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<td>APNAN</td>
<td>Asia-Pacific Regional Health Accounting Network</td>
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<tr>
<td>ARVs</td>
<td>anti-retroviral drugs</td>
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<tr>
<td>BPHS</td>
<td>Benefit Package of Health Services</td>
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<tr>
<td>BPS-MOPH</td>
<td>Bureau of Policy and Strategy, Ministry of Public Health</td>
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<tr>
<td>CGD</td>
<td>Comptroller General Department</td>
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<td>CGD-MOF</td>
<td>Ministry of Finance</td>
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<td>CHMTs</td>
<td>Council Health Management Teams</td>
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<td>CID</td>
<td>Integrated Expenditures System</td>
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<tr>
<td>CIS</td>
<td>Commonwealth of Independent States</td>
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<tr>
<td>CNLS</td>
<td>National Committee to Fight against HIV/AIDS</td>
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<td>CME</td>
<td>Continuing Medical Education</td>
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<tr>
<td>COPD</td>
<td>Chronic Obstructive Pulmonary Disease</td>
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<td>CSMBs</td>
<td>Civil Servant Medical Benefit Scheme</td>
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<tr>
<td>CSO</td>
<td>Central Statistical Agency</td>
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<td>DAD</td>
<td>Development Assistance Database</td>
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<td>DAF</td>
<td>Directorate of Administration and Finance</td>
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<td>DEP</td>
<td>Directorate of Studies and Planning</td>
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<td>DHS</td>
<td>Demographic and Health Surveys</td>
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<td>Directorate General for Information and Health Statistics</td>
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<td>DMT</td>
<td>Data Management Tool</td>
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<td>DOH</td>
<td>Department of Health</td>
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<td>DRGs</td>
<td>Diagnosis Related Groups</td>
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<td>EASHH</td>
<td>East Asia and Pacific Health Nutrition and Population Sector Unit</td>
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<td>ECSA-HC</td>
<td>Eastern and Southern African – Health Community</td>
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<td>EPHS</td>
<td>Essential Package of Health Services</td>
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<tr>
<td>FEV1</td>
<td>Forced expiratory volume in one second test</td>
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<tr>
<td>FIES</td>
<td>Family Income expenditure Surveys</td>
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<td>GeoStat</td>
<td>State Department of Statistics of Georgia</td>
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<td>GDP</td>
<td>Growth Domestic Profit</td>
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<td>GEL</td>
<td>Georgian Lari</td>
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<td>GHSPIC</td>
<td>Georgia Health and Social project Implementation Center</td>
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<td>Health Economics and Financing Directorate</td>
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<td>HHC</td>
<td>High Health Council</td>
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<td>HMIS</td>
<td>Health Management Information System</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<td>HMOs</td>
<td>Health Maintenance Organizations</td>
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<td>Health Transformation Program</td>
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<td>IC</td>
<td>Insurance Commission</td>
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<td>ICD</td>
<td>International Classification for Diseases</td>
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<td>International Health Policy Program</td>
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<td>KIHSM</td>
<td>Korea Institute of Health Services Management</td>
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<td>LSHTM</td>
<td>London School of Hygiene and Tropical Medicine</td>
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<td>LSMS</td>
<td>Living Standards Measurement Study</td>
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<td>M&amp;E</td>
<td>monitoring and evaluation</td>
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<td>MAP</td>
<td>State Health Program for Medical Assistance to the Poor</td>
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<tr>
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<td>Marginal Budgeting for Bottlenecks</td>
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<td>MBIS</td>
<td>MNHA (q.v.) Business Intelligence Solutions</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>(NHA Unit Malaysia) Ministry of Health’s Planning and Development Division</td>
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<td>National AIDS Spending Assessment</td>
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<td>National Health Development Plan</td>
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<td>National Commission on Macroeconomics and Health</td>
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<td>Non-governmental Organization</td>
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<tr>
<td>NPISH</td>
<td>Non-Profit Institution Serving for Households</td>
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<td>Acronym</td>
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<td>NSCB</td>
<td>National Statistical Coordination Board</td>
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<td>NSSO</td>
<td>National Sample Survey Office</td>
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<td>NTCC</td>
<td>Health Sector National Technical Coordination Committee</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>OOP</td>
<td>Out-of-pocket payments</td>
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<td>PADS</td>
<td>Support to Health Development</td>
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<td>Public Expenditure Review</td>
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<td>Public Expenditure Tracking Survey</td>
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<td>PHFI</td>
<td>Public Health Foundation of India</td>
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<td>PNDS</td>
<td>National Health Development Plan</td>
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<td>EURO-EMRO</td>
<td>WHO Europe-Eastern Mediterranean Region</td>
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<td>PRODRESS</td>
<td>Health Sector Strategic Plan</td>
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<td>RH</td>
<td>Reproductive Health</td>
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<td>RM</td>
<td>Malaysian Ringgit</td>
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<td>Rashtriya Swasthya Bima Yojna</td>
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<td>SG</td>
<td>Secretary General</td>
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<td>Sosyal Güvenlik Kurumu</td>
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<td>SHA</td>
<td>System of Health Accounts</td>
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<td>SNA</td>
<td>System of National Income Accounts</td>
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<tr>
<td>SR</td>
<td>Seychelles Rupee</td>
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<td>Social Security Corporation</td>
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<td>Social Security Scheme</td>
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<td>SWAp</td>
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<td>THB</td>
<td>Thai Baht</td>
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<td>THE</td>
<td>Total Health Expenditure</td>
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<td>TOR</td>
<td>Terms of Reference</td>
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<td>TURKSTAT</td>
<td>Turkish Statistical Institute</td>
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<td>TUSAK</td>
<td>Turkish Ministry of Health-affiliated School of Public Health</td>
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<td>UC</td>
<td>Universal Coverage</td>
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<td>UEMOA</td>
<td>West African Economic and Monetary Union</td>
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<td>UHI</td>
<td>Universal Health Insurance</td>
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<tr>
<td>UNGASS</td>
<td>United Nations General Assembly Special Session</td>
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<td>UPSE</td>
<td>University of the Philippines School of Economics</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>WCF</td>
<td>Workmen Compensation Fund</td>
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<td>WDI</td>
<td>World Development Indicators</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>WHR</td>
<td>World Health Report</td>
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</table>
Country policy makers and technical experts have contributed to the shaping of this compendium of case studies through an extensive consultative process involving low-, middle- and high-income countries, large and small, from all corners of the world (listed on page 93–94). We are grateful for these contributions which have helped shape a document that synthesizes lessons learned from using NHA, often in triangulation with other tools and instruments, to inform policy. This is part of a global initiative to promote the institutionalization of National Health Accounts (NHA). The Bill and Melinda Gates Foundation (BMGF) provided generous financial support for activities undertaken in this global initiative, including the development of this compendium of case studies and a Strategic Guide for the institutionalization of NHA; provision of technical assistance to selected countries; consultative meetings with experts and practitioners for methodological development; and in-depth analysis of the constraints to institutionalizing NHA, based on collaborations and interactions with developing country partners.

This compendium was developed in consultation with numerous World Bank and development partner field staff from organizations such as USAID, WHO and OECD as well as regional networks and observatories.

Overall guidance has been provided by Akiko Maeda, Lead Health Specialist at the World Bank. The project team consisted of Margareta Norris Harrity, Banafsheh Siadat and Shunsuke Mabuchi. Outstanding project management support was provided by Daniela Hoshino.

The compendium was edited by Colin Douglas. Design and typesetting were done by The Word Express, Inc.
INTRODUCTION

There has been a global effort to promote the institutionalization of National Health Accounts (NHA): these serve as a comprehensive tool to create an evidence base on the flow of public, private and donor funds at the country level. Since 2008, the World Bank has been coordinating this effort, which has culminated in a publication entitled, “Where Is the Money and What Are We Doing with It? Creating an Evidence Base for Better Health Financing and Greater Accountability – A Strategic Guide for the Institutionalization of National Health Accounts” (World Bank, 2011).

The development of the Strategic Guide was informed by an extensive consultative process involving more than fifty countries, and it explicitly references the lessons learned from countries which are at different stages on their journey towards the institutionalization of NHA. This document serves as a companion document, providing detailed case studies of 14 countries that span multiple regions and income levels—namely, Afghanistan, Burkina Faso, Georgia, India, Jordan, Korea, Malaysia, Mali, the Philippines, Serbia, the Seychelles, Tanzania, Thailand, and Turkey.

The purpose of this document is twofold: 1) bring policy makers and producers of NHA closer together by introducing the common language they use to the type of answers NHA can provide; and 2) learn how other countries used NHA as an input to an evidence base that informs policy.

A robust evidence base for policy decisions can be created when country policy makers can articulate key policy questions that NHA can help answer, and when countries have the capacity to translate NHA data in ways that help respond to policy questions. This interaction between policy makers and NHA producers is an iterative process, and needs to be repeated as a cycle of activities. The case studies also describe countries’ efforts to produce, disseminate and translate NHA into “products” used by a wide array of stakeholders. This compendium of case studies aims to highlight each country’s process of NHA institutionalization, as well as the outcomes of country efforts to build the evidence base for health policy. The lessons learned from their institutionalization efforts, which are incorporated into the Strategic Guide, are summarized in the Appendix of this report.

This compendium is not a comprehensive account of countries’ use of NHA, but offers a guide for readers on various policy areas to suit a multiplicity of interests. The main policy areas introduced by the case studies include the following:

- **Financial access to care**: Afghanistan, Burkina Faso, Georgia, India, Jordan, Korea, Malaysia, The Philippines, Serbia, Tanzania, Thailand and Turkey
• **Resource allocation** (for different income levels or regions): Burkina Faso, Korea, Mali and the Seychelles

• **National program planning, budgeting and monitoring**: Burkina Faso, Georgia, Mali and Turkey

• **Rational use of drugs**: Afghanistan, Korea, Jordan, Thailand and Turkey

• **Disease-specific or general public-health programming**: Georgia, the Philippines and Thailand

• **Transparency**: Serbia

• **Cost inflation**: Jordan

• **Quality of care**: The Seychelles

• **Donor aid coordination**: Tanzania
AFGHANISTAN: INFORMING HEALTH SECTOR DECISION MAKING AND IMPROVING ALLOCATIVE EFFICIENCY

Institutionalization from the First Round of NHA

Limited access to primary healthcare, together with high maternal mortality rates, have prompted Afghanistan to examine its investments in health. NHA have helped analyze how resources are allocated, indicating a need for greater financial risk protection for Afghanistan’s population. NHA also have the potential to improve transparency in Afghanistan’s health sector. Completing its first round of NHA in April 2011 while simultaneously embarking on the institutionalization process, Afghanistan has started to use health resource tracking to inform decision making for better health outcomes. This process has been fostered by strong government buy-in, multi-stakeholder support, and broad dissemination.

NHA Institutionalization in Afghanistan

The first NHA in Afghanistan (2008–09) were conducted by a core team comprising two members from the Health Economics and Financing Directorate (HEFD) of the Ministry of Public Health (MoPH), with technical support from USAID’s Health Systems 20/20 Project. The impetus for NHA came from earlier work that demonstrated the need for tracking resources in the health sector (World Bank, 2010). The desire to conduct the initial NHA exercise and institutionalize the process was discussed at great length in Afghanistan’s National Strategy on Health Care Financing and Sustainability 2008–2013. This country-driven process brought on board different government actors at both ministry and directorate level to help create an evidence base for decision making (Afghanistan MoPH, 2011).

A process of institutionalization of NHA was initiated simultaneously with the first NHA exercise. In this, a great deal of emphasis was placed on understanding the NHA methodology, developing mechanisms to ease data collection, and producing a long-term work plan. The country places great importance on capacity building. For example, the two-person team is transferring and

Key Points

- Demands for greater transparency and accountability in health resource tracking have led to the first round of NHA in Afghanistan.
- The results provide an evidence base that shows a lack of financial risk protection for households.
- The process of producing the first round of NHA was conducted simultaneously with the institutionalization process.
- Afghanistan has already disseminated the results broadly for use by stakeholders and policy makers.
in institutionalizing their knowledge by training other colleagues and local staff through workshops and presentations on NHA methodologies and statistical methods. The team is also developing a manual with a glossary of terms, data sources used, and collection and estimation methods for future reference.

The country intends its NHA to be used by a wide variety of stakeholders including government, civil society, NGOs, donors, and academia. To enrich discussion and advocate to the Parliamentary Committee and MOF for increased funding to the health sector, working groups have already been established, including the Consultative Group on Health and Nutrition, the Afghanistan Health Sector Donor Group, the Health Sector National Technical Coordination Committee (NTCC), and an Inter-Ministerial Coordination.

NHA results were disseminated nationally through a “launching” ceremony in April 2011. Invitees included senior officials from other Ministries (including the MOF), representatives from the Central Statistics Organization, hospital directors, NGOs, and the donor community. The event received significant coverage on local television and radio and has motivated a significant amount of discussion. The NHA report itself is in the process of being finalized. Once completed, it will be printed and published on the government’s NHA website and translated into local languages. The data is already being communicated through email to various ministries (Afghanistan MoPH, 2011).

As Afghanistan moves forward with NHA production and analysis, it will be interesting to observe how key areas are developed to better inform decision making, including the use of other inputs to inform health sector decision making, optimization of NHA with other data instruments such as the Public Expenditure Review (PER) and Medium Term Expenditure Framework (MTEF), and their enhancement through translation in ways that “reach” policymakers.

**Early Insights from NHA Data**

Although it is still too early to see tangible policy impact, an evidence base is being created in Afghanistan that can provide input for decision making. Early insights from the production of NHA have stimulated debates on the following issues:

- **Greater public financing of health.** The government of Afghanistan pays only 6% of total health expenditures (Figure 1). This has highlighted the need for greater public resource allocation to the health sector and an investigation of different strategies to raise domestic revenue, including corrective taxes or user fees (Afghanistan MoPH, 2011).

- **Financial risk protection.** Approximately 75% of total health expenditures are borne by households, 18% by donors and only 6% by government (Figure 1). This illustrates the vulnerability of households to impoverishment due to catastrophic health expenditures. As a result, policymakers have called for a review of existing financing mechanisms and are currently exploring alternative financing mechanisms to alleviate the burden on households, looking at both the

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1 Moreover, donors alone contribute 75% of total public health spending, illustrating the degree of donor aid dependence in public financing for health (Afghanistan MoPH, 2011).
feasibility of insurance and of increasing government allocations to health\(^2\) (Afghanistan MoPH, 2011).

- **Rational use of drugs.** The majority of household health expenditures are for the purchase of drugs. This finding has resulted in calls for a rational use of drugs policy to limit over-prescribing by physicians and over-consumption by consumers who are known to ask private pharmacies to prescribe. In addition, health education campaigns to promote behavior change and the rational use of drugs are being considered. The government also seeks to strengthen its drug procurement policy to limit stock shortfalls and improve the quality of drugs (Afghanistan MoPH, 2011).

- **Regional benchmarking.** Data have brought to light how Afghanistan compares with its regional neighbors, both in terms the levels and trends of its health spending. Afghanistan currently spends 10% of its GDP on health which is above its regional neighbors (and even above the OECD average of 9%), but in per capita terms spends only US$ 42 per capita, far less than neighbors such as Iran (US$ 722 per capita), India (US$ 118 per capita), and Pakistan (US$ 71 per capita), as shown in Figure 2 (Afghanistan MoPH, 2011).

- **Greater accountability.** Health resource tracking data has the potential to ensure greater accountability of policymakers to their constituents—e.g. as a means to expose corruption in the health system and hence improve public trust in the administration.\(^3\)

Through sustained NHA production, and as the data and the availability of capacity in the country develop, the evidence base will grow, so enabling increasingly sophisticated insights for use by policy makers.

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\(^3\) ibid
References


BURKINA FASO: ADDRESSING INEQUITIES IN RESOURCE ALLOCATION AND IMPROVING FINANCIAL ACCESS TO CARE

Strengthening Capacity Building to Use Data to Inform Policy

Burkina Faso has addressed inequities in resource allocation across regions and health programs, as well as inequities in financial access to care, using insights from NHA data. In further strengthening the linkage between production and use of data, Burkina Faso seeks to make further investments in capacity building and dissemination, and further strengthen government commitment to the country’s health resource tracking efforts.

NHA Institutionalization in Burkina Faso

The institutional “home” for NHA in Burkina Faso is the Division of Information and Health Statistics within the MOH. NHA were initially produced externally by a consulting agency. Now, however, production has moved in-house where it is prepared by local staff, whose members remain in contact with WHO to share results and ensure that standardized procedures are used. The International Development Association (IDA) will continue to finance NHA and ensure support for the MOF.

Key Points

- NHA in Burkina Faso have highlighted the need to make resource allocation across regions and health programs more equitable. Data have also highlighted the need for improvements in financial access to care.
- NHA have the potential to improve transparency and accountability if dissemination mechanisms are strengthened. This would also encourage feedback and transparency to improve NHA production and analysis, lend credibility to the numbers and enhance the quality of data produced.
- Burkina Faso faces several challenges in capacity building. Greater resources need to be mobilized for capacity building, both within the MOH and externally to other ministries and the private sector. Increased commitment to and ownership by the central government for effective health resource tracking data can help strengthen this area.

NHA are part of a broad government mandate to identify ways to mobilize financial resources for the health sector to implement the National Health Development Plan (PNDS) (2000–2010), ensure equity in geographic access to care and equity in financial access to care across income groups (Zida et al, 2010). The MOH was chosen to “house” the NHA as it frequently uses NHA data in

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4 Documents needed for the writing of this case study were translated from French by Damini Bansal at the World Bank.
formulating its policies and strategies and allocating resources: it has the ability to readily collect the data needed for NHA production, and is also thought to be able to better facilitate the link between production and use of data. As a result of having the institutional “home” of NHA within the MOH, however, the frequency of data collection is not always respected and some data are not collected. There is, further, limited human resource capacity (particularly in terms of statistics) within the MOH. Moreover, NHA conducted by the MOH are not yet harmonized with the NHA sub-accounts for HIV/AIDS. Finally, the private sector is also not yet included in the NHA data although trainings are underway to rectify this exclusion in the future.

NHA are produced in conjunction with a multidisciplinary Technical Team and a SC chaired by the Secretary General (SG) of the MOH. The Technical Team consists of twelve members with expertise in areas related to NHA production; it is responsible for collecting and assessing data quality, producing the NHA tables and matrices, identifying key health financing trends and making strategic recommendations based on the results. It includes six officers from the Directorate General for Information and Health Statistics (including economists, statistical engineers, doctors and administrators), an economist with the Directorate of Studies and Planning (DEP), a physician from the Directorate General of Health, the Head of Finance and Accounting from the Directorate of Administration and Finance (DAF), a representative from the National Institute of Statistics and Demography (InSD), a representative from the Unit for Training and Research in Economics and Management, and the Technical Manager responsible for developing sub-accounts for HIV/AIDS.

The SC reviews the Technical Team’s recommendations, which are ultimately forwarded to the authorities in the MOH and to key development partners, for use in policy. The SC is comprised of the following members: Secretary General of the MOH (who serves as President of the SC), Director General of Information and Health Statistics in the MOH, Director of Administration and Finance in the MOH, Director General of Health Statistics, Head of the NHA Technical Team, Technical Advisor to the MOH, Director General responsible for the supervision of public hospitals and the private health sector or his representative, Director General of Health or his representative, Director General of Budget or his representative, Director of Studies and Planning in the MOH, Director General of Cooperation of the Ministry of Economy and Finance or his representative, Coordinator of the Support to Health Development (PADS), Permanent Secretary of the National Committee to Fight against HIV/AIDS (CNLS) or his representative, and a representative of WHO in Burkina Faso.

Within government, there is a need to strengthen capacity building in order to better use data to inform policy. Currently, a two-person NHA team is responsible for production; it consists of a team lead and an assistant. Responsibility for data compilation and analysis at central level is conducted by only two persons (the team leader is leaving), making the process achieved thus fragile. The team lead is dedicated and has strong technical expertise. He has worked in conjunction with the World Bank and with USAID’s HS/2020 Project. There is a clear shortage of personnel and a need to scale-up the NHA team, particularly in the event of staff attrition. A loss of either team member could mean a loss in institutional memory and the capacity to continue with NHA production.

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6 ibid
7 ibid
a result, the MOH has pursued training in the public sector (of MOH and other entities) to build capacity, but ongoing efforts are needed. There have been plans to integrate and build capacity within the private sector, but this has not yet happened.8

The primary user of NHA is the MOH, which is responsible for producing the national health strategy, monitoring budget allocations across regions as well monitoring household spending on health—as discussed below. To date, development partners, research organizations and civil society have used NHA as part of one-off studies; there is a need to further make NHA routinely used by and made available to these and other entities.7 For example, Amnesty International used the 2008 NHA reproductive health subaccounts results, for its campaign to raise awareness about maternal mortality and women’s rights to healthcare. As to Burkina Faso’s high maternal mortality rate (484 per 100,000 live births in 2000), only 6% of the total health budget was allocated toward reproductive health services, and only 0.02% of the total health budget was allocated towards maternal health and family planning (Zida et al, 2010; WHO, 2006). Studies such as these bring to light discrepancies between health spending and need, and make it an increasing priority to use data such as NHA to inform decision making. For the development of community-based health insurance in Burkina Faso, civil society organizations are citing as an example of the financial burden on poor populations, the high household out-of-pocket (OOP) spending, which is around 39% (2009 NHA).

In terms of dissemination, data are disseminated in hard and digital versions of the final NHA reports, as well as through workshops and training forums. Results are also posted online.10 Data remain very technical and are not translated into a simple political language that everyone can understand.

Currently, Burkina Faso uses NHA data in conjunction with a variety of other data sources. For example, data on government health expenditures come from the Integrated Expenditures System (CID), which is also used for the MTEF. Household health expenditures are estimated from household surveys conducted by the National Institute of Statistics and Demography. Public health facilities’ expenditure data are collected annually from the final balance sheet of the PNDS. Finally, additional data are collected from private providers, including pharmacies and insurance entities. All collected data is entered in a single database that is used to produce NHA tables. Other data instruments such as the Marginal Budgeting for Bottlenecks (MBB) and the MTEF are tools for projection that use health financing indicators from NHA as a baseline.11

Using Insights from NHA to Inform Policy

- Resource allocation across regions: The 2005 NHA revealed major geographic inequities in health spending: poorer regions received less of THE than more affluent areas. For example, Boucle du Mouhoun and Nord, two of the poorest regions within the country, with poverty incidences of 60% and 69% respectively, received a combined total 11% of all healthcare spending. In contrast, wealthier areas such as the Centre region received 29% despite having

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9 ibid
10 Ouedraogo and Tegwouli. Written Communication already mentioned.
11 ibid
only a 22% incidence of poverty. This finding was particularly stark in light of the fact that Boucle du Mouhoun and Nord are home to 20% of the country’s total population, while Centre is home to only 9% (Zida et al, 2010).

This discrepancy in health spending was due to the differential ability of the regions to invest in infrastructure and capital investments. Poorer regions simply lacked the resources to devote additional resources to health. This finding prompted the construction and development of new health facilities by the central government, which increased the number of health facilities nationwide by 62% between 2001 and 2009. The results also prompted central government and development agencies to reallocate resources to poorer regions (Zida et al, 2010).

- **Resource allocation across health programs**: Effective resource tracking data have also been used to improve equity in resource allocation across health programs. For example, the 2005 NHA found that 46% of the total health budget was spent on medication and other medical goods for outpatients, while only 10% was spent on preventive services and health promotion. This prompted the government to offer free health-promotion and preventive services to ensure that individuals continue to utilize primary healthcare services. Following this, the 2006 NHA results showed that spending on medical goods for outpatients declined to 31%, while spending on preventive health increased to 26% (Zida et al, 2010).

- In addition, the NHA results showed insufficient district health spending, with little involvement in the health sector at the district level. This prompted the central government to further decentralize responsibilities for health: for example by transferring money and staff from the central to district governments (Zida et al, 2010).

- **Financial access to care**: Health resource tracking data have revealed that households are the largest contributor to health spending. For example, in 2003 households accounted for 50% of total health expenditure, with 92% of this attributable to households’ OOP payments for health services at the point-of-service (Figure 3). Highlighting these data, development partners have encouraged the government to respond. The government has since taken action by subsidizing specific medical services in order to alleviate the financial burden on households—for example, natural deliveries and emergency obstetric care, including cesarean sections, are now 80% subsidized. This has culminated in a reduction of household OOP payments as a proportion of THE to 38% in 2008 (Zida et al, 2010).

- **Policy and planning**: The government also uses the data to monitor the implementation of the Burkina Abuja Declaration, which suggests that countries allocate 15% of their budgetary resources to finance healthcare. In addition, the government also uses the data to assess the cost of implementing the National Plan for Health Development 2011–2020.

Data and resource tracking have thus helped provide answers to the following key policy questions:

**At the national level**

- How can Burkina Faso ensure equitable resource allocation across regions, and across health programs?
• How can Burkina Faso improve financial access to care and reduce the health financing burden borne by households?

At the international level

• How does Burkina Faso perform relative to its regional neighbors in terms of health spending levels and trends?

Currently, regional organizations such as the UEMOA (West African Economic and Monetary Union) are harmonizing NHA data and methodologies across eight West African countries to facilitate regional comparisons.

Lessons Learned

• “Home” of data production and oversight: The production of NHA in-house helps facilitate local ownership and retain production capacity in the country.

• Central-level ownership and commitment. Ownership by the central government to support and push NHA forward can be strengthened. Although there is strong buy-in from the Division of Information and Health Statistics, ownership needs to be strengthened within the Ministry more broadly.

• Capacity-building. The difficulties of capacity building are worth noting, particularly in a context of limited financial and human resources. Greater resources need to be mobilized for capacity building, both within the MOH and externally to other ministries and the private

Figure 3. Composition of Total Health Expenditure (2003–2008)

Source: Zida et al., 2010.
Note: The comparison of 2003 and 2008 NHA figures should be viewed with caution because the methodology used to calculate NHA was not the same. Methodologically rigorous comparisons can be made between 2005 and 2008 data when THE increased by over 26%.
sector. Increased commitment to and ownership by the central government for effective health resource tracking data can help strengthen this area.

- **Dissemination.** Dissemination of NHA findings can be strengthened and expanded to include a broader audience such as civil society. For example, while NHA was produced in 2009, results were not widely disseminated. Improved dissemination includes translating the data so that is readily understood by a wide array of audiences.

- **Accountability and transparency.** Data such as NHA have the potential to improve transparency and accountability to government and civil society, if dissemination mechanisms are strengthened. This would encourage feedback and transparency to improve NHA production and analysis, lend credibility to the numbers and enhance the quality of data produced.

Burkina Faso serves as an example where, in a resource poor setting, production capabilities have been strengthened in-house—i.e. within the Ministry of Health. However, ongoing efforts are needed to support capacity building and there is room to further improve dissemination and commitment by the central government to ensure continued uptake of insights from the data to inform policy. Continued investments in these areas will create a stronger evidence base on which to generate additional insights to inform policy.

**References**


Georgia has addressed inequities in financial access to care and sought to improve publicly funded healthcare programs. It has used National Health Accounts (NHA) as an evidence base to both highlight these issues and identify potential solutions. NHA in Georgia is produced using local expertise transferred over time from international experts, and has been facilitated through standardized tools. Use of the data has been made possible through broad dissemination of the data, and its linkages with other data sources and instruments. Going forward, Georgia seeks to address existing human resource shortages through recruiting efforts to ensure that there is a solid base of local, institutionalized knowledge of NHA.

NHA Institutionalization in Georgia

The development of NHA in Georgia began in 2003 with technical and financial support from different bilateral (USAID through Abt Associates) and multilateral agencies such as the World Bank and WHO. The work was contracted out to the Curatio International Foundation, a Georgia-based NGO dedicated to health accounting, financing and management reform (Goginashvili and Turdziladze, 2009). Over time, the responsibility for NHA production moved internally, while development

### Key Points

- NHA has highlighted the need for greater financial risk protection among households, with currently just over one-third of the population holding any type of insurance; high OOP spending by households for pharmaceuticals have also contributed to household’s health financing burden.
- Over time, knowledge of NHA production has been transferred from international consultants to local staff on the ground and the production of NHA have been formalized by a decree, ensuring that there is a base of local, institutionalized knowledge within the NHA team. Given the team’s limited human resource capacity however, there are efforts to scale-up the number of team members, ensuring a continuous transfer of local knowledge going forward. The formal involvement of entities from multiple sectors ensures the buy-in of these actors in the NHA production process long-term and can facilitate production through the collection of data inputs.
- NHA are used by a wide array of stakeholders including government (within and outside the MOH), private insurance companies, academics and researchers. Broadening dissemination has built confidence in the numbers NHA provides.
partners such as WHO continue to provide high-level technical guidance and donors such as the World Bank provide financial support.\footnote{Goginashvili, Ketevan. 2011. Personal Interview. Chief Specialist, Health Policy Division of Health Care Department, Ministry of Labour, Health and Social Affairs of Georgia. July 20 2011.}

As of January 18 2006, the Government of Georgia issued Decree No. 11, \textit{On Institutionalizing National Health Accounts in Georgia}, requiring the annual production of NHA and mandating all entities in health provide the data inputs for production. This served as the first legislative initiative stipulating the aims, objectives, timeframe and parties to be involved. NHA were legally established under the umbrella of the National Institute of Health and Social Affairs (NIHSA), the think tank of the Ministry of Labor Health and Social Affairs (MoLHSA). The technical composition of the NHA team, as well as the hiring process of the team, was supported and closely monitored by the World Bank. The Bank also overhauled the NHA department, equipping it to modern standards, as well as financed various capacity building efforts. In 2006, the decision was made to abolish the NIHSA and move the NHA team under the MoLHSA, preserving its main functions, but apparently losing staff members as certain members were promoted to managerial level positions.

Currently, NHA remain under MoLHSA. Production is led by a two-person technical team comprised of both an economist and public health specialist. Prior to 2007, an SC\footnote{Prior to 2007, a multisectoral Working Group was responsible for review of the NHA classification scheme, production and data collection standards. It comprised representatives from the following agencies: MoLHSA, NIHSA, Public Health Department, National Center for Diseases Control and Medical Statistics, State United Social Insurance Fund (SUSIF), Ministry of Economic Development, MOF, State Department of Statistics (SDS), Insurance State Supervision Board, and the Insurance Association.} was in place comprised of representatives from across government, including the MOF and the Ministry of Economic Development; it provided oversight of the production process and was required by government decree to regularly provide data inputs to NHA production. Members of the SC could recommend specific analyses (e.g. health sub-accounts or specific reviews of household health spending\footnote{Goginashvili. Personal Interview already mentioned.} (Goginashvili and Turdziladze, 2009). In this way, there was regular feedback from the SC to the NHA technical team. This allowed for regular quality checks of the data, adding reliability to the numbers. The SC has been defunct since 2007 and its tasks are now conducted by the production team in conjunction with MoLHSA authorities.

Local production capacity building over time has been pivotal to the routine production of NHA. At its inception, international consultants from WHO helped to develop standardized production tools, apply standardized methodologies and ensure uniform reporting of data outputs through special statistical forms based on the OECD’s SHA. For example, a special data management tool (DMT) in Microsoft Excel was developed by the NHA production team in 2005 to ease the production of NHA tables and matrices. NHA have since been integrated into the Health Information System, allowing for the easy transfer of data inputs into NHA production (Goginashvili and Turdziladze, 2009). In addition, Georgia is currently strengthening its human resource capacity on the production side, as it aims to bring on board two or three new members to the technical team to facilitate production.\footnote{A member of the production team is currently overseeing the Health Management Information Systems project so it was decided that additional staff are needed to assist with production.} Finally, the regional Eurasian NHA network for the Commonwealth of Independent States (CIS) serves as another source of capacity building. It presents a forum where
policymakers can share results and discuss concerns on the production and user side (World Bank, 2008). In all, these factors have allowed for institutional knowledge to be developed and strengthened locally.

Georgia places a strong emphasis on dissemination and information sharing, ensuring that data can be used by a broad array of audiences. Whereas previously there was less access to and therefore less confidence in NHA results, broadening dissemination has built confidence in NHA numbers. NHA data are displayed on the websites of the MoLHSA and WHO. They are also made available to universities for academic purposes. Key summary statistics (e.g. health expenditures as related to GDP) are picked up by the media and displayed in newspapers and on television. These data have been used to inform current debates on health reform. NHA results are used broadly by the MOH and its agencies, the MOF and other public institutions. Outside of government, the data is used by insurance companies in their management of premiums and contracts with providers (World Bank, 2008).

Georgia employs a variety of data sources and instruments that are used in conjunction with NHA. For example, the Georgia Health Utilization and Expenditure Survey (HUES) is used with NHA to estimate household OOP payments and private health expenditures. The first HUES was conducted in 2007, with the second in 2010. Both surveys were implemented by the State Department of Statistics of Georgia (GeoStat), supported by the World Bank and implemented by the Georgia Health and Social project Implementation Center (GHSPIC). NHA have also been used to inform the MTEF 2006–2010, based on 2001–2003 NHA estimates. Currently, Georgia is investing in a robust Health Management Information System (HMIS) with World Bank and USAID support, which will directly link health utilization to financing data. It will allow for data inputs country wide to be directly “translated” in ways that can inform policy. This will ease data production costs and provide for a seamless flow of information from the district to the central level, accessible nationally. As Georgia continues with NHA production and analysis, it will be interesting to observe how these key areas develop to better inform decision making.

Using Insights from NHA to Inform Policy in Georgia

- **Financial access to care**: The issue of limited financial access to care was brought to light by routine NHA analysis. Data highlighted that Georgia primarily relies on private sources of financing, which accounted for 71% of THE annually between 2001 and 2007. In per capita terms, private health spending increased from US$ 46 to 127 (82 GeL to 224 GeL—Georgian Lari), more than doubling over this period, demonstrating the need for greater financial risk protection, particularly for the poorest populations (Table 1).

Georgia has chosen its own path towards improving financial risk protection, with the state assuming the responsibility for purchasing coverage for essential health services for the poor population through private insurance companies, under the State Health Program for Medical Assistance to the Poor (MAP); this covers about 950,000 individuals living below the

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16 Goginashvili. Personal Interview already mentioned.
17 ibid
poverty line, and an additional 200,000 public servants (teachers and law enforcement and military personnel). MAP provides rather comprehensive coverage without co-payments. Therefore, beneficiaries must pay OOP only for items that are not covered such as pharmaceuticals (although these are often significant expenses). In addition, about 250,000 individuals have private (typically corporate) insurance. Therefore, only about one-third of Georgia’s population holds any type of insurance (WHO, 2009; World Bank, 2010).

Access to affordable medicines is also an issue for the whole population: most out-patient drugs are not covered by the universal benefit package and were only added to the Medical Insurance Program for the poor in 2010 (and with a ceiling on reimbursement) (World Bank, 2010).

These data are further highlighted in the Georgia Health System Performance Assessment Report (WHO, 2009). This report was carried out by MolHSA, with technical and financial support from the WHO Regional Office for Europe and the World Bank. The assessment was carried out between July 2007 and September 2009 and contributes to government efforts to strengthen the capacities of the MolHSA for effective stewardship of the health system.

- **Budgeting, M&E**: Findings from health resource tracking data have also been used as a budgeting tool for state healthcare programs. Specifically, the data have informed discussions on how to price healthcare services for state healthcare programs and to calculate premiums for private insurance companies and actuaries.

In addition, the data have been used as an M&E tool for state healthcare programs. For example, data from NHA were used to identify the number of state healthcare programs with adequate support for M&E as a proportion of total government health expenditures (Table 2). This is relevant as prior to 2007 state healthcare programs did not include any indicators on M&E to assess their effectiveness. With help from a local consultant, MolHSA was able to establish indicators for these state healthcare programs. As a result, in 2007 alone, four out of ten state healthcare programs (accounting for 68% of total public funds available to health) had adequate M&E frameworks. While in 2008 MolHSA required that only one state

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**Table 1. Private Health Expenditures as a Percentage of THE, by Type of Medical Service (2001–2007)**

<table>
<thead>
<tr>
<th>Medical Service Type</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curative services</td>
<td>34%</td>
<td>29%</td>
<td>29%</td>
<td>30%</td>
<td>30%</td>
<td>29%</td>
<td>28%</td>
</tr>
<tr>
<td>Inpatient curative services</td>
<td>19%</td>
<td>16%</td>
<td>17%</td>
<td>17%</td>
<td>16%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Outpatient curative care</td>
<td>15%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Additional medical services</td>
<td>7%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Medical supplies and medical equipment</td>
<td>31%</td>
<td>34%</td>
<td>40%</td>
<td>40%</td>
<td>39%</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>Total Private expenditure</td>
<td>72%</td>
<td>71%</td>
<td>77%</td>
<td>78%</td>
<td>77%</td>
<td>72%</td>
<td>71%</td>
</tr>
<tr>
<td>Total Health expenditure</td>
<td>100%</td>
<td>100%</td>
<td>30%</td>
<td>30%</td>
<td>29%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Total Health expenditure (in 100 Gel)</td>
<td>521.6</td>
<td>650.7</td>
<td>724.8</td>
<td>835.9</td>
<td>998.3</td>
<td>1,159.6</td>
<td>1,386.6</td>
</tr>
</tbody>
</table>

Source: Georgia National Health Accounts; WHO, 2009.
program include M&E indicators, this will be changed from 2012 onwards as all state programs are now required to include such indicators18 (Goginashvili and Turdziladze, 2009).

- **Disease-specific programs**: NHA provide critical information for all development partners (including international development partners), highlighting the additional resources needed to meet MDGs. Further, sub-accounts data have been used to convince decision makers to scale-up funding for anti-retroviral drugs (ARVs), TB treatment and reproductive health, by showing gaps in domestic spending. With respect to HIV, data from NHA were used to prepare the 2007–2010 United Nations General Assembly Special Session (UNGASS) report, covering prevention and treatment costs. These results were then used to develop the National HIV/AIDS strategy; after 2008, all HIV/AIDS patients receive ARV treatment financed by government.

Reproductive Health (RH) NHA sub-accounts were also shared with the RH Working Group, Parliamentary Committee for Health and Social Affairs, MoLHSA and interested local and international NGOs. This resulted in the development of the country’s national strategy on reproductive health.

Finally, TB sub-accounts were used by MolHSA and development partners in evaluating the National Strategy Plan for TB and assessing the current level of TB-related expenditures in Georgia. As a result, from 2009, the government covers all expenses for treatment, supervision and drugs for patients with TB.

Data and resource tracking have thus helped provide answers to the following key policy questions:

**At the national level**

- How can Georgia improve financial access to care and reduce the health financing burden borne by households? How can Georgia expand health insurance coverage?
- How can Georgia determine the prices and premiums for health care services?
- How can Georgia use data as a monitoring tool for state health care programs?
- How can Georgia monitor and strengthen disease-specific programs?

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18 ibid
At the international level

- How does Georgia compare with its regional neighbors on health spending levels and trends?

Lessons Learned

- **“Home” of data production and oversight:** NHA are “housed” under MoLHSA. In this way, health resource tracking data has a regular home and insights from the data can occur at the hub of policymaking at the highest levels.

- **Technological investments:** Georgia currently uses an automated, Microsoft Excel-based DMT to facilitate production of NHA tables and matrices. Data inputs from a variety of sources feed into NHA through the current health information system. There is a current move to create a new, country-wide health management information system with USAID support which will seamlessly link health financing and utilization data.

- **Capacity-building:** Over time, knowledge has been transferred from international consultants to local staff on the ground, ensuring that there is a base of local, institutionalized knowledge on the NHA team. Given the team’s limited human resource capacity, there are efforts to scale-up the number of team members by the autumn of 2011. New members will be trained and coached by existing staff.

- **Enabling environment:** Mandating NHA activities and the defining roles and responsibilities of multiple stakeholders through a legal framework can facilitate the activities and increase the sustainability of NHA.

The reliance on donor funds for the production of NHA and the financing of local staff on the production team raises issues of sustainability, and requires that Georgia seek alternative sources of funding once current donor funds come to an end. Further, in the event of staff turnover, Georgia may experience production delays due to the small two-person team responsible for production and the lack of adequate capacity building. Despite this, there is a recognition that NHA have had the indirect effect of enhancing accountability and promoting transparency in the use of data to inform decision making in Georgia.

References


India has used data from NHA and related sources to inform Parliamentary debates and other high-level discussions on health policy and finance. Ultimately, these have improved the understanding of financial access to healthcare in India and impacted policy. India uses multisectoral involvement to facilitate production of NHA, and use of the data to inform policy has been made possible through its linkages to broader reform efforts. The example of India may provide lessons that could assist other developing countries in implementing NHA and through both production and use of health resource tracking data, generate new insights to inform policy.

**Key Points**

- From their inception, NHA were used as part of a broad government agenda to examine the nexus between health and economic development, with a focus on the poor; NHA have therefore had a major impact on policy.
- India finances its own NHA production, with a dedicated annual budget line-item and with the buy-in and involvement of entities from multiple sectors. However, the institutional link for translating NHA data into insights for policymaking is less clear.
- By addressing production-side bottlenecks, the use of and demand for data will be improved.

**NHA Institutionalization in India**

Health accounts in India started at the state-level in Punjab and Karnataka in 1999–2000, followed by Andhra Pradesh in 2004. The first publication of national-level NHA in 2005 was part of a broader research agenda set by the National Commission on Macroeconomics and Health (NCMH), which was established in 2004 by the Government of India under the Ministry of Health and Family Welfare (MoHFW), and co-chaired by the MoHFW and Finance Ministers. The Commission comprised high-level policymakers and representatives from a variety of entities (NGOS, academia, and international organizations) with the main technical body comprising a small group of health systems and economics experts. It was tasked with studying the impact of increased health investments on poverty reduction and economic development, and to provide the evidence base to formulate a long-term strategy for scaling-up essential health interventions, particularly to benefit the poor (WHO India, 2008). The NCMH first commissioned NHA at the national level; from inception they were thus part of a broad government agenda to examine the nexus between health and economic development.
In parallel, an NHA Cell (Secretariat) was set-up within the MoHFW supported by a grant from WHO. The “home” for NHA was also placed within the MoHFW given that it was the Ministry that was aware of the NHA methodology and identified and initiated the need for the data. This institutional home, under the guidance of a high-level Steering Committee (SC), enjoyed broad, high-level membership. The SC is chaired by the Secretary of the DoHFW (Department of Health and Family Welfare) and includes the Secretaries from other departments of the MoHFW, the Economic Adviser to the MoHFW, senior-level representation from the MoHFW, and representatives from the Ministries of Statistics and Planning, the National Sample Survey Organization, among others, with about twenty-five members altogether (India MoHFW, 2009). The Steering Committee is responsible for overall guidance for the production of NHA. Technical and methodological issues are discussed by an Expert Group as well as informally with economists and other experts from time to time. The Expert Group and the informal consultations also suggest ways for securing data inputs for NHA production. The SC is not much involved in the process of “translating” the data to inform policy nor is routinely connected with policymakers to identify policy priorities. By finding ways to bridge this gap between data and policymakers, the use of data for decision making could be improved.

Authorized by the SC, the NHA Cell estimated NHA figures for the first round in 2001–02. These were published in 2006; in which year the NCMH produced NHA estimates with a greater level of detail. The two estimates were generally consistent with each other. Subsequently, a second round of NHA was conducted by the NHA Cell with the results published in 2009 using 2004/05 data. A third round of NHA is currently underway. To date, sub-accounts for HIV and TB have also been produced in the country as parallel research efforts and not under the aegis of the NHA Cell. Further, the preparation of health accounts have been initiated in six states, accompanied by training that is geared to facilitate production at this level (World Bank, 2008).

Production of NHA at the national-level within the NHA Cell is conducted by a team of two to three full-time researchers and supervised by the Economic Adviser to the MoHFW. Staff turnover within the NHA Cell (and the MoHFW broadly) has been problematic and there have been efforts in inducting a full-time official, who could be an economist, statistician, or other health professional, to further guide the team’s work. While initially supported financially by donors such as WHO, the NHA Cell is now funded through the domestic budget. International consultants have largely not been used at the state or national-level for NHA production. Ongoing efforts at building domestic capacity will ensure continued production and analysis of routine data.

In India, further investments in capacity building would help the preparation of NHA; there currently exists no training on a routine basis. The few formal discussion forums that have been hosted have been poorly attended. Informal discussions are ongoing, however. Within the NHA Cell, for example, routine discussions explore how data can be used as a policy tool to highlight methodological issues and concerns, particularly in the estimation of OOP household expenditures. Further,

22 Nagpal, already referred to.
the NHA Cell interacts and collaborates with other key stakeholders in health on an informal basis on the quality and reliability of data inputs for NHA; these include the Ministry of Statistics and Programme Implementation (Central Statistical Organization and the National Sample Survey Office) and other central ministries such as those governing railways, defense, and communications. From these discussions, data are collected which tend to exhibit relatively high health expenditures. The NHA Cell has also been in communication with the Public Health Foundation of India (PHFI) which has proposed to collaborate with the MoHFW on future NHA exercises23 (. 2011).

Dissemination of NHA currently includes a workshop organized by the MoHFW to highlight results. Results are also posted on the websites of the MoHFW and WHO (World Bank, 2008). However, dissemination remains limited, attributable to the weak ownership and demand for the data.

Currently, there are several strengths and challenges on the production side that affect the integration of NHA with other data sources. One strength is the streamlined analysis of data made possible by the skilled production team that can easily take raw data inputs and put these into an NHA-ready format—at national and state level—and this is being done on a regular basis for public expenditure, based on Government of India and State Governments budgets. However, there are several factors contributing to delays on the production side. First is the receipt of data inputs for NHA, particularly in terms of surveys to estimate household OOP expenditures. For example, the National Sample Survey Office (NSSO), responsible for estimating household expenditures across all sectors including health, does not conduct surveys that detail OOP expenditure on health on a regular basis. These data are only available once in approximately every ten years. The first such detailed survey was conducted in 1986–87, followed by one in 1995–96 and the latest survey in 2004. Another challenge on the production side lies in estimating health expenditures incurred by private corporations or firms who tend to be less responsive to government requests for data. 24 Currently private firms’ expenditures are still based on the original NCMH estimates, using data collected from employers in association with industry chambers. In the 2009 publication, the time lag until the publication of data has been innovatively addressed through the inclusion of high-level provisional estimates up to 2008–09. These provisional estimates are based on budgeted public expenditure (rather than actual and audited final accounts) and projected estimates of household and firms’ health expenditures25 (India MoHFW, 2009).

By addressing production-side bottlenecks the use of and demand for data will be improved. Currently, many policymakers are not aware that the health expenditure numbers in published reports come from NHA26 and explicit awareness-raising would give them added value. The limited interest at present may be attributed to the lack of capacity to train new NHA staff on key concepts and methodology; the highly technical nature and perceived complexity of production and analysis; NHA serving as a lesser-known area in health competing with other health sector issues that are on the government agenda; and the weak linkages between NHA and economic policy such that the impact of health expenditures on economic performance is not made clear.27

23 Sachdeva, already referred to.
24 Sachdeva interview, already referred to.
25 Nagpal, already referred to.
26 Nagpal, already referred to.
27 Sachdeva, already referred to.
Using Insights from NHA to Inform Policy

Insights from the production of NHA in India have been used to inform key Parliamentary debates, resulting in programs to improve financial access to care.

Data from NHA have often been referred to during key Parliament debates, particularly in answer to questions around total, public health expenditure and private health expenditures. These have been used to make the case for increasing public health spending and providing greater financial risk protection—especially for the poor. In particular, NHA have highlighted the need to increase public health spending from its existing low levels in India. A government manifesto (2004) committed to increase public health spending from 1.1% of GDP (Table 3) to 2–3%. Several state governments have also sought to scale-up public health spending.

The data also revealed high private spending by households of 78.1% of total health expenditures, compared to only 19.7% from the public sector and 2.3% from development partners (Figure 4). Total private spending includes expenditure by firms, NGOs, and households. Households alone contribute about 71%. These findings helped change a perception that government was financing a much larger proportion of healthcare.

These data, as well as the original NCMH estimates for the first round of NHA, have prompted the government to establish the National Rural Health Mission (2005–2012) with, as examples, the following objectives: increasing public expenditure on health, reducing regional imbalances in health infrastructure, pooling resources, integrating organizational structures in health, and operationalizing community health centers into functional hospitals. The results also led to the creation of a new generation of government-funded health insurance schemes that target the poor, such as the Rashtriya Swasthya Bima Yojna (RSBy) (India MoHFW, n.d.).

NHA have therefore made an impact on policy through its ties to the government’s broader effort to examine the impact of health spending and economic development. The NCMH had a broad agenda, and therefore its findings (including that of NHA) have had a large impact on policy.

### Table 3. Health Expenditure Trends in India

<table>
<thead>
<tr>
<th></th>
<th>2005/06</th>
<th>2008/09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health spending as % of GDP</td>
<td>0.96%</td>
<td>1.11%</td>
</tr>
<tr>
<td>Total health spending as % of GDP</td>
<td>4.23%</td>
<td>4.13%</td>
</tr>
</tbody>
</table>

*Source: India NHA 2004/05. Note: 2008/09 data reflect provisional estimates from 2004/05 NHA.*

### Figure 4. Distribution of Total Health Expenditures (2004/05)

*Source: India NHA 2004/05.*

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Data and resource tracking have thus helped provide answers to the following key policy questions at the national level:

- How can India improve financial access to care, particularly for the poor?
- What are the levels and trends of public expenditures in health?
- What proportion of total health spending do households contribute?

**Lessons Learned**

- **Public financing.** India uses public funds to produce, analyze, and disseminate data for decision making such as NHA. Financial support is stipulated in an annual line-item budget for NHA. This promotes the sustainability of NHA in the long-term and ensures that they are an integral component of using data to improve resource allocation within the public sector.

- **“Home” of data production and oversight.** NHA are “housed” within the NHA Cell within the MoHFW. The NHA Cell has strong technical expertise in production and receives overall guidance from a multisectoral Steering Committee chaired by the Secretary of the DoHFW.

- **Multi-stakeholder involvement.** The NHA Cell interacts regularly with other entities that supply data inputs needed for NHA to facilitate data collection, analysis, and, finally, dissemination once the report is ready. Informal discussions are also underway with the Public Health Foundation of India to discuss future collaboration in production.

India’s example highlights the importance of having competent local staff on the production-side that are funded through domestic budgets to ensure continuity. This case also demonstrates the value of having a team or oversight committee to raise awareness among policymakers and development partners about the importance of health resource tracking data and to generate key insights from the data to guide health policy. It is critical for policymakers to understand the value-add of health resource tracking data, and its linkages to the broader economy and other policy areas, and move beyond the perception of NHA being a mere reporting exercise or requirement. By creating awareness and building demand for data, tools such as NHA can more readily inform policy.

**References**


Jordan is beginning to create an evidence base, using data such as NHA, to address inequities in financial access to care and cost inflation in the pharmaceutical sector. In Jordan, five rounds of NHA estimates have been completed since 1998. The first three were produced with international support from Health Systems 20/20 and the latter two were conducted by local staff. The last two NHA rounds were part of a broad effort to integrate activities in a way that serves decision makers in Jordan, yet the challenge remains that Jordan continues to lack a culture of using data for decision making. The translation of insights from the data to inform policy and the use of the data remain challenges, but Jordan is working to address these through capacity building and dissemination.

NHA Institutionalization in Jordan

NHA in Jordan currently falls under the High Health Council (HHC), headed by the Prime Ministry. The King of Jordan supports the regular production of NHA, and royal decree mandates the routine production of the data, the delineation of the workloads and roles of relevant NHA stakeholders, and use of data to inform budgeting and planning for policy purposes. Jordan is currently developing a bylaw that ensures the private sector will provide routine data inputs needed for NHA production.

Key Points

- NHA in Jordan have highlighted the need for greater financial risk protection and the need for better cost containment in the pharmaceutical sector.
- Jordan relies on multisectoral involvement for NHA production, which is also strengthened by a royal decree mandating NHA production.
- The translation of insights from the data to inform policy and the use of the data remain challenges, but Jordan is working to address these challenges through capacity building (within its multisectoral team and among other healthcare-related institutions) and broad dissemination of results.

29 NHA were initially undertaken by a three-person team in the late 1990s, and fell under the mandate of the MOH. Several key stakeholders (e.g. the Royal Medical Services) were independent of the MOH, and therefore NHA were moved under the Prime Ministry so that all stakeholders in health (public and private) could be accountable, and to facilitate transparency. This was part of a broader recognition that the “home” for NHA should be at the hub of policymaking (Nandakumar, 2011).
Essentially, NHA fit into the broader government agenda to ensure evidence-based policy making and reduce inequities in financial access to care. The government also contributes to the funding of NHA, along with development agencies\(^{30}\) (Jordan HHC/General Secretariat, 2007).

Within government, there has been a strong emphasis on capacity building to use data to inform policy. For example, the core NHA Team is comprised of about 25 stakeholders (including three individuals responsible for production) from government, the private sector and academia. These include the HHC, MOF, MOH, Ministry of Higher Education, Ministry of Planning and International Collaboration, Ministry of Social Development, the Royal Medical Services (army), Jordan University Hospital (JUH), King Abdullah University Hospital (KAUH), the Food and Drug Administration, the Joint Procurement Department, Department of Statistics, and the Private Hospitals Association. In the future, the Social Security Corporation (SSC), the Insurance Commission (IC) and the Ministry of Higher Education will also be included. The team received their initial training in Jordan and receives annual “refresher” training on NHA production and use in Egypt. Weekly discussions among NHA Team members are held to highlight the current state of NHA, new approaches, next steps and key decisions (Jordan HHC/General Secretariat, 2007).

Outside the core team, 180 persons from healthcare-related institutions (largely responsible for completing the NHA questionnaires) have been trained on NHA production and use, in a three-day workshop. Another 180 will be trained next year. This collaborative effort allows for an informed dialogue on results, and highlights ways data can potentially be used to inform policy\(^{31,32}\) (Jordan HHC/General Secretariat, 2007).

Within the HHC, a Centralized Data Collection Unit for NHA has been established to facilitate the exchange of information and provide a single, central location for quality assurance of the data. A Technical Committee for NHA Data Interpretation has also been formed to validate data and to identify relevant health policy issues. As a result, there has been a marked improvement in the transparency of data collection and production. Whereas initially, there was a great deal of emphasis on results alone, today there is greater emphasis on how data was collected, the assumptions used and the adjustments made in the analysis. There is a move to conduct NHA at the regional-level to take a deeper, decentralized view of health-spending levels and trends\(^{33,34}\) (Jordan HHC/General Secretariat, 2007).

Finally, Jordan emphasizes dissemination and information sharing. Hard and digital copies of NHA reports are disseminated broadly to all stakeholders who provide data inputs for NHA production. This fosters transparency in the policy-making process. Data is also posted on the websites of the HHC and distributed to academia. In this way, feedback from a variety of stakeholders can be integrated to improve the NHA report. Furthermore, workshops led by the World Bank have

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\(^{30}\) Nandakumar, Allyala. Personal Interview. Professor and Co-Chair of PhD Concentration in Global Health and Development Policy. Heller Graduate School Brandeis University. May 4 2011.

\(^{31}\) ibid


\(^{33}\) Nandakumar. Personal Interview already referred to.

\(^{34}\) Taher. Personal Interview already referred to.
improved the core team’s dissemination, and helped strengthen the team’s capacity to use the data to inform policy.35

Using Insights from NHA to Inform Policy

- **Pharmaceutical policy**: The issue of cost inflation in the pharmaceutical sector was brought to light by routine NHA analysis. Data highlighted that pharmaceuticals alone account for 34% of total health expenditures, or 3% of GDP, as shown in Table 4. Insights from the data have prompted further investigation as to the factors underlying high pharmaceutical expenditures and inefficiencies in the pharmaceutical sector, including: (1) over-prescribing by physicians and pharmacists, enabled by the lack of regulation governing the prescribing patterns of providers; (2) consumer behavior of self-medication and inefficient drug use; and (3) marketing and advertising of drugs by pharmaceutical companies which has promoted over-prescribing by physicians and over-consumption by consumers36, 37 (Jordan HHC/General Secretariat, 2007).

As a result, insights from the data have had a tangible impact on pharmaceutical policy in Jordan. The government has revised its rational drug use policy. This includes the development of a National Essential Drug List and a National Formulary for Essential Drug List, which is currently used in all public facilities at all levels of care. In addition, a Joint Procurement Department has been established to oversee the procurement of pharmaceuticals across the public sector, in an effort to reduce costs38 (Jordan HHC/General Secretariat, 2007).

The pharmaceutical findings have also prompted analyses by the Jordanian government, in conjunction with Harvard University, on household OOP spending, to examine the potentially catastrophic impact of pharmaceutical expenditures. The government has also worked with the Department of Statistics to incorporate questions on OOP drug expenditures for household surveys, so that the household-level impact of pharmaceutical spending can be monitored.39

<table>
<thead>
<tr>
<th>Table 4. Pharmaceutical Expenditures (2001, 2007)</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Total drug expenditures</td>
</tr>
<tr>
<td>Drug expenditures per capita</td>
</tr>
<tr>
<td>Drug expenditures as % of THE</td>
</tr>
<tr>
<td>Drug expenditures as % of GDP</td>
</tr>
<tr>
<td>Distribution of drug expenditures</td>
</tr>
<tr>
<td>Public</td>
</tr>
<tr>
<td>Private</td>
</tr>
</tbody>
</table>

Note: 1 Jordanian Dinar (JD) is equivalent to US$ 1.41.

35 ibid
36 Nandakumar, Allyala. Personal Interview already referred to.
37 Taher. Personal Interview already referred to.
38 ibid
39 ibid
• **Universal healthcare coverage**: Insights from health resource tracking data have also been used to inform policy debates around universal healthcare coverage and ways to improve financial access to care. These discussions, under the HHC, are ongoing. Debates around universal healthcare coverage involve an array of stakeholders, including the former Minister of Health, Dr. Nael Ajloni, who has been appointed to lead a committee on this process. Preliminary findings suggest that the existing system needs to be made more efficient and less costly, by strengthening primary healthcare in a more financially sustainable manner and targeting population groups that need specific healthcare interventions40, 41 (De et al, 2003).

• **Regional comparisons**: Policymakers in Jordan use insights from health resource tracking data to make broad comparisons of how Jordan performs relative to its regional neighbors, by highlighting health spending levels and trends. For example, the 2007 NHA highlighted that Jordan’s total health expenditure as a percentage of GDP (9.05%) was far higher than its neighbors of similar economic development, such as Yemen (4.5%), Egypt (6.1%) or Iran (6.8%). This finding, in light of Jordan’s population growth rate and ageing demographic, has been deemed unsustainable and will in future be monitored (Jordan HHC/General Secretariat, 2007).

Data and resource tracking have thus helped provide answers to the following key policy questions:

*At the national level*

• How can Jordan contain cost inflation in the pharmaceutical sector?

• How can Jordan improve financial access to care and reduce the health financing burden borne by households? How can Jordan expand health insurance coverage?

*At the international level*

• How does Jordan compare with its regional neighbors on health spending levels and trends?

**Lessons Learned**

• **Public financing**: Jordan uses public funds to produce, analyze and disseminate data for decision making, such as NHA. Donor funds are primarily used to upgrade tools and build support for capacity building. This promotes the sustainability of NHA in the long term.

• **“Home” of data production and oversight.** NHA are “housed” under the HHC that falls under the Prime Minister’s office. In this way, using insights from the data can occur at the hub of policymaking. NHA are also supported at the highest level by the King of Jordan.

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40 Nandakumar, Allyala. Personal Interview already referred to.
41 Taher. Personal Interview already referred to.
Multi-stakeholder involvement: NHA are analyzed by an inter-disciplinary team comprised of stakeholders across the public and private sectors, as well as academia. This allows for greater collaboration and input from a variety of actors in the NHA production process.

Capacity building: Jordan emphasizes continuous training among its core NHA Team members, and broader training and support for other stakeholders not directly involved in policy. In this way, these actors can be better informed on how to complete health resource tracking questionnaires, and in the production and use of data.

Dissemination: NHA reports are disseminated broadly to all public institutions as well as several key private organizations. Dissemination remains a key part of the government’s NHA strategy to enhance accountability and information sharing.

Feedback and transparency: The government encourages feedback and transparency to improve NHA production and analysis. This lends credibility to the numbers and enhances the quality of data produced.

Policy advocacy: It is important to note that NHA institutionalization in Jordan has been facilitated and led by a strong policy advocate, Dr. Taher. He has realized the added value of having broad stakeholder support, continuous training and making a “home” for health resource tracking data at the cornerstone of policymaking.

While the initial NHA findings initially brought some resistance from key industry leaders in the pharmaceutical sector, these industry giants have been brought in to inform the discussion, provide data and ultimately become NHA supporters.42

Moreover, Jordan is continuously seeking ways to improve quality controls. Specifically, it is exploring uniform methods to pool data across sectors in order to improve comparability across agencies. In addition, detailed private health expenditure data (from private hospitals) is often incomplete and remains an area of ongoing inquiry (Jordan HHC/General Secretariat, 2007). Ultimately, demand and use of the data are the main bottlenecks, and Jordan is working to address these issues. Ultimately the Parliament and the Royal Court are the ultimate decision makers, and demand would come from officials who serve these institutions.

References


42 ibid
KOREA: ADDRESSING INEQUITIES IN FINANCIAL ACCESS TO CARE AND PHARMACEUTICAL COST INFLATION

Establishing Strong NHA Production Capacity and Linkages to Policy

NHA are fully institutionalized in Korea, with 28 years of data available. What is notable is that the institutional “home” for NHA has changed over time in response to the location of expertise for production. Korea has a highly skilled production team and various mechanisms are in place to facilitate the uptake of insights from the data produced to inform policy debates. In particular, NHA have been used to identify ways to remedy inequities in financial access to care and address the cost inflation of pharmaceuticals. The NHA Focal Point, who has several linkages with the policy-making process, aids in facilitating the translation of data into policy-relevant insights. Such insights from NHA have improved government accountability and transparency over health spending issues.

NHA Institutionalization in Korea

In the early 1990s the institutional “home” for NHA was the Korea Institute of Health Services Management (KIHSM), predecessor of the Korea Health Industry Development Institute (KHIDI). This changed to the Korea Institute of Health and Social Affairs (KIHASA) Management (1998–2003) after joining the OECD. As of 2004, however, NHA is housed at Yonsei University, commissioned by the Ministry of Health and Welfare. This shift was due to the technical expertise available at Yonsei. Thus, whereas previously NHA tables were produced by the KIHSM and the KIHASA in a two-dimensional manner (i.e. by financing and function), the NHA team at Yonsei has succeeded in constructing three-dimensional tables required by the System of Health Accounts (SHA). Currently, the organization officially responsible for NHA production is the Ministry of

Key Points

• In Korea, NHA has been used to inform debates about financial access to care and the need to control costs in the pharmaceutical sector
• Korea’s institutional “home” for NHA, Yonsei University, has sufficient production capacity and technical expertise; the “home” of NHA in Korea has shifted over time, according where the required skills and expertise have resided
• Translation of data to inform policy has been facilitated by broad dissemination to a variety of stakeholders, as well as by having a Focal Point on the production team who is actively engaged in policy-making; this ensures that data can be readily publicized and shared broadly by a well-informed audience, and actively feed into the health policy making process.
Health and Welfare. The Ministry contracts the production of NHA out to Yonsei University which is responsible for producing the full set of NHA tables and matrices (Jeong, 2004).

The NHA technical team at Yonsei University is led by Professor Jeong, the NHA Focal Point, and five assistants (three doctoral and two Masters students). About two professors have joined annually from other universities. In addition to production, the team is also responsible for issuing government press releases on NHA data, publishing and distributing NHA annual reports among researchers and institutions, and responding to technical questions about NHA figures, etc. The production team comprising the NHA Focal Point, Professor Jeong, and several assistants, collects administrative as well as survey data produced by various organizations and maps them into the SHA tables according to the SHA manual. Following a learning-by-doing approach, the team carefully documents their methods and processes. Although the team does not work on NHA full-time, its members appear to have sufficient knowledge to avoid production interruptions from occurring in the event of staff turnover. Once produced, the data are shared with the Ministry of Health and Welfare, and the OECD.

There are many ways in which NHA data have been shared and where insights from the data have been taken up to contribute to key policy debates:

- **Publicity**: NHA data are posted on Korea’s health accounts website and press releases are issued after the annual publication of the NHA report.

- **Use of data beyond NHA**: While the NHA Focal Point responds to policy-oriented questions, other researchers use OECD Health Data to run analyses and contribute to important policy discussions. Korea thus has a tradition of using data beyond NHA to inform policy. These analyses may not be directives of the Ministry of Health and Welfare, but instead may be taken on independently by the researchers themselves.

- **NHA Forum**: Developed in March of 2008 to discuss production and for data diffusion, the NHA Forum is attended by members of the Ministry of Health and Welfare, and several researchers from the KIHASA, the National Health Insurance Corporation (NHIC) and professors from a few universities. Thus far, the NHA Forum has not been extremely active but there are plans to make greater use of it as a discussion forum to highlight technical queries and other concerns. For example, there has been a growing interest by the NHIC (Korea’s single payer) on production of the data. Nevertheless, there is a need to expand the Forum’s audience and users and as a result, the NHA Forum (under the Korean Association of Health Economics and Policy) has planned various activities including workshops this year. Importantly, opinions and suggestions of the NHA Forum members are reflected in the production process.

While there is no Steering Committee per se to validate and conduct quality assurance of the data, results are discussed at the NHA Forum and the Ministry reviews the validity of the

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44 [www.healthaccount.kr](http://www.healthaccount.kr)
methodology and the estimates made. It is significant that insights from the data have been regularly invoked in important policy discussions and debates. An example of this is the frequent citing of data in discussions of public shares of total health financing compared to other OECD countries. With the impending presidential elections, political parties have cited NHA and OECD Health Data figures to highlight Korea’s low public health spending as a proportion of total health expenditures (THE)—see example below. Specifically, while the public share as a proportion of total pharmaceutical spending remains at about the OECD average, its share of inpatient expenditures falls far below the OECD average. Figures such as these make the case for shifting public health spending from pharmaceuticals towards inpatient care.

There are other ways by which the potential for NHA to add-value has improved:

- **Linkages:** The NHA Focal Point has previous experience working at the Ministry of Health and Welfare and currently has an advisory role there. These linkages facilitate the uptake of insights from the data. He is also currently a member of the Committee for Health Insurance Policy, which is the highest committee determining the National Health Insurance contribution rate and fee schedule. This provides an opportunity for NHA results to be publicized and broadly shared with a well-informed audience, actively feeding into the health policy-making process.

- **Recognized Standards:** Further improving the uptake of insights from the data is Korea’s use of international standards and techniques. Figures are consistent with SHA guidelines, an international standard, adding credibility and legitimacy to the numbers. Unlike other countries, Korea does not employ competing methodologies which may produce alternative results.

- **Use of other data:** Recognizing that many inputs beyond NHA can inform health sector decision making, the NHI Statistical Yearbook is among the most important data sources used for NHA, along with a dozen others. NHA uses data from private health insurance, automobile accident insurance, injury compensation insurance, as well as data from National Health Insurance (NHI) and Korea’s Medical Aid Program.

- **Regional sharing:** Korea’s results and experiences with NHA are disseminated and shared at the OECD/Korea Policy Centre or APNHA network meetings. Korea promotes capacity building for developing countries in the region by hosting annual meetings on the SHA methodology and by inviting public servants to Korea for a training course on SHA, during which Korea’s experience was shared with participating countries.

**Using Insights from NHA to Inform Policy**

- **Financial access to care:** Korea has been characterized as having low public financing for health (55.9% of THE, compared to the OECD average of 71.9%) with high OOP payments (32.4% of

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| Page 33 | KOREA: ADDRESSING INEQUITIES IN FINANCIAL ACCESS TO CARE AND PHARMACEUTICAL COST INFLATION | 33 |
THE, compared to the OECD average of 19.2%). These figures (Figure 5) have been cited as an area to be addressed in Korea’s NHI scheme.

Although the services covered have gradually expanded, benefits remain relatively low and public funding is limited, leaving beneficiaries with relatively high co-payments. Insights from health resource tracking data have thus helped inform policy debates around financial access to care and revealed the need for increasing the depth and breadth of the benefit package.

- **Pharmaceutical policy**: NHA revealed that pharmaceutical expenditures reflect a large proportion of THE, standing at about 23% compared to the OECD average of 17%. This result has been cited as evidence of the high drug consumption by Koreans. In response to this finding, various measures to contain costs in the pharmaceutical sector have been introduced since 2006, including: a selective (positive) list of NHI-covered drugs; de-listing of drugs deemed not to be cost-effective; and price-cutting measures to lower the purchase price of drugs.

Policymakers in Korea use insights from health resource tracking data to make broad comparisons of how Korea performs relative to OECD countries by highlighting health spending levels and trends. For example, while Korea’s health status stands at about the average level of OECD countries, its health expenditures are quite low as shown by the international comparison of NHA figures. As noted above, Korea’s public share of health spending, which accounts for 54.9% of THE, is far lower than the average of the 24 OECD countries which produce SHA cross-tables (74.0%), (Jeong et al, 2009).

Data and resource tracking have thus helped provide answers to the following key policy questions:

**At the national level**

- How can Korea improve financial access to care and reduce the health financing burden borne by households?
- How can Korea contain cost inflation in the pharmaceutical sector?
- How can Korea re-prioritize public health spending (i.e. shift public health expenditures from pharmaceuticals to inpatient care)?

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50 ibid
At the international level

- How does Korea compare with OECD countries in terms of health spending levels and trends?

Lessons Learned

"Home" of data production and oversight: The Ministry contracts the production of NHA out to Yonsei University which is responsible for producing the full set of NHA tables and matrices. The “home” of NHA has shifted over time and where it sits today reflects the broad production expertise at Yonsei.

Translation: The able production team at Yonsei responds to key technical questions. The NHA Focal Point (as well as other researchers using OECD Health Data) conducts analyses to answer key policy questions and inform debates at the national-level. Further facilitating “translation” and uptake of insights from the data to inform policy is the NHA Focal Point’s key role as an advisor in government policy committees, which frequently use the data to inform debates at the highest levels.

Accountability and transparency: Opinions and suggestions of NHA Forum members, including the Ministry of Health and Welfare, are reflected in the production process. This lends credibility to the numbers and enhances the quality of data produced. Furthermore, the production of NHA and their linkages to policy have helped to increase accountability and transparency within government (in responding to the needs for healthcare priorities and programs, for example).

Korea has encountered several challenges on the production-side. For the first few years, the main production challenge was to construct a multi-dimensional matrix while data remained insufficient to do so. With this problem now resolved, a major goal is building consensus on methodology and production, diffusing the results and enlarging the number of NHA users. Various workshops are currently being planned in order to expand NHA’s audience base and users. In addition, an online discussion forum for the OECD’s System of Health Accounts (SHA) is now available on the homepage of the Korean Association of Health Economics and Policy. Although there have been an increasing number of users among policy makers as well as academic researchers compared to previous years, few of them seem to fully understand the SHA and are able to fully utilize the data.51 As Korea continues to address these challenges, it will further ensure that uptake of the data to inform and guide policy can be conducted on a routine basis.

References


51 ibid
Inequities in health financing have been salient issues in Malaysia’s health system. NHA has been used to garner evidence to review existing health financing mechanisms and mitigate the health financing burden borne by households. While routine budget allocations for NHA ensure its continued production and dissemination, capacity constraints on the production side need to be addressed. In “translating” the data to inform policy, Malaysia emphasizes dissemination and information sharing, and frequently use data in conjunction with other sources.

NHA Institutionalization in Malaysia

NHA in Malaysia currently fall under the NHA Unit within the MOH’s Planning and Development Division (the MNHA Unit), which is responsible for the annual production of the data. While the Department of Statistics (DOS) was considered as the institutional “home” for NHA at the initial stages, it was decided that the MOH had the best understanding of the national health system and so was best placed to conduct the work.52 The MNHA Unit is comprised the technical MOH staff who are responsible for the production of NHA.53 An annual, line-item budget is allocated by the government for NHA production and dissemination, ensuring that NHA activities are routinely supported. In this way, NHA are a firm part of the broader government agenda to ensure evidence-based policy making (World Bank, 2008).

Key Points:

- NHA in Malaysia has prompted the government to review current health financing mechanisms, particularly the high OOP payments borne by households which currently stand at 40% of total health expenditure.
- NHA are housed within the MOH and supported by a regular line-item budget for production and dissemination. The work is conducted by civil servants but with occasional support and engagement from international consultants.
- Malaysia strives to pre-empt human resource constraints on the production side by ensuring detailed documentation of NHA processes. Capacity building is conducted on-the-job and as-needed.

52 The DOS was also more inclined to use the System of National Income Accounts (SNA) methodology in line with National Income Accounts rather than the SHA methodology used for NHA.
53 Dr. Zainuddin, Jameela and Dr. Rozita Husein. 2011. Written communication, Head of Unit, Malaysia National Health Accounts Unit, Planning & Development Division, Ministry of Health Malaysia and Head of the National Health Financing Unit under the Planning & Development Division of the MOH, Malaysia.
Prior to dissemination, the MNHA SC reviews national, regional and local data. The SC is jointly chaired by the Director General of Health and the Secretary General of the MOH. It includes representatives from the MOH, other ministries and government agencies, the private sector and academia. In total, it has 35 members.  

Within government, there is growing recognition of the need to strengthen capacity building—for example, to improve staff retention and conduct regular trainings on data management, analysis and use of statistical programs (World Bank, 2008). While international experts and consultants are engaged from time to time, the work of the MNHA Unit is conducted by civil servants. Thus in the event of staff turnover, there is insufficient institutional knowledge for production to be carried out without further international assistance. This is a recurring challenge of the MNHA Unit and it strives to pre-empt this problem by ensuring there is detailed documentation to address issues concerned with the production of NHA. Capacity building is basically conducted through on-the-job trainings while the production of NHA is carried out. Additional trainings are given as problems arise. In addition to mail and telephone communications, discussion forums are held with data contributors and stakeholders to discuss and iron-out issues that arise.  

In addition, Malaysia is an active participant in the Asia-Pacific Regional Health Accounting Network (APnHAN). It participates in APnHAN’s in annual meetings and workshops. Activities discussed at APnHAN meetings are presented at the NHA SC (World Bank, 2008).  

Finally, Malaysia places a strong emphasis on dissemination and information-sharing. NHA data are disseminated through policy dialogue sessions held every two years which involve various public and private stakeholders in health. Group work during these sessions highlights important issues in NHA and areas that need to be addressed broadly, as well as issues that require the attention of individual agencies. The output of these sessions is disseminated to stakeholders and key policymakers (World Bank, 2008). In addition, final NHA products are disseminated to all stakeholders in health either in hard or digital versions. Summaries of the data are also documented in the Health Facts booklet, a pocket-size health statistics reference produced annually by the MOH. This booklet is disseminated widely in hard copy and online. In addition to dissemination of the NHA reports and response to data requests, NHA data is discussed during the MNHA Policy Dialogue sessions. Other MOH divisions and units with representatives from both the public and private sectors also utilize NHA data.  

There are some challenges with dissemination and use of the data. Dissemination requires a substantial budget for producing hard copies and postage, for example; as a result, dissemination in the form of CDs rather than printed reports, along with web-based uploads of data, have been made. However, there remains a persistent challenge in using NHA and in gathering insights from the data to inform policy decisions. 

54 ibid 
55 ibid 
57 ibid 
58 Zainudding and Hussain. Written Communication already referred to. 
59 ibid
Policymakers and researchers in Malaysia frequently use NHA in conjunction with other data sources and instruments. As Malaysia continues with NHA production and analysis, it will be interesting to observe how these key areas develop to better inform decision making.

Using Insights from NHA to Inform Policy

THE in Malaysia has been seen to follow an increasing trend. THE as a percentage of GDP (4.3% in 2006) has also been on the rise (Figure 6), although THE as a proportion of GDP remains far below the OECD average of 9%. Per capita spending on health has more than doubled over this period (Figure 7). In particular, private expenditures as a proportion of THE have been increasing from 44% of THE in 2002 to 54.8% of THE in 2006. Conversely, public expenditures as a proportion of THE have declined from 56% to 45.2% over the same period (Mohamad, 2009).

OOP spending in Malaysia is high—40% of THE, or RM 9805 million. High OOP payments and inequitable financing can lead to impoverishment due to catastrophic health expenditure. The high proportion of OOP expenditure (particularly for pharmaceuticals) reflects the lack of an affordable pre-payment mechanism for the population at large (Mohamad, 2009).

This has led to reviews of the current health financing system and proposals to introduce National Health Insurance based on a community rating. The aim is to develop National Health Insurance with a government intermediary body (the National Health Financing Authority) as a single fund manager. This would create a single payer system, funded through government revenues and channeled into the National Health Insurance Fund. Contributions would be based on ability-to-pay, with government assistance for disadvantaged groups (Mohamad, 2009).

Data and resource tracking have thus helped provide answers to the following key policy questions:

Figure 6. THE Trend, 1997–2006

Source: MNHA.
**At the national level**

- How can Malaysia evaluate and reconfigure its health financing mechanisms?

**At the international level**

- How does Malaysia compare with its regional neighbors on health spending levels and trends?

**Lessons Learned**

- **Public financing**: Malaysia uses public funds to produce, analyze and disseminate data for decision making, such as NHA. There is an annual budget line-item to support the production and dissemination of NHA. This promotes the sustainability of NHA long-term and ensures that it is an integral component of using data to improve resource allocation within the public sector. Malaysia receives minimal donor funds; support from development partners such as WHO are used to support consultants who engage in capacity building.60

- “Home” of data production and oversight: NHA are “housed” under the MNHA Unit within the MOH’s Planning and Development Division. In this way, using insights from the data can occur at the hub of policymaking with government support at the highest levels.

- Multi-stakeholder involvement: The MNHA SC is an inter-disciplinary team comprised of members from the public and private sectors. This allows for greater collaboration and input from a variety of actors who can translate data to inform policy. This also encourages feedback and transparency to improve NHA production and analysis.

- Dissemination: NHA reports are disseminated broadly to all public institutions, as well as private organizations and civil society. Dissemination remains a key part of the government’s NHA strategy to enhance accountability and information sharing.

As to challenges, there is a need to strengthen capacity building in Malaysia. The MNHA Unit has been plagued by high staff turnover, due to promotions and transfers. As a result, most staff members responsible for data management are only temporary. There is a growing need to address staff retention and this has gained visibility among policymakers, becoming a key government priority.

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60 Zainuddin. Informal Document already referred to.
Moreover, for existing staff, additional training is needed on data management, methodology, analysis and use of statistical programs (World Bank, 2008).

In addition, there is a need to move towards electronic data collection. Currently, primary data for MNHA are collected by postal surveys. These are conducted using multiple, unique, MNHA-designed questionnaires targeted to various agencies. These data are entered manually into Microsoft Excel format to enable data checks and analysis. This is costly and time-consuming.

Finally, additional financing is needed to upgrade the MNHA Business Intelligence Solutions (MBIS), which is software designed to create NHA tables and matrices, and to upgrade statistical tools used for analysis such as STATA.  

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ibid
National Health Accounts (NHA) in Mali have been used to highlight and address the geographical disparity in health financing between central and periphery levels and the country’s current health financing mechanisms. Mali has attempted to build production capacity over time. Looking ahead, it is hoped that, through further capacity building, NHA can be regularly used to inform government policy.

**NHA Institutionalization in Mali**

NHA in Mali are mainly produced by a two-person team of health economists, based at the Institute for Public Health Research (INRSP). The work of the INRSP team is overseen by the MOH, but the entire NHA production process includes multisectoral involvement. This highly-skilled team takes data inputs from household budget surveys, provided by the Bureau of Statistics and the MOH’s Financing Department, to create NHA matrices and table.63 The team also conducts quality checks on the data received. This technical team then sends the NHA results to the Planning and Statistics office of the MOH, a team comprised of four to five persons, which is essentially the institutional “home” for NHA in Mali. The MOH team serves as an intermediary between producers and policy users. Their task is to take the data

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**Key Points**

- Mali has used health resource tracking data to analyze resource allocation between central and periphery levels, and to review the composition of health financing; this revealed that households account for 65% of total health expenditures.
- Mali’s governance model for NHA is MOH-led, yet production is conducted by the Institute for Public Health Research, outside the MOH. Multisectoral involvement is a critical component to NHA’s production.
- Capacity building has improved over time and there is a growing recognition of the need to better involve the MOH in the NHA process and build capacity so that the data can ultimately reach policymakers.

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62 Documents needed for the writing of this case study were translated from French by Damini Bansal at the World Bank.

63 In the coming years, health expenditure data will be used from DHS surveys, as health expenditure questions have been incorporated into the DHS (Zine-Eddine El-Idrissi, 2011).
produced by the technical team and analyze it in ways that “reach” policymakers\(^{64}\) (World Bank, 2008).

There has been an emphasis on capacity building for production within the INRSP. Since the 1980s, the Institute has conducted NHA and increasingly built capacity, ultimately establishing the INRSP’s Health Economics Department. On the user-side, there has been a growing recognition of the need for better involvement of the MOH in the NHA process, and for building capacity so that the data can ultimately reach policymakers. To illustrate, while the first two rounds of NHA in Mali were done solely by the INRSP, the MOH (encouraged by development partners and the INRSP) has become an active participant in the NHA process and a primary user of the data. The MOH views NHA as a means to inform planning; it continues to work in conjunction with the INRSP as capacity within the MOH is gradually built.\(^{65}\)

To date, capacity building within the MOH has been more ad-hoc than routine but plans are underway for regular, intensive training. A Training of Trainers workshop was held from September 5–9, 2011 to train MOH staff, including individuals from its Financing, Planning and Legal Departments, as well as staff from the Bureau of Statistics, MOF and related public health institutions, including the INRSP. The aim is to build capacity broadly within the public health sector and create a deeper understanding of what NHA are, how they are produced, and how data such as NHA can be used to inform policy within related health organizations.\(^{66}\)

To date, NHA in Mali have been used for ad-hoc analyses on health expenditures by government, civil society, research and policy institutions and development partners (World Bank, 2008). Looking ahead, it is hoped that, through further capacity building, NHA can be used regularly to inform government policy. For example, the draft three to five year NHA institutionalization plan proposes that a simple NHA be done annually with a full, comprehensive NHA conducted every five years. This will lend credibility to the numbers and ensure that the data can be accessible (and used) by the government to inform the broader health policy agenda and facilitate planning.\(^{67}\)

Currently, there are plans to strengthen the dissemination process: while previous rounds of NHA results were not well disseminated,\(^{68}\) the draft three to five year NHA institutionalization plan proposes to disseminate broadly the next round of NHA results (2012), to a variety of audiences including Parliament, NGOs, MOH, and Bureau of Statistics through the Internet, workshops, policy briefs and flyers.\(^{69}\)

Currently, Mali uses NHA data in conjunction with other data sources including health information systems, epidemiological data, demographic and health survey data, and the Development Assistance

\(^{65}\) ibid
\(^{66}\) ibid
\(^{67}\) ibid
\(^{68}\) Previous NHA results were available directly from the MOH, development partners, or the INRSP upon request, but results were not broadly disseminated or used. It is unclear why dissemination was weak in previous years (Zine-Eddine El-Idrissi, 2011).
\(^{69}\) Zine-Eddine. Personal Interview already referred to.
Using Insights from NHA to Inform Policy

- **Health Sector Strategic Plan 2008**: NHA results were integrated into the 2008 Health Sector Strategic Plan (PRODRESS), informing changes in human resources for health and health financing. Between 1999 and 2004: households in Mali contributed an average of 65% to THE; government contributed an average of 17%; 12% was contributed from the rest of the world including donors; and decentralized collectives contributed 6% (USAID Health Systems 20/20, 2011).

- **Reallocation of health financing towards periphery levels**: Insights from health resource tracking data have also been used to inform policy debates around shifting health financing from central to periphery (regional) levels, in line with the government’s policy of decentralization. This policy aims to increase the budget ceiling at the periphery level and address the need for capital and other investments. The reallocation of financing to periphery levels still needs to be evaluated to ensure that monies are reaching their intended beneficiaries.70

Data and resource tracking have thus helped provide answers to the following key policy questions at the national level:

- How can Mali inform the government’s national health policy, including changes to human resources for health and health financing?

- How can Mali reallocate health financing towards periphery levels for needed investments?

Lessons Learned

NHA production is “housed” within the INRSP which has built up technical capacity since the 1980s to produce NHA. The MOH feeds data to the INRSP and then matrices are returned to the MOH’s Planning and Statistics Office for analysis. This unit therefore serves as an intermediary to translate the data in ways that can be understood and used by policymakers.

To date, the production of NHA has provided policymakers in Mali with a preliminary evidence base to inform policymaking. Mali has recognized, however, that it faces challenges in connection with capacity building, country-level ownership and dissemination. There is, however, a clear action plan underway which includes short- and long-term objectives to address these issues.

70 ibid
There is a need to strengthen capacity building. Currently, the MOH team is comprised of only four to five individuals. There is a clear shortage of technical staff and a need to provide ongoing training. Training has been conducted at a broad level. In a September 2011 Training of Trainers workshop, 21 individuals participated, including stakeholders from the MOH and MOF, Ministry of Social Development, National Institute of Statistics and National Institute for Public Health Research. As Mali continues to invest in capacity building, it will create a stronger evidence base on which to generate additional insights to inform policy.

There is, similarly, a need to improve country-level ownership of and commitment to routine NHA production and analysis. Mali largely uses donor funds for NHA production. Only 10% is government funded (World Bank, 2008). As a result, policymakers tend to view NHA as a donor-driven exercise. Improvements will entail creating a broad awareness of what NHA are and how they can be used to inform policy and improve planning.

Finally, little has been done in the way of dissemination to date, but there is a plan to inform a wide array of stakeholders including Parliament, the Bureau of Statistics, MOH officials and others through a variety of mechanisms. These will include the online sharing of data, policy briefs, workshops and flyers. Dissemination as part of the government’s NHA strategy will enhance accountability and information sharing. Although this is not the stated objective of policymakers in using NHA, the broad, routine sharing of information will indirectly improve accountability within government.

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THE PHILIPPINES: MONITORING UNIVERSAL COVERAGE AND HEALTH SPENDING

Locating NHA where Expertise Resides to Strengthen Institutional Capacity

NHA in the Philippines have produced insights that are frequently used as an evidence base to inform the government’s broader health sector agenda to address universal healthcare coverage, to prioritize health programs and local health financing. The linkage between NHA production and use of the data has been made possible through a variety of factors, including triangulating NHA with other data sources and instruments, creating a cadre of skilled and capable NHA producers and establishing a standard set of estimation procedures, and strong central government buy-in and support. Additional investment in capacity building will secure ongoing production capacity, and the Philippines is currently seeking to improve and strengthen institutional capacity through workshops, forums and newly developed “action plans.” These factors have culminated in improving the nexus between data production and use of data to inform policy in the Philippines.

Key Points

- The triangulation of NHA data with various sources has helped to identify key policy gaps and identify bottlenecks in the health system in the Philippines
- Placing NHA at the hub of a country’s statistical analyses and projects has ensured access to the statistical and accounting expertise needed for NHA’s production
- Workshops and annual forums have provided a platform for dialogue between producers and users, and promoted capacity building for data analysis

NHA Institutionalization in the Philippines

In the Philippines, NHA are an intrinsic part of the broader government health sector reform agenda in its efforts to develop universal healthcare coverage and to use NHA data for decision making. There is, for example, a great deal of political support from central government to make NHA a more routine source of publicly-available information for tracking progress in delivering universal healthcare.  

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NHA are currently produced by the National Statistical Coordination Board (NSCB) which was created by a Presidential Executive Order in 1986 to serve as the highest statistical coordinating and policymaking body in the Philippines. This Order gives the NSCB a mandate to allocate time and responsibilities for collecting data inputs to NHA and assigning specific NHA tasks to staff members. The expertise of the NSCB staff ensures that they can readily understand, analyze and release the data once it is received. The NSCB also produces the National Income Accounts, placing NHA at the hub of the country’s statistical system and expertise (Racelis, 2008).

Making the NSCB the institutional “home” of NHA poses several advantages, namely:

- The NSCB’s political independence from other government agencies ensures that the numbers produced are credible and can be used directly to inform health policymaking.
- The NSCB’s location as the central “home” of satellite health accounts ensures that data at regional and provincial levels (discussed below) follow the same standardized methodology as NHA, and are produced and analyzed at the same central hub. This enhances the reliability and credibility of local health accounting data.
- The NSCB’s convening power allows it to coordinate and convene multi-lateral forums easily, at which the various needs and concerns of other data-producing agencies are discussed.
- The NSCB data is put in the public domain, allowing independent researchers and others to use the data for research, thus generating evidence and independent thought pieces on the health sector.

On the use side, a Health Policy Development and Planning Bureau (HPDPB) was created within the Department of Health (DOH) to use health accounts data, along with other data sources, as inputs for health policy, planning and research (Racelis, 2008). Creating an institutional “home” for users of NHA data has ensured the routine application of data to inform decision making.

In the Philippines, there is also an emphasis on simplified NHA analysis based on institutionally generated data and standardized methodologies with clear documentation. This ensures that estimates are consistent and credible (Racelis, 2008). Further, a clear “action plan” has been established to ensure there is a clear, streamlined process for NHA production, with a clear designation of the responsibilities of the agencies producing the data and timelines of when they are due to the NSCB for production. This “action plan” will remove the need for special requests for data in favor of regular, annual data feeds to the NSCB. This will enable annual NHA reports to be prepared and produced by the NSCB and posted on their website. Regular summary statistics can then be

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72 NHA were initially produced in the early 1990s solely by academics at the University of the Philippines School of Economics (UPSE). The NSCB has been directly involved in the production process since 1995 and served as the institutional “home” of NHA since 1999; the NSCB has since undertaken a thorough review of the initial NHA methodology and parameters (Encarnacion, 2011).


74 Chakraborty. Personal Interview already mentioned.
The Philippines also emphasizes capacity building in using data such as NHA for decision making. This occurs through several forums. First, the annual National Health Research Forum of the DOH allows for dialogue between the NSCB and users. It allows the NSCB to present its findings, highlight the data inputs needed and how this will be used. The Inter-Agency Committee on Health and Nutrition Statistics (IAC-HNS) serves as another forum to promote dialogue between producers and users. The IAC-HNS, which is chaired jointly by the MOH and NSCB, contains 20 regular members from both the producer and user side of health statistics; it meets quarterly to discuss problems faced by NSCB statisticians in production, areas where help is needed and mechanisms to facilitate the transfer of data from data-producing agencies to the NSCB. The association of Health Maintenance Organizations (HMOs) is a regular participant in the IAC-HNS, although other private sector or academic agencies are not involved at present (Racelis, 2008).

It is noteworthy that there is still room for additional capacity building as the NSCB lacks the statistical manpower to conduct the NHA. For example, the NSCB has been scaled-down from ten to four members, with one serving as lead coordinator. This is due, in part, to the high attrition of staff members who may opt for higher paying jobs in the private sector. The staff shortage can also be attributed to a government hiring freeze put in place due to budget constraints.

There is a move to conduct NHA at the local (regional and provincial) level through local health accounts for a deeper, decentralized view of health-spending levels and trends, as well as financing sources, in order to move closer towards universal healthcare coverage and to improve fiscal space, as discussed further below. NSCB staff members are being used to train local health accountants to this end.

Finally, it is important to recognize that NHA are only one of many inputs that can be used to inform health sector decision making. They are fully optimized when used with other data instruments (e.g. PER and MTEF). As highlighted below, the Philippines serves as a unique example where NHA data are triangulated and used with other sources to inform policy and illustrate the connections between financial decisions. The Philippines illustrates how the utility of inputs such as NHA are further enhanced when they can be translated in ways that “reach” policymakers. As the Philippines continues with NHA production and analysis, it will be interesting to observe how these key areas develop to better inform decision making.

Using Insights from NHA to Inform Policy

Sustained health resource tracking efforts have added value to the health sector in the Philippines by increasing government accountability to ensure financial risk protection for its population.

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75 Encarnacion. Personal Interview already mentioned.
76 ibid
77 ibid
78 Chakraborty. Personal Interview already mentioned.
79 Encarnacion. Personal Interview already mentioned.
shifting central government resources to local public health priority programs and calling for further inquiry as to the limitations in fiscal space at both national and local levels.

Specifically, insights from the production of NHA in the Philippines have been used to inform the following policies.

**Universal coverage**

The lack of effective healthcare coverage in the Philippines was brought to light by routine NHA analysis, where data was triangulated with the Family Income expenditure Surveys (FIES) and National Demographic and Health Surveys (NDHS) to illustrate discrepancies between insurance coverage and health financing sources. This illustrated that, while PhilHealth claimed an 85% national insurance coverage rate, social health insurance accounted for only 8.5% of all health financing sources. This indicated that 57% of health financing was due to households’ OOP expenditures (Lavado et al, 2011b). Further, the burden on households has been increasing over time (Figure 8). These results served as the impetus to move policy discussions from ‘coverage’ to ‘effective coverage’. Essentially, such findings revealed a disconnect between the national health insurance policy and the government’s ability to implement such a policy by providing financial access to care.

As a result, insights from the data have had a tangible impact on government efforts to mobilize resources as it move towards universal coverage. As a result, PhilHealth has set a target in the Health Sector Reform Agenda to increase its share of total health expenditures from 9% to 30% (Racelis, 2008).

Insights from effective health resource tracking data have also been used to conduct an actuarial analysis on health insurance in the Philippines—to analyze the costing of and possible changes to the height and breadth of the benefit package. This work is being led with technical assistance from the World Bank.

**Figure 8. Sources of Health Financing**

![Figure 8. Sources of Health Financing](image_url)


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80 Chakraborty, Personal Interview already mentioned.
Such findings have also prompted research groups, such as the Philippines Institute of Development Studies, to work in conjunction with the World Bank, DOH and WHO, to conduct studies on catastrophic health spending. These studies have highlighted an increasing number of catastrophic healthcare payments, even for the wealthiest quintiles of the population (Figure 9). This indicates that households are incurring health expenditures that exceed 40% of their capacity to pay, and are therefore forced to sacrifice other basic needs, sell productive assets, incur debt or become impoverished (WHO, 2010). The results of this joint study have had far-reaching effects, as they have been used to inform the 2011 Health Sector Review.81

Further, a July 2011 World Bank mission will conduct an intensive evaluation of the use of NHA to inform universal coverage. This will include close discussions with the NSCB and other stakeholders. The idea is to retain the current structure and remove bottlenecks in NHA production.

The lack of effective coverage in the Philippines is firmly on the government agenda. To illustrate, in June 2011 the President will present existing health insurance coverage rates, financing sources, costing of the benefit package and the next steps needed to move towards universal coverage.82 NHA have therefore provided a “snapshot” of health-financing sources and expenditures. Their important findings, in conjunction with other data sources, have served as the catalyst for wide-reaching reforms in the health sector. These results have contributed to the 2011 Health Sector Review (World Bank, 2011). The NHA are therefore serving as a baseline against which to evaluate the impact of government actions on universal healthcare.83

**Priority public-health programs and local health financing**

NHA and other resource tracking data have been used to increase central government funding for local public health programs (e.g. vaccines). This is particularly important in the Philippines where

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**Figure 9. Proportion of Households Exceeding their Capacity to Pay by 40%**

![Figure 9](image_url)


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81 ibid
82 ibid
83 ibid
both national and local government are responsible for subsidizing healthcare for the poorest 40% of the population. Increased allocations from the central government to provinces have addressed local health-financing gaps.\textsuperscript{84} However, there are concerns that increased central government allocations to provinces may crowd-out local health spending.

Past experiences highlight the fact that local government’s enrollment of the poor in PhilHealth has been inconsistent and dependent on the availability of local government funds and the priorities of chief executives (Lavado et al, 2011a). In general, a more rigorous evaluation is needed to understand the sources of local health financing, the variations in local financing by province and the reason why some provinces finance more of healthcare than others. This has led to 11 provincial-level pilots where local health accounts have been implemented, with the intention that these will be scaled-up to reach all 81 provinces. The DOH is leading these efforts. It has mobilized regional and provincial health accounting staff, ensuring that the NSCB train local staff on health-accounting methodologies. Essentially, further work is needed to examine new ways to finance healthcare, given the government’s limited fiscal space (e.g. through “sin” taxes, improved tax collection, and improved allocative efficiency to ensure that government spending reaches priority government programs and local governments that need it most). The issue of limited fiscal space will need to be analyzed in conjunction with local health accounts at the provincial-level.\textsuperscript{85}

Data and resource tracking have thus helped provide answers to the following key policy questions:

\textit{At the national level}

\begin{itemize}
  \item How can the Philippines improve financial access to care and reduce the health financing burden borne by households? How can the Philippines expand health insurance coverage?
  \item How can the Philippines improve fiscal space at national and local levels to better finance care?
\end{itemize}

At the \textit{international level}, the Philippines plans to use NHA to answer questions for the future, such as:

\begin{itemize}
  \item How does the Philippines perform relative to its regional neighbors in terms of health spending levels and trends?
\end{itemize}

Such regional comparisons were recently made in the Health Sector Review (2011) using WHO and World Development Indicators (WDI) data, although there will be a move to use NHA results for such regional comparisons (World Bank, 2011; Chakraborty, Sarbani. Personal Interview. Senior Health Specialist, The World Bank. 9 June 2011).

\section*{Lessons Learned}

\begin{itemize}
  \item \textit{“Home” of data production:} The Philippines NHA are “housed” within the NSCB which serves as the home for all statistical analyses and are supported by executive orders from the
\end{itemize}

\textsuperscript{84} ibid

\textsuperscript{85} ibid
President’s office to ensure the routine production, analysis and use of data to inform health policymaking. Involving national statistical offices from the start of NHA production, with all statistical projects institutionalized, enables more sophisticated analysis.

- **Capacity-building**: The Philippines promotes capacity building and dialogue between producers and users through the annual National Health Research Forum, and through the quarterly IAC-HNS. These forums highlight ways to improve and streamline the data-production process and to create linkages between production and use. To address current delays in production, a thorough review of the NHA methodology has been conducted and “action plans” developed to ensure there are regular, institutionalized mechanisms to transmit the data from various agencies compiling the data to the NSCB. However, there is room to improve staff retention and scale-up existing numbers of technical staff at the NSCB.

There continue to be concerns about weak capacity on the production-side at the NSCB. This is now a high-priority issue of the central government. For example, bottlenecks in the release of the FIES have delayed production and analysis of NHA. Delays in NHA production can also be attributed to reviews of the NHA methodology by the NSCB, which was finalized in November 2010. The central government hopes to expedite the availability of data inputs so that NHA can be produced annually. The central government is looking closely at technological solutions to the production process and “action plans” (mentioned above) to streamline the production process and address bottlenecks (Encarnacion, 2011).

Perhaps further on the horizon is the involvement of other stakeholders in the production and use of NHA. Whereas currently, the association of HMOs is involved in the IAC-HNS and quasi-governmental think-tanks such as the Philippines Institute of Development Studies have used the NHA results for their research, there is room for further involvement from other private sector entities, academia and civil society. Further investment in capacity-building, particularly on the production-side, would ensure ongoing capacity for production of NHA.

**References**


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86 ibid
87 ibid
88 Encarnacion. Personal Interview already mentioned.

Serbia has used NHA as an evidence base to address inequities in financial access to care and the lack of transparency in the health sector. Over time, Serbia has transitioned from a model of development partner support to one of local financing and local expertise to support the production of NHA. The country has leveraged the experience of regional workshops and forums to further build local capacity. Yet there are still opportunities to strengthen demand for data and address challenges on the production side, including remedying human resource shortages and improving government awareness of and commitment to NHA. These steps will further enhance the utility of NHA to policymakers.

### NHA Institutionalization in Serbia

NHA in Serbia began as a project funded by the World Bank in 2004. In 2006, the first NHA were conducted with the guidance of two international consultants. This was followed by subsequent rounds in 2007, 2009 and 2010. Since 2008, NHA have been entirely government financed, supported by a routine line-item budget from the MOH. International consultants neither provide technical expertise nor finance the work. Currently, NHA fall under the purview of the Republican Institute of Public Health (IOPHOS), commissioned by the MOH to produce the NHA. While there has been a push to “house” production within the Central Statistical Agency (CSO), this effort has been unsuccessful due to a lack of demand for NHA by the CSO.89

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Production is led by a team of two part-time economists in the Planning Department of IOPHOS. They coordinate with the full-time Head of the NHA Unit who is located within the Biostatistics Department of the Center of Informatics and Biostatistics within IOPHOS. All are contracted on a permanent basis but production has to be balanced with other work priorities within the department. Only the work of the Head of the NHA Unit is directly related to NHA. This highly-skilled team has been trained by international consultants at the World Bank who have guided NHA production and facilitated learning-by-doing during the initial rounds of NHA through the following activities: developing a work plan to obtain data inputs in collaboration with the SC which provided technical support and ensured quality of the data; explaining how inputs could be collected and used for NHA production with examples; asking the NHA team to go through the production and validation of data by themselves while serving as a source of knowledge; and developing a work plan for NHA implementation. The Bank also provided financial support for SC meetings and initial workshops with the international consultants. Since financing was terminated in 2008, however, the SC is no longer operational due to limited finances within government. 

During the years of donor support, the production team was trained by IOPHOS. A representative from the National Health Insurance Fund (NHIF) and the Republican Statistics Office (RSO) were also trained in NHA but have not yet worked on NHA due to other responsibilities. There is a recognition that capacity building can be further strengthened, particularly in training on new methodologies, yet—unlike the previous years of donor funding—financial resources within government for training and workshops are limited.

Nevertheless, Serbia has leveraged other forums to facilitate capacity building. For example, the Regional EURO-EMRO meetings on the revision of health accounts, which included experts from the region, were attended by the Head of the NHA Unit. These meetings were seen as a way to foster learning on how to make NHA recognized as an official health statistic through the development of a Health Evidence Law that would mandate the submission of data inputs needed for NHA production, and the delineation of production responsibilities (as seen in Georgia), etc. The head of the NHA Unit has been part of the Working Group involved in the formulation of this law, guided by consultants from Slovenia. To date, however, the law has not been completed and its status remains ambiguous. The EURO-EMRO meetings were also seen as a way to build understanding of NHA, by enhancing communication among peers involved in production and facilitating the sharing of experiences (both positive and negative) encountered by different countries in production. Thus the regional forums created a sense of camaraderie and support but the NHA team’s current involvement with other regional workshops has been placed on hold, possibly due to limited financial resources by the government to support these efforts.

There is limited awareness of NHA and their importance within government, particularly outside of the MOH. This demonstrates the need for a strong policy advocate or advocates to connect data production to analysis and ultimately policy use. To increase awareness, the production team has attended internal and external Continuing Medical Education (CME) workshops where the Head of the NHA Unit has highlighted the importance of NHA and its potential to inform policy. Despite this, dissemination remains weak. This contrasts with the second round of NHA where

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90 ibid
91 ibid
donors financed eight workshops for interested policymakers and researchers. Current dissemination mechanisms are limited to the posting of results on the IOPOS website, production of annual reports and the sharing of results with international organizations such as WHO. Weak dissemination highlights the limited use and awareness of NHA among policymakers at the highest levels and the failure of production and analysis to generate insights to inform policy.92

Serbia uses NHA in conjunction with other data sources. For example, in its estimation of private health expenditures, Serbia uses NHA in conjunction with RSO data and Living Standards Measurement Study (LSMS) household budget surveys, complex annual reports from healthcare providers, surveys of private entities, and a World Bank baseline survey (2009). As Serbia continues onward with NHA production and analysis, it will be interesting to observe how these key areas develop to better inform decision making.

Using Insights from NHA to Inform Policy

Insights from the production of NHA in Serbia have been used to inform policy in the following ways:

- **Transparency regarding household health burden**: NHA have helped to improve transparency in the health sector and highlighted the need to address the health financing burden borne by households. Previously, public and private financing flows to the health sector were not well understood. NHA disaggregated total health spending into public and private sources for the first time (Table 5). NHA also confirmed that the NHIF was a major source of public funding for health. This prompted the government to increase public spending and reduce the private spending of households. To illustrate, from 2003 to 2006 NHIF as a proportion of GDP increased from 5.22% to 5.30%. This amounted to 63% and 65% of THE in the same period. NHA revealed important health information on both the public and provider side, giving policymakers a greater set of tools with which to inform policy. Before NHA, data on financial flows within the private sector were provided by the Republican Statistical Office. These data were inadequate, however, and insufficient to assess health services and expenditures. Policy makers were impressed with the financial picture NHA could provide and sought greater transparency around private financial flows, resulting in the development of the Fiscal Bill Policy, described below.

- **Financial access to care**: NHA further revealed that households spend a substantial amount OOP for health.

<table>
<thead>
<tr>
<th>Table 5. Health Spending (2003–2006)</th>
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<tbody>
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<td></td>
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<tr>
<td>THE as % GDP</td>
</tr>
<tr>
<td>NHIF Expenditures as % of GDP</td>
</tr>
<tr>
<td>NHIF expenditures as % of THE</td>
</tr>
<tr>
<td>Public sources of financing as % of GDP</td>
</tr>
<tr>
<td>Public sources of financing as % of THE</td>
</tr>
<tr>
<td>Donations as % of GDP</td>
</tr>
<tr>
<td>Private sources of financing as % of GDP</td>
</tr>
</tbody>
</table>

particularly through under-the-table payments to providers. In total, households accounted for 37% of all financiers in the health sector (Figure 10). This resulted in the development of the Fiscal Bill Policy (June 2009), requiring all public and private healthcare providers to provide patients with fiscal invoices. It is to be seen whether greater transparency will help mitigate the under-the-table payments incurred by households.

- **Research:** Finally, insights from health resource tracking data have been used for research purposes in Serbia. For example, the NHA team, along with international consultants, have used the data to develop interview questions for Serbia’s National Health Survey (2006) which disaggregated OOP payments by gender, age group, region and service area (e.g., inpatient, outpatient, dental). This revealed that 44.1% of the overall population incurred OOP payments for health in 2006, that these payments increased steadily with age and that 73.3% of the population over 75 years of age incurred them (Figure 11). Further, the data highlighted the fact that 42.4% of the total healthcare out-of-pocket payments are for medications, compared to 17.7% for dental services (Figure 12) (Serbia MOH, 2007).

NHA have also been used for studies that estimate the cost of primary healthcare and assess financial flows in the health system, among a variety of others.

- **Evaluation:** It is expected that insights from health resource tracking data will be used to evaluate key healthcare programs in Serbia. This includes the NHIF.

- **Regional comparisons:** Serbia has used NHA data to compare itself with its regional neighbors on health-spending levels and trends. In terms of health spending per capita (in purchasing power parity), for example, Serbia fares far worse than Slovakia, Croatia, the Czech Republic and Bulgaria (Figure 13).

Data and resource tracking have thus helped provide answers to the following key policy questions:
At the national level

• How can Serbia improve transparency in the health sector?

• How can Serbia monitor households OOP payments for health, and limit under-the-table payments?

Figure 12. Out-of-Pocket Payments by Service Area (2006)

At the national level

• How can Serbia improve transparency in the health sector?

• How can Serbia monitor households OOP payments for health, and limit under-the-table payments?

Figure 13. THE Per Capita (Purchasing Power Parity)

At the international level

- How does Serbia compare with its regional neighbors in terms of health spending levels and trends?

Lessons Learned

- Public financing: While initially donor-supported, Serbia now independently finances NHA production through domestic budgets, promoting long-term sustainability.

- “Home” of data production and oversight: NHA have a permanent “home” within the IOPHOS, commissioned by the MOH. In this way, production is in the hands of capable production experts with the requisite technical skills needed for production. On the other hand, IOPHOS is having difficulty connecting NHA results to policy making, due partly to the organizations’ weak linkage to policy makers.

- Capacity-building: When possible, Serbia’s production team has leveraged workshops and forums to enhance capacity building. These discussion forums serve as a means to share ideas, present results and communicate with peers on the production side.

Serbia faces bottlenecks on the production side. There is no specific NHA policy, government mandate or a memorandum of understanding between the IOPHOS, MOF and National Health Insurance Fund to secure financial data needed for NHA. There is also only a limited connection between the newly established Central Health Information System and health accounts. It is unclear how these production challenges will be addressed going forward.

On the user side, limited government funding prevents further dissemination of results and is inadequate to support a SC that can generate insights from the data for policy purposes. Moreover, while the MOH has supported NHA, other stakeholders within government are unaware of or have little interest in the results and there is no strong policy advocate within government who realizes the added value of NHA and who can communicate their utility to other stakeholders.

Further support of NHA implementation and use at the regional level may help to strengthen health systems of countries in the Euro-Asia region such as Serbia, and improve communication and comparability of results.

References


THE SEYCHELLES: IMPROVING RESOURCE ALLOCATION AND THE QUALITY OF SECONDARY AND TERTIARY CARE

Institutionalizing NHA with Full Financial Commitment from the Government

The Seychelles have made major progress towards NHA institutionalization in 2010 and 2011. This experience provides an example of a country with the potential to use health resource tracking data to inform decision making for better health outcomes. In the Seychelles, NHA data have been used to highlight how resources have been allocated across health programs, and ways to improve the quality of secondary and tertiary care. This process has been fostered by a strong sense of government buy-in at the highest levels, and by strong multi-stakeholder support. Government commitment to NHA is underpinned by financial support from an array of stakeholders in the public sector, including the Ministries of Health and Finance.

NHA Institutionalization in the Seychelles

There has been a continuous effort in the Seychelles to institutionalize NHA and build capacity over the past decade. Trainings that were organized for compiling NHA with the support of WHO and the Eastern and Southern African Health Community, in 2000 and 2004 respectively, did not materialize due to resource constraints. In 2010, the Ministry

Key Points

• In the Seychelles, NHA has shed light on the low for preventive health services (compared to curative care) and the need to improve the quality of secondary and tertiary care.
• Strong government commitment and demand for data to understand health financing flows and to create an evidence-based planning and budgeting process have been critical for NHA institutionalization in Seychelles. Government commitment to NHA is illustrated by financial support from an array of stakeholders in the public sector, including the MOH, the MOF and the Vice President.
• The institutional “home” for NHA resides where there is sufficient production expertise and knowledge of the importance of NHA as a resource tracking tool.
• The involvement of multiple actors and entities from across government and development partners, along with a committed NHA Focal Point, has facilitated the gathering of data inputs needed for the production of NHA.

93 Documents needed for the writing of this case study were translated from French by Damini Bansal at the World Bank.
of Health and Social Development decided to prepare NHA in the Seychelles and enjoyed initial support from WHO in developing the Terms of References, Action Plan and supplying equipment for the project. Funds were allocated to support this effort under the WHO Program of Action (2010–2011).

Having conducted the first NHA in 2011, the government, including the MOH, MOF and Vice-Presidency realize the value of NHA in making appropriate decisions needed to improve the performance of the Seychelles’ health system. Government commitment is illustrated by the financial support to produce the country’s first NHA: it covered all expenses including the costs of international experts showing a determination to understand health financing flows and create an evidence-based planning and budgeting process.

The institutional “home” for the Seychelles NHA, located within the MOH, was decided because; i) it deals with all policy-related issues concerning the health sector and is the leading ministry for health sector development; ii) it has the potential to generate cost efficiencies in implementing its policies; and iii) the MOH understood the importance of NHA as an effective planning tool.

NHA are produced with the active participation of a multisectoral team that includes representatives from various sections of the MOH, MOF, Ministry of Foreign Affairs, National Statistics Bureau, Social Development Department, Civil Society (LUNGOS) and insurance companies, as well as from partners, WHO and the World Bank. They make up an 18-person multisectoral team with technical expertise and policy experience. The multisectoral team also forms part of the production team. It is led by a Jean Malbrook, the NHA Focal Point and an Economist within the Ministry of Health of the Seychelles. It meets monthly. The multisectoral team also acts as liaison between the NHA producers and their respective organizations to provide the necessary data inputs when needed. It is a strong, capable entity committed to the production of NHA. The team is also responsible for generating insights from the data to inform policy.

Capacity building is ongoing in the Seychelles. Two World Bank staff members have also conducted a week-long training for stakeholders across the public and private sectors, as well as NGOs in health. This was found to be very useful and the production team was able to implement what they learned in conducting the NHA exercise the following week. The Seychelles is expected to be assisted by WHO in its Programme of Action (2012–2013) in providing training on NHA and disseminating results.

Preliminary results were presented in February 2011 to a broad audience. Highlights of this meeting have been widely reported by the media. Hard copies of the final report will be distributed to stakeholders and posted on the MOH and MOF website. The Seychelles also intends for the data to be used by a wide variety of stakeholders including the MOH, MOF, WHO, private healthcare practitioners and private pharmacies.

Currently, the Seychelles uses NHA with a variety of other data sources including household surveys from the Bureau of Statistics and audited accounts, MOH financial data and national health information systems. Other data sources include primary data obtained directly from employers, private providers and from NGOs using questionnaires developed by the multisectoral team.
Examples of early NHA insights that could to inform policy

Although it is still too early to see a tangible policy impact in the Seychelles, early insights from production have stimulated the following debates:

- **Resource allocation for preventive health**: In 2009, the Seychelles spent SR353 million (Seychelles rupee) on healthcare (3.3% of GDP) or US$ 297 per capita on health. Of THE, 87% was financed by government, 7% by the private sector including household OOP payments, and 6% derived from international partners (Republic of Seychelles, MOH. 2009). The 2009 NHA results showed a need to improve resource allocation for prevention and public health programs. For example, curative care in the Seychelles accounts for 75% of THE (and 50% of this is at hospitals) compared to only 3% for health prevention and public health programs (Figure 14).

- **Improving quality of public health services**: Effective health resource tracking data has highlighted a need to improve the quality of services in hospitals in order to reduce the financial burden of obtaining treatment overseas. For example, although household OOP payments accounted for only 5.2% of THE in 2009, two-thirds of this was due to overseas treatment and medicines. Where specialized care is needed, however, the Seychelles will continue to support overseas treatment for citizens.

- **Regional comparisons**: The Seychelles has plans to use NHA data for benchmarking and making comparisons with its regional neighbors in terms of health spending levels and trends. For example, the Seychelles’ OOP expenditures per capita are significantly lower than those of other comparable countries (Table 6). This reflects the fact that the government is the major contributor of THE.

With a strong push and financial commitment from government, the production of NHA has provided policymakers in the Seychelles with an evidence base on which to build. However, there are limited resources with which to support institutionalization. The Seychelles also faces resistance from private providers who are reluctant to provide information on health expenditures—and many, in fact, provide artificial figures. Further, continued support is needed from key government ministries (e.g. MOF and Ministry of Foreign Affairs). Overall, however, the Seychelles is making great strides in institutionalizing NHA and using insights from the data to identify key policy priorities for the future. With sustained production and capacity-building, the evidence base to inform policy will grow and become increasingly sophisticated.

![Figure 14. Seychelles Health Expenditure by Function](source: WHO NHA data & Seychelles NHA data 2009.)
Table 6. Select NHA Indicators for Seychelles and Other Countries (2009)

<table>
<thead>
<tr>
<th></th>
<th>Cyprus</th>
<th>Seychelles</th>
<th>Mauritius</th>
<th>Maldives</th>
<th>Barbados</th>
<th>Luxembourg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population ('000)</td>
<td>796</td>
<td>87</td>
<td>1,280</td>
<td>305</td>
<td>255</td>
<td>486</td>
</tr>
<tr>
<td>THE as % of GDP</td>
<td>6.7%</td>
<td>3.2%</td>
<td>4.2%</td>
<td>11.2%</td>
<td>6.8%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Government Expenditure</td>
<td>7.0%</td>
<td>8.6%</td>
<td>8.3%</td>
<td>12.8%</td>
<td>11.9%</td>
<td>17.3%</td>
</tr>
<tr>
<td>on Health as % of General</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov. Exp. as % of THE</td>
<td>45.1%</td>
<td>87%</td>
<td>46.2%</td>
<td>69.6%</td>
<td>63.8%</td>
<td>91.1%</td>
</tr>
<tr>
<td>THE per Capita (US $)</td>
<td>2,098</td>
<td>297</td>
<td>303</td>
<td>426</td>
<td>974</td>
<td>8,592</td>
</tr>
<tr>
<td>OOP per Capita (US $)</td>
<td>973</td>
<td>16</td>
<td>133</td>
<td>101</td>
<td>284</td>
<td>531</td>
</tr>
</tbody>
</table>

Source: WHO NHA data & Seychelles NHA data 2009.

References


In Tanzania, NHA have been used to address inequities in financial access to care and weak donor aid coordination. This has been successfully accomplished by bringing together a variety of stakeholders from across government and research organizations, by exploring data management solutions to facilitate NHA production, and through feedback loops for quality assurance. Translation of the data has been made possible through its linkages to other tools and instruments, as well as Tanzania’s broad dissemination of NHA results. Going forward, Tanzania plans to expand dissemination and is currently investing in monitoring and evaluation to better coordinate the collection of routine data. These efforts aim to strengthen the linkage between the production of NHA and its use to inform health policy.

**NHA Institutionalization in Tanzania**

Tanzania has held two rounds of NHA to date. The first round, produced in 2001 (using data from 1998/99), was conducted jointly by the government and international organizations. The data was not significantly used to inform policy. The second round, produced in 2008 (using data from 2002/03 and 2005/06), however, has helped create an evidence base to inform policy, as highlighted in the examples below. Building on these efforts, a third round of NHA is currently in process.

**Key Points**

- NHA have been used to inform debates about the need for greater financial risk protection for households, and the need to strengthen donor aid coordination.
- Regular feedback loops between the production team and oversight committee have promoted quality assurance and improved the NHA production process in Tanzania.
- Use of NHA in conjunction with other data sources and instruments (NASA, PER, MTEF) has facilitated the translation of insights from data to inform policy.
- Strengthening dissemination mechanisms has fostered greater transparency on health financing in Tanzania. Results have been disseminated broadly at the Joint Annual Health Sector Review, where all development partners were present, including members of the public sector (e.g. MOH, MOF) and the private sector; published in policy briefs; and presented at international conferences.
The institutional “home” for NHA in Tanzania is the Ministry of Health and Social Welfare (MoHSW). This was chosen to be the custodian of NHA due to its strong technical capabilities and interest in doing the work. The MoHSW was also perceived as having the most to benefit from NHA results. Leading NHA production is a multisectoral team, comprised of six MoHSW representatives who allocate about 10% of their working time to NHA, along with a representative from the University of Dar es Salaam, one from the MOF and another from the National Bureau of Statistics. This highly-skilled technical team is responsible for the design of the NHA, data entry, analysis and writing of the reports.\footnote{Ally, Mariam. 2011. Personal Interview. Head of Health Financing Unit, Ministry of Health and Social Welfare, Tanzania. 7 July 2011.} The technical team relies on a variety of data inputs from the MOF, Local Government Authorities, employers (private and parastatal firms), NGOs, donors, insurance companies, the MoHSW, the Ministry of Home Affairs as well as the Ministry Science, Technology and Higher Education (Tanzania MoHSW, 2008). Any problems and queries that arise are channeled to the Health Financing Working Group or SC. This oversight committee is responsible for providing guidance on issues related to health financing and commissioning various studies—including the NHA, PER and others. The Working Group is comprised of development partners with representatives from the MOF, the private sector and civil society. It meets monthly, and feedback loops allow the Working Group to provide their input on the entire NHA production process back to the technical team. In this way, there is open communication and feedback across stakeholders, and quality assurance mechanisms are in place to improve the quality of NHA reports.\footnote{ibid}

Training is conducted as needed. While development partners have provided team members with extensive training in prior years, there is a need for further capacity building due to the high turnover of production staff, resulting from promotions and transfers.\footnote{ibid}

The NHA data have been used by a wide array of stakeholders including: the government—for policy planning and budgeting purposes (as highlighted in the examples below); civil society—to address the high health financing burden borne by households; research and policy institutions; and international entities such as WHO (World Bank, 2008).

Tanzania has strengthened its commitment to improving dissemination and information sharing. Whereas little was done in the way of dissemination with the first NHA, there has been a much greater effort to improve dissemination in the second and third rounds. For example, the second round of NHA results were disseminated broadly at the Joint Annual Health Sector Review where all development partners were present, including members of the public sector (e.g. MOH and MOF) and private sector. NHA results were posted online at the MoHSW’s website. Also, policy briefs on sub-accounts (e.g. reproductive health) were published online, in conjunction with USAID’s Health Systems 20/20 Project. Findings were also presented at the International Health Economics Association (iHEA) meeting in Beijing in July of 2009. For the third round which is currently underway, efforts will be made to use local media and newspapers as part of the country’s dissemination strategy.\footnote{ibid} Together, these dissemination mechanisms will foster increased transparency in the policy-making process.
Tanzania currently uses NHA in conjunction with a wide array of data sources: health information systems, with utilization data extracted from the health management information system; sub-national data, to analyze expenditures by geographic region; and budget and actual expenditure analysis from other ministries, departments and agencies dealing with health-related matters. NHA have also been used in conjunction with various data instruments and tools including: the NASA—in fact, NHA and the NASA were conducted together; PER; and MTEF (World Bank, 2008). As Tanzania continues with NHA production and analysis, it will be interesting to observe how these key areas develop to better inform decision making.

Using Insights from NHA to Inform Policy

- **Financial Access to Care:** The high level of OOP payments borne by households was brought to light by routine NHA analysis. Household contributions arise through cost-sharing schemes at government facilities or user fees at private facilities. As illustrated in Figure 15, data highlighted that households contributed a large portion (42.0%) to health expenditures in Tanzania in 2002/03. This constituted 96.8% of private health expenditure (Tanzania MoHSW, 2008).

The health financing burden borne by households has led to calls for more equitable financial access to care. As a result, insights from the data have had a tangible impact on policy in Tanzania, prompting the government to expand pre-payment (risk pooling) mechanisms such as health insurance and Community Health Funds (a voluntary pre-payment scheme for rural households)98 (Tanzania MoHSW, 2008). The proportion of THE financed by households declined to 24.6% by 2005/06 (Figure 15), but private financing per capita increased 30% from US$ 5.88 in 2002/3 to US$ 7.63 in 2005/6. The decline in the proportion of private financing is primarily attributable to the increase in donor funding from 27% to 44% over this period (Tanzania MoHSW, 2008).

- **Donor aid coordination:** Insights from health resource tracking data have also been used to inform policy debates around donor aid coordination. For example, the second round of NHA in 2008 revealed that both government and donor funding were increasing in absolute and relative terms. Yet, while the government’s contribution to THE increased from 24.5% to 28.1% between 2002/03 and 2005/06, donors’ contribution increased from 27.4% to 30.3%. The increase in donor funding is primarily attributable to the increase in donor funding from 27% to 44% over this period (Tanzania MoHSW, 2008).

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98 ibid
44.0% over the same period (Tanzania MoHSW, 2008). The current health financing composition is highlighted in Figure 16.

In another example, the majority of donor funds have been channeled “off-budget” with donors bypassing government and directly financing their own health programs (World Bank, 2008). The increase in donor funding has been attributed to the commencement of financing for HIV/AIDS by the Global Fund (Tanzania MoHSW, 2008).

Tanzania’s high degree of dependence on donor aid was used by the government to advocate for donor coordination mechanisms and the adoption of a Sector Wide Approach (SWAp) which has encouraged donors to channel funds through a “basket” managed by the government (World Bank, 2008). Current results show noticeable progress, as the proportion of donor funds provided for health, through on-budget arrangements, has increased. While some donors continue to provide support off-budget, their communication and planning with government has increasingly improved.

Regional comparisons: Policymakers in Tanzania use insights from health resource tracking data to make broad comparisons of Tanzania’s performance relative to its regional neighbors, by highlighting health spending levels and trends. For example, in comparing countries in the South African Development Community (SADC), data such as NHA serve as an entry point for health policy discussions and benchmarking against regional neighbors. Thus in 2003/04, Tanzania ranked low compared to its regional neighbors in terms of THE per capita at about US$ 24.5 (Tanzania MoHSW) (Figure 17).

Data and resource tracking have thus helped provide answers to the following key policy questions:

At the national level

• How can Tanzania improve financial access to care and reduce the health financing burden borne by households?

• How can Tanzania improve donor aid coordination?

At the international level

• How does Tanzania compare with its regional neighbors on health spending levels and trends?

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99 ibid
100 ibid
Lessons Learned

- **“Home” of data production and oversight:** NHA are “housed” under the MoHSW with the result that insights from the data can occur at the hub of health policymaking with government support at the highest levels.

- **Multi-stakeholder involvement:** NHA are led by a multisectoral production team responsible for design, data collection and analysis; representatives from across ministries and academia are an integral part of this technical team. An inter-disciplinary, oversight SC includes representatives from across the public and private sectors, as well as academia; this allows for greater collaboration and input from a variety of actors who can translate data to inform policy.

- **Integration to policy process:** Tanzania uses NHA in conjunction with a wide array of data sources at the formal policy making process such as MTEF and the Joint Annual Health Sector Review, which ensures the use of NHA insights in the country’s planning and budgeting process.

- **Dissemination:** NHA reports are disseminated broadly to all development partners, government ministries and the private sector. Dissemination remains a key part of the government’s NHA strategy to enhance accountability and information sharing. There are also efforts to improve dissemination at local levels.

- **Feedback and transparency:** The use of data for decision making has indirectly made policymakers more accountable and improved transparency within and outside government, for example by highlighting the need to improve donor aid coordination and address inequities in financial access to care.

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Note: The red vertical line indicates the WHO Commission on Macroeconomics and Health target of US$34 per capita.

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**Figure 17. THE per Capita (2003)**

![THE per Capita Chart](chart.png)

- South Africa
- Botswana
- Mauritius
- Namibia
- Swaziland
- Zimbabwe
- Lesotho
- Angola
- Zambia
- Malawi
- Tanzania, U. Rep. of
- Mozambique
- Madagascar
- Congo, Dem. Rep. of the

<table>
<thead>
<tr>
<th>Per capita THE at average exchange rate (US$)</th>
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<tr>
<td>25</td>
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</table>

Note: The red vertical line indicates the WHO Commission on Macroeconomics and Health target of US$34 per capita.
The challenges experienced are as follows. First, there is a need for additional capacity-building and regular training, due to the high staff turnover from transfers and promotions. Second, while NHA are both government and donor funded, financing remains insufficient. Government provides an annual budget-line item for NHA but current financial needs fall short of allocations. Third, and importantly, there are issues with accessing data inputs from all stakeholders that are needed to produce NHA. Fourth, many data inputs are available in hard copy only, or do not use the NHA classifications that are needed for the analysis. This involves a great deal of work to modify inputs so that they can be readily accessed for NHA production. Possible solutions include investments in advanced information systems (described below) and development of a compact with stakeholders in health to make health expenditure data annually available in a standardized format.101

Finally, there is a general disconnect between central-level budgeting allocations and health spending at local-level, with a need to invest in technological solutions that connect budgeting and spending decisions. For example, PlanRep, a budgeting/planning tool designed to help Council Health Management Teams (CHMTs) analyze their budgets and expenditures, is currently used throughout the country (World Bank, 2011). However, this budgeting/planning tool does not connect with the accounting system (Epicor). As a result, budget and expenditure systems do not “talk” to each other at the national-level. In response, an Institutionalization Analysis study was conducted last year that offered several technical solutions: one proposal was to invest in advanced information systems that link budgeting to planning, and which would allow the central government to observe how much was actually spent at local levels, based on central government allocations. This information system would also provide the government with offline access to the data at central or local level.102 Towards these aims, a major monitoring and evaluation (M&E) strengthening initiative is currently underway. It is funded and implemented by a wide array of development partners, under the leadership of the MoHSW. The idea is to work with existing M&E structures, improve coordination across various initiatives and programs (including vertical programs) and coordinate the collection of routine information (MoHSW, 2010).

Tanzania plans to continue to make the necessary investments to address bottlenecks on the production side. On the user side, strong multisectoral support, routine oversight from both the public and private sectors and plans to further expand dissemination will further strengthen the utility of health resource tracking data.

References


101 ibid
102 ibid
THAILAND: INFORMING UNIVERSAL COVERAGE, PHARMACEUTICAL POLICY AND HIV/AIDS SPENDING
Building Institutional Capacity and Policy Networks through Learning-by-Doing

Thailand has used NHA data to inform its national policy on universal health coverage, and inform debates about pharmaceutical cost-containment and HIV/AIDS spending. Thailand has built capacity incrementally through a “learning by doing” model, with capacity increasing in every subsequent round of NHA. This has strengthened Thailand’s local production capabilities, creating a strong institutional base of knowledge. Thailand is able to use NHA data effectively, through its extensive dissemination to a diverse working group including academics and researchers, international entities, civil servants and the private sector. Further, use of the data with other policy instruments ensures there is continued demand for NHA.

NHA Institutionalization in Thailand

NHA fit into the broader government policy agenda of using evidence-based data to monitor financial inequities. Using data for decision making is underscored by political will at the highest levels across government ministries. Moreover, NHA are perceived within government as being a diagnostic tool to inform policy (World Bank, 2008).

The institutional “home” for NHA in Thailand is the International Health Policy Program (IHPP), as appointed by the Ministry of Public Health (MOPH). The IHPP is the key national Focal Point and producer of health accounts, with the responsibility for updating NHA. The IHPP is the

Key Points

• NHA in Thailand have been used to inform the government’s aims to promote universal coverage, and to ensure the long-term fiscal sustainability of the health sector.
• Thailand has opted for a “learning by doing” model, where capacity has grown with every round of production.
• The institutional “home” for NHA resides within the MOPH, yet is autonomous. It was chosen as the institutional “home” for NHA due to its strong technical expertise and commitment to NHA, including its capacity to mobilize internal financial resources for the production of NHA.
• NHA data are disseminated through an extensive network facilitated by Thailand’s diverse Working Group that includes: civil society, research and policy institutions, international entities, and the private sector.
• Use of NHA data with other policy instruments ensures there is continued demand for NHA.
autonomous research arm of the Bureau of Health Policy and Strategy within the MOPH. It was chosen as the institutional “home” for NHA due to its strong technical expertise and commitment to NHA, including its capacity to mobilize internal financial resources for NHA production (World Bank, 2008).

The IHPP is unique in that it fosters innovation in research. It generates evidence to inform policy and has a continuous interface with policymakers through its diverse Working Group, comprised of a wide array of stakeholders from across government, who hold information on health expenditures. For example, the IHPP has been working in collaboration with the London School of Hygiene and Tropical Medicine (LSHTM) since 1992. On the production-side, the current Working Group includes researchers from the National Economic and Social Development Board (NESDB); the National Statistical Office (NSO); the Social Security Office, Ministry of Labor (SSO-MOL); Controller General Department (CGD) of the MOF (CGD-MOF); the National Health Security Office (NHSo); and the Bureau of Policy and Strategy, Ministry of Public Health (BPS-MOPH). The Working Group compiles NHA data, conducts surveys where needed, tabulates the NHA matrices and interprets the results prior to dissemination. In this way, data are generated through a collaborative process, bringing together an array of perspectives in order to improve the quality of the data and strengthen the use of data for decision making (Tangcharoensathien, 2010). Essentially, the Working Group plays an important role in improving the quality of and access to data, and strengthening transparency and the uptake of insights.103

In terms of capacity building, Thailand has opted for a “learning by doing” model: producing the first round of NHA in 1994 with some funding from local resources and with continued support from the Health Systems Research Institute, yet without international consultants. Capacity has grown with every round of production (every two years). It is built through the mentoring of newcomers on the production-side and through a well-functioning network of statisticians from key government entities that fosters collaboration.104

While the primary user of NHA is the central government, specifically the extensive network created by the Working Group, the data is also used by a wide variety of other stakeholders. These include civil society which uses the data to advocate for additional government spending for key program areas; academic institutions, research and policy institutions, which use the data for research purposes; international entities who use the data routinely for international comparisons and trends; and the private sector (World Bank, 2008).

Finally, Thailand places a strong emphasis on dissemination and information sharing. NHA results are disseminated every two years. NHA matrices are posted on the IHPP website in Microsoft Excel and in the form of policy briefs (World Bank, 2008). Briefings are held to address specific policy debates. Results are publicized in the media to highlight particular policy issues, as shown in the examples below. Feedback from interested parties (e.g. comments and queries from the private hospital sector) is received via email. This fosters transparency in the policy-making process.

104 ibid
The IHPP and its NHA Working Group have the necessary capacity to put NHA data in context with other data sources and instruments. For example, Thailand uses NHA data in conjunction with hospital administrative data, such as the International Classification for Diseases (ICD) or Diagnosis Related Groups (DRGs), to estimate health expenditures for curative and preventive care, by disease category. The IHPP also improves the NSO’s annual household income and expenditure surveys to ensure accurate estimation of household OOP payments for health. These figures feed into the NHA. Household survey results are disseminated approximately four to six months after their production, so as to ensure that timely information is used to inform health resource tracking systems such as NHA.

In addition, Thailand uses NHA in conjunction with other instruments, for example, to inform the MTEF for the health sector for the 10th National Economic and Social Development Plan (Table 7). For example, the MTEF highlighted several scenarios where government can invest more in preventive health and health promotion to address chronic non-communicable diseases (World Bank, 2008).

For data to be effectively used, it is important that technocrats understand the value of using data for decision making, as they play a crucial role in translating insights from data to policy and informing the general public. The capacity to use data for decision making has grown for members of the NHA Working Group. There is a rolling membership, as members are replaced by colleagues from within their organizations. The Working Group has an institutional memory of the insights that data offers. Together, these factors ensure that data can be translated in ways that “reach”

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Table 7: MTEF, 10th Plan 2007–2011

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total recurrent expenditure, million THB</td>
<td>291,344</td>
<td>321,233</td>
<td>355,010</td>
<td>393,091</td>
<td>435,890</td>
</tr>
<tr>
<td>• Inpatient care</td>
<td>111,585</td>
<td>125,405</td>
<td>141,293</td>
<td>159,469</td>
<td>180,152</td>
</tr>
<tr>
<td>• Outpatient care</td>
<td>141,764</td>
<td>155,788</td>
<td>171,523</td>
<td>189,152</td>
<td>208,859</td>
</tr>
<tr>
<td>• Prevention/health promotion</td>
<td>21,505</td>
<td>22,504</td>
<td>23,503</td>
<td>24,502</td>
<td>25,501</td>
</tr>
<tr>
<td>• Administration</td>
<td>16,489</td>
<td>17,534</td>
<td>18,690</td>
<td>19,967</td>
<td>21,377</td>
</tr>
<tr>
<td>Capital formation</td>
<td>14,128</td>
<td>15,234</td>
<td>16,340</td>
<td>17,447</td>
<td>18,553</td>
</tr>
<tr>
<td>THE, million THB</td>
<td>305,472</td>
<td>336,467</td>
<td>371,351</td>
<td>410,538</td>
<td>454,444</td>
</tr>
<tr>
<td>Total population, million a</td>
<td>66.23</td>
<td>66.98</td>
<td>67.77</td>
<td>68.56</td>
<td>69.14</td>
</tr>
<tr>
<td>THE per capita, THB</td>
<td>4,612.30</td>
<td>5,023.40</td>
<td>5,479.58</td>
<td>5,988.02</td>
<td>6,572.81</td>
</tr>
<tr>
<td>GDP, current year price, million THB b</td>
<td>8,469,060</td>
<td>9,191,176</td>
<td>9,868,145</td>
<td>10,594,977</td>
<td>11,375,342</td>
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<tr>
<td>THE, % GDP</td>
<td>3.62</td>
<td>3.67</td>
<td>3.79</td>
<td>3.89</td>
<td>3.99%</td>
</tr>
</tbody>
</table>

Notes:  
1 Thai Baht (THB) is equivalent to US$ 0.03  
a population estimates by NESDB;  
b GDP in 2007–2008 refers to the NESDB projection for 2009–2011, which is based on the 1993–2007 GDP, using geometric mean annual GDP growth of 7.37%  

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105 ibid
policymakers. In the spirit of “learning by doing,” we expect that these capacities will continue to grow over time.

Using Insights from NHA to Inform Policy

- **Universal coverage**: Insights from health resource tracking data have been used to inform a national policy on universal health coverage developed in 2002. Universal coverage was developed through an iterative process over the past several decades. To illustrate, from 1970 to 1990 various health insurance and welfare schemes were established for specific target populations, reflecting a highly fragmented system. A scheme was developed for the poor in 1975, followed by one for government workers and their dependents in 1980 (CSMBS). A voluntary community health insurance (or Health Card Scheme) was implemented in 1983 as an option for the informal sector that neither qualified as low income, nor was eligible for the welfare scheme for the poor. Separately, a social security scheme (SSS) was established in 1990 for those in the private sector (IHPP and MOPH, 2010).

Using data from NHA (1994–2006), long-term projections of health spending were made to ensure that total health expenditures remained sustainable over time. Data were disaggregated by age group, geographic region and by major cost drivers. The data revealed that a large proportion of the population remained uninsured and that households shouldered a large burden of their health expenditures. As shown in Figure 18, in 1994 the majority of health financing came from private sources (55% of total health expenditure), with public sources accounting for only 45%. Households alone accounted for 44% of total health financing (IHPP and MOPH, 2010).

Pressure from civil society prompted the government to announce the Universal Coverage (UC) policy in 2002, incorporating the Low Income Scheme with the Health Card Scheme

**Figure 18. Thailand’s THE, 1994–2008**

Source: IHPP and Thai working group on NHA.

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106 Tangcharoensathien and Patcharanarumol. Personal Interview already referred to.
and extending coverage to those previously uninsured. To date, the UC scheme covers 75% of the population, while the CSMBS covers 8% and the SSS covers 15.8%. As Figure 18 illustrates, the composition of health financing has changed over time, with public agencies accounting for 74% of total health expenditure by 2008. Importantly, households now only account for 18% of total health expenditure, dramatically reducing their health financing burden (IHPP and MOPH, 2010). Furthermore, projections show that total health spending will remain below 6% of GDP under the universal coverage scheme, illustrating the sustainability of the scheme.

Thailand has also witnessed a decline in the health-financing gap across income deciles over the period 1992 to 2006, as a result of universal coverage (Figure 19). In addition, universal coverage has reduced the incidence of households becoming impoverished through catastrophic medical expenses (IHPP and MOPH, 2010).

The development of universal coverage reflects a homegrown process, based on nationally-generated evidence, using data such as NHA. While there were indirect influences from evidence produced by international entities, there were no direct international influences on the design of the universal coverage scheme. In this way, Thailand is able to bridge the gap between data and policy. It is also able to use data for decision making, fostered by strong support from civil society and strong political leadership at the highest levels (Tangcharoensathien, 2010).

**Figure 19. Improved Fairness of Financial Contributions**

![Graph](image)


107 Public health financing sources in Thailand include the MOPH, other Ministries that provide health care services, local government, the CSMBS, the UC Scheme, the SSS, State Enterprises, the Public Independent Organization, and the Workmen Compensation Fund (WCF). Private sources of financing include private insurance, mandatory traffic insurance, the employer’s benefit for employees, out-of-pocket payments from households, the Non-Profit Institution Serving for Households (NPISH) and the financing sources from the ‘rest of the World’ (IHPP and MOPH, 2010).

108 Tangcharoensathien and Patcharanarumol. Personal Interview already referred to.
• **HIV/AIDS Spending**: Insights from health resource tracking data have also been used to inform policy debates around HIV/AIDS spending. Data have been used to inform the NASA. For example, the NASA was first produced for 2000–2004 with funding by UNAIDS, but with little guidance on how to produce such sub-accounts until recently when the NASA methodology was established. Linking the NASA to NHA, HIV/AIDS spending estimates have now been fully institutionalized in Thailand and produced on a routine basis, as required by the UNGASS biennial report109 (World Bank, 2008).

• **Pharmaceutical policy**: Reflections on NHA production have prompted the development of drug sub-accounts, such as the National Drug Account (NDA). This work was initially carried out by a group of researchers with strong collaboration and support from the IHPP, and has now been moved internally within the IHPP. These data were proactively used to inform policy debates on drug use. Importantly, the private sector (e.g. the pharmaceutical industry, local producers and importers) has fully contributed to the development and sustainability of NDA.

Health resource tracking data have been effective in informing debates around the effective use of medicines. To illustrate, representatives from the pharmaceutical industry suggested that Thailand was spending too little on health, particularly on innovative medicine. However, a network of statisticians triangulated the data, allowing the IHPP to produce evidence to the contrary—and highlighted the country’s sustainable use of generics as a cost-containing measure. The results were broadly disseminated to the media and throughout society, and the debate was discussed publicly through television and newspapers.110

Data and resource tracking have thus helped provide answers to the following key policy questions:

**At the national level**

• How can Thailand improve financial access to care and reduce the health-financing burden borne by households? How can Thailand expand health insurance coverage?

• How can Thailand inform debates on the sustainable use of medicines?

• How can Thailand track HIV/AIDS spending?

**At the international level**

• How does Thailand compare with its regional neighbors on health spending levels and trends?

**Lessons Learned**

• “Home” of data production and oversight: NHA are “housed” under the IHPP, an autonomous entity that falls under the Bureau of Health Policy and Strategy within the MOPH. In this

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109 ibid
110 ibid
way, the use of insights from data occurs at the hub of health policymaking and has government support at the highest levels.

- **Self-reliance**: The IHPP and its partners are independent of donor support. They have their own technical expertise in-house and are capable of mobilizing local resources to facilitate NHA production; they conduct routine updates, methodological improvements and diversification of NHA to other sub-accounts such as NASA and NDA.

- **Multi-stakeholder involvement**: NHA have support and involvement from a wide array of stakeholders in the public sector that constitute the Working Group, and are continuously used by research and other academic organizations, including civil society. This allows for greater collaboration and input from a variety of actors who can translate data to inform policy. For example, through the Working Group, the IHPP can leverage the NSO to conduct household surveys and improve their questionnaires in order to provide accurate estimates of household health expenditures. The surveys are conducted annually and the quality has improved over time, making it easier for respondents to provide accurate information.

- **Capacity building**: As a lower-middle income country, Thailand emphasizes “learning by doing.” It avoids the hiring of international consultants who produce the “Rolls Royce” version of NHA. The aim is to improve the quality of data and build capacity over time to ensure that there is ownership of the NHA production process and uptake of data, so that NHA can be used internally to provide insights to inform policy. In addition, since a high proportion of total health spending comes from OOP payments, the aim is to work with national statistics agencies to improve the quality and frequency of nationally representative household surveys that capture information on household income and health expenditure.

- **Routine production and analysis**: NHA are produced routinely every two years, largely financed by government with some donor funding such as from WHO. This ensures that the data is up-to-date and that timely information can be used routinely by the government and other entities to inform policy. Currently, time-series data from 1994 to 2008 is available, and 2009 and 2010 data will be available by the end of 2011.

- **Dissemination**: NHA results are disseminated broadly through the IHPP website to help stimulate policy debates. Briefings occur and results are shared throughout the media to highlight specific policy areas. As such, dissemination remains a key part of the government’s NHA strategy to enhance accountability and information sharing.

- **Data triangulation**: NHA data are triangulated with other data sources, including household expenditure surveys. NHA are also linked to sub-accounts (e.g. the NDA), ensuring that sub-accounts are routinely produced. This lends credibility to the numbers and enhances the quality of data produced.

One challenge faced by Thailand lies in disaggregating the data. Often, data is available at the aggregate level with breakdowns by healthcare function or provider-type (e.g. public versus private), based on assumptions or evidence from other household surveys. Local governments do not have good databases to provide more detailed health expenditure information by function and provider.
Furthermore, it has been noted that NHA estimates conflict with NESDB estimates of National Accounts. The NHA figures produced by the IHPP on health spending were reported by the World Health Report (WHR 2000), while National Accounts data were reported to the UN on a routine basis. The Working Group is currently looking at ways to resolve this discrepancy by improving the methodological approach in NESDB's estimate of National Accounts data.\textsuperscript{111}

References


\textsuperscript{111} ibid
Turkey: Developing and Evaluating Health Sector Reform
Using NHA to Raise and Reallocate Resources, and Improve Efficiency in Spending

In 2003, Turkey ranked behind most other OECD and middle-income countries in terms of its health indicators—life expectancy was nearly 10 years below the OECD average, and infant and maternal mortality rates were among the highest of middle-income countries. The public health sector was underperforming due to inefficiencies in resource allocation, under-trained staff, and poor incentives. In rural areas, health services were often difficult to access and difficult to use. The health financing system was fragmented with four separate social insurance schemes (including the Green Card for the poor).

Evidence from NHA facilitated the development and introduction of Turkey’s Health Transformation Program (HTP)—a comprehensive health sector reform initiated in 2003 to provide financial risk protection. The wealth of NHA data allowed for subsequent evaluation of the reform process and projections of the health systems’ fiscal sustainability.

Key Points

- NHA in Turkey has enabled the government to identify health system problems and adjust policies accordingly. The data has also contributed to the analysis of the fiscal sustainability of the health system. Institutionalization of NHA has therefore provided a strong evidence base for raising new resources, reallocating existing resources, and improving efficiency of current spending. NHA has also led to successful implementation, evaluation, and management of health reform.
- Strong dissemination of results and information-sharing has facilitated the “translation” of insights from the data to inform policy.
- Turkey has a shared governance model for NHA where one entity is responsible for data collection, and the other entity provides technical support. Technical experts in both organizations subsequently review, validate and analyze the NHA results.

NHA Institutionalization in Turkey

NHA were first initiated in 2001 for the period 1999–2000. They were conducted with technical assistance from the Harvard School of Public Health’s International Health Systems Program Studies and were conducted within the framework of the OECD Systems of Health Accounts. Approximately 35 Turkish trainees attended the first NHA training course offered in Ankara in May 2002 and a follow-up course was conducted in May 2003. The initial study took approximately three years for design and implementation. After the initial NHA study was completed in 2003, an international workshop was organized to disseminate technical information, further build capacity and facilitate the institutionalization of NHA.
NHA in Turkey currently fall under the responsibility of two institutions: the Turkish Statistical Institute (TURKSTAT), which collects relevant data and is the primary Focal Point, and the Turkish MOH-affiliated School of Public Health (TUSAK), which provides technical support to the studies and reviews all data inputs (e.g. data from the Social Security Institute and the private sector). By law, TURKSTAT is authorized to request information from all public and private organizations. Once the data are collected, technical experts in TURKSTAT and TUSAK review, validate and analyze them.

Turkey places a strong emphasis on the dissemination of NHA results and information sharing: NHA are the official data for health financing in the country. NHA results are announced in a bulletin by TURKSTAT, published on its official website and available to all entities upon request. TUSAK also disseminates NHA data to international organizations, such as the OECD, WHO, and EUROSTAT. Studies that use health financing data are integrated with NHA and viewed as part of the NHA process. In addition, the “translation” of insights from NHA to inform policy is made possible by the strong coordination between various entities (including the State Planning Organization, Treasury, MOH, MOF and Social Security Institute) in their use of health expenditure data through various commissions for policymaking.

Using Insights from NHA to Inform Policy

NHA results have been used as an important tool to guide and inform policymaking at all stages of the process of developing the Health Transformation Program (HTP).

A. Development of the HTP

NHA results were used extensively during the development of the HTP, which was designed to address the following long-standing problems in the Turkish health sector:

- Lagging health outcomes in comparison with other OECD and middle-income countries
- Inequities in access to healthcare
- Fragmentation in financing and delivery of health services, which contributed to inefficiency and undermined financial sustainability
- Poor quality of care and limited patient responsiveness (OECD and World Bank, 2008).

The HTP included several key institutional and organizational components, namely:

- *Restructuring the MOH to strengthen its stewardship function.* It was envisaged that the MOH would become more of a planning and supervising authority and would focus on functions such as: health surveillance and disease control; monitoring and evaluation; health promotion; quality assurance; and promotion of equitable access. In 2005, in order to eliminate fragmentation in the public delivery system and provide a basis for separating purchasing from provisioning functions, hospitals previously owned by the Sosyal Sigortalar Kurumu (SSK) were transferred to the MOH. The goal of this transfer was to harmonize management...
and payment mechanisms across all public hospitals, to improve their allocative and technical efficiency and to pave the road for hospital autonomy in the future.

- **Establishing a Universal Health Insurance (UHI) system.** Prior to 2003, several different public agencies funded and provided healthcare to serve different parts of the population, which left significant gaps in coverage. Social security institutions covered employees in the formal sector, while the self-employed and active and retired civil servants were covered through separate schemes with different benefit packages. The government-financed Green Card program covered the low-income uninsured. In 2006, administrative integration was initiated of the three different security schemes—SSK, BagKur (for the self-employed), the Emekli Sandigi (for civil servants)—into the Sosyal Güvenlik Kurumu (SGK), under which all citizens were entitled to the same benefits package. The adoption of the Social Security and Universal Health Insurance Law in 2008 created the legal and institutional basis for a fully-synchronized, health insurance system, the SGK, which now functions as the single purchaser of health services. Benefits were harmonized for all categories of UHI eligibility, including the poor who are covered under the Green Card System. Today 87% of the population has health insurance coverage.

- **Restructuring the health services delivery system.** Prior to the reform, allocative efficiency was poor, with the majority of health expenditures allocated to costly inpatient and outpatient hospital-based services. Thus the government reprioritized preventive care and developed a family medicine program as a first point of contact. Implementation began in 2004 and was rolled out nationwide by the end of 2010. Patient satisfaction in 2008 in respect of primary healthcare services in Turkey was found to be 82.8% in provinces where Family Medicine had been implemented, 80.1% in other provinces and 81.2% overall, up from 69% in 2004 (MoH, 2010).

- **Providing access to information for effective decision making and strengthening human resources capacity.** Early in the development of the HTP, it was recognized that information and data would be critical for the successful implementation and monitoring of health reform. This led to the establishment of the MOH information system, known as Health-Net (or Saglik-Net), and the SGK claims database, MEDULA.

**B. Success of the HTP**

NHA have been used extensively to monitor and evaluate progress of the HTP.

- **Improved financial protection:** NHA studies and household surveys were used to evaluate universal healthcare coverage and financial access to care. NHA results reported per capita expenditures for the different social-security programs, which were also closely examined before bringing the various social-security programs under the umbrella of the SGK. Prior to the implementation of the HTP, OOP spending was high and most of it informal. The poor and elderly paid more per capita than the non-poor and young respectively (OECD and World Bank, 2008). This raised significant equity concerns and received appropriate attention from the government.

- **Access to care for Green Card holders:** One of the objectives of the HTP was to increase financial protection and access to care for Green Card holders. In 2005, Green Card holders
were given access to outpatient care and pharmaceuticals, and today all insurance schemes have access to the same basic benefits package. Formal health insurance coverage has also increased significantly and has now reached 87% of the population compared to 67% of the population in 2002. OOP payments—a gross measure of financial protection—have decreased from 27.6% in 2000 to 17.4% of total health spending in 2008. According to the Life Satisfaction Survey, the share of population that met the cost of medication and therapy through OOP payments dropped from 32.1% in 2003 to 11.7% in 2010 (TURKSTAT, 2011). In addition, few and decreasing numbers of households are being driven into poverty as a result of catastrophic medical expenses, with Turkey meeting the broad WHO macro criterion for financial protection. Based on the overall information available from the latest NHA and Household Budget Surveys, it appears that the Turkish health system performs quite well in terms of equity and financial protection, both in absolute terms and relative to other countries (World Bank, 2011).

- **Improved delivery of Green Card program to poorest quintile:** Steps have also been taken to ensure the effective targeting of the Green Card program to the poorest population group. As a result, data from the 2008 Household Budget survey indicate that 70% of benefits had reached the bottom quintile of the distribution compared to 55% in 2003. In addition, while in 2004, per capita spending on behalf of Green Card holders was only half that of SGK beneficiaries, by 2009 they nearly converged; over this period an equalization of benefits had occurred with improved access to services and freedom of choice for this group of Green Card holders.

- **Global comparison of health spending and outcomes:** NHA have been used extensively to analyze Turkey’s position relative to countries with comparable income-levels (OECD and World Bank, 2008; World Bank, 2011). Total health spending has increased from 5.4% of GDP in 2002 to 6.1% of GDP in 2008. Turkey’s current levels of health spending are about average for its income level and similar to other OECD countries such as Mexico and Chile, having improved slightly since 2002, as shown in Figure 20.

- **Performance relative to other OECD countries:** The HTP has significantly improved Turkey performance, which is closing the gap with other OECD countries. Turkey has been successful at reducing the maternal mortality rate, with maternal deaths per 100,000 live births falling from 39 in 2000 to 19 in 2008. The infant mortality rate at 17 deaths per 1,000 live births in 2008 was significantly higher than that in other countries with similar income levels but the most recent MOH data indicates that in 2010 infant mortality rates had fallen to 10 deaths while maternal mortality rates had fallen to 16.4 deaths (Ministry of Health, 2011a). Even though Turkey has been able to achieve the same success as OECD countries in reducing infant mortality in a significantly shorter time period and will meet its MDG target related to child mortality, a global comparison underscores the importance of further improving this outcome (Figure 21). As Turkey aims to achieve OECD standards, such comparisons are revealing given Turkey’s relatively younger population and anticipated future cost pressures associated with population aging and epidemiological transitions.

**C. Ensuring long term fiscal sustainability of the health system**

NHA data have also been used to ensure the continuing fiscal sustainability of the health system.
Global cost-containment caps on SGK health spending: NHA data indicate that health expenditures were on the rise prompting the government to introduce global budget caps. A global budget for MOH hospitals was first introduced in 2006. The cap was to be negotiated annually with the MOH and reflect historical spending levels and medium-term budget forecasts by the Treasury. Since 2010, expenditure caps were also introduced for SGK payments to private and university hospitals and for pharmaceuticals covered under the SGK.
NHA studies have shown that expenditure caps for MOH, private, and university hospitals have been successful in curbing spending levels and ensuring the short-term fiscal sustainability of the universal health insurance system. The cap on pharmaceutical spending has been less effective, however. Although pharmaceutical spending declined between 2009 and...
2010, maintaining the pharmaceutical spending limit has not been particularly successful. The availability of spending data has helped to analyze the potential, long-term distortionary effects of the global budget caps on access, outcomes, financial protection, micro-efficiency and equity (World Bank and MOH, 2011).

- **Pharmaceutical spending control**: NHA studies have highlighted the consistently high levels of pharmaceutical spending in Turkey, averaging an annual growth rate of 22% between 2003 and 2007. Insights from the data have prompted further investigations into the factors causing high pharmaceutical expenditures, such as overuse of medicines, the use of newer, patented medicines when equivalent generics are available, and the use of expensive medicines in ways that differ from their labeled use. To curb growth rates, Turkey first introduced compulsory rebates for SGK and finally, in 2010, a budget cap for pharmaceutical spending. However, the over-run of the budget cap in 2010 demonstrated that imposing a budget cap is not sufficient and indicates that a mid-term strategy must be implemented to complement the budget cap and manage pharmaceutical expenditure sustainably (World Bank, 2011).

Non-rational use of drugs has been identified as a major obstacle to curbing pharmaceutical expenditures and appropriate steps have begun to be taken. As shown in Figure 22, Turkey has achieved some successes in its efforts to curb the overuse of antibiotics. While the use of antibiotics has been decreasing, most recent data have shown an increase in drugs for respiratory diseases, prompting the government to introduce a rule requiring physicians to conduct an FEV1 (forced expiratory volume in one second) test for chronic obstructive pulmonary disease (COPD) patients to confirm their eligibility for the prescription of expensive inhalers. Controlling the non-rational use of medicines, however, finds a moving target and efforts at control have to be adjusted from time to time based on available data.

- **Monitoring fiscal sustainability of health system**: One of the main goals of the HTP will be to ensure the future, fiscal sustainability of the health system. Actuarial projections using NHA data were first conducted in 2007 under two different cost scenarios to illustrate the need for building cost-containment “brakes” into the system to ensure the financial viability and fiscal sustainability of the health system, including hard caps on public health spending, cost-sharing mechanisms and micro-efficiency measures (OECD/World Bank, 2008). As noted above, many such measures were introduced between 2007 and 2010 which limited public health spending to 6% of GDP.

Actuarial projections were repeated in 2011 using the latest NHA estimates to

![Figure 22. While Antibiotics Lose Market Share, Drugs for Respiratory Diseases are Gaining](https://example.com/figure22.png)

*Source: IMS.*
project future health spending in the short to medium term, under three different paths—low-, base- and high-cost growth—along with two options for the insured population: i) the insured population remains stable at 87%, and (ii) it rises steadily through 2015 to reach a level of 95% and remains stable thereafter (World Bank, 2011). In 2008, the base path assumed that the percentage growth in health spending would exceed the percentage growth in GDP by 7%, but by 2011 Turkey had already surpassed that. In 2011 the base path used the OECD average rate of 20%.

The various cost scenarios showed that the principal driver of healthcare spending in Turkey, under the given assumptions, is ‘excess healthcare inflation’ and that other institutional policies/factors and further expansion of coverage will not exert significant cost pressures (Figure 23).

All cost scenarios also demonstrated that the SGK deficit as a percentage of GDP will widen over time. While the Medium-Term Program for 2011–2013 indicated a zero-health deficit for SGK, projections showed that this is unlikely to be achieved even under the cost-containment scenario. Such an analysis is particularly important as it draws attention to issues of fiscal sustainability and allows the government to review and adjust health policies to avoid unsustainable levels of future spending. As a result of the projections, the study also suggested several policy lever options that could further curb spending and improve the efficiency of the health sector (World Bank/MoH, 2011).

Data and resource tracking have thus helped provide answers to the following key policy questions:

**At the national level**

- What steps are needed to develop, implement and monitor successful health reform?
- How can Turkey improve allocative efficiency, equity and financial access to care? How can Turkey achieve universal healthcare coverage?
- How can Turkey contain costs and ensure future fiscal sustainability of the health system?

**At the international level**

- How does Turkey perform on health spending levels and outcomes relative to other countries with similar income levels?
Lessons Learned

NHA have played an important role in Turkey’s HTP. Introduced in 2003, the HTP’s objective was to make the health system more effective by improving governance, efficiency, user and provider satisfaction and long-term fiscal sustainability. NHA data have enabled the government and international organizations to identify health-system problems and adjust policies accordingly. In addition, the data have also allowed for actuarial projections to be conducted which contributed to the analysis of the fiscal sustainability of the health system.

Every reform program needs to consider the raising of new resources, the reallocation of existing resources and improvements to the efficiency of current spending. Turkey’s experience has shown that institutionalization of NHA provides a strong base for such analysis and leads to successful implementation, evaluation and management of health reform.

In addition, institutionalization of NHA contributed to the establishment of reliable data collection and processing mechanisms in Turkey. During the implementation of the first NHA study, the government also conducted a household survey in an effort to analyze health-spending patterns, particularly OOP spending, and to cross-check insurance-coverage levels. Not only did this enable analysis of overall spending levels, but also allowed for the examination of financial access to healthcare and equity through various social-security programs.

It has been noted that although many factors are responsible for the improvements in health status in Turkey, it seems likely that a significant portion is due to higher and more effective spending on healthcare. Nevertheless, challenges remain and the next several years will be critical in terms of operationalizing the key cost-containment and efficiency-enhancing reforms in the sector, which will require further use and dissemination of NHA data.

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APPENDIX A: SYNTHESIS OF LESSONS LEARNED FROM THE CASE STUDIES

Where Is the Money and What Are We Doing with It? Creating an Evidence Base for Better Health Financing and Greater Accountability – A Strategic Guide for the Institutionalization of National Health Accounts” emphasizes that institutionalization requires a cycle of NHA activities to be embedded within a country’s planning and budgeting processes. That cycle extends beyond just the production of data: it involves the broad dissemination of that data and its translation into insightful analysis that can form an evidence base for effective policy making (Figure 24). The cycle is underpinned by three key elements of a country.

1. **Governance structure**: Formal and informal structure that defines who is responsible for what in respect of each NHA activity;

Figure 24. Framework for Institutionalization of National Health Accounts

1. **Demand and use**
   - As country leaders make tough trade-offs to ensure an equitable and efficient allocation of scarce health resources, there is a critical need for an evidence base.
   - Regular use of NHA in policy making contributes to more sophisticated policy analysis

2. **Production, data management, and quality assurance**
   - Sustainable production of data remains a major challenge in many countries, but capacities to produce health accounts have grown significantly in the developing world over the past decade

3. **Dissemination**
   - The value of NHA data is limited unless used as an evidence base for more informed health financing decisions.
   - Country ownership of the translation process allows countries to champion key policy insights, increasing the likelihood that the answers NHA data provide will be used to affect policy
   - Making the collected data available for analysis enhances transparency and—with experience—analysis and insights that inform policy
   - In countries that have institutionalized NHA, data are widely disseminated.
   - Dissemination takes place at two occasions, (1) when the NHA tables have been produced and (2) after the data has been translated into policy relevant briefs
2. **Capacity**: Individual and institutional capacity, as well as of an enabling environment to plan and implement the NHA activities;

3. **Financing**: Financing for the NHA activities including cost-sharing models between countries and development partners and approaches to achieve cost-savings.

The experiences of countries profiled in this document underline the importance of investing across the NHA institutionalization cycle. The case studies of these countries will provide valuable lessons, both for other countries and for their international development partners. They provide concrete examples of policy impact using insights from NHA data, capacity-building within the public sector and beyond, and the use of NHA in conjunction with other policy and planning tools to better inform decision making—to name a few examples.

Below is the brief summary of the key insights on the institutionalization of NHA from the case studies, across the NHA framework.

**Governance Structure**

NHA governance structures that are designed with multisectoral involvement can facilitate production and the translation of data into insights to inform policy. In Jordan, NHA are analyzed by an inter-disciplinary team comprised of stakeholders from across the public and private sectors, as well as from academia. This allows for involvement from a variety of actors with the potential to translate data into policy-relevant insight. Likewise in Korea, a multisectoral NHA Forum, including representatives of the Ministries of Health and of Welfare, oversees the NHA production process; while Malaysia’s NHA Steering Committee is an inter-disciplinary team comprised of members from the public and private sectors. In Tanzania, oversight is provided by a Health Financing Working Group, comprised of development partners, representatives from the MOF, the private sector and civil society.

**Capacity Building**

Learning-by-doing is an effective approach to building long-term capacity for NHA. In Georgia, for example, international consultants from WHO initially helped develop standardized production tools, but today production is led by a local technical team. This team draws on the regional Eurasian NHA network for the CIS as a source of capacity building. Thailand has built its capacity to produce NHA through a “learning by doing” approach and through a well-functioning network of statisticians from key government entities that fosters collaboration.

**Financing**

Long-term financing based on a cost-sharing model between countries and international development partners can help ensure the sustainability of NHA—as can financing from domestic budgets alone. For example, Jordan uses public funds to produce, analyze and disseminate data for decision making. Donor funds are primarily used to upgrade tools and build support for
capacity-building, thus promoting the long-term sustainability of NHA. NHA production in Serbia was initially donor-supported, but is now financed through domestic budgets. The Government of the Seychelles covered all expenses involved in producing the country’s first NHA, including costs for international experts—a vote of real commitment within the public sector to understanding health financing flows and creating an evidence-based planning and budgeting process.

**Production**

Standardizing and documenting methods and tools can improve the sustainability of production. Among India’s strengths on the production side is its streamlined analysis of data, made possible by a skilled production team that can easily take raw data inputs and put these into an NHA-ready format—for national and state level data. In Georgia, a special data management tool in Microsoft Excel was developed by the NHA production team in 2005 to ease the production of NHA tables and matrices. NHA have since been integrated into the Health Information System, allowing for easy transfer of data inputs to NHA production. In the Philippines, there is an emphasis on simplified NHA analysis based on institutionally-generated data and standardized methodologies with clear documentation.

**Translation of Data**

Integrating NHA into policy development processes can help translate data into meaningful policy insights. In Korea, the NHA Focal Point and other researchers conduct analyses to answer key policy questions. The NHA Focal Point plays a key role in government policy committees, which frequently use NHA data to inform debates at the highest levels. In the Philippines, several forums help build capacity to use NHA for decision making: these include the annual National Health Research Forum and the Inter-Agency Committee on Health and Nutrition Statistics.

**Dissemination**

Effective dissemination requires articulating a clear strategy and tailoring dissemination “products” to target audiences. In Malaysia, NHA reports are disseminated broadly to all public institutions, private organizations and civil society. Turkey likewise places strong emphasis on the dissemination of NHA results and information sharing, with NHA being the official health financing data for the country. In Afghanistan, NHA results were disseminated nationally through a “launching” ceremony that received widespread coverage on local television and radio, motivating significant discussion.

**Demand and Use**

Integrating NHA with other policy instruments may increase the utility of NHA and bridge the gap between production and use of data. For example, Burkina Faso uses NHA data in conjunction with a variety of data sources on government, private and household health expenditures. All
collected data is entered in a single database that is used to produce NHA tables. **Serbia** uses NHA in conjunction with national statistics, budget surveys, annual reports from healthcare providers, and a World Bank baseline survey. In **Tanzania**, NHA have been used in conjunction with various data instruments and tools, including the NASA.
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