



Learning from Thailand's health reforms

Adrian Towse, Anne Mills and Viroj Tangcharoensathien

BMJ 2004;328;103-105
doi:10.1136/bmj.328.7431.103

Updated information and services can be found at:
<http://bmj.com/cgi/content/full/328/7431/103>

- These include:*
- Data supplement** *"Tables showing costs"*
<http://bmj.com/cgi/content/full/328/7431/103/DC1>
- References** This article cites 7 articles, 1 of which can be accessed free at:
<http://bmj.com/cgi/content/full/328/7431/103#BIBL>
1 online articles that cite this article can be accessed at:
<http://bmj.com/cgi/content/full/328/7431/103#otherarticles>
- Rapid responses** You can respond to this article at:
<http://bmj.com/cgi/eletter-submit/328/7431/103>
- Email alerting service** Receive free email alerts when new articles cite this article - sign up in the box at the top right corner of the article
-

- Topic collections** Articles on similar topics can be found in the following collections
[Organization of health care](#) (1343 articles)
-

Notes

To order reprints of this article go to:
<http://www.bmjournals.com/cgi/reprintform>

To subscribe to *BMJ* go to:
<http://bmj.bmjournals.com/subscriptions/subscribe.shtml>

Competing interests: JS chaired the working group preparing guidelines on injectable opiate maintenance treatment for the National Treatment Agency and Department of Health (2002/3) and has recently been awarded a research grant for randomised trial of injectable versus oral opiate maintenance treatment.

1 Select Committee on Home Affairs. *Third report*. May 2002. www.parliament.the-stationery-office.co.uk/pa/cm200102/cmselect/cmha/318/31802.htm (accessed 30 Dec 2003).

- 2 Van Beek I. The Sydney medically supervised injecting centre: a clinical model. *J Drug Issues* 2003;22:625-38.
- 3 Zador D. Injectable opiate maintenance in the UK: is it good clinical practice? *Addiction* 2001;96:547-53.
- 4 Van den Brink W, Hendriks V, Blanken P, Koeter M, van Zweiten B, van Ree J. Medical prescription of heroin to treatment resistant heroin addicts: two randomised controlled trials. *BMJ* 2003;327:310-5.
- 5 Burrell I, Norton C. Living agony of prison life for charity worker jailed for allowing homeless to deal in drugs. *Independent* 2000 January 20.
- 6 Court of Appeal (Criminal Division). *R v Brock and Wyner* [2001] Cr.App.R.3.

Learning from Thailand's health reforms

Adrian Towse, Anne Mills, Viroj Tangcharoensathien

Providing all of Thailand's population with subsidised health care required radical changes in the health system

Thailand took a "big bang" approach to introducing universal access to subsidised health care. In 2001, after years of debate¹⁻³ and slow progress,^{4,5} it extended coverage to 18.5 million people who were previously uninsured (out of a population of 62 million). This move was combined with a radical shift in funding away from major urban hospitals in order to build up primary care. Such an approach has merits but also risks. We discuss the implementation and some of the problems.

Formulating the change

Prime Minister Shinawatra obtained a landslide victory for his Thai-Rak-Thai (Thais love Thais) Party in 2001 on a platform including the "30 baht treat all" scheme for universal access to subsidised health care. Under the scheme, people pay 30 baht (£0.50, €0.7, \$0.86) for each visit or admission.

Thailand previously had four public risk protection schemes (box 1) with widely differing benefits and contribution levels. These schemes protected a total 43.5 million people, leaving 18.5 million paying fees for care from public or private providers.

The initial plan was to merge resources from the four schemes into one universal coverage scheme to remove overlaps in coverage and improve equity. This met resistance from government departments running the other schemes and from civil servants and trades unionists benefiting from the two employment based schemes. The government therefore decided to fund the 30 baht scheme by pooling the Ministry of Public Health budgets for public hospitals, other health facilities, and the low income and voluntary health card schemes and providing some additional money. This could be done without legislation, enabling progress to be made while legislation was prepared and debated.

The National Health Security Act was passed by parliament in November 2002, creating new institutions to regulate the quality and financial elements of the scheme. It preserves all benefit entitlements for members of the civil service and social security schemes but places management of their financing



SAEED KHANGETTY IMAGES

The Hai healthcare system is dominated by hospitals

with the National Health Security Office, which runs the 30 baht scheme. The act allows for the civil service and social security schemes to be merged into a single universal coverage scheme by decree should that become politically acceptable in the future.

Factors required for implementation

In low and middle income countries, government capacity is often a key constraint on the design and implementation of policy change.^{6,7} In Thailand, previous experience and investment in health care was essential for implementation of the universal coverage scheme.

Over several decades, comprehensive healthcare coverage had been achieved through developing infrastructure in rural areas, where two thirds of Thailand's

Office of Health Economics, London SW1A 2DY

Adrian Towse
director

London School of Hygiene and Tropical Medicine, London WC1E 7HT

Anne Mills
professor

International Health Policy Programme, Thailand, Bangkok

Viroj Tangcharoensathien
researcher

Correspondence to: A Towse
atowse@ohc.org

BMJ 2004;328:103-5

Box 1: Public risk protection schemes

Civil servants medical benefit scheme—introduced in the 1960s for civil servants and their dependants

Low income card scheme—introduced in the 1970s, providing free care to low income families and individuals, elderly people, children under 12 years, and people with disabilities

Voluntary health card scheme—predominantly rural; introduced in the 1980s and funded through equal matching of household and Ministry of Public Health payments

Social security scheme—introduced in the 1990s; it protects workers only and is mandatory for all private firms with more than one employee



Tables showing the costs of health care are on bmj.com

population lives. Although beds (public and private) and doctors are concentrated in Bangkok, successive governments have built up primary care health centres (which do not have doctors or beds) in all subdistricts and community hospitals (10-120 beds) in more than 90% of districts. In addition, an effective administrative system meant that 45 million people could be registered for the universal coverage scheme within four months.

Experience had also been gained in managing insurance schemes, especially relating to payment mechanisms in urban areas where provider choice is available. Although retrospective fee for service payment in the civil service scheme encouraged increased costs, the social security scheme provided a successful capitation model.⁸ Employees choose a public or private hospital, which receives an annual capitation payment, and provides care directly or subcontracts to primary care. The capitation approach encouraged the development of competing provider networks and contained costs while still permitting choice of public or private provider (the market share of the public sector fell from 83% in 1991 to 41% in 2001).

The low income card scheme provided experience of resource allocation and of case based payment in rural areas. Under this scheme, a global budget was allocated to provinces based on the numbers of registered beneficiaries, weighted by health needs. A reinsurance premium of 2.5% was deducted from the allocations to pay for cross boundary services and high cost care for patients. Hospitals were paid on a per capita or weighted diagnosis related group basis.

During the 1990s, research capacity in health economics and financing had been systematically built up in the Health Systems Research Institute through doctoral study and workplace training. This provided the basis for formulating an evidence based policy and developed skills in interfacing research and policy. In addition, public health advocates and leaders were active at senior levels of the bureaucracy and were therefore able to take the political imperative and translate it into effective action. It is still unclear, however, whether the scale of the reform undertaken by the Thai government is manageable within its capacity.

Box 2: Key elements of healthcare provision under the 30 baht scheme

- The contractor unit for primary care is contracted by the province to be the main deliverer of health care to its registered population; individuals must register with it
- Primary care units (health centres and units set up in hospitals to provide primary care) are assigned to deliver primary health care
- A typical rural contractor unit network comprises a district hospital with all health centres in the district. In urban areas it is the provincial or tertiary care hospital with several urban health centres
- The contractor unit receives a capitated budget to provide comprehensive primary care services to its registered population
- Patients can access either the health centres or the hospital associated with their contractor unit. Referrals can then take place to other hospitals
- Inpatient care is reimbursed from a provincial budget based on a weight of the diagnosis related group, adjusted for location (eg, community or provincial hospital)
- Patients who do not use their assigned providers must pay the cost themselves

Cost of universal care

Estimating the financial implications of universal care and setting capitation rates has been contentious.^{9,10} Some analysts propose a capitation rate as high as 1500 baht.¹¹ In fiscal year 2002, the government used a per capita rate of 1202 baht (see bmj.com for calculation details). A rate of 1414 baht was set for 2003. A key issue in setting this was compliance—the extent to which patients use their registered provider rather than another (in which case they must pay themselves). The 2003 figure assumed 85% compliance for outpatients and 100% for inpatients. Compliance rates also have implications for the revenue of public hospitals from user fees. Before universal coverage was introduced, public hospitals received 20-50% of their income from user fees. The total health budget for 2002 was 51bn baht. Comparable figures for spending in earlier years are difficult to identify, but spend has not increased to the same extent as the number of people covered.

The per capita allocations for 2002 and 2003 resulted in many provinces and hospitals having deficit budgets. This partly reflected the previous geographical funding imbalance relative to population. Rather than phase in the new formula, a contingency fund of 10% (5bn baht) was set up to relieve hospitals in 2002. However, because of fiscal constraints and evidence of low compliance among universal coverage beneficiaries, no contingency fund is planned for 2003. It is too early to tell if this will give rise to problems. Teaching and other supertertiary hospitals have been particularly affected by the financial redistribution. Although some special provision has been made, a separate stream of funding for teaching and research activities may be required.

If the universal coverage scheme relies totally on general taxation and the capitation rate is not adjusted to reflect costs and usage, the quality of care and confidence in the scheme could deteriorate. Various options are available to manage the financial pressures generated. These include:

- Changing the benefit package (this would be politically difficult)
- Collecting contributions from beneficiaries through higher copayments (for higher income users or for some services) or some kind of social insurance contribution or separate tax (the National Health Security Act provides for this)
- Expanding the social security scheme to include spouses and dependants so reducing the numbers covered by the 30 baht scheme.

Strengthening primary care

The universal coverage scheme combines capitation funding with a shift to delivery led by primary care to help keep costs under control. A typical province will have five to seven district primary care networks, each led by a contractor unit (see box 2) with one or two networks in the provincial city. This is a radical change from the social security scheme, which uses large hospitals (over 100 beds) as the main contractor. When the social security scheme was set up, primary curative care was largely delivered in hospital outpatient departments or by government doctors working out of hours in private clinics.⁶

For the hospital dominated Thai healthcare system, the emphasis on primary care in the universal scheme represents a bold departure. Initial problems included a shortage of doctors to staff primary care units, necessitating use of hospital doctors in rotation, and little attention being paid to preventive and health promotion services. High level policy makers have so far not been prepared to put the necessary staff management mechanisms in place to support redeployment. Little attention has been paid to the role of provinces in purchasing and monitoring quality of care and to the importance of giving people choice of contractor. Very limited private sector participation is allowed, even in urban areas where a large private sector exists.

Will the reform benefit the right people?

Before the latest reforms, the Thai healthcare system was notoriously inequitable. Public expenditure (health, education, and public infrastructure) has favoured middle income over poorer families because of their greater use of public services,¹² the extensive reliance on user fees, and the inequitable pattern of public subsidies.¹³ A recent study indicates that expenditure on district hospitals benefits poorer people more than expenditure on provincial and teaching hospitals (P Hanvoravongchai et al, paper presented at Manila meeting, May 2003).

A survey shortly after introduction of universal coverage found that those in the lowest income fifth were spending 7.5% of their income on health compared with an average of 1.6% and 0.1% for those in the social security and civil service schemes.¹⁴ This suggests that the scheme has not yet provided effective financial protection.¹⁴

Compliance rates are low (see table A on bmj.com). One interpretation is that the scheme is not giving people access to their preferred providers. However, compliance rates are higher than in the early years of the social security scheme and show a satisfactory income gradient, suggesting that richer groups are self selecting out of the universal coverage scheme. Moreover, bypassing primary care to tertiary provincial hospitals has hitherto been routine, and it will take time to gain patient confidence in the quality of primary care. A Ministry of Public Health report has found the ambulatory caseload in tertiary provincial hospitals has decreased since the scheme began.¹⁴

Conclusions

The Thai policy is a bold reform driven by top level political imperatives and incorporating many innovative features. However, the approach has carried with it many problematic side effects, including driving major reforms in healthcare delivery through changing financing mechanisms. A continued emphasis on monitoring, evaluation, and research will be vital in fine tuning the reforms. Major revisions may need to be considered if the policy is to survive. These include allowing greater patient choice, providing greater opportunity for private sector participation and competition in urban areas, strengthening further the rural district health system with adequate clinical staff, protecting key national functions such as teaching and research, and expanding the sources of finance beyond general taxation.

Summary points

Thailand combined the introduction of universal access to subsidised health care with a radical shift in funding away from urban hospitals to primary care

Implementation was facilitated by strong political imperative and previous experience from existing health schemes

Redirection of funds to primary care left many hospitals with large deficits

Staff need to be redeployed to primary care units, which are still underdeveloped

Patients are used to accessing care from hospitals and choosing their provider

Confidence in primary care needs building, and the scheme may have to be modified to permit more choice and raise more funding

Contributors and sources: This paper was prepared from a review of the relevant literature including Thai documents, talking to key individuals in Thailand, and use of the extensive experience of two of the authors of the Thai healthcare system. AT has worked on health reforms for 10 years. AM has been involved in research on the Thai health system since 1990. VT has been a full time researcher on the Thai health system for many years.

Competing interests: AT was funded by the Thailand Pharmaceutical Producers and Pfizer to attend and present at a conference in Thailand in January 2002. AM has been reimbursed on several occasions to attend and present at health reform conferences in Thailand. VT has an institutional grant from the Thailand Research Fund for research and capacity building in health policy and systems.

- Mills A. The route to universal coverage. In: Nitayarumpong S, Mills A, eds. *Achieving universal coverage of health care*. Bangkok: Office of Health Care Reform, Ministry of Public Health, 1998:284-99.
- Green A. Reforming the health sector in Thailand: the role of policy actors on the policy stage. *Int J Health Plann Mgmt* 2000;15:39-59.
- Pannarunothai S, Srithamrongsawat S, Kongpan M, Thumvanna P. Financing reforms for the Thai health card scheme. *Health Policy Planning* 2000;15(3):303-11.
- Nitayarumpong S, Pannarunothai S. Achieving universal coverage of health care through health insurance: the Thai Situation. In: Nitayarumpong S, Mills A, eds. *Achieving universal coverage of health care*. Bangkok: Office of Health Care Reform, Ministry of Public Health, 1998:258-80.
- Pramualratana P, Wibulpolprasert S, eds. *Health insurance systems in Thailand*. Bangkok: Health Systems Research Institute, Ministry of Public Health, 2002.
- Mills A, Bennett S. Lessons on the sustainability of health care funding from low- and middle-income countries. In: Mossialos E, Dixon A, Figueras J, Kutzin J, eds. *Funding health care: options for Europe*. Milton Keynes: Open University Press, 2002:206-25.
- Figueras J, Saltman RB, Rathwell T, Walt G. Implementing successful health care reforms: minding the process. In: Mills A, ed. *Reforming health sectors*. London: Kegan Paul, 1999:246-60.
- Mills A, Bennett S, Siriwanarangsun P, Tangcharoensathien V. The response of providers to capitation payment: a case-study from Thailand. *Health Policy* 2000;51:163-80.
- Tangchareonsathien V, Prakongsai P, Patcharanarumol W, Tisayatikom K. Respond to observation on the weakness of 1202 baht [letter, in Thai]. *J Health Sci* 2002;11:759-66.
- Prakongsai P, Patcharanarumol W, Tisayatikom K, Tangchareonsathien V. Capitation rate of the universal health care coverage for the fiscal year 2546 (2003AD) [in Thai]. *J Health Sci* 2002;11:599-613.
- Health Systems Research Institute. *Towards universal health care coverage in Thailand. A working group report* [in Thai]. Bangkok: HSRI, 2002.
- Patmasiriwat D. Fiscal analysis: tax incidence and benefit incidence from government spendings [in Thai]. *Thai J Dev Admin* 2003;43:23-71.
- Tangchareonsathien V, Supachutikul A, Lertindumrong J. The social security scheme in Thailand: what lessons can be drawn? *Soc Sci Med* 1999;48:913-24.
- Pannarunothai S, Patmasiriwat D, Kongsawat S, Srithamrongsawat S, Suttayakom W, Rodsawaeng P. *Sustainable universal health coverage: household met need* [in Thai]. Phitsanulok, Thailand: Centre for Health Equity Monitor, Naresuan University, 2002.

(Accepted 20 November 2003)