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## CASES IN GLOBAL HEALTH DELIVERY

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### CONCEPT NOTE

# Implementing Universal Health Coverage: The Experience in Thailand, Ghana, Rwanda, and Vietnam

*“Left to their own devices, health systems do not gravitate naturally towards the goals of health for all through primary health care as articulated in the Declaration of Alma Ata.”*  
—World Health Report, 2008

The goal of universal health coverage (UHC) is to ensure that all people have access to the health services (prevention, promotion, treatment, rehabilitation) they need without suffering financial hardship when paying for them.<sup>1</sup> The goal itself is a moving target as epidemics change, populations shift, social norms change, and the economy fluctuates, and there is no one means of providing universal coverage; the experience of working to achieve this goal varies dramatically.<sup>2</sup> In addition, what the goal should actually be—universal access, coverage, care or insurance—has also been raised for discussion.<sup>3</sup> Universal access is the most comprehensive approach to UHC and involves addressing the broader social determinants of health such as education, income inequality, and poverty. Universal access includes three dimensions: 1) physical access—having good services within reach; 2) financial affordability—whether people can pay without hardship, including price and opportunity costs; and, 3) acceptability—people’s willingness to seek services, which can be impacted by perception and cultural norms.

In this paper, we briefly explore the issues involved in working toward UHC and four countries’ experiences in doing so. The countries represent different contexts, levels of development, and a range of stages of implementation (see **Appendix 1** for brief overviews of country experiences). They offer a point of comparison to efforts in the Philippines and South Africa, as described in the Cases in Global Health Delivery: “‘Sin Taxes’ and Health Financing in the Philippines” and “Political Leadership in South Africa: National Health Insurance.” We suggest reading the cases in conjunction with this paper to develop a more nuanced understanding of the many choices, challenges, and opportunities countries face in designing, financing, implementing, and sustaining UHC.

## Historical Background

The first organized health care system emerged in Germany in the late nineteenth century, as part of the Bismarckian social insurance system. Employed men and their families benefitted, thanks to trade union advocacy. Wage-related contributions funded the system, and governments soon became involved as they

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*Julie Rosenberg, Rebecca Weintraub, and Amy Madore prepared this concept note with assistance from Heather Pearson, Samantha Chao, and Liana Woskie to aid in classroom discussion rather than to illustrate either effective or ineffective health care delivery practice.*

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saw the impact that health and welfare programs could have on the social problems that emerged with industrialization, such as alcoholism, tuberculosis, and overcrowding.

The emergence of effective disease treatments and the ability of medicine to truly impact whether one would live or die in the mid-twentieth century led to the concept of health as a fundamental human right. The World Health Organization's constitution of 1948 acknowledged this right, which was reinforced in the Health for All agenda set by the Alma-Ata declaration in 1978.<sup>4</sup> In 2012, the United Nations passed a resolution endorsing UHC as a "pillar of sustainable development and global security." A global coalition of more than 500 health and development organizations urging governments to accelerate UHC reforms formed on December 12, 2014, the first-ever, UN-proclaimed Universal Health Coverage Day.<sup>5</sup> The following year, the UN proposed achieving UHC globally—"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"—as 1 of 12 targets for the third Sustainable Development Goal: to ensure healthy lives and promote well-being for all at all ages.<sup>6</sup> With growing international pressure and support, an increasing number of countries are undertaking plans to develop and implement UHC policies and systems.

Whether UHC is a means to an end or an end unto itself and what should be measured to assess progress is debated.<sup>3,7</sup> The concept must be well understood to be achieved; while almost any health financing reform or scheme can be justified in the name of UHC, UHC suggests specific health system goals that can be influenced by finance and policy reforms, among others.<sup>7</sup>

## Political Leadership for UHC

UHC is intrinsically political because it defines a set of policies based on social values, including the ideas of fairness and equity. UHC pools risk, allowing one group or entity to support another. For example, the healthy and wealthy may subsidize the sick and the poor. Governments, in making decisions about how to allocate health benefits—whether according to need, financial contributions, or ability to pay—and about how to create a health financing system, must negotiate between different interest groups. They must make a decision about who should pay for these benefits, balancing stakeholder interests with the need to maximize available resources and care for populations.

Leaders implementing UHC—determining whom to cover, what services to offer, and how to generate revenue—face a political process.<sup>8</sup> A World Bank case study of UHC in 11 countries echoed this, finding that achieving and sustaining UHC requires strong national and local political leadership, as well as long-term commitment.<sup>9</sup> While economic development is often associated with strong health care systems, political leadership and followership account for significant differences in health care policy across and within countries.<sup>10</sup> Some of the poorest countries in the world (e.g., Rwanda) have developed robust health systems thanks to strong political leadership and commitment in this area.

*Wise leadership secures prosperity in the long run; foolhardy leadership may bring about a catastrophe. The lack of leadership routinizes governance...focusing solely on pattern maintenance and repetition of the same. On the other hand, over-assertive leadership pays little attention to institutional constraints: it may bring about sudden, unexpected changes, and disrupt the normal flow of the political process, thus detracting from its transparency and/or predictability.<sup>9</sup>*

There are benefits to leaders for working toward UHC. UHC policies that are implemented quickly and bring noticeable change impact public perception. Progress can win votes and help put leaders in the national spotlight. Not surprisingly, many UHC initiatives have blossomed from times of elections and transitions of power, including Thailand and Ghana, after many years of failed attempts.

Ghana, for example, began iterating on health financing mechanisms at the time of independence, in 1957. Ghana's Ministry of Health established a committee to study national health insurance in 1970, continuing to plan in the mid- and late-1980s, with the creation of a National Health Insurance Project Management Unit. In the early 1990s the Ministry of Health—inspired by the growth of independent mutual health organizations—sought advice from experts for creating a national health insurance organization (see **Appendix 2** for a glossary of health insurance terminology).<sup>11</sup> A private consultancy group proposed establishing centralized compulsory social health insurance for all formal workers and piloting rural, community-finance schemes for non-formal sector workers in August 1995.<sup>12</sup>

Prior to the 2000 elections, National Democratic Congress (NDC) officials in power aimed to scale up existing mutual health organizations and create a national insurance scheme. When they were unsuccessful, the New Patriotic Party (NPP) capitalized on the NDC's failure and pledged to succeed in its election platform. After winning, the NPP worked to create a policy that would be perceived as a new initiative prior to the next election in 2004. In late 2003, the majority NPP passed the National Health Insurance Act establishing Ghana's National Health Insurance Scheme (NHIS). Acrimonious debates erupted with accusations of rushed passage and political motivations,<sup>13,14</sup> and street protests followed.

The NHIS became operational in March 2004. NPP sympathizers described the NHIS as the best health care policy ever introduced in the country while NDC sympathizers disliked the policy-making process and saw the NHIS as a tool to build political capital.<sup>15</sup> They felt that the only way they could show their disapproval was by refusing to enroll. As one NDC sympathizer explained, "I hate what [NPP] did and said about my party who first conceived the idea even long before they won the elections. They should have acknowledged NDC as being the first to introduce the idea of health insurance even if it did not materialize before they left power."<sup>14</sup> Ghana's example shows both the role of politics and political leadership in enacting UHC policy enacted.

Thailand provides an example of strong political leadership that contributed to its national program. Two committed physician policy champions, Dr. Sanguan Nittayarumphong and Dr. Viroj Tangcharoensathien, began proposing legislation for universal coverage in the 1990s and producing and disseminating financial analyses to support it. They "were very concerned about equity and fairness," as one colleague explained.<sup>16</sup>

When challenged about the feasibility of UHC, Sanguan said, "I firmly believed that what I was doing was right and stood my ground." In 2000, the policy champions convinced the Thai Rak Thai (TRT; "Thais love Thais") party, which was running for office, of the value of the concept of universal coverage. The TRT party made UHC a priority in the 2001 election, and national interest in universal coverage grew. The TRT candidate won and pushed to adopt universal coverage within a year.<sup>16,17</sup>

Policy champion Dr. Sanguan became the secretary of the National Health Security Office (NHSO) responsible for overseeing the development of the health care system, and over the next decade he continued to play a key role in helping ensure "every person born a Thai feels secure irrespective of being sick or not."<sup>18</sup> Sanguan's consistent leadership was important given the Ministry of Public Health saw nine health ministers and six permanent secretaries transition through its offices. One leader explained, "[Sanguan] was humanistic, caring, and supportive ... People liked him."

Public opinion also contributed to sustained political support for UHC. Because the Thai people supported the Universal Coverage Scheme (UCS)—the insurance program put in place to work toward universal coverage—and its beneficiaries represented 75% of voters, political parties supported it and raised it in their campaigns, making small adjustments for efficacy or sustainability over time.

In 2010, Thailand established the Committee on Benefits Package to make recommendations on the adoption of new drugs and technologies, including diagnostics and medical devices, for UCS. The Health Intervention and Technology Assessment Program and the International Health Policy Program, under the

Ministry of Public Health, worked on health technology assessment and health system evaluation, supply effectiveness, and cost-effectiveness information (see **Exhibit 1** for a diagram of the benefits package decision-making process).<sup>19</sup> The leadership uses the evidence of financial feasibility, budgetary impact, and ethical considerations to make sound decisions that enable ongoing political support for the UCS policies.<sup>19</sup>

Not all political support stems from the same social values and evidence that Thailand’s leaders have leveraged. For example, Rwandan President Paul Kagame used different tactics, harnessing his political power to hold local leaders accountable for advancing the UHC agenda. He signed performance contracts with district mayors for meeting certain indicators and expected those who failed to meet their commitments related to social wellbeing to resign. In Vietnam, political leadership behind universal health care was inspired by the desire to prevent social unrest, which would undermine authority.<sup>20</sup>

Sustaining political leadership over time is critical given the trajectories of each of these countries. Their experiences highlight the importance of iterating on an approach to universal coverage over time and the potential to reach universal health coverage at different paces. Researchers and politicians agree that UHC is a lofty aim. Vietnam, which has pursued UHC for two decades, has yet to achieve its goal. Leadership and political will play key roles.

#### Context and UHC Roll Out in Thailand, Ghana, Rwanda, and Vietnam<sup>i</sup>

Principal features	Thailand: Universal Coverage Scheme (UCS)	Ghana: National Health Insurance Scheme (NHIS)	Rwanda: Community Based Health Insurance (Mutuelles de Santé)	Vietnam: Social Health Insurance (SHI)
Population (millions), 2014	67.73	26.79	11.34	90.73
GDP (USD billions), 2014	373.80	38.65	7.89	186.20
Initial scale	Pilot in 6 provinces	Pilot among 1% of population	Pilot in 3 provinces	National, but one of several options
Timeline	The Thai constitution acknowledged the right of every citizen to health care in 1997. In April 2001, a pilot study underway in 6 provinces was relabeled as the first stage of national implementation. In June 2001, 15 more provinces were brought on board; the scheme was extended to all provinces by October 2001. The Universal Coverage Scheme (UCS) was implemented in April 2002, and a law on UCS passed in November 2002.	In 2003, the National Health Insurance Scheme (NHIS) was introduced to replace “cash and carry” and covered a minimal percent of the population. The scheme was implemented on a national level in 2005.	The government piloted 3 community-based health insurance programs in 1999 and 2000. Local governments adopted the program and national policy was adapted in 2004; 2006 saw national implementation; 2008 law strengthened strategy.	The 1992 constitution guaranteed health for all. The Government of Vietnam experimented with several strategies, culminating in the 2002 Health Care Fund for the Poor. In 2009, the government passed the Law on Social Health Insurance, creating a national Social Health Insurance (SHI) program and combining disparate programs into a central policy. The plan was to replace compulsory and voluntary schemes with the compulsory scheme by 2014; as of late 2015 they still were separate.

<sup>i</sup> Population and GDP data compiled from World Bank DataBank: <http://databank.worldbank.org/data/home.aspx>

<b>Institutions and actors involved</b>	The Health Systems Research Institute (HSRI), established in 1992, documented the health policy problems in Thailand. With the MoPH, HSRI documented health inequalities and advocated health as a human right. Policy champions within the MoPH and HSRI sold the concept of universal health coverage to the Thai Rak Thai party. The Prime Minister proposed the legislation to the General Assembly, and Parliament made a Policy Declaration in February 2001. The 2002 National Health Security Act (NHSA) established the NHSB and the National Health Security Office (NHSO) as the UCS purchasing agency.	The National Health Insurance Authority (NHIA) was responsible for managing policy planning, monitoring, and evaluation. It could register, license, and regulate health insurance schemes and accredit and monitor health care providers, and it was responsible for managing the National Health Insurance Fund.	President Paul Kagame, who took office in 2000, designated the Mutuelles program as a priority. President Kagame signed performance contracts with district mayors for meeting certain indicators. The government conducted an annual evaluation to ensure the effectiveness of the performance indicators related to social wellbeing. Mayors who failed to comply with the performance commitments were expected to resign.	In 2002, there was a merger between the agency for SHI and the agency for pension insurance and short-term allowance benefits (VSS). The National Assembly promulgated the Law on Education, Health Care and Protection for Children providing all children under 6 years of age free health care, firstly through direct reimbursement to provider, later (from 2009) via SHI premium subsidization. The MoH was responsible for overseeing all health insurance programs while the VSS implements the schemes, including collection of insurance premiums, issuing health insurance cards, and reimbursing service providers.
<b>Opposition</b>	Physician groups and the Ministry of Public Health (MoPH) opposed general tax revenue financing of UCS. MoPH saw its authority being decreased with the NHSO becoming the financier of UCS. Physicians saw the loss of autonomy due to cost containment measures. Private hospital owners saw UCS policy as competing with private market.	Public opposed the Value Added Tax (VAT) due to its regressive nature. The Trade Union Congress, International Monetary Fund, and Ghana's parliament agreed and opposed individual contributions as well as financing the scheme with funding from the Social Security and National Insurance Trust.	There were no public reports of opposition to the Mutuelles de Santé system. This may have been due to wide popular support and/or fear of speaking out against government initiatives.	The International Labor Organization believed out-of-pocket health spending was increasingly high and impeding the poor and vulnerable from accessing services. It suggested the government increase spending on health, revise user fees, and increasing contribution rates to the SHI.

## Policy Design and Implementation

Knowing the capabilities of their public health care systems, governments determine the package of services that will be offered, which population to cover first, how to reach the population, how to finance the program, and how to scale both the reach and depth of implementation. Maximizing the impact of these choices requires a strong, efficient health system; a system for financing health services; access to essential medicines and technologies; and a sufficient capacity of well-trained, motivated health workers.<sup>1</sup> Developing these areas is a step toward UHC. Thailand, for example, focused on strengthening its health workforce, increasing both the numbers available to provide care and the incentives to keep them in place, as early as the 1970s, before implementing its universal coverage scheme, which was essential to success. Strong public health services helped generate demand and contributed to a virtuous cycle of support from both politicians and constituents alike. Further, financing policy had to align with the goals of UHC,

including improving coverage and what have been termed the “intermediate objectives” of UHC, “efficiency, equity in health resource distribution and transparency and accountability.”<sup>7</sup>

In Vietnam, by contrast, a gap between what is covered in the policy and what is actually available contributes to a failing system. And, though not all services are available in all provinces, medical expenses incurred outside one’s home province are reimbursed at very low rates.<sup>20</sup>

The World Health Organization (WHO) suggests health system and insurance priorities should be “key interventions targeting the millennium development goals—births attended by a trained health worker, family planning, vaccinations, and prevention and treatment of diseases such as HIV, malaria, and tuberculosis—while considering how to address the growing problem of non-communicable diseases.”<sup>21</sup> The populations eligible for government programs and their contributions to the scheme are a part of policy design that is linked closely with finances, discussed in the following section. Governments face many competing demands and tradeoffs given the expanse of services involved in addressing these priorities.<sup>21</sup>

In addition, health departments must determine how they will work with other government actors and what role they envision, if any, for nongovernmental stakeholders in the design and implementation of UHC. Finance or treasury departments and legislators typically participate in the policymaking process so generating and maintaining their buy-in is essential. Those leading the UHC policymaking process also may wish to seek input from nongovernmental stakeholders involved in delivering, financing, or monitoring health services in the country, such as private health care providers and insurers and NGOs. In particular, governments should consider what role the private sector could play, if any, in advancing or obstructing progress toward achieving universal coverage and design policies accordingly.

Thailand, Ghana, Rwanda, and Vietnam have all designed and managed their UHC policies differently, creating different models for health care system management and decentralizing administration to varying extents.

### Design and Organization of UHC in Thailand, Ghana, Rwanda, and Vietnam

Principal features	Thailand: Universal Coverage Scheme (UCS)	Ghana: National Health Insurance Scheme (NHIS)	Rwanda: Community Based Health Insurance (Mutuelles de Santé)	Vietnam: Social Health Insurance (SHI)
Package of services	Package included: inpatient and outpatient care, surgery, accident and emergency visits, dental care, diagnostics, prevention and health promotion, and medications. A subcommittee on benefit package development oversaw benefit package updates.	The package covered health service costs and drugs for 95% of diseases in Ghana. It included outpatient consultation, essential drugs, in-patient care, shared accommodation, maternity care, eye care, dental care, and emergency care. It did not cover echocardiography, renal dialysis, heart and brain surgery, organ transplantation, or HIV/AIDS drugs.	Minimum package: pre- and post-natal care, vaccinations, family planning, minor surgical operations, and essential and generic drugs. Complimentary package: select services at the district hospitals, including hospitalization, caesarians, surgeries, medical imaging, and all diseases affecting children 0-5.	Coverage included a range of services from ambulatory care to rehabilitation and advanced diagnostic and curative services. The Ministry of Health established the package and played a prominent role in revising it. Transportation costs and drugs were also covered.
Population covered	UCS covered everyone not already covered by the Social Security Scheme (SSS) and Civil Servants Medical Benefits Scheme (CSMBS). Children under 12, senior citizens over 60, and the	All Ghanaian citizens were eligible to enroll by paying a premium.	Beneficiaries included Rwandan citizens below the poverty line and the informal sector, accounting for around 72% of the population. All Rwandan citizens were eligible for the	The government is responsible for fully subsidizing premiums for children under six, the elderly, households defined as poor according to official government standards, households living in

	poor were exempted from paying copayments for outpatient visits.		Mutuelles system.	disadvantaged communes, and for ethnic minorities. It partially subsidizes premiums for the near-poor and students.
<b>Different plans within system</b>	Private sector employees were covered through the SSS. Government employees, dependents, and retirees were covered through the CSMBS. Everyone else was covered by UCS, including the small percentage of Thais who opted to maintain private insurance.	Outside of NHIS, 65% of population defaulted to the old fee-for-service model.	Rwanda Health Insurance Scheme (RAMA) covered public servants and formal sector employees, and Military Medical Insurance (MMI) covered Rwanda's Defense Force. Other insurance types covered 6% of the population.	SHI consisted of a compulsory health insurance scheme (CHI) and a voluntary health insurance scheme (VHI). CHI supported the formally employed, pensioners, and full-time students. It also supported economically and socially disadvantaged citizens, who were not required to contribute financially. VHI provides insurance for family members of those with CHI who would otherwise not fall under social insurance.
<b>Management system</b>	NHSO was the national management system, while the Provincial Purchaser Offices (PPOs) and Area Purchaser Board (APB) were established in provinces to contract with providers. NHSO allocated money to local purchasing offices called Contracting Units of Primary care (CUPs) who subcontracted to health facilities. There were 12 Regional Inspector General Offices assigned to support and monitor implementation. Thailand's civil registration system facilitated enrollment; the national ID card served as a membership card and linked individual-level information to the national identification number.	The National Health Insurance Fund (NHIF) was administered by the National Health Insurance Authority (NHIA). The satellites were a country-wide network of CBHI schemes known as District Wide Mutual Health Insurance (DWMHI) schemes which the NHIA monitored, subsidized and re-insured.	Mutuelles were decentralized health insurance schemes, relying on existing community-based structures at the district and local level to provide a majority of management and administration. The central government coordinated only top-level policy and administration.	Starting in 2008, each province had a health insurance fund, while the national fund managed by Vietnam Social Security functioned as a reserve fund that balanced the deficit and surplus of provincial health insurance funds.

## Financing

As countries implement UHC, considerations for the financing mechanism should include: sustainability, equity, and the interests of the players involved, including providers, patients, and payers—both public and private. Money alone cannot achieve the goals of universal coverage (see **Exhibit 2** for depiction of the relationship between health financing and universal coverage objectives). The financing

policies must be strong and well aligned with the goals. Multiple financing models can be implemented to generate revenue.<sup>22</sup> Implementing ministries will need strong technical teams to assist in decision making, calculations, and actuarial work.

A financing system for universal health coverage must collect revenue of prepaid funds to cover the costs for all the members of the pool, regardless of their ability to pay. Pooling funds reduces the financial risks associated with poor health. There are two ways to pool or collect funds in advance of poor health: voluntary health insurance and compulsory health financing systems. One recent estimate of the cost to provide a minimum set of services for a population addressing both communicable and non-communicable diseases estimated that around USD 60 per person would be required in 2015.<sup>23</sup> The more governments spend, the less its citizens must pay directly and the more equitable the system, generally.<sup>22</sup>

The countries that have made the most progress toward financing universal coverage are those who have implemented compulsory or mandatory contributions for people who can afford to pay, either through tax-based or premium collections.<sup>2</sup> Taxation sources funds from charges collected by government including direct taxes on income and profits, sales of goods and services, and import duties. Thailand, for example, has used taxes to fund its health services. Contributory schemes may expect households to contribute to an insurance scheme as in Rwanda and Vietnam. The poor or vulnerable will almost always need subsidies for this type of scheme to lead to universal coverage. Vietnam's government, in subsidizing the poor, saw its share of financing for the scheme rise from 29% to 50% from 2006 to 2010 as Social Health Insurance expanded quickly.<sup>24</sup> Schemes that draw many more poor than wealthy members will often struggle to both finance themselves and maintain quality care.

Ghana's National Health Insurance collected funding for its scheme through a 2.5% value added tax, a social security payroll tax, individual premiums, and miscellaneous other funds.<sup>25</sup> Some obligatory contribution mechanisms are "progressive" in that the wealthy contribute more than the poor as a percent of their ability to pay, but other types of taxes, such as those on goods and services, are "regressive" in that the poor pay a greater share of their wealth. Ghana's 2.5% National Health Insurance Levy, which provides 70% of the revenue for the scheme, has received criticism for its regressive nature. While premiums are supposed to be adjusted based on a subscriber's socioeconomic bracket, the difficulty of classifying wealth brackets has led to a primarily flat premium rate.<sup>26</sup>

Voluntary schemes include non-mandatory insurance and out-of-pocket payments at the time of service. Out-of-pocket payments for health services, or user fees, do not provide financial risk protection and create a barrier to care for the poor. The administrative systems countries have implemented to exempt certain groups in order to promote universal access have proven inefficient due to the costs of running them.<sup>27</sup> Ghana's NHIS expenditures, 28% of which came from administrative and logistical costs in 2011, exceeded revenues, with the budget gap increasing.<sup>28</sup> While much of the administrative costs went to supporting enrollment, only 35% of people in the poorest quintile were insured in 2007. The percent of each quintile insured increased with wealth.<sup>29</sup>

While government at multiple levels will need to be involved with the finances, reducing the number of risk pools nationally by consolidating them brings down costs and improves distribution, making it easier to cover the poor. Changes in risk pooling made after an initial pool is established often meet resistance as coverage is extended to previously uninsured populations.<sup>22</sup> Thailand faces this dilemma now as it continues to support multiple schemes for different stakeholder groups, including civil servants, who were drawn to the sector for the better health benefits and want to maintain that privilege without paying for others to have it.

Setting provider payment schemes is another piece of UHC policy that countries must determine. Payments should fit within the available budget, keep providers satisfied and motivated to provide quality care, and incentivize providers to improve efficiency and outcomes. Payment methods are defined by the unit of payment—per service, per visit, per case, per bed-day, or per person per year. While many



researchers have attempted to compute the cost of care to a population, the cost of services is dependent upon provider decisions and investments.<sup>30</sup> Setting payment rates and mechanisms can largely impact health outcomes and system efficacy and efficiency. Thailand has had to address unhappy physician providers, some of whom have turned to the medical tourism industry where they can earn higher salaries, and Ghana has had to tackle corruption within the system (see **Exhibit 3** for 2015 National Health Insurance Authority web page highlighting physician arrests).

For universal coverage, the health system needs to be simultaneously efficient and effective in how it supplies health care. Efficiency involves: procurement, generating demand for preventative care (i.e., patronage), and productivity, which involves management, motivation, absenteeism, and management information systems.<sup>31</sup> The system's effectiveness should be judged by its ability to improve health outcomes.

### Financing UHC in Thailand, Ghana, Rwanda, and Vietnam

Principal features	Thailand: Universal Coverage Scheme (UCS)	Ghana: National Health Insurance Scheme (NHIS)	Rwanda: Community Based Health Insurance (Mutuelles de Santé)	Vietnam: Social Health Insurance (SHI)
<b>Funding mechanism</b>	General tax revenue	1) A 2.5% value added tax, which accounts for 75% of NHIS funding; 2) Payroll tax of 2.5%, redirected from the Ghana pension scheme for formal sector workers; and 3) Premium contributions from informal sector workers (less than 5% of the total annual NHIA revenue)	1) Donors and NGOs, 2) Tax-generated funding from the formal sector, and 3) Annual member premiums, which provide about 50% of funding for the Mutuelles system)	Property, income and other tax revenues as well as out-of-pocket payments
<b>Purchasing agency</b>	The National Health Security Board (NHSB) was created under MoPH to design the UCS and determine health services for beneficiaries. The NHSB oversaw the National Health Security Office (NHSO) that managed the registration of beneficiaries, service providers, and coordinating pay claims.	Initially, NHIS was decentralized to districts called the District Wide Mutual Health Insurance (DWMHI) scheme. Each scheme was managed by a Board elected by a General Assembly comprised of Community Health Insurance committee (CHIC) representatives. Many districts were unable to manage the DWMHI. The government centralized the administration of NHIS into the National Health Insurance Authority.	The district Mutuelle is governed by a board of directors and an agent who conducts audits. The Mutuelle Fund manages member premium subsidies and disburses funds to the appropriate locale based on need and service utilization. Districts guide and facilitate the administrative, logistical, technical, training, and management of the Mutuelles.	VSS collects mandatory (and voluntary) contributions to the health insurance program, pools these with the subsidies from the Ministry of Finance and pays the providers for care received by people covered by VSS.

<b>Cost control</b>	Government expenditure on UCS increased steadily, reaching USD 7.4 billion by 2008—a 76% real term increase from 2002—due to increased utilization of primarily curative health services and other high cost services such as kidney dialysis, which was introduced in 2008. Per capita UCS spending more than doubled from 2002 to 2011.	By 2011 the government was facing a deficit of more than USD 16.6 million, due to cost escalation of services and large inefficiencies. Purchasing and revenue collection cost USD 67.3 million and included registering district-level programs and administrative support. USD 30.7 million was spent by the government on identification cards and offices. High enrollment premiums deterred participation among informal sector workers, whose enrollment might have improved financial sustainability.	Health expenditures increased from 10 USD per capita in 2002, to 48 USD per capita by 2010. Revenues generated from Mutuelle member contributions are insufficient to cover hospital costs, leading to debts at district hospitals, putting the sustainability of Mutuelles in question.	As SHI expanded from 2006 to 2010, the government’s share in financing it rose from 29% to almost 50%. The capitation system places district hospitals at risk for the costs of referral to the provincial level. Pharmaceutical companies also lobby to include their drugs in insurance lists, increase drug prices and encourage doctors to overprescribe expensive medications and laboratory tests. Medications account for 45-60% of all hospital costs. The VHIF is running at a loss and facing the risk of bankruptcy.
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## Monitoring and Evaluation of UHC

While the concept of universal coverage is important for orienting policy, measuring effective coverage across all services in an entire health system is not feasible.<sup>7</sup> In May 2014, the World Bank and WHO released a framework for monitoring UHC progress, using two targets: financial protection and service delivery.<sup>32</sup> The goal for financial protection is to reduce by half the number of people impoverished due to out-of-pocket health expenditures by 2020 (from 100 million to 50 million people) and to eliminate impoverishment due to health expenditures fully by 2030. The goal for service delivery is to increase the percent of the poor with access to basic health services from 40% to 80% by 2030.

Researchers have identified indicators for assessing UHC progress in these areas—health services coverage and financial protection coverage. They break down health services coverage into prevention and treatment and suggest examining coverage in terms of: 1) aggregate measures using a set of tracer interventions, and 2) equity measures stratified by wealth quintile, place of residence, and gender.<sup>32</sup> For example, the percentage of women in fertile age ranges accessing family planning services or children under 5 seeking immunizations would inform aggregate coverage, and exploring differences by region or wealth would inform equity. Many countries, however, do not have the means to measure national coverage of needed health interventions and may choose to study coverage in a subset or smaller population.<sup>32</sup> Other metrics below may provide some insight to coverage as well.

### Indicators of Universal Health Coverage in Thailand, Ghana, Rwanda, and Vietnam

Principal features	Thailand: Universal Coverage Scheme (UCS)	Ghana: National Health Insurance Scheme (NHIS)	Rwanda: Community Based Health Insurance (Mutuelles de Santé)	Vietnam: Social Health Insurance (SHI)
<b>Number of people enrolled</b>	In 2002, UCS membership was 45 million. In 2011, 48 million.	In 2003, less than 1 million people were covered by Community-Based Health Insurance Schemes. In 2005, NHIS membership was 1.3 million. In 2012, 9 million.	In 2003, about 600,000 had insurance coverage. As of 2010, 9.2 million people were enrolled.	In 2000, 10.4 million people were covered by SHI. About 50.8 million were covered in 2010.
<b>% population insured</b>	About 70% of Thai population had health insurance in 2001 (mostly through SSS,	In 2003, about 1% of the total population was covered by Community-Based Health Insurance Schemes. In 2012,	7% had insurance coverage in 2003; 92% of total population was enrolled by 2010.	In 2000, 13.4% of the population was enrolled in SHI. In 2011, 63% was enrolled.

	CSMBS, Voluntary Health Card Scheme, and Medical Welfare Scheme). In 2009, 73% was covered by UCS, and 99% was covered in total.	NHIS membership was about 35% of total population. The remaining 65% of the population defaulted to the old fee-for-service model.		
<b>Demographics of those insured</b>	People living in poverty have benefited the most.	The rich are twice as likely to join and benefit from NHIS.	A 2012 study found Mutuelles enrollees in the poorest household expenditure quintile had a lower rate of utilization and higher rate of catastrophic health spending than enrollees in higher quintiles.	95% of the poor had enrolled in SHI by 2011.
<b>Change in out-of-pocket expenses</b>	Out-of-pocket payments decreased from 33% of total health expenditure in 2001 to 18% in 2008.	National average out-of-pocket spending dropped by 4% over 10 years, but remains about 22-37% of total spending.	Out-of-pocket health expenditure and 'catastrophic' expenditures decreased.	Out-of-pocket expenses remained high. In 2010, the OOP share of total health spending was 57.6%.
<b>Change in service utilization</b>	Annual outpatient visits per member increased from 2.45 in 2003 to 3.22 by 2010. Annual hospital admissions per member rose from 0.094 in 2003 to 0.116 in 2010. Vaccination for measles and DTP3 rose to 98% and 99%, respectively, and 99% of births were attended by skilled health personnel.	A study from Accra showed an increase in patients reporting general exams, breast exams, seeking formal care when sick, visiting a clinic over the past year, being hospitalized overnight, and filling prescriptions.	Incentives in the Rwandan Pay for Performance (P4P) program have increased use. Between 2003 and 2010, the utilization of health services per capita increased threefold from 0.31 to 0.95. In 2010, 24 months of P4P programs had increased institutional delivery.	Voluntary health insurance increased annual outpatient and inpatient visits by around 45% and 70%, respectively.
<b>Principal service providers</b>	Primary health care is organized at the community level, and the principal service providers are the Health Volunteers who are trained to provide care services in their catchment area.	The NHIS benefit package had been traditionally weighted toward curative rather than primary and preventive care, but the Community-based Health Program and Services (CHPS) has strengthened primary care service delivery since 1999. CHPS focuses on remote areas of rural districts through Community Health Nurses (CHNs). District Health Management Teams support CHNs. At the community level, basic preventive and curative services for minor illnesses were addressed at health posts and CHPS compounds.	Every village within a district has three community health workers who monitor child growth and development, offer health information, family planning and basic preventive and curative services. Local health centers, staffed by nurses and serving 20,000 people, support the community health workers. Health centers provide reproductive and child health services, acute care, and diagnosis and treatment of HIV, tuberculosis, and malaria. District hospitals, with 10-15 generalist physicians, provide more advanced care. District pharmacies procure essential medicines	The Commune Health Stations (CHS), the first formal point of contact in the government health care system, provide primary health care services. They carry out early detection of epidemics, provide care and treatment for common diseases and deliveries, mobilize people to use birth control, practice preventive hygiene, and carry out health promotion at the village level. The CHS also supervise voluntary health workers who receive 3-9 months of health promotion training. The CHS is under the District Health Office and the Commune People's Committee for local health care and receives technical

			from a central agency and distribute.	guidance from the district hospitals.
<b>Challenges</b>	Costs to the government were rising and human resources were not equitably distributed throughout the country. Some rural areas experienced long periods of time in which no physician posts were staffed. While medical tourism brought in a lot of money, it drained human resources from the public health system.	Less than 2% of Ghana's population was enrolled in NHIS as indigent. The insured complained of health providers' negative behavior, including derogatory language toward the insured, long waiting times, and lack of drugs at facilities. Some health providers collected unauthorized fees from insured patients. Patients had generally negative perceptions of the health care delivery system as a whole, which had consequences for health insurance enrollment. The enrollment process was a barrier to the success of the scheme due to inadequate administrative staff, office space, and equipment, as well as long waiting times for receiving ID cards.	Donors contributed 53% of Rwanda's overall health budget in 2006. This reliance on external sources of health funding raises questions about the sustainability of Mutuelles. Rising premiums also pose a financial barrier for many Rwandans. The institutional capacity and managerial abilities are still limited at the national and the community levels. Rwanda's one medical school does not have the capacity to train enough specialists to meet the needs; many districts have two physicians per every 100,000 people.	High rates of enrollment into SHI have not translated into effective coverage for the poor. Despite large increases in the partial subsidy extended to the near poor, enrollment rates remain low even among formal sector workers whose enrollment is compulsory. In principle, Vietnam has a single pool and a unified benefits package. In practice, the resource allocation mechanisms in place have exacerbated existing fragmentation of revenue and risk pools and led to larger inequalities.

Financial protection coverage can be examined in terms of aggregate impoverishing expenditure and catastrophic expenditure on both fees and planned health costs (e.g., premiums, pre-scheduled primary health care visits), the percent of the total population being pushed into both these conditions, and the fraction of households protected stratified by wealth, location, and gender. In the example of Vietnam, around 50% of the total population has insurance coverage. The two groups who are fully subsidized by the government or by social security, however, have 80% and 94% insurance enrollment, respectively. Those who are voluntarily insured with no subsidy have 21% enrollment.<sup>33</sup> These data show not only low enrollment but also suggest other problems with UHC policy, including inequity. Research has further revealed that apart from financial barriers, there are minimal incentives for those who can pay in Vietnam. They believe the benefits are limited, with few services covered, and the quality poor.<sup>34</sup> This has implications for all wealth quintiles, showing the value of data in evaluating UHC.

Lessons from recent interventions that focus primarily on enhancing access suggest that improving financial protection may not be sufficient to improve health outcomes. Literature on quality of care has been concentrated in high-income countries but is expanding in low- and middle-income countries. While it is not yet clear how previously articulated domains of quality are applicable (the Institute of Medicine describes quality as having six key features: safe, effective, patient-centered, efficient, timely, and equitable<sup>35</sup>), it is clear that quality is of considerable concern: low- and middle-income countries experience 50% more adverse medical events than high-income countries and account for approximately two-thirds of the corresponding loss of DALYs due to these events.<sup>36</sup> The equity and universality aspects of the UHC concept are closely related to quality measures.<sup>7</sup>

## Quality of Care and UHC in Thailand, Ghana, Rwanda, and Vietnam

Principal features	Thailand: Universal Coverage Scheme (UCS)	Ghana: National Health Insurance Scheme (NHIS)	Rwanda: Community Based Health Insurance (Mutuelles de Santé)	Vietnam: Social Health Insurance (SHI)
Accreditation	Thailand relies on accreditation to set quality standards, and financial incentives encourage providers to seek accreditation. A Standards and Quality Control Board oversees quality control. Provider's payment is linked to accreditation status. Although the accreditation program was officially implemented in 2001, only 35 hospitals had become accredited within the first 3 years. By the end of 2004, only 6.6% of all hospitals in Thailand (86 hospitals) had been accredited. Thailand introduced financial incentives for hospitals to improve quality in 2007; by 2012, nearly 40% of hospitals were accredited.	The National Health Insurance Council governs the National Health Insurance scheme in Ghana. It is responsible for the licensing, registration, regulation, accreditation, and supervision of health care providers, as well as their performance management and quality.  As of 2011, all public and Christian Health Association of Ghana (CHAG) facilities were given accreditation, as were 1,551 private providers. Some districts have only one accredited clinic, while others have more.	Instead of establishing a traditional accreditation system, Rwanda created a Performance Based Financing (PBF) scheme whereby facilities underwent quarterly external quality assessments and the results were used to set payment rates.  A 2009 study examined the effect of the PBF system on Rwanda's public sector health centers and found facility quality scores at the beginning of the PBF phase ranged between 10% and 55%. After participating in the PBF system, all participating health centers achieved sustained quality scores between 80% and 95%.	Vietnam has no accreditation system. The quality standards are based on inputs. As of October 2014, The Partnership for Health Advancement in Vietnam (HAI-VN) is discussing the development of an accreditation system with the Accreditation Council for Continuing Medical Education (ACCME).
Safety	In a nationwide, multi-centered study of 10,760 patients, the average prevalence of HAIs in Thai patients was 7.3% in 2011. Health care-associated infections (HAI) were found at the highest rates in tertiary-care facilities, particularly in intensive care units, most commonly in the lower respiratory tract.	According to the US Census Bureau, the estimated rate of incidence of HAI infections in Ghana is approximately 152,000 out of 20.7 million people (0.73%).  In studies of a regional hospital in Ghana, health care workers were found to have adequate knowledge on HAIs but low compliance on preventive techniques such as handwashing.	Minimal research exists on the prevalence of HAIs, but a study on multiresistant Salmonella typhimurium (MRST) found this HAI in 81% of patients in Rwanda. Of patients enrolled in a TB program at Kigali University Hospital, 26% developed a serious adverse event; incidence was higher in HIV-infected patients (58 of 167 patients, or 35%) than in patients not infected with HIV (6 of 86 patients, or 7%).	The first nationwide study of HAIs was conducted in 2008 at 36 Vietnamese hospitals. Of 7,571 patients, 7.8% had HAIs. The most common HAIs were pneumonia (41.9%) and surgical-site infections (27.5%). The greatest risk factor was device use. In 2003, Vietnam began to implement a database to detect adverse events related to vaccinations such as cholera, Japanese encephalitis, rabies, and typhoid fever.
Patient satisfaction	In 2003, 83% of members expressed satisfaction with UCS, and in 2010 that number rose to 90%. When asked about continuity of care after the transfer of primary care to family physicians, patients rated faculty family physicians more highly (67.87) than residents (64.57) and general doctors (62.51).	Anecdotally, patients have reported high quality care, though there have been complaints about facilities not having prescription medications available, and the belief that hospitals are withholding medications for bribe payments. In 2012, women at an antenatal clinic spent 6.5	A qualitative study published in 2005 on patient trust reported that positive responses about health insurance expansion described the contribution of insurance to improving access to care, while negative comments pointed to weaknesses that limit the effectiveness of insurance and quality of	Patient complaints have included poor facilities, inadequacy of patient beds, lack of medical equipment, dirty toilets and shortage of water. Patients also complained about unclear procedures for hospital admission, long wait times and

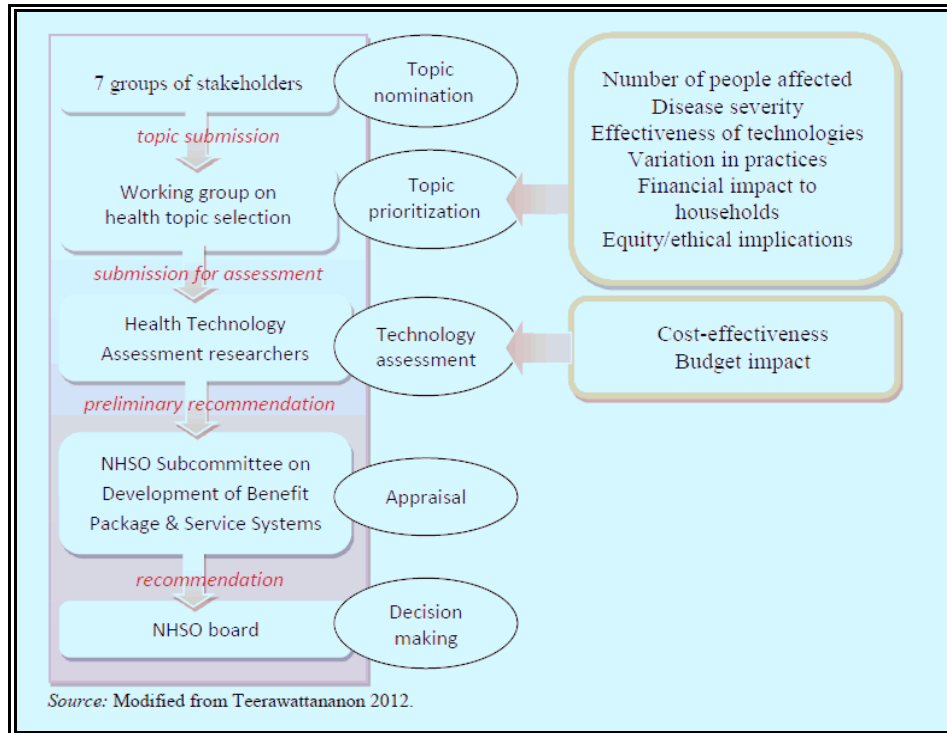
		hours getting care; about 68% rated the waiting time as too long. However, overall patient satisfaction at regional/district hospitals, private hospitals/clinics, and health center/CHPs was 85.7%, 93.5%, and 88% respectively.	care in health facilities. Overall national patient satisfaction, has increased as of 2010.	crowding, especially in the big, well-known central hospitals. In a study on HIV/AIDS care, the percentages of respondents completely satisfied with overall service quality and treatment outcomes were 42.4% and 18.8%, respectively.
Health indicators	UCS reduced likelihood of people reporting to be too sick to work within three years of its introduction. Life expectancy increased from 71 years in 2000 to 74 years in 2010. Infant mortality decreased by 6.5 per 1,000 births from 1997 to 2008. The prevalence pattern of hypertension decreased, diabetes stayed constant, and hyperlipidemia increased.	In 2003, the vaccination coverage for measles and for DTP3 was around 80%. In 2011, measles coverage was 91%, and DTP3, 92% coverage. Antenatal care visits were reported at 73%, and 55% of births in Ghana were attended by a skilled health personnel. Since 2008, there has been an improved trend in doctor/population ratio, nurse/population ratio and midwife/population ratio.	Child mortality dropped from 15.2% in 2005 to 7.6% in 2010. Life expectancy at birth has increased from 48 years in 2005 to 58 years; deaths from malaria decreased by almost 60%. 45% of pregnant women delivered at a health facility in 2008, an increase from 26% who delivered at a health facility in 2000.	In 2011, vaccination rate for measles and DTP3 were at 96%, the same as the regional average, and approximately the same as they were a decade earlier. Antenatal visits were at 73% in comparison to the regional 48%. Furthermore, about 92% of births in Vietnam were attended by skilled health personnel, comparable to the regional average.

## Conclusions

As countries aim for universal health coverage—to provide all people access to a package of health services without causing financial hardship—leaders need to mobilize political will and revenue. Ministers and governments must be able and willing to shift their policies and agendas to support the shared goal of UHC. The experiences of Thailand, Ghana, Rwanda, and Vietnam display the complexity of mobilizing these commitments over long periods of time. Leaders need to navigate often slow-moving bureaucracies to expand coverage. The process of preparing for, designing, and implementing UHC takes time; leaders should anticipate this and set stakeholder expectations accordingly.

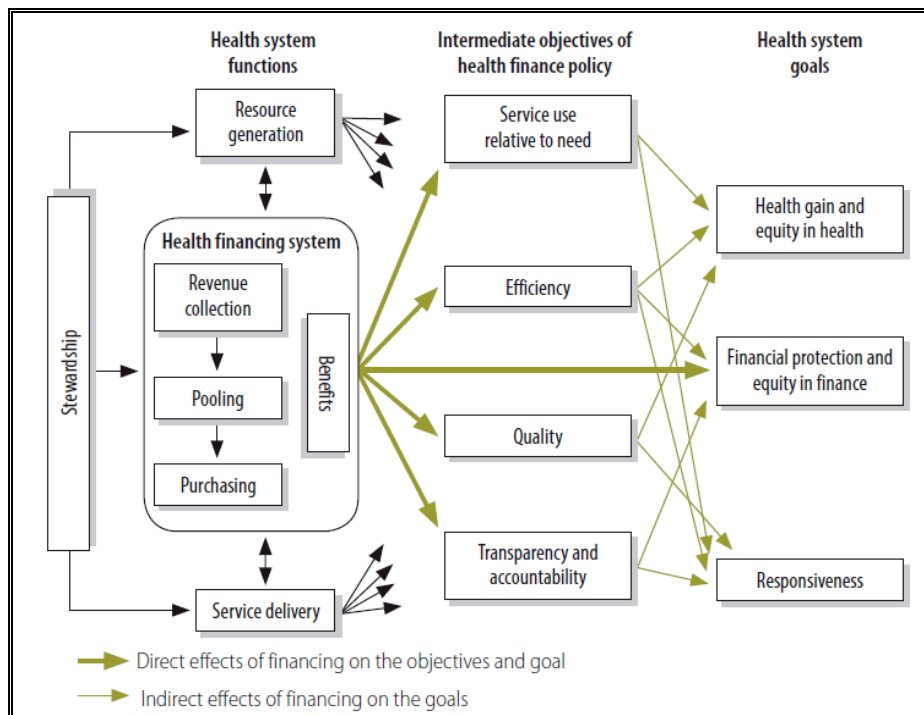
In addition to the strong role of politics, these four examples remind stakeholders of the technical, multivariable analysis needed to begin and sustain UHC. Political strategies and accurate forecasting remain important in working towards UHC over time as countries see changes in the economy and population. Ministers of health and finance need to be able to expand their financial and administrative capabilities while using their leadership skills to ensure successful policy implementation. While the funding mechanisms that generate revenue for the system are important, ultimately health systems providing the care must generate value, i.e., improve health outcomes and contain costs to the system. Country leaders can glean great lessons from their colleagues who have been working toward UHC in how to balance efficiency and equity. Doing so will allow them to generate value, improve health outcomes of populations, and overcome the struggles of ensuring access, affordability, and acceptability.

**Exhibit 1** Thailand Benefits Package Decision Process Since 2010



Source: World Bank UNICO report.

**Exhibit 2** Relationship between UHC and Health Financing Goals



Source: Kutzin, Joseph. Health financing for universal coverage and health system performance: concepts and implications for policy. Bulletin of the World Health Organization 2013; 91: 602-611.

### Exhibit 3 *Ghana’s National Health Insurance Scheme Website Warns Providers of Fraud*

The screenshot shows the homepage of the National Health Insurance Scheme (NHIS) website. At the top, there is a banner for the 'NHIS 10TH ANNIVERSARY CONFERENCE PRESENTATION MATERIALS' with a 'Click here' button and social media links for Facebook (1.3k likes) and Twitter (599 followers). The NHIS logo is on the left, and the Ghanaian coat of arms is on the right. Below the logo, the text reads 'NATIONAL HEALTH INSURANCE SCHEME' and 'Your access to healthcare...'. A navigation menu includes links for 'Annual Report', 'NHIS Medicines List', 'Health Tips', 'News', 'Press Releases', and 'Downloads'. A search bar is also present. A blue navigation bar contains links for 'HOME', 'ABOUT US', 'DISTRICTS', 'PROVIDERS', 'CLAIMS', 'MEMBERSHIP', 'FAQ', 'MEDIA GALLERY', and 'CONTACT US'. The main content area features a large image of hands in handcuffs, with a news article titled 'Dr. Ametewee defrauds NHIA of GHC 415,000'. The article text states: 'Two persons, one of whom is the medical superintendent of the Essikado District Hospital in the Western Region, Dr. N.K Ametewee, have been arrested for allegedly defrauding the National Health Insurance Authority (NHIA) to the tune of GHC415, 439.15.' To the right of the article is a 'NHIS Call Centre' advertisement with contact numbers '054 444 6447' and '0302 74 6447', and a short code '6447'. The advertisement also lists languages (English, Akan, Dagbani, Ewe, Ga, Hausa) and operating hours (Monday - Sunday, 6am - 12 midnight). At the bottom, a 'NEWS' section highlights 'Another doctor in police grip for defrauding NHIA' with a 'More news >>' link.

Source: [www.nhis.gov.gh](http://www.nhis.gov.gh), accessed February 10, 2015.



**Thailand**

The Kingdom of Thailand, located centrally in the Indochina peninsula, is a constitutional monarchy of 67.5 million people, 65% of whom live in rural areas and 35% of whom work in agriculture. The industry and service sectors generate over 90% of Thailand's GDP. The first decade of the 21st century saw seven different Thai governments and five general elections. The most recent coups d'état was in May of 2014.<sup>37,38</sup>

In the late 1990s, reformists in the Ministry of Public Health (MoPH) and partnering institutions started systematically documenting health inequities and developing evidence-based policy options to tackle them, including radical financing reforms to achieve universal health coverage (UHC). Sluggish political will and economic insecurity impeded efforts at the end of the twentieth century, when about 75% of the Thai population was insured by at least one of four fragmented health insurance schemes and about 33% of all health expenditures were out-of-pocket.

Equipped with data showing that universal coverage was financially and programmatically feasible, and with the support of 11 Thai NGOs in late 2000, affordable health care became a campaign promise. Newly elected Prime Minister Thaksin Shinawatra announced in 2001 his goal to achieve universal health coverage within a year.

To formulate specific policies, the MoPH set up working groups, with representatives from other sectors and those involved in implementation. The government had been investing in local health infrastructure, health policy and systems research institutions, public health administration capacities and a computerized civil registration system long before the proposal, which allowed for a rapid roll-out of a new financing scheme.

The initial primary beneficiaries of the Universal Coverage Scheme (UCS) were those not covered by the Social Security Scheme (SSS) for formal sector private employees and the Civil Servants Medical Benefits Scheme (CSMBS) for government employees. At its launch, UCS covered around 70% of the Thai population. By 2005, it covered 96% of the population and by 2012, 99% of the population. Those eligible for SSS and CSMBS benefits were entitled to outpatient, inpatient, accident and emergency, high-cost, preventative, and primary forms of care via UCS. The UCS was funded largely by general revenues, with a minimal copayment of 30 baht (about USD 0.70) that was abolished in 2006.

The government's commitment to and public support for UCS remained strong through several elections and coups. Catastrophic health care expenditures, especially in impoverished areas of the country, decreased, and health care utilization increased, especially in public facilities.<sup>39</sup> While many contracted health care providers were unhappy with UCS initially, satisfaction rose from 39% in 2004 to 79% in 2010.

The success of the scheme has yielded new challenges, including how to integrate foreign migrants; how to combine the three nationalized schemes (SSS, UCS, and CSMBS) to reduce inequities in benefit packages; how to ensure sufficient and highly-trained human resources for health to meet current shortages; and how to adjust the evolving financing mechanism to better serve the population.<sup>39</sup>

## Ghana

The country of Ghana, on Africa's western coast, is a constitutional democracy of almost 26 million in 2015, 48% of whom live in rural areas. Ghana has long enjoyed relative political and social stability and boasts one of West Africa's largest economies, second only to Nigeria.<sup>40</sup> In 2014 Ghana's economy plummeted, forcing President John Dramani Mahama to turn to the international community for help.<sup>41</sup>

Prior to 2003, Ghana's health system relied on a user fee scheme called "Cash and Carry." Individuals received care only after payment, even in emergency settings, though vulnerable populations such as the poor, pregnant women, and children were exempt from pre-service fees.

In 2004, President John Kufuor, elected in 2000 with promises to deliver health care to all, enacted the National Health Insurance Scheme (NHIS) to ensure universal access to quality health care and provide financial protection. Membership in the scheme was mandatory for all Ghanaian citizens. The scheme covered services and medicines for 95% of the disease burden in Ghana. Currently, the NHIS is composed of three plans: a mandatory scheme for formal sector employees; a district mutual health insurance for informal workers; and private plan options.

Revenue streams include a payroll tax of 2.5% redirected from the Ghana pension scheme for formal sector workers, premium contributions from informal sector workers, and a 2.5% value added tax (VAT) called the National Health Insurance Levy (NHIL), which accounts for 75% of NHIS funding.

The program's membership grew from 1.3 million in 2005 to 9 million, or 35% of the total population, in 2012. This low enrollment is thought to be the consequence of cost-prohibitive premium pricings.<sup>42</sup> The cost of administering the program rose 40-fold to unsustainable levels.<sup>43</sup>

Out-of-pocket payments for services still dominate health care financing in Ghana, accounting for 37% of total national health expenditures in 2009, over twice the WHO's recommended threshold of 15%.

## Rwanda

The Republic of Rwanda, a small landlocked nation in central eastern Africa, is densely populated and highly reliant on subsistence agriculture. Overcoming a history fraught with civil war, genocide and destruction, Rwanda is a presidential republic in which the head of state governs the executive branch independent of the nationally elected legislature. The international community has admired current President of Rwanda, Paul Kagame, in power since 2000, as an effective leader, however, his "intolerance for political opposition" has also been noted."<sup>44,45</sup>

In 1999, Rwanda's health infrastructure was reconstructed but was unaffordable and under-used. In early 2000, Rwanda was investing 10% of GDP in health care, but had a shortage of human resources for health with only 6 physicians per every 100,000 citizens.<sup>46</sup> The government piloted three community-based health insurance programs, Mutuelles de Sante.

In 2003, the Mutuelles de Sante pilot was scaled to a voluntary national health insurance policy. Existing community-based structures provided most health management and administration services, while regional administrators and local lawmakers collected premiums and managed community risk pools. Members were entitled to curative care benefits at all public and private non-profit hospitals and health centers (90% of the country's health care facilities). The central government provided only top-level policy decisions and coordination.

Currently, those unable to afford private insurance or ineligible for one of the two formal sector employment-based programs can choose between the Minimum Package of Activities (MPA) and Complementary Package of Activities (CPA).<sup>47</sup> MPAs cover comprehensive primary care at local health centers, including pre- and post-natal care.<sup>47</sup> CPAs provide additional insurance coverage for secondary and tertiary care.

The Mutuelles system uses multiple financing mechanisms, including cross-subsidies, donor/NGO support, and tax-generated funding from the formal sector. About 50% of funding is from annual member premiums—less than 2 USD per family member and a 10% co-payment for all health services. Those considered very poor are exempt from fees. In 2011, to address affordability, Mutuelles adopted a sliding scale, quadrupling premiums for the wealthiest.<sup>45</sup>

Insurance coverage for the people of Rwanda improved from 7% in 2003 to over 92% in 2012. Enrollment declined to 81% in 2012-2013. Utilization increased three-fold between 2003 and 2010, and child mortality dropped almost 50%.<sup>48</sup>

These successes are not without challenges. Health costs, especially the increasing costs of secondary and tertiary care have skyrocketed. Total expenditure on health per capita rose from USD 28 in 2002, to USD 144.3 in 2012. Donors contributed 53% of Rwanda's overall health budget in 2006 and 46.6% in 2012,<sup>49</sup> raising questions about the sustainability of Mutuelles. Rising premiums also pose a financial barrier to care for many Rwandans. The limited institutional capacity and managerial abilities at all levels remain challenges to the system. Rwanda's one medical school does not have the capacity to train all the needed human resources for health.<sup>50</sup>

## **Vietnam**

Vietnam, the 13<sup>th</sup> most populated country in the world, is a single party socialist republic in Southeast Asia, united under a communist government in 1975.<sup>51</sup> Nearly one-third of the population lived in urban areas in 2014. Urban poverty was 3.6% in 2007, compared with rural poverty at 25%. Vietnam faces major inequities in incomes, health care, and gender relations.<sup>52</sup> The country aims to achieve 70% national health insurance coverage by 2015 with out-of-pocket costs less than 40% of total health care spending and 80% insurance coverage by 2020.<sup>34,53</sup>

The Vietnamese government has always prioritized health care, with the provision of health insurance guaranteed for all citizens in the 1992 constitution. However, in the early 1990s, 70% of health care expenditures were out-of-pocket.<sup>51</sup> The Government of Vietnam experimented with several strategies to improve coverage for the poor and reduce out-of-pocket expenditures, culminating in the successful 2002 introduction of the Health Care Fund for the Poor that insured the poor, ethnic minorities, and the disadvantaged. The Health Care Fund for the Poor became compulsory in 2005, with government-subsidized premiums.

In 2009, new legislation created a national Social Health Insurance (SHI) program, combining disparate programs into a central policy.<sup>54</sup> The SHI program consists of a Compulsory Health Insurance scheme (CHI) and a Voluntary Health Insurance scheme (VHI). CHI supports a contributory scheme for the formally employed, pensioners, and full-time students; and a non-contributory scheme for economically and socially disadvantaged citizens. The VHI scheme provides insurance for family members of those with CHI who would otherwise not qualify.<sup>54</sup>

The government is responsible for full subsidies of all health insurance premiums for children under six years old, the elderly, the poor, households in disadvantaged communities, and ethnic minorities. The

government partially subsidizes premiums for those near the poverty line and students.<sup>55</sup> Government-based tax subsidies, along with support from provincial governments and the Vietnam Health Insurance Agency (VSS), supplement the contributory health care financing mechanisms.<sup>34</sup>

SHI covers a broad range of services from rehabilitation and ambulatory care to advanced diagnostic and curative services. SHI also covers transportation costs and medications. The Ministry of Health, with input from Vietnam Health Insurance Agency and service providers, determines the care package. In theory, all SHI members are entitled to the same benefits package; however, there are large inequalities in quality of care and availability of services provided to the poor and the non-poor.<sup>55</sup>

SHI medication benefits present challenges. SHI medication coverage lists are inconsistent. Not all medications on the list are cost effective; some expensive drugs that are rarely used in more developed countries are covered in Vietnam. There is no regulation of pharmaceutical prices; individual hospitals set drug costs, which lead to high medication costs, limiting access. Hospitals also often lack needed medications, and SHI only reimburses patients for medication purchased from the hospital.<sup>34</sup>

In 2010, nearly 60% of the population was enrolled in the program, but out-of-pocket health expenditures still reached 57.6% of health care spending. By 2011, nearly 95% of Vietnam's poor had been enrolled in SHI, but enrollment figures remained low among formal sector workers.<sup>54</sup> Capitation-based resource allocation for primary care based on historic risk pooling and utilization rates present barriers for care equity because providers are de-incentivized from delivering services in poor settings.

## Appendix 2

## Health Insurance Terminology

**Capitation:** Payment on a per-person basis for a defined package of services during a fixed period of time, usually a month or a year. Typically a per-person fixed rate is paid to a general practitioner based on the number of individuals enrolled in that practice for the specified time period, regardless of whether the enrollees use services and the type of service rendered. Capitation shifts financial risk to providers and generally is used to pay GPs and other outpatient providers.

**Fee-for-service (FFS):** Payment based on individual visits or clinical activities (e.g., injections, lab tests, x-rays). Facilities and individual doctors receive revenue based on the quantity and type of services they provide. As such, one drawback to this payment method is that it tends to promote excessive use of services and can increase costs. The patient or insurer bears the financial risk under FFS.

**Mutual Health Organizations:** Voluntary organizations that provide health insurance services to their members. Typically they are owned, designed, and managed by the communities they serve.

**Social Health Insurance:** One of the possible organizational mechanisms for raising and pooling funds to finance health services, along with tax-financing, private health insurance, community insurance, and others. Working individuals and their employers, as well as self-employed individuals, typically pay obligatory contributions that cover a package of services available to the insurees and their dependents. Many governments also pay subsidies into these systems to ensure or improve their financial sustainability.

**User Fees:** A financing mechanism whereby payment is made at the point of service and there is no risk sharing. User fees may include any combination of drug costs, supply and medical material costs, entrance fees, or consultation fees. Patients typically pay user fees for each visit to a health service provider, although in some cases follow-up visits for the same illness can be covered by the initial payment.

Source: Compiled by case writers using WHO and World Bank sources.

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