International

An overview of the healthcare system in Taiwan

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Key messages

- A national health insurance system was introduced in Taiwan in 1995.
- The Taiwanese healthcare system is characterised by good accessibility, comprehensive population coverage, short waiting times, low cost, and national data collection systems for planning and research.
- Problems with the system include short consultation times and poor gatekeeping of specialist services.
- Concern about quality of healthcare is another key issue that the Taiwanese government will have to address in future years.

Why this matters to us

There are different ways to provide universal health coverage. Taiwan and the UK have taken different approaches and there are lessons that can be learned from the respective experience of the two countries. For example, the UK system has a much stronger focus on the gatekeeper role of primary care physicians. The Taiwanese system by contrast allows for greater patient choice.

Keywords: to come

ABSTRACT

Taiwan adopted a national health insurance system in 1995. It is a government administered insurance-based national healthcare system. Although, like the UK, Taiwan has a single payer system for healthcare, there are several differences between the two systems. The characteristics of the Taiwanese system include good accessibility, comprehensive population coverage, short waiting times, relatively low

costs and a national health insurance databank for planning, monitoring and evaluating health services. The weaknesses include variable quality of care, a weak gatekeeper role and increasing financial pressures.

Keywords: health insurance, health services accessibility, national health programs, primary healthcare

The Taiwanese national health insurance system

Taiwan is a small country with a population of 23 million located in the eastern part of Asia. It was first called 'Ilha Formosa' (Beautiful Island) by the Portuguese in 1544. The economy of Taiwan has developed rapidly in the last 60 years and there has been a rapid transition from an agricultural-based to an industrial-based economy. The life expectancy for Taiwanese people in 2008 was 75.6 years for males and 81.9 years for females¹ as compared to 77.4 and 81.6 years for males and females in the UK in 2008, respectively.² In the capital city, Taipei, life expectancy was 79.7 years for males and 84.4 years for females in 2007¹ as compared to 77.9 years old for males and 82.4 years old for males and females in London in 2005–2007, respectively³.

The Taiwanese government adopted a nationwide health insurance system in March 1995, the national health insurance (NHI) system. Before the introduction of the NHI, there were a range of separate insurance schemes covering around 57% of the population.⁴ These included labour insurance, governmental employee insurance, farmers' health insurance and fishermen's health insurance. However, most of the general practitioners (GPs) practiced independently, and there was a high-level of out-of-pocket payments from patients. The NHI system consolidated all these small insurance schemes into a single national insurance system. The principal goals of NHI were to improve the efficiency of the Taiwanese healthcare system, and to improve social justice by increasing healthcare coverage. The organisational structure of the health system in Taiwan is shown in Figure 1.

The revenue for the NHI program comes from several sources: employees, employers and government, both national and local. There are special programs for different degrees of governmental premium subsidies for low income populations and disadvantaged popu-

lations. The insured are classified into six main categories and 15 subcategories based on their job and income. The percentage of the premium paid by the insured for each category varies from 0% for low income citizens to 100% for the self employed. The percentage of the revenue coming from government and the insured/employers was 23.2% and 76.8% in 2008, respectively.⁵ The percentage of gross domestic product (GDP) spent on healthcare was 5.0% in 1994 (the year before the NHI system), and 5.2% in 1995 (the first year of NHI system).⁶ The percentage of GDP spent on healthcare is currently 6.2% in Taiwan⁷ in contrast to 8.3% in the UK, 10.7% in Germany or 11.6% in Switzerland.

Both retrospective (RPS) and prospective payment systems (PPS) are adopted in the Taiwanese NHI. The unit of payment is mainly fee for service, although case payment is used for certain diagnoses, and per diem payment is allowed for chronic psychiatric problems and community services. The Bureau of National Health Insurance started to use the diagnosis-related group system (Tw-DRG) in January 2010. Every service is accompanied by a co-payment, irrespective of the age of the patient. Only the cancer screening programs and annual physical checkups of people older than 65 are exceptions to this, in order to improve their uptake rates. The co-payments vary in different institutions, from £6.37 in hospital medical centers to £1.09 in GP clinics.⁸ Those patients who cannot afford co-payments receive public assistance.

Every Taiwanese citizen has a NHI IC card (integrated circuit card, a smart card), which is used to identify the person, store a brief medical history and to bill the national insurer. The patient has to bring his NHI IC card each time he/she utilises medical services. The hospitals will then claim the related charges from the government. The claims process for healthcare providers is very rapid, in contrast to the rather lengthy processes for payment seen in the USA and UK. Hence, there is a clear link between activity and payment.

Figure 1 The organisational structure of the healthcare system in Taiwan.

In Taiwan, GPs earn their income mainly through patient consultations, drug prescription and minor procedures. Sometimes, GPs provide additional services such as cosmetic laser treatment, aesthetic surgery or detailed health checkups. Self-paid advanced health checkups are relatively prevalent in Taiwan, reflecting the general concerns that people have about their own health. These are areas not covered by the NHI and are paid out-of-pocket by patients.

The financial structure of the Taiwanese NHI system is shown in Figure 2.

Strengths of NHI

Good accessibility

The NHI has a very high approval rate among Taiwanese people. Taiwanese citizens can see any doctor without a referral. They may also go to any level of hospital directly, as they wish. However, larger, more popular hospitals charge a higher co-payment and can be overcrowded. Seeing a GP is much cheaper. Patients often choose to see a family doctor for minor illnesses, preventive care, health checkups, consultations with multiple complaints, because of poly-pharmacy, or simply because they have good relationships with their family doctor.

Comprehensive coverage

The NHI covers almost all services that can be provided by a health system: from dental care to parturition, from Western medicine to traditional Chinese medicine, and from preventive services to elderly home care.⁸ 'Cheap and abundant care' is the best description of Taiwanese NHI.

Figure 2 Financial structure of the Taiwanese NHI system

Short waiting times

Although the insurance scheme is run by the government, private providers including doctors and hospitals dominate the healthcare market. There are more private establishments than the public ones. All providers claim and compete for payments from the NHI.

There is generally no waiting list and patients can normally see any specialist they wish to during the usual working hours. For example, if a patient sprains his/her back while doing house chores one evening, he/she may see an orthopaedic specialist, a pain specialist, a neurologist or a family physician directly the very next morning. The only exception is when the physician whom the patient wants to see is very popular, in which case there may be a waiting list for the appointment. The surgical waiting list for elective procedures is usually short as well.

Low cost

Owing to the single insurer system, Taiwan's NHI has one of the lowest administrative costs in the world, typically under 2% of total healthcare spending. Every year, the Department of Health negotiates with physicians and hospitals to set the global budget, and this helps keep the cost of the NHI down.

There is also a panel review system of medical records to keep healthcare costs down, whilst maintaining the quality of healthcare. Procedures considered inappropriate by this specialist panel will not be paid.

High coverage rate

It is mandatory for all citizens in Taiwan to join NHI except for prisoners or people who have moved out of Taiwan. The coverage rate is around 99%. Taiwanese citizens living overseas who maintain the residence registration in Taiwan are also covered by NHI and are required to pay the premium. Those who live in other countries often come back to Taiwan for major surgery or annual health checkups. Foreign nationals with legal residence in Taiwan may join NHI through their employers.

Nationwide research databank

The NHI claim and administrative data is kept in the Department of Health. The National Health Research Institutes also keeps a complete database from the date the NHI first started for research purposes. The identities of patients in the database are anonymised. The dataset is open to the public upon application.⁹ The system also helps public health officials monitor the effects of policy implementations.

Weaknesses of NHI

Quality of outpatient visits

There is a high level of health seeking behaviour in Taiwan. It is part of the Taiwanese culture to take medicines or to seek medical help frequently, even for minor ailments. The average outpatient department visit rate is 14 times per year per person². This is substantially higher than the equivalent rate in the UK.

To ensure their incomes are maintained, seeing 50 patients in a morning is quite common for GPs in Taiwan. Hence, each patient may receive no more than five minutes of physician time during a consultation. Such short contact time may result in poor patient–physician rapport and inability to deal with complex problems in one visit. As a consequence, patients often attend for a second or a third opinion, thus contributing to even higher patient volume and higher medical costs.

Weak referral system

One consequence of easy accessibility to specialists is that the ‘gatekeeper’ role of family doctors is relatively weak in Taiwan. Unlike the UK, Taiwanese are able to choose their healthcare providers freely. Having no gatekeeper means there is no check on whether Taiwanese use specialty healthcare appropriately. Large medical institutions are always at full capacity from patient admissions, and patients may find it difficult to get admitted, while the number of middle sized hospitals is shrinking progressively.

This problem has now been recognised and there are several ongoing programs initiated by NHI to solve the problem of the weak gatekeeper role. One of them, to encourage the gatekeeper role in the referral system, is to offer a discount on the co-payment for patients referred by GPs to specialists in hospital medical centres.

Financial problems

As in the health systems of many countries including the UK, significant financial problems exist in Taiwan. The payment systems for healthcare providers are formulated in global budget and based on the care provided. The new pharmaceutical agents and medical technologies that emerge also pose financial dilemmas to the health system. Currently, the Taiwanese NHI does not take in enough money from premium payment to cover the entire healthcare provided by the hospitals and other healthcare personnel. The government often has to provide additional funds to keep the system running. The problem is complicated by politics

because any premium increase would require the approval of the Legislative Yuan (Parliament).

Comparison with NHS

Both the British and the Taiwanese health systems are single-payment systems. However, the method of funding is different as one is tax based, and other insurance-premium based. However, all citizens are covered by the health system in both countries. Both systems avoid selection of the young and healthy, as often seen in private health insurance schemes. Such universal coverage programs tend to be cheaper and much simpler to administer than profit generating insurances companies.

With regard to medical providers, the British system is more ‘socialised’, with the state both providing and paying for health services. Long waits and limited choice have been limitations of the NHS, with ongoing government initiatives to address these problems. In Taiwan, providers are primarily private and free to compete with each other, despite the presence of some public hospitals. The Taiwanese NHI system is closer to the Canadian NHI system. Accessibility is not currently its main concern now, but gatekeeping and quality of care are its most pressing issues. This is particularly the case in the metropolitan area of Taiwan where waiting times are generally short and medical resources have been described as ‘more than enough’ by Dr Sun-Yran Chang, superintendent of Taipei City Hospital, the biggest community hospital in the capital. According to the data provided by NHI, there are on average 76.61 hospital-beds per 10 000 people in Taipei city.¹⁰

Future perspectives

Moving into its second decade, the NHI continues to achieve high satisfaction rates among the Taiwanese people. Based on public opinion polls held by the Bureau of NHI, the overall satisfaction rate has consistently been over 70%.¹¹ The next big challenge for the Taiwanese government is to improve quality of care while keeping national healthcare expenditure under control. One quality of care area that the Taiwan NHI is working on to improve is ‘pay for performance’ schemes. This is an area where the UK has substantial experience through the quality and outcomes framework (QOF) for general practitioners. QOF has been closely studied by policy-makers in Taiwan in developing the pay for performance programs. However,

the efficiency of the Taiwanese system may be an area where the UK NHS can draw lessons from Taiwan.

CONFLICTS OF INTEREST

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