Can just any Country Achieve UHC?: Lessons from Different Health Systems

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Abstract

The UN's Sustainable Development Goals-3, to ensure healthy lives and promote well-being for all at all ages, adopts Universal health coverage (UHC) as one of the targets to reduce the inequality and fight poverty. Universal Health coverage (UHC) is the aspiration of the world and the global impetus for a very long time now. Even though WHO shares a framework to achieve UHC, there is no universal way to achieve it, thus, there exists many pathways depending on the socio-economic and political issues faced by the country and yet none of the single pathway is complete in itself to sustain the coverage. Hence we see countries seek to diversify the sources of revenue by using hybrid financing models or make healthcare reforms to sustain UHC. This calls for an innovation in the ways healthcare system is financed. There are many policy levers and combination of factors that may help when implemented to achieve UHC that is inclusive and sustainable in the long-run. Pursuing UHC though is expensive, complex and definitely not easy, but it is achievable.

The study reviews the evolution of diverse health systems of 5 distinct countries (Japan, Thailand, Rwanda, Brazil and Turkey) into achieving UHC as well as draws useful lessons to attain universal coverage for India and any aspiring country from their experience.

Keywords: UHC, Universal healthcare, sustainable development goals, health systems, components of health system

Introduction

The countries in the world have wrestled with the cost benefit analysis of raising their healthcare sectors. Each time a country invests more on health, it is left with a lesser budget for other investments like infrastructure, defense etc. At the same time, better health of people is linked with more productivity and hence healthier economy. Each nation set its own constraints and priorities towards providing equitable healthcare to its people, termed as Universal health coverage (UHC). Though many countries in the world have already accepted UHC as a first concern of health system, more than half of the global population do not have access to essential health services and each year millions are getting pushed into extreme poverty because of the high health expenses (WHO and World Bank). Though improving access to quality healthcare and universal coverage is a global problem, there is no universal solution to it, given the diversity of demographics, economic history and political issues within the nation and cross countries.

The United Nation's Sustainable Development Goals-3 (SDG-3), "*to ensure healthy lives and promote well-being for all at all ages"*, adopts UHC as one of the targets of SDG-3 to reduce the inequality and fight poverty. Strengthening the healthcare systems will not only help reach SDG-3 target of achieving UHC but also positively affect the other SDG's to reduce poverty and unemployment, ensure food security, better education, equality, inclusive societies and economic growth (ONU, 2019). The WHO defines healthcare systems as, "A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health." The strengthening of the health system demands holistic investments in various components of healthcare alongwith embracing reforms in these structures that talk to each other so as to create an optimal system that caters to health needs of the people. There is no standard or universal path to achieve universal health coverage, thus, many pathways and arrangements exists to achieve the basic goal of a healthcare system depending on the socio-economic and political issues faced by the country. The healthcare systems aim at constantly improving patient health, meeting patients need and ensure sustainability for the longer run. While doing so the health systems have to deal with changing demographics, technology advancement, rising cost of healthcare.

The paper proceeds with the evolution of health systems of different countries (Japan, Thailand, Rwanda, Brazil and Turkey) that have followed one of these model into attaining universal healthcare along with brief introduction of healthcare system of India. It then progresses to compare the health system of these countries based on four themes namely, health financing, healthcare reforms, care provisions and human resource. Finally, the paper concludes to draw lessons for the developing countries like India, which is taking bigger strides to achieve UHC.

Japan

Japan's population is declining owing to the stage 5 of demographic transition of the country. The ageing population is causing a significant financial burden on sustaining the healthcare cost of Bismarckian model of Japan. The first health insurance act came in 1922, which resulted in the formation of The Employees' Health Insurance Law (EHI) and Community-based Health Insurance Law (CHI). Even before the act, Japan had its private and public employee covered under some voluntary associations that were not so much of appeal to workers. After the first world-war, the poor economic situation prompted the government and industrial sectors to come up with EHI from health insurance act 1922. The act was more of an industrial policy rather than a medical one and premium were parked on income of individuals usually averaging 10%, capped at 13%. The Great Depression of 1929, hugely affected the Farming community. US being one of the biggest importer of Japan's bumper crop, the plummeting price of rice along with other agricultural product multiplied the economic problems of farmers. Japan, which was gearing up for the second world war, used this opportunity to rope in farmers to build its military. It was then decided by government to provide CHI to cover temporary workers from unorganized sector starting with farmers to fisherman to self-employed. Post second world-war, healthcare were destructed and there was a political conflict to provide health cover to unemployed and poor people that pressured the then LDP government to enact mandatory National Health Insurance (NHI) in 1958 replacing the voluntary CHI to attain equitable health care as well as to sustain his

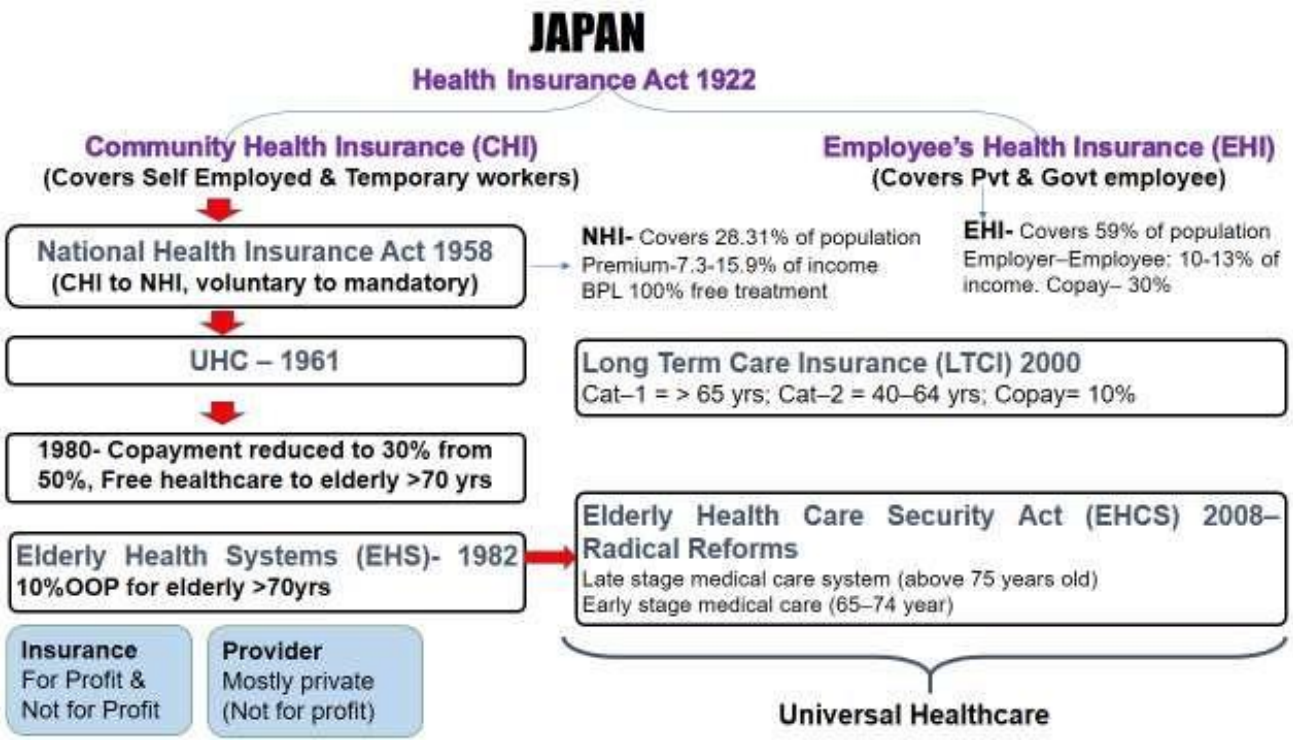
own cabinet. Those living below poverty line enjoyed free healthcare service financed by government subsidies. The premium varied with respect to income ranging from 7.3% to 15.9%. This marked attainment of universal healthcare in Japan in 1961. Though there was UHC, people had to pay 50% copayment from their own pocket. The subsequent reforms by LDP as pressured by the socialist party reduced the copay to 30% and provided free healthcare to elderly above 70 years. This populist policy later imposed heavy financial burden on the Japanese health system. At the same time, rapidly ageing population caused increase in number of retired unemployed pool of NHI thus increasing the health expenditure paid on behalf of this population. Finally the government had to abolish the free healthcare to elderly and made some independent pools out of NHI.

The elderly health systems (EHS) act 1982 requested 10% copay from elderly above 70 years who earlier enjoyed free healthcare. This act was later modified into an independent scheme called Elderly health security act (EHCSA) in 2008. Similarly, the Long term care act (LTCA) 1997, was created as an independent insurance scheme for people with disability, chronic illness or requiring long term care treatment at 10% copay. Thus, the NHI was unburdened and Japan now has 4 mandatory independent schemes i.e. EHI, NHI, LTCA and EHCSA.

There are more than 3000 insurers in Japan that are managed by Ministry of Health and Labor Welfare (MHLW) and classified based on occupation, place of residence and age. The hospitals are predominantly private, licensed by local governments and are not for profit. The MHLW sets the uniform fee schedule to bring prices of the treatment under ambit including those under NHI and all providers must adhere to schedule. The hospitals and clinics submit the claims every month with CRROs (Claims Review and Reimbursement Organizations) chartered in every prefectures that review the claims before sanctioning it to the providers' basis fee schedule. MHLW employs database that banks all the claim data received from providers, known as National Receipt Database (NDB) so as to audit and control the cost efficiently. There is no gatekeeping system in Japan as it takes pride in featuring "free access to healthcare facilities", however, patients need to pay an additional fee to access tertiary care if they do so without a referral from primary or secondary healthcare facility.

Source: (Health & Systems, 2021; Sakamoto et al., 2018)

Figure 1: Japan Health System Evolution



Thailand

Thailand is considered to have one of the most efficient UHC in the world, an outcome of a well-researched and thoughtful policy.

The Medical Welfare scheme 1975, established by Ministry of Public Health (MPOH) marked the first major health insurance program to cover poor people to elderly, children and other unprivileged groups. The program suffered from poor funding and ineffective targeting of beneficiaries and thus, failed.

By the end of the decade, Thailand had array of insurance schemes for government employees, private employees, community health insurance for people in unorganized sectors, welfare schemes for poor, voluntary health card schemes etc. and despite its versatile approach to cover people from every strata, the country was facing issues in providing a universal care.

The careful analysis reflected some challenges and issues with the coverage schemes:

1. There was a difficulty in assessing the target population; some individuals were covered under two or more schemes while other few had none.

2. The staffs providing care were not well trained.

3. The voluntary nature of schemes led to adverse selection and moral hazard.

4. There were no proper infrastructure as facilities provided were limited and geographically not accessible to many.

Thailand ultimately realized that having a universal coverage is not the solution to achieving universal healthcare. It started building on its infrastructure which gained momentum in the late 1990's.

There were three major schemes that rolled out in this period.

The Civil Servant Medical Benefit Scheme (CSMBS) 1980, managed by Ministry of Finance (MOF) covered all the government employees and their dependents without any contribution from their salaries. The scheme is solely financed from the government budget. The beneficiaries could go to any public provider to avail services and also private providers in case of emergency.

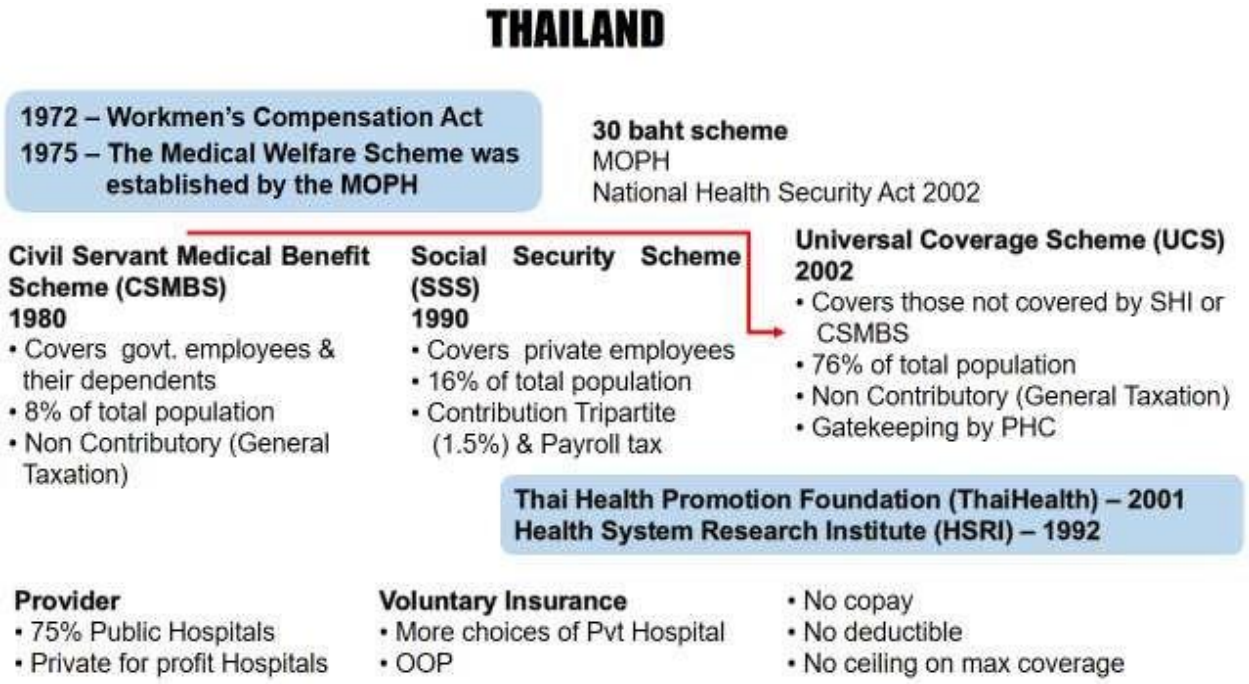
The Social Security Scheme (SSS) 1990, replaced worker compensation scheme (1972) and covered all private employees but not their dependents and was facilitated by tripartite contribution from employee, employer as well as government to provide the mandatory cover under the social security act 1990.

The Universal care scheme (UCS) 2001, funded by general taxes covered the entire population not covered under CSMBS and SSS that is 75% of the total Thai population. It was an improved version of a very popular 30-baht scheme introduced by TRT (Thai Rak Thai) leader as an election campaign that said "30 Baht treats all diseases" to provide free healthcare to its people at just 30 baht copay. The copay was later removed to provide absolute free healthcare to people. There are no deductibles, co-sharing, copayment or limit on maximum coverage.

Thai health system focusses on primary health system, which acts as a gatekeeper to comprehensive curative and rehabilitative care thus keeping the cost under control. The providers are mostly public and reimbursed by the government. There are no insurer but managing agencies for 3 schemes i.e. the Comptroller General's Department, Ministry of Finance for CSMBS, the Social Security Office, Ministry of Labour for SSS and National Health Security Office (NHSO) for UCS. There are voluntary insurers offering same service with more choices of private hospitals.

Source: (Haines et al., 2019)

Figure 2: Thailand Health System Evolution



Rwanda

Rwanda is a poor small country grappling with communicable diseases that are preventable through improved hygienic measures but in recent decades it has seen great improvements and managed to achieve universal health coverage for its people.

Following the independence in 1962, Rwanda which was still under European powers endured decades of violence, bloodshed and civil war. In 1988, Rwanda adopted the Bamako initiative as health development strategy popular among many sub-saharan nations to strengthen the equity in access to healthcare. Embracing the initiative, Rwanda decentralized the care to the district level with the development of provincial to district level health system. The whole progress was disrupted following the 1994 genocide that not only destroyed the infrastructure, equipment, personnel and the health system itself but also plagued the society with ill health and diseases.

In 1995, the government began to restructure the healthcare with the same Bamako initiative, however, the health system was severely under-resourced which affected the access as well as quality. It rolled out Community based health insurance scheme or Mutuelles de Santé (CBHI/Mutuelles) in the year 1999 in the select areas as health insurance pilots. Meanwhile, GoR also initiated health insurance plans for the Civil Servants called Rwandaise d'Assurance Maladie (RAMA) in the year 2001 followed by Military Medical Insurance scheme (MMI) in 2005 to cover military personnel. The salaried individual working in the private sector are ensured medical insurance by their employers either through private insurance companies or RAMA affliation. CBHI later quickly scaled across the country and became a national policy in the year 2004. In

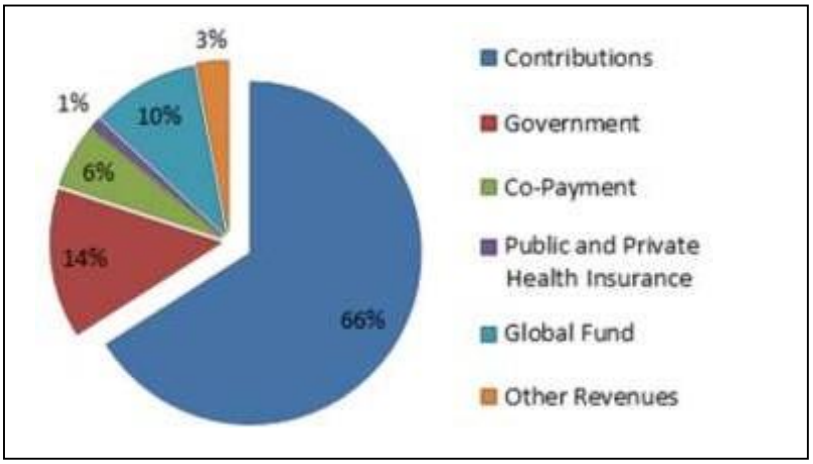
the year 2004, the CBHI was made mandatory for every individual not covered under any other scheme and by 2011 the coverage rose to 91%.

Every citizen is identified in the national database based on the socio-economic category to the village level an individual belongs to. This database helps the GoR to set appropriate insurance premium for each population category. Under CBHI, healthcare centres are reimbursed on fee-for-service basis. The national database is used to categorize the beneficiary in three groups. The premium paid by different categories are different and the most poor of all, is exempted from paying the premium. The copayment is fixed at 10% of the total hospital bills. The community healthcare is the gatekeeping system in Rwandan healthcare where community healthcare workers form the first point of contact with patients. From the CHW, patients move to the Health Post or dispensary to the Health Centre to the District hospital and ultimately to the Provincial or Referral hospitals. Apart from the public sector that facilitates and manages healthcare at various levels with respect to the 'minimum package of activities', GoR has also authorized government assisted health facilities (GAHF), private providers, and quacks to join the work task force.

Rwanda has maintained its own measure of geographical accessibility to healthcare i.e. a service is said to be accessible if a patient could visit a nearest healthcare worker 'in less than 1.5 hours by walk' and with this definition, more than 85% of the population have access to healthcare service in Rwanda.

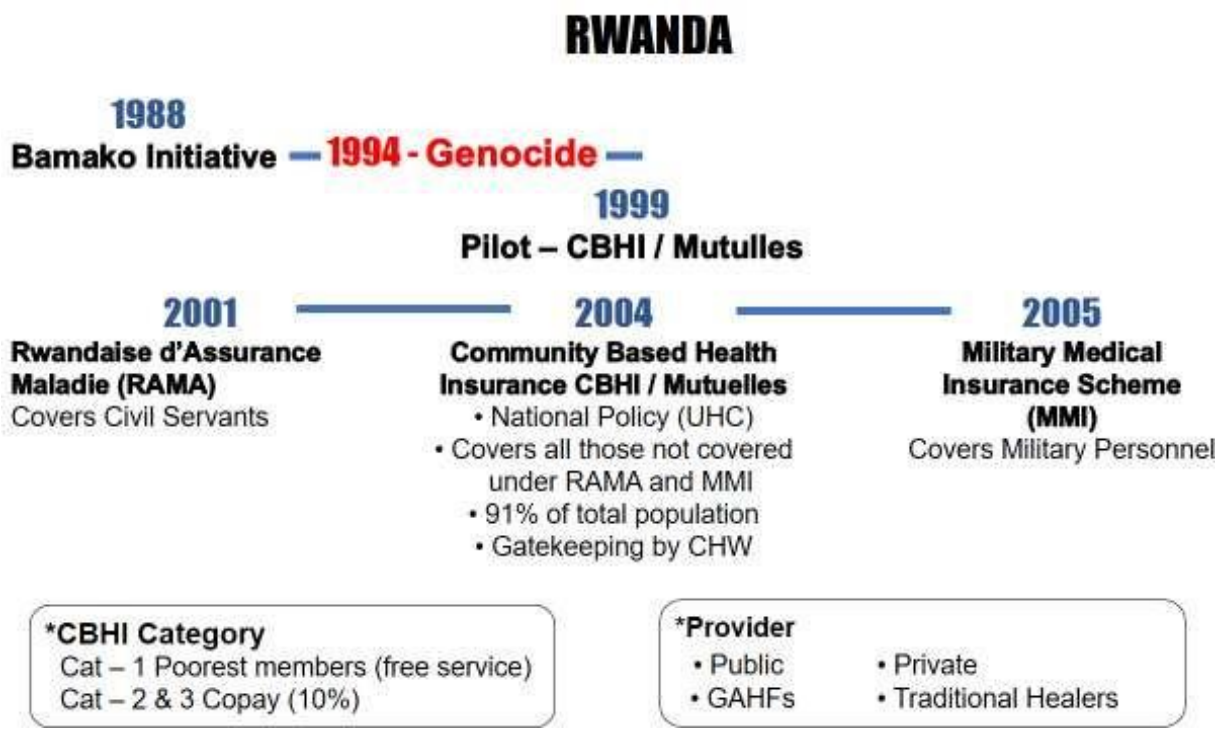
Source: (Aly et al., 2000; Jarl, 2011; USAID, 2013)

Figure 3: Sources of Funding for CBHI, 2012-13



Source: Ministry of Rwanda

Figure 4: Rwanda Health System Evolution



Brazil

Brazilian health system started officially in 1923 with the launch of social security system (SSS) for those working with private organizations. The SSS was based on mandatory contributions from both employer and employee and this system that did not cover majority of the Brazil, remained in order until the health reforms began in 1970. Though, healthcare for the people were still not considered a right, the Ministry of Health started with providing basic medical care to the people not covered under SSS.

In 1985, after the political power in Brazil was finally returned to the civilians, re- democratization brought a brand new constitution which was more inclusive of social and civil rights of people that guaranteed right to health in order to achieve universal healthcare. Brazil introduced, SUS (Sistema Único de Saúde) as a first step towards UHC that covered whole population. By the next decade, the SUS grew substantially to provide universal coverage to Brazilians.

The SUS, a national health system of the country provides free healthcare to anyone residing in the country legally including visitors. Apart from comprehensive curative and specialized care, SUS focusses on preventive care, primary care as well as mental health. In 1994, the family health strategy was introduced as a national policy to expand the primary care in SUS, while municipalities controlled the managing and delivering part of it. It presents health team comprising of a doctor, a nurse, a nursing assistant and maximum 12 CHW. Each team caters to 2000 to 4000 individuals in the population. Similar to health team, oral health team comprising of one

dentist and 1- 2 dental assistant cater to the same population size. The model is financed by federal government and its success led to the appreciable reduction in the in-patient admission.

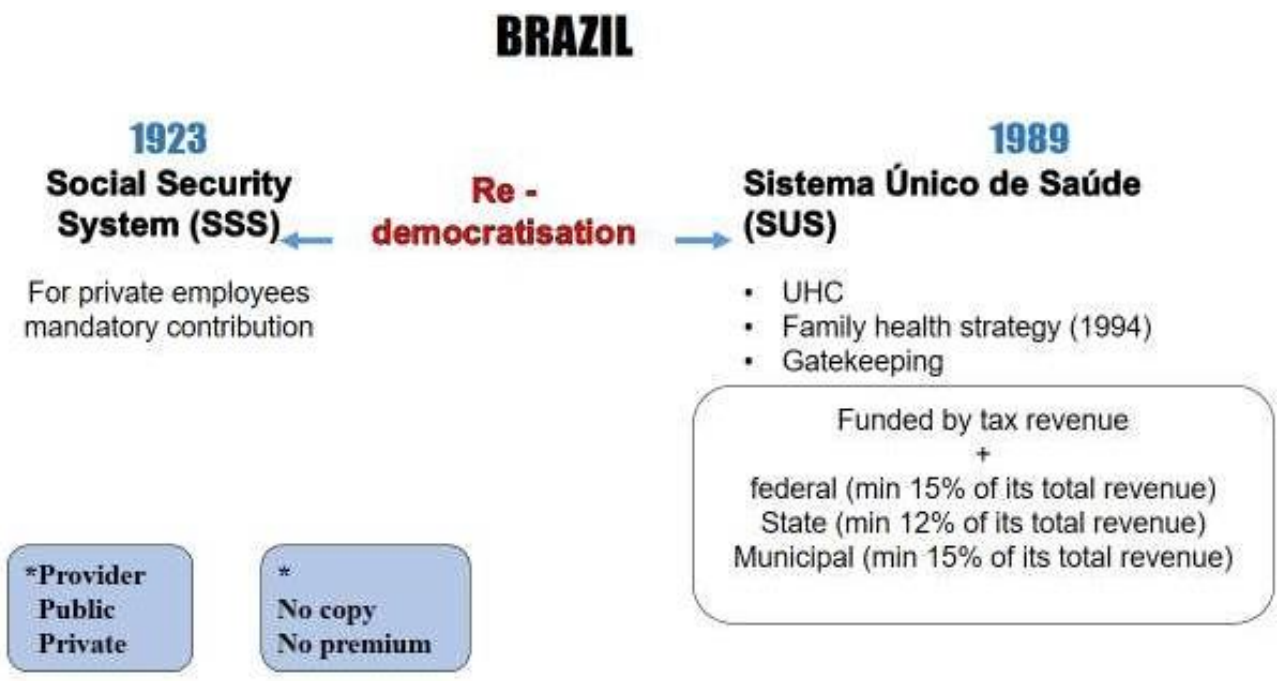
The SUS system is decentralized, has gatekeeping mechanism and is jointly financed by tax revenues, federal and municipal contribution. The contribution rate for health expenditure as per the law is at least 15% for both Federal and Municipal level separately and 12% from the State level of their own total revenue. In 2017, the federal share was 43% of the total public healthcare expenditure while state and municipalities contributed 26% and 31% respectively.

The patients do not have to pay any premium or copay to avail health service, nevertheless, there are limited set of medications that are available under SUS. The care delivery and administration are dealt by state and municipalities. Though health is free at the point of care for the population, almost 25% Brazilian go to private healthcare centres to avail paid services with their private health plans to avoid bottlenecks to access public health centres. Many people working with private sector also receive health insurance in the form of employee welfare schemes.

Brazil spends more than 9.5% of its GDP to the healthcare of which almost 50% is the public spending. The cost of medicines that are not covered under the SUS account for one of the primary reason for ~27% of the OOP expenditure. The ever increasing copayment from private health plans is another major reason for high OOP.

Source:(Massuda et al., 2020)

Figure 5: Brazil Health System Evolution



Turkey

The history of public health in Turkey dates back to 1920's when the first minister of health brought some radical changes to healthcare system. The law on public health was created, detailed framework of public health was established along with provincial health directorates and public hygiene institute (1928). The main agency of health i.e. Ministry of Health which was constituted in the year 1920 built numune (ideal) hospitals as an example of best hospitals to guide local governments that were responsible for providing in-patient care. To deal with scarce medical staff, state government subsidized the medical education of poor students along with providing additional benefits and this led to a doubling in number of doctors with each passing decade. Medical staff working in preventive healthcare were paid better salaries than those working at other level.

However, with the passing time focus from primary care shifted to in-patient care and more hospitals were build. The healthcare facilities under different ministries and municipalities were centralized under Ministry of health. Health centres were built for villages, many vertical programs were introduced for malaria, tuberculosis etc. and few more healthcare laws were created but yet Turkish people living in the rural area had no access to even basic healthcare services. This called for the introduction of another law to socialize the healthcare services in the year 1961. Under this law, health centres were established with one doctor and allied healthcare staff per 5000 population, a health post with one midwife nurse per 2000 population. The infrastructure prolifered and by 1983, whole population was covered. In 1946, the social insurance scheme called Sosyal Sigortalar Kurumu (SSK) was launched to provide cover to the daily wage or meagre salaried workers of public sector. To provide the cover to the rest of the public employees, Turkey started Government Employee's Retirement Fund (GERF) called "Emekli Sandigi" in the year 1950. In 1971 Social Insurance Agency (Bağ-Kur) scheme started for those working in unorganized sector and self-employed. These schemes acted as a major health policy over the years and on the backdrop, UHC occupied the health agenda for several coming decades. As a temporary means in 1992, the Green Card scheme was introduced to cover all the uninsured and poor people who can certify that their income is lower than one-third of the base wage rate determined by the state. The scheme provided access to all level of care with 20% copay on pharmacy and OPD care.

Nevertheless, the effort continued to improve public health, develop a patient-centred system and attain a single universal program for the entire population. In 1993, MoH published a document outlining the framework to plan the future of health system but the reforms never got implemented because of the deep political turmoil faced by Turkey at the same time that lasted till 2002.

The new government in 2003, rolled out Health Transformation Programme to streamline the healthcare system that gained momentum by the year 2008 and all the insurance schemes were brought under a single umbrella. The, SSK, GERF, Bağ-Kur, Green Card holders, refugees and foreign individuals not covered in their home country were now under the ambit of General Health Insurance Scheme (GHIS) with effect from October 2008. In the year 2008, 94.2% of the population were officially covered by the public health insurance.

The Turkish healthcare system is financed through tax revenue, contributions from employed individuals and OOP. The healthcare is totally free for pregnant women, war veterans, tuberculosis and diabetic patients.

Source: (Mollahaliloglu et al., 2021; Tatar et al., 2011)

Figure 6: Turkey Health System Evolution

India

India has a rich heritage of traditional medicine that can be traced back to Vedic times, however, modern medicine was introduced in and evolved after 1600s with the Portuguese, French and British rule. Pre-independence, India had more than 7000 hospitals and clinics across the country (Chakrabarti, 2014). Post-independence, India prioritized the healthcare needs of its people that led to the foundation of Ministry of Health and Family welfare (MoHFW) in the year 1947. In 1946, Health Survey & Development Committee also known as Bhore Committee submitted a report that laid emphasis on integration of curative and preventive medicine at all levels healthcare, continues to be the basis of health structures of India. Around 1975, India was launching schemes aimed at improving the nutrition and health status of children in the age group of 0-6 years called as Integrated Child Development Services (ICDS) and vertical health programmes aimed at controlling the diseases like AIDS, polio, leprosy etc. The public healthcare of India took the giant stride with the launch of National Health Policy in 1983 and with that started a series of five year plans each of which determines state spending priorities for the coming five years. In 2005, National Health Mission (NHM) was started that encompasses its two Sub-Missions National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM) focusing on specific needs of rural and urban India together envisaging achievement of universal access to equitable,

affordable & quality health care services that are accountable and responsive to people's needs. To revive the profound knowledge of traditional Indian systems of medicine, GOI started with Ministry of Ayurveda, Yoga, Naturopathy, Unani, Siddha, Sowa-Rigpa and Homoeopathy (Ministry of AYUSH) in the year 2014.

At central level, (MoHFW) provides administrative and technical assistance to the states in health subject along with implementation of various programs at the national level to prevent and control AIDS [National AIDS control Programme], Tuberculosis [National TB Programme (NTP)], and other major communicable diseases, promotion of indigenous systems of medicines [AYUSH], etc. There are also certain insurance programs offered at national level as a welfare schemes for poor people. The national health insurance schemes like CGHS (Central Government Health Scheme) provides comprehensive health care facilities for the Central Govt. employees and pensioners and their dependents, ESIS (Employees' State Insurance Scheme) is a multidimensional social security system tailored to provide socio-economic protection to worker population and their dependants, CHSS (Contributory Health Service Scheme), ECHS (Ex-servicemen Contributory Health Scheme), RELHS (Retired Employees Liberalized Health Scheme). The national welfare schemes like Rashtriya Swasthya Bima Yojana (RSBY), Aam Admi Bima Yojana (AABY), Janani Suraksha Yojana (JSY) and others aims to provide health insurance coverage for Below Poverty Line (BPL) segment of population.

The federal system of government tasks healthcare as a state subject and hence each of the 28 states and 8 union territories independently govern their public health system. This has resulted in different health insurance schemes offered by different state government that also differ in coverage, availability and access. Most of the health insurance schemes offered at state level are very similar to the ones offered at national level that has resulted in overlapping of central and certain state insurance schemes for the beneficiaries.

There has been several attempts to achieve UHC by the Government of India (GOI), the most recent being Ayushman Bharat –Pradhan Mantri Jan Arogya Yojana (AB-PMJAY- 2018) that is world's largest tax financed scheme aiming to cover socio-economically backward population that forms (approx. 50 crore beneficiaries) the bottom 40% of India's population. It provides health cover of 5 lakh rupees per family for hospitalization at any empanelled secondary or tertiary care public or private hospitals. The scheme also transforms primary healthcare by providing health and wellness centres and thus aims to offer comprehensive healthcare to all beneficiaries. However, so far only 17 crore beneficiaries have been verified from 3 years of launch of the scheme (Bhushan, 2021)

Theoretically, almost 70% of the population is covered under some form of insurance coverage including state government insurance schemes, central and state government employee insurances, private employee insurances, private individual insurances. For the remaining 30% of the 'missing middle' population, GOI has come up with Arogya Sanjeevani policy (Sarwal and Kumar, 2021) as this population segment are not poor enough to be covered under any social security scheme and not rich enough to buy private health insurance but have high odds of getting pushed into poverty because of financial hardships caused by adverse health events.

India also has a rich pool of community health insurance (CHI) schemes organized by community/NGO/cooperative society/union members where they pool funds to offset the cost of healthcare. The micro insurance regulations of 2005 offered many such schemes to buy micro-insurance products thus protecting them from catastrophic losses and promote ethical practice.
The healthcare service providers are both public and private. The outpatient care is free and inpatient care is highly subsidized at public hospitals but the private health-care providers are more in demand because patients have better access to medical staff, medicines and quality healthcare. Private providers are concentrated more in urban India because of the high purchasing power of people, providing secondary and tertiary health-care services resulting in high OOP expenditure.

Figure 7 Time line of Important Events in Indian Healthcare

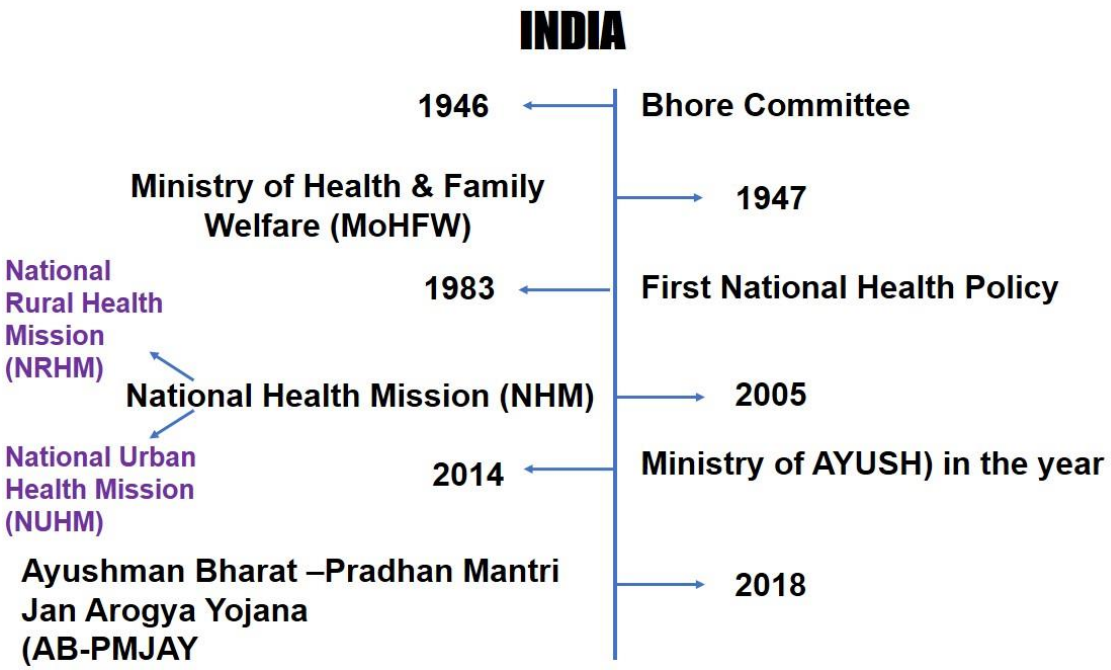


Table 1: Comparing Countries

	Japan	Thailand	Rwanda	Brazil	Turkey	India
Developme ntStatus	Developedcountry	Developing country	Least Developed country	Developing country	Developing country	Developing Country
Model of Healthcare System	Bismarck	Beveridge	NHI	Beveridge	NHI	Mixed

SDI (2017)	0.8	0.68	0.41	0.66	0.73	0.55
UHC Index (2017)	83	80	57	79	74	61
UHC adopted in the year	1961	2002	2004	1988	2003	NA

The Table: 1 shows the development status and model of different healthcare system by comparing the Socio-demographic index (SDI) and Universal health coverage (UHC) index that have strong correlation with the health outcomes. Though countries have started with some model of healthcare, few have transitioned into creating the hybrid model by absorbing features from other model so as to sustain the universal coverage.

Methodology

This study aims to study the evolution of some diverse health systems showcasing equally diverse socio-economic background into accomplishing a common goal, universal health coverage. The deliberate selection of 5 countries with UHC have been done bearing varied development status and health systems viz. Japan, Thailand, Rwanda, Brazil and Turkey. The study proposes to review the evolution of these health systems into achieving UHC and comparing these systems by focusing on four components namely health financing, healthcare reforms, care provisions and human resource, as well as drawing useful lessons to attain universal coverage for India and any aspiring country from their experience.

For the study, data collection has been done from WHO website, national repository of respective countries, and literature review of peer-reviewed journals including grey literature.

Health Financing

Japan's health financing through payroll premium contribution is quickly condensing since several decades because of the retiring population that are no longer contributing to the pool (Sakamoto et al., 2018). Hence, the country is principally relying on tax revenue and premium contribution to finance its healthcare expenditure. On the other hand Japanese are one of the highest tax payers in the world with effective top marginal tax rate being around 55% of their income (Tajika, 2018). The capping on OOP has further reduced the source of finance to the system.

The three coverage schemes of Thailand CSMBS, SSS and UCS manifest highly skewed per-beneficiary expenditure because of the poor redistribution of resources across them (Reich et al., 2016).

Rwanda too struggles with the increasing cost of care which is putting the question on sustainability of its mutuelles scheme that is funded majorly by the contribution from the beneficiaries, government subsidies and external aid. So as to understand the cost of service

delivery and ensure sustainability, Rwanda is executing a costing study with RTI, USAID and public health school (Kayonga, 2007).

Thailand being a developing country has achieved UHC with just 3.8% of GDP spending on healthcare and there are many strategies that has led to its low cost, predominant adoption of public providers being one of them. Particularly on the supply side, there is a capping on inpatient payments using DRGs, limited spending on primary care by capitation, substantial use of generic medicines etc (Hanvoravongchai, 2013).In Turkey, the alarmingly increasing unemployment rate (13.7%, 2019) is bound to hit hard the premium collection thus affecting the UHC.

Brazil and Thailand allow the breeding of private providers as well as private voluntary health insurers which has not only led to the increased private spending and OOP as high as 30% (Table 2) in Brazil is also affecting the efficiency of the public healthcare and thus raising inequity (Reich et al., 2016). Though health is free at the point of care for the population, almost 25% Brazilian go to private healthcare centres to avail paid services with their private health plans to avoid bottlenecks to access public health centres. The cost of medicines that are not covered under the SUS account for one of the primary reason for ~27% of the OOP expenditure. The ever increasing copayment from private health plans is another major reason for high OOP.

The Table 2, compares the GDP contributions of each country towards total healthcare expenditure (THE) and the public contribution to the THE. The GDP to THE is the highest with respect to Japan and Brazil but the government contribution is at the second lowest in Brazil.

Healthcare Reforms and Political Leadership

UHC goals adoption in most of the countries have shown a pattern with mostly beginning after some major socio-economic or political change (Reich et al., 2016). The UHC became the national priority following the reconstruction efforts post second world war in Japan, following a financial crisis in Thailand and Turkey, during re-democratization in Brazil and post genocide in Rwanda.

In Japan, the primary push to start UHC was to build more of a warfare state of healthy individual rather than for establishing a welfare state but the strong political commitment with concrete goals led to the accomplishment of the UHC (Ikegami, 2014). Thailand & Turkey's UHC is the result of determined commitment and leadership of its government together with sharp economic growth. (Tatar et al., 2011).

The strong social movements in Thailand accelerated UHC that was high on the political agenda and boosted the government leadership in reforming the healthcare and the same is with Brazil (Massuda et al., 2020; Reich et al., 2016). The strong commitment of the political leaders at local, district and national levels in Rwanda has led to the mobilization of population in enrolling, paying premiums and development of the universal community health insurance program (Ministry of Health, 2008).

Japan has national fee schedule that it updates twice annually which is a two-step approach of setting a global revision rate, revising pricing item by item and this has tremendously helped in containing cost by leveraging policies. Thailand has separated the healthcare purchaser and provider functions to keep accountability a priority and that resulted in creation of capable governance (Haines et al et al., 2019; Reich et al., 2016). It also demonstrates strong capacity for strategic goal setting, for the evaluation of new technologies and pharmaceutical products to be included in benefit packages. Brazil with its new leadership initiatives has started with innovative form of providing care by contracting the primary healthcare at the state level in order to improve quality and efficiency (Araujo *et al.*, 2014). To manage opposition of the UHC reforms from the interest groups, Turkey and Thailand developed strategies by creating an oversight board to understand their motivation and potential effects on the reform process (Haines et al et al., 2019; Tatar et al., 2011).

Care Provisions

Primary healthcare is fundamental in designing a cost effective and efficient system as it focusses on prevention of disease, health promotion and outpatient care is the principal means of accessing it (Attaran & Capron, 2014; Bloom, 2017). Several studies demonstrate that not only hospitalization but also outpatient care leads to impoverishment of households (Aggarwal *et al.*, 2012). The Green-card insurance scheme of Turkey introduced as part of a transition to UHC, provides comprehensive outpatient cover along with secondary and tertiary care with rigorous eligibility check, gatekeeping, cosharing to regulate and at the same time providing unrestrained access to healthcare (GÜRSOY, no date); (Tatar *et al.*, 2011).

Japan brags one of the best UHC service coverage index (83) with no gatekeeping mechanism, maximum number of hospital beds per capita (13/1000), free choice of physicians and minimum waiting time (Health & Systems, 2021). Howbeit, the same privileges provide little determent to overuse of specialized and expensive care. Japan also has the highest average length of stay (ALOS) i.e. 16.1 days per admission leading to supply side moral hazard, however, been steadily declining because of the fee schedule revision to incentivize the reduction of chronic care beds at hospitals (Sakamoto *et al.*, 2018).

In Thailand, the gatekeeping system are strictly followed care and bypassers are held liable to pay full user fees (Tangcharoensathien *et al.*, 2019).

Thailand however, exhibits clear disparities and inequity across the three schemes with respect to quality of care and access to specialized care because of the pro-rich bias, where profit hungry private facilities cater mostly to rich urban population and the poor people received care from government facilities and health centres with poor choice of providers, insufficient referrals etc.(Rodney and Hill, 2014). Nevertheless, the poor people could still have equitable access to primary health care. Similarly, Japan faces a political economy challenge by not being able to improve the fairness by creating an integrated risk pool (Reich et al., 2016). The low risk pool do not want their premium rates increased to subsidize for increasing high risk pool that is responsible for widening the premium rates. Though Thailand has relatively small aggregate of

private sector around 25% of total hospitals, this pro-rich bias has also resulted in concentration of private sector providing specialized care in the urban areas while primary care in such affluent areas remain weak (Haines et al *et al.*, 2019). The bottlenecks to access healthcare like long waiting time, poor infrastructure etc has resulted in one fourth of the population utilizing private healthcare despite having free unified health systems in Brazil (Massuda *et al.*, 2018), 2020; (Reich *et al.*, 2016).

Rwanda's strikingly distinct strength of care provision is having an efficient bottom- up and top-down mechanisms for layering the population into four different socio- economic categories with the help of the national database (Ministry of Health, 2008). This has helped in unbeatable cross-subsidisation from rich to poor using health insurance schemes while the poor are paid for by the government and development partners. The growing physician workload, lack of population trust in PHC's hindered the implementation of compulsory gatekeeping in Turkey.

The countries have witnessed a clear improvements in the health indicators, economic growth with large GDP improvements with the dawn of universal primary care service utilization as in the case of Rwanda, Thailand and Turkey ((Jarl, 2011); (Mollahaliloglu *et al.*, 2021); (Thaiprayoon and Wibulpolprasert, 2017).

Rwanda faces an ongoing challenge in engaging the members in the scheme which can be improved by providing a better quality of care.

Human Resource

In Japan, both private and public sector follow the single fee schedule which is the only cost control measure in the system that favours clinic services over hospitals (Ikegami, 2014). This also positively incentivizes the desirable workforce distribution. Thailand incentivizes healthcare workers to work in rural areas and thus ensures decent geographical distribution (Haines et al *et al.*, 2019). A healthcare professional working in rural area are paid twice than the urban fellow. The school students are recruited from the underserved area into medical and nursing courses and made to work in their home districts after graduating. These incentives have tremendously increased (20%) the admissions of medical students (Sundararaman, 2018). In Turkey, in the framework of the HTP, certain measures to attract the healthcare workers like contract recruitment has led to the balanced geographical distribution of the physicians (Mollahaliloglu *et al.*, 2021). The national 'prioritisation system' also takes care of the proper geographical distribution of the healthcare workers by assigning the healthcare staff to the places where the need is compelling and care needed the most (Mundy, Trowman and Kearney, 2018)Similar efforts have been taken by the Brazillian government where it constantly strengthens the policies and provides incentives to increase influx of primary care physicians, medical schools and other healthcare infrastructures in resources stricken area where the healthcare access is limited (Massuda, Atun and Castro, 2020)

Thailand also trains paramedical staff with a three year bachelor's degree to fill the human resource gap and deploying them at below district levels to provide care (Haines et al *et al.*, 2019).

Rwanda has sheer shortage of healthcare personnel (Table 5, 0.1 physician per 1000 population) with fundamentally zero advanced level physiotherapists, radiologists, anesthesiologists, midwives, or laboratory technicians and to fill their gaps, it coaches paramedicals and readies them for the same positions (Aly, Avila and Cram, 2000). Thailand also has rich pool of community health workers that maintains, one CHW per 20 households.

The family health strategy, which relies on CHW is the essence of UHC in Brazil. The extensive network CHW perform monthly visit to every family enrolled in the programme and run health promotion, prevention activities and check whether family members are complying with any treatment they are on (Massuda *et al.*, 2018). Thus, volunteers from community play a key role in managing the relationship between society and the healthcare system.

Conclusions

The comparisons of the health systems of different countries is useful as it offers potential learning of the different approaches the countries take to work out on the similar problems and challenges to achieve the common health system goals.

The study shows that systems not only go through turbulent reforms to adopt UHC but also go through continuous adjustments to meet changing demands and rising costs to sustain the UHC. The ripened systems like Japan is gradually shifting its healthcare model (bismarckian) to sustain the current challenge of presented by ageing population. This calls for an innovation in the way healthcare systems are financed. Thus UHC requires a continuous commitment. The health financing of the country should be such that it protects people from paying from their own pocket to avail healthcare that creates inequity in the level of healthcare utilization by different social class. The merger of different schemes has showed improvement in the cross-subsidization among the risk pools in the population as in the case of Thailand, Brazil and Turkey thus also improving equity and access to healthcare. In many of these countries, health sector reform and decentralization have brought about shifts in functions between the central and peripheral levels. The inequity can still revive even after UHC reforms and so regular monitoring and effective measure of the equity should be persistent with particular attention on the need of the population to ensure any detrimental or inimical effects are taken care with suitable policy introduction. The presence of strong political will, commitment and policy objectives to build a robust health financing, equitable service delivery and good governance is essential in order to successfully implement and keep going with such national level schemes. The Investments in quality primary health care will be the cornerstone for achieving UHC around the world. The evidence from the UHC success of developing and least developed nations confirms that UHC can be achieved even with modest but strategic funding to healthcare. The gatekeeping mechanism or referral system using well equipped and comprehensive PHC's have proved to not only reduce hospitalization but also the cost of the healthcare system as in the case of Thailand. The public health sector needs to assume the roles of promoter, provider, contractor, regulator, and steward. The private sector's role also needs to be clearly defined and regulated. The inherent shortage of healthcare professionals with poor geographical distribution is a global problem that can be handled with a strong network of ground level primary or community healthcare workers as in the

case of Thailand, Rwanda and Turkey. The informal healthcare workers thus can be trained to strengthen the referral system. Thus, a systemic reforms must ensure effective functioning and delivery of healthcare services in both rural and urban areas. Since UHC is not only about the provision of universal coverage but also the quality of the care, infrastructure and access to services provided under the coverage, it is imperative to develop robust public health financing structure, meet the skilled health workforce requirement to ensure improved health outcome.

Any developing country like India, that typically has large population and inadequate resources, struggles with meeting healthcare needs of its people. Such countries can learn from the example of these developed, developing and least-developed countries that have successfully and fairly achieved UHC by leveraging different policy levers, combination of cross- system elements and focus on health system components to gravitate to UHC realization that is inclusive and sustainable in the long-run. Thus justifying, that pursuing UHC though is expensive, complex and definitely not easy, but it is achievable.

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