

Thailand's Universal Health Coverage Scheme

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Thailand achieved universal health coverage by 2002 with three public health insurance schemes covering the entire population. Of these, the Social Health Insurance scheme for private sector employees has been run on a capitation contract model since 1991. The Universal Coverage Scheme followed its example, with capitation payments for outpatient services and a global budget with diagnosis-related group-based payments for inpatient care. There are several arguments in favour of this closed-end payment system such as administrative simplicity, efficiency, prevention of supplier-induced demand and long-term cost containment.

1 Background

After 27 years of gradually extending health protections coverage to different groups of the population such as the poor, public and private sector employees and the informal sector, Thailand achieved universal health coverage in 2001 and passed the National Health Security Act in 2002.^[1] There are now three public health insurance schemes covering the whole population – the Civil Servant Medical Benefit Scheme (CSMBS) for public sector employees and their dependents, the Social Health Insurance (SHI) scheme for private sector employees and the Universal Coverage Scheme (UCS) for the rest of the population.

General tax revenue is used to finance the CSMBS and the UCS while tripartite payroll contributions fund the SHI. Compared to payroll contributions, general tax is more progressive as the rich pay a larger proportion of their income to health financing than the poor.^[2] As a matter of fact, general tax is the most progressive source of health finance, with direct tax being more so than consumption tax.

Evidence shows that the poor in Thailand benefit in a substantial way from public health services. The health system in each district, comprising health centres and a district hospital, serves as the provider network for a registered population. Its geographical proximity to the rural population plays a crucial role in ensuring the poor utilise it.^[3] The primary health care services available today are the result of the rural health service infrastructure being expanded between 1970 and 1990 until all sub-districts and districts were covered by health centres and district hospitals.^[4] Government health spending favoured the poor much before the coming of the UCS in 2001, and the pro-poor trend

was sustained over decades, particularly at district and provincial hospitals.^[5] An independent external assessment of 10 years of UCS (2001-11) confirms that Thailand had pro-poor health policies before 2001 and that the UCS continues and fosters this.^[6]

Financial risk protection has been greatly improved by the UCS; with a minimal incidence of catastrophic health expenditure, assessed by whether household out-of-pocket payment for health services exceeded 10% of total consumption expenditure.^[7] The incidence of medical impoverishment is very low and decreasing, as measured by the additional number of people falling below the national poverty line as a result of health payments. Between 2004 and 2009, the UCS is estimated to have prevented at least 3,00,000 households from becoming poor because of paying medical bills.

Closed-End Provider Payment

The UCS adopted a system of closed-end payments to healthcare providers right from its inception in 2001. According to this, age-adjusted capitation is used to pay for outpatient services provided by a network of contracting units. This network is the district health system, consisting of a district hospital and five to eight health centres serving a population of about 50,000. It is paid on the basis of the number of people served and their age structure, and there is a slant in favour of the elderly and children, who have a higher chance of using the services. An examination of utilisation rates shows that they are higher among these sections than the rest of the population. In this system, the financial risk is transferred to the contractor provider network, capitation payments not being linked to the number of times services are provided.

A national global budget was set up annually to reimburse provincial and tertiary hospitals for inpatient services through diagnosis-related group (DRG)-based payments, reflecting volumes and case-mix, and adjusted according to the relative weights pertaining to particular hospitals. Hospitals are thus reimbursed inpatient expenditure based on the case-mix severity measured by the cost weight

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(so-called relative weight). The more complex a case, the higher the resource use and the higher the reimbursement level. At the end of a typical year, the total expenditure on inpatient services will not exceed the global budget. For example, in 2011, the total global budget was set at THB 54,000 million and the total national relative weight was 6 million. Therefore reimbursement per relative weight was THB 9,000. It would have been THB 8,300 per weight if the total national relative weight was 6.5 million; or THB 9,500 per weight if the total national relative weight was 5.7 million.

Capitation payments for outpatient services and a global budget with DRG for inpatient care are de facto a “hard budget”.^[8] A fee-for-service system implicitly results in a “soft budget” that insurance funds have difficulty in controlling because total spending is driven by numbers and the cost of services rendered. The financial risk is here transferred to the insurance fund or met through co-payment or extra billing, which has to be paid by the beneficiaries. The deficit of the insurance fund will be recouped by an increased budget of premium contributions in subsequent years. So, at the end, the burden is shifted to taxpayers or members of the fund.

The three key functions of healthcare financing are resource mobilisation, pooling and purchasing health services.^[9] Efficiency and long-term financial sustainability are influenced by the way clinicians command health resources such as diagnostics, medicines and treatment. The more services they prescribe, the higher the cost to the insurance fund or the higher co-payment beneficiaries have to shoulder, and the overall effect is an escalation in cost. If clinicians are motivated by efficiency, the cost will be better contained. Their behaviour can be influenced by the way they are paid.

This paper briefly reviews the strengths and weaknesses of different methods of paying health providers for outpatient and hospitalisation services, with special attention on fee-for-service payment, capitation, a global budget and DRG. It also looks into how Thailand introduced capitation and a global budget with DRG for the UCS in 2001, drawing on International

and country experiences with the purchasing design for health services.

2 Findings

Provider Payment Methods

Table 1 shows the different modes of paying healthcare providers and the effects they have on their behaviour.^[10] When primary care providers are paid on a line item budgeting system, they have incentives to increase input factors such as beds and staff and tend to use up all the budget allocated to them. The annual budget allocation is not linked to service output and providers may not be accountable and responsive to patients. When providers are paid on the basis of each dispensed item, it sends a strong signal to boost the number of services per patient, resulting in cost increases, which are either shouldered by the insurance fund or met through co-payment by the beneficiaries.

Table 1: Overview on Provider Payment Methods and Related Incentives

Payment Method	Provider Behaviour
Primary health care services	
• Input-based line item budget	Increase input factors (bed, staff, etc) and use full budget
• Fee-for-service	Increase number of services per patient
• Capitation adjusted by age and gender	Treat patient within budget, or in worst case, provide substandard care and exclude high-risk patients; refer patients to specialists and other hospitals
• Capitation-fee-for-service mix	Treat within budget and increase number of fee-based services
Hospital admission services	
• Input-based line item budget	Increase number of staff, beds; reduce number of admissions; keep occupancy rate low but prolong patients' average lengths of stay, refer high risk/intensity patients to other hospitals
• Hospital day	Increase number of admissions and prolong patients' average length of stay (ALOS)
• Diagnostic-related groups (DRG)	Increase number of admissions, shorten ALOS, select less severe patient case-mix
• Global budget	Provide care within a budget ceiling

In contrast, when providers are paid on a capitation basis (per person registered with them), they have to manage expenditure within the budget they receive for the population registered with them. In a worse-case scenario, when effective auditing by the insurance fund is absent, they could provide substandard care or limit necessary services. They could also refer patients to specialists or other hospitals if they are not liable to pay for such referrals (non-gatekeeping primary care provider).

Likewise, paying for hospital admission (inpatient) services based on line item budgeting induces similar behaviour.

Paying per admission day sends a strong signal to prolong the stay of patients in hospitals to boost revenue. DRG, a closed-end payment per case according to its complexity, sends signals that could encourage admitting more patients, re-admitting them or early discharge. But hospitals have to manage expenditure within the ceiling if they receive a global budget. A combination of a global budget set by an insurance fund and paying individual hospitals by DRG improves the chances of patients receiving quality care.

Inefficiency and Cost Escalation

Fee-for-service arrangements are used to pay general practitioners (GPs) in several Organisation for Economic Co-operation and Development (OECD) countries and are even more widely used to compensate specialists working in ambulatory care. Fee levels are either negotiated centrally, as in Japan, Germany and Canada, or set by the individual practitioners. Countries

such as Australia and New Zealand allow “extra billing” by GPs on top of standard patient reimbursement rates.

Information asymmetry and fee-for-service mechanisms give physicians “full discretion” over the level and mix of services provided, referrals and other treatment options. However, doctors have incentives to expand the volume and prices of the services they provide. The risk of supply-induced demand is particularly strong with this type of payment system.

There is an extensive literature on the most effective and efficient payment mechanisms, but as a generalisation,

fee-for-service payment paid through health insurance is a recipe for rapidly rising costs that will eventually require many types of controls over provider (and even patient) behaviour.^[11]

In the us, health spending reached nearly \$2.5 trillion in 2009 (17.6% of gross domestic product, or GDP) and was projected to reach \$2.7 trillion in 2011.^[12] One of the drivers of expenditure there is fee-for-service payment.

Fee-for-service payment misaligns incentives; it creates a big incentive for overutilisation. Although most physicians are not income maximisers, they know that it is better to be paid to do something, and the higher the payment the better. Paying for doing more adds a strong financial motivation to what is often a slim clinical rationale for an intervention.^[13]

Fee-for-service payment is one of the key sources of inefficiency in the health sector. It leads to an overuse of procedures, investigation and equipment, all generated by supplier-induced demand.^[14] In China, for instance, the inappropriate incentives embedded in fee-for-service payment have been recognised as creating inefficiencies, waste and poor-quality healthcare, compromising the goal of ensuring access to affordable, quality healthcare to all.^[15]

Pioneering SHI Scheme

Thailand introduced the SHI scheme for private sector employees with the promulgation of the Social Security Act in 1990. The law was published in the Royal Gazette on 1 September 1990, after which there were 180 days for organisational preparation. The SHI is a tripartite payroll tax contributory scheme, equally paid for by the employer, employee and the government. The scheme covers four benefits – non-work related sickness, maternity, invalidity and funeral grants. It was initially enforced in all firms having more than 20 employees, but after three years extended to all companies with more than 10 employees.^[16] Over time, the scheme has been expanded to include three other social protection measures, a child allowance and pension and unemployment benefits, with extra contributions for these purposes.

The contribution rate specified by the law was 1.5% of payroll by the three

parties (4.5% of payroll in total) for the four benefits. This contribution estimate was based on the total resources required for these benefits. In the mid-1980s, when knowledge of strategic purchasing and provider payment was not widespread in developing countries, International Labour Organisation (ILO) consultants had advised the Thailand's labour department that with this contribution rate, the benefit package would only cover inpatient services; an estimate that was based on the fee-for-service reimbursements paid by the Workmen Compensation Fund (for work-related illnesses, injuries and deaths). But the capitation contract model contributed significantly to the success of the SHI scheme's implementation, in particular with regard to cost containment and financial sustainability, and this persuaded the UCS to adopt the model in 2001.

Adoption of Capitation Contract Model

The preparatory team for the SHI scheme, using existing evidence, convinced the first secretary general of the Social Security Office (SSO) to accept capitation at a level of THB 700 (THB 25 was \$1 at the time) per person. This was adopted by the SSO in 1991. (One of the authors, Viroj Tangcharoensathien, was a member of this team.) The contractor hospitals received THB 700 per SHI member registered with them. The more the number of persons registered with a hospital, the larger the revenue it received. This was not tied to the number of outpatient and inpatient services rendered.

We now take a look at the arguments that were made in favour of capitation. First, the capitation of THB 700 per member in 1991 allowed for the purchase of both outpatient and admission services. The capitation rate was based on a simple formula – three visits per capita per annum multiplied by a unit cost of THB 150 per visit, plus 0.1 admissions per capita per annum multiplied by a unit cost of THB 3,000 per admission. This actually gives a capitation rate of THB 750, but the SSO approved only THB 700. The total resources required using the capitation model were found to be

affordable because it matched the revenue collected from payroll contributions.^[17]

Second, the formula allowed contractor providers some margin. There was a chance that the utilisation rate might not reach three visits per person per year and admission rates might also be lower than estimated because most private sector employees were young adults who tended to be reasonably healthy.

Third, instead of only covering inpatient care using fee-for-service payment, the same amount of funds could purchase additional outpatient services, thus minimising the health expenditure burden of members. In the process, workers received better protection and the SSO gained social credit for delivering more benefits than promised.

Fourth, the reform-minded technocrats had direct experience of the cost escalation that took place in the fee-for-service CSMBs, which was risky for the fund. It was also unlikely that it could be successfully reformed. Under fee-for-service payment, a ceiling must be introduced to safeguard the financial stability of the social security fund and co-payment becomes a burden on low-income wage earners. Co-payment was not allowed to figure in the capitation model.

Fifth, the administrative cost of managing the capitation system was modest. Only a monthly wire transfer of the capitation fee had to be made to the contractor hospital. This was in marked contrast to the huge workload a fee-for-service system would have entailed (three visits plus 0.1 admissions multiplied by 1.8 million members resulted in 5.6 million transactions). An exhausted claims review staff would have ended up rubber stamping claims all night long.

Sixth, capitation did come with registration as opposed to the free choice a fee-for-service system granted. However, a limited choice was available under the contract model – members could make an annual choice of which contractor they preferred. There were a sufficient number of competing public and private hospitals in urban areas the SSO could make contractual arrangements with and there was no need for it to construct its own hospitals.

Seventh, capitation ensured a smooth flow of income to contractor providers, which facilitated better business planning. This has been subsequently confirmed by key hospital informants.

After the capitation contract model was adopted, evidence showed that public and private contractor hospitals made good margins in the first four or five years as the utilisation rate was well below the estimate. The THB 700 capitation rate was maintained until the first revision in 1998, which was made in the wake of the 1997 Asian financial crisis.

UCS Adopts Capitation Model

Under the capitation contract model, the utilisation rate by SHI beneficiaries gradually increased as did the quality of service.^[18] The model went through various adjustments to the Thai health system over a decade before the UCS was based on it, with some modifications. Instead of inclusive capitation for outpatient and inpatient services, as in the SHI scheme, the UCS applies capitation only for outpatients and a global budget with case-based payments, or DRG, for inpatients. This is to prevent the underprovision of inpatient services, which can occur with inclusive capitation – expensive admission could be dumped into ambulatory care to keep costs down. Under the global budget and DRG payment system, hospitals are reimbursed on the basis of the relative weight of each DRG for inpatient cases.

The free-choice, fee-for-service model of the CSMBs was not pursued due to serious cost escalation, supplier-induced demand^[19] and systems inefficiency. Reformists perceived that the free consumer choice inherent in the fee-for-service system would not outweigh the cost of inefficiency.^[20] In addition, free choice does not promote equity in access and use of health services by rural people if they have to pay to travel to provincial hospitals, bypassing primary health care in their home district. Free choice undermines the functioning of primary health care in district health systems and results in higher inequity in access and use of health services. At the same time, it provides less access to tertiary care for rural people.

It is important to note that the same group of health system and policy researchers and reformers who were involved in the design, monitoring and evaluation of the SHI scheme in the 1990s influenced the design of the UCS in 2001. The introduction of the capitation model in the UCS in 2001-02 met with no resistance from public or private providers because they were used to working within the SHI system since 1991. However, efforts to push the fee-for-service CSMBs towards a capitation model have consistently failed since 1995 due to benefits accruing to all entrenched parties.

3 Discussion

A number of factors contributed to the success of the contract model in the SHI scheme and to its later extension to the UCS, again with favourable results.

The Context

After the Social Security Act was endorsed by Thailand's parliament in September 1990, there were only 180 days for organisational preparation, such as setting up a system for collecting premiums, registering employers and employees, and developing information systems. The secretary general of the SSO recognised the complexity of the fee-for-service reimbursement method, the high number of claims that would have to be handled and the need for strong auditing systems as in the Workmen Compensation Scheme. The new proposal based on the simplified management strategy of a capitation contract model was compelling, given the very short time there was before implementation.

In addition, while the fee-for-service model could only cover inpatient services with 4.5% of payroll contribution, the

capitation model could give cover both outpatient and inpatient services with the same amount – an argument in its favour and a reason for it gaining political support. Later, the successful implementation of the capitation model in the SHI scheme nationwide since 1991 made every partner in the UCS confident about it.

Role of Evidence

The capitation formula allows for quite a favourable margin given the utilisation rate. In practice, employees covered by the SHI scheme were initially not fully aware of their rights and entitlements. So the utilisation rate in the first three to four years was lower than the estimate and this resulted in substantial profits to both public and private contractor hospitals.

In addition, the SHI scheme's capitation contract model had a good image right from the beginning and even with auditing and monitoring systems well in place, it resulted in adequate service provision.

Policy Decisions

Evidence on its own was not enough and it was very important to present the secretary general of the SSO with all the information he needed for the UCS as well as compelling arguments. The trust that existed between the decision-makers and the technical team members played a significant role. The reformers of the 1991 SHI and the 2001 UCSs were the same group of health system and policy researchers and entrepreneurs. Their values, experience and background in health systems ensured that they realised the importance of primary health care and that their attitude was pro-poor.

The formula to calculate capitation for the UCS was similar to the SHI but the

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information was more up to date. Thailand has key national representative household data sets with the health and welfare survey conducted regularly by National Statistical Office. Data on the utilisation rate of health schemes, health seeking and the unit cost of health care providers facilitated estimating the rate of capitation. The formula and data used were peer-reviewed by all the key partners through the financing subcommittee. All the partners, including the bureau of budget, politicians and healthcare providers, felt assured the capitation rate stood on a firm platform of evidence.

Thailand introduced capitation to the SHI scheme in 1991 and managed to successfully run it, dispensing quality healthcare and also satisfying providers in terms of their margins, particularly in the initial years. This ensured the SHI contract model served as an example for the UCS. It is now evident that capitation and case-based payments in the UCS have led to an increased use of generic medicines and an emphasis on proper diagnosis and treatment, resulting in cost containment and systems efficiency.

Once a payment system is entrenched, particularly where private, for-profit providers dominate the healthcare market, radical reform from a fee-for-service system to a capitation or case-based payment system will face united resistance from the medical profession, as seen in South Korea.^[21] It is introducing the right purchasing strategies at an early stage that lays the foundation for the successful performance of social health insurance.

In the Philippines, the design of PhilHealth does not provide adequate financial protection to its members. Outpatient services are not covered; inpatient care is reimbursed on a fee-for-service basis, but only up to a maximum amount, with patients having to pay the rest from their pockets. This resulted in slightly more than a third of the total medical bill being paid by patients in 2008.^[22] The PhilHealth annual report for 2008 stated, "PhilHealth must move away from fee-for-service towards provider payment schemes where it can easily leverage its purchasing power of more than

18.5 billion pesos",^[23] which is what it spent that year on healthcare purchases.

4 Conclusions

In universal health coverage, the ways in which healthcare services are purchased and providers are paid are important factors determining long-term cost containment, systems efficiency and financial risk protection for beneficiaries. A fee-for-services system provides free choice to consumers, but its downside of supplier-induced demand, cost increases and inefficiency outweigh whatever benefits unfettered choice may have. Policymakers need to pay special attention to the purchasing design so that it realigns incentives for providers with the social goals of quality and efficiency. Closed-end payment offers better cost containment and provides a decent quantity and quality of care, as proved by 20 years of the SHI scheme and 10 years of the UCS in Thailand.

NOTES AND REFERENCES

- [1] Tangcharoensathien, V, P Prakongsai, S Limwattananon, W Patcharanarumol and P Jongudomsuk (2009): "From Targeting to Universality: Lessons from the Health System in Thailand" in Peter Townsend (ed.), *Building Decent Societies: Rethinking the Role of Social Security in Development* (Hampshire: Palgrave Macmillan), pp 310-22.
- [2] Prakongsai, P, S Limwattananon and V Tangcharoensathien (2009): "The Equity Impact of the Universal Coverage Policy: Lessons from Thailand", *Advances in Health Economics and Health Services Research*, 21, pp 57-81.
- [3] Prakongsai, P (2008): "The Impact of the Universal Coverage Policy on Equity of the Thai Health Care System", Doctoral thesis, London School of Hygiene and Tropical Medicine, University of London.
- [4] Patcharanarumol, W, V Tangcharoensathien, S Limwattananon, W Panichkriangkrai, K Pachanee, W Pongkantha, L Gilson and A Mills (2011): "Why and How Did Thailand Achieve Good Health at Low Cost?" in D Balabanova, M McKee and A Mills (ed.), *Good Health at Low Cost? 25 Years On – What Makes a Successful Health System?* (London: London School of Hygiene and Tropical Medicine), pp 193-223.
- [5] Limwattananon, S, V Tangcharoensathien, K Tisayathicorn, T Boonyapaisarncharoen and P Prakongsai (2012): "Why Has the Universal Coverage Scheme in Thailand Achieved a Pro-Poor Public Subsidy for Health Care?", International Health Policy Programme, Nonthaburi, Ministry of Public Health.
- [6] Evans, T, M Chowdhury, D Evans, A Fidler, M Lindelow, M Mills, X Scheil-Adlung and Thai Research Team (2012): "Thailand's Universal Coverage Scheme: Achievements and Challenges: An Independent Assessment of the First 10 Years (2001-2010)", Synthesis Report, Draft 3, Nonthaburi, Health Insurance Systems Research Office.

- [7] Limwattananon, S, V Tangcharoensathien and P Prakongsai (2007): "Catastrophic and Poverty Impacts of Health Payments: Results from National Household Surveys in Thailand", *Bulletin of the World Health Organisation*, 85, pp 600-06.
- [8] Rechel, B, S Thomson and E van Ginneken (2010): *Health Systems in Transition: Template for Authors* (Copenhagen: WHO).
- [9] World Health Organisation (2010): *The World Health Report 2010: Health Systems Financing* (Geneva: WHO).
- [10] Schneider, P (2007): "Provider Payment Reforms: Lessons from Europe and America for South Eastern Europe", Policy Note (Washington DC: World Bank).
- [11] Doetinchem, O, G Carrin and D Evans (2010): "Thinking of Introducing Social Health Insurance? Ten Questions", Background Paper No 26, *World Health Report 2010* (Geneva: WHO).
- [12] California Health Care Almanac, Health Care Costs 101, at <http://www.chcf.org/~media/MEDIA%20LIBRARY%20Files/PDF/H/PDF%20HealthCareCosts11.pdf>, accessed on 7 February 2012.
- [13] Emanuel, E J and V R Fuchs (2008): "The Perfect Storm of Overutilisation", *Journal of the American Medical Association*, 299, pp 2789-91; Fuchs, V R (2009): "Eliminating 'Waste' in Health Care", *Journal of the American Medical Association*, 302, pp 2481-82.
- [14] Thomson Reuters (2009): "Where Can \$700 Billion in Waste Be Cut Annually from the US Healthcare System?", White paper (Ann Arbor: Thomson Reuters), at http://thomsonreuters.com/content/press_room/healthcare/waste_US_healthcare_system, accessed on 5 February 2012.
- [15] Yip, W, W Hsiao, Q Meng, W Chen and X Sun (2010): "Realignment of Incentives for Healthcare Providers in China", *Lancet*, 375, pp 1120-30.
- [16] Social Security Office (1990): Social Security Act, at <http://www.sso.go.th/cms/spaw2/uploads/files/ssolaw/1.web.htm>, accessed on 3 March 2010.
- [17] Tangcharoensathien, V and S Waleethikul (1991): "Social Security Act: Who Gain, Who Lose?", *Thai Medical Council Bulletin*, 20, pp 215-22.
- [18] Mills, A, S Bennett, P Siriwanarangsun and V Tangcharoensathien (2000): "The Response of Providers to Capitation Payment: A Case-Study from Thailand", *Health Policy*, 51, pp 163-80; Tangcharoensathien, V, A Supachutikul and J Lertiendumrong (1999): "The Social Security Scheme in Thailand: What Lessons Can Be Drawn?", *Social Science and Medicine*, 48, pp 913-23.
- [19] Tangcharoensathien, V, J Lertiendumrong and S Saranasathaporn (1999): "Report on Research for Reform of the Civil Servant Medical Benefit Scheme", Mimeograph in Thai (Bangkok: Health Systems Research Institute).
- [20] Langenbrunner, J C, C Cashin and S O' Dougherty, ed. (2009): *Designing and Implementing Health Care Provider Payment Systems How-To Manuals* (Washington DC: International Bank for Reconstruction and Development/World Bank).
- [21] Kwon, S (2003): "Payment System Reform for Health Care Providers in Korea", *Health Policy Plan*, 18, pp 84-92.
- [22] Tangcharoensathien, V, W Patcharanarumol, P Ir, S M Aljunid, A G Mukti, K Akkhavong, E Banzon, D B Huong, H Thabrany and A Mills (2011): "Health-Financing Reforms in Southeast Asia: Challenges in Achieving Universal Coverage", *Lancet*, 377, pp 863-73.
- [23] Philippines Health Insurance Corporation (2008): PhilHealth Annual Report, at http://www.philhealth.gov.ph/about_us/annual_report/ar2008.pdf, accessed on 6 Feb 2012.