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Working Paper
Stories from Around the Globe: Financing Catastrophic Health Expenditures in Selected Countries


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Stories from Around the Globe: Financing Catastrophic Health Expenditures in Selected Countries

Anna Mae D. Dela Cruz et al.

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December 2014
PROJECT BRIEF

Project Title  Stories from Around the Globe: Financing Catastrophic Health Expenditures in Selected Countries

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Management  Philippine Institute for Development Studies (PIDS)

Funding  Health Research Management Program, Department of Health (HRMP, DOH)

Brief Description  This study reviews literature on financing catastrophic health expenditures in low-to upper middle-income countries that have demonstrated relatively good performance

Time Frame  The study was expected to require five months.

Date Submitted  30 April 2014
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<td>Additional Drug Package</td>
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<tr>
<td>CIS-7</td>
<td>Commonwealth of Independent States</td>
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<td>CSBMS</td>
<td>Civil Servant Medical Benefit Scheme</td>
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<td>CUPs</td>
<td>Contracting Units for Primary Care</td>
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<tr>
<td>DOH</td>
<td>Department of Health</td>
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<td>DPT</td>
<td>Diptheria-Pertussis-Tetanus</td>
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<tr>
<td>DRG</td>
<td>Diagnosis-Related Group</td>
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<tr>
<td>EMP</td>
<td><em>Empresas Médicas Previsionales</em> (English translation: Provisional Medical Firms)</td>
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<tr>
<td>FAP</td>
<td>Feldsher-obstetric Ambulatory Point</td>
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<td>FFS</td>
<td>Fee-For-Service</td>
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<td>FGP</td>
<td>Family General Practitioners</td>
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<td>FMC</td>
<td>Family Medicine Centers</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GGE</td>
<td>General Government Expenditure</td>
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<td>GGHE</td>
<td>General Government Health Expenditure</td>
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<td>GNI</td>
<td>Gross National Income</td>
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<td>IMR</td>
<td>Infant Mortality Rate</td>
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<td>LIC</td>
<td>Low Income Card</td>
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<td>LTTE</td>
<td>Liberation Tigers of Tamil Eelam</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<tr>
<td>HRMP</td>
<td>Health Research Management Program</td>
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<tr>
<td>INSS-MSP</td>
<td><em>Instituto Nacional de Seguridad Social - Ministerio de Salud Publica</em> (In English, it refers to the Nicaraguan Social Security Institute)</td>
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<tr>
<td>MHI</td>
<td>Mandatory Health Insurance</td>
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<tr>
<td>MHIP</td>
<td>Mandatory Health Insurance Fund</td>
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<tr>
<td>MINSA</td>
<td><em>Ministerio de Salud</em> (In English, Ministry of Health)</td>
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<tr>
<td>MMR</td>
<td>Maternal Mortality Ratio</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<td>MOOH</td>
<td>Medical Officers Of Health</td>
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<td>MoPH</td>
<td>Ministry of Public Health</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NHS</td>
<td>National Health Service</td>
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<td>NHSO</td>
<td>National Health Security Office</td>
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<td>OOP</td>
<td>Out-Of-Pocket</td>
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<td>PHIC</td>
<td>Philippine Health Insurance Corporation</td>
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<td>PHSB</td>
<td>Provincial Health Security Board</td>
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<td>PIDS</td>
<td>Philippine Institute of Development Studies</td>
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<td>PM</td>
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<td>SGBP</td>
<td>State Guarantee Benefit Package</td>
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<td>Social Health Insurance</td>
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<td>SILAIS</td>
<td><em>El Sistema Local de Atención Integral en Salud</em> (English translation: District System for Integrated Health Care Delivery)</td>
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<tr>
<td>SLFP</td>
<td>Sri Lanka Freedom Party</td>
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<tr>
<td>SSS</td>
<td>Social Security Scheme</td>
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<td>THE</td>
<td>Total Health Expenditure</td>
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<td>TRT</td>
<td>Thai Rak Thai</td>
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<td>UCS</td>
<td>Universal Coverage Scheme</td>
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<td>UHC</td>
<td>Universal Health Care</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
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<tr>
<td>UNP</td>
<td>United National Party</td>
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<tr>
<td>VHC</td>
<td>Voluntary Health Care</td>
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<td>WHO</td>
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Abstract

This study reviews literature on financing catastrophic health expenditures in selected countries to describe and synthesize the strategies of relatively successful health financing schemes.

It begins with a review of basic concepts and definitions to set the stage for later discussions. This is followed by a country selection process, where countries were selected based on their income level, health outcomes, coverage outcomes, cost-effectiveness, and the availability of information on their health financing strategies. Low-income, lower middle-income, and upper middle-income countries were selected, each one having above average outcomes and cost-effectiveness relative to other countries within the same income level. The availability of information further limited the selection to three countries—Kyrgyz Republic, Sri Lanka, and Thailand—on which a desk review was conducted. The study now presents the stories of each country and the common themes that emerged.

The stories reveal that the causes behind catastrophic payments, specifically high out-of-pocket payments, vary, thus the strategies for addressing also do. Health financing schemes were either set for the whole population or formulated to fit specific segments. All three countries increased the amount of funding available for healthcare, and did so mostly through taxation. Benefits are comprehensive, covering preventive, inpatient, and outpatient care with drugs and medicines. Payment methods were generally designed to use the available funds in a cost-effective manner, by strengthening preventive, primary care and incentivizing efficiency in tertiary care facilities.

Beyond that, change management factors that were common to most or all of the countries were: Crises that created an impetus for change; strong public demand and participation; a political system that empowers the populace and creates political incentives for reform; commitment to a comprehensive, cohesive, and appropriate strategy; grit and responsiveness throughout the implementation period; monitoring and evaluation; and rapid but phased implementation.

KEYWORDS: health, health financing, catastrophic health financing, out-of-pocket expenditure
Introduction

As universal health care begins to gain momentum in the Philippines and funding and technical support for it amasses, a timely opportunity to step back and revisit strategy arises. This study searches literature for what the best performers across the globe have done.

This section reiterates the study’s objectives, significance, background literature review, scope and limitations, and methodology.

OBJECTIVE

To review literature on financing catastrophic health expenditures in selected countries to describe and synthesize the strategies of relatively successful health financing schemes

SIGNIFICANCE

In reform, many ideas will make sense, not all of them will work, but all are costly—whether in terms of financial resources, social or political capital, or opportunities. The World Bank states that “with the scaling up of aid, both donors and countries have come to realize that money alone cannot buy health gains or prevent impoverishment due to catastrophic medical bills.” Effective reform requires resources, but also and more importantly, strategy.

Certainly, strategies are highly contextual and as such, will always to some extent involve tailor- fitting, intuition, even trial-and-error. However given the cost, impact, and urgency of universal health care, strategies must at least be informed and guided by the experience of others, especially as so many countries today are pursuing the same goal. This study thus hopes to compile research on successful strategies and provide policy-makers with a synthesized source of information.


Study 4 Stories from Around the Globe 8
LITERATURE REVIEW

Though resources and aid for health care have scaled up, neither these nor the opportunities for reform are unlimited. Donors and policy makers have also come to realize that resources alone do not lead to results. Thus more attention has recently been given to defining what works and directing aid to reforms that can better promise good outcomes.

A What Works Working Group was formed by the Center for Global Development’s Global Health Policy Research Network to establish criteria for success. These criteria have been touted as a significant contribution towards improving the formation of evidence and design of interventions, simply by setting standards for “what works.” According to the group’s research, public health interventions must present adequate evidence on five criteria: Scale, importance, impact, duration, and cost-effectiveness.2

Interventions must thus be reassessed with these ends in mind; the country selection process in this study specifically looks for such characteristics in addition to objectives that are specific to health financing, which are discussed in the concept review section.

Health Financing Strategies

Clarifying the performance objectives is only the first step. Strategies for reaching them are highly varied and contentious. In the path to universal coverage, Dr. Margaret Chan, Director-General of the World Health Organization (WHO), said that few things fit all: “We know that reforms of health systems must be context-specific, culturally acceptable, aligned with a community’s self-defined priorities, and fully owned and operated by national health authorities. Beyond these well-known prerequisites for success, there are virtually no other generalizations.”3

Indeed various literature agree that reform is highly contextual and hence, approaches are unique and specific to each country. The succeeding sections summarize what key references say about these strategies.

Enabling Conditions for Good Performance

The World Bank, in its search for good practices in health financing,4 confirms that the methods of each country are “clearly different and heavily contingent on each country’s political economy and institutional arrangements.” However it also asks whether reforms are so country-specific that no common elements may be found and recommended to those still in pursuit of universal coverage. A World Bank study of nine good performers—a set of low- to upper-middle income countries spread across the world—reveals this common ground. The Bank calls these general elements “enabling conditions”. (In fact this study is so similar that this research will emulate and cite it quite frequently.) These general enabling conditions are as follows:

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• Economic, institutional, and societal factors: Strong and sustained economic growth; long-term political stability and sustained political commitment; a strong institutional and policy environment; and a well-educated population.

• Policy factors: Financial resources committed to health, including private financing; commitment to equity and solidarity; health coverage and financing mandates; consolidation of risk pools; recognized limits to decentralization; and focus on primary care.

• Implementation factors: Carefully sequenced health service delivery and provider payment reforms; good information systems and evidence-based decision making; strong stakeholder support; efficiency gains and co-payments used as financing mechanisms; and flexibility and mid-course corrections.

Health Financing Strategies for the Asia Pacific Region

The Asia Pacific Region includes 37 countries and areas of the WHO Western Pacific Region, as well as the 11 countries of the WHO Southeast Asia Region, all of which are in various stages of attaining of better health outcomes. Specifically, out-of-pocket payments (OOP) are placing millions of people at great financial risk, with OOP spending much higher in the Asia Pacific Region than anywhere else. Global evidence suggests that OOP payments higher than 30% of total health expenditures as well as public spending of less than 5% of the gross domestic product (GDP) lead to difficulties in achieving universal health coverage.

Given the low levels of government spending in many countries in the region as well as changes in the socioeconomic conditions and global health environment, regional health financing strategies are being updated by WHO to better support universal coverage. Governments are called to strengthen their roles as providers, regulators and financiers of health systems. Strategies to increase public health investments and improved spending efficiency have been highlighted. Furthermore, primary health care is fast becoming the new focus for health systems, shifting the attention from curative services to more cost-effective preventive and promotive care.

The Health Financing Strategy for the Asia Pacific Region (2010 – 2015) aims to assist governments in analyzing their health financing situations and identify specific actions to achieve universal health coverage. It aims to help countries ensure access to quality health care services, achieve better health outcomes and attain universal coverage. In order to definitively monitor and evaluate this, the following indicators have been proposed:

• Out-of-pocket spending not exceeding 30% to 40% of total health expenditure;
• Total health expenditure should be at least 4% to 5% of the GDP;
• Prepayment and risk-pooling schemes should cover over 90% of the population; and
• Close to 100% coverage of vulnerable populations with social assistance and safety-net programs.

These are complemented by core strategic actions, five of which are from the current Strategy on Health Care Financing for Countries of the Western Pacific and South-East Asia Regions (2006 – 2010). These include:

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(1) Increasing investment and public spending on health

This strategy emphasizes that the most effective health financing mechanism to promote equity is adequate public funding. This becomes especially critical during times of economic and financial crisis. This can be achieved through appropriate policy developments and action plans, well-planned and integrated investment plans, stronger resource mobilization, and well-disseminated evidence on the impact of public investments on health.

(2) Improving aid effectiveness for health

External aid should complement domestic funding towards sustainable universal coverage. Results-oriented strategic resource planning should be the foundation of requests for overseas development assistance (ODA). Coordination with partners, transparent monitoring mechanisms, and alignment with national health agenda should then follow.

(3) Improving efficiency by rationalizing health expenditures

Focusing on health outcomes, addressing inequity, inefficiency, and low quality should then maximize the value of available resources. This can be done through a well-prioritized planning process and resource allocation, capacity building, as well as engagement with non-state sectors.

(4) Increasing the use of prepayment and pooling

Equity, access, and protection against the financial risks of ill health should be the targets of increasing prepayment and risk-pooling arrangements. Prepayment options should be well-defined and well-advocated. Implementation can also be improved through a combination of various prepayment mechanisms, supported by legislative and accreditation measures in both the public and private sectors.

(5) Improving provider payment methods

Influencing provider and consumer behavior can help improve health systems performance. Thus, existing provider payment methods should be evaluated and cross-matched with their respective results in terms of service delivery, cost containment, decrease of catastrophic spending and decrease of unhelpful provider incentives. Incentive options to better engagement the private sector should also be considered.

(6) Strengthening safety net mechanisms for the poor and vulnerable

Safety net mechanisms that reduce out-of-pocket payments should be strengthened in order to reduce a variety of economic, political, social and cultural factors. In order to better advance social protection especially for the poor and vulnerable, social determinants of health should be well-studied to address particular needs of vulnerable groups. Safety net mechanisms should also be well-funded with the support of strong monitoring and evaluation mechanisms as well as legal and regulatory frameworks.

(7) Improving evidence and information for policymaking

Health information systems should be complemented by timely and accurate evidence for guiding decision-making and policy development. Data and quality gaps should be identified in order to define research capacity that needs attention. Policy analysis and formulation should be supported by established centers of international quality, as well improved capacity for financial management.
Improving monitoring and evaluation of policy changes

Monitoring and evaluation should of course be done at the regional and national levels, keeping close observation of how indicators are being targeted and met. Results should then be closely linked to policy development, together with effective engagement with as many stakeholders as possible.

The same study identifies a similar set of factors that can form a “supportive environment for health financing reforms.”

- **Consensus on and commitment to universal coverage**
  - Multi-sectoral and multi-stakeholder consensus on goals
  - Commitments to roles and responsibilities to universal health coverage (UHC)
  - Availability of evidence of impact of public investments in health
  - Forums for disseminating policy analyses for high-level advocacy
  - Plans to address concerns of stakeholders who may be opposed

- **Development and implementation of policy**
  - Technical capacity to generate information and formulate policy
  - Capacity to review and enforce legislation and regulation
  - Administrative and management capacity at national and local levels

- **Transparency and accountability in all processes**
  - Resource management
  - Monitoring and evaluation of policy
  - Carrying out designated roles and responsibilities

**Note on Research Objectives**

The team must note that the research agenda thus appears to be somewhat redundant. Given (1) that reforms must be country-specific, and (2) there are already many, highly reputable studies on what the general, cross-cutting recommendations and success factors are, there may indeed have been no need for this study.

If the intention was to copy specific strategies, that would be a misuse of the stories of other countries. Recommendations to apply successful strategies can only be made after a full and thorough strategic planning process. Thus the agenda should perhaps have funneled resources towards the development of a strategic plan, where experts and stakeholders convene to discuss and agree on the country’s objectives, appraise its external and internal conditions, evaluate strategies, and map an implementation plan.
If the intention was to get a general direction (or common enabling conditions) and leave the specifics to local implementers, then that direction has already been provided by many such studies, including but not limited to the literature that have just been reviewed here. In lieu of commissioning another such study, existing ones could have been used to guide the strategic planning process, which goes straight to discussing what is appropriate to the country.

SCOPE AND LIMITATIONS

Restrictions in time and resources limit the coverage and methodology of the study, particularly the following:

- The study will focus on up to five countries only.
- The study is purely descriptive. Results are not meant to be normative or generalizable, nor do they attempt to establish causation between specific strategies/factors and performance. Great care must be taken in comparing the strategies and conditions with those present in the Philippines and saying that the same factors are sure to assist local reform efforts. What works for one or even several countries may not necessarily work for another.
- The study provides only a rapid appraisal and desk review. As such it is limited only to literature written in the English language and available through research databases as of September 2013. Though standardized and extensive set of information would be ideal, it may not be possible to obtain this kind of information. Though legal aspects will be considered and discussed, in-depth research on the relevant legal instruments may not be feasible given the timeframe, availability of information, and background of the research team.
- Data quality is often tenuous, but its assessment is also beyond the scope of this study.

METHODOLOGY

The methodology largely follows that used by a World Bank study on nine countries that have performed well in terms of health financing\(^6\). That study begins by defining good performance, then collecting standardized and detailed performance data in order to select a group of countries. Information on health financing reforms is then collected and synthesized.

Significant changes to the proposed methodology and scope of the study had to be made as the research team struggled with information availability. These changes are described and explained in the appendix.

1 Review of Conceptual Underpinnings

Fundamental concepts must first be defined and discussed to provide a clear and common understanding of underlying issues and an overall framework for the rest of the study. These concepts include:

**Catastrophic Health Expenditure**
Definitions and measures for catastrophic health expenditures will be discussed briefly. The evolution and divergences in how this has been understood and quantified is especially critical to this study. This discussion will provide the basis for focusing the study or not later on.

**Health Financing**
The objectives, functions, and performance measures of health financing, particularly in the context of universal health care, will be discussed to establish what a financing scheme must ultimately accomplish.

**Financing Catastrophic Health Care**
Putting the two together, this section discusses the features and specific policy objectives for catastrophic expenditures that merit special consideration in designing financing strategies.

2 Country Selection

Selection criteria and indicators based on literature were defined, sequenced, and applied to identify a maximum of five low- to upper-middle income countries with relatively successful financing schemes.

1 **Income Level**
   Only low- to upper-middle income countries will pass the first round of screening.

2 **Health Outcomes**
   Countries must have above average scores in terms of widely accepted health indicators.

3 **Coverage Outcomes**
   Indicators for coverage performance were also selected based on literature.

4 **Cost-Effectiveness**
   Countries must have minimal health care spending levels relative to other countries with similar outcomes.

5 **Information Availability**
   For practical reasons, sufficient data must be found in order for an analysis to be conducted.

These criteria were designed to cover the five criteria set by the working group of the Center for Global Development and follows the example set by the World Bank study on good practices in health financing, both mentioned in the literature review.

Countries were selected following an elimination approach, with each screening criteria reducing the list of eligible countries. To ensure balance (one country may score low in one respect but very high in other important ones), standards were set at a minimum level.

3 Data Collection

A desk review of global literature (including published literature, secondary data, and statistics) was conducted. The so-called “story” of each country is told thus:
**Timeline**

Each story begins with a timeline showing the significant events in the country’s history vis-a-vis health financing reforms. It appears that health reforms are heavily shaped by each country’s historical context.

**Story**

The story of health financing reform—the events and/or rationale as well as the resulting strategies—is told following a general inputs-processes-outputs-outcomes format. A more specific framework or outline could not be formulated given the variability in information availability and uniqueness of each country’s story.

**Inputs**

This section describes the market and health system conditions that had to be considered in strategy formulation.

**Processes**

This describes the strategy formulation process, or how the health financing scheme was designed.

**Outputs**

This describes the resulting financing strategy in terms of the three health financing functions. This section will also discuss implementation strategies.

**Outcomes**

This describes health financing achievements or performance that literature has somehow attributed to reform efforts.

Initially, the selection process yielded four countries—Thailand, Kyrgyz Republic, Sri Lanka, and Nicaragua. However, upon researching the stories of each, the research team felt that not only was there very little literature (in English) for Nicaragua, but that based on the existing literature, the country’s performance is not particularly extraordinary.

This suggests that the selection criteria may have been flawed. Perhaps the study should have selected countries that pass *absolute* performance standards (e.g., OOP payments not exceeding 30-40%) rather than *relative* standards (e.g., below average OOP payment levels). Then again, the team had relaxed the standards to become relative because too few countries were passing each stage.

Thus, the country report for Nicaragua has been eliminated. Interested readers may find it in the Appendix.

4 **Synthesis**

Each country report ends with a summary, and the paper as a whole is wrapped up by a synthesis highlighting common themes and factors across all the selected countries.

5 **Report Writing, Peer Review, and Dissemination**

The researchers wrote and packaged all information and findings. The managing agency (PIDS) requested a panel of reviewers to provide feedback on the study. This final report incorporates the revisions suggested by the review panel.

In addition to this written report, the team will also make a policy note and present the study at a health systems management research seminar scheduled for June 2014.
Concept Review

This section provides a brief review of the basic concepts that underlie all succeeding portions of the study. They are provided here with the aim of establishing definitions and providing a framework for how information can be analyzed later on. The review on health financing objectives and measures, in particular, provides the rationale for the country selection process.

Note that since many concisely written references discussing these concepts are available, many of the following sections have been taken almost verbatim from the indicated sources.

CATASTROPHIC HEALTH EXPENDITURES

Spread and Impact

The World Health Organization (WHO) estimates that every year, 44 million households or more than 150 million individuals face catastrophic expenditures, and of these, 25 million households or more than 100 million individuals are pushed into poverty by the need to pay for health care services. A 2007 study by Ke Xu and colleagues presents somewhat similar figures: Around 150 million people suffer financial catastrophe each year, 100 million are pushed below the poverty line due to health expenditures, and more than 90% of them live in low-income countries. The study collected data from 89 countries representing 89% of the world’s population, and likewise estimates the median incidence of financial catastrophe to be at 2.3%, with the problem being more severe among middle-income countries, and worse among low-income countries where the median is at around 2.5% and results for some countries reach up to nearly 10%.

Catastrophic health expenditures are a significant concern for several reasons. Payments for medical care often exceed the capacity of poor households to pay, thus families often have to cut back on other necessities such as food, clothing, or education, in order to pay for health care. The absence of these other necessities can, in turn, lead to other dire consequences. Catastrophic expenditures create a negative impact even when they are not incurred: Many people decide not to avail of health care services in anticipation of unaffordable costs for care, both direct (for consultations, tests, or medicines) and indirect (transport and food). Untreated illnesses are thus prolonged or even worsen, leading to lost earnings and other welfare effects.

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8 Ke Xu, David B. Evans, Guido Carrin, Ana Mylena Aguilar-Rivera, Philip Musgrove and Timothy Evans. “Protecting Households From Catastrophic Health”. Spending Health Affairs, 26, no.4 (2007):972-983
Defining Catastrophic Health Expenditures

Not seeking care can lead to impoverishment due to poor health and consequently, the inability to work. On the other hand, seeking care can also lead to impoverishment due to unaffordable costs of health care, and this is what the study focuses on—catastrophic health expenditures.

Before anything else, an important note: Catastrophic health expenditures are related to but not synonymous with catastrophic illnesses. Catastrophic illness is defined as “a morbid condition that results in health care costs that exceed a person's income, or which compromise financial independence, reducing him/her to subsistence or near-poverty levels.” Catastrophic expenditures cannot be simply defined as those associated with diseases that typically require high-cost treatments, however. Even inexpensive treatments can be catastrophic to a poor household, for example. There appears to be no standard definition of catastrophic health expenditures in that there is no consensus on an absolute amount, threshold, or cut-off point past which an expenditure can automatically be considered catastrophic. However the definitions that do exist agree on one thing—that they are defined relative to capacity to pay.

Essentially, health care expenses that are large relative to the resources available to a household may be considered catastrophic because they disrupt the living standards of that household. Ide-ally, longitudinal data would be followed throughout a certain period to estimate the extent to which living standards are disrupted by events that entail large health care expenses. Often, however, only cross-sectional data is available therefore a more widely used approach has been to define catastrophic health expenditures as those exceeding some fraction of household income or total expenditure within a given period, usually one year. A few things must be noted: (1) Spending on medical care diverts resources away from other goods and services, especially essential ones. However it is difficult to ascertain, with cross-sectional data, whether these compromises did in fact occur. (2) This approach only studies households that incur medical expenses, thereby missing out on households that did not. Often these households forewent treatment precisely because they may not be able to meet the expenses, and due to worsening health conditions, could potentially suffer more than the households that did incur catastrophic expenditures. Because of this, other approaches estimate exposure to, rather than incurrence of, catastrophic payments. (3) Illness shocks result in catastrophic economic consequences other than medical spending, typically through lost earnings and other opportunity costs, which the approach does not capture.

In any case, two variables are key: (i) total household OOP payments for health care, and (ii) a measure of household resources in the form of income, expenditure, or consumption. Income is advantageous in that it is not influenced by health expenditures, however it is disadvantageous because the health payments-to-income ratio also does not reflect how different means for financing health care can result in different levels of health expenditures. In addition, income is also subject to random shocks while spending is more likely to be smoothed over time, taking into account households’ expectations for the future.

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If total health expenditure is used as the denominator, catastrophic payments are defined in relation to a household’s budget for health—which becomes problematic considering that poor households often have a significantly lower budget for health. Most of the resources of poor households are spent on essential items like food or shelter, leaving very little to nothing for health care. Hence catastrophic payments have also been defined as a share of expenditure net of spending on basic necessities. The trouble now lies in defining what may be considered basic or “non-discretionary expenditures,” and here a common approach is to use food spending.\(^\text{12}\)

Ke Xu and colleagues have proposed that the threshold for financial catastrophe be set at 40% of a household’s capacity to pay in any year. Capacity to pay for health services, meanwhile, is defined as a household’s non-subsistence spending. Subsistence needs were defined as the average food spending associated with households whose food share in total expenditure was in the 45-55 percentile range, adjusted for household size.\(^\text{5}\) The WHO has echoed the recommendation that health expenditure be deemed catastrophic whenever it equals or exceeds 40% of a household’s non-subsistence income (i.e. income available after basic needs have been met), although countries may wish to use a different cut-off point in setting their national health policies.\(^\text{13}\)

**Associated Factors**

Characteristics of households that are more vulnerable to catastrophic health expenditures: Households with elderly, handicapped, or chronically ill members, especially when OOP payments are required because these members usually have a greater need for services and lack financial resources.\(^\text{5}\)

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**HEALTH FINANCING**

Health financing follows three basic principles\(^\text{14}\) of public finance, also called the three principal health financing functions, towards improving health outcomes and financial protection:

1. **Revenue generation** - Raise enough revenues to provide individuals with a basic package of essential services and financial protection against catastrophic medical expenses caused by illness and injury in an equitable, efficient, and sustainable manner

2. **Risk pooling** - Manage these revenues to pool health risks equitably and efficiently

3. **Purchasing** - Ensure the purchase of health services in ways that are allocatively and technically efficient

Revenue collection is often limited by a country’s income level; lower income countries typically afford to collect a smaller percentage of their GDP than others. Risk pooling and prepayments may be done in a variety of ways, and most countries employ a mix of public and private arrangements.

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Resource allocation and purchasing mechanisms, meanwhile determine for whom to buy, what to buy, from whom, how to pay, and at what price. One or a mix of four main health insurance mechanisms\textsuperscript{15} are used to pool health risks, promote prepayment, raise revenues, and purchase services:

- State-funded systems through ministries of health or national health services
- Social health insurance
- Voluntary or private health insurance
- Community-based health insurance

Hence health financing strategies are described in terms of these functions, assuming that these, when effectively performed, will lead to good performance.

In addition, these functions have important implications for the following:\textsuperscript{16}

- Funds available (now and in the future) and the concomitant levels of services and financial protection
- Fairness (equity) of the revenue collection mechanisms to finance the system (basing financial access on need rather than ability to pay)
- Economic efficiency of revenue-raising, in not creating distortions or economic losses in the economy
- Levels of pooling and prepayment (and the implications for risk and equity subsidization)
- Numbers and types of services purchased and consumed and their effects on health outcomes and costs (allocative efficiency)
- Technical efficiency of service production (producing each service at its minimum average cost)
- Financial and physical access to services (including equity in access)


Health financing performance, meanwhile, is defined in terms of at least three separate and interrelated dimensions: (1) the number of people covered by the organized (public and private) financing initiatives (breadth of coverage); (2) the extent (number and type) of services covered (depth of coverage); and (3) the resulting impacts on health outcomes and financial protection against high out-of-pocket expenditures.\(^{17}\) (The latter is sometimes referred to as the height of coverage.\(^{18}\))

Financial protection (also called financial risk protection) in health is generally taken to broadly imply that households and individuals: (1) obtain health care when needed and are not prevented from doing so by excessive costs; (2) do not incur costs when they do access health care that prevent them from obtaining other basic household necessities—including food, education, and shelter; and (3) do not fall into poverty due to excessive medical care costs and lost income resulting from illness. Financial protection is measured in a number of ways. For the health system as a whole, it is measured by OOP payments as percentage of total health spending. However this does not reflect the distribution of OOP payments among income groups or the impact or severity of catastrophic spending. Therefore, other measures provide an individual or household level analysis. In principle, OOP payment shares reflect both depth and breadth of coverage and/or lack thereof.\(^{19}\)

The assumption is that health financing leads to or at least influences health outcomes. Other health system building blocks are of course essential to improving outcomes. However, health financing is a critical lever to widespread system reform. And in the end, improvements in relation to key health outcomes are the ultimate gauge. For this, it is generally acknowledged that life expectancy, infant and child mortality, and immunization coverage are key population-level outcomes.

In gist:

*Functions (three principal functions) ➞ Coverage (three dimensions) ➞ Outcomes (financial risk protection and health outcomes)*

In a similar study, the World Bank defined “good performance” in health financing as significantly increased coverage for essential benefits with better-than-average health outcomes, reasonable financial risk protection, and better-than-average health care costs when compared with other countries with similar income. These concepts shape the country selection process employed in this study.

In the country reports, strategies refer to how the three principal functions were modified or strengthened, thus leading to positive changes in coverage (breadth, depth, height), and eventually to positive results, meaning improvements in OOP and/or health outcomes, often with special attention to changes experienced by the poorest segments of the population.

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Study 4  Stories from Around the Globe 20
According to the WHO, health financing that is designed to reduce catastrophic expenditures considers the following:20

- Extending population coverage through prepayment mechanisms;
- Protecting the poor and disadvantaged;
- Designing a benefits package; and
- Deciding the level of cost-sharing by the patient.

More specifically, the WHO states that reducing catastrophic expenditures requires a shift to prepayment, whether through social health insurance, tax-based systems, or some mix of the two. Coverage must extend particularly to vulnerable sectors but cannot focus solely on these or the tendency will be for insurance benefits and risk protection to shrink since these sectors are less able to contribute to risk pools. Benefits must be carefully designed to balance cost and risk protection, and then also risk protection and efficiency. Covering too little of the expenditures compromises risk protection, while covering too much of it leads to abuse and a financially unviable system. In addition, the WHO points to the importance of purchasing services and paying providers strategically.

Three factors have to be present for catastrophic payments to arise: The availability of health services requiring out-of-pocket payments; low household capacity to pay; and lack of prepayment mechanisms for risk pooling (funds for health collected through taxes and/or insurance contributions).21

Of all factors, literature seems to agree that the shift to prepayment is of particular importance as it reduces out-of-pocket (OOP) spending. OOP has been called the “main culprit behind catastrophic health expenditures” and prepayment schemes a “direct route to elimination of catastrophic health expenditures”.22 In fact the absence of prepayment mechanisms was identified as one of three key preconditions for catastrophic payments, along with that availability of health services requiring payment and low capacity to pay.23 However the form of prepayment mechanism does not enjoy similar consensus. Alternatives include tax-funded schemes, social, private, or community-based health insurance programs. There is no strong evidence that social health insurance systems offer better or worse protection than tax-based systems. Also, though prepayment reduces the chance of catastrophe, they do not automatically eliminate it, especially when prepayment schemes offer limited coverage in terms the groups that may be qualify for coverage, the services that are covered, or what share of the costs is covered.24

In addition, literature points to the need to target groups that are at particular risk for financial catastrophe, especially lower income households and those having members who are elderly, disabled, or chronically ill as mentioned in previous sections.

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Country Selection

In order to select the countries that will be studied, the research team used five levels of screening criteria, eliminating countries that do not pass as the levels progress. These criteria are adapted from a similar study done by the World Bank on nine countries that have performed well in terms of health financing, modified to account for the limitations in data access and the absence of an expert panel that can make normative decisions. They are:

**Level 1:** Income levels of countries based on World Bank classifications. Only low- to middle-income countries can pass this level.

**Level 2:** Health outcomes of countries according to key population-level indicators, namely, maternal mortality ratio (MMR), infant mortality rate (IMR), life expectancy and immunization rates for diphtheria-pertussis-tetanus (DPT) and measles. Countries that pass this level must have lower than average mortality rates and higher than average life expectancy and immunization coverage within their income level.

**Level 3:** Coverage outcomes of countries, measured through a financial protection indicator (out-of-pocket expenditure as a percentage of total health expenditure) which, according to literature, can gauge the breadth and depth of coverage. Countries that pass this level must have higher than average values within their income level.

**Level 4:** Cost-effectiveness, measured through total health expenditure per capita. The ten countries with the lowest expenditures per capita within each income level pass this level.

**Level 5:** Information availability, measured first through the number of search hits on the academic search database EBSCOHost. Literature from countries that had the most number of search hits were further examined to verify whether they were in English and whether they contain a substantial amount of information on the subject matter.

If sufficient data is not available for a particular country at that particular level, that country automatically does not qualify for that level, unless otherwise specified. For purposes of comparison, data from the Philippines will also be shown on all five levels.

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1 INCOME LEVEL

The first level of screening for country selection was based on the World Bank classification of countries according to gross national income (GNI) per capita 2012 Atlas method, the latest version of which was published on April 2013.\textsuperscript{26}

GNI per capita (in US dollars) is mathematically defined as:\textsuperscript{27}

\[
GNI \text{ per capita } (Y_t^* / e_t) = \frac{Y_t / N_t}{e_t^*}
\]

where \(Y_t\) is the current GNI in local currency for year \(t\); \(N_t\) is the midyear population for year \(t\); and \(e_t^*\) is the Atlas conversion factor (national currency to the US dollar) for the year \(t\).

GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income from abroad).\textsuperscript{28}

The Atlas conversion factor is defined as the average of a country’s exchange rate (or alternative conversion factor) for that year and its exchange rates for the two preceding years, adjusted for the difference between the rate of inflation in the country, and through 2000, that in the G-5 countries (France, Germany, Japan, the United Kingdom, and the United States. Its purpose is to reduce the impact of exchange rate fluctuations in the cross-country comparison of national incomes.\textsuperscript{29}

The current income levels of the World Bank, with their respective GNI per capita ranges for the year 2012, are the following:\textsuperscript{30}

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income</td>
<td>$1,035 or less</td>
</tr>
<tr>
<td>Lower Middle Income</td>
<td>$1,036 to 4,085</td>
</tr>
<tr>
<td>Upper Middle Income</td>
<td>$4,086 to 12,615</td>
</tr>
<tr>
<td>High Income</td>
<td>$12,616 or more</td>
</tr>
</tbody>
</table>

The current list drafted by the World Bank contains GNI per capita data for the year 2012 for most of the 214 countries; however, there are some limitations. They are summarized as follows:

1. Thirty-one (31) of the countries have no GNI per capita data at all; however, they have been given category estimates by the World Bank (Seven of these top countries actually rank within the Top 20); and
2. An additional seventeen (17) countries only have 2010 or 2011 data available.


The GNI per capita of all countries have been summarized in the scatterplot below:

![Scatterplot of GNI per capita for 2012, segmented by income categories.](image)

From Figure 2, 75 countries that have been classified as high income can easily be eliminated. This leaves the combined total of 139 countries: 36 low income countries, 48 lower middle income countries, and 55 upper middle income countries.
Table 1. Countries that passed the first screening (based on income level). Those in asterisks are World Bank estimates due to the absence of GNI per capita data.

<table>
<thead>
<tr>
<th>#</th>
<th>LOW INCOME</th>
<th>LOWER MIDDLE INCOME</th>
<th>UPPER MIDDLE INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Afghanistan</td>
<td>Armenia</td>
<td>Albania</td>
</tr>
<tr>
<td>2</td>
<td>Bangladesh</td>
<td>Bhutan</td>
<td>Algeria</td>
</tr>
<tr>
<td>3</td>
<td>Benin</td>
<td>Bolivia</td>
<td>American Samoa*</td>
</tr>
<tr>
<td>4</td>
<td>Burkina Faso</td>
<td>Cameroon</td>
<td>Angola</td>
</tr>
<tr>
<td>5</td>
<td>Burundi</td>
<td>Cape Verde</td>
<td>Argentina*</td>
</tr>
<tr>
<td>6</td>
<td>Cambodia</td>
<td>Congo, Rep.</td>
<td>Azerbaijan</td>
</tr>
<tr>
<td>7</td>
<td>Central African Republic</td>
<td>Côte d'Ivoire</td>
<td>Belarus</td>
</tr>
<tr>
<td>8</td>
<td>Chad</td>
<td>Djibouti*</td>
<td>Belize</td>
</tr>
<tr>
<td>9</td>
<td>Comoros</td>
<td>Egypt, Arab Rep.</td>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>11</td>
<td>Eritrea</td>
<td>Georgia</td>
<td>Brazil</td>
</tr>
<tr>
<td>12</td>
<td>Ethiopia</td>
<td>Ghana</td>
<td>Bulgaria</td>
</tr>
<tr>
<td>13</td>
<td>Gambia, The</td>
<td>Guatemala</td>
<td>China</td>
</tr>
<tr>
<td>14</td>
<td>Guinea</td>
<td>Guyana</td>
<td>Colombia</td>
</tr>
<tr>
<td>15</td>
<td>Guinea-Bissau</td>
<td>Honduras</td>
<td>Costa Rica</td>
</tr>
<tr>
<td>16</td>
<td>Haiti</td>
<td>India</td>
<td>Cuba*</td>
</tr>
<tr>
<td>17</td>
<td>Kenya</td>
<td>Indonesia</td>
<td>Dominica</td>
</tr>
<tr>
<td>18</td>
<td>Korea, Dem. Rep.*</td>
<td>Kiribati</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>19</td>
<td>Kyrgyz Republic</td>
<td>Kosovo</td>
<td>Ecuador</td>
</tr>
<tr>
<td>20</td>
<td>Liberia</td>
<td>Lao PDR</td>
<td>Fiji</td>
</tr>
<tr>
<td>21</td>
<td>Madagascar</td>
<td>Lesotho</td>
<td>Gabon</td>
</tr>
<tr>
<td>22</td>
<td>Malawi</td>
<td>Mauritania</td>
<td>Grenada</td>
</tr>
<tr>
<td>24</td>
<td>Mozambique</td>
<td>Moldova</td>
<td>Iran, Islamic Rep.*</td>
</tr>
<tr>
<td>25</td>
<td>Myanmar*</td>
<td>Mongolia</td>
<td>Iraq</td>
</tr>
<tr>
<td>26</td>
<td>Nepal</td>
<td>Morocco</td>
<td>Jamaica</td>
</tr>
<tr>
<td>27</td>
<td>Niger</td>
<td>Nicaragua</td>
<td>Jordan</td>
</tr>
<tr>
<td>28</td>
<td>Rwanda</td>
<td>Nigeria</td>
<td>Kazakhstan</td>
</tr>
<tr>
<td>29</td>
<td>Sierra Leone</td>
<td>Pakistan</td>
<td>Lebanon</td>
</tr>
<tr>
<td>30</td>
<td>Somalia*</td>
<td>Papua New Guinea</td>
<td>Libya*</td>
</tr>
<tr>
<td>31</td>
<td>South Sudan</td>
<td>Paraguay</td>
<td>Macedonia, FYR</td>
</tr>
<tr>
<td>32</td>
<td>Tajikistan</td>
<td>Philippines</td>
<td>Malaysia</td>
</tr>
<tr>
<td>33</td>
<td>Tanzania</td>
<td>Samoa</td>
<td>Maldives</td>
</tr>
<tr>
<td>34</td>
<td>Togo</td>
<td>São Tomé and Principe</td>
<td>Marshall Islands</td>
</tr>
<tr>
<td>35</td>
<td>Uganda</td>
<td>Senegal</td>
<td>Mauritius</td>
</tr>
<tr>
<td>36</td>
<td>Zimbabwe</td>
<td>Solomon Islands</td>
<td>Mexico</td>
</tr>
<tr>
<td>37</td>
<td>Sri Lanka</td>
<td>Montenegro</td>
<td></td>
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<tr>
<td>38</td>
<td>Sudan</td>
<td>Namibia</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Swaziland</td>
<td>Palau</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Syrian Arab Republic</td>
<td>Timor-Leste</td>
<td>Peru</td>
</tr>
<tr>
<td>41</td>
<td>Ukraine</td>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Uzbekistan</td>
<td>Serbia</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Vanuatu</td>
<td>Seychelles</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Vietnam</td>
<td>South Africa</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>West Bank and Gaza*</td>
<td>Yemen, Rep.</td>
<td>St. Lucia</td>
</tr>
<tr>
<td>46</td>
<td>Yemen, Rep.</td>
<td>St. Vincent and the Grenadines</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Zambia</td>
<td>Suriname</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Thailand</td>
<td>Tonga</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Tunisia</td>
<td>Turkey</td>
<td></td>
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<tr>
<td>50</td>
<td>Turkey</td>
<td>Turkmenistan</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Tuvalu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Venezuela, RB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HEALTH OUTCOMES

The second level of screening for country selection was based on the following standard health indicators: (1) infant mortality rate; (2) maternal mortality ratio; (3) life expectancy; and immunization coverage rates for (4) diphtheria-pertussis-tetanus (DPT) and (5) measles.

**Infant mortality rate (IMR)** is defined as the number of infants dying before reaching one year of age, per 100,000 live births in a given year. For every income level, the World Bank has average IMR values, which are as follows (as of 2011):\(^{56}\)

- Low Income: 62.8
- Lower Middle Income: 46
- Upper Middle Income: 15.9

**Maternal mortality ratio (MMR)** is the number of women who die during pregnancy and childbirth, per 10,000 live births. The World Bank has modeled data estimated with regression techniques using other health indicators such as fertility, birth attendants, and HIV prevalence. For every income level, the World Bank also has average MMR values, which are as follows (as of 2010):\(^{57}\)

- Low Income: 41
- Lower Middle Income: 26
- Upper Middle Income: 6.2

**Life expectancy** at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.\(^{58}\) For every income level, the average life expectancies estimated by the World Bank are as follows (as of 2011):

- Low Income: 59.2
- Lower Middle Income: 65.9
- Upper Middle Income: 72.9

**Immunization rates for DPT and measles** measure the percentage of ages 12-23 months who received these vaccinations before 12 months or at any time before the survey. For every income level, the average immunization rate as follows (as of 2011):\(^{59}\)

<table>
<thead>
<tr>
<th></th>
<th>DPT</th>
<th>Malaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income</td>
<td>79.2</td>
<td>77.5</td>
</tr>
<tr>
<td>Lower M Inc</td>
<td>73.1</td>
<td>78.3</td>
</tr>
<tr>
<td>Upper M Inc</td>
<td>95.3</td>
<td>95.7</td>
</tr>
</tbody>
</table>

In order for the 138 countries to pass the second screening, they must have lower than average values on IMR and MMR as well as above than average values on life expectancy and immunization rates depending on their income level.

Not all countries have complete data on these indicators, and therefore have been automatically excluded. These countries are:


Low Income (1)  South Sudan
Lower Middle Income (4)  Georgia, Kiribati, Kosovo, and West Bank and Gaza
Upper Middle Income (8)  American Samoa, Argentina, Dominica, Marshall Islands, Palau, Seychelles, and Tuvalu

The data is presented in a clustered columnar graph with dotted lines representing average values for each indicator. Those countries that passed the second screening have their names highlighted in yellow.
Figure 3. Health Indicators (IMR, MMR, Life Expectancy, Immunization Rates of DPT and measles) among Low Income Countries. IMR (blue) and MMR (red) values have to be below the mean (dotted) line to be considered passed, while life expectancy (green) and immunization rates (purple for DPT and orange for malaria) values have to be above the mean (dotted) line to be considered passed. Those countries highlighted in yellow pass all five screening indicators.
Figure 4. Health Indicators (IMR, MMR, Life Expectancy, Immunization Rates of DPT and measles) among Lower Middle Income Countries. IMR (blue) and MMR (red) values have to be below the mean (dotted) line to be considered passed, while life expectancy (green) and immunization rates (purple for DPT and orange for malaria) values have to be above the mean (dotted) line to be considered passed. Those countries highlighted in yellow pass all five screening indicators.
Figure 5. Health indicators (IMR, MMR, Life Expectancy, and Immunization Rates of DPT and measles) among Upper Middle Income Countries. IMR (blue) and MMR (red) values have to be below the mean (dotted) line to be considered passed, while life expectancy (green) and immunization rates (purple for DPT and orange for malaria) values have to be above the mean (dotted) line to be considered passed. Those countries highlighted in yellow pass all five screening indicators.
Figures 2 to 4 show that a total of 58 countries have passed the second screening: 10 low income, 17 lower middle income (excluding the Philippines), and 11 upper middle income countries. They are listed in the following table:

**Table 2. Countries that passed the second screening (based on health indicators, specifically, IMR, MMR, and life expectancy)**

<table>
<thead>
<tr>
<th>#</th>
<th>LOW INCOME</th>
<th>LOWER MIDDLE INCOME</th>
<th>UPPER MIDDLE INCOME</th>
</tr>
</thead>
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Figures 5 to 7 show an alternate way to present Figures 2 to 4. The data is still presented in a clustered columnar graph, with each country having three columns representing the three health indicators. However, in order to ease the graphical representation of which countries have passed, the graphs are modified such that the absolute difference between the country value and their respective averages are plotted. Those that are above the x-axis are considered better performing than average, and those below are considered worse performing than average. Those countries that passed the second screening have their names highlighted in yellow.
Computed Differences between Country Values and Average Values (IMR, MMR, Life Expectancy, Immunization of DPT and Measles) among Low Income Countries (MMR, 2010 data; others, 2011 data)

In order to pass the second screening (health indicators), countries need all three columns above the x-axis.

Figure 6. Computed differences between country values and average values of health indicators (IMR, MMR, life expectancy, immunization rates of DPT and measles) among Low Income Countries. IMR and MMR differences are in their additive inverses to display position above x-axis for better performing countries. Those countries highlighted in yellow pass all three screening indicators.
In order to pass the second screening (health indicators), countries need all three columns above the x-axis.
Study 4
Stories from Around the Globe

Figure 8. Computed differences between country values and average values of health indicators (IMR, MMR, life expectancy, immunization rates of DPT and measles) among Upper Middle Income Countries (MMR, 2010 data; others, 2011 data).

In order to pass the second screening (health indicators), countries need all three columns above the x-axis.

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3 COVERAGE OUTCOME

The third level of screening is the amount of health coverage that the country provides for healthcare for its citizens. It has at least three dimensions:

1. **Breadth of coverage.** indicated by the number of people covered by organized funding initiatives, such as national health services (NHS), mandatory health insurance (MHI) funds, and private health insurance;

2. **Depth of coverage.** defined as the extent (i.e., number and types) of services covered

3. **Resulting impacts on health outcomes and financial protection against high out-of-pocket expenditures**

Impacts on health outcomes have already been covered in the second screening; therefore, they have higher than average values than other countries in their income level.

Neither the World Bank nor the World Health Organization has any sufficient data on the breadth and depth of coverage. Although breadth of coverage can be determined from various sources, such as national surveys and news reports, data on these are not readily available to the research team. Therefore, a proxy indicator that can cover both breadth and depth of coverage is through financial protection indicators.

The World Health Organization has proposed core indicators for the availability of funds and the extent of financial risk protection that have been agreed on at various fora. These indicators are:

1. **Total health expenditure per capita in international and US$ (THE/capita).** This provides information on the overall availability of funds. Sufficiency must be judged as a second step, in relation to country-specific estimates of how much is needed.

2. **Related to the first, general government health expenditure as a proportion of total government expenditure (GGHE/GGE).** This reflects government commitment to raising funds for health. The research team did not use this because financing could come from many sources and it may be contentious to that the more financing comes from government, the better.

3. **Out of pocket expenditure as a percentage of total health expenditure (OOP/THE).**

The World Bank also recommends (3), together with OOP spending as a share of household consumption, as a proxy indicator. OOP spending as a share of household consumption is the more preferred indicator because it gives a clearer picture of how unanticipated financial shocks, such as catastrophic health expenditure, can negatively affect household consumption and welfare. However, the World Bank also does not have sufficient data for all 58 countries; therefore, OOP payments as a percent of total health spending was used in screening the countries.

A one-dimensional screening to health financial protection is insufficient, given that OOP payments as a percent of total health spending does not account for factors such as supply- and demand-side barriers (e.g. number of people accessing a particular health insurance package), types of services covered by the protection programs, and program eligibility. The World Bank does not have data that standardize the assessment of these said factors. OOP payments as a percent of total health spending only serves as a crude indicator of the degree of health coverage.

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60 “Health Financing Functions,” Good Practices in Health Financing, p. 9

61 “Health Financing Functions,” Good Practices in Health Financing, p. 16

62 “Health Financing Functions,” Good Practices in Health Financing, p. 17


64 “Health Financing Functions,” Good Practices in Health Financing, p. 17

There is no direct indicator in the World Bank database for OOP payments as a percent of total health spending. However, two other indicators were available in order to compute for this indicator: (1) public health expenditure as a percent of total expenditure; and (2) OOP health expenditure as a percent of private expenditure of health. The definitions of the indicators are as follows:

1. **Public health expenditure** consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.

2. **Total health expenditure** is the sum of public and private expenditure, covering the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.

3. **Out-of-pocket (OOP) expenditure** is any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups.

4. **Private health expenditure** includes direct household or OOP spending, private insurance, charitable donations, and direct service payments by private corporations.

Since total health expenditure is assumed to the sum of public and private health expenditure, private health expenditure as a percent of total health expenditure can be computed as:

\[
\frac{\text{private health expenditure}}{\text{total health expenditure}} \times 100\% = 100\% - \frac{\text{public health expenditure}}{\text{total health expenditure}} \times 100\%
\]

Therefore, OOP payment as a percent of total health expenditure can be computed as:

\[
\frac{\text{OOP payment}}{\text{total health expenditure}} \times 100\% = \frac{\text{private health expenditure}}{\text{total health expenditure}} \times \frac{\text{OOP payment}}{\text{private health expenditure}} \times \frac{1}{100}
\]

In order for the country to pass the third screening, they must have lower than average values of OOP payment as a percent of total health expenditure. The data used to compute are 2011 values.

The average values for every category have been computed as follows:

- Low Income: 46.4
- Lower Middle Income: 52.4
- Upper Middle Income: 34.6

Only the Democratic Republic of Korea does not have data on any of the indicators; therefore, it has been automatically excluded.

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70 World Health Organization. World Health Statistics 2013, pp. 131-141. 2013. Retrieved from [link] [This assumption is confirmed in Section 7, pp. 131-141. The data tables show that public health expenditure as a percentage of total health expenditure and private health expenditure as a percentage of total health expenditure add up to 100%. The data in this report was not used because the data presented was from 2010, whereas data from the World Bank database is more recent, i.e. 2011].
The data is presented in a bar graph with a dotted line indicating the cutoff average value. Those countries that pass the screening (or are under the mean line) are have their names highlighted in yellow. The graphs are as follows:

**Figure 9.** Out-of-pocket (OOP) payment of total health expenditure for Low Income Countries. Those countries highlighted in yellow pass the third screening, as shown to have lower than average values.

**Figure 10.** Out-of-pocket (OOP) payment of total health expenditure for Lower Middle Income Countries. Those countries highlighted in yellow pass the third screening, as shown to have lower than average values.
Figure 11. Out-of-pocket (OOP) payment of total health expenditure for Upper Middle Income Countries. Those countries highlighted in yellow pass the third screening, as shown to have lower than average values.

Figures 8 to 10 show that a total of 18 countries have passed the second screening: 4 low income, 10 lower middle income, and 5 upper middle income countries. They are listed in the following table:

Table 3. Countries that passed the third screening (based on OOP payment as percent of total health expenditure).

<table>
<thead>
<tr>
<th>#</th>
<th>LOW INCOME</th>
<th>LOWER MIDDLE INCOME</th>
<th>UPPER MIDDLE INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Comoros</td>
<td>Bolivia</td>
<td>Brazil</td>
</tr>
<tr>
<td>2</td>
<td>Kyrgyz Republic</td>
<td>Bhutan</td>
<td>Hungary</td>
</tr>
<tr>
<td>3</td>
<td>Madagascar</td>
<td>Cape Verde</td>
<td>Libya</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>El Salvador</td>
<td>Thailand</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Micronesia, Fed. Sts.</td>
<td>Turkey</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Moldova</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Mongolia</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Nicaragua</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Sri Lanka</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Azerbaijan</td>
<td></td>
</tr>
</tbody>
</table>
4 COST-EFFECTIVENESS

The fourth level of screening for the remaining 33 countries is based on the cost-effectiveness of health spending, measured through total health expenditure per capita as it reflects the commitment of both private and public sectors in promoting health and protection against the costs caused by catastrophic treatment.\textsuperscript{71} Total health expenditure per capita (in current US$) is defined as the sum of public and private health expenditures as a ratio of total population, covering the provision of preventive and curative services, family planning services, nutrition activities, and emergency aid designated for health but does not include provision of water in sanitation.\textsuperscript{72}

However, the limitation to this indicator is that it provides little information on allocative efficiency (value for money in terms of health outcomes) and technical efficiency (production costs for providing health care). Therefore, money alone is not a sufficient indicator to translate to better health outcomes. Nonetheless, the indicator provides a rough comparative benchmark on the effectiveness of a country in health care spending relative to their health outcomes.\textsuperscript{73} Countries that perform better with respect to this indicator must have lower values relative to other countries within their income level, indicating that they achieved better health outcomes for less.

The top five countries per income level are chosen for the next level of screening. Since there are only three low income countries and five upper middle income countries left, all of them are considered passed. Nonetheless, their data are presented for comparative purposes.

The data across all countries is presented in the graph below. Countries highlighted in yellow represent the top five countries per income level.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{total_health_expenditure_per_capita.png}
\caption{Total health expenditure per capita across all countries, arranged in ascending order per income level. Countries indicated in yellow have passed the fourth screening.}
\end{figure}

\textsuperscript{71} “Criteria for Defining ‘Good Practice’ and Choosing Country Cases,” \textit{Good Practices in Health Financing}, p. 16


\textsuperscript{73} “Criteria for Defining ‘Good Practice’ and Choosing Country Cases,” \textit{Good Practices in Health Financing}, p. 16
Figure 11 shows the top five countries in every income level sorted in ascending order. They are listed in the table below:

Table 4. Countries that passed the fourth screening (based on public health expenditure as a percent of total health expenditure).

<table>
<thead>
<tr>
<th>#</th>
<th>LOW INCOME</th>
<th>LOWER MIDDLE INCOME</th>
<th>UPPER MIDDLE INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Comoros</td>
<td>Moldova</td>
<td>Brazil</td>
</tr>
<tr>
<td>2</td>
<td>Kyrgyz Republic</td>
<td>Mongolia</td>
<td>Hungary</td>
</tr>
<tr>
<td>3</td>
<td>Madagascar</td>
<td>Nicaragua</td>
<td>Libya</td>
</tr>
<tr>
<td>4</td>
<td>Sri Lanka</td>
<td>Thailand</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Uzbekistan</td>
<td></td>
<td>Turkey</td>
</tr>
</tbody>
</table>
5 INFORMATION AVAILABILITY

The final level of country selection is the availability of information on the health financing policies of the remaining 13 countries published in reputable academic journals or in books.

To standardize the search on the availability of information on these countries, the research team used the academic search database EBSCOHost with the following refinements:

1. The search keywords used are “(country name)” and “health financing;”
2. The source types of literature must only be academic journals or books;
3. For journal-articles, they must be peer-reviewed; and
4. The literature must be published anytime from January 2000 to July 2013

EBSCOHost is a powerful discovery service that offers 375 full-text and secondary research databases, with over 420,000 electronic books and subscription management for more than 355,000 journals.⁴⁹ Therefore, the research team has found EBSCOHost to be a comprehensive and reliable search engine for the purposes of this level of selection.

The search hits from the top two countries in each income level were examined in depth to check whether these are truly viable and available, such as having sufficient literature in the English language and containing substantial information on the topic.

The data is presented in a clustered columnar graph with the lower section indicating the number of academic journal hits and the upper section indicating the number of book hits.

![Number of search hits per country in academic search database EBSCOHost](image)

Figure 13. Number of academic journal source and book source search hits in academic search database EBSCOHost using the keywords “(country name)” and “health financing,” peer-reviewed, and published from 2000 to 2013. Those highlighted in yellow are the ones that will be examined for this literature review.

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The top two countries in each income level are as follows:

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income</td>
<td>Madagascar and Kyrgyz Republic</td>
</tr>
<tr>
<td>Lower Middle Income</td>
<td>Sri Lanka and Nicaragua</td>
</tr>
<tr>
<td>Upper Middle Income</td>
<td>Brazil and Thailand</td>
</tr>
</tbody>
</table>

Of the six countries above, the research team found that only four countries had sufficient information in English to create a comprehensive review of their health financing practices. Therefore, the final list of countries to be examined are as follows:

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income</td>
<td>Kyrgyz Republic</td>
</tr>
<tr>
<td>Lower Middle Income</td>
<td>Sri Lanka and Nicaragua</td>
</tr>
<tr>
<td>Upper Middle Income</td>
<td>Thailand</td>
</tr>
</tbody>
</table>

As explained in the Methodology section, the research team initially had a selection of four countries and conducted a desk review of all four. However, upon completion of the country reports, the team felt that Nicaragua’s performance, while not dismal, was also not exemplary. In addition, there was too little information on it. The team felt uncomfortable about presenting the country as a high-performing or significantly improved nation. This indicates flaws in the selection process.

Consequently, Nicaragua’s story may be found in the Appendix but will not be included here for analysis.
Stories from Around the Globe

Kyrgyz Republic
Sri Lanka
Thailand
Kyrgyz Republic

A brief history of **KYRGYZ REPUBLIC**
Key events across history coinciding with major health financing reforms

**HEALTH FINANCING REFORMS**

- Introduction of user fees
- Undertaking of MANAS Health Care Reform Program
- National Health Policy approved by the government
- Government approves MANAS healthcare program
- Introduction of mandatory health insurance system
- MHI introduces case-based payment to hospitals
- Introduction of partial funding in 14 family group practices (FGPs) in Karakol City
- FGP enrolment campaign in Chui oblast and Bishkek (until March 1999)
- Introduction of capitation payment to FGPs in Bishkek
- About 55 hospitals and 290 FGPs enter into contracts with the MHI
- Government decree on introduction of a new healthcare financing mechanism in health facilities
- Government decree on provision of healthcare to citizens under State Benefits Package
- Naryn and Talas oblasts join single payer system
- Batken, Jalal-Abad and Osh oblasts join single payer system
- Republican facilities join same system
- Law on Single Payer System in Healthcare Financing
- Government approves "Manas Taalim" Health Care Reform Program 2006-2010

**GENERAL HISTORY**

- 1991
  - Declaration of independence from Soviet Union
- 1992
  - Noted emergence of informal payments
- 1993
  - Significant decrease in government health spending
- 1994
- 1995
  - Significant decrease in GDP
- 1996
  - Peak of burden of informal payments
- 1997
- 1998
  - Substantial increases in OOP
- 1999
- 2000
  - Infrastructure (hospital)-centered health care system persists
- 2001
- 2002
- 2003
- 2004
  - Popular uprising and subsequently new government elected
- 2005
- 2006

*Timeline not drawn to scale.*

**Figure 14.** A brief history of Kyrgyz Republic, highlighting major health financing reforms and general historical events from 1801 to 1959. Information from various sources, cited in-text.
The Kyrgyz Republic entered into independence in the 1990s, resulting in a major reversal in both economic and social development. Fiscal constraints created much pressure leading to sharp declines in the budget particularly in the social sectors, including health. A setback of 50% in GDP was felt during the first five years of transition, followed up by slow but positive economic growth. Forty-six percent (46%) of the population was estimated to be living under the poverty line, putting the country at a rank of 116 out of 177 countries worldwide with a United National Development Program (UNDP) Human Development Index (HDI) of only 0.696.

The country’s total public revenue as a share of gross domestic product (GDP) was an estimated 41%. The health sector was one of the social sectors particularly affected by the extreme fiscal contraction. This extreme fiscal contraction was shared by most of the countries comprising the former Soviet Union. The poorest seven countries of the former Soviet Union (CIS-7) was separated into “very low” and “low” spenders, measured by public expenditures on health as a share of total government spending. “Very low” spenders have a public health spending of less than 2%, while “low” spenders have a public health spending of more than 2% of GDP. Kyrgyzstan is categorized under low spenders with 6% of public spending on health care in 1994.

The government’s ability to spend on health was further severely affected as the GDP fell to an estimated 15% in 1995. Fiscal constraints eventually resulted to very low salaries for health workers, which led to the emergence of provider-demanded informal payments peaking in 1996. This translated to a great deal of financial burden to the patients. By 1998, informal out-of-pocket payments had substantially increased even if health care was supposed to be free of charge for the population. The financial burden became very palpable for households that choose to seek care. All throughout, a hospital-centered health care system persisted, with a health financing system that was not meeting the needs of its population but was instead meeting the “needs” of its physical infrastructure.

The Kyrgyz Republic actually inherited a health system with universal access and free services at the point of delivery. However, the post-independence environment was very different and sustaining the inherited system proved challenging. The system that was handed down proved to be mismatched with the government and public’s capacity.

REFORM STORY

Inputs

Governing Structure

The country was following a strict line-item budgeting process carried over from the pre-independence period. An input-based provider payment mechanism was dominant, with 18 input categories for budgeting that include personnel, drugs and utilities. Hospitals received greater budget justified by greater numbers of beds and/or staff positions.\(^6\) Incentives were anchored on these inputs, not on number of patients attended to.\(^6\) Re-allocation across line-item categories was not allowed; unspent resources re-incorporated into the government budget. Furthermore, a fragmented health (and health financing) system was an added layer of difficulty. With a decentralized health system marked by self-managed funding at each level of government, excess capacity was particularly apparent in urban centers where both city and provincial (oblast) facilities existed.\(^6\)

Physical and Human Resources

Costs continued to rise, in particular, due to the inherited system’s emphasis on physical infrastructure and specialization.\(^6\) These health facilities were oversized and overstaffed, with large numbers of health care workers and facilities serving overlapping populations.\(^6\) During the former Kyrgyz Soviet Socialist Republic, revenues were high, hence prices for inputs such as medicines and energy could be subsidized sustainably. However, upon independence, the combination of increasing prices and declining government revenues caused problems. Majority of public health spending was directed to overhead costs, leaving very little money for treatment inputs such as medicines and supplies.\(^6\) In 1995, round 72% of public health expenditures were still directed to hospitals, reflecting a hospital-oriented health care system as opposed to a less expensive primary health care system.\(^6\)

Provider-Patient Relationship

The decline in government health spending was accompanied by increased private expenditures by households in the form of official charges and informal payments or under-the-counter payments.\(^6\) As a form of salary subsidy sought by providers, these informal payments became a form of precondition for treatment, translating to a grave impact on access particularly for poor households.\(^6\)

Informal payments are defined as “payments to individual and institution providers in-kind or cash that are outside the official payment channels, or are purchases that are meant to be covered by the

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In 1996, it was learned that although giving gifts to providers had cultural rooting, a large proportion of informal payments were not voluntarily given by patients but were either requested or expected by the providers. In Kyrgyz Republic, 75% of patients reported giving informal payments to their providers. These informal payments were evident throughout Central Asia in 1992, together with scarcity of medical supplies and drugs in facilities and local budgetary constraints and petrol shortages. The latter two led to an increase in the number of patients having to spend for their medicine and transportation to medical facilities, respectively. Household surveys conducted in Kyrgyz Republic uncovered that even in government health facilities where services are supposed to be generally provided for free, 69% of outpatients and 86% of inpatients contributed something to the cost of care. And in 2001, practically all patients confirmed paying something for their hospitalization. Patients had to contribute not just in terms of medicines, syringes and other supplies such as IV tubes and bandages, but also light bulbs, linen and food.

All in all, (1) the lower income of the overall population, (2) lower public expenditure on health and the resulting lower quality of care, and (3) higher incidence of OOP payments in health care led to large decreases in health care utilization. By 1998, private spending was estimated to be at least as much as public spending at 3.1% of GDP, thereby increasing the total health spending to about 6% of GDP.

Process

As a response particularly to the high health care costs and expenses burdening households, the Ministry of Health sought assistance from the World Health Organization (WHO) in the form of a request for technical assistance in the development of a comprehensive health reform program.

Output

The partnership initiated in 1994 materialized in the national Manas Health Care reform program in 1996. One of the priorities of this program was the improvement of equity through patients’ rights and access to existing health services. Specifically, one of the reform’s indicators in its dashboard was improving accessibility and equity of health services, defined as “the share of population that did not seek necessary health care due to lack of money and remoteness of health care facility.”

The health financing reforms targeted changes in funding, decrease in costs and prioritization of primary health care. These were intended to address the problems caused by line-budgeting, high OOP, and emphasis on tertiary health care, respectively. Several prominent strategies were deployed, namely the Mandatory Health Insurance Fund (MHIF), budget and fund centralization, and co-payments.

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MHIF: Single Payer

In 1997, Kyrgyz Republic introduced a compulsory health insurance fund called the Mandatory Health Insurance Fund (MHIF), which meant the roll out of case-based payment for inpatient care and capitation for primary care. With a “single payer” health insurance fund to purchase services, the system gradually shifted subsidies from supply of services to purchase of services through the health insurance fund. Ultimately, the reform targeted increased efficiency and responsiveness to population and patient needs.\(^{75}\)

The health insurance contribution to the MHIF was designed to be a complementary revenue source. The payroll tax rate directed to MHIF funding was set at a very low 2% because payroll tax rates for social contributions were already high at 37% of wages. In addition, the country’s population was predominantly worked in agriculture where cash income was not regular. Small amounts of transfers from pension and unemployment funds were also used to fund the MHIF.\(^{76}\)

Related reforms followed through in 2001, which instituted the split between purchasers and providers. These consisted of radical changes in pooling arrangements for budget funds, unification of provider-payment methods from budget and MHIF revenues and measures towards increasing transparency of financial contributions by patients.\(^{77}\) This purchaser and provider split increased cost-effectiveness and quality of services by creating a competitive environment among providers to obtain contracts from the purchasing agency. The MHIF outlined specific benefits, cost-sharing mechanisms, and population covered. The contracting was also linked to performance indicators, and only hospitals accredited by the Licensing and Accrediting Commission were contracted.\(^{78}\)

Initially, the MHIF experienced implementation delays due to apprehensions about the program aggravating an already fragmented system by adding an insured/uninsured split. As a resolution, a “joint systems approach” strategy was developed, providing a common system for information and accounting for MHIF and the decentralized oblast health departments.\(^{79}\)

Budget and fund centralization

The reform was pushed even further in 2006 by the centralization of health funding to the national level. Underfunded areas received incremental fund increases from the government instead of the typical re-distribution from better-off regions. This was a strategic move, made to prevent the loss of political support especially from the better-off regions.\(^{80}\)

Despite the notable developments of MHIF particularly in its information and payment system, the previous health financing scheme still plagued the new system. Particularly, the fragmentation problems evident in budget allocation at each level of government remained. This was addressed in 2001 through a government mandate of eliminating several ministers from the oblast level, including health. The Minister of Health redirected the state budget for health for each oblast into the oblast branch of the MHIF.

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During that time, 90% of public health spending was still shouldered by allocated budget sources, with the remaining 10% shouldered by MHIF. In the case of contracted general hospitals and primary care providers, MHIF accounted for 18% of the total allocation from public sources. Back in 1999, the insured population was only at an approximate 30%, covering employees, pensioners, and those receiving social benefits. In 2000, the insured population grew 70% through funding by direct transfer from the central state budget. This funding specifically allowed children less than 16 to be added into the insured category, accounting for the 40% increase in population coverage.\textsuperscript{81}

**Co-payments and exemption categories**

This pooling at the central level paved the way for an equalized allocation of the State Guarantee Benefit Package (SGBP) by oblast.\textsuperscript{82} The SGBP is an annually revised and approved, transparent system and package of entitlements that regulated the rights and regulations of citizens and the government in the delivery of health services.\textsuperscript{83} This was also introduced under the *Manas* reform, which included the development of a list of people eligible for free or nearly free provision of health care. This was then used for the enrollment of people to contracted Family General Practitioners (FGP)/Family Medicine Centers (FMC) where primary health care is provided for free.\textsuperscript{84} These FGPs/FMCs were paid a capitation for the number of people voluntarily enrolled under them, with rates based on the size of the MHIF pool for primary health care. Risk adjustment factors were also accounted for such as sex, age, geographic location and economic factor.\textsuperscript{85} This then developed exemption categories of the population based on individual or disease-specific characteristics, such as Second World War veterans, low-income pensioners, cancer patients, tuberculosis patients, etc. Those falling under any of these categories were exempt from co-payments. Co-payment rates based on entitlements were provided in the program, which should be contributed by patients for inpatient and/or outpatient care and services. Co-payments coupled with a clear payment between the MHIF and the providers ensured that funding would be improved and could therefore support other elements including wages. Access to the Additional Drug Package (ADP) was also provided for outpatients.\textsuperscript{86}

This prioritization of primary health care was actually a shared initiative of other CIS-7 countries. This strengthening called for other necessary changes in budget allocations, the mix of health care workers, the outdated clinical protocols, and the availability of ambulatory facilities for greater autonomy and responsiveness of facilities. Furthermore, education of health workers was also enhanced.\textsuperscript{87}

Phased implementation from 2001 – 2004

This process of MHIF becoming the single purchaser was implemented in phases. A pilot area was identified, and then implementation gradually expanded to accommodate more areas. This phased implementation ran from 2001 to early 2004.88

Under the phased implementation of the program, Kyrgyz Single Payer System began with two oblasts in 2001 and reached nationwide implementation in 2004. The health financing system, then, was completely transformed.89 In late 2001, 83% of the population was already covered.90

EVOLUTION OF HEALTH FINANCING SYSTEM

The reforms in Kyrgyz Republic proved that health financing policy should not just be an absolute choice between a general taxation or Beveridge Model and a social health insurance or Bismarck Model.91

The Manas Health Care Reform Program retained the predominant tax financing while introducing a new institutional arrangement – the single purchaser.92

The reform agenda for 2006 – 2010 “aims to increase the effectiveness of primary health care, with a particular emphasis on building the capacity of feldsher-obstetrical ambulatory points (FAPs) and ambulance services, and to increase funding for health care through improved revenue collection and improved purchasing of services with the guaranteed basic package.” Regulatory mechanisms for transparent allocation of funds are also a goal of this “next generation” of reforms.93

OUTCOMES

Centralized pooling

Household survey analysis revealed that financial barriers to care have consistently reduced from 2001 and 2004, as well as out-of-pocket costs especially for the two poorest quintiles. This, together with the observed decrease in funding gaps across oblasts, were clear manifestations of the positive and immediate impact of centralized pooling. System fragmentation was reduced and resources were re-allocated with structural support according to needs instead of infrastructure. Case-based payments and

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the disintegration of traditional line-budget allocation also reduced fixed costs and shifted incentives into productivity instead of infrastructural inputs.\textsuperscript{94}

**OOP payments**

OOP payment as a percentage of total health expenditure steadily increased as the millennium approached. Upon introduction of universal coverage, OOP payments decreased from more than 50% prior to implementation to around 30% in 2011.\textsuperscript{95}

![Figure 15](image-url) OOP payment as a percentage of total health expenditure in Kyrgyz Republic, 1995-2011. Data from the World Bank.

**Primary health care**

2007 survey showed that the out-of-pocket payments for primary health care decreased. Proportion of people paying at a polyclinic/FMC also fell from 45% in 2004 to 23% in 2007. Access to antenatal care as part of the reform was also seen to be successful as no one in the survey reported of any payment for maternity care.\textsuperscript{96}

**Co-payment and exemption**

The system of exemption also showed evidence of being effective. From 15% in 2004, the number of exempt patients making payment in 2007 dropped to only 9%.\textsuperscript{97}


In 1994, 55% of patients reported that they provided “other payments” in connection with consultations. This dropped to 32% in 2001, 20% in 2004 and then 17% in 2004, showing that the new charging mechanism of a single co-payment is working effectively as well.\textsuperscript{98}

A major source of expenditure for households is hospitalization. The co-payment policy has translated to fruition as the proportion of people paying for drugs, laboratory tests and food has fallen. However, the proportion paying for medicines and other services during hospitalization still remains high, and no decrease has been observed in the proportion providing payment for services to medical personnel.\textsuperscript{99}

In terms of informal payments, generally a low proportion of inpatients report making direct payments to staff. Nevertheless, when they do provide these, they are considerably high especially for surgeons, ranging from 5527 soms for the richest 20% quintile to 1185 soms for the poorest 20% quintile.\textsuperscript{100}

Evidence also shows that out-of-pocket payments related to hospitalization are impacted by the system of co-payments. Indeed, substantial expenses over and above the co-payment rate still occur in hospitalizations. However, the lower median levels versus mean levels in payment indicate that a considerable proportion of patients pay very little over and above the co-payment to nothing, while a few pay substantial amounts. Plus, if spending on food is to be excluded, at least half of all inpatients pay no more than the co-payment rates particularly in Issy-Kul, Jalai-Abad, Batken and Naryn.\textsuperscript{101}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|c|}
\hline
 & \textbf{EXPENDITURE INCLUDING FOOD} & & \textbf{EXPENDITURE EXCLUDING FOOD} & \\
 & \textbf{Mean} & \textbf{Median} & \textbf{Max} & \textbf{Mean} & \textbf{Median} & \textbf{Max} \\
\hline
Issyk-Kul & 1119 & 200 & 13,423 & 846 & 0 & 12,423 \\
Jalal-Abad & 642 & 160 & 6,161 & 515 & 0 & 5,761 \\
Talas & 1,224 & 880 & 9,711 & 968 & 580 & 8,711 \\
Barken & 695 & 0 & 8,561 & 399 & 0 & 8,061 \\
Naryn & 989 & 130 & 8,961 & 654 & 0 & 7,861 \\
Bishkek & 1,936 & 1,230 & 13,350 & 1,346 & 600 & 11,850 \\
Chui & 3,287 & 202 & 20,200 & 2,473 & 1,120 & 17,210 \\
All Kyrgyz & 1,688 & 890 & 20,200 & 1,185 & 290 & 17,210 \\
\hline
\end{tabular}
\caption{Average payments in excess of copayment rates by region, 2007, in soms (Source: Akkazieva, et al)}
\end{table}

All in all, it can be observed that there have been improvements in access and equity, with financial barriers to primary care and proportion of people providing informal payments declining. A considerable proportion of inpatients are not paying excess to their co-payment rates as well. However, it is important to note that barriers to access in terms of hospitalization still exist, with high levels of payment to medical personnel still existing occasionally especially to surgeons. The burden of health care payment to the poor also has not been eradicated, and remains significant.\textsuperscript{102}

Post-independence Kyrgyz Republic inherited a health system giving universal access and free services—a system it could no longer afford after independence brought on severe fiscal constraints. Decentralized funding and line-item budgeting led to over- and under-funding among health facilities. Majority of public health funds were spent on overhead expenses, leaving operational expenses unmet. To cope with fiscal constraints, salaries were reduced and health professionals began demanding under-the-table payments. And so though in theory healthcare was free, in practice patients were asked to pay for operational expenses and professional fees informally. Lower income levels, lower quality due to lower budgets, and higher incidence of OOP payments led to large decreases in healthcare utilization.

Hence in 1994, the Ministry of Health sought technical assistance from the WHO to develop a comprehensive health reform program. This became 1996 MANAS Health Care Reform Program, which targeted (1) changes in funding, (2) decreases in costs, and (3) prioritization of primary care, intended to address the problems caused by line-budgeting, high OOP, and an emphasis on tertiary care respectively. Among the strategies the program employed are:

**Strategies**

**Budget and fund centralization**

In 2006, health funding was centralized to the national level, allowing government to allocate resources more equitably and according to strategic priorities. This also gave the government more fiscal space to shoulder the premiums of more people.

Funds were allocated according to needs and performance rather than infrastructure. There was a shift from covering fixed costs (particularly infrastructural inputs) to giving productivity incentives.

Underfunded areas received incremental fund increases from the national government, as opposed to redistributing budget from better-off regions (and consequently losing political support from those regions). This decreased funding gaps across oblasts.

**Mandatory Health Insurance Fund (MHIF)**

Government shifted the funding from the supply side (supplying services) to the demand side (paying for services and leveraging its purchasing power as a large, single payer). In 1997, the republic introduced a compulsory health insurance fund—the MHIF.

Funding for health is sourced primarily from the national budget. Subsidies for the supply of services went to the purchasing of services. Other minor sources include health insurance contributions, payroll taxes, and small transfers from pension and unemployment funds.

Thus, the reform program managed to retain predominantly tax financing while introducing a new institutional arrangement that can improve efficiency and performance—the single purchaser.

**Payer-provider split**

Reforms that followed in 2001 instituted the split between purchaser and providers.

The cost-effectiveness and quality of services increased by creating a competitive environment among providers to obtain contracts from a payer that set rates and performance standards.
Provider payment methods

The MHIF uses case-based payments for inpatient care and capitation for primary care, with fixed co-payment rates.

Implementation

The process of MHIF becoming the single purchaser was implemented in phases from 2001 to early 2004. Two pilot oblasts were identified then implementation was gradually expanded to other oblasts, reaching nationwide implementation by 2004.

Coverage

• Back in 1999, MHIF only covered approximately 30%, comprising employees, pensioners, and those welfare recipients. In 2000, this was increased to 70% through funding from the central state budget. This allowed children below 16 to become insured, accounting for the 40% increase in coverage.
• MHIF benefits cover a full range of services, from primary to tertiary—the same as the pre-independence system, except government now does so as a purchaser.
• MANAS reform included the creation of a list of people (impoverished segments) who can receive the SGBP (essentially a national package of health services) for free or nearly free through contracted family medicine practitioners or centers. These professionals or centers were paid a capitation fee for every person enrolled under them. Access to drug packages were also provided for outpatients.
• Exemption categories were created for certain vulnerable groups. Individuals falling under them were exempted from co-payments for inpatient and/or outpatient services.

Outcomes

• OOP payments decreased from more than 50% prior to implementation to around 30% by 2011.
• The proportion of patients reporting that they provided “other payments” in connection to consultations decreased from 55% in 1994 to 17% in 2004.
• Inpatient OOP payments also decreased.
  • The proportion of inpatients paying for drugs, laboratory tests, and food during hospitalizations decreased due to co-payment rates. However this proportion remains high and no decrease in the proportion providing payments to medical personnel has been observed. Though the proportion of inpatients making direct payments to staff is low, the payments that are made are considerably high especially for surgeons.
  • Expenses above co-payment rates still occur in hospitalizations. However, a considerable proportion of patients pay very little above these rates to nothing; only a few pay substantial amounts. If food spending is excluded, at least half of all inpatients pay no more than the co-payment rates in certain areas.
• The proportion paying at family medicine clinics decreased from 45% in 2004 to 23% in 2007.
• The proportion of exempted patients making payments decreased from 15% in 2004 to 9% in 2007.
• OOP payments decreased especially for the two poorest quintiles.
### Study 4  Stories from Around the Globe

#### Planning
- MOH seeks technical assistance from the WHO
- 1996 MANAS Health Care Reform Program

#### Context
- Universal access and free services, line-item budgeting, emphasis on tertiary care
- Independence; severe economic and social difficulties
- Inability to sustain health care system

- Lower income levels
- Lower public spending for health
- Lower quality of care
- High incidence of informal payments
- High incidence and degree of OOP payments
- Lower health care utilization

#### Functions
- **Budget and fund centralization**
  - Ability to allocate funds in a more equitable manner across the different oblasts
  - Ability to allocate funds in a more strategic manner—from covering fixed costs to giving productivity incentives, from paying for tertiary care to emphasizing primary care
  - Ability to subsidize premiums through funding from the central state budget

- **Shift from supply-side to demand-side financing**
  - Creation of a single payer—the MHIF
  - Greater health system efficiency and performance

- **Payer-provider split**
  - Single purchaser + contracted providers

- **Provider payment methods**
  - Case-based payments for inpatient care
  - Capitation for primary care
  - Fixed co-payment rates for inpatient and outpatient services

#### Outcomes
- **Overall decrease in OOP payments**
  - Decreased incidence and degree of OOP payments among inpatients, but no decrease in incidence of informal payments
  - Decreased incidence and degree of OOP payments at primary care facilities, especially for the poor and disadvantaged

#### Implementation
- Phased implementation from 2001 to 2004

#### Coverage
- Depth of coverage maintained
  - Improved breadth and height of coverage especially for the poor and disadvantaged
Two major historical events were seen to heavily influence the health reforms in Sri Lanka’s health system: the shift to democracy and universal suffrage in 1931 from British colonists, and the Ceylon malaria epidemic of 1934-1935. Universal suffrage ushered in a new political dynamic where power was placed into the hands of a largely rural population. This would come to drastically affect the direction of health reforms in the following years. The Ceylon malaria epidemic that immediately followed in 1934, meanwhile, provided valuable insight into how Sri Lankan health reforms should move forward, and what goals should be set.

During the British colonial rule, the first government medical department was opened in 1858, which marked the shift from the pre-modern era of health care to a system that was primarily maintained to service only colonial officials and administrators. After obtaining democracy and universal suffrage, Sri Lankans quickly worked towards a restructuring of their entire health system, marked by an expansion of government medical services mostly into rural areas. In 1948, health policy-makers made the landmark decision...
move of rejecting social health insurance in favor of expanding the network of MOH facilities. By 1951, user fees being charged for health services were also abolished amidst political pressure from the rural electorate. The end of health budget increases in 1959 initiated a series of productivity measures for coping with financial limitations.

**INPUTS**

*Democracy and universal suffrage*

The reforms that have been observed in Sri Lanka’s health system have largely been attributed to its democratic processes. Important democratic reforms in Sri Lanka include the attainment of universal suffrage, and the development of a bipartisan electoral system. Ever since the British Colonial Government granted the Sri Lankan population universal suffrage in 1931, Sri Lanka has mostly maintained a democratic government. Along with universal suffrage, the British also ceded all responsibility for domestic policy to the Sri Lankans upon independence in 1948. Over time, the country developed a two-party electoral system evolved from the initial electoral competition between the dominant conservative political establishment [United National Party [UNP]] and the Marxist-Trotskyite challengers [Sri Lanka Freedom Party [SLFP]]. Since the 1950s, these two dominant political parties have competed for majority control over the Sri Lankan government. Moreover, a presidential system, wherein an executive president was directly elected and a legislature elected through proportional representation, eventually replaced the British-inherited constitution and electoral system in 1970.

The democratic processes and the bipartisan electoral system of Sri Lanka have contributed to the advancement and continuity of health reforms in the country. One such impact is the proliferation of medical facilities all throughout the country, especially in rural areas. The construction program was promoted by the lobbying of the health ministry to individual members of parliament, which, in effect, ensured that all electorates received health services. This lobbying was biased in favor of rural areas, because rural electorates had fewer voters on average than urban electorates, and thus was overrepresented in parliament. In addition, until the late 1940s, party political organization was weak, and most legislators competed for election not on the basis of a party platform, but on their ability to bring their constituents benefits, which contributed to the demand for more health services.

To a large extent, health care reforms became intimately tied with political control, evident in how governments have risen or fallen along with public perception on the management of the health care system.
system. Indeed, this political phenomenon has solidified bipartisan consensus on major health care policy features such as an emphasis on universal health care access, no user fees, the rejection of social health insurance, and the continued public sector predominance in service delivery. This also strengthened the institutionalization of health reforms, making it harder for succeeding governments to introduce radical changes in policy where there is a strong preexisting consensus. Competitive electoral politics during the following two decades would drive all major changes in social policy, including the introduction of personal income tax (1932), the expansion of government health services to rural areas (1931–40), the introduction of free education (1930s and 1940s), and the abolition of user fees for health services (1951).

**Taxes**

The development of the economy under the British proved to have a positive impact on the financing of the public sector later on. The British introduced the large-scale cultivation and export of tea, rubber, and coconut, which required the importation of large numbers of labor from India. This motivated the British to develop an efficient colonial administration to maintain the necessary infrastructure and provide the regime a ready source of taxation in the form of export taxes.

Later on, accrued plantation export allowed the newly independent Sri Lankan government to pay for service expansions for the rural poor. Since majority of the population are informal sector workers, a large portion of the tax base came from indirect taxes, which include the aforementioned export taxes as well as the value-added taxes.

**Mass female education**

Another crucial input that contributed to the success of Sri Lankan health reforms is the mass education of women in the country. The predominantly Buddhist Sri Lankan population saw education as an inalienable right that should be available for everyone. When independence was gained, investments in education became an important policy instrument for reducing socioeconomic inequality. In the 1940s rural secondary schools were opened in every part of the island and a system of state scholarships was established, enabling promising but economically disadvantaged children from rural primary schools to obtain secondary and higher education. In 1945, education was made free from primary to tertiary levels, including university and postgraduate studies. While education per se was not compulsory, social demand led to the rapid development of a formal school system. Today, a network of schools throughout the island provides a national average of three schools per ten square miles and 35 schools per 10,000 school age children.

118 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
120 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
121 Björkman, JW. “Health Policy and Politics.”
122 Björkman, JW. “Health Policy and Politics.”
123 Björkman, JW. “Health Policy and Politics.”
The investments made in educational infrastructure and knowledge-development among Sri Lankans translated in the dramatic improvements made in literacy over the years. Literacy, in turn, has an important impact on life expectancy and infant mortality. Improved literacy had a positive, far-reaching social impact, with mass female education as one of the most powerful drivers of the development of the health system.124

State orientation in health care provision

The Sri Lankan health system has its roots in a tradition of state activism in social service provision. Even before various colonizers of Sri Lanka arrived, a pre-modern health system was already setup and running. Sri Lankan kings had ordered the establishment of various public hospitals all over the country, with government revenues as funding. The motivation behind this was largely religious since Buddhist tradition places great importance on the alleviation of human suffering.125

Although the period from the pre-modern area and the end of the colonial period represents a discontinuity in social policy development, contemporary public attitudes in Sri Lanka, which assign to the state primary responsibility for providing health care to the state, echo these earlier aforementioned traditions.126 Sri Lankan society is markedly much more state-oriented in the way it organizes social services compared to other countries in the South Asian region. This provided another powerful impetus for propelling universal access to health care after universal suffrage was granted to the people.127

Exposure to western medicine

Throughout the Dutch and British colonial periods, a subsistence-level health system was kept running if only to service colonial officials and European residents. This health system was primarily made up of a set of few hospitals located mostly in urban locations – outside the reach of rural residents and plantation workers.128 However, this underdeveloped colonial health system served as an important introduction to the Sri Lankans of the concepts of modern medicine. The reception of the colonial medical services reflected how Sri Lankan culture easily absorbed the western model of biomedicine. Combined with the strong Buddhist background of Sri Lanka, the country’s colonial exposure to western medicine facilitated the development of its health system during the reform years of 1931-54.129

Commitment to universal health care

The successes of the health reforms were attributed to the concepts of universalism, citizenship, and health care that are largely embedded in Sri Lankan culture.130 Sri Lankans strongly believe that every citizen has an inalienable right to affordable and good quality health care. Moreover, they believe that the government has the obligation to uphold this right. The commitment to the principle of free universal care

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124 Björkman, JW. “Health Policy and Politics.”
126 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
130 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
to all citizens is taken so seriously that, despite a quarter of a century of war against the terrorist group Liberation Tigers of Tamil Eelam (LTTE), successive governments have consistently refused to restrict the right to free care that LTTE members have by virtue of their citizenship.\textsuperscript{131}

In fact, the demand and support for universal health care access is so overwhelming across all population segments that everyone in Sri Lankan society utilizes government health services, even the middle-to-upper classes who have likewise remained supportive of universal health care. Despite practical resource limitations, proposed budget cuts that would have affected access to care never succeeded. This approach towards providing health care proved to be an effective method of reaching the poor. Universal health care mandated that everyone is ensured access to health services so once the upper and middle classes were covered, marginal increases in the provision of health services benefited mostly the poor. This commitment to universal health care access among all Sri Lankans proved to be an important driver for the nature of health reforms that would take place in 1931-1954.\textsuperscript{132}

\textit{Dual medical practice}

When the health department was first established, medical officers were not permitted to engage in private business, consistent with general civil service regulations.\textsuperscript{133} However, health policymakers at the time observed that dearth of physicians that came about because of this policy. Therefore, they eventually allowed medical officers to supplement their official salary through private practice outside official work hours and government premises, hence the colonial medical department was able to recruit and retain medical staff.\textsuperscript{134}

These modifications in the policy concerning dual medical practice were in effect by 1930, just in time for when the dramatic expansion of health services. It supported the coverage of rural areas, since the health ministry cannot afford to pay market wages to entice doctors, but doctors could raise their incomes by private practice.\textsuperscript{135} In rural areas where government medical officers are usually the only physicians, private practice can be lucrative. The policy changes ensured that newly-built health infrastructure in the rural areas had medical personnel to staff them.\textsuperscript{136}

\textit{Failure of market forces in the health sector}

The Ceylon malaria epidemic of 1934-35 proved to the British colonial officials and policymakers at the time that the provision of health care and the administration of the health system could not be solely left to the privy of market forces.\textsuperscript{137} Malaria spread to every part of Sri Lanka, severely hitting most severely as people here had no natural immunity to the disease. The then-newly elected conservative Sri Lankan government thought it best to leave disaster response to market forces; firms might see the crisis as an opportunity and thus provide services to those in need.\textsuperscript{138} This mode of action proved to be deeply inadequate in the face of the epidemic, which occurred immediately after a rural financial crisis that

\textsuperscript{131} Ranna-Eliya, R. Sikurajapathy, L. "Sri Lanka: ‘Good Practice.’"
\textsuperscript{132} Ranna-Eliya, R. Sikurajapathy, L. "Sri Lanka: ‘Good Practice.’"
\textsuperscript{133} Ranna-Eliya, R. Sikurajapathy, L. "Sri Lanka: ‘Good Practice.’"
\textsuperscript{135} Ranna-Eliya, R. Sikurajapathy, L. "Sri Lanka: ‘Good Practice.’"
\textsuperscript{136} Ranna-Eliya, R. Sikurajapathy, L. "Sri Lanka: ‘Good Practice.’"
\textsuperscript{137} Ranna-Eliya, R. Sikurajapathy, L. "Sri Lanka: ‘Good Practice.’"
\textsuperscript{138} Ranna-Eliya, R. Sikurajapathy, L. "Sri Lanka: ‘Good Practice.’"
followed from the global impact of the 1930 Great Depression. Beyond direct mortality from the disease, the epidemic also economically devastated rural. Farmers became ill, which led to huge income losses for their families and greater vulnerability to catastrophic expenses.

The Marxist political opposition sounded the alarm and sent off numerous aid missions to rural areas. This did not prove to be effective, but it did serve to make the incumbent government politically anxious. As a response, the government instituted an official inquiry on the impact of the malaria epidemic, leading to two major observations. First, it became apparent that the provision of medical services simply could not be left to market forces. There was a clear need for state intervention in addressing gaps in service delivery as well as inequities. Second, the financial impoverishment following ill-health in the rural areas proved to be just as, if not more, devastating as the immense mortality caused by the epidemic.

**PROCESS**

Health reforms in Sri Lanka required a major institutional change within the ministry of health. The MOH essentially underwent a shift in mission from serving a limited population of colonial officials and administrations to providing widespread health care access to a predominantly rural population. Coupled with this institutional shift were several other important policy considerations that shaped the strategy behind the major health reforms of 1931-1954 such as the abolition of user fees, the rejection of social health insurance, productivity improvements in the public health sector, and an implicit tradeoff between quality and access.

**Abolition of user fees**

During British colonial rule, government hospitals imposed user fees to patients. After universal suffrage was granted and the first democratic elections were held in the country, political pressure mounted to abolish the user fees. By 1951, the conservative UNP government finally abolished user fees in all government hospitals until it was reinstated in 1971 by the leftist Trotskyite government. This policy change had the effect of drastically lowering demand for health services across the entire population, most especially among the poor. Political pressure to abolish user fees once again gained momentum, and in 1976 the newly-elected UNP government abolished them once again. Consequently, user charges have not been a barrier to access by the poor and the national policy of free care has been firmly supported by all major political parties, including the most pro-market ones.

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140. Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”; Perera, MALR. “Intersectoral Action.”
Rejection of social health insurance

During the planning and development phase of health reforms, it was agreed that social health insurance would not be the primary means to finance health services.\textsuperscript{150} Policymakers also saw the need to concentrate on curative services as many illnesses were not preventable. Hence the policy direction was to set up a public hospital-dominated health system, with an emphasis on hospital spending. The MOH would lead the way in combating illness and providing financial protection against catastrophic health expenditures by providing free care in an extensive network of tertiary facilities.\textsuperscript{151}

Productivity improvement

The establishment and maintenance of this network of MOH facilities would be expensive. The financial demands were felt especially during the mid-1950s, when fiscal constraints made it nearly impossible for the government to continue increasing the health budget.\textsuperscript{152} Public health spending also began to fall as a share of national income at the time. In order to push through with the hospital system strategy, there had to be adjustments in fiscal space.\textsuperscript{153}

Political leaders refused to budge on the question of whether universal access to health care should be compromised or foregone in light of financial limitations; a solution simply had to be found. In lieu of budget increases, leaders pushed the MOH to increase workplace productivity. In order to do this, the MOH had to rely primarily on administrative and managerial measures for efficiency gains. Over time, the effects of these productivity measures became apparent as more than two-thirds of the expansion of government health services during the critical 1945-60 period was financed not by budget increase, but productivity gains in the public sector. Average productivity in the public sector has continued to increase at 1-2\% per year.\textsuperscript{154} Political pressure not to compromise universal access to health care eventually created an institutional culture that promoted productivity in a manner that is yet to be seen in other countries’ public health sector.\textsuperscript{155}

Tradeoff between quality and access

Improvements in the public health sector led to the need for policy decisions regarding tradeoffs between access and quality. As rural access to the health services improved in the 1940s, the public health system was met with continuous and unanticipated surges in patient demand. Medical personnel and administrators lobbied for measures to curb the demand else the quality provided to each patient would begin to deteriorate. Meanwhile, political leaders remained steadfast in their commitment to universal health care. Thus, the MOH had no choice but to forego quality and focus on access. Although this inevitably resulted in overcrowding, it benefited the poor. Any measures to restrict demand would have affected the poor more than the rich.\textsuperscript{156}

\textsuperscript{150} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{151} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”; Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
\textsuperscript{152} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{153} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{155} Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
\textsuperscript{156} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”; Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
OUTPUTS

Sri Lanka’s health reform strategy can generally be described as having a strong emphasis on access and tertiary care, with funding coming from the government health budget.\textsuperscript{157} 

Revenue collection

Much of the funding for the Sri Lankan public health system comes from general tax revenue. International development assistance only accounts for a small percentage (about 4 to 5\%) of the funding that goes into public sector health spending.\textsuperscript{158} Due to the abolition of user fees in 1951 meant, user fees account for less than two percent of funding.\textsuperscript{159} No large-scale social insurance scheme exists in Sri Lanka given the rejection of social health insurance in 1948 in favor of public spending on hospitals.\textsuperscript{160} Public sector health spending is financed exclusively from taxation, predominantly in a mixed form of indirect taxes, which include value-added taxes and excise taxes. Direct taxes contribute very little given the overwhelming population of informal sector workers. Although indirect taxation in Sri Lanka is neither regressive nor progressive, direct taxation is progressive. The burden of funding half of the total health expenditures that comes from general revenues falls mostly on the richer households.\textsuperscript{161} To improve the progressivity of its health care financing, Sri Lanka would need to increase the share of direct taxation in overall government revenues, as well as modify its system of indirect taxes to place a heavier burden on goods and services used more by the rich than the poor.\textsuperscript{162}

From the administrative perspective on revenue collection, financing is largely dependent on the health budget allocation of the national government. Provincial and local government funding for health care usually flows primarily from the national government’s coffers.\textsuperscript{163} This is not to say that the provincial and local government units cannot collect tax revenue by themselves. They have the authority to do so, but due to inherent limitations of direct taxation in most rural areas in Sri Lanka, they usually raise less than five percent of overall government tax revenues.\textsuperscript{164} The prevailing form of taxation is the value-added tax, which can only be levied at the national level, given the small size of the island, and the uneven geographic distribution of the country’s economic output and formal sector workforce.\textsuperscript{165}

On the other hand, funding in the form of user fees is what primarily finances private sector health spending. Private health spending sources are progressive since the rich are more likely than the poor to seek private care. Private health services usually charge by item for cost of services, except for the fees of attending physicians, who may bill the patient separately. Moreover, a fifth of private financing is from employer spending on medical benefit schemes for their employees and group medical insurance schemes, plus a smaller amount from individually purchased medical insurance. Regardless of the source, all the processes for collecting funding for private sector spending involves a reimbursement scheme.

\textsuperscript{157} Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
\textsuperscript{158} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{159} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{160} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{161} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{162} Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
\textsuperscript{163} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{164} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
which still requires the patient to pay first, and get reimbursed later. Consequently, the main source for private sector health spending has been out-of-pocket payments.\textsuperscript{166}

\textit{Risk pooling}

Sri Lankan’s total health expenditure has, more or less, been a 50/50 split between private and public health spending. Moreover, approximately 8 percent of overall government budgetary spending goes to public health spending alone.\textsuperscript{167}

Majority of the government budget for health is allocated for hospital construction and spending.\textsuperscript{168} Approximately 70-85\% of public health spending is channeled to hospitals.\textsuperscript{169} This has helped the country establish and maintain its extensive network of health facilities in rural areas. The policy push behind this was primarily driven by political pressure from the electorate to favor this kind of health expenditure in particular. First, once the provision of preventive services had been maximized to reach nearly universal levels of coverage, policymakers saw little benefit in pouring in more money in preventive health.\textsuperscript{170} Continued increases in preventive health services spending would have only yielded marginal benefits. Second, protection from catastrophic health expenditures became a high priority in policymaking especially after the events of the Ceylon malaria epidemic.\textsuperscript{171} Inpatient care was the most expensive type of health care, hence the Sri Lankan government poured the largest chunk of its health budget into tertiary care.\textsuperscript{172} Increases in hospital coverage resulted in both greater health care access to health care as well as financial risk protection.

\textit{Purchasing}

Purchasing of health services in the public sector has been heavily directed at inpatient services while equally sharing the load of outpatient care with the rising private health sector. In recent years, however, the provision of outpatient care has mostly already been ceded to the private health sector while inpatient services continue to be predominantly provided by the government.\textsuperscript{173}

Despite this, there is an implicit rationing of care is occurring.\textsuperscript{174} First, through internal purchasing controls and investment decisions, the MOH can and does restrict the availability of services it considers too expensive. For example, government hospitals are prohibited from or limited in buying individual drugs or certain high-technology equipment.\textsuperscript{175} Second, the ministry can restrict the supply of specific services to only certain government hospitals by controlling the placement of specialists or through the lists of

\textsuperscript{166} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”; Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
\textsuperscript{167} Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
\textsuperscript{168} Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
\textsuperscript{169} Rannan-Eliya, R. “Sri Lanka’s Health Miracle.”
\textsuperscript{171} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{172} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{174} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\textsuperscript{175} Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
drugs approved for different hospital levels. Third, it has been official policy that, if medicines are not available in hospital stocks, patients may be asked to buy drugs themselves from private pharmacies. This results in extensive self-purchasing by patients, because the medicines budget is inadequate.

With regards to efficiency, the Sri Lankan health system demonstrates high technical and allocative efficiency in purchasing health services. From a macro perspective, it stands out among other countries worldwide, spending less than comparable low-income developing countries while achieving better health outcomes than some European countries. Most of Sri Lanka’s health reforms were achieved with less government health spending per capita than majority of Sub-Saharan African countries that underwent their own transitions. On a micro level, Sri Lanka has achieved remarkable technical efficiency. Public hospitals deliver inpatient admissions and outpatient services at a far lower ratio of cost to per capita GDP than the average developing country and, in many instances, at lower costs than any other country for which data are available. These efficiency gains can be attributed to high patient throughput, high bed-turnover rates, and high labor productivity among government medical personnel. Significant factors that influenced efficiency was the decision to trade quality for access and the strong emphasis on productivity within the organizational culture in the public health sector.

In terms of allocative efficiency, Sri Lankans were able to maximize their gains by consistently following the strategy of giving the largest resource share to hospitals, in particular inpatient care. Policymakers realized that well-run government hospitals were an efficient way of delivering primary care, owing to economies of scale. Most government hospitals require only minimal capital investment and treat only simple illnesses but are more cost-efficient than smaller outpatient facilities. Moreover, because most patients, even those from rural areas, were seen to be able to pay for outpatient services, funding was instead allocated to tertiary care in order to protect patients from catastrophic expenses usually associated with in-patient care.

A considerable portion of this public health spending goes into funding a comprehensive system of preventive health facilities, with services delivered by a specialized team of doctors, community midwives, and nurses overseen by Medical Officers of Health (MOOH) units. This organizational model was developed in the 1920s and expanded in the 1930s and 1940s, and continues until today. The teams are tasked with monitoring their local communities, identifying and registering pregnant mothers, and ensuring that these mothers and their children receive all indicated antenatal and postnatal services, as well as subsequent child interventions such as immunization. This has led to high levels of coverage for basic preventive services, eradicated all immunizable diseases, and significantly reduced maternal mortality.

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177 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
179 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
180 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
183 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
185 Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka’s Health Miracle.”
OUTCOMES

Population coverage

Sri Lanka’s strategy of establishing and maintaining a wide network of MOH hospital facilities all over the country, especially in rural areas, greatly contributed to expanding population coverage for health services. The rise in coverage occurred during the major health reform years of 1931-54 when there was direct government support in expanding access to health services.\(^\text{187}\) By the 1960s, having basic health services within close proximity became the norm for almost the entire population.\(^\text{188}\) This resulted in an aggregate increase in population coverage of 200-300 percent during the 20-year period.\(^\text{189}\)

In essence, this policy move granted the entire country universal coverage.\(^\text{190}\) Since the Sri Lankan health system operates as a state-funded health care system, their tax-financed system granted every citizen access to health services and permitted patients to visit any hospital in the country without restriction, and with no enforcement of a referral system.\(^\text{191}\) Health coverage suddenly became a defining feature of Sri Lankan citizenship. These health reforms have been largely pro-poor given the expansion of health services into rural areas as well as the deliberate lack of doing a means test for public services.\(^\text{192}\)

Financial protection

Ever since the Ceylon Malaria Epidemic, health reforms had the explicit goal of protecting households from the financial burden of disease, not just improving health outcomes.\(^\text{193}\) Hence, the Sri Lankan health system performs very well in protecting the poor against catastrophic expenses. In fact, Sri Lanka is one of the few Asian countries where very few people in the entire population are pushed into poverty as a result of medical expenses.\(^\text{194}\) Only 0.3% of Sri Lankan households are pushed below the PPP$1.08 international poverty line as a result of health expenditure.\(^\text{195}\) OOP payment has remained at levels lower than its income level average, floating around 40-46% as a percentage of total health expenditure.\(^\text{196}\)

This high level of financial risk protection can be attributed to high government subsidies for inpatient services and emphasis on access for overall quality.\(^\text{197}\) Moreover, since the rich voluntarily opt-out of using government health services, public sector health spending for inpatient and outpatient services is largely pro-poor.\(^\text{198}\)

\(^{187}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\(^{188}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\(^{189}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\(^{191}\) Gottret, P., Schieber, G. Health Financing Revisited.
\(^{192}\) Gottret, P., Schieber, G. Health Financing Revisited.
\(^{193}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\(^{194}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\(^{195}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\(^{196}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\(^{198}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
\(^{199}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
Figure 18. OOP payment as a percentage of total health expenditure in Sri Lanka, 1995-2011. Data from the World Bank.

**Benefit package**

All government health services (inpatient, outpatient, and preventive health services), except a few, are available for free to all citizens.\(^{199}\) These services, which range from antiretroviral therapy for HIV/AIDS patients to coronary bypass surgery, constitute the benefit package that every Sri Lankan citizen can avail of in the network of MOH facilities.\(^{200}\)

Exceptions to the aforementioned free package of benefits provided include the following: (a) family planning commodities such as condoms and oral contraceptives which are available at government primary care facilities at low cost, (b) private paying-wards in government hospitals that provide the same treatment but greater privacy and higher consumer quality standards, and (c) the Sri Jayewardenapura General Hospital, an autonomous, tertiary care, 1,000-bed hospital constructed with Japanese development assistance. The Japanese stipulated that user fees be charged at this facility. Patients are also asked to buy drugs themselves when these are out-of-stock at public hospitals.\(^{201}\)

\(^{199}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”

\(^{200}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”

\(^{201}\) Ranna-Eliya, R. Sikurajapathy, L. “Sri Lanka: ‘Good Practice.’”
The Sri Lankan population have always strongly believed that every citizen has an inalienable right to education as well as to affordable and good quality health care, and that the state is primarily responsible for delivering this. Buddhist tradition likewise places great importance on the alleviation of human suffering.

These values materialized when the shift to democracy and universal suffrage in 1931 from British colonists ushered in a new political dynamic, placing power into the hands of a largely rural population. A bipartisan political system encouraged parties to compete on their ability to bring benefits to constituents, especially health care services. An administration’s ability to manage the health system heavily determined its stay in power. Rural populations were also over-represented in parliament, given that rural areas had less voters yet enjoyed the same representation. Hence the needs of the rural populace were attended to. The direction of reforms were largely determined by the population, who not only had very strong but also very clear demands. Public demand by itself ensured the continuity of these reforms, for this remains consistent throughout changes in administration.

Meanwhile the expansion of school networks led to the mass education of women, which led to improvements in health outcomes and contributed to the demand for and success of health reforms.

That provision should be the responsibility of the state was further solidified by the Ceylon malaria epidemic, which showed that the financial impoverishment following ill health in rural areas can be just as, if not more, devastating than morbidity and mortality from the epidemic. The failure of the private sector to respond to needs also confirmed the need for state intervention to ensure that gaps and inequities in service delivery are addressed.

**Strategies**

**Policies by public demand**

These include the abolition of user fees, emphasis on tertiary care (in order to protect people from catastrophic expenses) and hence the expansion of public hospitals over the establishment of social health insurance, emphasis on access over quality, and the push for universal health care as a whole.

**Fund generation**

Public funding for health comes mostly from indirect taxes. Given the size of the informal population, direct taxes are limited and fall most heavily on the rich. Private sector care is paid for through OOP payments.

**Fund allocation**

Majority of health funding is spent on maintaining and expanding a network of public hospitals. A considerable portion of public health spending also funds preventive health facilities. Teams of doctors, midwives, and nurses monitor communities, with special attention to maternal and child care. The rich voluntarily opt out of using public health services. Hence public spending on services is largely pro-poor.
Technical and allocative efficiency

From a macro perspective, Sri Lanka spends less per capita than other low-income countries but achieves health outcomes comparable to those of European countries. On a micro level, technical efficiency in hospitals is attained through high patient throughput and high bed turnover rates brought about by the decision to trade quality for access. This was also largely due to high labor productivity. Political leaders were adamant about maintaining universal health care yet fiscal space was limited. Hence a series of productivity measures were successfully implemented and the approach eventually created a culture within public institutions that promotes productivity in a manner yet unmatched by other countries.

The set-up also proved to be an efficient way to allocated public funding. Hospitals were found to be a more cost-effective way of delivering primary care, in lieu of building primary care facilities and referral systems.

Coverage

- Access to an almost full range of free health services increased by 200-300% over the 20-year reform period (1931-54).
- By the 1960s, having health services within close proximity became the norm for almost the entire population.
- Government hospitals offer a wide range of inpatient health services for free, save for selected services (like services requiring certain high-technology equipment, private pay wards in government hospitals, individual drugs, and drugs when these are out-of-stock). Though government also provides outpatient care, this has mostly been ceded to the private sector while government focuses on inpatient care.
- Focusing public funding on tertiary, inpatient care ensured that the population was protected from the most catastrophic types of expenditures.

Outcomes

- Only 0.3% of Sri Lankan households are pushed below the international poverty line as a result of health expenditures.
- OOP levels remain lower than average (relative to other countries of the same income level), floating at around 40-46% of total health expenditure.
- Basic preventive services led to the eradication of immunizable diseases and significantly reduce maternal mortality.
- Reforms have been pro-poor given the expansion of health services into rural areas. That the rich voluntarily opt out using public facilities ensured that majority of public spending goes to the poor.
Beliefs and values on the importance of health care, who has rights to it, and who should be responsible for it

Democracy and universal suffrage, post-independence

Ceylon malaria epidemic

Bi-partisan political system where health reforms heavily determined a party’s stay in power

Government provision of health care

Effective representation of rural areas in parliament

Policy direction and structure of the health system largely determined by the population

Context

Functions

Policies by public demand:

Universal health care

Abolition of user fees

Emphasis on tertiary care and the expansion of public hospitals (instead of establishing social health insurance)

Emphasis on access over quality

Culture of productivity

Productivity measures launched to maintain universal health care while coping with fiscal constraints became part of organizational culture

Spending

Majority of funds are spent on maintaining and expanding a network of public hospitals

A considerable portion is spent on preventive health facilities

Upper-class segments opt out of using public facilities

Fund generation

General taxation, mostly indirect; OOP payments for private sector care

Outcomes

Only 0.3% of Sri Lankan households are pushed below the poverty line by health expenditures

OOP levels remain below average

Preventive services led to the eradication of immunizable diseases and significant reductions in maternal mortality

Reforms have been pro-poor, with the expansion of facilities into rural areas and a majority of public funds spent on the poor

Coverage

Access to an almost full range of free health services doubled to tripled over the 20-year reform period

In addition, the system demonstrates remarkably high technical and allocative efficiency

Study 4  Stories from Around the Globe
Thailand

A brief history of THAILAND
Key events across history coinciding with major health financing reforms

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<th>HEALTH FINANCING REFORMS</th>
<th>GENERAL HISTORY</th>
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<td>Introduction of Civil Servant Medical Benefit Scheme (CSMBS)</td>
<td>Implementation of mandatory rural service for doctors and nurses</td>
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<td>Introduction of Voluntary Health Card (VHC) scheme</td>
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<td>Introduction of Social Security Scheme (SSS) for private sector employees</td>
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<td>Development of National Health Account, a transparency tool for monitoring flows</td>
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<td>Legislation of UCS through the National Health Security Act, establishing a 30 baht copayment scheme</td>
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<td>30 baht copayment scheme scrapped due to difficulties among poorest quintile in accessing care</td>
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Figure 20. A brief history of Thailand, highlighting major health financing reforms and political events since 1970. Information from various sources, cited in-text.

Study 4 Studies from Around the Globe 71
Thailand had various insurance schemes prior to the universal coverage scheme (UCS). It was during the landslide win of the Thai Rak Thai (TRT) party in 2001 when UCS was actually drafted and implemented, combining all previous insurance schemes except for SSS and CSMBs. Despite constant changes in power from 2001 to 2009, including a 2006 coup, UCS remained out-of-reach from political control and has experienced continual reform under the hands of reformists both from government and civil society.

A BACKGROUND OF UNIVERSAL COVERAGE SYSTEM (UCS)

Socioeconomic and political background

Thailand is an upper middle-income country in Southeast Asia with a population of 67 million (2010 figures).\(^{202}\) It comprises 76 provinces, 876 districts, 7,255 tambons (or communes) and 68,839 villages.\(^{203}\)

Two-thirds of its gross domestic product (GDP) is driven by exports, and Thailand’s economy has enjoyed moderately successful growth rates within the past decade.\(^{204}\) It experienced double-digit growth in the 1960s until the Asian financial crisis of 1997, when economic growth fell to -10.8% by 1998. This resulted in a drop in allocations for education and health, though the economy recovered by the 2000s.\(^{205}\)

Its annual gross income rates (GNI) are higher than the average rates among countries in the same income level, but its GNI per capita is significantly lower. Unemployment rates remain low at 1.4% but 51% of the 35 million employed are in the informal sector. With regards to poverty alleviation, various social protection policies, including some for health, have caused significant poverty reduction from close to half of the population in 1988 to just 8% in 2009. However, income equality remains stagnant with a Gini index of 42.5 since 2004. Human Development Index (HDI) is at 0.682 in 2010, ranking 103rd out of 187 countries, but life expectancy is high at 74.1 years. All Millennium Development Goals have been achieved.\(^{206}\)

With regards to peace and order, Thailand has not experienced much insurgency within the past few decades, resulting in a decrease in the budget for national security by almost half from the 1980s to 2000s. The revenue was reallocated to more basic services such as education and health. However, the country is currently undergoing a demographic transition, as population growth rates have been decreasing significantly since the 1970s (3.2% to just 0.7% in 2005), and the elderly are increasing in proportion. More of the population are also moving to urban areas.\(^{207}\)

The political system has been a constitutional monarchy since 1932. Because of movements against the military regime in the 1970s, young social and political leaders took active roles in reform, including those involving the health system. These leaders are scattered among political parties and non-government organizations that have helped in the promulgation of the 16th constitution in 1997, which added the universal health care as a basic right. Moreover, the constitution also allows crowdsourcing

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\(^{204}\) Evans, TG, et al. *Thailand’s Universal Coverage Scheme*.

\(^{205}\) Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”

\(^{206}\) Evans, TG, et al. *Thailand’s Universal Coverage Scheme*.

\(^{207}\) Evans, TG, et al. *Thailand’s Universal Coverage Scheme*. 
as a form of major political involvement with the aim of creating a more participative form of democracy. For example, 50,000 Thai citizens can sign as a form of support towards a particular bill. This has helped shaped many laws, including the National Health Security Act of 2002, which mandated the institution of the Universal Coverage System (UCS). UCS advocates were proactive in developing ties with civil society and nongovernment organizations (NGOs), including these in the creation of the law.

Amid charges of corruption, the government was overthrown by a military coup in September 2006, and a new constitution was crafted. General elections were held in 2007, and a new democratic government was set up in February 2008. Despite changes in government, UCS has remained safe from political manipulation as civil society is strong and political leaders are careful not to upset the public.

Overview of health care system delivery

Thailand’s health care system is dominated by the public sector in rural areas. As of 2005, 9,762 rural health centers covered 100% of all tambol. Public hospitals are well-distributed. There are 730 community hospitals with bed capacities ranging from 10 to 120 beds, covering 91.2% of rural districts. There are also 70 general hospitals and 25 regional hospitals covering all provincial cities and urban districts, as well as 59 military hospitals, 47 specialized hospitals, and 11 medical school hospitals. Combined, these hospitals provide a total bed capacity of close to 100,000 beds. Private facilities provide a smaller share of bed capacity, with 344 private hospitals providing 35,706 beds or 25% of total bed capacity. Also, there are 16,800 private clinics mostly in urban centers, 15,000 drug stores, and 400,000 rural grocery stores that sell drugs.

With regards to health workforce (2000), there are 22,435 medical doctors, 119,651 nurses, 6,966 dentists, and 10,354 pharmacists, with more professionals working for the public sector than in the private sector. There are also 31,931 rural health workers and 829,403 trained village health volunteers working in all rural health centers to provide primary care. More than 95% of these health professionals are educated by public schools under a heavily subsidized education system.

To strengthen local districts, the 1999 Decentralization Act gave local governments more power on the administration of their own health systems. Health Insurance System Research Office, strong in research and development, was established to provide data for policy formulation. Civil registration systems also had complete and reliable data, thus facilitating the enrolment of members from various insurance schemes into the UCS.

References


209 Evans, TG, et al. Thailand’s Universal Coverage Scheme.

210 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”


214 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”

Evolution of health care system

Modernization of medicinal practices started in 1882 when Dr. Dan Beach Bradley brought the first smallpox vaccine. The establishment of medical schools and hospitals and health centers began six years later but stagnated until 1942, when the Ministry of Public Health was established. Initially, hospital care was fully subsidized by the government but medication had to be purchased from private drugstores.\textsuperscript{217}

The World Bank commissioned a National Economic Development Plan in the 1960s, leading to a rapid expansion of all kinds of government infrastructure, including a full coverage of provincial hospitals and rural health centers.\textsuperscript{218} Hospitals now charged patients for maintenance expenses and capital outlay of new medical equipment. In order to address brain drain and inequitable distribution of health personnel, a law was passed requiring doctors to work for the public sector for three years after graduating from medical school.\textsuperscript{219}

The expansion continued into the late 1970s as the government shifted the budget from urban to rural health facilities in order to broaden access to services, and until now urban health facilities do not experience much congestion.\textsuperscript{220} This was also the time when a group of progressive student leaders formed the “Rural Doctor Society.” These leaders eventually occupied positions of power in government, which enabled them to initiate reforms, including health reforms.\textsuperscript{221}

Segmentation of health financing system

Long before UCS was conceived, a health insurance system with five kinds of insurance schemes existed. Segmentation was based on demographic characteristics. The first, the Low Income Card (LIC) scheme, was introduced in 1975 and is a government-subsidized program targeting the poor who do not have enough income to access health services. The LIC scheme later expanded to include the elderly in 1992, then other indigent groups, children under 12, community leaders, and health volunteers by 1994.\textsuperscript{222} In 1978, the Civil Servant Medical Benefit Scheme (CSMBS) was introduced as a fringe benefit system for all government employees, their dependents, and retirees from the public sector.\textsuperscript{223} However, it was only in 1990 that a private sector counterpart, the Social Security Scheme (SSS), was introduced for the same purpose.\textsuperscript{224} In 1983, the Voluntary Health Card (VHC) scheme was introduced, initially a maternal and child health fund, but was later expanded to become a government-subsidized health insurance scheme for the poorest quintile in the informal sector who were ineligible for other types of insurance.\textsuperscript{225} Wealthy private individuals avail of private health insurance from various health management organizations instead. Despite the presence of these five programs, only 70\% of the population was covered by health insurance in 2001.\textsuperscript{226}

\textsuperscript{217}Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
\textsuperscript{218}Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
\textsuperscript{219}Evans, TG, et al. Thailand’s Universal Coverage Scheme.
\textsuperscript{220}Wibulpolprasert, S., ed. Thailand Health Profile 2005-2007.
\textsuperscript{221}Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
\textsuperscript{223}Evans, TG, et al. Thailand’s Universal Coverage Scheme.
\textsuperscript{224}Damrongplasit, K., Melnick, G. (2009). “Early Results.”
\textsuperscript{225}Evans, TG, et al. Thailand’s Universal Coverage Scheme.
\textsuperscript{226}Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
Efforts to draft a law on universal health coverage started in the 1990s but none of were ever passed. Constitutional changes in 1997 created political incentives to create policies that better served the public’s interests. Politicians from the Thai Rak Thai (TRT) Party, under the leadership of Thaksin Shinawatra, saw this as an opportunity to create reforms in health financing, and campaigned for low-cost health care for all with the backing of other reformists from the Ministry of Public Health (MoPH) as well as civil society groups. Their popular motto “30 baht treats all diseases” represented the policy, a platform that led to a landslide victory in the January 2001 elections. Thus began a series of pilot implementations from early to mid-2001.

**NATIONAL HEALTH SECURITY ACT OF 2002**

*Initial policy design*

Despite Thailand’s the Asian financial crisis of 1997, reformists believed that it was financially feasible to implement UCS in 2001. The World Bank sponsored a pilot study on UCS in that year. It began in April 2001 with six provinces and was later expanded to fifteen more provinces that June. By October, all provinces were covered with the exception of some Bangkok districts. The speed of implementation was due to the leadership and pressure from the MoPH secretary at that time. Strong support from the public, demonstrated by the more than 50,000 people who endorsed their support directly to Parliament after the first reading, also helped in the passing and approval of the law as the National Health Security Act of 2002.

Revenue collection was purely tax-based, as a share of the national budget for health. In the beginning, the 30-baht copayment contributed to 2% of revenue. Revenues from sin tax helped increase UCS funding, and is expected to contribute around $2.8 billion by 2015, or 0.64% of projected GDP. Risk pooling originally involved pooling all previous schemes into a single fund, however, it was only the Medical Welfare Scheme and Voluntary Health Card Scheme that were merged into UCS. CSMBS and SSS remained to be separate from UCS.

Purchasing was done via capitation, allowing providers flexibility in treating patients without over-treating. It was intended to reduce inequality in spending patterns both historically and geographically. By providing money for following-up on patients, smaller hospitals and primary health care units could recruit more staff and lessen congestion in bigger, urban hospitals. This system did not protect patients against under-treatment, though reports of under-treatment have not been mentioned in literature.

227 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
228 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
229 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
230 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
231 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
233 Evans, TG, et al. Thailand’s Universal Coverage Scheme.
235 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
In order to avail of insurance, all UCS members must be registered with a contracted provider in the district nearest to their residence or workplace. This is how the government determines the capitation budget for that district, which is a shift from the traditional supply-side capitation to a demand-side one. Given Thailand’s experience of capitation payment under SSS and the Medical Welfare Scheme, the Health Systems Research Institute suggested two payment mechanisms for two main split budgets: one for outpatient and another inpatient. Outpatient budget is based on age-adjusted capitation and total enrolment of UCS members in a particular district. Inpatient budget is calculated on a global budget for each public health region, and reimbursements are done through diagnosis-related group (DRG)-based payments to bigger provincial and tertiary hospitals, adjusted relative to the size and capacity of the hospital but capped by the said regional budget. The scheme was expected to increase efficiency as it includes all costs, and hospitals must improve their quality of service in order to survive financially. It was also expected to increase equity as capitation budgets are computed according to population.

Less than 20% of total health spending in the country is allocated for UCS, hence costs have been controlled well through the closed-end nature of UCS payments and the limitations in benefits. The scheme also minimized the risk of supply-side moral hazard; service providers have no financial incentive to induce unnecessary demand, unlike when fee-for-service (FFS) payment schemes are used.

The law also separated the function of purchaser and provider through two strategies. The first strategy was the creation of the National Health Security Office (NHSO) as an autonomous purchasing agency separate from the already existing MoPH. The second strategy was a fund allocation system of contracting units for primary care (CUPs) to reduce the reliance on a local purchasing body to determine patterns of health service utilization. Each CUP serves the population of a certain local health district where it receives capitation-based funding. CUPs employ specified numbers of health staff and provide comprehensive health care within a 30-minute travel time radius. These CUPs mostly come from the public sector, but some private facilities can gain CUP status if they offer the required set of services, including preventive care. These strategies allowed for greater responsiveness of the local health districts due to the closeness of the decision-makers to the local population and costs were contained through the CUP’s gatekeeping function.

Implementation issues and changes made

The implementation of UCS has generally been successful and has gone according to plan. As sound as the original provisions and strategies were, however, the government had to continually tweak the policy after experiencing implementation problems. Some of these issues and changes are discussed below.

Provincial Health Security Board

The reformists wanted the active participation of civil society to continue from the crafting of the law until its implementation. Therefore, in 2004, the NHSO set up a Provincial Health Security Board (PHSB)

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236 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
238 Evans, TG, et al. *Thailand’s Universal Coverage Scheme.*
239 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
240 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
241 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
to include them, some professional groups, and local governments in decision-making processes concerning UCS. They also lobbied for the removal of the 30 baht copayment scheme, which they have expressed discontent since 2001 because the poorest quintile cannot afford it, and in 2007 the scheme was successfully dropped.242

**Delay in merging into single fund**

There were delays in merging the multiple insurance schemes into a single fund. The problem was evident with the SSS and CSMBS.243 SSS worried that its funds might be used to cover UCS, while CSMBS said that generous medical welfare benefits were needed to compensate low-paid civil servants. This raised questions regarding entitlements to universal health care, especially with regards to the quality of and access to health care across different groups. The NHSO recommended the creation of a coordinating committee for all three incentive schemes. This resulted in better cooperation among the helpdesks of each scheme in providing information, sharing membership databases, and agreeing to a joint auditing system.244

**Conflict between MoPH and NHSO**

Due to the controversial nature of many of the radical reforms, conservative officials from the MoPH successfully delayed the full implementation of the roles of NHSO. Thus, the MoPH was able to: (1) oversee the implementation of reforms until 2006; and (2) it would disburse the budget via provincial health offices instead of the NHSO. In other words, during this transitional period, the NHSO was stripped of most of its purchasing power, while the MoPH doubles as a provider and purchaser. This defeated the purpose of the original intent of the law to split the purchaser and provider. However, the MoPH did not further delay the full implementation of NHSO after 2006, and the purchaser and provider are now split.245

**Capitation rates negotiation**

Negotiation of capitation rates was always a source of heated public debate. UCS negotiations with the Ministry of Finance has led to capitation rates below needed amounts year after year.246 Although demand-based capitation aimed for equity, there were problems in its distribution. For example, hospitals situated near Bangkok but were from another province received underfunding because its reported population is low despite people from the city availing of their services also. Larger provinces in the Northeast, though its health workforce is small, received larger budgets because of its larger reported population. This situation somehow helped in the redistribution of the health workforce, as these larger provinces started to hire more staff and those in the smaller, urban areas stopped hiring, forcing workers to move to rural areas. However, it negatively impacted salaries of health staff, as staff were either underpaid or hospitals refused to hire more staff.247

243 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
244 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
245 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”
246 Antos, J. *Health care Financing in Thailand.*
247 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
There were also disagreements within the MoPH about the amount of control its provincial offices should be given on the global budget for inpatient care due to conflicts with CUPs. To solve this, policymakers gave the provincial offices power to choose two kinds of funding models – “exclusive” and “inclusive.” The “exclusive” model allowed the provincial office to hold its own fund for inpatient payments, while the “inclusive” model passed the bulk of that responsibility to CUPs. Under both models, provincial offices had the power to allocate the global budgets to hospitals however they wish.

The data where capitation rates were based also was problematic, as during the initial implementation of the UCS, capitation budget was based on 1996 utilization rates, thus failing to account aging population and increase in inpatient care between 1996 and 2001. According to available literature, this problem continued until 2007, but gaps between expected capitation and actual capitation is slowly closing.

Months after the formal implementation of UCS, the government created a central contingency fund, over and above UCS budget in case some districts require additional funding that was not originally approved. The salaries of the health staff are also separated from the bulk capitation budget given to hospitals in order to address their underpayment.

To further strengthen larger hospitals who were always underfinanced, the health secretary in 2002 decided that provincial hospitals should follow the “exclusive” model. Thus, larger hospitals had no the option to bypass CUPs. In other words, the budget for inpatient payments for larger hospitals were sliced on top of the capitation funding, together with salary payments for all health professionals.

**Dissatisfaction and increase in workload among health personnel**

A 2007 study by the NHSO showed that 70% of health personnel claimed that there was an increase in their workload, reflecting the 20% increase in utilization rate in public facilities from 2002 to 2007. Because of this, half of these personnel are not satisfied with UCS in the beginning, because they felt overworked and underpaid. Internal brain drain from public to private facilities, which was aggravated by the boom of medical tourism in Thailand. Latest data show that dissatisfaction has remained somewhat the same, although this did not affect overall service delivery.

**Expansion of catastrophic coverage**

Despite the wide range of services that UCS cover, some catastrophic care expenses were not covered, such as HIV care (which was the leading cause of disease burden) and renal-replacement therapy. Due to public pressure, HIV care was included in 2003 and renal-replacement therapy in 2007.

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248 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”

249 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”

250 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”

251 Hughes, D, Leethongdee, S. “Universal Coverage in the Land of Smiles”

252 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”

253 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
CURRENT POLICY DESIGN

A split between three insurance schemes

Thailand’s health insurance system continues to be split between SSS, CSMBS, and UCS. All are funded by general taxation, but SSS receives additional revenue from contribution of salaries of private employees enrolled under it. A general framework from the World Bank is presented below:

Although it is the same network of public and private health facilities that provide health services to Thai citizens, providers answer to three different agencies depending on the insurance scheme: The NHSO handles UCS, the comptroller general handles CSMBS, and the SSO handles SSS. A summary of the features of each scheme is presented below.\(^{254}\)

Table 6. A general overview of the three insurance schemes in Thailand and their characteristics. Adopted from the World Bank.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>UCS</th>
<th>CSMBS</th>
<th>SSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scheme nature</td>
<td>Social welfare</td>
<td>Fringe benefit</td>
<td>Compulsory contribution</td>
</tr>
<tr>
<td>2. Target group</td>
<td>All Thai citizens not covered by CSMBS and SSS</td>
<td>Government employees, prisoners, and their dependents</td>
<td>Private and temporary public employees</td>
</tr>
<tr>
<td>3. Financing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Revenue collection</td>
<td>General tax</td>
<td>General tax</td>
<td>Tripartite 1.5% of payroll each, up to payroll of B15,000 (reduced to 1% since 1999)</td>
</tr>
<tr>
<td>- Payment mechanism</td>
<td>Capitation</td>
<td>Fee for service</td>
<td>Capitation</td>
</tr>
<tr>
<td>- Copayment</td>
<td>None (before 2007, 30 baht per visit)</td>
<td>Yes for some inpatient care and private hospitals</td>
<td>Maternity and emergency services if beyond budget ceiling</td>
</tr>
</tbody>
</table>

254 Wibulpolprasert, S., Thaiprayoon, S. "Thailand: Good Practice."
### In terms of catastrophic care, the following table summarizes the conditions included and excluded from UCS as of 2008:\(^{255}\)

<table>
<thead>
<tr>
<th>INCLUDED</th>
<th>EXCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemotherapy</td>
<td>Other organ transplants</td>
</tr>
<tr>
<td>Radiation therapy</td>
<td>Cosmetic surgery</td>
</tr>
<tr>
<td>Open heart surgery (including prosthetic cardiac valve replacement)</td>
<td>Infertility treatment</td>
</tr>
<tr>
<td>Percutaneous transluminal coronary angioplasty (PTCA)</td>
<td></td>
</tr>
<tr>
<td>Coronary artery bypass grafting (CABG)</td>
<td></td>
</tr>
<tr>
<td>Stent for treatment of atherosclerotic vessels</td>
<td></td>
</tr>
<tr>
<td>Prosthetic hip replacement therapy</td>
<td></td>
</tr>
<tr>
<td>Prosthetic shoulder replacement therapy</td>
<td></td>
</tr>
<tr>
<td>Neurosurgery</td>
<td></td>
</tr>
<tr>
<td>Antifungal treatments for cryptococcal meningitis</td>
<td></td>
</tr>
<tr>
<td>Antiretroviral treatment for HIV (added October 2003)</td>
<td></td>
</tr>
<tr>
<td>Renal replacement therapy including kidney transplants for end-stage renal disease (added January 2008)</td>
<td></td>
</tr>
</tbody>
</table>

Budget allocations from UCS come from public and private sources. With the introduction of UCS, public health expenditure has increased significantly, while private health expenditure has decreased in the same manner.\(^{256}\)

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\(^{255}\) Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”

Capitation spending has increased by almost 100% in 2008 from its original 2002 levels, with the greatest increase in inpatient care allocation, followed by outpatient care.\textsuperscript{257}

\textsuperscript{257} Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”
HEALTH FINANCING OUTCOMES

Health financing outcomes have also been generally successful. In terms of breadth, only 3% is not insured under UCS as of 2007 compared to 29% prior to its implementation in 2001.258

In 2010, only 1.44% and 0.4% had unmet needs for outpatient and inpatient care, respectively. These unmet needs were caused by lack of time to seek care, uncertainty about available treatment, and geographical barriers.259

In terms of width or the scope of available services, UCS is comprehensive enough to cover preventive care and health promotion all the way to catastrophic treatments such as chemotherapy, radiotherapy, bypass grafts, and joint replacements. Primary health care units were strong gatekeepers, and cost-benefit analyses estimate that it effectively increases probability to visit smaller district hospitals by 2.3% and decrease visits to larger provincial hospitals by 4.3%. Inpatient services covers medicines listed under the National Drug Formulary. Admissions have also increased from 4.3 million in 2003 to 5.21 million in 2009, indicating an increase utilization of inpatient services. Outpatient services also saw an increase in visits, from 111.9 million in 2003 to 140.7 million in 2009.260

![Progress in Health Insurance Coverage in Thailand](image_url)

**Figure 24.** Insurance coverage in Thailand from 1991 to 2007, selected years, by type of insurance scheme. Data from the World Bank.

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258 Wibulpolprasert, S., Thaiprayoon, S. “Thailand: Good Practice.”

259 Evans, TG, et al. *Thailand’s Universal Coverage Scheme.*

In terms of financial risk protection, incidence of catastrophic expenditures was reduced from 5.4% pre-UCS to 3% during the first few years of UCS to finally 0.9% in 2007. Among the poorest quintile, incidence dropped from 6.8% in 1996 to 2.8% in 2008. Out-of-pocket expenditures also decreased from 18.3% pre-UCS to just 8-10% during UCS. Benefit incidence of public health care spending has proved to be progressive and in favor of the poor, as nearly one-third of the budget goes to the poorest quintile.

This reduction is also reflected in the decrease in OOP payment, with significant decreases in 2001 and 2007, when the UCS was first implemented and when the 30 baht copayment scheme was dropped, respectively.

Overall, Thailand’s success in implementing UCS has been attributed to a strong political system with reform-minded leaders, decades of strengthening of the health system, and an active public concerned with a service that they feel entitled to. As a result, it has increased utilization rates and improved health outcomes.

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261 Limwattananon, S., Tangcharoensathien, V., Prakongsai, P. “Catastrophic and poverty impacts.”

262 Antos, J. Health care Financing in Thailand.

263 Limwattananon, S. et al., “Catastrophic and poverty impacts.”


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Study 4  Studies from Around the Globe 83
Before UCS, a health insurance system with five different schemes existed. These schemes included: (1) the LIC for poor segments and later on, the elderly, children under 12, community leaders, health volunteers, and other indigent groups; (2) the CSMBS which gave health benefits to government employees, their dependents, and retirees from the public sector; (3) the SSS which covered employees from the private sector; (4) the VHC which was initially a maternal and child health fund but later covered the poorest quintile in the informal sector; and (5) private health insurance from health management organizations, which wealthy individuals patronized. These five programs together covered 70% of the population.

Efforts to draft a law on universal health coverage began in the 1990s but remained fruitless until constitutional changes in 1997 created stronger political incentives to serve the public’s interests and the Thai Rak Thai party grabbed the opportunity to propose health financing reforms. It’s platform and motto “30 baht treats all diseases” led to a landslide victory in 2001, thus starting a series of reforms.

The World Bank sponsored a pilot study on UCS in 2001. Implementation proceeded swiftly due to the leadership and pressure from the MoPH secretary. It began in April with 6 provinces, later expanded to 15 by June, then to almost all provinces by October.

The UCS was institutionalized by the National Health Security Act of 2002, a law shaped and passed with the help of young social and political leaders and active participation from the public, particularly 50,000 Thai citizens who, through their signatures, expressed their support for the bill.

Strategies & Implementation

Several issues were encountered throughout the implementation phase, leading to the establishment of certain groups or committees or the revision of certain policies.

Fund generation

Funds were generated from taxes, particularly sin taxes. The 30-baht co-payment contributed only 2% of the needed revenues.

Provincial Health Security Boards were established to ensure the participation of civil society throughout the implementation and revision phase. These successfully lobbied for the removal of the 30-baht co-payment scheme in 2007 due to concerns that the poorest quintile could not afford it.

Less than 20% of the total health spending in the country is allocated for UCS, hence costs were controlled through budget and benefit limits.

Risk pooling

Risk pooling originally involved merging all five schemes together, however the CSMBS and SSS remained separate from the UCS because the SSS did not want to use its funds to cover other groups, and the CSMBS argued that it needed to maintain a more generous benefit package than could be offered if its funds were pooled in with the rest.

A coordination committee was created to ensure cooperation among the three schemes with regards to providing information, sharing databases, and auditing.
**Purchasing**

Purchasing was done through capitation to contracted hospitals and primary care units. Outpatient budgets were based on age-adjusted capitation and total enrollment of UCS members in an area of responsibility. Inpatient services were paid through global budget; reimbursements were based on DRGs to provincial and tertiary hospitals, adjusted based on the size and capacity of the hospital, and capped by the regional budget.

Initial problems regarding capitation included insufficient capitation rates, allocations that were insufficient given that population sizes (on which calculations were based) did not necessarily reflect the size of each hospital's clientele or its workforce, the impact of these budgets on the distribution and compensation of health professionals, the amount of control provincial offices should have on the global budget, basing capitation budgets on outdated utilization rates (which don’t reflect current demographics and utilization patterns), etc. Measures to close the gap between expected and actual capitation requirements were implemented, including the creation of a contingency fund and the separation of salaries from capitation budgets.

**Payer-provider split**

The law also created a payer-provider split through two strategies: The creation of the NHSO as an autonomous purchasing agency separate from the MoPH, and the delivery of primary care services through contracted CUPs. The split was not as strong in the beginning. Concerned about some of the more radical reforms, conservative officials from the MoPH delayed the full implementation of the NHSO’s roles until 2006.

Hence in 1994, the Ministry of Health sought technical assistance from the WHO to develop a comprehensive health reform program. This became 1996 MANAS Health Care Reform Program, which targeted (1) changes in funding, (2) decreases in costs, and (3) prioritization of primary care, intended to address the problems caused by line-budgeting, high OOP, and an emphasis on tertiary care respectively. Among the strategies the program employed are:

**Coverage**

- By 2007, only 2.3% was not covered under UCS (as opposed to 29% before UCS)
- In 2010, only 1.44% and 0.4% experienced unmet needs for outpatient and inpatient care, respectively, and usually for non-financial reasons.
- UCS is comprehensive enough to cover preventive and promotive care all the way to selected catastrophic treatments, as well as medicines included in the National Drug Formulary.

**Outcomes**

- Incidence of catastrophic expenditures decreased from 5.4% pre-UCS, to 0.9% by 2007. Within the poorest quintile, incidence dropped from 6.8% in 1996 to 2.8% in 2008.
- OOP payments decreased from 18.3% pre-UCS to only 8 to 10% during UCS. Significant decreases were observed when UCS was first implemented and when the 30-baht co-payment scheme was dropped.
- One-third of the public health care spending has gone to the poorest quintile.
Planning
The World Bank sponsors a pilot study on UCS in 2001

Implementation
Rapid and phased implementation from April to October 2001

Context
The World Bank sponsors a pilot study on UCS in 2001

Functions
Fund generation
- General taxation, particularly sin taxes
- 30-baht co-payment was dropped due to concerns that the poorest quintile cannot afford it
- Budget limits led to cost control via benefit limits

Risk pooling
- CSMBS and SSS refused to share funds and benefits with the other groups
- 3 of the 5 schemes were merged
- A coordination committee

Purchasing
- Capitation to contracted hospitals and primary care units
- Several measures to refine the rates and close the gap between expected and actual capitation requirements were implemented

Payer-provider split
- Creation of the NHSO as an autonomous purchasing agency; service delivery through contracted public and private providers
- Split initially delayed by conservative officials but eventually implemented fully

Implementation
Solutions were continuously enacted as problems were encountered throughout the implementation period.

Outcomes
Overall decrease in OOP payments
- Incidence of catastrophic expenditures decreased
- OOP payment levels decreased
- A significant portion of public spending goes to the poorest quintile

Coverage
- Insurance coverage greatly increased, leaving only 2.3% not covered by 2007
- UCS covers the full spectrum of care, including selected catastrophic treatments and medicines

Constitutional changes that created stronger political incentives to serve the public

Health financing reform platform leads to landslide victory for the Thai Rak Thai party

The National Health Security Act of 2002 institutionalized UCS

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Defining and targeting catastrophic expenditures

The concept review explains that though there is no consensus on an absolute amount past which an expenditure may be considered catastrophic, definitions of catastrophic health expenditures usually agree that such expenditures are defined relative to an individual or household’s capacity to pay. Health expenditures are catastrophic when they use up so much of that capacity that they disrupt the living standards of the individual or household—some put this at 40% or more of capacity to pay in any year. What is being spent on could thus be anything, as long as it is related to the care that was required and incurred a detrimental level of expenditures—as opposed to approaches that define catastrophic expenditures as those incurred by treating specific illnesses.

The flexibility of this definition proved useful and appropriate in the study. The team found no country-specific definitions of catastrophic health expenditures, and no indication as to which definition the countries employed. However all countries were highly concerned with reducing OOP payment levels, for it is when an individual or household has to pay for care out of his/its own pocket that an expenditure potentially becomes disruptive. When it does exceed a certain point, it becomes catastrophic, regardless of what illness or treatment was spent on. Indeed in the country reports, the cause of high OOP payment levels varied, further demonstrating the error in treating catastrophic illnesses and expenditures interchangeably. And as the causes behind high OOP payment levels varied, so did the strategies for addressing them.

For example, in Kyrgyz, high incidence of OOP payments were not necessarily due to high incidence of catastrophic illnesses. Instead it was because fiscal constraints had so reduced the operating budget of hospitals and salaries of health professionals that patients were being asked to pay for operational expenses (even light bulbs) and professional fees. For the poor, even minor charges could become catastrophic if services are repeatedly needed and they simply have very little to no means to pay. Hence, the strategies had a lot to do with the financial management of facilities.

In Sri Lanka, the public was insistent on having government focus on providing and expanding tertiary care because in their context, financial risk protection was most needed against user fees charged at tertiary hospitals for the treatment of non-preventable diseases. Hence hospital networks providing free care were expanded.

Thailand took a demand-side approach; inadequate insurance coverage was causing high OOP payment levels. The previous system where five insurance schemes were in place did not cover enough
of the population or provide enough financial support to those who were covered. Consequently, the country strengthened its social health insurance scheme.

Hence there was no categorization of high-cost illnesses or construction of an “essential package” for tertiary care, save for attempts to increase coverage for a few, specific conditions, usually as a result of pressure from advocacy groups. Generally, the approach to addressing catastrophic expenditures was to cover inpatient care and strengthen prevention through primary care facilities.

Designing the health financing scheme

This again highlights the need to contextualize strategies and consider not only what strategies are commonly employed or what are technically correct, but what the specific needs are, what is acceptable to stakeholders, and what is feasible given local conditions, among others. The same theme applies to the actual design or structure of health financing. There were some commonalities among the schemes that the three countries employed, but the strategies were generally intended to address specific concerns. The structure of each is summarized below:

<table>
<thead>
<tr>
<th></th>
<th>Kyrgyzstan</th>
<th>Sri Lanka</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>UCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CSMBS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SSS</td>
</tr>
<tr>
<td><strong>Target Segments</strong></td>
<td>General population</td>
<td>General population</td>
<td>All those not covered by CSMBS and SSS</td>
</tr>
<tr>
<td></td>
<td>General population</td>
<td>General population</td>
<td>Government employees and pensioners</td>
</tr>
<tr>
<td></td>
<td>General population</td>
<td>General population</td>
<td>Private and temporary employees</td>
</tr>
<tr>
<td><strong>Revenue Collection</strong></td>
<td>Primarily payroll taxes</td>
<td>General taxation</td>
<td>General taxation</td>
</tr>
<tr>
<td></td>
<td>Primary care</td>
<td>Preventive care</td>
<td>Health prevention and promotion</td>
</tr>
<tr>
<td></td>
<td>Inpatient and outpatient services</td>
<td>Inpatient and outpatient services</td>
<td>Maternity benefits</td>
</tr>
<tr>
<td></td>
<td>Drugs and medicines</td>
<td>Drugs and medicines</td>
<td>Ambulatory and inpatient services</td>
</tr>
<tr>
<td></td>
<td>Family planning commodities, services requiring certain high-technology equipment, private paying wards at government hospitals, services at one foreign-funded hospital, drugs when these are out of stock at public hospitals</td>
<td>Coverage for 15 diseases</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Coverage for 15 diseases</td>
<td>None</td>
<td>Coverage for 15 diseases</td>
</tr>
</tbody>
</table>
Health financing schemes either targeted the whole population or formulated schemes for each segment of the population. Given the amounts that needed to be raised especially by countries with many poor households, taxation was by and large the major means of generating more funding. What was taxed varied depending on factors like the size of the formal versus the informal sector, which industries were the largest, whether sin taxes could be expanded, etc. Benefits basically covered everything though, subject to the availability of equipment and supplies or deliberately excluding high-cost treatments for illnesses that should have been treated sooner rather than later. Payment methods were generally designed to make the most out of the available funds. Primary care was strengthened in order to address health issues early on and avoid costs. Advanced care had to become more cost-effective; facilities were incentivized by capitation and case-based payments to produce better health outcomes at lower costs by adopting leaner but equally effective treatment protocols.

Beyond these general principles, strategies varied to address a specific rationale.

The Manas Health Reform Program modified the way tertiary care facilities were being managed and brought back an emphasis on primary care. As the country gained independence, major reversals in both economic and social development led to an inability to sustain the universal health coverage that the country previously had. Although the focus on tertiary care was sustainable pre-independence, post-independent conditions were very different. Tertiary care had to be managed more efficiently, and costs further avoided through primary care.

In Sri Lanka, strong public support for universal health coverage played a central role in shaping the benefits to be provided. Clamor from the electorate placed immense pressure on the bi-partisan political system and decisions on health policies heavily determined who stayed in power. This pressure

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translated into free services provided by a network of tertiary-level facilities, as inpatient care was the main concern of the public.

In Thailand, the coverage provided by the previous 5 schemes was inadequate, thus there were efforts to generate more funds and widen the risk pool by consolidating these 5 schemes. UCS benefits were mainly copied from SSS benefits in order to reduce inequity in access. The rationale behind the SSS scheme is unknown as this has been in place since the 1970s. Meanwhile, CSMBS is more comprehensive because the government used health benefits to boost the compensation of underpaid civil servants. Coverage for certain high-cost illnesses were initially though not to be cost-effective but were later included due to pressure from lobbyists.

Managing change

For all three countries, determining the desired structure was merely the first step (and often had to be adjusted along the way). The greater challenge lay in how to manage the changes. Some common themes emerged in this area.

Crisis that created an impetus for change

In two of the three countries, a poignant event or period highlighted the need for reforms, lending a sense of urgency to them or revealing that some strategies are clearly better than others.

In Kyrgyz, social and economic conditions suffered greatly after independence brought on severe fiscal constraints. There was a need to rebuild the nation and the failure to maintain universal health care could have led to post-independence conditions worsening further, hence government had to find a way to maintain the system despite having an entirely different landscape.

The Ceylon malaria epidemic in Sri Lanka reinforced the opinion that state intervention was needed in the provision of health services; provision could not be left to the private sector. Also after independence from the British, there was a demand for a health system that was no longer preferential to colonial officials.

Similar to what the other enabling factors do, sometimes crises, however regrettable, are useful for building two key ingredients: A sense of urgency and momentum.

Strong public demand and participation

In two of the three countries, public demand was key to launching and sustaining reforms.

Culturally, Sri Lankans placed heavy importance on healthcare (and education, which also had a strong, positive impact on healthcare). They also had strong opinions on healthcare being a universal and inalienable right and on who should primarily be responsible for ensuring access to it. Moreover, Sri Lankans were clear and consistent about what they wanted, and they rewarded political parties that responded to their needs by keeping them in power. Consequently, policy decisions were more a response to their demands rather than the product of technical discourse, and changes in administration did not change the direction of reforms. Whichever the dominant party was, what the public wanted did not change.

In Thailand, a clear and compelling health platform won an election for a political party. Young social and political leaders strongly supported the institutionalization of UCS and civil society made itself heard through a signature campaign. Throughout the implementation phase, structures were
established (e.g. provincial health security boards) to ensure that the public would be represented and responded to. This led to certain policy revisions, like the removal of the co-payment scheme.

A political system that empowers the populace and creates political incentives for reform

The demand by itself was not enough. The structure of the political system had to be one that facilitated the expression of these demands and led them to fruition. There had to be political incentives for government officials and policymakers to respond.

In Sri Lanka, democracy and universal suffrage gave teeth to the demand for universal health care. This demand was so strong that successfully managing the health system became closely tied to political dominance. A bipartisan system created a competitive dynamic between parties that benefited the country.

In Thailand, constitutional changes first created stronger political incentives to respond to the public's needs. Then a strong health platform won the votes of the electorate.

Commitment to a comprehensive, cohesive, and appropriate strategy

In successful reforms, objectives were agreed on, focused, and specific. In all cases, strategies for achieving those objectives clearly stemmed from a situational analysis that identified the most crucial problems and recognized context-specific issues, hence initiatives could target the most strategic areas for improvement. Reformists did not simply parrot “correct” solutions or the strategies of other successful countries, but designed creative and appropriate solutions that logically fit local conditions.

Perhaps more than anything else, however, reformists were committed to a chosen direction. Initiatives were internally consistent in that they did not pursue multiple directions that effectively water down the effectiveness of any one strategy. Rather than competing with each other for resources and impact, strategies were complementary and aligned. They did not dilute each other, breed conflicts of interest, or address issues in a piecemeal manner. They were cohesive, and in being so, synergistic.

This goes back to the earlier discussion on there being no one size that fits all. All strategies are context-specific, and all have trade-offs. Successful reforms choose, accept, and manage these trade-offs. They funnel all efforts and resources into a single direction instead of hedging their bets on multiple but overlapping or conflicting strategies. There must, in short, be no inconsistencies, ambivalence, or half-way measures. Decisions must be made.

This is not to say that only one type of financing scheme must be used at a time. The stories show that multiple mechanisms can be in place and work together well. The point is that policy choices must be mutually supportive. Some strategies could be considered diametrically opposed, such as when both supply- and demand-side financing are used to cover the same services. Some create conflicts of interest, such as when the roles of purchasing and provision are not split. These are the kinds of strategies that successful countries were careful not to use in tandem, but that aside, creativity in combining strategies is key. There is no “universally correct” strategy, just an appropriate one that stakeholders, especially leaders, must commit to.

Grit and responsiveness throughout the implementation period

Study 4 Stories from Around the Globe
This commitment is critical because making difficult decisions often means that reforms are of a radical nature. The soundness of the strategy and the political will of leaders will be sorely tested. Two things seemed to be essential here: One, the strength to stand one’s ground and see decisions through, and two, the ability to discern when adjustments do need to be made and to make them promptly, without delay and without deviating from the overarching strategy.

In Kyrgyz, reforms involved the elimination of several ministers. In Thailand, several modifications and compromises were made as issues cropped up during implementation. However adjustments were made quickly and prudently, without undermining the overall intent and direction of the reforms. In all cases, there were limits to coverage, which are unavoidable given finite resources. In all cases, significant changes to the roles and power of individuals and institutions were made. Hence it is impossible to please all stakeholders and resistance on both micro and macro aspects of the strategy is to be expected. The leaders’ confidence and firmness regarding the overall strategy must have been paramount to their success.

This also highlights the need to communicate the thinking behind the overall strategy very well. In order for implementers to make appropriate revisions along the way, the rationale and intent of the strategies must be clear.

**Monitoring and evaluation**

A key aspect that facilitated that responsiveness was a system for monitoring and evaluating the strategies and their impact. Implementers kept an eye on their objectives and the indicators that measured them—OOP payments, utilization rates, etc.—and adjusted strategies accordingly. Numerous examples of this may be seen in each country report.

It may be useful to add that monitoring the externalities of strategies may be crucial as well. Focusing exclusively on objectives and whether these are being achieved may sometimes cause implementers to miss the other, unintended effects of their strategies—for example, the impact of increased utilization rates on the the workload of health professionals, and thus on their satisfaction and turnover rates.

**Rapid but phased implementation**

Thailand and the Kyrgyz Republic both phased the implementation of reforms, first launching the reforms in one or a few areas, then scaling up gradually. This allowed implementers to troubleshoot policies and programs and in a timely manner, before they reach nationwide scale.

Moreover, they did not delay or prolong the implementation of reforms. From pilot-testing to scale-up, Thailand took less than a year. Kyrgyz implemented reforms throughout a 3-year period. Sri Lanka took a while longer with a 20-year reform period, though perhaps this was because their strategy seemed, in a sense, more passive—responding to public demand as it arises rather than pushing for a structured and time-bound reform strategy.

Also the countries tended to launch the radical structural changes first, then improve quality and efficiency later.

This suggests that though it is clearly important to try to anticipate all possible problems and reactions, perhaps perfection is a myth and policymakers must simply launch the reforms then continuously refine them as they progress. *Phased, but fast* in order to take advantage of the momentum and political support that has already been generated.
To sum, the overarching approach to improving performance is to generate more funds for health and to design benefits and payment methods to make the use of those funds more cost-effective. A literature review can only provide some tips or common themes, but the specific details would have to be the product of an actual strategic planning process.

In addition, it appears that success lies not merely in addressing hard or technical issues, but in addressing the softer aspects of change management and resolving broader issues to create an enabling environment.

This study and similar studies before it essentially ask: How did other countries do it? The experiences of other countries have now made the key ingredients to reform clear. Moving forward, the next question is: How can the Philippines do it?

FURTHER RESEARCH

The research team encountered difficulties finding substantial amounts of literature on reform strategies. Studies were mostly too specific (discussing the details and impact of very specific initiatives within very small or focused settings), too general (discussing strategies for several countries or regions as a whole), written in a different language, outdated, or simply non-existent. Information availability was highly variable, hence the depth and coverage of the country reports also varied greatly.

Given the context-specific nature of reforms, the rationale for each strategy is perhaps more important than the strategy itself, yet many studies also do not explain the thinking or the events behind each reform, or the principles or techniques for managing the changes.

Due to these reasons, the research team suggests the use of fora or conferences inviting international speakers as an alternative to desk research. Information availability is a significant challenge with desk reviews, which are also already available. Speakers would probably be better able to provide other, relevant information in a succinct manner, and to address specific queries. This way, reformists can better adapt and implement the strategies in the local context.

More importantly, reviews of how other countries accomplished their objectives are useful in so far as they provide tips and cautionary tales. However these reviews already abound and ultimately, policy choices must be context-specific. Hence the team recommends that future research or policy initiatives go straight to the formulation of a strategic plan for reform.
Appendix

METHODOLOGICAL CHANGES

Initially the study was to focus on social health insurance (SHI) programs and identify common enabling conditions, however a review of the study’s marching orders and background literature negated the need to do either. The team was tasked simply to describe the strategies.

Apart from that, significant changes to the proposed methodology and scope of the study had to be made as the research team struggled with information availability. These are described and explained in this section, showing only portions of the methodology for which significant adjustments had to be made. The final report observes the revised methodology.

Focal Areas

By Disease

In an attempt to focus the study on more specific types of catastrophic health expenditures, a second step called Disease Selection was initially included. Given the highly relative definition of catastrophic expenditures and the large variety of conditions that may lead to these, the chosen approach was to focus on financing health care services for specific diseases rather than those that correspond to certain levels of expenditure. However, (1) as confirmed by the team’s concept review, certain diseases may or may not result in catastrophic expenditures depending on existing financing schemes, and (2) there were concerns over whether information on benefit packages specific to certain diseases would be available. Indeed this approach later proved to be infeasible when the data collection phase revealed that the different countries do not all have literature specific to certain diseases. Hence this section has been renamed as Focal Areas.

By Types of Health Care Services

The team began to explore other approaches. The next was to focus on sets of health care services instead. Study 5 within this same batch of research studies analyzes local financing schemes for catastrophic expenditures. (The research team for Study 5 is headed by Dr. Alvin Caballes.) In an effort to create a package of information that is as useful to the end-user as possible, the researchers decided to align focus areas for this study with those of Study 5’s. Dr. Caballes identified three sets of health care services that, based on his experiences, commonly lead to financial catastrophe and which his study would be focusing on: Urgent, acute inpatient, and chronic care. The team also consulted with the Corporate Planning Department of the Philippine Health Insurance Corporation (PHIC), asking which sets of services it needs the most information on. (PHIC was initially perceived to be the end-user of the study.) It was suggested that the team use a slightly different categorization: Outpatient care
(which the corporation currently finds difficult to create policies for), then to perhaps follow its
categorization for other benefit packages, such as inpatient care, and special benefits.

Unfortunately, the data collection phase also revealed that the different countries again do not have
literature in all or any of these categories. They were often too general, too specific, or entirely absent.
Hence the study ended up having no focal areas, if not due to conceptual difficulties (in defining
catastrophic expenditures) then due to practical reasons.

**Catastrophic Expenditures**

Literature also did not reveal any country-specific definitions of catastrophic expenditures. The
concept review likewise demonstrates that definitions are variable and almost all expenditures could be
considered catastrophic depending not only on poverty levels, but on what health financing schemes
are already in place.

**Country Selection**

**Scale**

Initially, the fourth step checked on scale—reforms must have taken place on a national policy-
making level. However this could only be checked after information availability was verified and data
collection was performed.

**Information Availability**

Screening based on standardized indicators was a fairly straightforward process. Selection became
problematic when the team reached the final stage, where countries with relatively good performance
had to be chosen based simply on whether the team would have enough literature to work with.

Initially, this step produced the top 6 countries out of 15—Thailand and Brazil for upper-middle
income countries, Sri Lanka and Nicaragua for lower-middle income countries, and Madagascar and
Kyrgyz for low-income countries. This was the selection stated in the team’s previous report.

The current selection differs slightly because upon conducting the data collection phase, the team
realized that the previous parameters were insufficient to guarantee information availability. Upon
checking, only 3 (Thailand, Sri Lanka, and Kyrgyz) of the 6 were viable, viable meaning that enough
information was available to allow the team to tell a story. The main issue with the rest was language
barriers; many were written in languages other than English. Also, much of the literature was regional or
based on a cluster of countries rather than specific to a country.

The team thus explored several options and consulted PIDS on which direction would be best. Using the World Bank study on good performance as a filter could somehow guarantee information availability, but that would render the study a mere replication of it. Having 3 “major” countries on which full reports could be written, then 3 “minor” countries for which very scant information and thus a very scant report was also considered, but this would not make the study very substantial. Also the remaining 9 (out of 15) countries were not promising options; information availability (when graphed) followed a very steep decline, with a select few having sufficient literature while the rest had little to none. The countries suggested by the study’s marching orders (Mexico, Singapore, Brazil, Chile, and
Estonia) seemed to have been selected on the basis of what was currently popular or well-known, and
upon checking, similar language barriers exists. Literature on Singapore was not helpful, while literature
on the rest was mostly in Spanish or some other language. It seemed that only 3 countries (Thailand,
Brazil, and Sri Lanka) were truly viable, and a 4th (Nicaragua) slightly so. The 4th country does not have
as much information as the other 3, hence the write-up for it is less substantial. However the research team felt that there was still enough to make a case.

In an attempt to provide more information on success factors for regions or all countries in general, the team included a relatively extensive review of literature on health financing strategies, seen in the introductory literature review.

Data Collection

Initially, the team was to come up with a standardized taxonomy—an outline or a concise set of indicators or areas of information on which data will be gathered from each country. A comprehensive outline of indicators and other information was proposed. The idea was to come up with a table that summarizes data for all countries across all areas of information. This would lend itself to both horizontal and vertical analyses, or at least structure the data in ways that make it easy to see relationships among factors and strategies.

The team again explored several different approaches or outlines. Initially it was a combination of the World Health Organization’s 6 Building Blocks framework along with marketing frameworks. Later on, operations frameworks were also incorporated.

Eventually, it became clear that to make sense of a country’s health financing strategy, (1) an almost endless list of factors would have to be studied—demographic, economic, political, sociocultural, historical, etc. The World Bank study on enabling factors observed in high-performing countries had the distinct advantage of having a local team of experts from various disciplines (not to mention significantly more time and financial resources) who could discern what information was relevant. This study clearly does not have such a resource. Perhaps this also explains why the World Bank study did not follow a standardized outline either but instead chose to tell each country’s story as their teams of experts saw fit. (2) In addition, again there was very little commonality in terms what information was available across all countries. This made it impossible for the team to come up with a table—no matter how general—for which most if not all cells could be filled. (3) Finally and most importantly, data availability was simply too limited. It seems that so little about health reform is documented, and most studies were either too specific or too general. Hence, the team decided to simply tell each country’s story as far as the available data could allow.

The original horizontal and vertical analysis could no longer be conducted as there is no “data table” to speak of. Eventually the team settled for a simple inputs-processes-outputs-outcomes format, as described in the methodology section.
Nicaragua

Note: The research team was not able to find a substantial amount of literature on Nicaragua; hence, this country report is not as extensive. However, there was enough information to outline the country’s basic strategy.

OVERVIEW OF HEALTH SYSTEM

In 2006, the total health expenditure (THE) of Nicaragua was approximately US$420 million, or 7.8% of the country’s GDP. More than half (54.7%) came from public health spending while the remainder (45.3%) came from private health expenditures. In terms of prepaid contributions, only 59% comes from tax revenues, SHI, private health insurance and NGO funds, while OOP expenditures increased greatly from 21% in 1995 to 41% in 2006.\(^{316}\)

\[\text{Figure 27. Breakdown of total health expenditure in Nicaragua, 2006. Data from the World Health Organization.}\]

Over the last two decades, the Nicaraguan health system has transitioned from a socialist model of health care that predominated the 1980s-1990s Sandinista Regime to a more market-oriented one by the late 1990s. During this time, successive governments had adopted generally more market-focused economic policies across most sectors. Currently, the Nicaraguan health system is a three-tiered model, constituting the Ministry of Health (MINSA), the Nicaraguan Social Security Institute (INSS-MSP), and the private sector, but the role of the private sector is minimal.\(^{317}\)

MINSA was established during the Sandinista Regime to serve as the singular consolidated state institution for the national health system. At present, MINSA delivers health services through its network of public hospitals, and 17 decentralized health districts known as SILAIS (District System for Integrated


Health care Delivery). A district health manager is assigned to supervise each SILAIS-MOH facility. Staff and drug shortages characterize MOH health services, and process quality is perceived as low.

The INSS-MSP operates as the social health insurance scheme of the Nicaraguan population. Because it is under the control and operation of the Ministry of Labor, the INSS actually functions separately as a health financing and delivery system apart from MINSA. The INSS-MSP is a payroll-tax funded social security institution that caters primarily to employed workers and whose main operations center upon revenue collection and purchasing health care services from a network of contracted private health care providers, referred to as provisional medical firms (EMPs) who are tasked to deliver benefits. To be more specific, the INSS contracts EMPs through a fixed capitation fee. It is then the EMP’s responsibility to deliver an explicitly defined, basic package of health services to social security affiliates and their eligible dependents. While the clinical quality of care in INSS contracted facilities may not necessarily be superior to that of MOH facilities, the overall quality of care is perceived as better due to well-equipped and clean facilities, shorter waiting times, and motivated staff members.

Revenue collection

Funding for MINSA’s operations is fully through tax-based financing. The two main sources for general government revenue are taxes on consumption and income. Since Nicaragua’s informal sector predominates, direct tax revenues are quite limited. Majority of the tax revenues come from indirect taxation such as value-added taxes, corporate taxes, export, and import taxes. The government’s revenues are also highly dependent on external resources, with 47% of the health budget coming from grants, loans and internal debt relief.

By institutional design, taxes on consumption are regressive while income taxes are progressive. Overall, tax collection is slightly regressive. In 2001, the top quintile bore 54.6% of the tax burden, against owning 58.5% of total income. The poorest quintile, with just 4% of the income, shouldered 6% of total tax burden. Current income tax collection practices are also characterized by a high tax evasion rate of 38%.

A significant change in revenue collections for health happened when the government initiated the “Free Health Care Policy” in January 2007. This policy move essentially abolished user fees/charges for services and medical supplies, when these are available at MINSA hospital and medical facilities. Prior

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318 Jack W. “Contracting for Health.”
326 La Forgia, G. Health System Innovations.
to 2007, patients had to pay for certain services and medicines, partly because of insufficient resource availability at MOH facilities. These user charges used to provide MOH with some 4% of its budget.329

Funding for the INSS-MSP comes primarily from mandatory payroll tax contributions; revenues for INSS are all from employed sector workers. The SHI contribution rule prescribes a contribution rate of 8.5% of gross salary, with 6% paid by the employer, 2.25% by the employee, and 0.25% by the government.330 Contributions are thus designed to be proportional to ability to pay. However, government has not paid its contributions to INSS over the past years, contributions to INSS by almost 3% over the past three years. Moreover, enrollment into INSS-MSP was only 24% of the employed sector in 2006.331 Low enrollment resulted from inadequate implementation of membership rules and from deficits in their institutional design and enforcement of revenue collection. For one, INSS only enroll employees who earn at least the official minimum monthly salary of approximately US$80, which leaves out a large portion of the employed sector.332 Enrollment practices have yet to be reformulated in order to better capture the entire workforce, especially the large informal sector. Low enrollment penalties, poor monitoring, and weak enforcement make it easy for employers and employees not to enroll into INSS-MSP at all, adding to the problem of evasion. These gaps in SHI resource collection, together with high tax evasions, amount to a total estimated 29% of THE foregone in 2006. Given this, the general government expenditure on health per capita could thus be considerably higher.333

Risk pooling

The MINSA and the INSS-MSP financing schemes function separately without any risk equalization measures in place. The MINSA operates as a singular fund, and thus as a singular risk pool. However, it devolves budgets to SILAIS and hospitals that operate relatively autonomously.334 SILAIS and the network of hospitals do not carry the same amount of risk.335

INSS and the private insurance schemes operate independently. In the INSS-MSP, the risk pool constitutes about only 8% of the population since only 24% of the employed sector was enrolled in 2006.336 INSS-MSP membership rules supposedly emphasize the principles of risk solidarity and income solidarity. Provisions regarding mandatory membership/enrollment and the no-opt-out option for high-wage earners are laid out. In principle, this design should be able to maintain a balanced risk pool comprised of members that are both high- and low-income as well as with high- and low-risk profiles.337 However, SHI membership rule excludes children above 12 years and spouses, unless pregnant. Current enrollment practices have also held to a SHI pool that comprises better off groups, reducing income

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332 La Forgia, G. *Health System Innovations.*
solidarity. This leads to higher average INSS-MSP contribution amount and hence higher average health spending per INSS-MSP member.\textsuperscript{338}

Various forms of non-conducive cross-subsidization occurs between MINSA and INSS-MSP. For example, the government subsidizes 0.25\% of every INSS-MSP affiliate’s contribution. Since majority of INSS-MSP members actually belong to upper-income quintiles, the government is actually subsidizing the rich. Moreover, since the INSS-MSP benefit package excludes high-cost interventions, MINSA funds are also being utilized for high-cost interventions that are being consumed by INSS-MSP affiliates when they seek care in MINSA facilities. Since INSS-MSP is no longer mandated to reimburse MINSA facilities for whatever health services rendered to INSS-MSP insured members, cross-subsidization from MINSA to INSS-MSP is increased.\textsuperscript{339}

**Purchasing**

In essence, the MINSA acts as the singular provider for its network of medical facilities. Government revenues for health are used to purchase preventive and curative care delivered by MINSA facilities.\textsuperscript{340} MINSA channels funding to its hospital facilities and 17 SILAIS based on a line-item and historical purchasing mechanism, meaning the budget for a given year is based on the previous year’s budget, with adjustments only for inflation.\textsuperscript{341} No adjustments are made based on changing health care needs or population structure/size. This essentially results in a fragmented MINSA risk pool and unequal per capita health expenditures across the 17 SILAIS. There is also an apparent lack of a strategic purchasing plan for MINSA facilities, which leads to an inefficient use of scarce resources.\textsuperscript{342}

On the other hand, the INSS-MSP primarily acts as the purchaser of the health system while the EMPs act as the health care service providers. In order to become an EMP and to join the INSS-MSP’s network of health care service providers, health care firms must undergo a certification process. The requirements for the certification process are structural, legal, and financial in nature, with no quality or outcome indicators being measured. The INSS uses an open contracting strategy in certifying EMPs; any organization that fulfills the requirements of certification is offered a contract. This approach supports INSS goals of expanding coverage and improving access to care, as well as encouraging the organization of the private provider market. As of 2007, only 49 EMPs had been contracted by the INSS-MSP. Since majority of these 49 EMPs are located in urban areas, various concerns are being raised over the geographical accessibility of EMPs in Nicaragua.\textsuperscript{343} EMPs are paid a fixed, monthly capitation fee for the provision of an explicitly defined package of health care benefits.\textsuperscript{344}

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\textsuperscript{338} Mathauer, I., et al. *Health Financing Challenges.*
\textsuperscript{339} La Forgia, G. *Health System Innovations.*
\textsuperscript{340} Mathauer, I., et al. *Health Financing Challenges.*
\textsuperscript{341} Jack W. “Contracting for Health.”
\textsuperscript{342} Mathauer, I., et al. *Health Financing Challenges.*
\textsuperscript{343} Mathauer, I., et al. *Health Financing Challenges.*
\textsuperscript{344} Muiser, J, Carrin, G. *Financing Long Term.*
OUTCOMES

Population coverage

In principle, MINSA provides universal access to the entire Nicaraguan population through its network of MINSA medical facilities.\textsuperscript{345} Meanwhile, about 8\% of the population – salaried workers in the government and industry and their families – are covered by the INSS-MSP scheme due to Nicaragua’s Social Security law, which requires mandatory enrollment of all employed individuals, including informal sector workers. This would mean relatively comprehensive population coverage of the employed sector of the population. However, in 2006, only 363,000 out of an estimated total population of 530,000 employed workers were affiliated to the INSS-MSP scheme - just 24\% of all employed workers.\textsuperscript{346}

Under the INSS-MSP scheme are three major programs that are classified by the package of benefits they provide: (a) Incapacity, Old Age and Death Insurance basic package, (b) Professional Risks Insurance package, and the (c) Sickness-Maternity Insurance package. More than 99\% of all INSS-MSP affiliates availed of the first two packages. Not all INSS-MP affiliates who availed of the first two packages have availed the third, though the number is growing, with almost 76\% of affiliates having already availed of the Sickness-Maternity Insurance Package in 2000. In 2005, it was estimated that all INSS programs covered about 6\% of the national population and 17\% of the workforce.\textsuperscript{347}

Being an INSS-MSP affiliate usually means that the contributing worker as well as the family is provided health care coverage. If the worker is male and married, his wife is entitled to receive prenatal, childbirth, and postpartum care. Spouses of female workers are not entitled to any health care services. Originally, the contributing worker’s children were entitled to care only up until their third birthday but in 1997, the coverage of children was extended through five years of age. It is estimated that dependents constitute approximately 40\% of total MSP beneficiaries.\textsuperscript{348}

Financial risk protection

OOP as a share of THE amounts to almost 41\%.\textsuperscript{349} This OOP rate comes mostly from the need to buy and pay for medicines, which are covered by neither MINSA nor INSS-MSP. Looking at the incidence of catastrophic health expenditures, approximately 5.8\% of Nicaraguan households heavily suffer the financial burden of disease.\textsuperscript{350} Moreover, households from the two lowest quintiles experience catastrophic expenditures up to 1.5 times more than the top quintile. However, their OOP expenditure on health as a share of household expenditure is smaller than that of the richer quintiles, suggesting that many poorer households are not seeking care when they need it because they are deterred by OOPs.

\textsuperscript{345} Muiser, J, Carrin, G.  \textit{Financing Long Term.}
\textsuperscript{346} Mathauer, I., et al.  \textit{Health Financing Challenges.}
\textsuperscript{347} La Forgia, G.  \textit{Health System Innovations.}
\textsuperscript{348} La Forgia, G.  \textit{Health System Innovations.}
\textsuperscript{349} Mathauer, I., et al.  \textit{Health Financing Challenges.}
\textsuperscript{350} Muiser, J, Carrin, G.  \textit{Financing Long Term.}
Benefit package

The MINSA is essentially the leading health care service provider for primary and secondary level care in Nicaragua. The package of health care benefits provided by the MINSA network of medical facilities spans a relatively wide range of outpatient care, clinical laboratory and diagnostic imaging services. The health care services afforded by MINSA are primarily aimed at covering high-cost curative interventions. The composition of the MOH benefit package meets efficiency and equity criteria, since essential, cost-effective services with public health externalities are included, focusing on family and community health. Often, however, medical supplies and other necessary inputs or diagnostic services are unavailable, forcing patients to purchase them outside MOH facilities, which can lead to high OOP expenditure. Most interventions included in the benefit package provided by MINSA facilities are targeted at the management and control of communicable diseases, with little or no interventions aimed at addressing non-communicable diseases.\(^{351}\)

With regards to the INSS-MSP, its original benefit package primarily covered treatment of common illnesses and maternity care services. Only services that were already provided by MINSA and which the INSS-MSP found affordable were included in the package. The MSP identifies the specific pathologies included in the package by using the *Tenth Version of the International Classification of Diseases* codes and the surgical procedures, diagnostic tests, and medicines (including dosages) that are supposed to be used to treat them. There exists a lengthy list of exclusions, including dental and vision care; some specific, expensive procedures (for example, spinal and vascular surgery, dialysis, chemotherapy, rehabilitation therapy); some chronic diseases (for example, cancer, renal disease, certain skin diseases); and some catastrophic conditions (for example, severe burns). The INSS-MPS package does not cover high-cost interventions. It was a deliberate decision that the SHI benefit package only includes curative and rehabilitative care, thus excluding cost-effective preventive care, which are provided by the MOH. In addition to the benefits, the MSP pays monetary subsidies for maternity, short-term sickness, and funeral services.\(^{352}\)

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\(^{351}\) Muiser, J, Carrin, G. *Financing Long Term*.  
\(^{352}\) La Forgia, G. *Health System Innovations*. 

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Figure 28. OOP payment as a percentage of total health expenditure in Nicaragua, 1995-2011. Data from the World Bank.