced. Some clinics avoided referring patients to hospitals due to the fee-for-service charges they would be responsible for, leading to referral avoidance and service gaps. In several cases, clinics incurred unpaid debts to hospitals, worsening provider relations and system inefficiencies.

Although NHSO had contractual mechanisms to oversee clinics, the agency faced significant limitations in staffing, which made comprehensive monitoring difficult to enforce.

MODEL 4

SHIFTING FINANCIAL RESPONSIBILITY TO HOSPITALS (2005)

Introduced in 2005, Model 4 was developed as a service delivery and financing adjustment to address the financial strain experienced under Model 2. The primary change was the reassignment of the Main Contracting Unit (MCU) from health centers to hospitals. Under the earlier model, health centers had faced significant financial burdens due to their responsibility to reimburse hospitals, which were often the main providers of advanced care.

Under Model 4, the service access protocol remained unchanged: individuals were still required to first seek care through a Primary Care Unit (PCU) and obtain referral forms for outpatient hospital services. However, the structure of the service delivery network became more streamlined:

1. Health Center – Hospital – Hospital

On the financing side, capitation payments were now allocated directly to hospitals acting as MCUs, bypassing health centers. This change leveraged hospitals' superior financial and administrative capacity, allowing for economies of scale and stronger cost control. For instance, hospitals could monitor referral patterns and reduce unnecessary investigations (e.g., overuse of diagnostics), now that they bore direct responsibility for budget management. This shift effectively turned hospitals from fee-for-service recipients into accountable budget managers within the UCS network.

MODEL 5

RESTRUCTURING SERVICE DELIVERY AND PAYMENT (2020)

Despite the improvements made under Model 4, referral system inefficiencies persisted, especially involving outpatient services. A turning point came in 2019, when the NHSO uncovered fraudulent claims under the Promotion and Prevention (PP) budget. As a result, NHSO began canceling contracts with implicated clinics, dental units, and private hospitals. By 2020, over 190 service units had their contracts revoked, creating a significant coverage gap for UCS beneficiaries in Bangkok.

To address this crisis, the Bangkok Regional Health Security Board approved Model 5 in October 2020, which marked a complete overhaul of both service delivery and payment structures. The new model aimed to:

- Fill the service coverage gaps,
- Reduce reimbursement delays,
- Improve referral processes, and
- Control rising healthcare expenditures.

SERVICE DELIVERY REFORMS

Model 5 restructured the network as follows:

- Clinics became Primary Care Units (PCUs),
- Health centers assumed roles as Main Contracting Units (MCUs),
- Hospitals remained as referral centers.

This resulted in a new network structure:

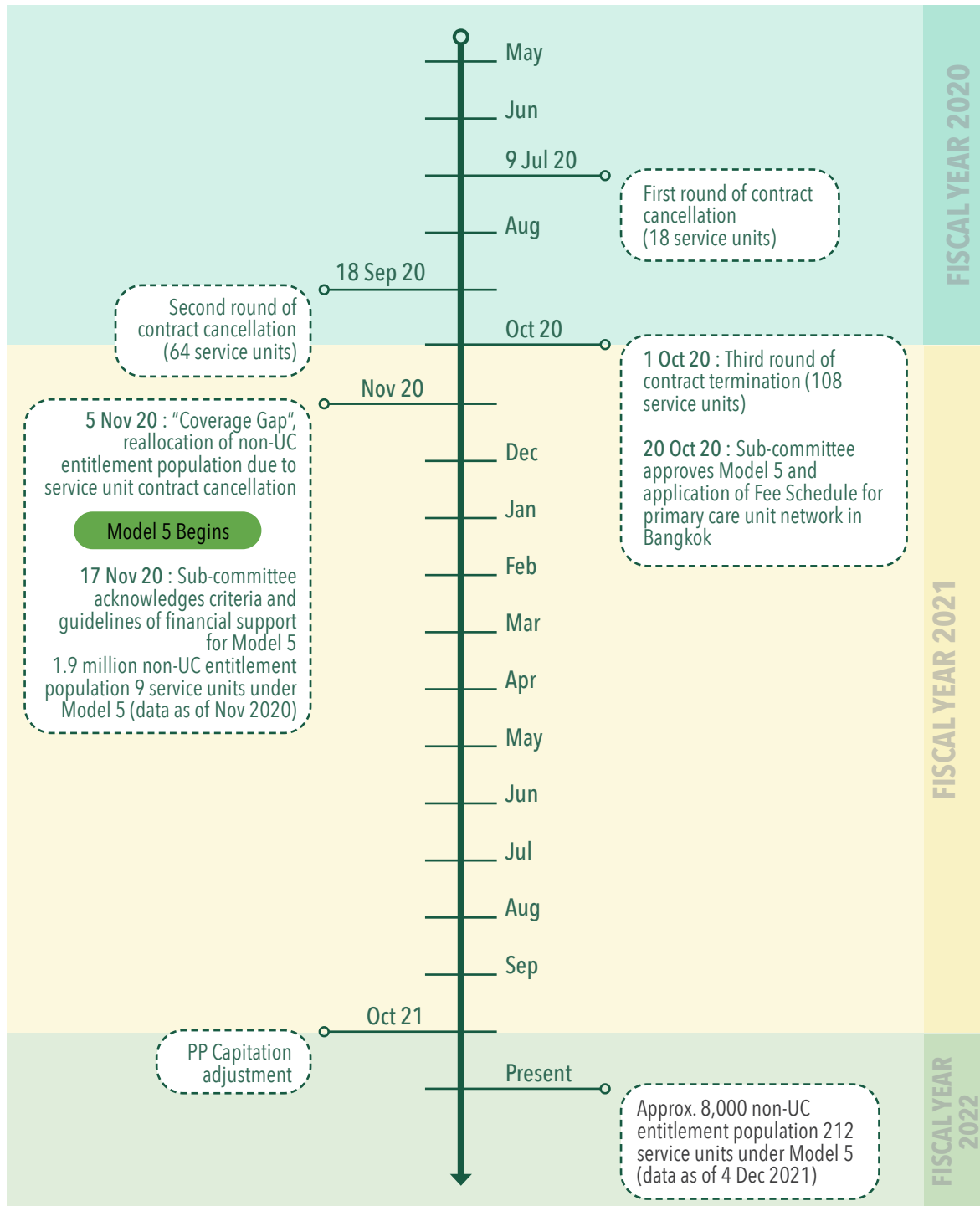
- Clinic – Health Center – Hospital

Under Model 5, referrals were no longer mandatory, allowing UCS members to access services across all levels—PCU, MCU, or hospital—without referral forms. Health centers were positioned as area managers, overseeing both service provision and quality within their networks. Additionally, NHSO began accrediting new types of providers, including:

- General practice clinics as Referral Units, and
- Clinics with extended (evening) hours to increase access.

Satellite clinics, such as Warm (Ob-Un) Community Clinics, supported public health centers, improving geographic and temporal access to care.

MODEL 5 TIMELINE



Total of 190 service units had their contracts cancelled during the first to the third round

PAYMENT REFORM: FEE SCHEDULE WITH POINTS

The traditional capitation system was replaced by a Fee Schedule with Points, governed under a global budget framework. Providers received payments based on services rendered, scored as points, with point values tied to budget availability.

- 2021: Utilization was low due to the COVID-19 epidemic, resulting in a budget surplus. The initial point rate was 1 baht, but actual reimbursement increased to 1.85 baht/point after reallocations.
- 2022: Continued low utilization allowed a rate of 1.68 baht/point, supported by additional central COVID-19 funding from MOPH.
- 2023: As COVID-19 receded, utilization surged. The outpatient utilization rate jumped from 1.86 visits/person (2022) to 3.33 visits/person (2023). However, this led to over-claiming and budget overruns, forcing the point value to fall to just 0.57 baht, sparking disputes with providers.

To address these issues, NHSO formed a claims data analysis working group in late 2023. In response to its recommendations, NHSO implemented a “New Model 5” on March 1, 2024, which reintroduced capitation payments for outpatient services to stabilize finances and restore provider trust.

MODEL 5.3: HOSPITAL-LED PRIMARY CARE NETWORKS (2024)

Introduced alongside the New Model 5 in 2024, Model 5.3 was developed to leverage the capacity of large public hospitals in managing primary care delivery and budgets. Under this model:

- Public hospitals directly operate Primary Care Units, forming vertically integrated service networks.
- The structure is:
 - Public Hospital (PCU) – Hospital – Hospital

Unlike the standard Model 5 (Clinic – Health Center – Hospital), where referrals could originate from any unit, Model 5.3 centralizes referral management within the hospital itself. The hospital oversees both primary and secondary care and manages its own capitation budget across service levels.

This hospital-led approach promotes stronger coordination, tighter cost control, and potentially higher service quality by integrating governance, financing, and clinical management under a single institutional authority.

LESSONS FROM IMPLEMENTING THE FEE SCHEDULE PAYMENT MODEL IN BANGKOK

The transition from a capitation-based payment system to a Fee Schedule with Point System in Bangkok represents a major reform in the way health services are financed under the Universal Coverage Scheme (UCS). This shift was designed with two main goals in mind: improving urban residents' access to services and encouraging innovation in service delivery.

1. Improving Access to Services for Urban Residents

The new model enables UCS beneficiaries to seek services from any Primary Care Unit (PCU) rather than being restricted to the one they are registered with. Service delivery operates through a hub-and-spoke system, where public health centers act as hubs, and Warm (Ob-Un) Community Clinics or general medical clinics serve as spokes. To enhance service accessibility in underserved areas, NHSO Bangkok has encouraged private clinics to join the system as specialized providers.

Notably, many participating private clinics offer evening-hour services, aligning more closely with the lifestyles of working urban populations and reducing geographic and temporal barriers to care.

2. Encouraging Innovative Service Models

To meet the evolving needs of urban residents, NHSO initiated a plan in 2023 to diversify and modernize primary care delivery. This includes:

- Telemedicine services
- Home delivery of medications
- Prescription pick-up at local pharmacies
- Off-site health check-ups
- Mobile health units

These innovations are particularly important for improving access among vulnerable populations and those living in informal settlements across the city.

Despite its ambitious aims, the Fee Schedule model has revealed several challenges:

1. Efficiency Concerns

Compared to capitation, the new model introduces greater complexity in claim verification and auditing, which has affected operational efficiency. Ensuring transparency and accuracy in reimbursements requires more time and administrative resources.

2. Adequacy of Compensation

Because the Fee Schedule with Point System is tied to a fixed global budget (closed-end), the value per point declines when service volumes rise. This fluctuation has made it difficult for providers to predict income and, in some cases, led to concerns that reimbursement does not fully cover service delivery costs, possibly affecting both the quality and availability of care.

3. Sustainability Challenges

In Fiscal Year 2023, a surge in outpatient service use led to a sharp decline in the reimbursement rate per point. This drop in financial returns—amid increasing demand—caused dissatisfaction among providers and led to calls for budget increases to maintain service quality and sustainability.

Policy Response and Adjustment

To address these challenges, NHSO decided in March 2024 to revert to the capitation payment model for outpatient services offered by regular service units (e.g., community health centers and designated clinics). However, health promotion and disease prevention services and referrals to higher-level hospitals continue to be financed under the Fee Schedule model, with a closed-end budget ceiling.

Table 4: Summary of Primary Care Network Models Previously Implemented in Bangkok

MODEL	SITE OF SERVICE DELIVERY			REMARKS
	PRIMARY CARE UNIT	MAIN CONTRACTING UNIT	REFERRAL UNIT	
1	Hospital Community Health Center	Hospital Hospital	Hospital Hospital	Original Model
2	Clinic Health Center Health Center	Clinic Clinic Health Center	Hospital Hospital Hospital	Original Model
4	Health Center	Hospital	Hospital	
5 (Model 1)	Clinic	Health Center	Hospital	Main model supported by 2021 policy
Model 1 (in place)	Health Center	Health Center	Hospital	Alternative Model
Model 2 (5.2)	Clinic Network	Clinic	Hospital	Alternative Model
Model 3 (5.3)	Public Primary Care Unit	Hospital	Hospital	Alternative Model

Table 5: Summary of Guidelines for Outpatient Service Reimbursement in Bangkok

CRITERIA	BEFORE IMPLEMENTING THE MODEL 5 NETWORK	MODIFIED MODEL 5 NETWORK LAUNCHED IN FY 2021	MODEL 5 NETWORK AS OF MARCH 1, 2024
Primary Care Unit, Main Contracting Unit	Capitation	By service list (fee schedule with point system)	Capitation
Total Budget	Global budget (closing amount)	Global budget (closing amount)	Global budget (closing amount)
Referral and Subsequent Payment	According to the billing list: fee schedule + fee-for-service	According to the billing list: fee schedule	According to the billing list: fee schedule
	In case of referral 1) Clinic pays the first 1,600 baht 2) Excess is paid from OP Refer Bangkok funds	Pay from the Bangkok Global Budget Model 5 by the following methods: 1) fee schedule • OPFS • OP Refer	In case of referral Clinic pays no more than 800 baht. The excess is paid from the OP Refer Bangkok funds
	In case of Central Reimbursement (CR): Reserve CR money from per capita budget of all service units; AE, HC, Dent, Disabled, OP Refer	CR case: Reserve money from the per capita budget of every model service unit; AE, HC, Dent, disabled	CR case: Reserve money from the per capita budget of every model service unit; AE, HC, Dent, disabled

The development from Model 1 to Model 5 reflects ongoing efforts to improve system efficiency. Model 5 currently uses a Fee Schedule with Points System. However, due to issues of over-claiming and low compensation rates, the system was adjusted back to OP Capitation in March 2024 to ensure sustainability.

4

PUBLIC HEALTH SERVICES FOR HEALTH PROMOTION AND DISEASE PREVENTION (PROMOTION AND PREVENTION - PP) IN THE BANGKOK AREA

Health promotion and disease prevention (PP) services are a core component of the Universal Coverage Scheme (UCS), aiming to improve health and prevent illness before the onset of disease. In Bangkok, NHSO is responsible not only for UCS service delivery but also for PP services for all Thai citizens, regardless of their healthcare entitlement scheme.

SCOPE OF PP SERVICES

PP services are designed to cover all age groups, and benefits are categorized accordingly:

- 1 Pregnant and Postpartum Women:**
Antenatal care, screening for thalassemia and Down syndrome, preventive dental care, postpartum check-ups.
- 2 Young Children (0–5 years):**
EPI vaccinations, developmental assessments, thalassemia screening, preventive dental care, mental health screening.
- 3 Older Children and Adolescents (6–24 years):**
EPI vaccinations, school health checkups, family planning, preventive dental care, mental health screening.
- 4 Adults (25–59 years):**
Screening for chronic disease risk factors, family planning, pap smears, and oral health checkups.
- 5 Elderly (60+ years):**
Depression screening, assessment of activities of daily living (Barthel's ADL), preventive dental care.

Expanded Screening Services (2024 Announcement)
In 2024, the Minister of Public Health, as Chair of the NHSO Board, issued a formal announcement titled: "Types and Scope of Public Health Services for Health Promotion and Disease Prevention in the Bangkok Area (2024)."

The announcement introduced 11 additional free annual screening services for Bangkok residents, targeting two age groups: 15–35 years and 35+ years.

4.1

FOR INDIVIDUALS AGED 15+ YEARS (DOMICILED OR RESIDING IN BANGKOK)

- 1 Physical health screening
- 2 Mental health screening
- 3 Diabetes and hypertension risk screening
- 4 Blood sugar test (BS/FBS)
- 5 Complete blood count (CBC)
- 6 Chest X-ray

4.2

FOR INDIVIDUALS AGED 35+ YEARS (DOMICILED OR RESIDING IN BANGKOK)

- 1 Physical health screening
- 2 Mental health screening
- 3 Diabetes and hypertension risk screening
- 4 Blood sugar test (BS/FBS)
- 5 Complete blood count (CBC)
- 6 Chest X-ray
- 7 Cardiovascular disease risk screening
- 8 Blood lipid profile (cholesterol, triglycerides, HDL)
- 9 Kidney function test (creatinine)
- 10 Liver function test (SGOT, SGPT)
- 11 Electrocardiogram (EKG)

CHALLENGES IN UTILIZATION AND BUDGET EXECUTION

Although PP services are available to all residents, utilization remains low:

- In 2024, only 2.2 million out of 7.6 million registered residents (29%) received PP services.
- Of the 1,833 million baht allocated to NHSO Bangkok for PP in 2024, only 639 million baht (35%) was spent.
- This left 1,194 million baht (65%) unspent.

Contributing factors include:

- Lack of public awareness about entitlements, and
- Limited proactive service delivery by providers, such as community outreach or home visits.

5

GOVERNANCE OF UCS IN THE BANGKOK AREA

The governance of the Universal Coverage Scheme (UCS) in Bangkok operates through a multi-sectoral participation mechanism, reflecting the complexity of service delivery and the diverse range of service units under different authorities. Effective coordination and collaboration are critical, necessitating dedicated committees to guide and oversee implementation.

Unlike other provinces, Bangkok lacks a central health agency capable of fully governing the health system. This is due to the fragmented structure of healthcare services, with numerous service units under different public and private organizations. In contrast, most provinces have their services governed by the Ministry of Public Health (MOPH) and managed through a Provincial Health Office (PHO).

Bangkok also faces unique governance challenges, including a large and dense population, uneven distribution of service units across its 50 districts—some of which lack service units entirely—and a highly specialized, complex system. These factors limit the capacity of NHSO Bangkok to fully administer the scheme independently.

To address these challenges, the NHSO Board and the Public Health Quality and Standards Control Board have established multiple subcommittees. The two most important are:

- The Bangkok Area Health Security Subcommittee
- The Bangkok Area Public Health Quality and Standards Control Subcommittee.

These bodies act as key governance mechanisms for UCS operations in Bangkok and are composed of representatives from government agencies, private providers, and civil society organizations. Their advisory and policy-driving roles are a key strength of Bangkok's governance structure, promoting inclusive participation and reflecting the realities of a complex urban health system.

However, unlike MOPH authorities, these subcommittees do not have directive authority. Instead, they function as coordinators and system managers, facilitating collaboration across hospitals and providers under various jurisdictions to ensure equitable, quality healthcare for all UCS beneficiaries in Bangkok.

5.1

BANGKOK AREA HEALTH SECURITY SUBCOMMITTEE

This subcommittee is tasked with implementing and managing UCS policies in Bangkok, including oversight of budget allocations and service system performance. Appointed by the NHSO Board, it is chaired by a member of the Board and includes:

- Executives from public and private health service units,
- Representatives from civil society and partner networks,
- District directors from the Bangkok Metropolitan Administration (BMA).

The subcommittee convenes monthly meetings to review policy matters, monitor implementation, and address operational issues affecting service units across Bangkok.

5.2

BANGKOK AREA PUBLIC HEALTH QUALITY AND STANDARDS CONTROL SUBCOMMITTEE

Appointed by the Public Health Quality and Standards Control Board, this subcommittee is responsible for overseeing and regulating healthcare service standards at the local level. Its membership is broad and includes:

- Representatives from universities,
- The military and police,
- The Department of Medical Services,
- Local service units under the BMA's Department of Health and Department of Medical Services,
- Warm (Ob-Un) Community Clinics and private hospitals,
- Regulatory bodies and professional councils,
- Legal sector representatives (e.g., public prosecutors from the Administrative Litigation Department),
- Experts from royal colleges,
- Nine types of private organizations defined under the National Health Security Act.

This diverse composition allows for comprehensive oversight, ensuring that service quality and professional standards are upheld in line with national health security policy.

6

CHALLENGES

The Universal Coverage Scheme (UCS) in Bangkok faces a range of complex challenges stemming from both internal and external organizational factors. These challenges directly affect the efficiency and effectiveness of public health service delivery. Identifying and understanding these issues is essential for planning future system improvements.

6.1

INTERNAL CHALLENGES WITHIN THE NHSO

1

Budget-Related Issues

- 1 Under Model 5, compensation for services is often paid at rates lower than 1 baht per point, with referrals accounting for 70% of total expenses.
- 2 In New Model 5 (Capitation):
 - The uniform per capita allocation is seen as inequitable by some Primary Care Units (PCUs), as it fails to account for variations in chronic disease burden, service utilization, and referral volumes.
 - In some cases (e.g., Outpatient Accident and Emergency – OPAE), disbursement from the Central Reimbursement Fund does not adhere to established principles.

2

Unclear Payment Conditions

Payment classifications can be ambiguous—such as when a patient is observed over several days, yet the hospital submits the charge as an outpatient case, leading to inconsistencies and confusion.

3

Delays in Referral Compensation

Compensation for referrals is delayed, as the originating service unit must first review and approve the reimbursement before it is finalized, creating bottlenecks in the payment process.

4

Inadequate Oversight of Reimbursements

Monitoring and auditing of reimbursement claims, both pre- and post-payment, are often delayed. Moreover, there is limited stakeholder involvement in the oversight process, reducing transparency.

5

Unclear Network Management

The roles and relationships between service units within a hub-and-spoke model remain undefined. Since units belong to different agencies, there is no supervisory chain of command, complicating coordination and accountability.

6.2

EXTERNAL CHALLENGES BEYOND THE NHSO

-  **Diversity of Service Units**
Bangkok's health system comprises service units under various jurisdictions—public and private—making it difficult for NHSO, which lacks formal supervisory authority, to ensure uniform service quality and standards. NHSO's primary tool—financial mechanisms—is often insufficient for effective regulation.
-  **Conflicting Interests of Service Units**
Many UCS providers are private entities motivated primarily by profit, which poses challenges for managing service quality, particularly under a capitation payment model.
-  **Gaps in Professional Ethics and UCS Understanding**
Some service providers lack adequate understanding of UCS principles and may prioritize personal or institutional interests, negatively affecting service quality, collaboration, and public trust.
-  **Low Utilization of Services**
The outpatient utilization rate (OP UR) in Bangkok remains relatively low, with even lower rates for health promotion and disease prevention services.
-  **Population Distribution per Service Unit**
Bangkok clinics often serve both registered residents and unregistered migrants. Clinics with small registered populations may suffer cash flow problems and financial strain, as service provision extends beyond those officially registered.

6

Inpatient Service Challenges

Although UCS entitles residents to inpatient care, access remains limited:

- There is a shortage of inpatient beds in public hospitals.
- No designated district hospital system exists in Bangkok.
- Many inpatients come from other provinces, burdening local capacity—up to 30% of beds are occupied by non-residents.
- These problems were especially visible during the COVID-19 pandemic, when 30,000–50,000 patients in Bangkok went without care.

7

Problems with Service Delivery and Referrals

Key issues include:

1. Some service units refuse to issue referrals, creating inconvenience for patients.
2. A high number of rejected referral claims, increasing the administrative burden on hospitals to provide supporting documents.
3. Chronic disease patients often transfer their UCS rights from other provinces to Bangkok for better access, transferring financial responsibility to Bangkok-based clinics under the fee-for-service model.

7

AREAS FOR IMPROVEMENT GOING FORWARD

The continued development of an efficient and sustainable Universal Coverage Scheme (UCS) in Bangkok requires a strategic focus on strengthening service networks, enhancing referral systems, and building trust among service units. Improvements in these areas will help raise the quality of services and increase satisfaction among both healthcare providers and recipients.

7.1

DEVELOPMENT OF SERVICE UNIT NETWORKS

A structured network of service units, organized in a main hub-satellite model, is essential. An effective example is the Bhumibol Adulyadej Hospital network, which employs an electronic referral system (e-referral). This system enables real-time access to patient information by both clinics and the hospital, ensuring continuity of care and fostering patient confidence. As a result, more patients seek treatment from affiliated clinics, alleviating congestion at the main hospital.

7.2

DEVELOPMENT OF A REFERRAL SYSTEM TO ENSURE CONNECTIVITY

To improve continuity of care across different levels of the health system:



Intermediate Care

Intermediate services should be developed to support patients after inpatient discharge. This may include outpatient services at hospitals or continued care at Primary Care Units, facilitating efficient discharges and reducing hospital bed occupancy.



Tertiary Care Connectivity

A structured link between secondary and tertiary care providers is needed to ensure that patients receive appropriate, need-based services and are referred efficiently to the correct level of care.

7.3

DEVELOPMENT OF THE PRIMARY CARE TRUST (PCT) CONCEPT

The UCS should strengthen the collaborative model across service unit networks by embracing the concept of Primary Care Trust (PCT)—adapted from the UK system. The focus should be on empowering local units to:

- Oversee service network development,
- Build public trust in the quality, continuity, and convenience of services,
- Promote mutual confidence between Primary Care Units and Referral Units.

Here, “trust” is not only institutional but also relational—creating confidence among the public and stakeholders in the integrity and reliability of the system.

8

SUMMARY

Bangkok presents a unique challenge for the implementation of UCS due to its dense population, complex administrative structure, and fragmented health service delivery system. Unlike other provinces with centralized health management under the Ministry of Public Health (MOPH), Bangkok lacks a single governing agency. In this context, the NHSO Bangkok functions as a coordinator and system manager, working with various agencies to ensure the population has access to comprehensive and equitable health services.

The evolution from Model 1 through Model 5 reflects continuous efforts to adapt service delivery structures and financing mechanisms to expand coverage and improve service quality. These models represent an ongoing process of balancing the needs of providers and recipients through public-private partnerships and network-based service delivery.

Despite progress, the implementation of UCS in Bangkok remains a work in progress. The core challenge is to establish a balanced system that provides equitable, accessible, and high-quality public health services while also ensuring financial sustainability and fair compensation for service providers.

Moving forward, success will depend on:

- Fostering collaboration across sectors,
- Strengthening governance mechanisms, and
- Institutionalizing a Primary Care Trust model to reinforce quality, equity, and sustainability across the public health system.

REFERENCES

1. National Health Security Office. (2017). Performance Report of UCS in Bangkok Area, Fiscal Year 2017.
2. National Statistical Office. (2023). Health and Welfare Survey 2023. Accessed from https://www.nso.go.th/nsoweb/storage/survey_detail/2023/20230929131046_99194.pdf
3. Working Group for "50 Districts 50 Hospitals Policy". Policy Proposal: "50 Districts 50 Hospitals" to Provide Bangkok Residents with Nearby Hospitals as a Trusted Resource. Accessed from https://www.canva.com/design/DAGbWNIWICA/tK9ApMIVWSDjz05zqjPD6w/edit?utm_content=DAGbWNIWICA&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton
4. The Coverage. (2 January 2025). NHSO launches 2 "Age-Appropriate Health Checkup" packages for Bangkok residents to receive free services! Accessed from <https://www.thecoverage.info/news/content/7953>
5. Winai Leesmith. (2018). "Models, Approaches, and Management Systems of Health Zones in Universal Coverage Scheme" in "Report on Proposals for Developing Health System Management in Bangkok Area: Special Health Zone."

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