

Sustainability of Bhutan's Health Services

Dr Sangay Thinley, Jayendra Sharma, Kinzang Wangmo

Existing Health System

The Bhutanese health system is predominantly government driven, both in financing as well as provision, and follows the principles of Universal Health Coverage. Service delivery, based on Primary Health Care, focuses on the promotive, preventive, curative and rehabilitative approach. The integration of traditional and allopathic medicines which are delivered through the same system has given a unique feature to the Bhutanese health system.

Since the beginning of a formal health care system, health services have been provided free of charge by the Government. Comprehensive services are delivered through a network of Outreach Clinics, Sub-posts, Satellite Clinics, Basic Health Units, District/General Hospitals, Regional Referral Hospitals and the National Referral Hospital. Services include referral outside the country, when needed, at the State's expense. The provision of free health care is now enshrined in the constitution (Article 9, Section 21) which states that "The State shall provide free access to basic public health services in both modern and traditional medicines".

Achievements

The health of the Bhutanese has improved rapidly since the start of the planned socio-economic development in the 1960s. In five decades the life expectancy has increased to 69.5 years in 2015, from 32.4 years in 1960 (WDI). Bhutan was officially declared polio free in 2014, Universal Childhood Immunisation was achieved in 1991, and leprosy was declared to be not a major public health problem in 1997. People enjoy over 95 percent access to improved water sources. Whilst goiter was a common feature in the past, it is a rarity now with iodine deficiency eliminated by 2003. Between 1984 and 2012 (in 28 years), Maternal Mortality Ratio decreased by 89 percent, Infant Mortality Rate and Under Five Mortality Rates reduced by 70 and 77 percent respectively. By 2015, as targeted, Bhutan achieved the health Millennium Development Goals (MDGs). Adult mortality rates, both male and female, also have declined substantially over the decades and currently the rate is 209.7 for males and 216.4 for females.

Bhutan's Goals and the SDGs

A rapid integrated assessment conducted by the United Nations reveals that 143 of 169 Sustainable Development Goal targets are relevant for Bhutan in the 11th Five Year Plan (FYP). Of the 143 targets, 134 were found to be already integrated into the Plan, illustrating a high level of alignment. More synergies are expected with the 12th Plan as the 16 identified national key result areas are directly correlated with 16 of the 17 SDG goals. So, it can be said that the Bhutan's health service goals are very much aligned with 2030 SDG goals and targets. Subsequent plans also are bound to be aligned with the SDGs as Bhutan's developmental plans are based on the principles of Gross National Happiness which promotes people's happiness and well-being, similar to the SDGs.

Sustaining the health services involves maintaining the gains and achievements that have been made so far, and focusing on the health targets that have been outlined in the SDGs: reducing maternal mortality; ending preventable deaths of newborns and children under five years of age; tackling the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases; combating hepatitis, water-borne diseases and other communicable diseases; reducing premature mortality from non-communicable diseases; strengthening the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol; reducing deaths and injuries from road traffic accidents; ensuring universal access to sexual and reproductive health-care services; achieving universal health coverage; reducing the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination; and addressing other crosscutting targets.

Among the nine SDGs, Goal 3 targets is the target to achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all, which is the main objective of the health sector. Another relevant objective is to increase health financing and the recruitment, training and retention of the health workforce. Likewise, other SDG health targets and cross-cutting targets are also the ones the health sector is in the process of addressing.

Institutional and Financing Mechanisms Supporting Health Services

Health services are mainly financed by the government and, to some extent, by external aid, households (Out of Pocket), Bhutan Health Trust Fund (BHTF)

and private insurance. Government support is primarily from its own domestically derived revenues plus transfers from development partner funds and the yield from the Bhutan Health Trust Fund (BHTF). Additionally, health-related revenues are collected in the form of user fees for some services and a pay-roll health contribution levied on employees working in formal sectors. Voluntary health insurance schemes and enterprise financing schemes constitute a small share of the health financing schemes in the country. Health pay-roll contribution and user fees would, if earmarked to health, constitute 5.5 percent and 2.21 percent of the TGHE respectively as per the 2014-15 fiscal year information.

The Royal Government has accorded high priority to the health sector in the Five Year Plan (FYP) outlays. The outlays have increased steeply over the Plan periods, from Nu 3.1 million in the 1st FYP to Nu 205.6 million in the 5th FYP and Nu 2,904.11 million in the 8th FYP to Nu 13,952.96 million in the 11th FYP.

Table 1 Health Expenditure Trends in Bhutan

Indicator	1995	2000	2005	2010	2014
Total Health Expenditure (THE) % Gross Domestic Product (GDP)	4.0	6.9	5.3	5.2	3.6
General Government Health Expenditure (GGHE) as % of Total Health Expenditure	67	77	79	88	73
General Government Health Expenditure (GGHE) as % of General Government Expenditure (GGE)	7	12	12	11	8
Private Health Expenditure (PvtHE) as % of Total Health Expenditure (THE)	33	23	21	12	27
Out of Pocket Expenditure (OOP) as % of Total Health Expenditure (THE)	33	23	21	11	12

Source: Global Health Expenditure Database, WHO- 2016

The Total Health Expenditure (THE) as a proportion to Gross Domestic Product (GDP) increased from 4.0 percent in 1995 to 6.9 percent in 2000 but fell to 3.6 percent in 2014 (Table 1). The General Government Health Expenditure as percentage of GDP has remained between 3-5 percent since 1995. In 2014, TGHE including grants from development partners was 73 percent of the THE and Private Health Expenditure including OOP and insurance about 27 percent.

Issues and Challenges in Sustaining the Health Services

There is an ongoing debate in the country on the sustainability of the predominantly public financed health care in the face of escalating healthcare costs, increasing public expectations, and the emergence of more complex and costly pathologies associated with non-communicable diseases. There are also calls for diversification of health financing sources including the gradual emergence of the private sector in health care. It is important to firmly establish the evidence of equitable/pro-poor approach to health financing in Bhutan to inform these policy debates.

Sustaining health service in the Bhutanese context is to ensure free health services as mandated by the constitution. This constitutional provision to provide free access to basic public health services in both modern and traditional medicines has not only meant providing access to free preventive, promotive, curative and rehabilitative services but also advanced diagnostic and organ transplant services. In 2014-15 patient referrals outside for the services that could not be provided locally cost about Nu 185 million which is about 5.35 percent of the Total Health Expenditure. Therefore, it may be necessary to define what it means “to provide free access to basic public health services” while addressing the issue of sustainability of health services as there are huge cost implications from an all-inclusive health services package. Although a start has been made by charging user fees for services that are of cosmetic nature and not strictly a health service imperative (medical certificates, and cabin charges), the range of services to be provided under the constitutional mandate needs to be defined so that the rights and responsibilities of both providers and consumers are clearer and appropriate provisions are made to finance the package. Even Universal Health Coverage, which is a target of the SDGs, advocates a benefit design, rationing mechanisms, and the basis for entitlement for its coverage.

Expectations of the citizens regarding health services are growing rapidly along with the technological advancements in the field and their availability in neighbouring countries and beyond. While health services is still in the process of expanding the range of services at the secondary and tertiary levels, depending on the availability of human resource capacity, keeping pace with technological developments would mean additional costs; for instance, to procure equipment and train people to use them effectively.

Another cost driver for health services will be the non-communicable diseases, requiring huge investments to treat them as well as to sustain usually prolonged treatment schedules. Environmental and occupational health protection will also entail costs which have been minimal till now.

Resources from external sources played an important role in health development, particularly in the 1990s, constituting about 30 percent of the THE. However, this has been reducing steadily over the years and it constituted only 6 percent of the THE in 2014, a five-fold reduction from 1996. As Bhutan graduates to a lower middle income country and then to a middle income country these resources are expected to dwindle further. In fact the Global Alliance on Vaccine Initiative (GAVI) which has been supporting us with vaccines, and the Global Fund for HIV, TB and malaria have already categorised Bhutan as a GAVI/GF graduating country.

One of the health service delivery challenges and, in that sense, sustainability, is human resource, both in terms of numbers and capacity. There is an acute shortage of specialised and super specialised categories of the health workforce including general doctors. There is a need to make concerted efforts to bridge this gap. Currently, the number of doctor and nurses per 10,000 population is 3.3 and 14.1 respectively, a ratio which urgently needs to be improved. The current health workforce is just over 4,000, including the administrative staff, although the HRH Master Plan (2013-2023) estimates a staff requirement of more than 10,000. The development of the remaining workforce and their retention need to be prioritised. With the establishment of the Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB) which is an institute which has both pre-service and in-service programmes, including CMEs, the task may be easier and under greater control compared with times when Bhutan has had to depend on institutes in neighbouring countries.

Macroeconomics and Health

Health and economic development are inherently intertwined. Besides being in itself an intrinsic good, the good health of the population contributes to economic growth (Gyimah-Brempong and Wilson 2004; Bloom *et al.* 2004; Commission on Macroeconomics and Health 2001). This close interrelationship is also explained through a reverse pathway where national wealth is argued to be one of the pre-conditions for population health status (Pritchett and Summers 1996). The United Nations General Assembly resolution on *The Future We Want* summarised this important interrelationship by highlighting the role of health as “a precondition for and an outcome and an indicator of all three dimensions of sustainable development”(United Nations 2012).

Financial sustainability in health, which is frequently debated, essentially means that the expenditure on health care and the returns of health care must be aligned.

Bhutan has sustained high levels of economic growth averaging 8.4 percent per year between 2006 and 2013. The economy is among the world's fastest-growing economies and registers a relatively higher growth rate projection (International Monetary Fund, 2014). This momentum of robust macroeconomic conditions and increased government revenue could contribute to increasing budgetary space for health translating into sustainable government health investments evolving to scaled-up health interventions, expenditures and outcomes.

Sustaining Health Services Beyond SDGs

As the economic, social, agricultural and industrial environment is dynamic and changing, as is the age structure of the population and expectations of the people, and resources are finite, two questions need to be asked in the context of sustainability: What is the preferred content of services that best meet the needs of the population? What is the preferred mix of financing arrangements and organisational arrangements for the services that are affordable and equitable? Having raised the issue of the first question earlier, answers to the second question will be outlined in the subsequent paragraphs. Before that, based on the experiences and lessons learnt from health services so far, some points which will contribute to sustainability need to be highlighted. They relate to improving efficiency, both technical as well as allocative.

- Although people are expected to use health facilities in their communities, they use facilities in the urban areas (Damrongplasit et al, 2016). This increasing preference and use of health services in urban areas puts service pressures on these urban secondary/tertiary facilities, resulting in a lack of continuity of care and sub-optimal utilisation of services in the rural areas. In fact the national referral hospital outpatient (OPD) is crowded by patients seeking care from all parts of the country. The cost of using a higher level of facility is more than a lower level. The average cost of an OPD visit at Referral Hospital was Nu 635 and Nu 161 for BHU II (MoH, 2011). Instituting a formal gatekeeping system and adhering to the referral system will go a long way in saving costs and improving the quality of care.
- There are observed differentials in district level average length of stays in hospitals where longer lengths of stay are concentrated in districts with higher levels of health facilities. Further, efficiency levels are variable among different districts and health facilities. Analysing and addressing these has the potential to generate efficiency gains.
- Access to essential drugs is being maintained at over 95 percent in all facilities across the country (Ministry of Health, 2015). However, availability of free

medicines and supplies has limited population cost-consciousness and value for services, contributing to wastage. Therefore, among the measures to generate value for money including adherence to the periodically updated national Essential Drugs List (EDL) and the use of generics in mainstream drug procurement and distribution, mechanisms for creating cost consciousness and understanding of the value of the services amongst the population need to be put in place.

- Significant reforms to improve efficiency in the drugs and medical supplies procurement and distribution processes have been carried out. However, given the complete dependence on import of medical supplies and the small volume required, Bhutan remains vulnerable to high cost for medicines and supplies. Therefore, to reduce cost pressures, regional negotiation on best possible price given assured quality of medicine and vaccines that have been initiated through WHO needs to be pursued.
- Service providers are all salaried employees. While salary differentials have been made to benefit health professionals, in absence of a robust performance driven provider payment mechanism, there are limited contributions to efficiency improvements. Therefore, alternative payment mechanisms which could lead to improving the efficiency of the service providers could be explored.
- The current system of paying healthcare providers, via allocation of budget by Ministry of Finance adopting the line item budgeting, may not be the most efficient payment mechanism. Re-structuring these payment mechanisms to ensure efficiency gains by different levels of healthcare providers could be explored.
- The increasing cost of patient referral abroad merit to be studied closely, vis-a-vis introducing services within the country or to continue the referrals. Savings on the costs could be obtained by introducing the services that do not require too heavy an investment in-country and tendering for treatment packages and reviewing them from time to time.
- Health programmes are usually rolled out universally covering the whole country except malaria control programme which is focused in the endemic areas. A more cost-effective approach will be to target interventions to populations that need the services most, which would entail rigorous collection, analysis and monitoring of localised data/information.

Preferred Mix of Health Financing and Organisational Arrangements

The public financed and publicly managed health services of Bhutan has performed well, bringing about substantial gains to the health of the population. Bhutan is among the global top performers in life expectancy gains in the last 40 years. Minimal burden is posed by health expenditure on household livelihood with a largely progressive health financing framework. Therefore, while talking of a preferred mix of health financing and organisational arrangements, there is no other than the current mix that is best placed to sustain health services in Bhutan. Nevertheless, the following avenues need to be explored to meet the needs of the population against the backdrop of rapid technological evolution, escalating costs, and finite resources.

Primarily, it is important to sustain an adequate level of government investment in health. Currently the government budget outlay for health is around 6.5 percent and the total health expenditure as percentage of GDP is 3.6 percent. This would need to be increased to meet the increasing expenses and sustain the services. By global standards, for a country like Bhutan, an allocation of around five percent of the GDP and about eight percent of the total government budget on health is considered adequate to ensure universal health coverage (11FYP). The costs, however, will depend upon the benefit package that is to be covered.

In order to supplement the public finance, alternative options of financing and resource mobilisation will have to be explored.

Currently, there is no earmarked tax for the health sector except the payroll health contribution of 1 percent which has been allocated to the Bhutan Health Trust Fund (BHTF) since 2014. Earmarked taxes and excise duties on products such as tobacco and alcohol are an appropriate source to supplement overall government health expenditure. Some countries, like Thailand, charge a special tax (surcharge/health tax) of two percent on alcohol and tobacco which is allocated to the Thai Health Promotion Foundation. In Bhutan, the existing tax for import of alcohol and tobacco is 100 percent and the sales tax on beer, alcoholic drinks, aerated water (point of sale) constituted 2.9 percent of the total revenue (Ministry of Finance, 2014). A similar surcharge/health tax could also considered for collection in Bhutan so that more resources could be generated to sustain the health services.

The Bhutan Health Trust Fund is an innovative mechanism set up by the government to sustain the investments in primary health care through a sovereign and self-sustaining resource framework. Notable efforts are being made to enhance the corpus

and scope of the fund to enable it to finance primary health care services for all time. The aim of the Bhutan Health Trust Fund is to achieve a target capitalisation of USD 24 million and have a capital of approximately USD 21 million with returns of 8.75-10 percent per annum (approximately USD 2 million) currently. The BHTF in the past years has been co-funding procurement of pentavalent vaccines but from 2010-15 financial years, it is financing the entire essential medicines requirement of the health services. The Fund has the potential to increase the current share (0.169 percent) of the Total Health Expenditure provided that the Fund is fully endowed and the capital is invested astutely. Further the mandate and scope of the Fund, given the increasing needs which was not envisioned earlier, may need to be reviewed. One consideration that could be given is to allocate any additional tax that is related to health to the Fund in addition to the current payroll tax.

Social health insurance is a mechanism adopted by some countries for health financing along with tax-financing, private health insurance, and community insurance. However, it may not be feasible in Bhutan considering the small base of its formal sector. Moreover, as highlighted earlier, a payroll health contribution of one percent is being already made. Increasing the amount of this contribution could contribute to financial sustainability of health services.

Voluntary/private health insurance play a very small part in health financing in Bhutan. A start has been made by the Royal Insurance Corporation of Bhutan (RICBL) for treatment abroad. For the 2012-13 financial year, voluntary health insurance accounted to 0.31 percent of the Total Health Expenditure covering one percent of the population. Over 10 percent of the total premium collected are contributed by government (state owned corporations), while over 86 percent is contributed by employers of private companies to its employees. The share by individuals on the coverage accounted about 3.5 percent treatment availed within Bhutan (user charges) accounted the major share (72.54 percent) of the total claim followed by treatment in India, which accounted 24.25 percent of the total claims. With an annual premium of Nu 800, a benefit up to Nu 100,000 is covered which covers cost for cabin and transportation charges within and outside the country (RICBL, 2015). From the above available information it can be seen that while the cost to the Government for referral outside may be reduced a little, the insurance only offers choice to the insured to avail services such as cabin facilities, special consultation clinic services and private facilities. So, a review actually may be necessary, particularly for the state owned corporations, to see whether the contributions can supplement the overall government resources rather than offer choice of facilities since essential packages are available to all the population.

Community involvement and ownership is being pursued for maintenance of water supply schemes, ORCs and to some extent BHUs. This is further emphasised with the devolution of power to the Local Government particularly in the area of human resource management which is anticipated to bring about cost effective use of resources. Further strengthening community ownership and involvement in not only ORCs and BHUs but also even to the level of district hospitals would enhance health infrastructure and services.

The question of sustainability will not be complete without looking at the role of user fees and private sector in the health services of Bhutan.

The system of user fee has been highly contentious in literature. It has been argued that user charges lead to unnecessary services for those who can pay, and the under-provision of necessary services for those who are not able to pay (Liu, 2002). There are others who argue for the institution of user fee owing to its ability to generate efficiency, quality and equity (Akin, 1987) and, generally, a method of increasing financial resources of resource-constrained health sectors in developing countries (de Ferranti, 1984). In Bhutan, user fees are charged for non-essential/clinical care services including cabin charges, expensive dental crowns, medical certificates, medicines not on the essential drug list and for services offering a choice (off-hours clinics). The charges contributed, as mentioned earlier, about 2.21 percent (Nu 76.26 million) to the domestic sources in 2014-15. Therefore, user fees have some potential to generate revenue if they are judiciously designed and not applied to essential health services.

Private sector participation in delivery of health services is currently limited to pharmaceutical retail shops and some diagnostic centers. But high-end hospitals maybe on the horizon as the subsequent Economic Development Policies in 2010 and 2017 have recommended selective services in health to be opened to private investment and practices. High end luxury medical facilities are anticipated to earn foreign exchange and generate employment. However specific mention is made that such practices shall not under any circumstances lead to privatisation of the public health services. So, the Government will have to continue to provide free health care through the public hospital network both in modern and traditional medical systems.

Within the above overall outlook for participation of private sector in health, it needs to be seen as to what selective services should be opened to private investment and practices. While there is potential with such action to relieve the government

resources for more needy services, careful consideration should be given and regulatory mechanisms established to protect equity and the rights of the people and that the existing public system is not weakened. Above all opening up health to private sector investments should not lead to development of a dual system of health care but rather be complementary to the public system to sustain health.

A dilemma that the public health services faces, vis-a-vis opening up selective services to private participation and opening high end hospitals, is whether public facilities also should open up ancillary/preferential services on a business model to attract the growing number of people who opt to and can afford to pay for special services within as well as outside the country. In fact, to offer choice, special consultation services- an off-hours service at some hospitals has been initiated for a fee but no charges are levied for the medicines on the essential drug list and laboratory tests. Cabins also are levied user fees but the accompanying services are not charged. Likewise, other enhanced or preferential services for people who are willing to pay could be developed with proper attention to details of consumer preferences and protection of the consumers as well as the health system. If the ancillary services associated with the preferential services are also charged, overtime, such semi-private services may generate substantially more revenues than the nominal user fees to support the health care delivery system. Further, if the services are developed well, people would seek these services for all the reasons that people visit private physicians and hospitals: convenience, privacy, and the feeling that they receive more attention.