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

DRAFT

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Contents

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Policy makers and technical experts from more than 50 countries have contributed to the shaping of this report through an extensive consultative process involving low-, middle- and high-income countries, large and small, from all corners of the world (listed on page 108–113). We are grateful for these contributions which have helped shape a document that represents a synthesis of lessons learned from country experiences. This report is intended to serve as a Strategic Guide, helping countries build greater ownership of the process of designing, implementing, and integrating NHA into their planning, budgeting, and monitoring processes.

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Acronyms

ADB	Asian Development Bank
AIS	AIDS Indicator Survey
APNHAN	Asia Pacific National Health Accounts Network
AusAID	Australian Agency for International Development
BIA	Benefit Incidence Analysis
CHIPSR	Policy and Systems Research
CIS	Euro-Asia (regional network)
CID	Integrated Expenditure System
SRS	Creditor Reporting System
DAC	OECD Development Assistance Committee
DANIDA	Danish International Development Agency
DEC	Research Department (of the World Bank)
DECRG	Research Department (of the World Bank)
DHS	Demographic and Health Survey
DMT	data management tool
DFID	Department for International Development
DOH	Department of Health (Philippines)
DRGs	Diagnosis Related Groups
ECSA	East, Central, and Southern Africa
Equitap	Equity in Asia-Pacific Health Systems
EO	European Observatory (on health systems and policies)
FA	Francophone Africa
FIES	Family Income and Expenditure Surveys
FNU	Fiji National University
GAC	Governance and Anti-Corruption
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHE	Government Health Expenditures
GHI	Global Health Initiative
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HHC	High Health Council (Jordan)

HIS	Health Information System(s)
HMIS	Health Management Information System
HMN	Health Metrics Network
HMOs	Health Maintenance Organizations
HR	Human Resources
HSS	Health Systems Strengthening
HUES	Health Utilization and Expenditure Survey (Georgia)
IAC-HNS	The Inter-Agency Committee on Health and Nutrition Statistics
IADB	Inter-American Development Bank
ICD	International Classification for Diseases
ICHA	International Classification for Health Accounting
IDB	Inter-American Development Bank
IHEA	International Health Economics Association
IHPP	International Health Policy Program (Thailand)
IMF	International Monetary Fund
IOPHOS	Planning Department of the Republican Institute of Public Health (Serbia)
JHAQ	OECD-Eurostat-WHO Joint Health Accounts Questionnaire
KHIDI	Korea Health Industry Development Institute
KIHASA	Korea Institute of Health and Social Affairs
KIHSM	Korea Institute of Health Services Management
LAC	Latin America and Caribbean (now REDACS, q.v.)
LSMS	Living Standards Measurement Study
MBB	Marginal Budgeting for Bottlenecks
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MICS	Multiple Indicator Cluster Surveys
MIS	Malaria Indicator Survey
HMIS	Health Management Information System (Georgia)
MDGs	Millennium Development Goals
HMOs	Health Maintenance Organizations
MOF	Ministry of Finance
MOH	Ministry of Health
MoHFW	Ministry of Health and Family Welfare (India)
MoHSW	Ministry of Health and Social Welfare
MOPH	Ministry of Public Health
MTEF	Mid-Term Expenditure Framework
NASA	National AIDS Spending Assessment
NCMH	National Commission on Macroeconomics and Health
n.d.	undated
NESDB	National Economic and Social Development Board (Thailand)
NGO	Nongovernmental organization
NHA	National Health Accounts
NORAD	Norwegian Agency for Development Cooperation
NRHM	National Rural Health Mission (India)
NSCB	National Statistical Coordination Board (Philippines)
NSO	National Statistical Office
OECD	Organisation for Economic Co-operation and Development

PAHO	Pan American Health Organization
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Surveys
PG	Producer's Guide
PHFI	Public Health Foundation of India
PPP	Purchasing Power Parity
PREM	Poverty Reduction and Economic Management Network (World Bank)
REDACS	Network of the Americas on Health Accounts
RH	Reproductive Health
SDS	State Department of Statistics
SES	Socio-Economic Survey
SHA	System of Health Accounts
SIDA	Swedish International Development Cooperation Agency
THE	Total Expenditure on Health
UHI	Universal Health Insurance
UN	United Nations
UNGASS	United Nations General Assembly Special Session
USAID	United States Agency for International Development
USP	University of the South Pacific
WG	Working Group
WHO	World Health Organization
WHS	World Health Survey

Executive Summary

Policies to improve the equity and efficiency of health financing can play a critical role in strengthening health outcomes in the developing world. However, such policies must be built on a foundation of sound evidence and analysis.

There has been a global effort to promote the institutionalization[1] of National Health Accounts (NHA) as a tool to provide a robust evidence base on the sources and allocation of public, donor and private health expenditures at the country level. Since 2008, the World Bank has been coordinating this effort, which draws on lessons learned from countries at different stages of the journey towards institutionalization. This work has culminated in a strategic guide for the institutionalization of NHA, developed through an extensive consultative process involving more than fifty low-, middle- and high-income countries, large and small, in all corners of the world.

This guide represents a synthesis of lessons learned from country experiences and is intended to help countries build greater ownership of the process of designing, implementing, and integrating NHA into their planning, budgeting, and monitoring processes. This summary sets out the key elements of the guide.

The Value Proposition for Institutionalizing NHA

NHA provide national decision makers with essential financial information on a country's health system, and facilitate more sustainable, equitable and efficient allocation of resources. NHA thus represent a cost-effective, "smart" investment for countries.

It is vital for effective policy making that decision makers have access to essential information on health expenditure—such as the share of health expenditure within an economy, the

[1] Defined as: 'Routine government-led and country-owned production and utilization of an essential set of policy relevant health expenditure data using an internationally accepted health accounting framework.'

financial burden of health spending on households, the magnitude of external financing in health expenditure, and the share of spending on primary care. It is also important for policy makers to be able to understand how these metrics are shifting over time in their countries, and to make accurate comparisons with health expenditure in other countries.

NHA provide a globally recognized framework to systematically measure the total expenditure and the flow of funds in a country's health system. NHA provide a rigorous methodology that reveals actual sources of funds, resource gaps, and potential areas for capturing greater resource efficiencies. They disaggregate total health expenditure by end user, type of provider, and the population sub-group that benefited from health services. With such information, countries can monitor spending and design policies to achieve more sustainable, equitable, and efficient health financing.

NHA can provide considerable value-add to countries. Many countries that have institutionalized NHA have benefitted from the ability to visualize resource gaps and inefficiencies. As a result, country leaders have been able to focus attention on priority issues, such as reducing out-of-pocket payments by households, mobilizing additional resources for healthcare, and identifying opportunities to improve cost-efficiency in government spending.

Constraints to Institutionalization

The number of countries that have institutionalized NHA is still very limited. In 2010, only forty-one countries were routinely producing NHA, many of them OECD members. Institutionalization of NHA has not progressed as fast as expected—despite the value-add of NHA and evidence that in-country institutionalization can result in significant savings in cost and time.

Country experiences reveal that one of the major constraints to institutionalization has been the failure to consider NHA as part of a complete cycle of activities that include demand for data by country leaders; production of NHA; dissemination and translation of NHA data; and finally, the use and application of NHA for policy decisions.

Institutionalization requires a full cycle of NHA activities to be embedded within a country's planning and budgeting processes. This cycle extends beyond production, and involves translating the essential information that NHA can help provide into insightful, evidence-based policy recommendations for decision makers (Figure 1). The steps in the cycle and their effective linkages to one another are influenced and guided by a country's governance structure, as well as its institutional capacity and financial resources to support NHA-related activities.

Historically, a major challenge in using NHA for decision making has been the weak link between data production and its application by key stakeholders who could make use of the NHA to inform policy. Much of NHA capacity building has focused on data collection and production, whereas there has been a relative dearth of resources to invest in the "translation" of large volumes of data into policy-relevant information. The translation of data into policy-relevant analyses is essential for enabling policy makers to capture, interpret, and use the critical information contained in NHA for their policy decisions. Likewise, a clear strategy is required to disseminate NHA data and analyses to target audiences through a variety of channels.

A second major constraint in NHA institutionalization has been the absence of atten-

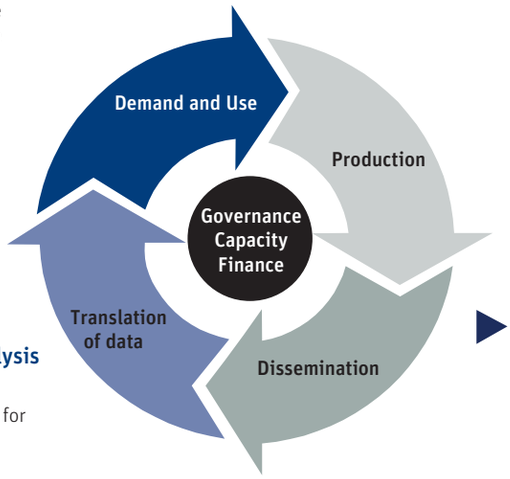
Figure 1. Framework for Institutionalization of National Health Accounts

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



4. Translation of data and dissemination of specific analysis

- 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

3. Dissemination

- 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

Source: The World Bank.

tion to developing a long-term strategy for ownership and capacity building that takes realistic account of the country's unique resource environment. Countries need to "learn by doing" and should tailor NHA to meet their domestic policy needs. In this, the international development partners who support NHA will need to take a longer view on institutionalizing NHA, and allow sufficient time and pacing of activities to ensure country ownership.

Where NHA production has been conducted by consultants with insufficient focus on the transfer of capacity to local staff, there has been little ownership by countries and little use has been made of the data at the country level. Several countries have undertaken multiple rounds of NHA production, yet do not possess the institutional skills to own the process in a way that serves annual budget and planning processes at the country level. Such practices have led NHA activities to be viewed as an externally-driven (rather than country-owned) process.

For the NHA cycle to be fully optimized and leveraged, the process needs to be "owned" by country champions who can coordinate and ensure effective linkages between the steps in the NHA cycle. This "ownership" needs to be defined and adjusted based on a country's governance structure and availability of human and financial resources.

In countries where external assistance is needed there has to be a "shared responsibility" in which countries have an explicit stake in managing the NHA institutionalization cycle. Institutionalization will only occur when country leaders recognize the added value of the evidence base that NHA help produce. For example, low-income countries might focus on ensuring that the use of NHA data will serve as an input to policy decisions and annual planning and

budgeting activities, while continuing to rely on development partners for part of the financing and production of NHA. In middle-income countries, country ownership might extend to the entire cycle, including financing and production of NHA, with minimal external support.

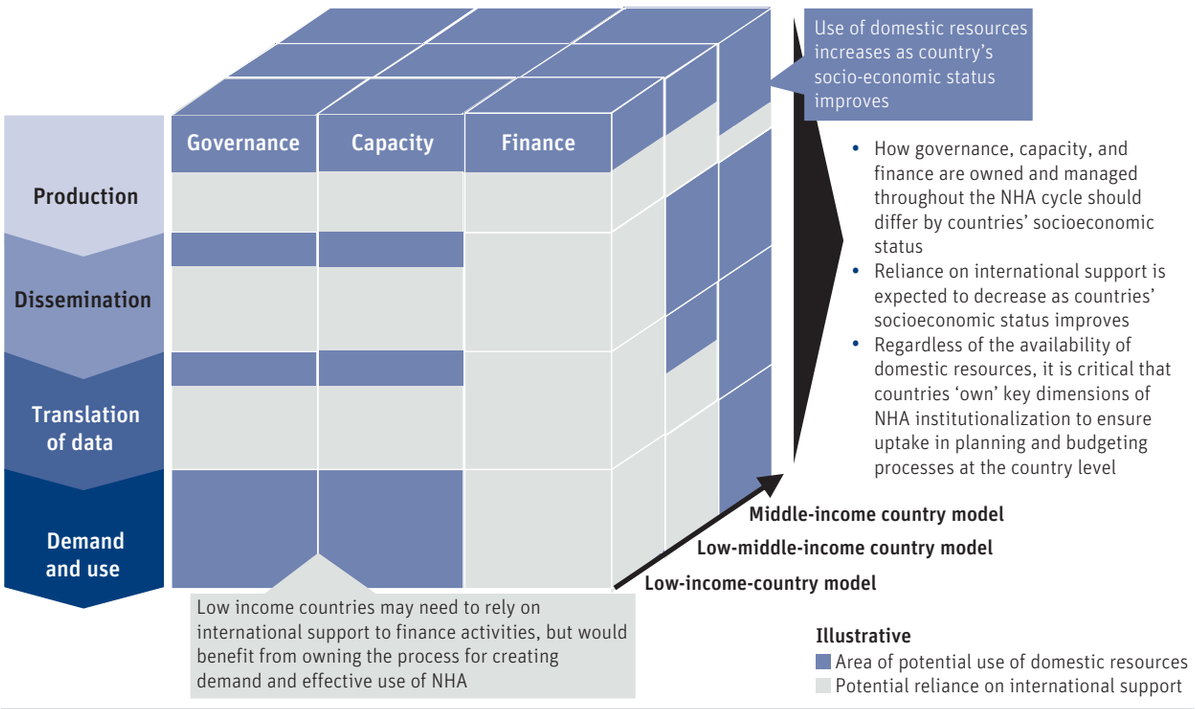
The Way Forward

Effective NHA institutionalization requires the development of long-term strategies that address three key elements of the cycle—governance, capacity and financing—adjusted to a country's socio-economic status (Figure 2). Experiences drawn from the countries that have contributed to this global initiative have provided valuable insights on the importance of these elements in building the foundation for sustaining the NHA cycle. These are summarized below.

The governance structure of NHA is a core component in linking NHA production to use of the data and its translation through further analysis into insights to support policy making. Country experiences show that different governance models exist for NHA, each with its own strengths and challenges. Countries can choose a model that best fits their own political context as well as capacities.

Countries typically employ one of four governance models for NHA: (1) led by the Ministry of Health (MOH) with little external collaboration; (2) MOH-led with multisectoral collaboration; (3) government-mandated coordination by a multisectoral team; and (4) led by an entity outside of government. Each model has its strengths and limitations. The optimal institutional "home" for NHA will depend on a country's institutional capacity, financial resources, and political context.

Figure 2. A Three-Dimensional Model of Country Ownership of NHA Institutionalization (Illustrative)



Source: The World Bank.

In all cases, an important element of success involves clearly delineating the responsibilities within the core teams, and building strong and explicit linkages with other agencies to facilitate access and validation of data. Many countries define a Coordinating Body to plan, budget, and coordinate the cycle of NHA activities; a Policy Advisory Group that liaises with key decision makers to provide them with essential financing information; and a Technical Consultative Group that provides data collection support, validation, and quality assurance of data.

Capacity building should target existing gaps within the NHA cycle, and focus on building institutional knowledge. Creating a mechanism to embed NHA cycle within the policy making process can increase the sustainability of NHA, and bridge the gap between production and use.

Production, dissemination, and effective use of NHA depend on access to a skilled workforce equipped to produce work of high technical quality and empowered to coordinate the links between each step of the NHA cycle. Capacity constraints are common, especially in health systems where statisticians, health accountants, and health economists are scarce.

Although capacity building in many countries has been focused on production, a comprehensive assessment of and targeted approach to critical gaps across the entire NHA cycle will be crucial to build sustainable capacity for the complete cycle of data production, dissemination, translation, and use.

***Experience also shows that addressing institutional and environmental factors can greatly increase the capacity to sustain NHA activities and link NHA to policy decisions*:**

- Countries can build institutional knowledge by ensuring that the NHA process is standardized and well-documented, and by creating tools to facilitate the process. This reduces reliance on the knowledge of a few staff members or of external consultants.
- Countries can consider strengthening their institutional production capacity by outsourcing production of NHA or by partnering with entities outside the MOH or outside government, such as universities and independent policy and research institutions.
- Countries can build an institutional mechanism that links NHA to policy units in the MOH as well as to formal budgeting and planning processes (such as public expenditure reviews, and medium-term expenditure frameworks). This will give decision makers access to insights from NHA, so bridging the gap between production and use.
- Broader contextual factors such as the political, financial and institutional environment affect the efficiency and effectiveness of the NHA cycle.

Learning-by-doing is an effective approach to building long-term capacity. Capacity building for NHA, at both the individual and institutional levels, is a highly iterative process. For example, an NHA team gradually learns the NHA classification and methodology; it partners with multiple organizations to streamline the data collection process; it aligns existing surveys to the NHA format; it adjusts methodologies to estimate consumption; it includes high-level policy makers in a Policy Advisory Group; and it improves communication among members of that Advisory Group.

A long-term financing strategy can help countries sustain NHA activities and capture cost efficiencies early.

A long-term financing strategy can generate cost savings. Overall, country experiences show that the cost of NHA tends to decrease

significantly with each subsequent round of NHA. It is thus crucial that a long-term financing strategy is put in place extending beyond the initial rounds of NHA production, and which makes provisions for cost-sharing between development partners and countries.

Embedding NHA activities in a country's planning and budgeting processes can ensure sustained financing of NHA.

Opportunities for capturing cost efficiencies reside in early rounds of the NHA cycle. More than 70 percent of the total average NHA cost is made up of survey, consultant, and staff costs, which form an even larger proportion of costs in early rounds. There are several opportunities to capture cost efficiencies early:

- ***Survey costs can be saved by integrating the NHA data collection process with routine data management systems and by simplifying and standardizing processes and tools.*** Several countries avoid survey costs by using their existing data system, sometimes by using estimation methodologies, revising questionnaires and classifications of existing surveys and budget items. Low-income countries also can limit the survey questionnaire to essential information, and use automated NHA production tools.
- ***Localizing and standardizing production and analysis can save costs on international consultants.*** Consulting costs can be reduced by: leveraging cheaper regional and local expertise and avoiding international consultants; standardizing and minimizing the NHA process to reduce the workload of consultants; and building staff capacity to reduce the need for consultant support. These steps can also improve development of in-country knowledge and skills to manage the NHA cycle.

International and regional organizations can add value through their global networks and cost-efficient, peer-learning approaches, but they also have specific challenges to overcome if they are to serve countries effectively over the long term.

Coordination at the global level can support institutionalization across the full cycle of NHA activities at the country level, by helping to improve accountability and transparency and facilitating the use of internationally comparable data. Moreover, international development partners can add value by: (1) serving as a repository of knowledge to build institutional capacity and facilitate the exchange of information; (2) facilitating the link from data to issues relevant to policy; and (3) improving transparency in their financing of health resource tracking activities.

Regional agencies can add value to countries by facilitating peer-based learning, serving as a repository of knowledge and best practices, and providing cost-efficient technical expertise. However, regional agencies often lack adequate financing and strong governance structures to support their work. To leverage regional agencies effectively, it is critical that these challenges are overcome through further dialogue between countries and international development partners. Countries need to define the modality that best serves their needs and be willing to contribute to the costs of establishing and managing the agencies. This would create a market equipped to shape the purpose and value-add of regional networks from a country perspective.

* * *

Through the process of synthesizing country experiences, it has become clear that we are moving into a new era where NHA activities can no longer be addressed in isolation.

NHA activities need to be conducted strategically to serve as an input into broader resource tracking, ultimately to inform policy. This shift requires a more strategic partnership between countries and their development partners, and calls for genuine commitments to mutual transparency and accountability on resources. It is hoped that countries and their development partners can fully utilize NHA in making headway towards national and international targets and in improving the efficiency and effectiveness of country-led efforts to build more equitable and efficient health systems for populations.

Introduction

One of the key constraints to improving health outcomes in the developing world relates to equitable and efficient health financing. In most developing countries, a large portion of health expenditure is private and out-of-pocket (Gottret and Schieber, 2006). This deters the poor from seeking health care, and puts many of the non-poor at risk of impoverishment as a result of a health shock when they do seek care. The public sector's share of health expenditure is relatively small in low-income countries. Further, there is empirical evidence indicating that, in several low- and middle-income countries, the rich proportionately benefit far more from public health spending than do the poor (Wagstaff, 2010). Moreover, public spending is often not allocated in a cost-effective manner.

Any analysis of health financing issues has to begin with sound estimates of the level and flow of resources in a health system, including total levels of spending, the sources of health expenditures, the uses of funds in terms of services purchased, and in terms of who purchases them. The analysis should also aim at understanding how these resource flows are correlated with health system outcomes, including those of improving health, reducing health inequalities, and reducing the incidence of catastrophic health expenditure. National Health Accounts (NHA) provide a framework to collect, compile, and analyze such data on all types of health spending in a country—and so create a robust evidence base for policy making.

Although NHA data delineate the key financial metrics of a health system, the collection of these data have not been institutionalized in most developing countries. Whilst most OECD countries follow standardized guidelines and systems to report NHA annually, many developing countries do not have systems in place for the routine reporting of NHA-related information. The root problems are often the same: insufficient resources to collect, collate, analyze and produce information on spending; poor development of health and other information systems; low levels of local capacity to interpret information to meet policy needs; and inadequate demand for data within countries.

In many low- and middle-income countries, previous NHA activities have been conducted as ad hoc, donor-driven initiatives. Some countries have never developed NHA; as a result, information on health resource flows in these countries is often limited, incomplete,

poorly communicated and understood, or inconsistent.

There has been a global effort to promote the institutionalization of National Health Accounts (NHA) as a tool to provide a robust evidence base on the sources and allocation of public, donor and private health expenditures at the country level. Since 2008, the World Bank has been coordinating a global initiative to identify bottlenecks to the institutionalization of NHA, and to learn lessons in countries at different stages on the journey towards this institutionalization. The activities in this initiative have included: the development of this report; provision of technical assistance to institutionalize NHA in 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 report has been developed through a consultative process.[2] Five international and four regional consultations have taken place, involving a wide mix of countries at different stages on the NHA institutionalization journey. In addition, country leaders in more than fifty countries have contributed to the development of this report, through workshops, technical assistance, and in-person or virtual conversations. Development partners have provided important contributions throughout the project, reflecting their past experiences with both NHA production and institutionalization. Further, numerous World Bank staff have informed the creation of this report and contributed to the design and implementation of technical work in countries.

This report represents a synthesis of lessons learned from country experiences and is intended to serve as a strategic guide to countries as they design and implement their strategy to develop nationally relevant and internationally comparable data, collected in a routine and cost-effective manner. These data will enable policy makers to develop and implement evidence-based decisions, and better measure the impact of health reforms, especially those related to health financing.

[2] See the Section in this document entitled, "Individuals and Organizations Consulted and Providing Inputs into the Strategic Guide".

Chapter 1

The Case for Institutionalizing National Health Accounts

This chapter sets out the business case for institutionalizing National Health Accounts (NHA) at the country level. First, it shows how NHA can play a critical role in strengthening national decision making and allocating health resources more effectively and equitably. The chapter then presents a framework for the institutionalization of NHA, from the production of accounts right through to their use in policy decisions. Each of the elements of this framework is then elaborated in subsequent chapters.

Key points are:

- NHA provide a globally recognized framework to systematically measure the source of public and private health expenditures and the flow of funds in a country's health system.
- Input from NHA to provide an evidence base on resource gaps and inefficiencies can help the making of policy decisions to reduce out-of-pocket payments borne by households, increase total health expenditure, and identify cost-saving opportunities on government spending.
- Linking NHA data with nonfinancial information (such as output and outcome indicators) can provide a powerful means of linking financial investments with attainments in health status and driving improvements in the effectiveness, efficiency, and quality of health services.
- A major constraint to institutionalization has been the failure to consider NHA as a complete cycle of activities that include demand for data by country leaders, production, dissemination, translation of large volumes of data into relevant policy briefs, and use of data for policy decisions.
- While a country can 'borrow' the capacity and finance needed to develop NHA, it is essential that overall leadership and ownership of the NHA cycle is provided by the country itself.
- It is crucial to align a long-term strategy between countries and development partners that facilitates country ownership of the NHA cycle, and is based on a country's unique resource environment.

1.1 The Value Proposition for the Institutionalization of National Health Accounts

Essential data to inform policy

Accurate information on the key dimensions of national health expenditure is essential for effective decision making by national policy makers, both in the health sector and beyond, and for the equitable and efficient allocation of scarce health resources. Such information might include:

- Health expenditure as a share of GDP
- The county's health expenditure and its composition over time
- The country's health expenditure as compared to that in countries with similar income levels
- The country's health outcomes as compared to those in other countries with similar income or health expenditure levels
- The financial burden imposed by health episodes on households—linked to their level of financial protection and their risk of impoverishment due to catastrophic health expenditure
- The share of health sector investments devoted to primary care
- The share of health expenditure reaching the population groups with the greatest health care needs
- The role of external financing in the country's health expenditure

NHA provide a globally recognized framework to systematically define, track, classify, and measure the total volume of expenditure and the flow of funds in a country's health system. NHA allow countries to produce consistent and internationally comparable information on the generation, allocation, and utilization of health system resources. This information can be used in conjunction with other datasets, such as those on health outputs and health outcomes, to further enrich the analytical base for health policy.

If appropriately used, NHA can be a powerful lever to help countries document resource gaps, highlight resource efficiencies, effectively advocate for additional funds where needed, and channel money to priority areas.

NHA are also a means of ensuring accountability and transparency in a country's use of financial resources. They offer a rigorous methodology to account for the flow of health funds from financing sources such as MOFs, development partners, and households, to the entities that determine how these funds are spent, such as MOH, insurance agencies, and households. Moreover, NHA allow for the disaggregation of total health expenditure by end use, such as by curative or preventive care, or by the type of provider that has delivered the service. With further analysis, NHA can help identify the population subgroups that have benefited from health services.

A key value-add offered by NHA is the ability to provide national decision makers with essential information about the financial status of a country's health system. This information can monitor and guide current and future expenditure, and assist in the design of policies to improve health financing via a more sustainable, equitable, and efficient allocation of resources. In an era of constrained fiscal resources, NHA data can help countries prioritize funds and design more effective interventions to protect pro-poor health services. Information on how money is spent at all levels is critical for ensuring successful outcomes for major health sector reforms, including implementing universal coverage (in Thailand, for instance) or decentralization (such as current efforts in the Philippines).

Baseline data for national and international equity analysis

NHA can provide information on the financial burden that health expenses impose on households and provide an evidence base for reforms aimed at improving financial

protection and reducing out-of-pocket payments. For example, in Mexico NHA data raised concerns about exorbitant out-of-pocket expenses and led to the establishment of Seguro Popular, a program geared toward achieving universal health care coverage. Since 2004, those states participating in Seguro Popular have witnessed a 23 percent reduction in the proportion of families experiencing catastrophic health expenditure. The evidence also helped the government redistribute resources among the states (Frenk 2006; King et al. 2009). Georgia has also used the information from NHA to improve financial protection for the poor and improve equity in access to health care (Box 1.1).

Further, international comparability of NHA data allows countries with similar financing and health system structures to compare performance from an equity perspective. Box 1.2 summarizes several examples of comparative equity analyses using NHA. The need for comparative data and standard methods (such as SHA 2011) to conduct such analysis will be discussed in section 6.1 and Appendix A.

Analysis and projections to improve efficiency

Further, in Turkey, NHA have been used to estimate the cost of the universal health insurance (UHI) system, its impact on out-of-pocket payments, and to identify measures to capture cost efficiencies in the UHI. NHA

Box 1.1. Use of NHA to Promote Equity in Financial Access to Care in Georgia

Inequities in financial access to care in Georgia have been highlighted by routine NHA analysis. Data revealed that Georgia primarily relies on private sources of financing, accounting for 71 percent of total health expenditures annually between 2001 and 2007. In per capita terms, private health spending more than doubled over this period. This demonstrated the need for greater financial risk protection, particularly for the poorest populations.

NHA estimations were subsequently used to inform the Medium-Term Expenditure Framework (MTEF), which provided additional insurance coverage for the poor as protection from financial risks related to catastrophic health spending. As a result, 700,000 poor people (16 percent of the population) received insurance coverage for additional health care services and drugs. The benefit package was also expanded to include public health, primary health care, and select hospital care services so as to better provide financial access to care. (World Bank, 2008)

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

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

Source: Georgia National Health Accounts; WHO, 2009.

Box 1.2. Using NHA for Comparative Equity Analyses

National Health Accounts (NHA) data have been used in a comparative study to assess equity in the distribution of financing and health system resources in Bangladesh, Nepal, and Sri Lanka (Data International ***et al.***, 2001). All three countries have health systems in which the predominant sources of financing are taxes and out-of-pocket payments by households. Despite the similarity in financing and delivery systems, the authors found significant differences in terms of equity between Bangladesh and Sri Lanka. In Sri Lanka, both tax and out-of-pocket payments were found to be progressive means of financing, with government health care expenditures being pro-poor. In Bangladesh, health financing was modestly regressive, and the distribution of government health expenditures was not pro-poor.

More recently, this comparative analysis of expenditure distributions linked to NHA data has been extended by the Equity in Asia-Pacific Health Systems (Equitap) network. It analyzed the distribution of government health spending in a range of countries and territories in the Asia-Pacific region, and used NHA data to anchor comparative analyses of the progressivity of financing, and the household impacts of out-of-pocket healthcare spending. Its analysis of the equity dimensions of public health spending across 11 Asian countries and provinces revealed that the distribution of public health care is pro-rich in most developing countries (O'Donnell ***et al.,*** 2007), but results from Malaysia, Sri Lanka and Thailand showed that limiting user fees (particularly for the poor), and building a large network of health facilities is necessary in order to increase the pro-poor spending.

Equitap's study on the progressivity of health financing illustrated the structure and distribution of health financing in 13 Asian territories, combining health accounts and household survey data on household payments to estimate the distribution of health financing (O'Donnell et al, 2005a). An important finding from this study was that more affluent groups generally contribute more as a proportion of ability-to-pay in low and lower-middle income territories. Moreover, Equitap's study of the catastrophic impact of health financing revealed that, despite the concentration of catastrophic payments on the better-off in the majority of low-income countries, out-of-pocket payments still push many families into poverty (van Doorslaer et al, 2005). Overall, these studies illustrate both the use of NHA to conduct equity analyses with implications for developing pro-poor policies, as well as the benefits of comparative cross-country analyses linked to standardized NHA estimates.

analyses identified the potential for a 38% reduction of the government cost of the UHI through the cost-efficiency measures such as family medicine practice, spending caps for MOH and hospitals, and modest copayments, which have been adopted by the government to improve the financial sustainability of the UHI (Box 1.2[3, 4]).

A robust evidence base to inform policy decisions

Table 1.1 illustrates how several countries have used the evidence provided by the NHA data to inform their policy decisions and to foster accountability and transparency in the health system.

As illustrated in Table 1.1, information from NHA is also useful in allocating financial resources based on the country's health policies and priorities, which in turn are related to the long-term financial sustainability of a country's health system. For example, choosing the quantum of resources for treatment of non-communicable diseases and provision of long-term care has been a major policy issue for countries battling with the demographic transition and an aging population. Large disparities in public coverage of long-term care costs among nineteen OECD countries reflect variations in choice among countries in the way that long-term

[3] World Bank. 2004. *Preparing for Universal Health Insurance in Turkey: Estimation of Costs Under Different Scenarios.* Washington, D.C.: The World Bank

[4] Chawla, Mukesh, Menon, Rehka. 2011. Personal Interview. Head of Knowledge and Senior Economist, The World Bank. August 22.

Table 1.1. Policy Applications of NHA: Country Illustrations

Thematic Area	Country examples	Policy impact in the highlighted country example
Evidence for designing health policy	**Jordan** Philippines Serbia Korea Mali	**Problem:** Cost inflation in the pharmaceutical sector resulted in pharmaceuticals accounting for 34% of total health expenditures, or 3% of GDP. **Impact:** NHA results prompted Jordan to revise its rational drug use policy. For example, it developed a National Essential Drug List; a National Formulary for Essential Drug List; a Joint Procurement Department to oversee the procurement of pharmaceuticals across the public sector.
Health sector reform and financial risk protection	**Thailand** Philippines Kenya India Jordan	**Problem**: Weak financial risk protection left a large number of uninsured among the Thai population. **Impact**: Using NHA data, Thailand developed a policy on universal coverage in 2002, incorporating its Low Income Scheme with the Health Card Scheme and extending coverage to those previously uninsured. The composition of health financing has changed over time, with public financing increasing and households accounting for only 18% of Total Health Expenditure (THE) in 2008 (down from 44% in 1994).
Financial planning, budgeting, and financial sustainability	**Tanzania** Georgia Mali	**Problem**: In Tanzania, NHA brought to light the high degree of donor aid provided off-budget which inhibited budgeting and planning for key health care programs. **Impact**: NHA data were used to encourage donors to channel funds in a "basket" managed by government. Since then, the proportion of donor funds provided for health through on-budget arrangements has increased significantly.
Accountability and transparency	**Serbia** Burkina Faso Tanzania Thailand	**Problem**: Weak transparency in public and private financial flows to health, particularly "informal" payments to providers. **Impact**: NHA revealed that households incur high out-of-pocket payments, including under-the-table payments to providers. This resulted in the development of the Fiscal Bill Policy requiring providers to share fiscal invoices with patients. This promotes transparency as it generates a more accurate picture of overall financial flows within the health sector to facilitate planning and rational allocation of funds.
Equity (across population groups, regions, program areas)	**Turkey** Kenya Thailand Burkina Faso	**Problem:** Inequities in health spending left many population groups without financial access to care. **Impact:** NHA revealed a need to harmonize the benefit package across insurance schemes and mitigate out-of-pocket spending for the poor (through the Green Card holders program). As a result, 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, reaching 87% of the population compared to 67% of the population in 2002. Out-of-pocket payments have decreased from 27.6% in 2000 to 17.4% of total health spending in 2008.
Allocative and technical efficiency in health spending	**Mali** Philippines Kenya Burkina Faso	**Problem:** Weak allocative efficiency in Mali resulted in low financing for health at the periphery level. **Impact:** Mali has used insights from NHA to shift health financing from central to periphery (regional) levels, in order to implement the government's decentralization policy. The aim is to increase the budget ceiling at the periphery level and address needed capital and other investments.

(*continued on next page*)

Table 1.1. Policy Applications of NHA: Country Illustrations (*continued*)

Thematic Area	Country examples	Policy impact in the highlighted country example
Public health priorities	**Georgia** Sri Lanka Serbia Philippines Kenya	**Problem:** Limited knowledge of spending levels and trends for key public health programs in Georgia limited the impact of public health priorities. **Impact**: NHA were used to inform the 2007 UNGASS report, covering prevention and treatment costs for HIV. These results were then used to inform the government's HIV/AIDS strategy. TB sub-accounts were used by the government and development partners in evaluating the National Strategy Plan for TB and assessing the current level of TB-related expenditures in Georgia.

care is financed and provided (OECD 2005a). Burkina Faso, on the other hand, reviewed the end-use data from NHA to reallocate resources to poorer geographical areas and to institute free health promotion and preventive services (Box 1.3). Decisions to improve resource allocation to reach those populations who need it the most give NHA a clear purpose in driving improvements in allocative efficiency, in contributing to raising the equity of health spending, and in supporting country leaders in being accountable to the populations they serve. NHA can thus be used to increase the fiscal space available for public health expenditure, both through efficiency gains as well as through making an evidence-backed case for higher investments in health.

Review of effectiveness when combined with other data

NHA are an integral component of effective Health Information Systems (HIS), and Health Systems Strengthening (HSS) (WHO 2010a). Linking this information with other nonfinancial information (such as output and outcome indicators) provides the basis for powerful tools to monitor performance, link financial investments with attainments in health status, and drive improvements in effectiveness, efficiency, and quality of health services. Lebanon, for example, used the findings from its NHA exercise to put in place a comprehensive pharmaceutical policy and to renew its focus on primary and preventive health care, which helped it to reduce health spending and the burden of out-of-pocket spending.

International comparisons

NHA have also been used for benchmarking health system performance against established targets and goals at the national or international level, and in identifying existing gaps and challenges. Figures 1.1a and 1.1b illustrate the use of NHA in benchmarking the level of public expenditure on health (as a share of the country's GDP). In Figure 1.1a, the eight countries of the South Asia region (highlighted in black) are benchmarked in relation to their global peers (represented by hollow circles), as well as countries with similar levels of income (in terms of GDP per capita). The analysis was used to demonstrate that most countries in South Asia have a lower level of public spending on health than other countries with similar levels of income (LaForgia and Nagpal, 2011), making a case for increased public spending on health in these countries. As depicted in Figure 1.1b, a similar analysis was undertaken for Ghana (World Bank, 2011) using the same dataset, where Ghana was compared to other African, East European, and Asian countries. Such analysis can provide a useful benchmarking tool for in-country as well as international use.

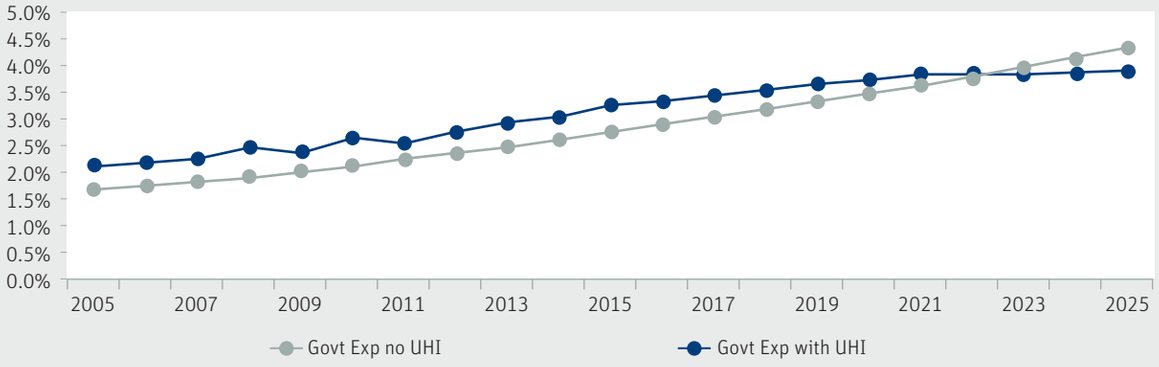
Box 1.3. Universal Health Insurance (UHI) in Turkey – Using NHA Analysis to Realize Efficiency Gains

In 2003, Turkey ranked behind most other 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 among middle-income countries. The public health sector was underperforming due to inefficiencies in resource allocation, under-trained staff, and poor incentives. To address these poor outcomes, the Health Transformation Program (HTP) was launched which included among other the establishment of universal health insurance (UHI) and a integrated primary health care system based on the family medicine model.

During the design of the HTP, NHA studies were conducted to estimate the additional health care costs of achieving UHI and cost saving opportunities that could help the Government of Turkey maintain health care costs at sustainable level while increasing insurance coverage. Different scenarios were used to model the various cost paths (see Table below). The analysis showed that increased utilization as a result of increased insurance coverage in the absence of additional efficiency measures could potentially threaten the sustainability of the UHI (Model 2 below). On the other hand, if increased insurance coverage was combined the introduction of family medicine, referral rates and non-referral outpatient visits to MOH hospitals could be reduced by 10% and 50% respectively resulting in cost savings. Further, introduction of expenditure caps for MOH, private hospitals, university hospitals, and pharmaceutical spending with modest patient copayments could reduce the public health spending on UHI by 38% while maintaining the level of reduction of out-of-pocket expenses (Model 4 below). These results were presented to policy makers.

Adoption by the Government of these measures in the design of the HTP, has lead to the significant efficiency gains and improved financial sustainability of the UHI system. In addition, significant improvements in health outcomes in terms of increased life expectancy and reduced infant and maternal mortality rates have also been realized. In Turkey, as the reform progressed, NHA studies have helped continued monitoring the financial sustainability of the UHI system (OECD/WB, 2008; World Bank/MOH, 2011).

Government Health Expenditure with and without UHI in Model 4 (after Cost Efficiency Gains) *% GDP*



Additional Costs of UHI (Trillion TL, 2002 Prices)

Model	Total Program Costs	Additional Government Costs	Additional Social Costs	Additional Out-of-Pocket Expenses
Model 1: Complete coverage, no changes in utilization patterns	14 113	3 826	2 091	(–) 1 734
Model 2: Complete coverage, with expected changes in utilization levels and patterns following introduction of insurance	17 005	6 462	4 728	(–) 1 734
Model 3: Complete coverage, with expected changes in utilization levels and patterns following introduction of insurance, and introduction of family medicine	16 755	6 213	4 214	(–) 1 998
Model 4: Complete coverage, with expected changes in utilization levels and patterns following introduction of insurance, introduction of family medicine, and with measures adopted to reduce pharmaceutical, inpatient care and hospital-based outpatient care expenditures	14 532	3 989	2 299	(–) 1 690

Box 1.4. Use of NHA to Improve Resource Allocation Across Geographies and Program Areas in Burkina Faso

Burkina Faso has used NHA to improve resource allocation across regions and key program areas. The 2005 NHA revealed major geographic inequities in health spending with poorer regions receiving less of total health spending than more affluent areas. For example, Boucle du Mouhoun and Nord, two of the poorest regions within the country with poverty incidences of 60 percent and 69 percent respectively, received a combined total 11 percent of all health care spending, but were home to 20 percent of the country's total population. In contrast, the wealthier Centre region, home to just 9 percent of the population, received 29 percent of national health care spending, despite having only a 22 percent poverty incidence.

The discrepancy in health spending was due to the differential ability of 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 by 62 percent between 2000 and 2009. The results also prompted the central government and development agencies to reallocate resources to poorer regions.

Effective resource tracking data have also been used to improve equity in resource allocation across health programs in Burkina Faso. For example, the 2005 NHA found that 46 percent of the total health budget was spent on medication and other medical goods for outpatients, whereas 10 percent 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 health care services. Following this, the 2006 NHA results showed that spending on medical goods for outpatients declined to 31 percent, while spending on preventive health increased to 26 percent.

In addition, the NHA results showed insufficient district health spending, indicating little involvement of the health sector at the district-level. This prompted the central government to further decentralize responsibilities in health, for example, by transferring money and staff from central to district governments.

(Zida et al, 2010)

Transparency at the global level

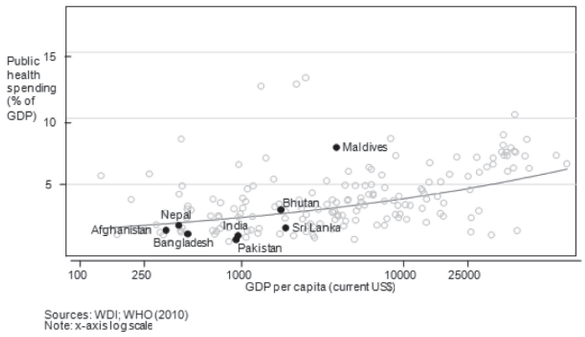
For international development agencies, NHA can inform the debate on the value of additional funds from development partners. Thus, it can provide critical information to international partners for additional resource needs to meet global priorities such as the Millennium Development Goals (MDGs). NHA data have provided evidence to forecast the availability of resources and, based on this assessment of needs, US$ 40 billion was pledged for women's and children' health at the September 2010 UN summit.[5] In May 2011, the United Nations Commission on Information and Accountability for Women's and Children's Health proposed a framework for global reporting, oversight, and accountability on women's and children's health. This accountability framework will track results and resource flows at global and country levels, as detailed in Chapter 6, making a clear case for resource tracking using the NHA framework.

NHA can also provide data for studies examining how the availability of international aid influences the allocation of domestic resources for the health sector (Farag et al. 2009; Lu et al. 2010). By integrating NHA data into other policy instruments, such as public expenditure tracking systems, public expenditure reviews (PERs), and medium-term expenditure frameworks (MTEFs), countries can link expenditures to budgets, making it possible to view the allocations in the context of complete public expenditure management,

[5] See *http://www.who.int/pmnch/activities/jointactionplan/jap_financialgapswg/en/index.html and http://www.who.int/pmnch/en*

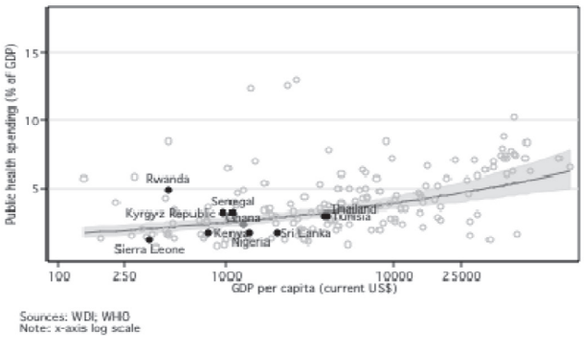
Figure 1.1. Public Expenditures on Health as a Share of GDP and in Relation to Income Per Capita, 2008

1.1a: South Asia



Sources: WDI; WHO (2010)
Note: x-axis log scale

1.1b: Ghana in relation to peers



Sources: WDI; WHO
Note: x-axis log scale

as well as to forecast future needs. Thailand provides an example of such an approach (Box 1.3). Using internationally accepted tools to define and measure health expenditure for these policy instruments also ensures that the numbers used are internationally comparable.

Analysis of the fiscal space

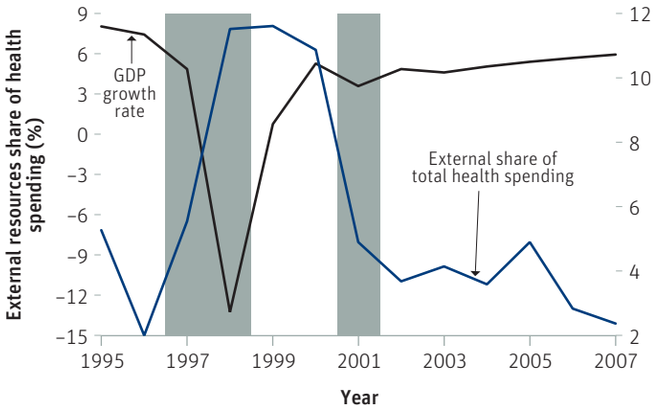
For a variety of reasons—e.g., for assessing the availability of public resources for meeting health-related MDGs or for implementing much-needed reforms such as attaining universal health insurance coverage—there has been a growing demand for a framework for analyzing the fiscal space for the health sector in particular.

The primary questions motivating any fiscal space assessment for health generally include:

- Given well-defined needs, what are the prospects (if any) for increasing public spending on health in the short- to-medium term without jeopardizing the government's long-term solvency or crowding out necessary expenditures in other sectors?
- What is the impact of broader macroeconomic factors on public expenditures for health; and conversely, to what extent does public and private spending on health influence the macro-economy?
- What can governments realistically afford, given macroeconomic and other constraints on public expenditures for health?
- Are there examples of innovative strategies that have been successful in increasing fiscal space for health in some countries that could be adopted in others?

It is virtually impossible to conduct a robust fiscal space assessment without access to baseline NHA. First, analysis of NHA data provides a baseline assessment of the current allocation of fiscal space to health. Second, and of obvious importance for reform possibilities, NHA can help identify the need for additional public (and total) spending on health and the potential fiscal space areas that could help meet such an identified need. For example, Turkey's Health Transformation Program aims 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, such as hard caps on public health spending,

Figure 1.2. GDP Growth and External Resources Share of Health Spending in Indonesia



Source: IMF; WHO.
Note: Shaded bars are years when GDP growth declined by more than 1% point.

cost-sharing mechanisms, as well as micro-efficiency measures to ensure financial viability and fiscal sustainability of the health system (OECD/World Bank, 2008). Many such measures were introduced between 2007 and 2010, thus keeping public health spending at 6% of GDP.

By parsing health resource flows by sources and use of funds, NHA data can also help assess the role of external sources in creating (or distorting) fiscal space for health in low- and lower-middle-income countries. An analysis by Shiffman (2008) for instance, highlights the fact that in many African countries with relatively low-prevalence, donor commitments for HIV exceed the national budget devoted to all other diseases and public health activities collectively, suggesting a possible skewing of priorities towards donor preferences. Analysis of NHA data can also help assess whether or not donor funds tend to create additional fiscal space, or simply displace domestically-sourced public expenditures on health. Prudent use of external resources is demonstrable in Indonesia where analysis of NHA data shows that donor funding on health as a share of total health spending rose dramatically in an attempt to cushion the impact of the 1997–1998 financial crisis (Figure 1.2).

NHA data and its micro components can be analyzed in order to assess whether public resources for health might need to be reallocated to improve technical and allocative efficiency (another critical source of fiscal space for health) to shed light on *equity*—Are resources going to areas where they are needed the most? Are the poor benefitting from public resource outlays?—and *efficiency*—Is the country utilizing resources so as to maximize health outputs obtained? Are countries spending too much for pharmaceuticals? NHA data can be analyzed to provide answers to these and other efficiency-related questions that can help feed into fiscal space assessments.

This section has reviewed various aspects of the value add that NHA data can contribute in making health financing more efficient and equitable. Weighed against these benefits, the costs of NHA activities is fairly small, especially if long-term capacity building and cost saving efforts are taken into account (see Chapter 4 for details). For example, the costs for the latest round of production and dissemination of NHA in Burkina Faso and Thailand represent 0.02% and 0.0006% of the respective governments' spending on health.[6] This rough calculation of cost, alongside the potential benefits and cost efficiencies NHA can help capture, suggests that investing in NHA activities is a cost-effective and "smart" investment for developing countries seeking to make better use of limited resources.

[6] Boureima Ouedraogo and Some Tegwouli, 2011. Personal Interview. Director-General, Information and Health Statistics, Director of Studies and Planning, MOH, Burkina Faso. Walaiporn Patcharanarumol. 2011. Personal Interview. Senior Researcher, IHPP, MOPH, Thailand. June 22.

1.2 The Case for Institutionalizing National Health Accounts

Increasing awareness of the information and insights that NHA can offer policy makers and development partners has led to an ever-increasing number of countries producing and utilizing health expenditure data. The practice of accounting for national health expenditures originated in the 1960s amongst OECD member countries. By 1980, only fifteen countries were producing health expenditure information, still mainly OECD members; this number rose to twenty-five by 1990. In 2000, eighty-seven countries had produced such information at least once and thirty-seven of these were producing it on a regular basis. By 2010, one hundred and thirty countries had produced NHA at least once, with forty-one countries producing it routinely through internationally accepted health accounting techniques.

The increased production of NHA is in many cases thanks to the hard work of individual country champions who have designed and implemented the methodologies in the context of their respective countries. Wider NHA production and use has also been facilitated by regional agencies and academia through knowledge sharing,[7] and by international development partners through financial and technical support for these efforts. Use of NHA has become more widespread, from being a resource-tracking tool used primarily in the richer countries to a tool used to inform policy in some of the poorest countries of the world.

While there is consensus on the need to improve the availability, quality, and policy relevance of financial data on health, NHA have not been widely institutionalized in most developing countries. Even after the rapid gains made in recent years, NHA often remain a supply-driven exercise sponsored principally by donors and development partners rather than governments. Even where there is interest, governments have often been unable to sustain NHA production, due to scarcity of financial and human resources or paucity of the data needed to produce health accounts regularly. In some instances, accounts have been produced but have not been widely used as the link to policy makers has been weak, so limiting their potential impact.

Institutionalization, by its nature, is suggestive of an ongoing process in which a set of activities becomes an integral and sustainable part of a formal system. Institutionalization can also be seen as a sequence of events leading to "new practices becoming standard practice" (Yin 1978). Merino Juárez and Raciborska (2008) developed a framework for assessing the institutionalization of NHA using the dimensions of an HIS as defined by the Health Metrics Network (HMN).[8] Supported by this prior work and based on feedback from about 40 countries which have been consulted, a working definition for institutionalization of NHA was arrived at, as follows:

Definition of Institutionalization of NHA

'Routine government-led and country-owned production and utilization of an essential set of policy rele-

[7] "Regional agencies" is a term used in this document to define a partnership that helps coordinate the activities of countries in a specific region to promote a particular interest. In this case, this partnership would support activities related to NHA or health financing (or both). It would comprise the regional agencies of international organizations, such as the regional offices of WHO, the regional networks (in this case mostly regional NHA networks), regional development banks, or regional institutions like the European Observatory on Health Systems and Policies (*www.euro.who.int/en/home/projects/observatory*).

[8] See *www.who.int/healthmetrics/about/en/*

vant health expenditure data using an internationally accepted health accounting framework.'[9]

NHA represent a global public good and their use is certainly not limited to those who have produced them, nor does their use by one entity diminish their use by others. Thus, the cost of producing NHA is to be compared to the full value that national and international stakeholders can potentially derive from the information. There are many positive externalities around this information that are yet to be completely realized, and in many cases these are not yet fully understood. Economic theory suggests that in the absence of formal mechanisms to ensure sustained production, NHA data will be under produced by health information services, which may not be a desirable situation for countries or international development agencies.

Institutionalizing NHA fosters their greater use and demand and improves transparency and accountability in health systems. Institutionalization reduces the cost and time required for the NHA process, and is critical for ensuring local ownership and improving demand. If countries manage the process themselves, they usually design and implement cost-effective programs that they see as being in their best interests. Institutionalizing NHA also fosters greater use and demand for NHA as a tool for budgeting and tracking resources. The more that NHA findings are used by policy makers and policy advocates, the more likely it is that this will strengthen demand for greater policy use of NHA.

1.3 Holistic Framework for Institutionalizing National Health Accounts

The definition set out above is supported by a framework for the institutionalization of NHA, as depicted in Figure 1.3. This framework is predicated on the belief that institutionalization goes beyond the recent progress made by several countries in the production of NHA. Instead, the framework proposes a complete process cycle, undertaken on a routine basis, with the clear purpose of ensuring that NHA inform the decisions of national policy makers.

Institutionalization, then, requires a cycle of activities to be embedded alongside the health systems planning and budgeting cycles. Further, it requires a strategy to be developed to translate data into insights that are relevant for policy making.

1.3.1 Stages in the NHA Process Cycle

The stages in the NHA process cycle are as follows:

Demand from country leaders. In addition to the global phenomenon of growing demand for information and accountability, NHA provide country leaders with the evidence required to make difficult decisions on the equitable and efficient allocation of scarce health resources. Demand from country leaders is thus an essential stage in the NHA process. This demand can be further accentuated, strengthened, and sharpened when put in the context of broader health financing issues, through triangulation with other instruments and, as more information is made available, through appropriate 'translation' of the information contained in the NHA, constituting a virtuous circle. The element of 'utilization' in the above definition of institutionalization responds to this stage in the process cycle.

Production of NHA, process management, and quality assessment. Major progress has

[9] Global consultation in Washington DC (Oct 20–21, 2011)

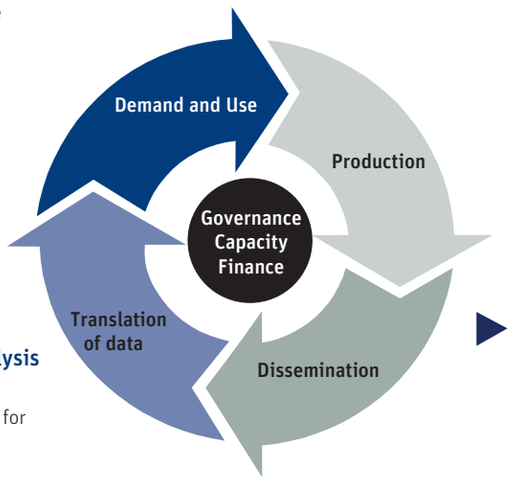
Figure 1.3. Framework for Institutionalization of National Health Accounts

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



4. Translation of data and dissemination of specific analysis

- 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

3. Dissemination

- 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

Source: The World Bank.

been achieved in this part of the NHA cycle in recent years, and capacity to produce NHA has grown significantly over the past decade, especially in the developing world. Nevertheless, sustained production of NHA remains a major challenge. Depending on their context, countries may face issues around the ownership of the production, the appropriate level of sophistication to match the country's capacity and financial resources, and linkages between production and utilization. These issues are elaborated in further sections of this document.

Dissemination of NHA findings. Dissemination of information provided by NHA can be done both before and after data translation. While dissemination of the NHA will itself enhance transparency (and, with time, greater analysis and insights), it is very important to also disseminate the 'translated' data arising out of the NHA. Dissemination provides the vital link between production and utilization, and requires effective targeting and messaging.

Translation of NHA findings and dissemination of specific analysis. NHA can be complex and often require further analysis (sometimes using additional datasets and other tools and instruments) to provide essential information on socioeconomic and health financing issues that assist country leaders in taking decisions and tracking progress towards health system goals. The process of 'translation' achieves this by extracting the information from NHA and creating new documents useful for the specific needs of different stakeholders and policy makers.

Institutionalization of NHA will accelerate when the cycle of NHA activities starts with demand from policy makers who clearly articulate the key policy questions NHA can help inform. Demand from policy makers helps create an enabling environment

for accessing quality data and translating it into policy-relevant briefs. However, in many countries, the cycle starts with the production of essential data, which goes through incremental improvements that can be leveraged when there is political demand to achieve cost efficiencies and more equitable spending.

For example, in the USA, NHA production began in the 1960s and has been produced routinely. In 1980, projections for a five-year period began, for which continuous improvements have been made, to allow for the 75-year projections made today. During the 1990s, NHA projections were increasingly integrated into Medicare trust funds, to inform key policy issues of federal relevance. Recently, NHA data in triangulation with demographic data has provided evidence for analyzing the current financial crises and US debt issues. The demand for and sophistication of NHA data has grown over time. Sustained production over time allowed economists and statisticians to make incremental improvements to generate and capture a "policy window" for improving efficiency and equity in health spending.[10]

1.3.2 Core Elements of NHA Institutionalization

Three core elements—governance, capacity, and finance—form the heart of the framework presented above, and underpin the institutionalization of all the stages in the process cycle. The interplay between these core elements and the process stages is illustrated in Figure 1.4 and briefly addressed in the remainder of this chapter. Each of these core elements is then discussed in greater detail in the subsequent chapters of this document.

Governance. A well-defined governance structure offers a framework for engaging key stakeholders to run and link each step of the NHA cycle and to improve data collection, validation, and eventual uptake in decision making. Such a structure provides the platform to connect the various political, administrative, and technical stakeholders involved in the process and thus influences how each step in the cycle takes effect and is linked to the other steps. The institutional structure of NHA governance can take multiple forms:

- It can be established entirely within the MOH
- It can be established within the MOH but with a formal structure that provides for multisectoral collaboration
- Ownership can be provided jointly by multiple sectors of government
- Ownership can reside outside of government.

Further, within these models of ownership, the actual production itself can be 'housed' inside a government entity or outsourced to an external agency such as an independent research institution, a public school of health, or the national statistics office. There is no right or wrong model in all these choices—there are strengths and weaknesses in each model and countries need to choose the one that best fits their institutional capacity, financial resources, and political context. Failure to consider governance in the NHA institutionalization plan, however, may mean that key opportunities in the health sector are missed. These aspects are elaborated in Chapter 2 on governance.

Capacity. The NHA process requires appropriate individual, institutional and environmental capacity to drive and sustain the cycle. The level of sophistication of NHA needs to match the country's production and analytical capacity, as well as its capacity to apply the information for policy purposes.

[10] Waldo, Daniel. 2011. Written Communication. Senior Economist, Actuarial Research Corporation. 17 September 2011.

Figure 1.4. Critical Components in Managing the NHA Cycle and Their Influence on Performance

	Governance	Capacity	Finance
Definitions	• Organizational structure that runs and links each step of the cycle	• Individual, institutional, and environmental capacity to drive and sustain the cycle	• Finances to support the cycle of activities and the ability to generate cost efficiencies
Production	• Mode of production influences the technical capacity, connection with data sources, link to policy makers, and sustainability	• Knowledge and skills are necessary to produce NHA • Level of NHA sophistication needs to match countries' capacity	• Production accounts for majority of total NHA cost • Upfront cost savings are possible, and can increase sustainability
Dissemination	• Dissemination strategy and channels impact effective targeting and messaging	• Skills to target communications are critical to influence users	• Resources need to be allocated for dissemination, translation and use • Long-term financing strategy across the cycle that defines cost sharing between countries and donors over time ensures sustainability
Translation of data	• Robust structure for producers and users to interact is crucial to improve analysis and use	• Need capacity to draw useful insights from NHA to inform policies, and make the case for NHA to policymakers	
Demand and use	• Formal structure that links NHA with planning and budgeting processes can ensure that data informs policy	• Capacity of policy makers and other users to understand and reflect key findings on policy decisions is critical for the effective use of data	

Source: The World Bank.

Each stage in the NHA process also requires specific skill sets in the NHA teams, which need to be matched with the skill sets available in-country or internationally, and made available for effective completion of the task. These aspects are detailed in Chapter 3 of this document.

Finance. The availability of adequate financial resources to regularly undertake the NHA process is key to sustaining NHA activities. It is important to put in place a long-term financing strategy as a part of country's plan to build capacity and achieve cost efficiencies, based on a country's specific socioeconomic contexts. It is also appropriate to institute mechanisms for higher cost efficiency, such as by reducing the reliance on specific surveys for the purpose of NHA alone, and by integrating NHA data requirements with the country's regular reporting systems or with other planned surveys. These issues are elaborated in Chapter 4 of this document.

In considering these three core elements of the NHA institutionalization framework, it is important to emphasize that while a country can 'borrow' capacity and finance, country leadership and ownership of the entire NHA process is crucial. In other words, NHA can be institutionalized effectively in a country even in the absence of adequate domestic sources of finance and capacity—but not in the absence of true ownership by that country.

1.3.3 Country Context and its Implications for Institutionalization

The four-stage process cycle and the three core elements discussed above represent two different dimensions of the institutionalization framework for NHA. The third dimension of the framework is represented by the country context, which has a multitude of implications for how NHA are institutionalized. Issues surrounding ownership, financial sustainability, and cost efficiency of the NHA process can differ significantly at the

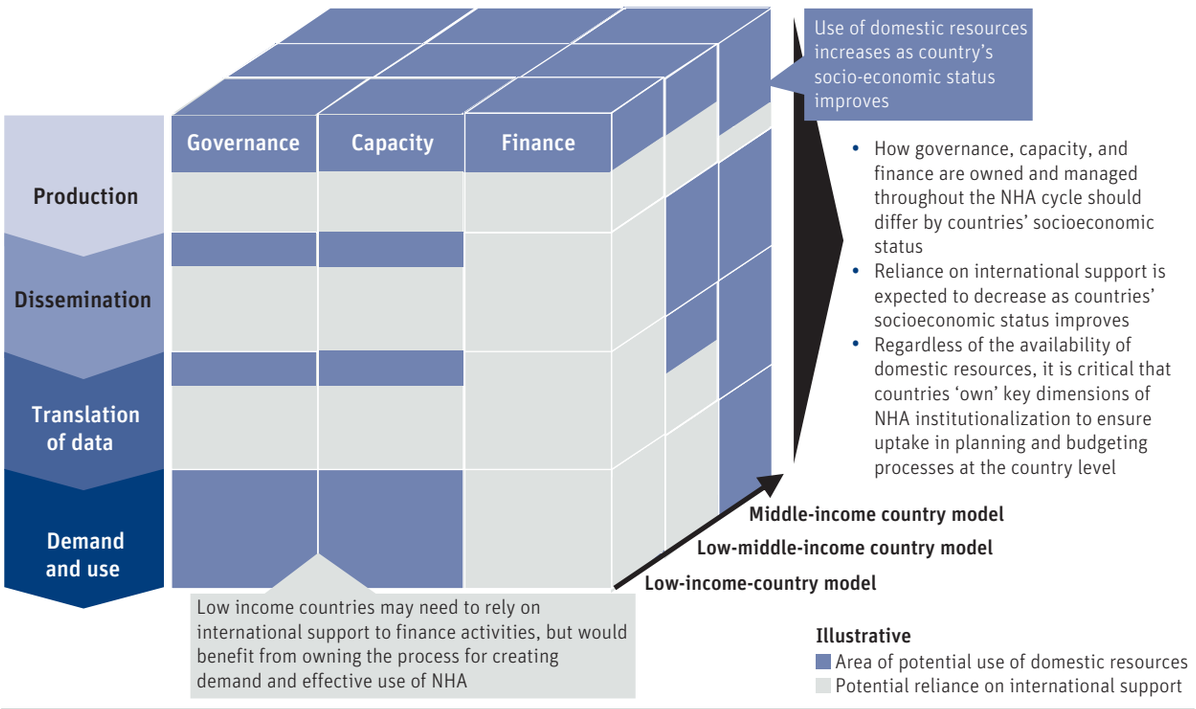
country level. So can the capacity aspects of knowledge transfer, tools and skills, and linkages of NHA to a country's specific financial resources and its planning/budget priorities. One of the major influences for all these aspects of the country context is the resource environment. We have therefore used the differences a country's income levels (using the World Bank income classification of countries) to represent this third dimension, as illustrated in Figure 1.5.

This three-dimensional model takes cognizance of the fact that 'one size does not fit all' and that the country context is an important determinant for making appropriate choices for the institutionalization of NHA. In particular: As a country's economy matures and its skill-sets grow, its capacity to afford recurring costs as well as undertake in-country production of NHA also increases. However, this ability to finance NHA domestically, and also the availability of domestic capacity to produce and translate NHA, is to be distinguished from country ownership of NHA which needs to exist even when the process is externally funded and/or externally produced.

With increasing complexity of health financing systems, as countries move from low-middle income to middle income, there may be need for more sophisticated NHA information and to invest in more detailed NHA exercises. As a corollary, in a low-income setting it is important to match the complexity of the NHA exercise with the level of resources, prioritizing essential information for policy makers.

In the chapters that follow, this document synthesizes, organizes and builds upon actual country experiences to provide a systematic framework and methodology that country policy makers can deploy for institutionalizing NHA in their own specific context.

Figure 1.5. A Three-Dimensional Model of Country Ownership of NHA Institutionalization



Source: The World Bank.

Chapter 2

Governance Structures for NHA

This chapter assesses the range of possible governance models for NHA, including the institutional location of NHA activities. It shows how the choice of governance structure is influenced by a country's income level, its available institutional capacity, and the location of the resources necessary to undertake the work. This chapter also considers the specific styles and modes of NHA production, which are related to its governance structure and influenced by similar considerations. Broadly speaking, NHA production can either be handled *in-house* by the government entity acting as the "institutional home" for NHA activities, or *outsourced* to an independent research organization or a school of public health, as examples. This chapter also discusses the importance of supporting the governance structure by legal and budgetary frameworks.

Key points are:

- The governance structure of NHA lies at the heart of the NHA institutionalization cycle. It is a vital element linking NHA production to the effective use of the data to inform policy decisions.
- Four governance models have been identified:
  1. Government mandated: MOH-led production and use with limited input from outside the health sector
  2. Government mandated: MOH-led production with multisectoral Technical and Policy Advisory Groups
  3. Government mandated multisectoral Production, Technical and Policy Advisory teams
  4. Externally mandated with limited or no government collaboration
- Countries can choose their model in view of their financial and human resources and political context, taking into account the unique strengths of the model chosen, while being able to preempt potential challenges associated with the chosen model. Country experiences also suggest several lessons for selecting a governance model:
  - Countries can improve the sustainability of NHA production by locating the production of NHA where technical expertise resides, including statistical, accounting and health economics expertise.

- Regardless of the model and production mode selected, ownership of the "institutional home", especially in connecting analysis of data with policy use, is crucial.
- A governance structure with multisectoral involvement is likely to facilitate access, transparency and quality of date, which is likely to lead to broader uptake of the insights this data help produce by policy makers.

- It is important that the governance structure is supported by appropriate legal and budgetary frameworks that help countries ensure routine NHA production, dissemination, and translation, and improve sustainability of the activities.

2.1 Identifying the Right Institutional "Home" for NHA

The governance structure of NHA—its institutional "home"—lies at the heart of the full institutionalization cycle. It is a core component in linking NHA production to the use of the data and their "translation" to inform policy (i.e. the further analysis that translates large volumes of data into insightful evidence that supports policy makers in their decision making). Failure to consider governance in the NHA institutionalization plan may mean that key opportunities in the health sector are missed.

This NHA "home" differs from country to country and depends on the country context and its institutional, political, and fiscal capacity. There are different governance models that countries may consider in this regard; we have identified four models based on an extensive literature review and interviews with producers and policy makers in more than forty countries, as well as with staff of development agencies and donors, including World Bank staff globally. These interviews have suggested potential strengths and challenges that apply broadly to each model. It is important to highlight the possible advantages and disadvantages of each so that countries can plan how to deal with these challenges in advance.

It is important to note that the institutional "home" of the NHA may shift over time, and that the availability of technical expertise will indicate the most logical place for NHA to be located. Korea provides an example as the institutional "home" for its NHA has changed over the years, based on where expertise for its production has been located (Box 2.1[11]).

We begin by proposing a generic framework that highlights the various *roles and*

[11] Jeong, Hyoung-Sun. 2011. Personal communication. Professor, Department of Health Administration, College of Health Science, Yonsei University. August 11.

Box 2.1. Changes in Governance Structure in Korea

Over time, Korea has experienced a series of changes to the institutional "home" for NHA—from the Korea Institute of Health Services Management (KIHSM), predecessor of the Korea Health Industry Development Institute (KHIDI) in the early 1990s, to the Korea Institute of Health and Social Affairs (KIHASA) Management (1998–2005) after joining the OECD, and finally (as of 2003) to Yonsei University, commissioned by the Ministry of Health and Welfare. The shift in the "home" of NHA was due to the level of technical expertise at Yonsei. Whereas previously NHA tables were produced by the KIHSM and the KIHSA 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 official organization responsible for the production of NHA is the Ministry of 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.

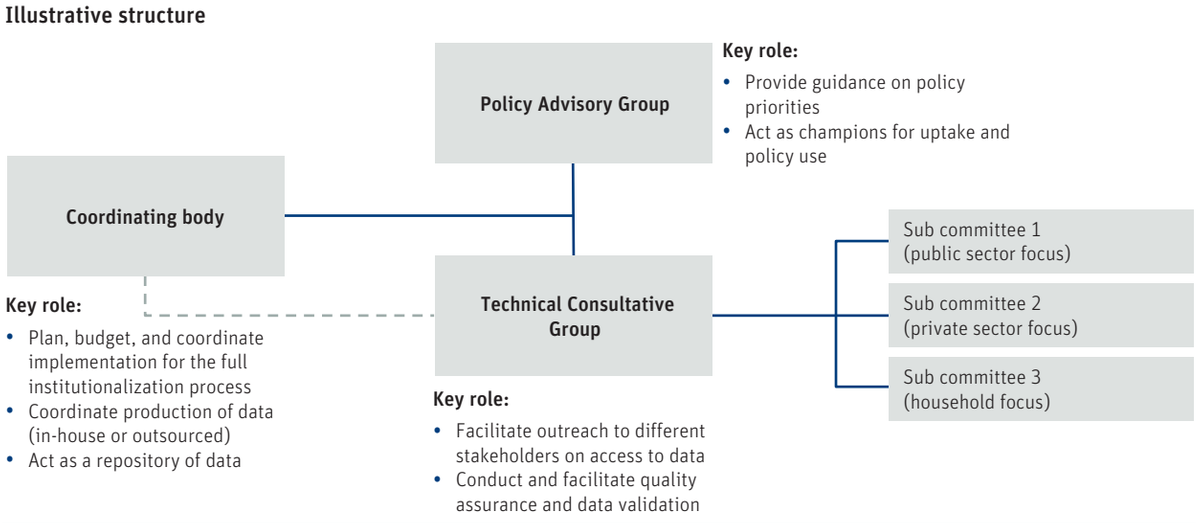
(Jeong, 2004)

responsibilities that make up the cycle of NHA activities. This is not a one-size-fits-all model but is rather meant to serve as an illustration for countries to think through when delineating the various tasks and responsibilities in institutionalizing NHA. Irrespective of the governance model chosen, it is important that responsibilities be clearly delineated and delegated. Here is an example of how roles and responsibilities could be structured into three main teams (Figure 2.1):

- A *Coordinating Body* can be employed to plan, budget and coordinate the full cycle of NHA activities. Activities of the Coordinating Body may include: developing and managing the NHA budget; coordinating a data repository; developing an effective communication strategy; and managing the work of health accountants.
- A *Policy Advisory Group* facilitated by the Coordinating Body could then potentially provide the critical link between NHA results and the uptake and use of data to inform policy. The Policy Advisory Group would therefore be responsible for providing guidance on policy priorities and serve as "ambassadors" of NHA and of NHA insights to the respective organizations they represent, to ensure that these are applied to policy. Its members would liaise with key decision makers to ensure buy-in and ownership of the data, and most importantly provide them with access to essential information that can guide their decision making.
- A *Technical Consultative Group*, also facilitated by the Coordinating Body, could provide guidance on the technical side—e.g., reaching out to entities that provide data inputs for NHA production, validating and ensuring quality of the data, and so on. Within the Technical Consultative Group, various sub-committees could interact directly with public, private, and household sub-committees to ensure the regular feed-in of the data needed for NHA production.

Countries often establish a Steering Committee to oversee and support NHA activities, which in some settings serves as a Policy Advisory Group and in others serves as a Technical Consultative Group. It is important for countries to clearly define the function of each entity, and ensure a body is in place to provide guidance on policy priorities and serve as a link between NHA insights and policy (i.e. the function of Policy Advisory Group).

Figure 2.1. Illustrative Framework for Defining Roles and Responsibilities

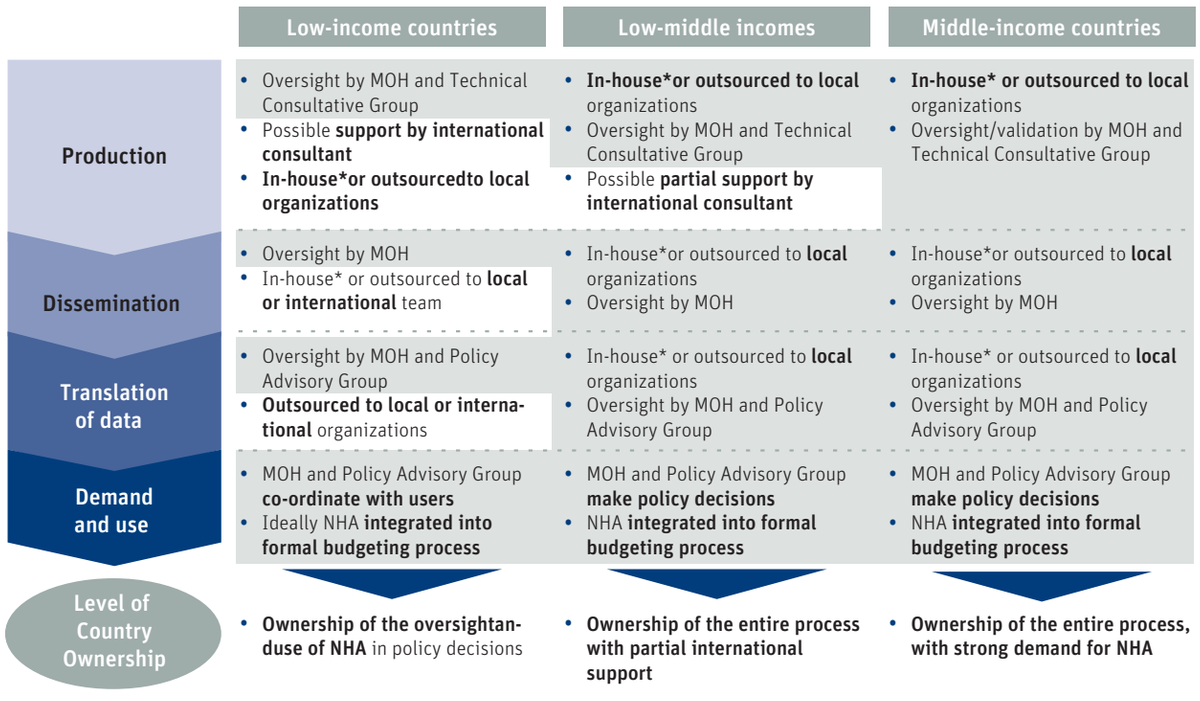


Source: The World Bank.

The choice of governance framework may also be affected by a country's income level, its access to skilled resources and location of those resources. Here are examples (illustrated in Figure 2.2):

- ***Low-income countries.*** Here, resources are usually scarce and institutional capacity weak so, while production may be conducted in-house (by the MOH or local health council), NHA production may be outsourced to a local entity (within or outside of government, such as a university or other research organization) or international entity outside government with quality assurance and validation conducted by the MOH or NHA Technical Consultative Group. Here, dissemination may also be conducted in-house (within the MOH or an internal health council), or outsourced to a local agency (within or outside government) or an international entity outside government. Similarly, the "translation" of NHA data into insights to inform policy could be placed outside government entirely and undertaken by a local or international agency. "Translation" may be coordinated by the MOH and NHA Policy Advisory Group, which can coordinate with users of the data.
- ***Low-middle-income countries.*** Here, responsibility for these key NHA functions may change slightly, particularly as they have greater domestic resources at their disposal to dedicate towards NHA. In this case, NHA production may be conducted in-house (by the MOH or local health council) or outsourced to a local entity (within or outside government), with quality assurance and validation conducted by the MOH or NHA Technical Consultative Group. Limited financial support may be available from international agencies to support production.

Figure 2.2. Examples of Governance Framework for NHA by Countries' Income Status



Source: The World Bank, based on country interviews
** In-house: By MOH or health council primarily in charge of the country's health system.*

Dissemination may also be conducted in-house (within the MOH or an internal health council) or outsourced to a local entity within or outside government. Similarly, "translation" of NHA data into insights to inform policy could be outsourced to a local agency (within or outside government), coordinated by the MOH and NHA Policy Advisory Group, which can integrate NHA into formal budgeting and planning processes and use the data to make policy decisions.

- ***Middle-income countries.*** Here governance may take a different approach given the greater resources available to lead and own various activities in the full cycle of NHA activities. As a result, middle-income countries may handle NHA production in-house (within the MOH or local health council) or delegate this work to a local agency within or outside government (e.g., Central Statistical Agency). Again, validation and quality assurance could be assumed by the MOH and NHA Technical Consultative Group. Similarly, dissemination could be conducted in-house (within the MOH or by a local health council) or delegated to a local agency within or outside government. These same entities could play a role in the "translation" of insights from NHA data to inform policy, with the MOH and Policy Advisory Group ultimately applying these insights to directly affect policy, while fully integrating NHA into formal budgeting and planning processes. These processes can ultimately culminate in strong ownership of and demand for NHA at the country-level.

2.2 Governance Models Compared

The four governance models identified above are considered here, along with their potential strengths and challenges (also summarized in Figure 2.3 and Figure 2.4).

1. ***Government mandated: MOH-led production and use with limited input from outside the health sector.*** Some countries host NHA strictly within the statistics, economics, or planning units of the MOH. This typically indicates that data collection and production are conducted or, if outsourced to an external organization, overseen by the MOH. Management and quality assurance may be tasked to the same production team or a wider NHA Technical Consultative Group within the MOH responsible for overseeing the team's work. Similarly, "translation" of data may be conducted by a Policy Advisory Group before dissemination to and use by technocrats who can link the evidence to relevant health policies. This model typically entails that demand for the data is driven by the government agency that acts as the institutional home for NHA, often the MOH. In this model there is little to no collaboration across agencies and ministries within government, with ownership of the full cycle of NHA activities largely remaining within the MOH.

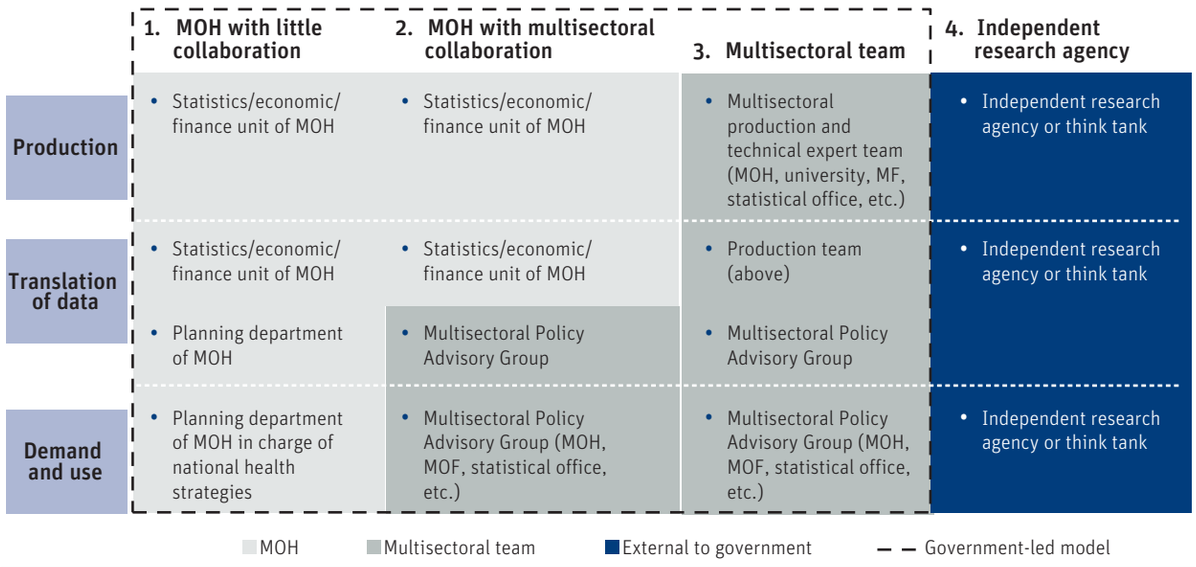
Potential *strengths* of this model are:

- Data analysis is likely to reflect policies and priorities within the MOH, increasing the likelihood that insights from the data will be generated to inform health policy.
- Further, the team responsible for production will tend to have strong public health expertise.

Potential *challenges* of this model are:

- The production team may lack the statistical or accounting expertise needed for NHA production.
- Use of data to inform policy may be limited to the MOH, limiting the

Figure 2.3. Governance Structures by Key Function



Source: The World Bank

Figure 2.4. Governance Structures: Possible Strengths and Challenges

	1. MOH with little collaboration	2. MOH with multisectoral collaboration	3. Multisectoral team	4. Independent research agency
Potential Strengths	• Can expect analyses to reflect policies and priorities within MOH, increasing the likelihood that data will inform policy • Strong public health expertise among producers	• Analyses typically reflect policies and priorities within MOH, as well as broader government policies (e.g., MTEF), and other planning and budgetary processes • Strong public health expertise among producers • Can leverage team members' connections to facilitate access to data inputs • May have greater objectivity in use of data to inform policy • Ease of coordination with MOH as "anchor" or owner of the NHA process	• Can leverage broad/ multisectoral expertise of team to facilitate production • Can leverage team members' connections to facilitate access to data inputs for NHA production • May have greater objectivity in use of data to inform policy	• Can "showcase" results and prompt government to take action, particularly where there is lack of interest by government • May have strong technical or health expertise • May have greater objectivity in analyses to inform policy
Potential Challenges	• May lack statistical or accounting expertise needed for production • Use of data to inform policy may be limited to MOH • May lack objectivity in selecting analyses and using results to inform policy • May focus on tracking resource flows within health sector alone, which may limit understanding of the total resource flows to health	• May lack statistical or accounting expertise needed for production • Requires multisectoral coordination • Multisectoral coordination requires strong champion to effectively bring stakeholders together		• Results may not be validated by MOH or other agencies providing data inputs • Lack of ownership by MOH or other government entity may limit ability to impact policy • Lack of sustainability

Source: The World Bank

ability of other government agencies (e.g., Ministry of Finance) to use data to shape policy. A potential limitation of this model is that it tends to offer limited access to and validation of data outside the MOH, given the lack of collaboration and input from other agencies.

- The analyses conducted for policy use are likely to be driven by the MOH, rather than by the needs of other agencies within government.

2. ***Government mandated: MOH-led production with multisectoral Technical and Policy Advisory Groups.*** Another type of governance structure is one where the institutional "home" of the NHA lies within the MOH, yet where there is multisectoral involvement through an NHA Technical Consultative Group and/or a Policy Advisory Group that is both technically and politically savvy (Box 2.2[12]). In this example, data collection and production are conducted or, if outsourced, overseen by the team housed within the MOH. Access to and validation of data that exist outside the scope of the health sector can be facilitated by Technical Consultative Group members. Management and quality assurance may also be provided by a multisectoral Technical Consultative Group responsible for providing methodological guidance and supervision. This group may include representatives from the public and private sectors, universities, development partners, or research organizations. "Translation" and dissemination may occur through a multisectoral Policy Advisory Group. Given the multisectoral involvement in this model, demand for NHA data may come from the MOH, Ministry of Finance (MOF), development partners, or the various stakeholders involved in the Advisory Group. Nevertheless, the MOH continues to serve to "anchor" the NHA institutional cycle from production to use. In other words, the MOH coordinates the process and serves as the primary custodian of NHA activities. For example, in Japan, the MOH mandates

[12] Ally, Mariam. 2011. Personal Interview. Head of Health Financing Unit, Ministry of Health and Social Welfare, Tanzania. July 7.

Box 2.2. Governance Through the MOH with a Multisectoral Steering Committee in Tanzania

Tanzania "houses" its NHA within the Ministry of Health and Social Welfare (MoHSW) and uses a multi-stakeholder Working Group (WG) to provide oversight. Data collection and production are conducted by a multisectoral technical team, comprised of a representative from the University of Dar es Salaam, Ministry of Finance, and National Bureau of Statistics. Management and quality reviews of data are the responsibility of a Health Financing Working Group which includes development partners, the Ministry of Finance, and the private sector and civil society to provide methodological guidance.

The WG is also responsible for commissioning specific studies deemed relevant to the health sector and therefore "translating" the data to inform policy. Dissemination occurs through: the Joint Annual Health Sector Review where all development partners and public and private entities are present; the MoHSW website; policy briefs; and international forums such as the International Health Economics Association (iHEA). Local media will be used to further disseminate future results. Multisectoral involvement in Tanzania means that there is a broader use of data from a wide range of audiences including government, civil society, research institutions, and development partners.

and controls the production and use of NHA, but the core technical work in production is outsourced to an external technical agency, the Institute for Health Economics and Policy (IHEP), in a very clear delegation.

The example of Fiji is also illustrative (Box 2.3[13]).

Potential *strengths* of this model are:

- Analyses are likely to reflect the policies and priorities within the MOH as well as in broader government policies and programs (e.g., MTEF and other priority planning and budgetary processes).
- The production team will tend to have public health expertise given that the "home" lies within the MOH.
- The production team can leverage the connections of its multisectoral group members to facilitate access to data for NHA production. This is particularly important in countries like the Seychelles, which leverages the diverse membership of its eighteen-person multisectoral team to secure inputs for NHA production. The multisectoral team forms part of the production team and acts as the 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 NHA production[14]. Yet the team is also responsible for generating insights from the data to inform policy.

[13] Pellny, Martina and Irava, Wayne. 2011. Personal Interview. Technical Officer Health Services Development and Health Care Financing, World Health Organization, Office for the South Pacific; and Coordinator, Centre for Health Information, Policy and Systems Research (CHIPSR), Fiji School of Medicine. August 22.

[14] Malbrook, Jean. 2011. Written Communication. Focal Point NHA, Economist, Ministry of Health, Seychelles.

Box 2.3. Fiji's MOH is Custodian of NHA Process

Fiji was one of three pilot countries of the ADB-WHO project: "Strengthening evidence based policy-making in the Pacific—support for the development of National Health Accounts". A full round of NHA for 2007 and 2008 data was produced with the help of an external consultant but the NHA team is able to prepare the current NHA for 2009 and 2010 on its own, under the following set up: After an initial discussion to fully outsource production of NHA to the Centre for Health Information, Policy and Systems Research (CHIPSR) at the Fiji National University, it was decided that NHA be permanently "housed" within the newly established Policy Development and Analysis Division of the MOH to ensure that the Ministry is the institutional custodian of the NHA process. Meanwhile, CHIPSR is responsible for data collection, analyzing the numbers, developing NHA matrices and tables, and writing the report. The final NHA report, however, is released by the MOH itself as an MOH publication. In addition to the key members from the MOH and CHIPSR, NHA production in Fiji is supported by the Fiji NHA Committee with members from the National Planning Office, the National Statistics Office, and WHO. The committee supports data collection, especially data from the private sector, but also provides oversight of the NHA production process, ensuring that other government agencies are informed and take ownership as well. Several members of the NHA Committee will also be involved in translating the numbers to inform policy, together with the Division for Policy Development and Analysis of the MOH.

Seeing the value-add of NHA, the government of Fiji has since put aside funds from the MOH budget for the routine production and dissemination of NHA, ensuring further ownership. The main dissemination workshop to all private and public stakeholders was opened by the Minister of Health and used particularly to target the growing number of private providers in the system. The data also served as evidence and "ammunition" for the budget negotiations with the Ministry of Finance to advocate for a steady increase of public funding for health.

- Placing NHA within the MOH with involvement of multiple sectors may ensure greater objectivity in the use of data to inform policy. As the sole custodian of the data and owner of the NHA process the MOH is more likely to use the data and link it to health policy.

Potential *challenges* of this model are:

- A permanent "home" within the MOH may mean that the production team lacks the statistical or accounting expertise needed for production.
- Multisectoral involvement requires coordination and perhaps a strong champion to succeed.

3. ***Government mandated multisectoral Production, Technical and Policy Advisory teams.*** The institutional "home" of the NHA may also lie within the auspices of a multisectoral team comprised of stakeholders within and outside government including universities, the central statistics office, and research organizations. This multisectoral team is typically involved in the full spectrum of production activities including data collection, production of NHA tables, management of the production process, and quality assurance, regardless of the actual production conducted by the team or outsourced to an external organization. A multisectoral Policy Advisory Group with similar representation may also be involved in setting the priorities for translation and dissemination. The multisectoral nature of this model is typically reflected in broad demand for data from a wide array of audiences including the MOH, MOF, development partners, civil society, academia, and others represented on the Policy Advisory Group. Data validation and quality assurance may be provided by a multisectoral Technical Consultative Group. Unique in this structure is the diverse ownership of the NHA institutionalization process. Whereas in the previous model, multiple stakeholders play a role in guiding the analysis or translation process, here the various stakeholders work as a single unit to serve as the custodians of the NHA (see Box 2.4).

Potential *strengths* of this model are:

- A multisectoral governance model can leverage the broad, multisectoral expertise of its Technical Consultative

Box 2.4. Governance Through a Multisectoral Team in Jordan

Jordan uses a multisectoral governance structure for its NHA. Data collection and production fall under the High Health Council (HHC), headed by the Prime Ministry. The "core" NHA production team housed at the HHC is intensively guided and supported by a Technical Committee of twenty-five stakeholders from across government, the private sector, and academia. Management and quality assurance are the responsibility of a Technical Committee for NHA Data Interpretation. This unique set-up actively involves a wide array of critical stakeholders and has contributed to greater access to and validation of data in Jordan's complex health system. The 2008/09 NHA report has been widely disseminated through the HHC website, to main universities, and to key individuals in the health system. In Jordan's five year NHA institutionalization plan, the NHA lead is planning on complementing technical capacities with that of a health economist to put NHA data in the context of health financing priorities and produce policy briefs to support decision makers in a targeted way.

(Jordan HHC/General Secretariat, 2007)

Group to guide and provide oversight of the production process.
- It can leverage team members' connections to facilitate access to data input for production.
- A multisectoral model may contribute to greater objectivity in the use of data to inform policy, as there are various stakeholders who "own" the institutionalization process.

Potential *challenges* of this model are:

- Responsibilities for production may be unclear unless there is good coordination and delegation of tasks.
- It may be difficult to coordinate and oversee the NHA process without strong leadership and good communication across agencies to oversee the work.
- Multisectoral coordination requires a strong champion to succeed, as is the case in Jordan where NHA institutionalization has been facilitated and led by a strong policy advocate who 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 policy making. Without a strong custodian in an entity like the MOH, it may be difficult to "translate" insights from NHA data to impact health policy, given that the MOH is not the custodian or owner of the NHA process.

4. ***Externally mandated with limited or no government collaboration.*** Finally, some governance structures place the "home" of the NHA entirely outside of government. The external entity may or may not have linkages to government. In this model, data collection and production is conducted entirely by the external team along with oversight, management, and quality assurance. In this model, translation, dissemination, and NHA data use to inform policy may in each case be the responsibility of the external team or government.

Potential *strengths* of this model are:

- An external governance structure may imply greater objectivity in conducting and using analyses to inform policy.
- Through wide dissemination of results, externally mandated NHA activities can assist in holding country leaders accountable for their targets or in showcasing results to bring awareness of key findings to the government—particularly in areas where it has previously lacked interest.
- The external agency may also have strong technical or health expertise, depending on the personnel on the team.
- Minimal bureaucracy in the outside agency may increase the speed of production.

Potential *challenges* of this model are:

- An externally "housed" NHA raise issues of sustainability—particularly if the external entity loses the interest or ownership of the NHA.
- This model may result in limited ownership of the process by the MOH or other government entity, thereby limiting the potential for data to inform policy.
- Results may fail to be validated by the MOH or other agencies providing data input.
- This model requires strong linkages and communication between the external agency and policy users and translators within government to inform policy.

Regardless of the governance structure chosen, country experiences indicate that it is beneficial to think through the following issues:

- Creating administrative agreements or mandates to institutionalize NHA production.
- Delineating clear roles and responsibilities to avoid duplication of effort and optimize productivity as well as clear linkages to other agencies which both provide input and are able to translate data to inform policy.
- Building institutional capacity within the institutional "home" to ensure there is a sufficient knowledge base to support operations at times of staff loss.
- Establishing well-functioning Technical Consultative Groups to ensure quality and credibility of the data and of Policy Advisory Groups that can set priorities and act as champions for the use of data in policy.

Country experience also shows that having stakeholders involved to provide access to and to validate the data is likely to increase data quality, transparency, and reliability. Further, linkages to policy makers help to ensure that use of the data is optimized and that insights from the data can be readily taken up by policy makers; this requires an economist or other health expert (possibly one who also sits on the production team) with linkages to key decision makers, who can put NHA in the context of other broad health reform issues and analyses.

2.3 Selecting Modes of Production for NHA Data

The NHA production stage will now be considered in more detail. Production generally includes a set of activities involving data collection, management, quality assessment, and validation. It should be noted that the location of production may change over time and that while the mode of production may vary dependent upon a country's income level and access to and the location of skilled resources, the choice of style and mode of the process is important as there are strengths and challenges associated with each. As has been said, the production side of NHA may be undertaken in-house or external to the "institutional home" regardless of the model selected (Figure 2.5). Details of the production process including data collection, data management, and data quality are discussed elsewhere in the *Guide to Producing National Health Accounts* (World Bank, WHO and USAID, 2003).

As has already been seen, some countries may decide to outsource production to agencies external to the "institutional home"—such as a national statistics bureau, universities, research entities, or national or international consultants, depending on where the required skills reside. Meanwhile, several countries may decide to keep NHA production within the government agency responsible for NHA institutionalization, to ensure stronger ownership of the process and to facilitate the uptake of insights produced by the data to inform policy. In both of these instances, it would be important that the body that represents the "institutional home" for NHA has a stake in the validation and quality assurance of the data.

Internal and external modes of production with their potential strengths and challenges will now be considered (summarized in Figure 2.5).

1. Internal production

Internal production simply means that production is done in-house (e.g., within the MOH) rather than outsourced to another entity (e.g., statistical department, school of

Figure 2.5. Two Modes of Production Within the Four Governance Model

	1. MOH with little collaboration	2. MOH with multisectoral collaboration	3. Multisectoral team	4. Independent research agency

Internal mode of production	• NHA *produced within* the MOH	• NHA *produced within* the MOH	• NHA *produced within* Multisector team (MOH, university, MF, statistical office, etc.)	• NHA produced by Independent research agency produces
				  • University
				  • Research institute

External mode of production	• Production *outsourced to* an external agency (overseen by MOH)
	  • Statistical department
	  • University
	  • Research institute
		• Production *outsourced to* an external agency (overseen by MOH)
		  • Statistical department
		  • University
		  • Research institute
			• Production *outsourced to* an external agency (overseen by MOH)
			  • Statistical department
			  • University
			  • Research institute	

- "Institutional home" of the Model 1–3 can choose to either produce NHA by themselves or outsource the production to an external agency and oversee the production
- Countries that manage production well appear to produce where statistical and accounting expertise exist
- Both modes of production require ownership by the "institutional home" to validate the NHA and ensure the link of the NHA to their policy use

public health, research organization, national or international consultants, or think-tank).

In terms of *strengths*, internal production may allow for greater control over the production process, with greater ability to validate and review data. There is likely to be easier access to the data input needed for production, as both the inputs and production processes are conducted in-house. Analyses are more likely to reflect policies and priorities within the institutional "home" of the NHA. Internal production (either within the MOH or via a multisectoral team which includes the MOH) allows for NHA to leverage linkages to other agencies or ministries within the same institutional "home". This facilitates data production but also strengthens the NHA connection to other data sources and instruments (e.g., MTEF). Burkina Faso serves as an example where NHA data are used regularly in conjunction with household expenditure surveys and the Integrated Expenditure System (CID), which are also used for the MTEF and Marginal Budgeting for Bottlenecks (MBB) tools. This ensures that the utility of tools like the NHA can be translated in ways that "reach" policy makers, and creates greater buy-in and ownership by the MOF and other, finance-related entities, given the NHA links to broader budgeting and planning issues highlighted by the MTEF. In this way, countries may be able to realize cost efficiencies through synergies between NHA production and other data instruments and sources, and build on existing surveys. Production in-house helps to ensure that results can be made available to institutions and individuals who inform health policy. Finally, internal production allows representatives from different agencies within the MOH to contribute to the NHA and collaborate without major difficulties.

In terms of potential *challenges*, an internal mode of production may result in less objectivity in how data are produced and the assumptions made in their analysis; this underscores the need for a standardized NHA methodology. Furthermore, in-house production—particularly where solely reliant on domestic budgets—also requires that the NHA compete with other items on the agenda for funding. Internal production may be more prone

to bureaucratic bottlenecks, shifts in the institutional and political climate, and so on. This may result in high staff turnover, which is frequently found on the production team.

Jordan is an example of a country that has dealt with this issue by forming a multisectoral team within the "institutional home". The NHA data is produced by the core NHA Team within the High Health Council (HHC) comprised of about 25 stakeholders (including three individuals responsible for production) from government, the private sector, and academia. To facilitate the exchange of information and provide a single, central location for quality assurance of the data, Jordan has also established a Centralized Data Collection Unit for NHA within the HHC. Further, the country has mandated the routine production of the data and roles of relevant NHA stakeholders through a royal decree. These arrangements have allowed Jordan to maintain the objectivity of data and high level of organizational commitment to the NHA production.

2. External production

External production (i.e. production outside the "institutional home") conducted at a statistical department, university or research entity is also possible. Again, there are potential strengths and challenges to this approach. Countries such as Georgia, Japan, Korea, Mali, the Philippines, Rwanda, and Serbia are all examples of this outsourced model, albeit through different arrangements.

As to the potential *strengths*, there may be greater objectivity in production if "outsourced" to an independent agency—say, a school of public health or research entity. This also ensures greater control over production processes by the external entity (i.e. without interference from government or a multisectoral team) and clear responsibility for production. Furthermore, there is a greater likelihood that political and institutional interference is minimized, so that work can continue without significant upheaval (e.g., staff turnover) resulting from political and institutional changes; an external agency may have a greater pool of human resources and production expertise that avoids interruption of routine production.

It is also important to take note of potential *challenges* in outsourcing production. First, without proper coordination, the outsourced production entity may have limited access to the data input that is needed for production.

Further, in the absence of strong linkages between producers and users in an outsourced production model, data may be less readily available to or accepted by institutions and individuals who design health policy. Korea overcomes this challenge by leveraging strong networks between the NHA Focal Point and influencers of policy. Production is outsourced to the team at Yonsei University (see Box 2.1), yet there is regular uptake of the data to inform policy debates given that the Focal Point who leads the production team has strong linkages to the Ministry of Health and Welfare and other high-level policy commissions due to his previous work experience at the Ministry and current advisory role. The current Focal Point is a member of the Committee for Health Insurance Policy, the highest committee which determines the contribution rate and fee schedule in National Health Insurance—meaning that there is an opportunity for NHA results to be publicized and shared broadly by a well-informed audience, and actively fed into the health policy making process.[15] Along those lines, most countries would benefit from strong communication and linkages between the production entities and government or other multisectoral entities chosen to coordinate and make use of the data.

[15] Jeong. Personal communication already referred to.

Figure 2.6. Modes of Production Compared (illustrative)

	1. Internal mode of production	2. External mode of production
Potential Strengths	• Greater control over production processes • Easier access to data inputs needed for production • Can expect analyses to reflect policies and priorities within the institutional "home" of NHA • If produced within government, can leverage linkages with other formal processes (e.g. MTEF) • May be able to realize cost efficiencies through synergies between NHA production and other data instruments/sources; build on existing surveys • Results can be easily made available to institutions and people who make health policy • Representatives from different agencies within the organization can contribute to NHA and collaborate without major difficulties	• Greater objectivity in production • Greater control over production processes • Clear responsibility over production • Greater likelihood that political and institutional interference is minimized, so that work can continue without significant upheaval resulting from political and institutional changes (e.g. staff turnover due to promotions or transfers) • May have existing and more in-depth skill sets in statistics and accounting
Potential Challenges	• Less objectivity in production • More prone to bureaucratic bottlenecks • Greater likelihood that political and institutional interference may impede production, resulting in high staff turnover • May compete for funding with other internal agencies	• May have limited access to data inputs needed for production • Cannot leverage linkages with other agencies within the same institutional "home" • May not be able to realize cost efficiencies through synergies between NHA production and other data instruments/sources; build on existing surveys • Results may be less readily available to institutions and people who make health policy • May have limited ability to collaborate with other agencies with different expertise or insights

Source: The World Bank
Note: "Internal" refers to within MOH. "External" refers to an entity within government but outside the MOH, or an entity outside government entirely.

These general strengths and potential weaknesses are context specific and will often vary depending on a country's political, economic and social climate.

2.4. Building an Enabling Environment to Support the Governance Structure

Country experiences suggest that building a legal and budgetary structure as an enabling environment that gives a clear mandate of the chosen governance model and facilitate the activities by the NHA team. Without it, NHA teams often rely on personal relations and ad hoc requests to obtain information from other government departments, such as the comptroller general of accounts that manages data on audit government expenditures. This makes timely production and translation of NHA data difficult.

Two dimensions of the enabling environment have been highlighted in country case studies:

- **Stipulation of a budget line-item for NHA.** This offers a clear mandate to ensure capacity for overseeing NHA activities by the entity that has been allocated responsibility as the "institutional home". A budget line should improve sustainability of these activities. Several countries, such as Ghana, have developed a formal budget line but are still struggling to ensure that the allocated budget is disbursed. In an era where country ownership of key dimensions of the NHA institutionalization process is core for long term sustainability of activities, it is important that governments honor their commitments to fund or partially fund recurring NHA activities. Generally, by taking a stake in the financing of activities they also generate higher demand for

the outputs, which in turn should facilitate the linkages between data and policy-relevant insights.

- **Legislation of NHA activities.** Several countries, such as Georgia and Jordan, mandate the routine production of NHA—including the collection of data inputs from public and private sources needed for NHA's routine production, and the delineation of workplans and roles of relevant stakeholders. This both clarifies the roles and responsibilities of stakeholders but also provides the selected "institutional home" with legitimacy in negotiating for the data collection, translation and advocacy for policy use.

Other factors that play part in shaping an enabling environment for NHA institutionalization include, for example, the human resources and data systems environments. The need to strengthen these environmental factors over the long term is discussed in section 3.4.

The governance model and its legitimacy will determine a country's ability to benefit from the range of advantages that access to routinely produced NHA data can provide. Careful attention should be given to the selection of governance model and the enabling environment around it, taking into account a country's particular context and socioeconomic reality. In countries where NHA activities are supported by development partners, the design of the governance model and the enabling environment should be a critical part of a long term plan to sustain and optimize use of the answers NHA can provide. Country experiences provide several insights that can guide the selection of an appropriate governance model and production mode. Here we discuss these insights in some depth.

1. ***Countries can improve sustainability of NHA production by locating production where statistical and accounting expertise resides.*** NHA require a production team with the requisite skills in national statistics and accounting practices, knowledgeable about the nation's health system and health policies, and with experience in working with data input and information generated by different entities in the health system. Ultimately, this requires a team that is quantitatively oriented, with a willingness to question numbers and look for and consider alternatives to existing data sources. This also entails having a Coordinating Body to act as a repository for the data. In resource-constrained environments, many countries have strengthened their production capacity by locating technical production where the statistical and accounting skills exist. For example, in the Philippines NHA is currently produced by the National Statistical Coordination Board (NSCB) that was created by a Presidential Executive Order in 1986 to serve as the highest statistical coordinating and policymaking body in the country.[16] 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).
2. ***Regardless of the governance model and the mode of production of data, it is critical to ensure that the***

[16] NHA was 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).

"institutional home" feels sufficiently comfortable with the data to ensure an effective link to policy. Countries with strong ownership over the NHA process have greater capacity to link NHA data to insights that informs policy. For example, Turkey uses a shared governance model for NHA where one entity is responsible for data collection (the Turkish Statistical Institute), and another entity which provides technical support and reviews the data (Turkish Ministry of Health-affiliated School of Public Health). Technical experts in both organizations subsequently review, validate and analyze the NHA results. Strong dissemination of results and information-sharing has facilitated the "translation" of insights from the data to inform policy. On the other hand, several countries with external modes of production struggle to link NHA with policy priorities. In Serbia, for example, NHA fall under the purview of the Republican Institute of Public Health (IOPHOS), commissioned by the Ministry of Health (MOH) to produce NHA. However, there is still limited awareness of NHA and their importance within government, particularly outside the MOH.

3. ***Multisectoral involvement can improve access to and quality and transparency of data, and facilitate the uptake of data by policy makers.*** NHA production requires access to large volumes of data input from public, private, and external sources, analyzed through a standardized methodology. Multisectoral involvement can facilitate the collection of this input. In Ghana, for example, the planning for NHA institutionalization takes place within the realm of the MOH, with the support and guidance of a Technical Consultative Group, which plays a critical role in accessing and validating data. Further, multisectoral involvement can enhance the translation of NHA in a way that answers the policy questions of multiple users, draws attention to NHA from multiple stakeholders, improves data objectivity, and ultimately strengthens the linkage with policy making. In Jordan, NHA is conducted by a 25-person team comprised of individuals from the public sector, private sector and academia. This team receives annual "refresher" trainings on NHA; and weekly discussions among NHA team members are held to highlight the current state of NHA, new approaches, next steps and key decisions. Jordan's two most recent NHA rounds were part of a broad effort to integrate activities to serve decision making, including through strengthening capacity building and dissemination.
4. ***A supportive legal environment can facilitate NHA production and contribute to institutionalization.*** A strong legal foundation can ensure that data is routinely produced, and that there are regular funds to support both production and dissemination. As mentioned, several countries, including Georgia and Jordan, have issued decrees mandating the routine production of NHA, along with a clear specification of the roles and responsibilities of the relevant NHA players. This, in turn, creates an environment where there is strong political commitment to institutionalize health resource tracking efforts.

Chapter 3

Building Capacity to Sustain NHA Activities

This Chapter considers approaches for building capacity to accelerate and sustain the NHA cycle. It shows how the capacity building of individuals can target gaps in the NHA cycle. It discusses efforts to build institutional capacity so as to protect countries from losing production knowledge and skills, and to ensure countries are able to link NHA to their planning processes. Further, the chapter considers how an enabling environment for NHA can be nurtured in a country, including through strengthening the policy, data, and HR environments. Finally, the chapter emphasizes "learning-by-doing" as an effective approach for building capacity.

Key points are:

- The production, dissemination, and effective use of NHA depend on a skilled workforce equipped to produce work of high technical quality and empowered to coordinate the full NHA cycle.
- Although capacity building in many countries has been focused on a few, key production staff, a comprehensive approach is critical to build capacity for the complete cycle of data production, dissemination, translation, and use.
- The target of capacity building—that is, those capacities that need to be built and in which people—should be defined based on each country's socioeconomic status, existing capacity, and ability to develop, attract, and retain the required workforce.
- Countries can build their institutional knowledge and skills base by ensuring that the NHA process is standardized and well-documented, and by building tools to facilitate the process.
- Building an institutional mechanism whereby decision makers regularly gain access to the insights that NHA data can provide would help bridge the gap between production and use.
- Countries that have moved towards full ownership of the NHA cycle have often done so through an open book, "learning-by-doing" approach, either without external consultants or with a clear phasing out of external technical assistance—external consultants can be valuable to serve as a source of knowledge and to facilitate rather than implement the NHA process.

3.1 Focused Capacity Building to Accelerate and Sustain the NHA Cycle

Production, dissemination, and effective use of NHA depend on access to a skilled workforce equipped to produce work of high technical quality and who are empowered to effectively coordinate the links between the steps of the NHA cycle. Capacity constraints are common, however, especially in health systems where statisticians, health accountants, and health economists are scarce. In addition, skilled workers are often fragmented between a range of competing priorities.

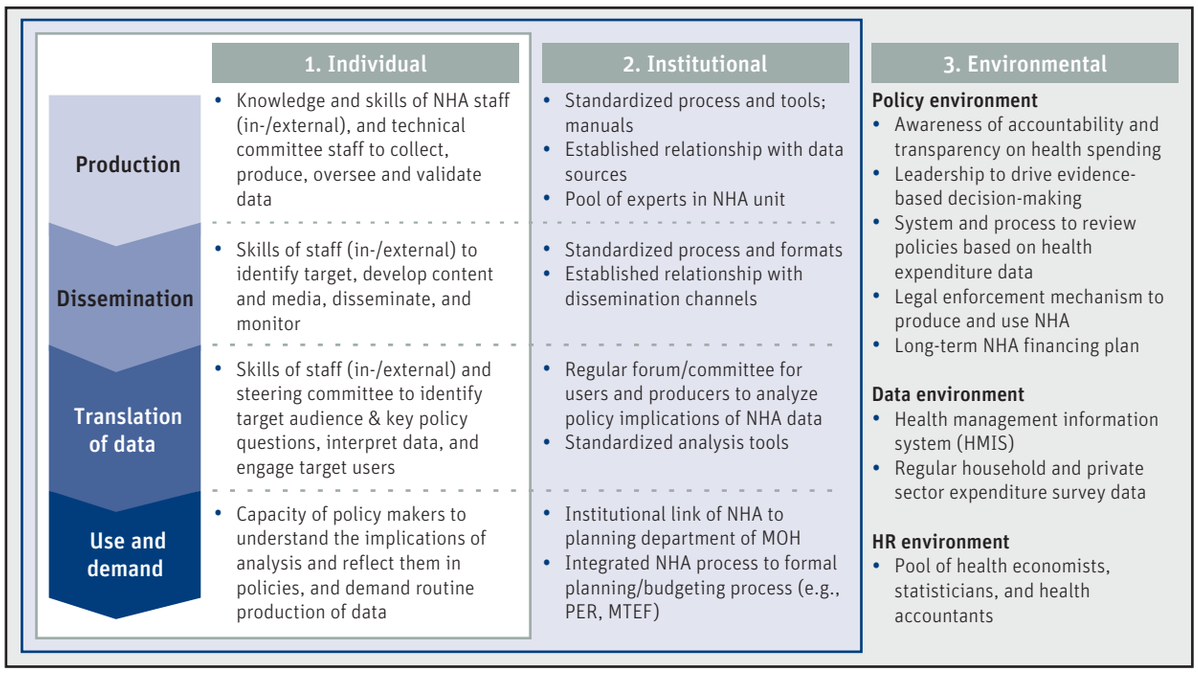
Building of skills to lead NHA activities is not directly correlated to the number of NHA rounds which a country has undertaken. In countries where NHA production has been funded by donors and conducted by external consultants with insufficient focus on the transfer of knowledge and skills to local staff, little ownership and thus little use has been made of the data at the country level. There are several countries that have gone through multiple rounds of production yet still do not possess the institutional skills to produce a next round of NHA. Rwanda, for example, struggled to build and retain the capacity to produce NHA and translate them into policy implications even after five NHA rounds; its production and translation were all driven externally by consultants and knowledge was lost with frequent turnover. To deal with this, the country decided on a governance model where NHA are overseen by the MOH, with production outsourced to the National University of Rwanda School of Public Health. The school pools statistician and public health experts, yet with some support from external consultants. The new staff members from the university are forming a group of experts working on the production of NHA which is set up in such a way that it will be able to help new staff to catch up rapidly (Rajkotia et al, 2011). Georgia, on the other hand, is an example that shows that the building of skills during the early rounds of NHA is possible. Its local NHA team learned the skills as they produced the country's first NHA. The team was able to produce its second NHA round with minimal support from external consultants, thanks to an explicit strategy to phase out external support after the first round of production.

Building capacity beyond the individual statistician or health accountant requires an approach that addresses three factors: individual, institutional, and environmental (Figure 3.1):

- First, countries need skilled and responsible *individuals* to produce, disseminate, translate, and optimize the use of NHA.
- Second, the knowledge and skills needed to run each step in the NHA cycle need to be held in the responsible *institutions*, which must retain knowledge and prepare for normal staff losses. Having a robust system, with standardized processes and tools to collect data and use NHA for policy, can improve and sustain the efficiency and effectiveness of the NHA cycle.
- Third, broader contextual factors such as the *policy, data, and human resources (HR) environment* affect the efficiency and effectiveness of the NHA cycle. Many aspects, such as an awareness of the accountability at the policy level and the robustness of health management information systems are not directly controllable within the ambit of NHA activities, but understanding the country context will be important to ground a long-term capacity building strategy for the country-specific NHA situation.

The target of capacity building (i.e. whose and what capacity needs to be built) should be defined based on each country's socioeconomic status and existing capacity. For

Figure 3.1. Three Layers of Capacity in Running the NHA Cycle (example)



Source: The World Bank

example, some low-income countries may decide to outsource production to external institutions while choosing instead to focus their capacity building efforts on the use of NHA to improve policies and the oversight of the quality of the consultants' work. On the other hand, some middle-income countries may choose to own the entire NHA cycle without relying on external consultants. It would be important for countries to ground their capacity building strategy on their access to skilled professionals in the country.

Countries that have moved towards full ownership of the NHA cycle have often done so by an open book, "learning-by-doing" approach either without external consultants or with a clear phasing out of external technical assistance. These countries have started small and grown in sophistication over time as capacities have become perfected. National NHA champions can initiate and accelerate the learning process. Experience shows that it is fundamentally important: (1) to build capacity beyond the individual in order to build the required skills to sustain and optimize the outputs of the NHA cycle; (2) to standardize processes and tools so that sophistication of the process can grow over time; and (3) to build and tailor capacity to the specific needs of the country context. A comprehensive diagnosis of existing capacity, with knowledge of the possible approaches from other countries' experiences to address the key capacity gap, could help countries develop a realistic capacity building strategy.

3.2 Individual Capacity Building Targeted at Critical Gaps in the NHA Cycle

In many countries, capacity building has been focused on building the capacity of a few staff members for producing NHA. For example, in India, although producers receive trainings, few formal discussion forums for potential NHA users have been available and those hosted have been poorly attended. As a

result, the link between NHA production and its potential input to broader health financing issues has not always been made. NHA are, however, a complete cycle of data production, dissemination, translation, and use, and the capacity of key stakeholders at each step of NHA activities needs to be built comprehensively, especially since, as the Indian case suggests, a major capacity gap has been identified in many countries on the use side of NHA.

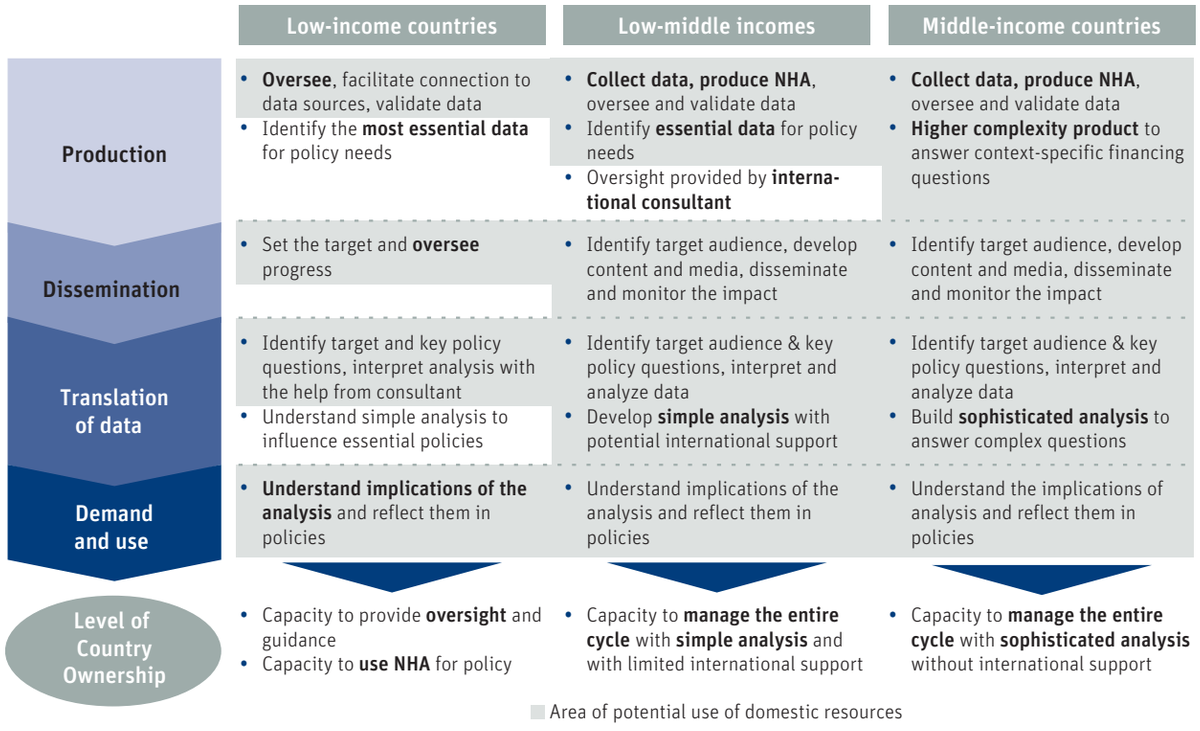
Table 3.1 exemplifies the capacities needed to manage each step of the NHA cycle. The process by which a country may prepare a targeted capacity building strategy includes defining: (1) those steps in the NHA cycle that need to be prioritized; (2) what capacity in the selected step needs to be addressed; (3) whose capacity needs to be built or leveraged; and (4) how it can be built.

What capacity should be addressed and whose capacity should be built or leveraged depend on the country's ability to develop, attract, and retain the required workforce. For instance, low-income countries may decide to rely on external consultants to produce and disseminate NHA whilst focusing their resource on managing the links between the production of the accounts and their role as a tool to inform policy decisions at the country level. The approach to capacity building is likely to change as countries' economies grow. Figure 3.2 suggests the various capacities needed in the NHA cycle according to the socioeconomic status of different countries. More local resources can be leveraged as a country's socioeconomic status improves.

3.3 Building Institutional Capacity

There are several critical steps that can be taken to strengthen a country's institutional

Figure 3.2. Examples of Capacity Building Framework for NHA by Countries' Income Status (illustrative)



Source: The World Bank, based on country interviews

Table 3.1. Capacity Necessary to Run the NHA Cycle

NHA steps (Where)	Tasks (What)	Necessary skill sets to run the tasks (What)
Production	*Phase 1— Planning and Scoping:* • Engage NHA Policy Advisory Group or other governing body in a discussion about scope and timeline of the NHA ◦ Define key policy questions that NHA can help answer, and identify data required to respond to the questions • Identify key stakeholders and partners • Create local NHA team • Mobilize resources for NHA *Phase 2—Launch:* • Train NHA technical team and data collectors • Introduce NHA methodology, develop work plan, identify roles and responsibilities • Facilitate official launch event *Phase 3— Data Collection*: • Define survey sample for respondents • Develop customized surveys for institutions • Train data collectors • Send out surveys and follow up with respondents • If including household survey, data collectors survey individuals houses for extended period of time • Collect secondary data *Phase 4—Data Analysis and Validation*: • Data entry • Data cleaning and compilation • Mapping the data to NHA codes • Producing NHA matrices • Validation with technical team and key stakeholders	• Technical skills: knowledge of NHA, sub-accounts, survey instruments, sampling methods, NHA analysis, report writing, etc. • Communication & facilitation skills: Engage Policy Advisory Group in discussion about what policies the NHA can inform, create stakeholder buy-in, send frequent updates about progress of the NHA, after analysis is done discuss policy implications of NHA findings with the Policy Advisory Group and relevant stakeholders • Leadership & Management skills: lead NHA team and leverage diverse technical skills of team members, ensure the commitments about timelines and deliverables are met • Budgeting & fundraising skills: ensure there are sufficient financial resources for completing the activity and mobilize additional resources if necessary
Dissemination	• Provide training for technical team on effective dissemination • Determine relevance of findings for country's health policies • Determine target audience for report • Write report • Develop tailored policy communication tools (brochures, slide presentations, etc.) • Present findings to key stakeholders • Engage media and broader health community • Make NHA report and data freely available	• Communication skills: identify key messages and audiences, and design suitable dissemination products • Strong writing skills: write meaningful reports and briefs, be able to summarize key points without losing important details
Translation	• Identify key users of the NHA • Identify key financing questions of the key users • Develop analysis to address the key financing questions, including identification of non-NHA data (macro-economic, health status, household surveys) • Review the data analysis with users (ensure the analysis answers key questions) • Revise the data analysis • Develop tailored policy communication tools (brochures, slide presentation, etc.)	• Intimate knowledge of country's health system and policies • Analytical skills: be able to identify key questions that the NHA can shed light on; combine NHA data with other data sources to undertake meaningful analysis

(*continued on next page*)

Table 3.1. Capacity Necessary to Run the NHA Cycle (*continued*)

NHA steps (Where)	Tasks (What)	Necessary skill sets to run the tasks (What)
		• Writing and communication skills: be able to disseminate findings from the analysis in impactful ways • PR skills: Have strong relationship with government and other stakeholders; seek audience for relaying findings
Demand/Use	• Government, partners and civil society organizations use NHA findings and NHA-based analysis to guide policy-making, planning, and performance assessments • The users of NHA in turn demand that NHA exercises be conducted on a routine basis	• Knowledge about NHA: Widespread awareness about NHA and the quantities that they measure • Advocacy Skills: Stakeholders should be able to effectively demand that Ministries of Health produce NHAs as a matter of routine

Sources: National Health Accounts Trainer Manual. PHRplus Project. June 2004; Personal Interviews: Lara Lorenzetti, Nirmala Ravishankar, Catherine Connor, Douglas Glandon, 2011

capacity, both to produce NHA data and to translate these into policy briefs.

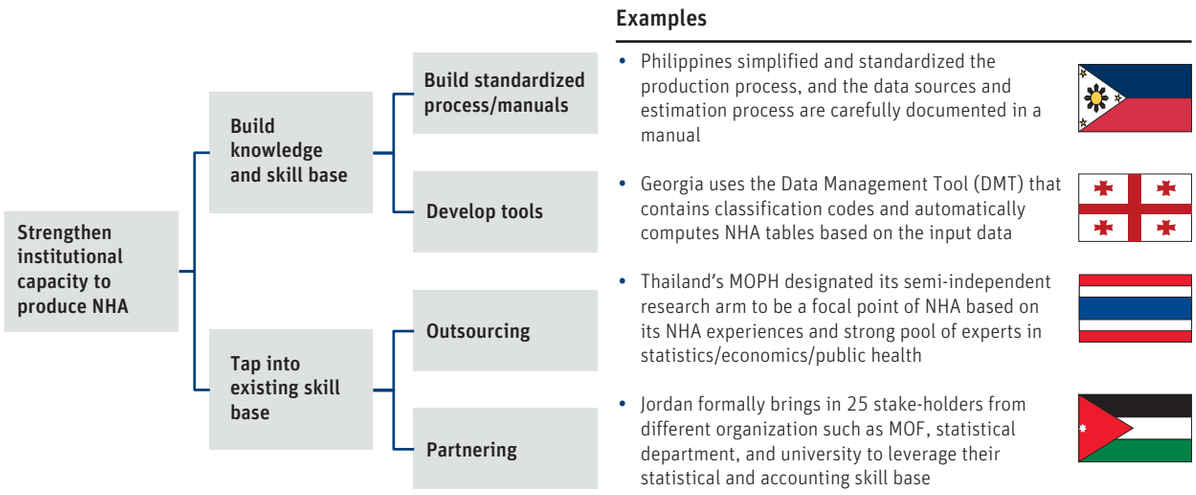
3.3.1 Strengthening Institutional Capacity for NHA Production

Skills, if only retained by a few individual producers of NHA, will deteriorate significantly with natural loss of individual staff. For example, the number of staff in the NHA unit of the MOH in Malaysia decreased from eight to four due to promotions and transfers; as a result, most staff responsible for data management are temporary workers. There is growing concern about maintaining knowledge and institutional capacity within the unit, and detailed documentation is thus kept wherever possible.

Different approaches, which countries can combine in their capacity building strategies, have been identified to protect countries from losing production knowledge and skills by strengthening institutional capacity (Figure 3.3):

1. Countries can build their institutional knowledge and skill base by ensuring that the NHA process is standardized and well-documented, and by building tools to facilitate the process; this enables new staff to learn quickly and reduces the reliance on the knowledge of a few production staff. In the Philippines, for example, a simple NHA design has been developed, based mostly on routine data collection, which makes NHA easy to produce. Data sources and procedures for estimation are documented in a manual and built into an estimation tool. This allows the country to train new staff even at times when production staff members leave (Racelis, 2008). In Georgia, on the other hand, a special data management tool (DMT) software application was developed in 2005 to facilitate the production of NHA. The DMT includes modules that contain classification codes for various categories of health expenditure to encode the input data, embedded formulas for calculating output

Figure 3.3. Approaches for Strengthening Institutional Capacity for NHA Production



Source: The World Bank, based on country interviews

estimates, and functions to generate NHA tables. These modules are linked together so that the NHA tables can be computed automatically, based on the data entered. An output file is generated which is linked to other NHA files for data analysis. The DMT enables the NHA team to easily produce NHA, balance respective tables, and find errors in the output tables without deep accounting knowledge (Goginashvili and Turdzlandze, 2009).

The NHA Production Tool being developed by the Health Systems 20/20 Project also aims to strengthen a country's institutional capacity to produce NHA and translate the results into policy analyses by providing step-by-step guidance through many of the more technical aspects of the NHA estimation process, as well as a series of automated production and analysis tools. For example, customized coding and a pre-designed survey built into the tool enable consistent and automated data production over multiple years. Data can be automatically imported if they are entered electronically, and easy-to-follow steps and information are also provided to assign codes to data for their automated analyses. The tool was pilot tested in Tanzania during the local team's data analysis workshop and the final version is expected to be available in the autumn of 2011.[17]

2. Countries can often tap into their existing skills base and strengthen production by either outsourcing or partnering the production process. As discussed in the previous chapter (Box 2.4) for example, the Ministry of Public Health (MOPH) in Thailand designated the International Health Policy Program (IHPP), a research arm of the Bureau of Health Policy and Strategy in the MOPH with autonomous status, to host the NHA long-term and to be a national focal point based on its expertise, continuity, and full commitment. The IHPP has a pool of approximately eighty statisticians,

[17] See Chapter 4 and Appendix B4 for details of the Production Tool.

economists, and public health experts, and it would be able to assign new staff members with expertise and provide coaching for them to catch up relatively quickly even when staff turnover occurs. Thailand's strategy to invest in the development of highly skilled technical experts with overseas experience makes a unique contribution to building sustainable capacity to collect, produce, analyze and disseminate data. Whilst Thailand's ability to invest in people may be far from the reality of many other countries, the approach it has taken to locate NHA production where statistical expertise exists offers a valuable lesson. By contrast, Jordan sourced the necessary expertise internally from statistics, finance, accounting, and public health, by partnering with the various in-country organizations such as the statistical department, universities, and the MOF. The country built a formal multisectoral team of twenty-five staff members from different organizations within the Health Council to facilitate access and validate the NHA tables. This group, with its vast expertise, would be able to fill any resource gap relatively easily through coaching other staff members.

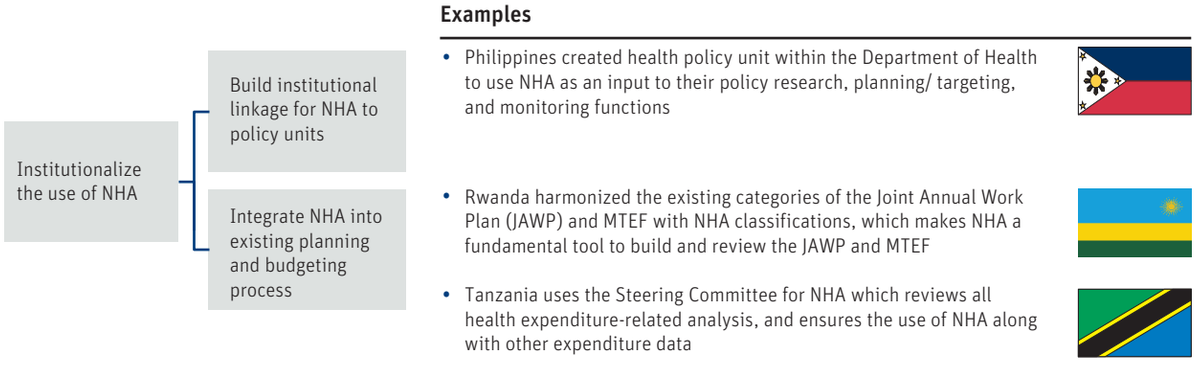
3.3.2. *Building Institutional Mechanisms to Link NHA to Planning Process*

The capacity to understand and reflect on the implications of NHA analyses in policies is an essential capacity that countries have expressed the clear desire to own, regardless of their socioeconomic status. The link between production, translation, and use has, however, often been weak due to the lack of coordination and a limited awareness of the value that NHA can add to broader health financing issues. Building an institutional mechanism whereby decision makers gain access to the insights that NHA data can provide—sometimes in triangulation with other data instruments and tools—would help bridge the gap between production and use. Countries can build institutional linkages between NHA and policy units by designating ownership of the NHA in the MOH or in other organizations with strong connections to policy units. Countries can also integrate NHA into the regular planning and budgeting process such as PERs[18] and the MTEF[19]

[18] The World Bank's core diagnostic tool prepared to help countries establish effective and transparent mechanisms to allocate and use available public resources.

[19] A tool to encourage cooperation across ministries and planning over a longer horizon than the immediately upcoming fiscal year.

Figure 3.4. Approaches to Build Institutional Capacity for Effective Translation and Use of NHA



Source: The World Bank, based on country interviews

(Figure 3.4). Countries can combine these approaches in their institutional capacity building strategies to strengthen the translation and use of NHA.

To ensure perpetuation of information and evidence-based decision making for their Department of Health (DOH), the Philippines created the health policy unit of the Health Policy Development and Planning Bureau within the DOH. It is mandated to use NHA for input to policy research, planning and targeting, and monitoring. Formally locating NHA use within the policy unit of the DOH will facilitate regular application of the NHA to policy.

Rwanda has also been making efforts to generate an institutional linkage between NHA and policy making. In order to integrate their NHA into existing formal planning and budgeting processes such as PERs and the MTEF, the country harmonized the existing categories of the Joint Annual Work Plan (JAWP) and MTEF with NHA classifications. This can make the NHA an essential tool for annual and multi-year planning reviews (Rajkotia, 2011).

Tanzania,[20] meanwhile, integrated their NHA analysis with other data and analyses on health expenditure. The country mandated the quality assurance of the NHA to the Steering Committee that oversees all information and analysis related to health spending. This will ensure NHA use as one of the key sources of information in the policy review on health spending.

3.4 Creating an Enabling Environment for Effective Resource Tracking

As shown in Figure 3.1, the effective and efficient production, dissemination, translation, and use of NHA hinge greatly on the policy, data, and HR environment of a country. Although many factors are beyond the scope of NHA work, the capacity building strategy for NHA and collaboration between countries and development partners should be grounded in the differences in these environmental factors and their implications for the capacity of countries.

Countries can benefit from addressing their NHA environmental factors. For example, Georgia used legal measures and is improving the data environment to make the NHA process robust and efficient. The government issued a decree in 2006 that defines the information flow needed for producing NHA, the organizations that are responsible for providing data, and the terms and conditions for submitting the data. This provides for successful institutionalization of multi-stakeholder data collection processes, and all the necessary data are covered by information from other agencies. With support from USAID, Georgia is also strengthening its HMIS to improve data reliability. As the data environment of the country improves, it is expected that the frequency of the HUES for NHA can be reduced from three to every five years, leading to a significant reduction of annual survey costs. Legal measures to formalize access to data from key stakeholders in the health system have also been deployed in Jordan. The country issued a royal decree that mandates the routine production of the data, delineation of workloads and roles of relevant NHA stakeholders, and use of data to inform budgeting and planning for policy purposes.

Building the HR environment for NHA could improve the quality of production, translation and NHA use in the long-term. For example,

[20] Ally, Mariam. 2011. Personal Interview. Head of Health Financing Unit, Ministry of Health and Social Welfare, Tanzania. July 7

Box 3.1. "Learning-by-Doing" Approach in Thailand

Thai NHA were initiated by the MOPH, Health Planning Division, in 1994 and fully institutionalized by 2000. It was started by 12 researchers at the National Statistical Office (NSO), National Economic and Social Development Board (NESDB), MOPH, MOF, and academic institutes, which without any external expert advice used WHO publications in an "open-book-do-it-yourself" approach (Tangcharoensathien et al., 2008).

There was a discrepancy of 1.5 percent of GDP between the consumption data and the UN estimate in the first NHA round, which led to further investigation of data and estimation methodologies that helped the researchers build deeper knowledge of these techniques. This process also served to strengthen partnership with the NSO, which led to the amendment of the questionnaire for the Socio-Economic Survey so as to include a detailed breakdown of expenditure for ambulatory services and inpatient care in the NHA.

During Phase 2, with a strategic objective to closely engage the NESDB because it produced the health expenditure data for NHA, the team involved the secretary general of the NESDB as chair of the Steering Committee. Also, in pursuit of the national focal point for NHA during Phase 3, the Deputy Permanent Secretary of the MOPH decided to designate the IHPP as host of the NHA on the ground of its expertise, continuity, and full commitment.

This case shows the step-by-step iterative evolution of NHA in terms of staff knowledge, data collection processes, and the involvement of key stakeholders. The country also carefully determined its institutional home based on expertise and past performance, which ensured there would be good institutional capacity to sustain the process.

The entire evolution of NHA has been driven by researchers from multiple organizations, motivated by the need for reliable expenditure estimates for health care functions, providers, and sources of financing. This case demonstrates how motivated champions can drive the evolution of NHA from within.

(Tangcharoensathien et al., 2008)

Ghana is considering designing an NHA module in the Masters Program of the School of Public Health at the University of Ghana; this is expected to broaden the HR base for NHA and strengthen the university's research functions using NHA output. Further, the capacity to produce and translate NHA into effective policy briefs should be discussed in a wider context of establishing countries' capacity to conduct Health Policy and Systems Research. The Biennial Review by Alliance emphasized that generating appropriate, trustworthy evidence depends on the existence of good research organizations (Alliance, 2007). The Review also concluded that capacity building strategies need to focus on the comprehensive needs of institutions, including overall skills and career development, development of leadership, governance and administrative systems, and strengthening networks among the research community. Addressing comprehensive research capacities in the long-term, as done in Thailand, needs to be considered as an important component of a broader initiative for resource tracking and evidence-based policy making (Alliance, 2007).

There appears to be a growing consensus among countries that actively engage in NHA on the need for institutional approaches to improve uptake of NHA, by making advocacy less about the tool itself and more about the answers which NHA can help to provide. Politically savvy personnel with strong communication skills provide useful skill sets to become NHA "champions" that can help "graduate" NHA beyond production, and can promote institutional approaches in a multi-stakeholder environment around policy issues.

3.5 "Learning-by-Doing" Approaches for Effective Long-Term Capacity Building

Country experiences indicate that capacity building for NHA is a highly iterative process that evolves at each step of the cycle: an NHA team discovers the data, learns the classification and calculations, gradually partners with multiple organizations to streamline the data collection process, aligns existing surveys to the NHA format, adjusts methodologies to estimate consumption by examining data discrepancies, and includes high-level policy makers in a Policy Advisory Group. The three layers of capacity—individual, institutional, and environmental—are addressed at the same time during the iterative process. The case of Thailand in Box 3.1 exemplifies this iterative process of "learning-by-doing" as driven by local staff members. A similar iterative process was observed in other countries such as Georgia, Kenya, Jordan, and Serbia.

Some country cases suggest the potential role that external support can play to promote "learning-by-doing". For example, in Serbia two international consultants were an excellent source of support in guiding production by a team of two part-time economists and a head of the NHA unit at the initial round of the NHA cycle. One consultant made a work plan for data collection together with the NHA team and Steering Committee. He also provided considerable on-the-job training, showing his work and explaining how NHA data could be collected and used for NHA production. Instead of collecting and validating the data himself, he then let the team collect and validate the data, while he served as a source of knowledge. The other consultant made a work plan to revise the data acquired from the pilot activities and prepared a plan to fully implement NHA production. This shows how external consultants can be valuable to serve as a source of knowledge and to facilitate rather than implement the NHA process.

A "learning-by-doing" approach appears to be initiated and promoted either through the efforts of individual "champions" from within the country (e.g., Thailand), through effective external facilitation, or a combination of both (e.g., Serbia). It would thus be valuable to identify a potential champion of NHA as well as to plan and review external support from the point of view of capacity building.

In conclusion, capacity building for NHA is a long-term, iterative process for individuals, institutions, and the country environment across the full cycle of NHA activities. The target of capacity building and approaches to bridge capacity gaps are likely to differ, depending on the socioeconomic status of the country. Developing a long-term strategy grounded on the specific country situation is critical to sustain NHA activities through the built capacity of skilled and empowered staff. Finally, the role played by technical assistants should be carefully defined in the strategy to enhance rather than obstruct the "learning-by-doing" process.

Chapter 4

Financing Strategy for NHA

This chapter shows how a financing strategy can be crafted to ensure the long-term sustainability of NHA, taking cognizance of a country's socioeconomic status and development path. It then discusses the importance of rooting NHA in a country's planning and budgeting process, both to allocate sufficient resources for NHA and to help ensure they are used effectively. The chapter also highlights ways to achieve cost savings—including integrating the NHA data collection process with routine data management systems, simplifying and standardizing NHA processes and tools, and localizing production. Finally, the chapter sets out the possible variations in a country's NHA financing strategy, as determined by its economic status.

Key points are:

- Past experience shows that, without a long-term financing strategy, countries face challenges in sustaining NHA.
- NHA in low- and middle-income countries have often been a donor driven, highly technical, and expensive exercise. To turn NHA into a user-friendly, practical, and sustainable tool, they need to be cost-efficient and integrated into existing data collection and national budgeting processes.
- The cost of NHA tends to decrease with each subsequent round of NHA. It is thus crucial to have a financing strategy in place that extends beyond the initial rounds of NHA production and aligns the shift in cost sharing between countries and development partners over the long-term.
- Rooting NHA activities in countries' planning and budgeting processes can ensure sustained financing of NHA.
- On average more than 70 percent of the total average NHA cost is made up of survey, consultant, and staff costs, and these costs form a larger proportion of overall costs in early rounds. This serves as an opportunity to capture cost efficiencies early.
    - Approaches to reduce consulting costs include reducing the unit cost of consultants by leveraging local and regional expertise, reducing workloads by minimizing and standardizing the process, and building the capacity of local staff.

- By investing upfront in integrating the data collection process into the existing data collection system, countries can benefit from cost savings every year after the initial rounds. This is particularly true of surveys to estimate private (household) spending on health.

4.1 A Sustainable Financing Strategy in Tune with a Country's Socioeconomic Status

Among the main challenges in sustaining NHA activities are both short- and long-term financing of the household surveys, staff, and the costs of keeping an office running. Past experiences show that without a long-term financing strategy, countries face challenges in sustaining NHA cycles. In several countries, donors have funded technical assistance for a few rounds of NHA production without a clear collective financing strategy to sustain activities, and the cycle did not continue after the one to two fully-financed rounds. In contrast, countries such as the Philippines, Thailand, and Jordan have moved toward self-funding by standardizing the NHA process, building capacity, and integrating the NHA cycle into existing data collection and budgeting processes through years of "learning-by-doing".

NHA in low- and middle-income countries have often been a donor-driven, highly technical, and expensive exercise. In order to turn them into a user-friendly, practical, and sustainable tool that feeds into countries' needs, they need to be cost-efficient and integrated into existing data collection and national budgeting processes. Whilst it is important for a country to co-finance the activity for the sake of owning the output, the level of (co)-financing needs to be based on its specific resource situation.

4.2 Benefits of a Long-Term Financing Strategy

4.2.1 A long-term Financing Strategy Can Facilitate Transition to Lower Costs

The total cost of financing NHA decreases as countries experience more rounds and build capacity. The World Bank conducted a survey on the costs on NHA in 2010 (The World Bank, 2010). Of fifty-nine countries responding to the survey, thirty-two countries provided their cost breakdown. Of those, seven are OECD countries, seventeen are middle-income countries,[21] and eight are low-income countries. These respondents reported their total costs of production and dissemination for their latest rounds of NHA; their figures often exclude the costs of international consultants as recipient countries often have limited transparency on the total cost of the technical assistance that they may be receiving. Based on the responses reported by the twenty-five low- and middle-income countries, the average total cost for NHA production and dissemination for countries that experienced NHA more than five times is 53 percent lower than the cost for the countries that have experienced one to two rounds. These data indicate that costs can be reduced over time with more NHA experience notwithstanding the limited size of the sample and the fact that countries do not fully capture international consulting costs. Cost saving opportunities may be even more dramatic if the high spend on international consultants is reduced already in the initial rounds of the NHA cycle.

According to the same survey results, the average operating[22] and investment[23] cost

[21] Including upper- and lower-middle-income countries

[22] For staff, office, travel, dissemination, and other costs

[23] For consultants, training, and IT

for countries with more than five rounds of NHA experience tends to decrease to about one third of the costs of those with only one to two rounds of experience, as countries build skills and standardize the process and tools. Savings on household and other survey costs appear to be achieved more slowly, however: the average total survey cost for countries with more than five NHA rounds is only 23 percent smaller than the average survey cost for countries with one to two rounds of experience. In contrast, none of the seven OECD countries who responded to the World Bank's survey reported any survey cost because all NHA data come from routinely collected financial data and no marginal cost is required. Non-OECD countries that use existing routine data collection systems to produce NHA such as Vietnam, Thailand, and China also reported very low survey cost.

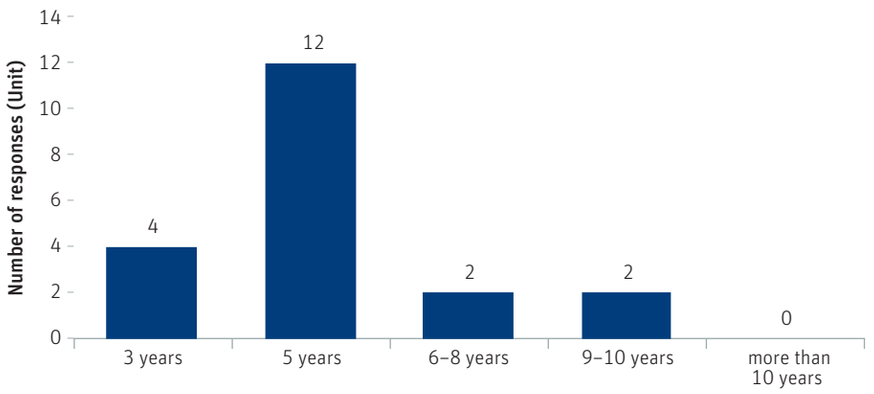
Overall, the cost of NHA tends to decrease significantly with experience. It would be crucial for countries and development partners to have a financing strategy that extends beyond the initial rounds and aligns cost-sharing between development partners and countries long-term to support this cost transition process effectively.

The World Bank conducted another survey in April 2011 which looked at the optimal duration of donor support for successful institutionalization of NHA. A majority of the twenty-one countries that responded to this survey thought that a five-year timeline for donor support would be required for this purpose (Figure 4.1) (The World Bank, 2011). The importance of having a long-term financing strategy is backed up by several country examples. In Madagascar and Mongolia, for instance, donor financing supported the production of the first round of the NHA but with no financing strategy in place for the future; as a result, these countries struggled to maintain the NHA cycle.

The pace of the cost transition and the need for financing support will vary depending on the country's socioeconomic status and access to resources. Low-income countries tend to need external consulting support across the NHA cycle, due to the shortage of human resources, and might need to conduct expensive household surveys to complete the NHA tables given the lack of reliable data systems. The variations in financing strategies between countries of different resource levels will be further discussed in the following sections.

Figure 4.1. Optimum Duration of Support from Development Partners (n = 21)

Q: For your country to put in place effective and sustainable capacity for the production, dissemination, analysis, and use of health accounts, what time commitment and support would you expect from donors and development partners?



- The majority of respondents believe that it takes 5 years to make recurrent costs and activities for NHA sustainable without donor support
- This suggests that an NHA institutionalization plan should cover and budget 5 years ahead

Source: The World Bank's survey on financing of health accounting, 2011

4.2.2 Rooting NHA Activities in the Country's Planning and Budgeting Process could Ensure Effective Use and Unlock National Funds for NHA

An effective approach to secure funding is to integrate the NHA process as a part of a country's regular budgeting process. For example, Rwanda is moving towards the integration of NHA into the formal national resource planning exercise in which the government and SWAP partners jointly plan sector expenditures (Rajkotia et al, 2011). Thailand uses NHA data in conjunction with hospital administrative data to estimate health expenditures for curative and preventive care. It also used NHA to inform MTEF for the health sector in the 10th National Economic and Social Development Plan.[24] In the Philippines also, the Health Policy Development and Planning Bureau within the Department of Health uses NHA along with a wide range of other health-related data as input to their policy research, planning, and monitoring functions, and a law requires the production of NHA every year (Racelis, 2008). These approaches ensure the routine use of NHA as a formal tool for analysis, and unlock national funds for the NHA exercise.

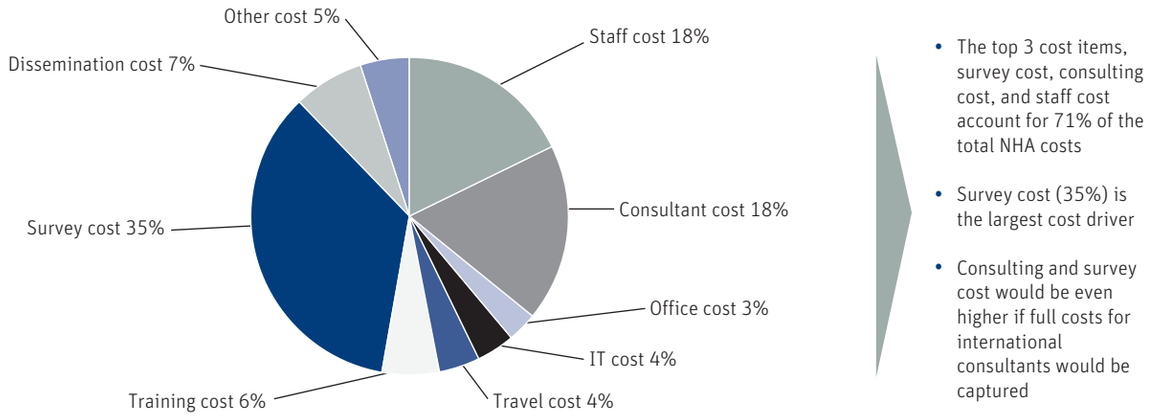
4.3 Capturing Cost Efficiencies for NHA

4.3.1 Opportunities for Capturing Cost Efficiencies Reside in the Early Rounds of the NHA Cycle

Capturing cost efficiencies is critical to increase financial sustainability of NHA. Figure 4.2, based on the 2010 World Bank survey on costs of health accounting, shows that on average more than 70 percent of the total, average NHA cost is made up of survey, consultant, and staff costs (The World Bank, 2010). This percentage will even be higher if the costs of international consultants that are not fully captured in the survey are included. Since it is vital for a country to build and sustain human capacity, cost-saving opportunities should be sought primarily on survey and consulting costs and not on staff costs. The survey data suggest that the survey and consulting costs form a larger proportion of costs at the early rounds of the NHA cycle, and that

[24] Tangcharoensathien, Viroj, and Walaiporn Patcharanarumol. 2011. Personal Interview. Senior Advisor and Senior Researcher, IHPP, MOPH, Thailand. June 22.

Figure 4.2. Average Cost Composition (%) for NHA



Source: The World Bank Survey on costs of health accounting, 2010
Note: Costing is based on reports from responding countries, who often have little overview of the full costs of international technical assistance

there is also a significantly larger variation in cost at the early rounds of NHA among countries with the same rounds of experiences. Assuming the adequate quality of NHA data produced in these countries, this would imply that the opportunity to capture cost efficiencies in survey and consulting costs reside in the early rounds of NHA, and that benchmarking best cost-efficient practices can reduce the NHA cost up front.

4.3.2 Costs Can be Saved by Integrating NHA Data Collection Process to Routine Data Management Systems

Many countries need a household survey to complete NHA, due to the lack of access to household health expenditure data or their poor quality. This makes the survey cost the largest cost item across different rounds of NHA. For example, Georgia conducts HUES to supplement the existing household survey by the State Department of Statistics (SDS). This survey costs account for 77 percent of the total NHA cost of the country.[25]

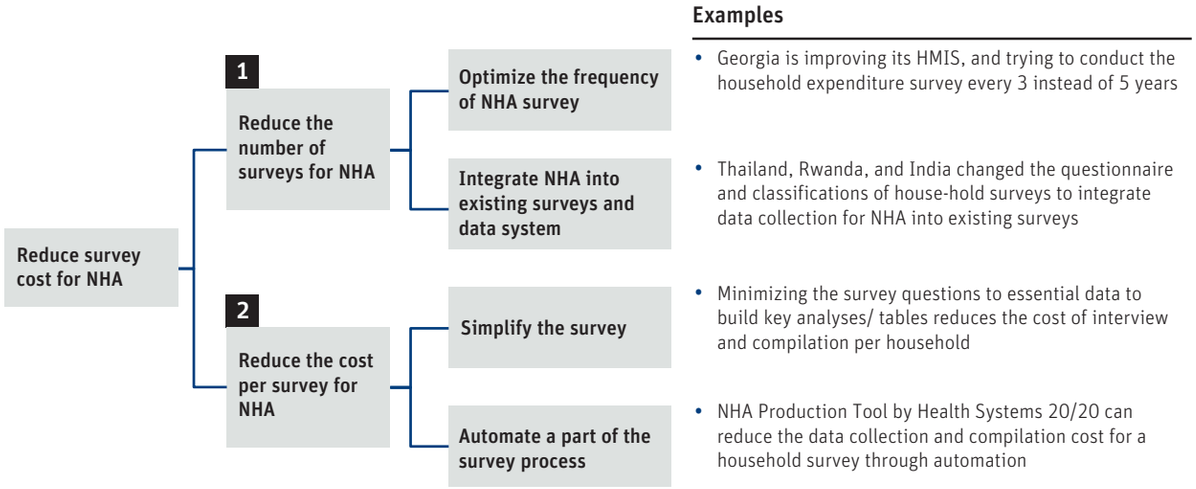
As summarized in Figure 4.3, country experiences indicate that survey costs for NHA can be saved through: (1) reducing the number of surveys by integrating data collection process into existing data management systems; and (2) reducing the cost of a survey by simplifying it and standardizing its process and tools.

Integrate the NHA data collection process into existing data system

First, countries can reduce or avoid the survey cost for NHA by integrating data collection into existing survey or data systems, where these exist, and use alternative estimation methodologies that leverage existing data. Estimation of household out-of-pocket expenditures (OOP) is frequently the most complex activity to estimate health expenditures. Furthermore, they often pose a large cost burden on overall NHA activities. The problems of reporting bias in large-scale surveys such as household surveys and for-profit private providers' surveys are well documented and studied. To avoid this, countries can use alternative methods for estimating household OOP that integrate and triangulate multiple data sources. Countries such as

[25] Goginashvili, Ketevan. 2011. Personal Interview. Chief Specialist, Health Policy Division of Health Care Department, Ministry of Labor, Health, and Social Affairs of Georgia. July 20.

Figure 4.3. Cost Saving Approaches in NHA Survey Cost



Source: The World Bank, based on country interviews.

Box 4.1. Estimating Out-of-Pocket Payments without Household Surveys

Current best practice methods for estimating household out-of-pocket spending involve integrating and triangulating multiple data sources to estimate household spending, many of which are related to the production or provider side resort (Examples of the latter include industry data on pharmacy sales, surveys and administrative reports from private hospitals. In countries such as the USA, Australia, Malaysia, Sri Lanka and Bangladesh, these are sufficient to generate reliable estimates of the level, trend and composition (by functions) of household out-of-pocket spending. However, in areas where expenditures occur at non-institutional or informal providers, household survey data may represent the last resort (Rannan-Eliya et al, 2010).

Countries that have used this estimation approach and leveraged existing and routine data sources have made significant savings on the overall costs of NHA activities (ADB, 2008). For example, in recent updates of NHA in several of the Pacific Island countries that share the challenge of limited data sources, new household surveys were not commissioned for NHA estimations. Instead, existing household budget and new provider surveys were employed. In the wider Asia-Pacific region, none of the developed or developing countries with annually updated NHA estimates depend on household surveys commissioned for NHA purposes, although all have used existing national household survey data to some extent.

However, the continuing reliance on household surveys to estimate household spending may reflect the difficulty that many NHA agencies have in recruiting and retaining personnel with research skills. The triangulation and adjustment of survey data with other data sources is less costly than conducting a new household survey, but requires the capacity to assess and manipulate statistics. Countries can benefit from capacity building supports on the alternative methods through experts and regional networks.

the USA, Australia, Malaysia, Sri Lanka and Bangladesh have been able to generate reliable estimates of the level, trend and composition of household OOP without using household survey data (Box 2.1). Also, as discussed in the previous chapter, the government of Georgia issued a decree that defines the information flow and responsible organizations for producing NHA, institutionalizing the multi-stakeholder data-collection process. With support from USAID, the country is strengthening the HMIS to improve data reliability, which is expected to reduce the frequency of health expenditure surveys thereby reducing the survey cost by 40 percent.[26]

Further, several countries have revised their questionnaire and classification of existing household surveys, adding a module to the survey to satisfy the data needs of NHA, thereby saving the entire survey cost for NHA (Figure 4.3). Research for Health Systems 20/20 estimated that a free-standing household health expenditure survey for an NHA estimation can cost up to US$ 1,000,000 (Carlson and Glandon, 2009). It is also estimated that the cost for a free-standing, disease-specific survey to review expenditures in health areas like HIV/AIDS and malaria for NHA sub-accounts can reach US$ 200,000–500,000 (Carlson and Glandon, 2009). On the other hand, adding a few questions to an existing survey to collect the same information for an NHA estimation adds less than a minute to the interviewing time for many of household members, which adds only about a few thousand dollars (Carlson and Glandon, 2009). These data show that the integration of NHA data collection into existing surveys can significantly improve the financial sustainability of NHA.

However, adding expenditure related questions to existing surveys, such as the Demographic and Health Survey (DHS), needs to be designed and tested carefully.

[26] Goginashvili. Personal interview already referred to.

First, even if the additional questions for NHA will not be a significant burden for many respondents, it is necessary to carefully avoid interviewee and interviewer fatigue due to adding further complexity to existing large-volume surveys, and to ensure that the quality of overall survey responses is maintained. Further, integrating an NHA module into existing surveys can require more training and monitoring. It would be crucial to examine these potential negative impacts of the integration and minimize them through, for example, limiting the additional module for NHA to essential questions that directly help policy decisions, and through optimizing the sample size for the additional module for NHA to the minimum level required to inform national-level NHA estimates.[27]

In Thailand, the NHA team built a strong partnership with National Statistical Office (NSO), and the NSO amended their Socio-Economic Survey (SES) questionnaire to break down the household expenditure into ambulatory services, that are provided by public and private providers, and inpatient services in public and private hospitals. As a result of these modifications, household expenditure in the NHA rely solely on the routine SES. By integrating NHA data sources into existing data sources, the NHA team has been able to reduce the entire survey cost for the last round of NHA to just US$ 1,538 per year[28] (Tangcharoensathien et al, 2008).

Rwanda is also exploring ways to streamline data collection processes to achieve cost-efficiency. For example, the country has integrated NHA and National AIDS Spending Assessment (NASA) analyses by identifying the primary sources of data needed going forward. In this way, analyses can be done annually rather than every five years. To streamline the collection of household data and minimize costs, household surveys which used to be the largest cost drivers of NHA for Rwanda have been integrated as part of major surveys including the DHS and the Household Living Conditions Survey (EICV) by aligning the questionnaires with NHA. Also, intermediate surveys on non-household expenditures will be conducted routinely every two to three years. As a result, more than 80 percent of data for NHA can be sourced from routine data collection processes. This will significantly reduce their NHA survey costs, which typically range from US$200,000–$500,000 (Rajkotia et al, 2011).

Carlson and Glandon in Health Systems 20/20 proposed sets of questions that countries can add to their regular, nationally-representative household surveys such as the DHS, the Living Standards Measurement Study (LSMS), and the World Health Survey (WHS). These questions are selected based on four criteria: 1) tested; 2) pertinent to health policy; 3) will inform NHA; and 4) minimize the additional financial and labor costs associated with data collection (Carlson and Glandon, 2009). The proposed questions that can be added to regular household surveys are presented in Appendix B7. An evaluation of the feasibility and impact of integrating these questions into the DHS has been tested through a stand-alone pilot DHS survey in Egypt and is being analyzed as a result of integration into the Rwanda 2010 DHS.[29]

Modifying the government accounting system can also reduce the need for additional surveys. In India during 2004/05, based on insights from the ongoing NHA process, the government introduced a line item

[27] Adetunji, Jacob and Maniscalco, Lisa, 2011. Personal interview. Contracting Officer's Technical Representative (COTR), Technical Advisor. USAID, September 7.

[28] Patcharanarumol, Walaiporn, 2011. Personal interview. Senior Researcher, IHPP, MOPH, Thailand and Technical Officer, Department of Health System Financing, WHO. August 15.

[29] Adetunji, Jacob and Maniscalco, Lisa, 2011. Personal interview already referred to.

classification for "Medical Treatment" in its accounting system to capture the expenditure incurred by the government on the health of its employees. Before this was introduced, the expenditure on employees' health had been captured under "salaries", and it required an additional survey on the payment and accounting offices to estimate the government spending on its employees' health. This survey cost was thus saved by the introduction of a sub-category in the expenditure classification.[30]

Simplify survey and standardize process and tools

Second, countries can reduce the cost of a survey by simplifying the survey and standardizing and automating the survey process. One approach is to limit the survey questions to obtain information that offer essential information for policy makers. Complicated questionnaires will incur additional cost in interviewing households and compiling results as well as for modifying an increase in errors. Especially in low-income countries with resource constraints where additional surveys would be needed, simplifying the survey to create essential NHA tables based on policy needs could maximize the cost effectiveness.

Another approach is to use standardized and automated tools that facilitate data collection and compilation and reduce the rework to deal with errors. In Tanzania, the National Health Accounts Production Tool developed by USAID-funded Health System 20/20 is being tested (see Appendix B.4). The Production Tool uses electronic questionnaires that are automatically generated for data providers. It also imports responses directly to the database electronically. Built-in validation and easy-to-follow steps to assign codes to data with automated double-counting check functions are expected to facilitate the compilation and validation of data and make it possible for a trained local team leader to administer the process. It also automatically produces the NHA tables and visualizes the flow of funds, which can save time for costly international consultants to double-check data. It is expected that the Production Tool can save the cost for survey and consulting at the initial stages of NHA by US$ 58,000–79,000 (rough estimation to be tested) (Figure 4.4).[31]

It should be noted that the long-term reduction of survey costs through integration into regular data collection processes may require considerable upfront consulting and staff costs that entail identifying existing data sources, validating data reliability, proposing changes in the regular data collection process, and negotiating with stakeholders. Once the integration is complete, however, significant cost savings can be made, as repeated household surveys in each subsequent round of NHA are expensive. It should be noted that whilst upfront investments may be high, experience shows that similar capital investments have been made just in NHA production without considering long-term efficiencies. The sooner countries can integrate their data, the more years of cost saving will follow.

4.3.3 Localizing and Standardizing Production and Analysis can Save International Consultant Costs

There are two kinds of consulting cost: the *direct* cost of consultants as a large cost item; and, if inappropriately designed to support long-term sustainability, the *indirect* cost of insufficient transfer of knowledge and skills to manage the NHA cycle, which is discussed in the previous chapter.

Experiences suggest that countries and their development partners can consider combin-

[30] Nagpal. Personal interview already referred to.
[31] Douglas Glandon and Lara Lorenzetti. 2011. Personal Interview. Senior Analyst and Associate Analyst of Abt Associates. July 20.

Figure 4.4. Expected Cost Saving Through NHA Production Tool by Health Systems 20/20 (rough Estimate)

Preliminary

	From: Traditional approach	To: NHA production tool	Potential cost saving
Customize NHA codes and develop surveys	• Local team adds customized codes in different format • Can cause inconsistency in multi-year spending analysis • Survey designed by local team	• Customized coding built into the tool, enabling its consistent and automated use over years • Pre-designed survey with electronic survey response	• Workshop cost for training and to build survey ($~1,500) • Cost savings in building codes and surveys ($~2,750)
Collect, enter and clean data	• Data technicians manually build data entry screen/collect/enter the data into Excel • Requires follow-up for data entry errors	• Automatic data entry from electronic responses • Built-in validation function prevents extreme numbers	• Mailing, collection, entry and validation saving ($~13,900) • Savings from workshop costs ($~4,000)
Map and analyze data	• Assign codes, split expenditures, and weigh response manually (highly technical work without instruction)	• Easy-to-follow steps and information are provided to assign codes • Mapping for subaccounts integrated to streamline analysis	• Significant reduction of data analysis training ($16,000–31,000) • Savings from workshop costs ($4,000-6,000)
Adjust and audit data	• Complicated manual weighting • Manual search for double-counting and errors • No consistent way to validate data	• Simple weighting process with automated formula • Automated double-counting check feature highlights overlaps	• Reduced work with automated functions ($8,250–11,250) • Savings from workshop costs($500-1,000)
Validate and present data	• No template to present data	• Automated production of NHA tables • Interactive flow diagram allows easy review of data	• Reduced work in generating charts and reports ($~5,000) • Savings from report writing workshops ($~2,500)

Total US **$~58,400 – $78,900** estimated cost savings* every year

Sources: Lara Lorenzetti, Nirmala Ravishankar, Catherine Connor, Douglas Glandon, 2011.[32]

ing three approaches to reduce the direct consulting cost (Figure 4.5): (1) reduce unit cost of consultants by leveraging local and regional expertise; (2) reduce workloads by minimizing and standardizing the process; and (3) utilize and build the capacity of local staff.

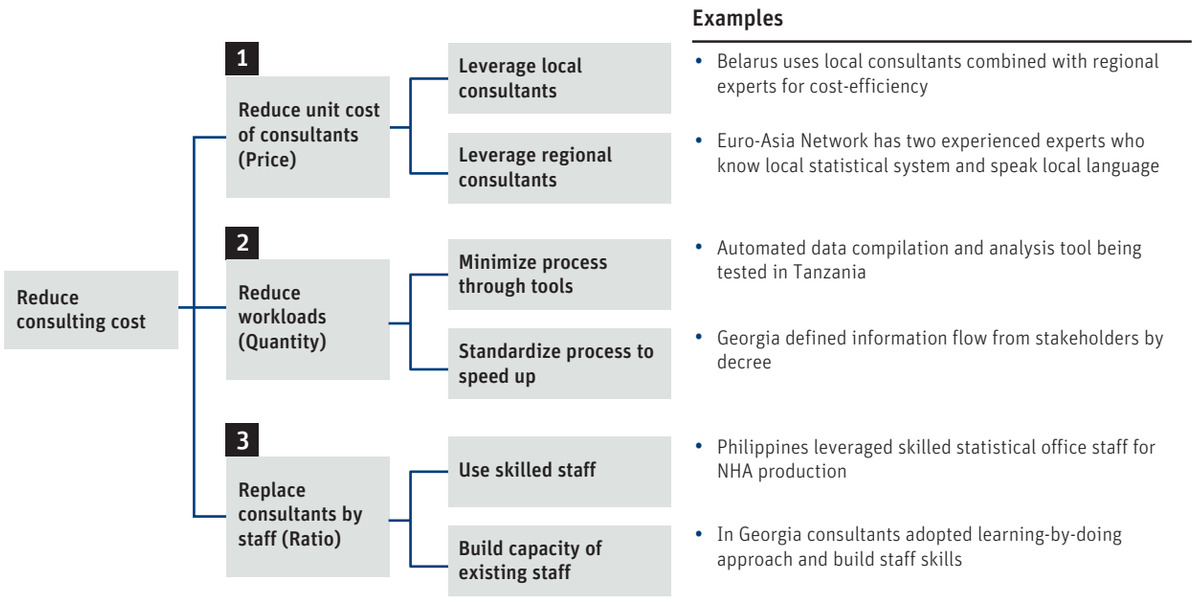
Leverage regional and local expertise

Countries can capture cost efficiency by leveraging regional and local experts where possible while avoiding the use of international consultants. The current unit cost for a regional consultant in the Euro-Asia network is about US$ 300 per day. In the former Soviet Union countries, for example, trained regional consultants can often also help the country more efficiently; they are familiar with statistics and data systems specific to the former Soviet Union countries, and can quickly identify where to collect specific data to fill the gaps. They also speak the local language, which enables them to work effectively with NHA staff, other local stakeholders, and local consultants. For example, in Uzbekistan a regional consultant worked closely with the leader of a local working group effectively helping her to identify options for efficient data collection, and they were able to communicate in the local language.[33]

[32] Lara Lorenzetti, Nirmala Ravishankar, Catherine Connor, Douglas Glandon, 2011. Personal Interviews. Senior Analyst and Associate Analyst of Abt Associates. July 20

[33] Markova, Nora. 2011. Personal Interview. Health Expenditure and Financing Analyst, WHO Barcelona Office for Health Systems Strengthening. August 2.

Figure 4.5. Approaches to save Direct Consulting Cost for NHA



Source: The World Bank, based on country interviews.

Standardize and minimize process

Standardizing the process of data collection and analysis reduces the transaction cost thus decreasing the workload of consultants. The example of the Philippines in Chapter 3, where the country standardized and documented its estimation procedure and data sources in a manual and in an estimation tool, not only reduced the consulting workload but also made it possible for new staff to learn the process without the help of external consultant (Racelis, 2008). Also, the NHA Production Tool developed by the Health System 20/20 in the previous section is a good example of reducing the consulting workload by simplifying and minimizing the process through an IT tool.

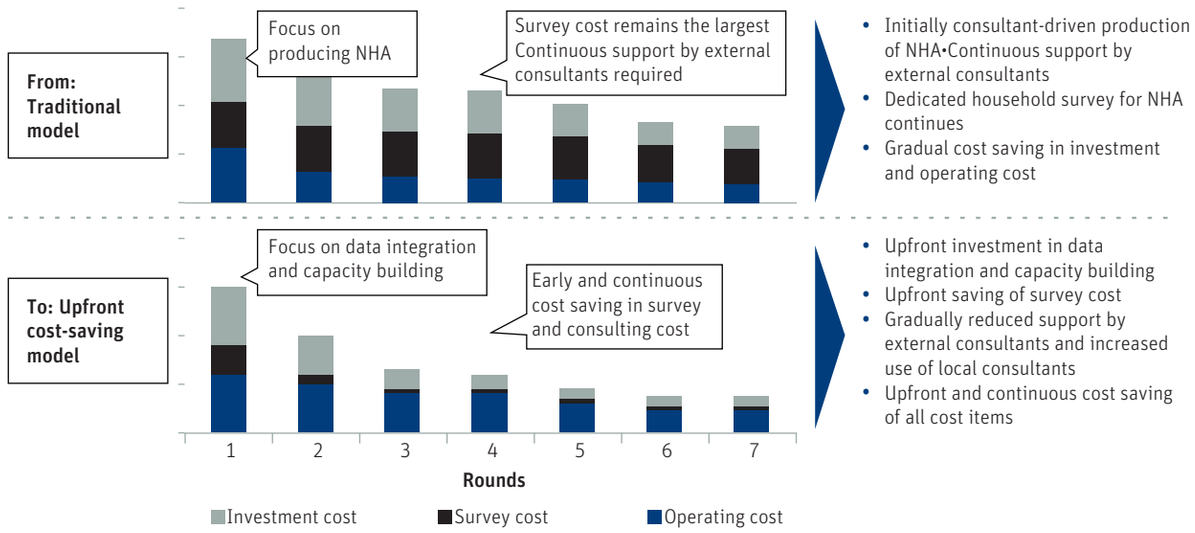
Build staff capacity

Building of local staff capacity can also reduce the consultant cost by increasing their ability to do more without support. As discussed in Chapter 3, several countries have leveraged existing statistical capacity within different government entities, and built their capacity to produce and analyze NHA through a "learning-by-doing" approach.

In the Philippines, staff at the NSCB with statistical expertise and trained health economists saved consulting hours. NSCB staff members readily understand the NHA approaches, especially when viewed as a component of existing National Income Accounts. They are also already familiar with many of the data sources for the NHA, facilitating data collection and compilation. As a result, the Philippines did not need to rely heavily on international consultants across the NHA cycle (Racelis, 2008).

In Georgia, while building the standardized process, tools, and manuals for data collection and analysis, consultants effectively helped a member of NHA staff and a local consultant to produce the first NHA themselves through "learning-by-doing". This limited the role of international consultants to light, remote support rather than on-site production and analysis of the NHA; this saved consulting and travel cost from the second round. As a

Figure 4.6. Conceptual Illustration of Upfront Cost-Saving Model (sample)



A cost saving model should be designed based on country's context such as existing staff capacity, data infrastructure, and regular availability of household expenditure data

Source: The World Bank.

consequence, Georgia maintains a relatively low consulting cost of about US$ 12,000 just to hire a local consultant[34] (The World Bank Survey on costs of health accounting, 2010).

As illustrated in Figure 4.6, then, by investing upfront in developing the data collection process in such a way that it is integrated into the existing data collection system and building the capacity to produce NHA with minimum support from external consultants, countries can benefit from cost savings every year after the initial rounds. The strategy to capture cost efficiency should be based on the specific resource context of respective countries, which will be elaborated in the next section.

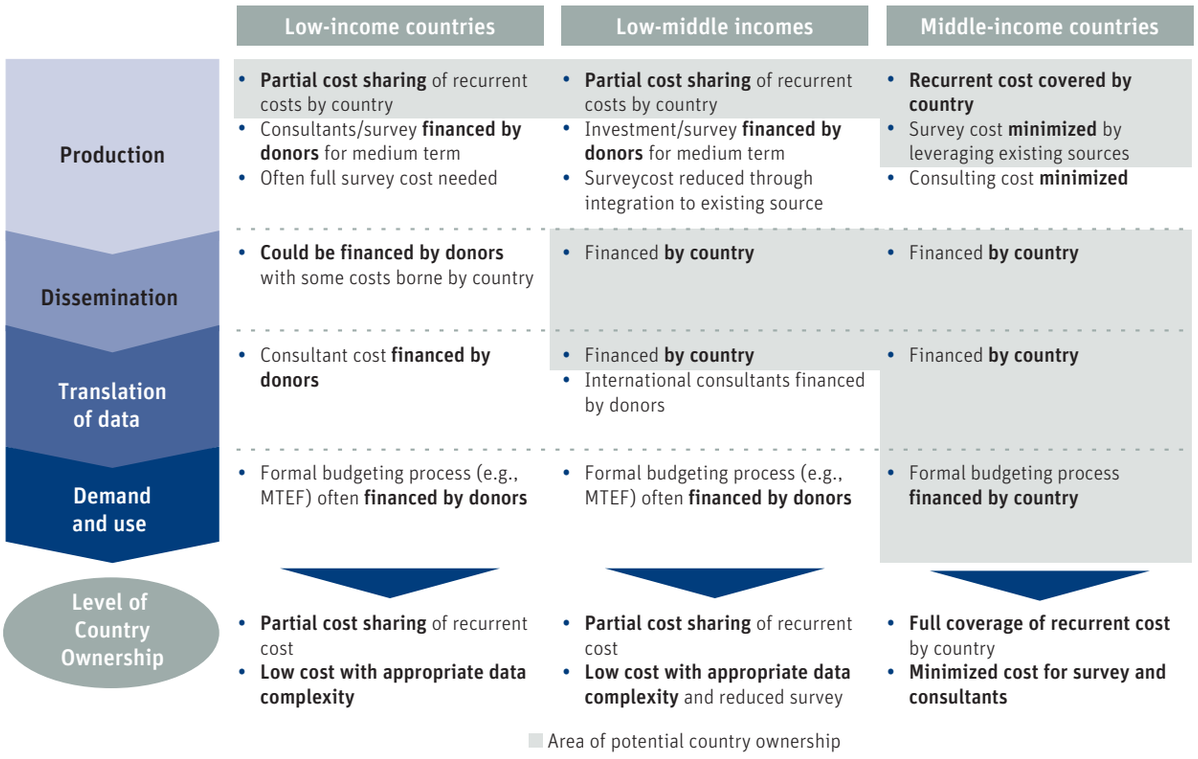
4.4 Aligning Countries' Financial Ownership

The socioeconomic status of a country should affect its financing of NHA and cost saving approaches. Figure 4.7 summarizes different approaches for low-income, lower-middle-income, and middle-income countries. Low-income countries, for instance, may need external financing across the NHA cycle, and they might need to conduct household surveys to supplement insufficient data infrastructure. A realistic financing approach for them may be to seek partial cost-sharing of recurrent and dissemination costs, and to limit survey complexity to essential data for policy makers. Even in this situation, it should be possible to reduce consulting costs over time by standardizing the process and ensuring the necessary financing for effective use of NHA by integrating them as tools for formal budgeting processes.

As the human and financial resources of a country improve, however, it can reduce reliance on external finance and save survey and consulting costs by fully integrating the NHA data collection process into the existing data system and by building local capacity. It is

[34] Goginashvili. Personal interview already referred to.

Figure 4.7. Examples of Financing Framework for NHA by Countries' Income Status (illustrative)



Source: The World Bank, based on country interviews.

important for countries and development partners to align financial ownership of the NHA process with shifts in income status over time, from the perspective of long-term, collective planning.

Driving the NHA cycle requires upfront investment and long-term financing of recurrent cost. However, as discussed in Chapter 1, NHA can provide considerable value-add to countries, and potentially improve their bottom-line. Turkey, as shown in Box 1.2 as an example, increased its total health expenditure using NHA as a monitoring tool, and through NHA analyses identified a significant cost-saving (38%) opportunity in respect of government's health spending. Despite these benefits, the cost of NHA is fairly small, especially with cost saving efforts introduced in this chapter. For example, as introduced in Chapter 1, the cost for the latest round of production and dissemination of NHA in Burkina Faso and Thailand represent 0.02% and 0.0006% of the respective governments' spend on health.[35] This suggests that investing in NHA activities is a cost-effective "smart" investment for developing countries seeking to make better use of how every dollar is spent.

[35] Boureima Ouedraogo and Some Tegwouli, 2011. Personal Interview. Director-General, Information and Health Statistics, Director of Studies and Planning, MOH, Burkina Faso. Walaiporn Patcharanarumol. 2011. Personal Interview. Senior Researcher, IHPP, MOPH, Thailand. June 22.

Chapter 5

Translation and Dissemination of NHA

This Chapter surveys how insights from NHA can be "translated" to inform policy and thus illustrates the variety of dissemination mechanisms and products used to target key stakeholders in health.

While the production of NHA alone provides a good fact base to illustrate current health financing flows within a country, the data are not particularly meaningful unless key insights from the data are not taken up by policymakers. In order for insights from NHA to "translate" into policy, results should be disseminated broadly to reach a wide variety of audiences. This translation and dissemination play a critical role in the full cycle of NHA activities: without them, data are little used, and key opportunities in health systems reform may be missed. As a result, this Chapter illustrates several lessons that have been learned from country experiences in their process of translation and dissemination. While it is recognized that production plays an important role in NHA, details of the production process, including data collection, data management, and data quality, are discussed elsewhere—in the *Guide to Producing National Health Accounts* (World Bank, WHO and USAID, 2003).

Key points are:

- Without the translation of large volumes of data into policy-relevant analyses and insights, as well as their dissemination to a broad audience, stakeholders in health may fail to capture important information about the performance of the health system. They may also fail to appreciate the utility of NHA as an evidence base that can provide input to help the shaping of policy.
- Countries require a clear NHA dissemination strategy, with each dissemination "product" targeting one of a range of different stakeholders or audiences.

5.1 Translating Data Into Insight for Policy Makers

A general challenge in using data such as NHA for decision making has been the weak link between data production, on the one hand, and the demand and use of NHA to inform policy, on the other. In previous years, there has been an emphasis on production that has failed to address this critical link. Without the translation of data into key analyses and insights, and their dissemination to a broad audience, stakeholders in health may fail to see the utility of NHA and therefore miss an important tool to help shape policy. Ultimately, translation to the policy phase involves overall country ownership of the NHA process, regardless of the mode of production or governance structure followed: this allows countries to champion key policy insights, increasing the likelihood that insights will be used in a meaningful way.

Country interviews with leaders on the production and use side reveal possible solutions to strengthen the linkages between NHA production, translation, dissemination, and use. This section first looks at ways in which translation may inform policy, and then at ways for such translation to be supported by policy makers and development partners.

Possible ways for countries to translate data to inform policy include:

- *Focus less on the tool and more on the answers that NHA can provide.* Providing answers to essential policy questions is the strongest selling point of NHA, as all policy makers increasingly need data to inform their decisions. By moving away from a discussion on NHA as a tool in itself, towards a discussion on the data which policy makers cannot live without, the case for NHA is easily made. Korea is an example where, due to strong linkages between production and use, the NHA as well as OECD Health Data are regularly used to inform key policy debates. For example, the data are frequently cited in discussions on the public proportion of total health finance compared to that in other OECD countries. With the impending presidential elections, political parties have cited the NHA and OECD Health Data figures to highlight Korea's low public health spending as a proportion of total health expenditures. Specifically, while the public share of total pharmaceutical spending remains at about the same proportion as the OECD average, its share of inpatient expenditure falls far below the OECD average.[36] Figures such as these make the case for shifting public health spending from pharmaceuticals towards inpatient care.
- *Make the product digestible and the policy relevant.* By translating large volumes of data (NHA tables) into sharp and concise policy briefs, insights from NHA data are more likely to be absorbed and used as evidence to support decision making. India provides an example where NHA results revealed low public health spending compared with the high out-of-pocket payments incurred by households. This prompted the National Commission on Macroeconomics and Health (NCMH) to encourage the government to establish the National Rural Health Mission (NRHM) in India, which promoted greater public financing and lower household payments in consequence. It also led to a new generation of government-funded health insurance schemes that target the poor (e.g., Rashtriya Swasthya Bima Yojna or RSBY) (India MoHFW, n.d.). The impact of the NHA was due to their linkage to a broad health reform agenda, commissioned by

[36] Jeong. Personal communication already referred to.

the NCMH to study the nexus between economic growth and the health sector.

- *Tailor your product to your audience*. The importance of dissemination cannot be over-stated. Dissemination can come in the form of policy briefs just referred to, or as seminars and workshops to inform policy makers. These add relevance to the NHA and highlight their importance. In the case of analyses which are transmitted to the media and broader public, it is important that key messages be crisp, free from technical terms, and with clear messages on what the data suggest.
- *Continue to invest in improving production and translation capacity to develop and respond to "policy windows" that can spur demand and use*. For example, in the United States, NHA production began in the 1960s and has been produced routinely ever since. In 1980, projections for a five-year period began. Continuous improvements have since been made to these projections which have allowed for the 75-year projections that are made today. During the 1990s, NHA projections were increasingly integrated into Medicare trust funds, to inform key policy issues of federal relevance. Recently, NHA data, in triangulation with demographic data, have provided evidence for analyzing the current financial crises and U.S. debt issues. Demand for NHA data has grown over time; as have their levels of sophistication. Sustained production has allowed economists and statisticians to make incremental improvements to generate and capture a "policy window" for improving efficiency and equity in health spending.[37]
- *Triangulate NHA data with other data instruments and sources.* As has been seen, creating strong linkages between NHA and other data instruments and sources can generate cost savings. It can also facilitate translation of data into analyses and relevant insights for policy. The case of the Philippines is illustrative here, where NHA were triangulated with the Family Income and Expenditure Surveys (FIES) and National DHS to illustrate discrepancies between insurance coverage and health financing sources—indicating a lack of "effective coverage". While the private insurance scheme, PhilHealth, claimed a national insurance coverage rate of 85 percent, public social health insurance accounted for only 8.5 percent of all health financing sources. This indicates that 57 percent of health financing came from households' out-of-pocket expenditure (Lavado et al, 2011b); the burden on households was also increasing over time. These results served as the impetus to move policy discussions from "coverage" to "effective coverage".[38] Essentially, the linkage between NHA and other data sources revealed a disparity between the national health insurance policy and the government's ability to implement it through the provision of financial access to care.

  In Thailand also, NHA have been used with other data instruments and sources to inform health policy (Box 5.1). In particular, this has led to the projection of various scenarios in the MTEF for the health sector, highlighting how the government can invest more in public and preventive health programs.

Possible ways for policy makers and development partners to support translation include:

- *Engage political leaders through the NHA Policy Advisory Group.* Policy Advisory Groups with a solid skill-set in translation

[37] Waldo, Daniel. 2011. Written Communication. Senior Economist, Actuarial Research Corporation. September 17 2011.
[38] Chakraborty, Sarbani. 2011. Personal Interview. Senior Health Specialist, World Bank. June 9.

Box 5.1. Translation and Use of NHA with other Data Sources and Instruments in Thailand

Thailand recognizes that NHA are one of the key inputs that can be used to inform health sector decision making: they need to be put in context with other data sources and instruments used by the country's IHPP and its NHA Working Group. 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 National Statistical Office's annual household income and expenditure surveys to ensure accurate estimation of household out-of-pocket 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 the NHA.

Thailand also 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. The MTEF highlighted several scenarios that would see government investing more in preventive health and health promotion to address chronic non-communicable diseases, among other things.

(World Bank, 2008)

can also strengthen the linkage between production and demand for data. A Policy Advisory Group can include a broad array of stakeholders from across government, the private sector, development partners, and civil society, etc. Members can request or even require that their organizations produce needed information or validate available figures while, importantly, serving as an authoritative conduit for communicating findings to policy makers. Policy Advisory Group members are, however, likely to add more value when they have a minimum skill-set—e.g., technical access to data; ability to extract meaningful insights from data and offer suggestions of analyses for the production team; and strong communication and inter-personal skills to communicate results to the production team and to policy makers.

- *Steer support by development partners away from "production only" and engage them in translation and use.* Development partners can also support translation by providing technical expertise, financing, or capacity building that will ultimately encourage the uptake of insights from data. While sustainability requires that the institutionalization of NHA be country-driven, donors can still support countries in their full cycle of NHA activities—from production to translation and use—without taking a directive, top-down approach.

While the institutional "home" and style of production is country-specific (impacted by a country's political, economic and social climate), the translation of data to insights that can inform policy and serve as a critical link is often missing, regardless of the country's governance model. While production generates data and results, it is important to recognize that this process is not an end in itself but a means to using data for decision-making purposes.

5.2 Disseminating NHA Outputs

Dissemination is a critical component in the full institutionalization cycle of NHA activities: it involves the development of a clear strategy to share data through a variety of information channels to target audiences in the country. Timely dissemination of data upon the release of NHA results makes data available and accessible to a broad array of

stakeholders in the public interest. It can highlight to policy makers specific policy issues that are revealed by the raw data and is likely to optimize the uptake of insights from data to inform policy.

In Thailand, the dissemination of health resource tracking data has been effective in informing debates around the effective use of medicines. For example, when representatives from industry suggested that Thailand was spending too little on pharmaceutical spending, a network of statisticians triangulated the data, allowing IHPP Thailand to produce evidence to the contrary—emphasizing 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.[39] Use of NHA thus brought transparency to public debate and enhanced accountability as a result.

In developed countries such as Korea, NHA data are shared broadly, and insights from the data have contributed to key policy debates. In the first instance, the NHA data are posted on Korea's health accounts website.[40] Press releases are also issued after the annual publication of the NHA report. Korea's NHA Forum, under the Korean Association of Health Economics and Policy, has held workshops and planned other activities to expand its user audience. The NHA Focal Point has strong linkages to the Ministry of Health and Welfare as a result of his previous work experience at the Ministry and current advisory role—this facilitates the uptake of insights from the data.[41]

Broad sharing of NHA results thus helps to promote transparency, adds credibility to the numbers that the NHA provide, and as a result helps to inform key policy debates.

In a variety of countries, however, data production rather than dissemination have been prioritized. Examples of countries where this has occurred include India, Burkina Faso, Serbia, and Mali. The emphasis on production has been reinforced by international workshops and conferences which tend to focus on the bottlenecks in production rather than those encountered in dissemination and use. In addition, there remains a dearth of financial resources to invest in dissemination. While a routine budget line-item may support production, there is often little in the way of supporting dissemination. This has been observed in a variety of countries.

In Serbia, for example, the termination of donor funding for NHA has left only limited financial resources to support dissemination. Whereas previously, eight workshops were held to launch and disseminate NHA results, current dissemination is limited to posting of data on the MOH website, production of annual reports, and sharing of data with WHO. The NHA team is trying to circumvent this issue by presenting findings at internal and external workshops for Continuing Medical Education.[42]

Mali serves as a unique example of a country that has sought to overcome this challenge. In previous NHA rounds, data were available directly from the MOH, development partners, or the Institute of Public Health Research, but were not broadly disseminated. Its draft three to five year NHA institutionalization plan seeks to prioritize dissemination through a broad strategy geared towards Parliament, NGOs, the Ministry of Health, and the Bureau of Statistics. Results will be

[39] Tangcharoensathien, Viroj, and Walaiporn Patcharanarumol. 2011. Personal interview already referred to.

[40] *www.healthaccount.kr*

[41] Jeong. Personal communication already referred to.

[42] Gajic-Stevanovic, Milena. 2011. Personal interview already referred to.

Box 5.2. Dissemination Via Workshops and Forums in the Philippines

The institutional "home" for NHA in the Philippines, the National Statistical Coordination Board (NSCB), convenes multilateral forums to discuss the needs and concerns of data producing agencies (Encarnacion, 2011). First, raw data are put into the public domain, allowing independent researchers and others to use the data for research; this generates evidence and independent commentaries on the health sector (Chakraborty, 2011). The annual National Health Research Forum of the DOH then allows for dialogue between the NSCB and users; this allows the NSCB to present its findings, highlight the data input needed, and share its plans on how to use the data.

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, chaired jointly by the MOH and NSCB, contains 20 regular members from both the producer and user side of health statistics; they meet quarterly to discuss the 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 also a regular participant in the IAC-HNS.

(Racelis, 2008)

disseminated through the internet, workshops, policy briefs, and flyers.[43]

In Ghana, there are plans underway to establish a clear dissemination strategy. For example, specific policy papers will be commissioned and disseminated as full reports or policy briefs. This will ensure that data can feed into policy discussions, for example on how to prioritize and allocate resources to the health sector. There are also plans to host a competition for the best paper on the use of NHA data to impact policy. Overall, Ghana aims to: print and disseminate total results and specific policy analyses; present analyses at various forums; and promote continuous advocacy with senior policy makers to increase demand for NHA data.[44]

Dissemination should occur at two points in the cycle of NHA activities. First, basic tables and raw data should be made available for initial discussion with the providers of the data and to draw broad conclusions. Second, additional dissemination of results should take place following the translation of the initial data into policy-specific analyses and reports. While the first dissemination plan can target policy makers, the media, and perhaps academic or research entities, the second dissemination stage could focus on senior policy makers and those who are able to have a direct impact on planning and budgeting. Box 5.2[45] exemplifies the two stages of dissemination in the example of the Philippines.

Unfortunately, countries often lack a clear dissemination strategy with clearly specified products and channels that are tailored to target audiences, including stakeholders within and outside of government. Frequently, data are not shared outside of government, making it difficult for universities, academics, think-tanks, and other independent institutions to access the information. For example, dissemination of NHA results in India currently includes a launching ceremony or workshop organized by the MoHFW, to highlight key findings. Results are also posted on the websites of the MoHFW

[43] Zine-Eddine El-Idrissi, Driss M. 2011. Personal Interview. Senior Health Specialist, The World Bank. June 21.
[44] Draft NHA institutionalization strategy for Ghana.
[45] Encarnacion. Personal communication already referred to.

and WHO.[46] Despite these steps, dissemination remains limited; this is attributable to weak ownership of and demand for the data.

Thailand, however, provides an example of a country that has sought to strengthen dissemination. The country places a strong emphasis on dissemination and information sharing. NHA results are disseminated every two years, with NHA matrices posted on the IHPP website in Microsoft Excel, as well as in the form of policy briefs (World Bank, 2008). Briefings are held to debate specific policy issues. Results are also publicized in the media to highlight particular policy issues. Meanwhile, 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. Tanzania, another good example, has strengthened its commitment to improving dissemination and information sharing. While with the first NHA little was done in the way of dissemination, 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., the MOH and the MOF) and the private sector. NHA results were posted online at the website of the Ministry of Health and Social Welfare. In addition, 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, 2009. For the third round (in process), efforts will be made also to use local media and newspapers.[47] Together, these various avenues of dissemination have helped to foster transparency in the policy making process.

Even low-income countries, where a dissemination strategy is not yet in place, can broadly disseminate data and analyses. For example, in Afghanistan NHA findings were highlighted with much fanfare through a "launching" ceremony in April 2011. Senior officials from other Ministries (including the MOF), representatives from the Central Statistics Organization, hospital directors, NGOs, and the donor community were among those invited. The event received significant coverage on local television and radio and has motivated significant discussion on how to use data to inform health policy. Once the NHA report is completed, it will be printed and published on the government's NHA website and translated into local languages. However, the data is already being communicated by email to various ministries (Afghanistan MoPH, 2011).

Similarly in the Seychelles, where the first round of NHA results is just now being finalized, there are plans to disseminate results. Once confirmed, the results will then be forwarded to a Cabinet of Ministers. The final report will be posted on the MOH website and hard copies distributed to stakeholders. The Seychelles also intends for its NHA data to be used by a wide variety of stakeholders, including the MOH, the MOF, WHO, private health care practitioners, and private pharmacies.[48]

Even in resource-constrained settings, then, there are various ways that countries can maintain a broad dissemination strategy. Malaysia provides a good illustration of this point (Box 5.3[49,50]).

[46] Nagpal. Personal interview already referred to.
[47] Ally. Personal interview already referred to.
[48] Malbrook. Written communication already referred to.
[49] Dr. Zainuddin, Jameela. 2011. *GSAP Financing-Malaysian Perspective.* Head of Unit, Malaysia National Health Accounts Unit, Planning & Development Division, Ministry of Health Malaysia.
[50] Dr. Zainuddin, Jameela and Dr. Husein, Rozita. 2011. Written communication. Head of Unit, Malaysia National Health Accounts Unit, Planning & Development Division, Ministry

Box 5.3. Financial Resources for Dissemination in Malaysia

Malaysia disseminates NHA data through policy dialogue sessions, held every two years, that involve public and private stakeholders in health. Group work during these sessions highlights important issues in the NHA along with areas that need to be addressed broadly, as well as the issues that require the attention of individual agencies. The output of these sessions is compiled and disseminated to stakeholders and key policy makers (World Bank, 2008). Final NHA products are disseminated to all stakeholders in health, either in hard copies of the reports or else in CD format. Summaries of the data are also documented in the *Health Facts* booklet, a pocket-size health statistics reference that is produced annually by the MOH. This booklet is disseminated widely in hard copy and online. A major obstacle, however, lies in generating additional funds for producing hard copies and postage—yet Malaysia has overcome this challenges by disseminating the data in CD format, and web-based data uploads are currently being considered.

It is important for countries to define target audiences and prioritize dissemination products according to their available resources. Table 5.1 shows some variations in the dissemination output for different targets.

Other, innovative solutions for the dissemination of NHA results are also available. One approach relies on integrating the NHA with other data instruments and sources. Statistical reporting systems in many countries fail to use indicators produced from NHA data. NHA are frequently considered a tool in parallel to existing health information systems. This can be remedied through the integration of NHA indicators in health information systems with other statistical documents. Investments in IT solutions (e.g., a common platform or health information system) can also help to harmonize data sources and instruments (e.g., MTEF) so that the NHA are not perceived as a stand-alone, separate system. The linking of NHA data with other, important health databases and systems facilitates translation of data to inform policy.

Countries can also leverage regional, health-accounting networks to highlight and disseminate NHA results. This has been particularly important for the Asia Pacific National Health Accounts Network (APNHAN) and Euro-Asia networks, where members can present their NHA findings, discuss methodological concerns, as well as possible applications to policy among their peers (see Chapter 6).

Regardless of the mode of dissemination chosen, it is important to have a clear communication strategy in place that is tailored to an array of specifically-identified audiences

of Health Malaysia and Head of the National Health Financing Unit under the Planning & Development Division of the MOH, Malaysia.

Table 5.1. Examples of Dissemination Products for Different Targets (not Exhaustive)

	Type of Dissemination				
	Internet (email, website)	Hard or soft copies of reports, or CDs	Workshops, forums, training sessions	Policy briefs	Press releases, media sound bites
Main target audience (Examples)	Civil society, researchers, universities, policy makers	Producers, researchers, universities, civil society	Policy makers, researchers	Policy makers, civil society, researchers	Civil society, researchers

in-country, along with the financial support that is needed for routine dissemination. In this way, information can be shared broadly, encouraging the uptake of insights from data production for use by policy makers in decision making.

Chapter 6

The Value of Global and Regional Partners

Previous chapters have explored approaches that countries can take to strengthen each of the steps out of the full cycle of NHA activities—including governance, capacity building, and financing—based on their income levels and skills profile. Moreover, international and regional organizations can also play a critical role in facilitating the institutionalization of the NHA process at the country level. This chapter explores the potential value that global partners and regional agencies can add to NHA institutionalization.

Key points are:

- Some coordination at the global level may help improve the accountability and transparency of the NHA process at the country level, facilitating the use of internationally comparable data.
- International development partners can add value to countries by: refining and updating international statistical frameworks and guidelines; serving as repositories of knowledge to build institutional capacity; promoting and facilitating the translation of data into policy-relevant data; and improving transparency in their own financial flows.
- Regional agencies such as WHO regional offices, regional NHA networks, and regional observatories can further support country-level NHA activities.
- Regional agencies can add value to countries by facilitating peer-based learning among member countries, serving as a repository of knowledge and best practices, and providing cost-efficient technical expertise. However, regional collaboration requires overcoming financing and governance challenges in the long-term.

6.1 Global Partners

Coordination at the global level can help support institutionalization across the full cycle of NHA activities at the country level by: (1) promoting accountability and transparency through global initiatives and governance structures; and (2) establishing international standards for health accounts and facilitating global access to internationally comparable data. Moreover,

international development partners can add value by: (1) serving as a repository of knowledge to build institutional capacity and facilitate the exchange of information; (2) facilitating the link between data to issues relevant to policy; and (3) improving transparency in their financing of health resource tracking activities.

Global initiative to improve accountability and transparency

In the face of global financial and fiscal constraints, governments around the world are demanding greater accountability on the use of funds, whether they are domestic or external. In such an environment, there is increasing global momentum to improve accountability in health resource tracking as a critical activity for benchmarking progress towards the achievement of global health initiatives, such as MDGs.

A high-level commission was convened by WHO to improve global reporting, oversight and accountability for women's and children's health—the Commission on Information and Accountability for Women's and Children's Health was established in January 2011 following the launch of the Global Strategy for Women's and Children's Health at the UN, with increased pledges worldwide to achieve Millennium Development Goals (MDGs) 4 and 5 to reduce child mortality and improve maternal health. The Commission proposes a framework for global reporting, oversight, and accountability that includes tracking results and resource flows at global and country levels, creating a system to monitor whether external assistance for women's and children's health are made on time, whether resources are spent wisely and transparently, and whether the desired results are achieved (Commission on Information and Accountability for Women's and Children's Health, 2011).

Specifically, the Commission calls for new targets in health resource tracking—i.e. by 2015, among all seventy-four countries where 98 percent of maternal and child deaths occur, to track and report at minimum two aggregate resource indicators: (1) total health expenditure by financing source, per capita; and (2) total reproductive, maternal, newborn, and child health expenditure by financing source, per capita. It is based on the premise that tracking financial resources provides critical information that helps increase the accountability of governments to their citizens; shows whether countries have spent funds according to the priority areas budgeted for in their national health plans; supports more informed policy making; and enables money spent to be associated with results achieved (Commission on information and accountability for Women's and Children's Health, 2011). This initiative, led by countries and development partners, to coordinate global accountability sheds lights on the importance for countries to institutionalize NHA as a key tool for health resource tracking.

Global coordination for international comparability

International comparison helps countries to measure their health financing performance compared to peers (Box 6.1[51]). The Organisation for Economic Co-operation and Development (OECD) is mandated by its member countries to work towards international comparability of health spending.

[51] *Sources for Box 6.1*:

Somanathan, A., Rannan-Eliya, R.P., Fernando, T., Hossain, N., Mahal, A., Pande, B.R., and L. Reichenbach. 2004. *Review of Costs and Financing of Reproductive Health Services.* Unpublished report prepared for World Bank's Analytical and Advisory Activity on Better Reproductive Health for Poor Women in South Asia. Colombo, Sri Lanka: The World Bank.

OECD. 2010. *Health at a Glance: Asia/Pacific 2010*. OECD Publishing. Available at: *http://dx.doi.org/10.1787/9789264096202-en*

Box 6.1. Using NHA for International Comparisons

The Asia-Pacific region represents provide several examples where health accounts have been used to facilitate inter-country comparisons at the national level, and allowed for the decomposition of national estimates to yield program-specific comparisons.

Inter-country comparisons have been undertaken for a variety of analyses using health accounts data in the Asia-Pacific region. One notable example is a study of regional comparisons of national health spending that have been analyzed for the Asia-Pacific Joint Regional NHA Collections, led by APNHAN together with OECD Korea, using the OECD SHA framework. This analysis combines health accounts and non-financial data. It examines health expenditure levels and trends from an international perspective, decomposing health financing by function, provider, and source (OECD, 2010). To illustrate: the report highlights a great deal of variation in total health spending across Asia-Pacific countries—from USD 3,448 PPP in Australia to USD 24 PPP in Myanmar—illustrating health spending that is highly correlated with GDP. The report also points to variations in the growth rate of real, per capita, public health spending over time—from 4.9 percent in Asia-Pacific compared to 4.1 percent annual growth for OECD countries over the period 1998–2008. Yet other countries experienced a decline in health spending—e.g. Brunei Darussalam, Papua New Guinea and Nepal. In some cases, this was due to broader government pressures to reduce public spending. Finally, private sector health spending was found to exhibit large variations by country, and constituted the major source of private financing for health—again with strong inter-country variations.

NHA have also facilitated analytical work on the distribution of health financing in the Asia-Pacific region. The Equity in Asia-Pacific Health Systems (Equitap) network, a collaborative effort of more than 20 research teams in the Asia-Pacific region, has engaged in examining equity in national health systems in the Asia-Pacific region, with linkages to NHA data. These include several inter-country analyses on benefit incidence, progressivity of health financing, and the catastrophic impact of health financing.

NHA has also been used to facilitate inter-country comparisons for specific health services. As one example, NHA were used in a World Bank, multi-country study (2004) on the costs and financing of reproductive health (RH) services in South Asia. NHA and other government estimates allowed for a full analysis of the costs of reproductive health services incurred by governments, donors, and households in Bangladesh, Sri Lanka, Nepal, Pakistan, and the states of Rajasthan and Andhra Pradesh in India. Amongst other things, this study found the public-private health financing mix to vary by country in South Asia, with public spending on RH ranging from 15–16 percent (Rajasthan, Sri Lanka) to 42 percent (Andhra Pradesh). In Bangladesh and Rajasthan, private financing for reproductive health was two—or threefold that of public financing. In contrast, private financing in Sri Lanka was only half that of public financing. Moreover, financing for specific RH services was also found to vary by country. Importantly, even countries with similar income per capita exhibited strong variations in access to care. For example, Sri Lanka, Bangladesh, and Nepal have similar RH expenditure in relation to GDP, but Sri Lanka provides universal access to RH services, while Bangladesh and Nepal have less than one half or one third the levels of access, respectively. The authors of the present document attribute this variation to differences in technical efficiency of public sector services across countries.

These examples further highlight the value of adopting international standards, harmonizing data (under the SHA), web-accessible databases, and comparable reports on health financing to facilitate international comparisons.

A System of Health Accounts (SHA) was released by OECD in 2000 with the aim of establishing an international statistical framework for the reporting of health expenditure and financing data. In 2003, the World Bank, WHO and USAID developed a methodological guide on how to collect data and produce national health accounts that built on the principles and concepts established by SHA. The result was the NHA *Producer's Guide* (PG), published in 2003, whose primary goal was to assist developing countries prepare their own national health accounts. While countries can develop and use their own financial reporting system that reflect the unique aspects of their health system,

the use of the SHA and the International Classification for Health Accounting (ICHA) enables international comparisons of the data produced, helping policy makers understand their country's health spending in relation to their peers. Through the use of the OECD-Eurostat-WHO Joint Health Accounts Questionnaire (JHAQ), comparable and detailed health expenditure data (based on the SHA/PG) are currently collected for around 35 OECD/EU countries. The same questionnaire is also used in the Asia-Pacific regional health accounts collection.

The release of a revised SHA manual in 2011 by OECD, WHO and the European Commission provides an updated global standard in health accounting that reflects new and emerging demands on health accounts, including greater responsiveness to the needs of non-OECD countries. In particular, SHA 2011 manual offers an updated international statistical framework for tracking financial flows from sources (external and domestic) to uses of funds. The addition of the SHA tables on sources of funds reflects a specific response to the particular needs of many non-OECD countries. In addition, SHA 2011 includes significant revisions on classifications for disease tracking that could better support the preparation of subaccounts by disease categories.

Global resource tracking efforts

At present, a large number of resource tracking efforts are being led by a diverse group of stakeholders. A number of international development partners have invested resources to build capacity at country level and provided financial and technical assistance to assist developing countries produce NHA. This section highlights a number of ways in which international development partners are contributing to this process:

Methodological development

Several entities play a role in methodological development and statistical standard setting. For example, OECD, WHO and the European Commission recently released SHA 2011, which provides a global standard in health accounting. This brings together the original SHA and PG produced by the World Bank, WHO, and USAID in 2003 (See Appendix A2 for details). Other entities, such as UNAIDS, use tools including the NASA to monitor the flow of HIV/AIDS funding.

Financiers

There are several financing entities that support NHA activities in countries as well as at a regional level. These include: the World Bank, USAID, the European Commission which provides financial support for African countries, the Asian Development Bank (ADB), and WHO country offices which provide limited funding. Several other donor agencies also have invested in NHA activities over the past years, including: BMGF, GTZ, DFID, the Inter-American Development Bank (IDB), Swedish Development International Cooperation Agency (SIDA), etc. In addition, some organizations fund household surveys, which include health expenditure components (e.g. MEASURE DHS).

Technical assistance (including capacity building)

Several organizations play a key role in providing technical assistance, including capacity building, at country and regional level. For example, WHO provides technical assistance to countries and supports regional capacity building efforts through its regional offices. USAID supports a wide range of technical assistance and capacity building support to various countries through its HS 20/20 program. Other organizations such as PAHO and Harvard University's International Health Systems Group are also providing technical assistance to support country-level NHA activities (Hjortsberg, 2001).

The World Bank provides financial and technical support for NHA, often in conjunction

with Public Expenditure Review, which is one of the World Bank's core diagnostic tools prepared to help countries establish effective and transparent mechanisms to allocate and use available public resources in a way that promotes economic growth and helps in reducing poverty. NHA is an essential input for preparing the health sector component of PERs (see Box 6.2). The World Bank has developed instruments such as Public Expenditure Tracking Surveys (PETS) to collect information on the characteristics, financial flows, outputs, and accountability arrangements of service facilities and, in some cases, firms. Data collected from PETS would provide valuable inputs for refining NHA. Finally, the Bank conducts Living Standard Measurement Surveys (LSMS) through which it supports government statistical offices in developing countries strengthen the type and quality of household data to inform development policies, including data collection for NHA.

Various organizations also play a role in providing technical assistance to support development of disease-specific sub-accounts. For example, WHO has issued guidelines on creating Reproductive Health, HIV/AIDS, and Malaria sub-accounts that are based on the NHA methodology. Other agencies such as USAID and UNAIDS assist countries in their production of disease-specific, sub-accounts for HIV/AIDS, malaria, TB, and RH.

Box 6.2. The Role of NHA in Formulating Policy: Examples from PERs

PERs are useful analytical tools that can be used to evaluate health-system performance, help ensure that resources are being allocated in ways that reflect national priorities and are likely to improve efficiency and equity of the health sector. NHA data* are critical for effective PERs. A review of 44 recently-published PERs provides several examples demonstrating how NHA data can be used effectively; they also remind us that well-targeted public policy cannot be made without such data. We highlight just a few examples:

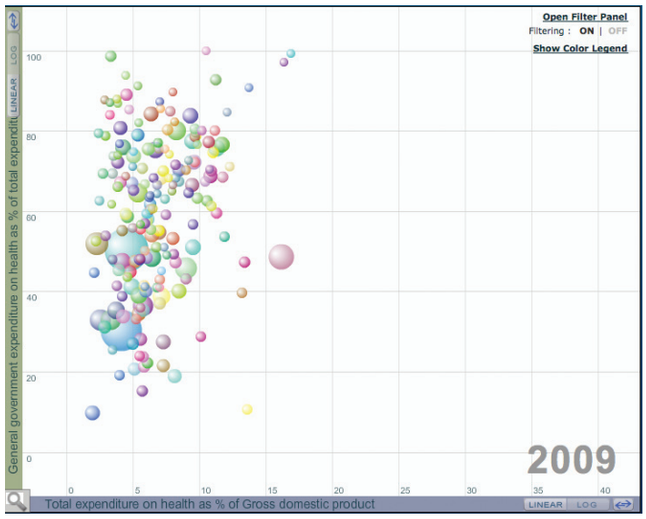
- **Level of health spending**. Recommendations on the level of health spending cited in PERs are often based on NHA data. Health spending indicators—such as public spending on health as a percentage of GDP or public spending on health as a percentage of total government spending—can be easily compared to regional averages and/or averages of countries of the same income level. In one example, the PER for Sierra Leone (2010) pointed to low levels of public health expenditure data relative to international standards, and a reduction in public expenditures in the share devoted to health. These observations were aligned with the dismal ranking of Sierra Leone in terms of health outcomes.
- **Financial sustainability.** PERs typically raise issues of the financial sustainability of the health sector, and these are based on NHA-type data. For low- and low-middle income countries, issues of financial sustainability raised in PERs most frequently relate to the size of donor funding relative to domestic funding for health. Donor funding is consistently reported as being unpredictable and unreliable for long-term strategic policy formulation. Another financial sustainability issue, raised in PERs using NHA data, concerns spending on specialized treatment abroad. For example, in the West Bank and Gaza PER (2007), the size of specialized treatment received outside the MOH was found to have reached unsustainable levels. In addition, the growing number of exempt beneficiaries and the decreasing revenues from payroll taxes has raised issues about the sustainability of the Government Health Insurance system. The PER therefore recommended diversifying the revenue base of the government's health insurance scheme.
- **Equity/targeting of specific populations**. PERs typically raise issues of inequality or poor targeting for specific population groups, again using NHA-type data. For example, the Ukraine PER (2008) analyzed the impoverishment and redistributive effects of high out-of-pocket payments borne by households. In the 2008 PER for Indonesia, in another example, benefit incidence analysis revealed that reforms were needed to address the regressivity of health-care spending. Geographically disagregated NHA data also revealed disparities in funding across districts of the same region.

* The term "NHA data" is used loosely to include any type of data quantifying health expenditures by source or use.

Data collection, estimation, and global and regional reporting

WHO collects health-spending information from member countries and reports annually on a set of health-spending indicators. Countries, as well as donors, increasingly use this information for both internal purposes as well as for cross-country comparisons. WHO also offers several tools to support these efforts: it has recently launched an online Global Health Expenditure Database that permits easy access to the totality of NHA information. The tool allows for quick cross-national comparisons (Figure 6.1[52]), country-specific summary statistics, a variety of easy-to-produce reports (see Appendix B.9), and figures on health expenditures. OECD/DAC (OECD Development Assistance Committee) also produces annual estimates of donor disbursements and financial commitments to health. DAC collects its information using its Creditor Reporting System (SRS). Other entities such as UNAIDS collect and report on spending on HIV/AIDS. It uses the NASA methodology as its country-resource tracking system.

Figure 6.1. Illustrative Bubble Chart from Global Health Expenditure Database



Source: WHO Global Health Expenditure Database.

Other support for health resource tracking

The Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), whose work is based on the principle of performance-based financing, also supports resource tracking efforts, although it does not directly produce health accounts. Its activities and grants are continuously being evaluated and monitored in order to make sure that performance benchmarks are reached. The GAVI Alliance also views monitoring and evaluation as integral to health-system strengthening, in its work to improve access to immunization in poor countries.

Further, the Global Health Initiative (GHI) represents a comprehensive, U.S. government-wide strategy for global health, focusing on the health challenges and needs of those in low- and middle-income countries. The GHI invests in 80 countries globally for a variety of global health programs, with an increasing focus on country ownership. Monitoring and evaluation is a critical component of this effort.

Value added by international development partners

Leveraging their global outreach, international development partners can also add value in supporting country-level NHA activities, through: (1) information sharing and serving as a repository of knowledge and (2) improving transparency in their own financial flows, at the global level; and (3) facilitating the link between data and issues relevant to policy, at the country level.

[52] Source for Box 6.2: Gaudin, Sylvestre. 2011. "National Health Accounts in Decision Making: Insights from World Bank's Public Expenditure Reviews and Poverty Assessments." Draft Prepared for the World Bank. September 8, 2011.

At the global level:

1. International development partners can facilitate information-sharing and serve as a repository of knowledge for building country-level institutional capacity for NHA. For example, experienced consultants can share their technical knowledge (including standardized methodologies and tools) to collect, compile, validate, and translate data to inform policy. They can also share experiences from other countries in incorporating NHA indicators into routine living-standard surveys and other data instruments. This may include integrating health expenditure questions directly into DHS, Multiple Indicator Cluster Surveys (MICS), the World Bank's LSMS, or other local surveys. In doing so, international support should ensure that countries own and lead the institutionalization process, regardless of whether the production is conducted in-house or by local, regional, or international consultants and they should support NHA from a long-term perspective rather than as a one-off exercise.
2. International development partners can also work toward improving accountability and transparency in the release of funds for the health sector in such a way that these are tracked and managed by countries themselves. The OECD DAC has forged major international development commitments, including the Paris Declaration on Aid Effectiveness, which establishes a monitoring system to assess progress and ensure that donors and recipients hold one another accountable for their commitments. Specifically, the Paris Declaration requires that international development partners harmonize efforts and use local systems in transferring funds to recipient countries, as well as simplify and share information to improve transparency in the flow of funds (OECD DAC, 2008).

At country level

3. International development partners can facilitate the linkage between data and their translation into insights that inform policy. This may involve helping countries to think through various governance structures and develop a long-term capacity building and financing plan for NHA, with emphasis on their use for policy making. In doing so, development partners can leverage their access to policy makers so as to encourage the uptake of insights from the data to inform policy. This would help to foster a culture of using data for decision making.

   Donors can also leverage their active involvement in countries' planning and budgeting processes to support the integration of NHA with other existing planning and budgeting instruments (e.g., linking NHA to the PER and the MTEF). Essentially, linking NHA to broader country planning initiatives will also support the sustained production of NHA, as well as their use to inform policy. In doing so, donors can support the use of standardized tools and the creation of a centralized health information repository at country-level, where a variety of data inputs can be accessed easily (e.g., to inform NHA, PER, and MTEF).

Global harmonization requires the buy-in of all key players (countries and regional and international stakeholders) and changing the incentives for development partners (Nandakumar and Ravishankar, 2011) to align their behaviors with the guidelines and targets set forth by the Paris Declaration

and the Commission on Information and Accountability for Women's and Children's Health.

6.2 Regional Agencies to Support Country-Level NHA Institutionalization

In addition to global partners, regional agencies can further support country-level NHA institutionalization. Various regional agencies such as *WHO regional offices*, *regional NHA networks*, *and regional observatories* can support country-level NHA activities by adding value from the perspective of individual countries, including: offering the potential to facilitate peer-based learning among member countries; serving as a repository for knowledge and best practices to build institutional capacity; and providing cost-efficient technical expertise.

- ***WHO regional offices.*** WHO regional offices can support countries by providing technical assistance in NHA production. This is largely due to WHO's own strengths and interest as a producer of internationally comparable health expenditure information.
- ***Regional NHA networks.*** Regional NHA networks aim to promote regional collaboration and cooperation in order to establish and maintain NHA within the regions. As presented in Box 6.3, with support from regional agencies, bilateral partners, and regional development banks, six regional networks were established by various bodies from 1997 to 2003: Eastern, Central, and Southern Africa (ECSA), Network of the Americas on Health Accounts (REDACS), Asia Pacific National Health Accounts Network (APNHAN), Middle East and Northern Africa (MENA), Francophone Africa (FA), and Euro-Asia (CIS). Further, new sister networks are developing such as one for the Pacific Islands, the sister network of APNHAN. Generally, the networks provide a platform for member countries to discuss experiences and share best practices on the production-side. While they have primarily focused on the production of NHA, their activities in promoting dissemination and use of the data have been limited.
- ***Regional observatories.*** Regional observatories have the potential to play a role in supporting country-level institutionalization activities by linking the outputs from the regional NHA networks to policy. The aim is to build on the success of the European Observatory (EO) on Health Systems and Policies in developing similar but unique partnerships in other regions. The observatories aim to bring together highly respected academic institutions to undertake analyses, promote dialogue with key policy makers, and leverage additional funding from other agencies (World Bank, 2011). Although still at an early stage of development, it is envisaged that regional observatories may play a role in guiding dissemination and the translation of data to affect policy, thereby filling a critical gap in NHA institutionalization activities.

Potential value added by regional activities

Regional activities have the potential to add value to countries in their NHA institutionalization activities in the following ways:

- *Promote peer-level knowledge sharing and learning.* Regional activities can serve as forums where producers of the data can share results and discuss concerns on the production-side (Box 6.4[53]). It allows

[53] Pellny, Martina and Irava, Wayne. 2011. Personal interview already referred to.

Box 6.3. Overview of Regional NHA Networks

Asia Pacific National Health Accounts Network (APNHAN). The largest of the six networks, APNHAN was established in 1998 with support from the Rockefeller Foundation grant channeled through WHO headquarters. The Asia-Pacific Health Economics Network (APHEN) established APNHAN as a non-funded project as well. Subsequently, the WHO Regional Offices for the Western Pacific (WHO-WPRO) and South East Asia (SEARO) have both provided funding on an ad-hoc basis either directly from their regional budgets or from country budgets to finance APNHAN members to attend annual meetings. WHO-SEARO facilitated the holding of the initial discussion meeting to establish the network on the fringes of a SEARO organized meeting. At the time, both WHO-SEARO and WHO-WPRO equally supported grant applications made by APNHAN to secure its initial seed funding by endorsing applications made by APNHAN to other entities. Membership within APNHAN consists of either ministries of health (or other agencies responsible for commissioning health accounts systems) or specialized technical agencies or experts responsible for compiling and maintaining health accounts systems. One of the network's major accomplishments was the establishment of Equitap in 2000, an initiative targeted at analyzing the various equity dimensions of health care financing and delivery. Over the years, APNHAN has cemented its relationship with the OECD, co-hosting its last five annual meetings with the OECD Korea Policy Centre in Seoul. Discussions mainly focus on technical issues related to production of health accounts under the SHA framework.

Eastern, Central, and Southern Africa (ECSA). Established in 1997, ECSA has a membership of 10 countries. Until 2001, its activities—largely consisting of periodic meetings to discuss technical matters—were financed by the WHO Regional Office for Africa. Since 2001, the Commonwealth Regional Health Community for East, Central and Southern Africa (CRHCS) has led the ECSA network. Regional training workshops have been the norm, with activities increasingly geared toward boosting national demand for NHA—particularly through sensitizing policy makers during the annual ministerial health conference—and building local capacity to sustain long-term production of NHA.

Euro-Asia Network. In 2008, after five years of operating as the Commonwealth of Independent States (CIS) network, it changed its name to Euro-Asia in an attempt to broaden its membership. The establishment of the network has been extensively supported by the USAID and WHO Regional Office for Europe. There has been a clear shift in leadership from development partners to network member countries with workshops and meetings regularly alternating among member countries. Peer support and technical assistance provided by regional experts (beyond the scope of the network's regional training sessions) have played a large role in improving data systems and the quality of estimates in member countries.

Middle East and Northern Africa (MENA). When the MENA network was established in 1999, membership was limited to countries of similar socioeconomic status suffering from common health issues. It has since expanded almost threefold as countries of all income levels have begun facing challenges related to the long-term financial sustainability of their health systems. MENA activities have largely been financed by the Eastern Mediterranean Regional Office of WHO, though member contributions are increasing. To meet the rising demand for support, the network is redirecting its attention away from technocrats to policy makers. While technical workshops are still being offered on a regular basis to promote routine production, the network has recently achieved greater success in motivating countries ministries to devote staff towards NHA production.

Network of the Americas on Health Accounts (REDACS). Also launched in 1997, REDACS has undergone substantial change over the years. It was initially known as the Latin America and Caribbean (LAC) network with membership limited to those countries undergoing significant health sector reform with an interest in the development of health accounts. Training sessions were heavily focused on refining health accounts methodology, with the Pan-American Health Organization assisting countries in the production of satellite health accounts. Nevertheless, minimal funding left LAC mainly inactive between 2000 and 2008. In 2008, the LAC network was reactivated as an initiative of Fundacion Plenitud and the Ministry of Health of the Dominican Republic. Today, it operates as branch of the LAC Health Observatory.

Pacific NHA Network. The Pacific NHA network is currently in the process of being launched. It is envisaged that the network will be governed by a Coordinating Body or Secretariat (chaired temporarily by the WHO); a Steering Committee (Policy Advisory Group) to provide strategic guidance to which members will be elected and for which representation can include member states as well as other research entities (e.g., FNU); and a Technical Resource Center to foster capacity building. The network plans to focus on data collection and production currently, but also dissemination and use of data to inform policy going forward. Member states have requested workshops to assist them in writing policy briefs using NHA data.

(Based on regional network studies conducted by Sakthivel Selvaraj (APNHAN), Jeff Tshabalala (ECSA), Jens Wilkens (Euro-Asia), Osmat Azzam (MENA), and Magdalena Rathe (REDACS), and based on interview with Martina Pellny and Wayne Irava (Pacific NHA))

Box 6.4. Capacity Building and Use of Data for Decision Making in the Pacific NHA Network

The Pacific Island Countries (PICs) have been making efforts to establish and develop health accounts systems for more than a decade. Recently, efforts have been made to develop a Network for NHA and evidence-based policy making in the Pacific. It is envisaged that the network will be governed by a Coordinating Body or Secretariat (chaired temporarily by WHO) and that a Policy Advisory Group will provide strategic guidance: members will be elected to the Policy Advisory Group with representation that can include member states as well as other research entities or interested members; there are a number of Australian institutes affiliated with the network, as well as IHP from Sri Lanka. The network's core institution however will be a Technical Resource Center, and CHIPSR at the Fiji National University (FNU) has been designated to take over this role. The aim of the Technical Resource Center is to build local capacity (rather than use international consultants), by creating a cadre of persons from across the Pacific Islands that are educated in health financing and health accounting at FNU or the University of the South Pacific (USP). These individuals can then support NHA activities within the ministries of their home countries. It is expected that the Technical Resource Center will be able to spark conversations about what is happening in NHA throughout the region; inform countries of new methods; serve as a guide on securing data inputs; and serve as a sounding board for methodological questions as needed. For some of the smaller PICs, it is also envisaged that the Center take over the routine production of NHA fully or partly—in close cooperation with their respective Ministries of Health.

The network plans to focus on data collection and production at first, but on the dissemination and use of data to inform policy in the future. At its inception, member states requested workshops to assist them in writing policy briefs using NHA data. The network also aims to have a designated focal point for NHA within the MOH of each member country, where production may or may not reside. The idea is to ensure that the MOH "owns" the NHA institutionalization process and that NHA have a permanent home, regardless of where production occurs. While funding remains limited, the Pacific NHA Network is currently leveraging the support of FNU, WHO, and development partners such as the affiliated institutes to support trainings and workshops. APNHAN provides financial support directly to CHIPSR and therefore the PIC NHA Network. This is conducted on an ad-hoc basis, and includes funding for a single regional training workshop held recently (costs shared with WHO), and funding to assist CHISPR in coordinating the NHA/SHA data collection from Pacific Island countries. Despite this, there is a need for additional financial support for the network.

Still, the network has been successful in creating awareness of NHA and serving as a platform to affect policy change. For example, the network has helped to raise awareness about the use of NHA given that funding by external donors and development partners in health is relatively high in the Pacific. There is therefore a great need to apply a recognized and comparable methodology to track sources of funding accurately—for the sake of better aid effectiveness. NHA also provide a fairly complete picture of all health expenditures and sources—not only on those provided by external partners—and it is also important for PICs to be informed of these. There was evidence of interest in NHA on a higher political level at the June 2011 Health Ministers meeting; all 22 Pacific Island countries identified their top ten priorities in health and one of these was to improve health financing, including for the production and use of NHA data as a tool to guide policy decisions.

producers to communicate with their peers, present key findings, and receive training on NHA concepts and methodology. For example, in order to facilitate peer-to-peer learning and the sharing of information, the Euro-Asia network has leveraged a common language and cultural understanding among members, common health information systems and statistics, and similar health system structures.

Countries within the region have also benefited from regional workshops and forums. In Serbia for example, the Euro-Emro regional workshop has been seen as an invaluable tool in supporting Serbia to recognize NHA as official health statistics through the development of a Health Evidence Law which would mandate the submission of data inputs required for NHA production, delineate production responsibilities, etc. (as done in Georgia).

The Head of Serbia's NHA office has been part of the Working Group involved in the law's formulation, guided by consultants from Slovenia; to date such a law has not been introduced, however, and its status remains ambiguous. This regional workshop has also benefited countries by facilitating the sharing of experiences (both positive and negative) encountered in production cross-nationally and developing local solutions to these challenges. In this way, regional collaboration has created a sense of camaraderie and support among peers (Gajic-Stevanovic, 2011).

Peer-level discussions can also occur through online networks to facilitate the exchange of information after regional meetings. In addition, regional agencies can help to partner non-institutionalized with institutionalized countries to facilitate an exchange of information. For example, the new Pacific NHA network is linked and affiliated to APNHAN in order to leverage the expertise and knowledge available in the Asia and Australian region (APNHAN, 2010; Asian Development Bank and the World Health Organization, 2010). While still in its infancy, REDACS (established in 2008 to replace the previous Latin America and Caribbean NHA network) has plans to include the United States and Canada in its networks so that countries in Latin America and the Caribbean can learn from the experiences of countries that have more experience in institutionalizing NHA (Rathe, 2010).

- *Serve as hub or repository for data and best practices.* Regional agencies also have the potential to gather evidence on regional and global best practices on NHA institutionalization and share these with member countries. They can further assist members in conducting country assessments and developing implementation plans for institutionalization. In particular, APNHAN has organized technical sessions to facilitate the sharing of country experiences in NHA estimation, and to share best practices in estimating households' out-of-pocket expenditures (Box 6.5). Under the APNHAN network, experts reviewed current methods and best practices for estimating these expenditures and made recommendations for improving and harmonizing estimation in future. This has helped to improve data quality among countries within the region.
- *Provide cost-efficient technical assistance with regional expertise.* Regional agencies can also be used to generate cost savings for countries by creating a pool of regional consultants to provide technical assistance and expertise. This pool of experts can facilitate recruitment of staff needed for production. In particular, regional consultants can support countries just embarking on NHA at costs lower than that of international consultants. They can also be effective in identifying data sources, coaching local staff, and managing local consultants with their knowledge about local data system in a common, local language. For example, within the Euro-Asia network, regional consultants were sent to Belarus to guide NHA production, identify data sources, examine national health statistics systems and highlight ways to improve the existing system. The consultants helped Belarus to create a NHA database and worked to improve data quality. In Uzbekistan, a regional consultant worked closely with the leader of a local working group and effectively helped her to identify options for efficient data collection and communicate with local consultants in the local language. The REDACS network (formerly LAC) has also been able to improve the cost effectiveness of NHA production for member countries in building a data repository for countries to access at the

Box 6.5. The Equity in Asia-Pacific Health Systems (Equitap) Project

NHA have facilitated analytical work on health financing, particularly in the Asia-Pacific region. One example is the Equity in Asia-Pacific Health Systems (Equitap) network a collaborative effort of more than 21 research teams in the Asia-Pacific region engaged in examining equity in national health systems in the Asia-Pacific region. Equitap was originally established as an initiative of the Asia-Pacific National Health Accounts Network (APNHAN), in collaboration with Erasmus University (The Netherlands) and The London School of Economics (United Kingdom), (Equitap, 2005). Equitap's original founder members were NHA teams who wanted to extend their NHA work to examine how health financing flows were distributed across their populations.

The Equitap network undertakes regular inter-country analyses of benefit incidence, progressivity of health financing, and the catastrophic impact of health financing. Specifically, Equitap has assessed the benefit incidence of public health care subsidies, exploiting detailed health accounts data to allow for variation in unit expenditures across health services, facilities and regions. Equitap research has shown that Hong Kong SAR achieves one of the most pro-poor distributions of all public health expenditures in the world, whereas public health care spending is moderately pro-poor in Malaysia and Thailand, and evenly distributed in Sri Lanka (O'Donnell et al, 2005b).

In addition, Equitap's study on the progressivity of health financing illustrated the structure and the distribution of health care financing in 13 Asian territories, combining health accounts and household survey data on household payments to estimate the distribution of health financing. An important finding from this study was that more affluent groups generally contribute more as a proportion of ability-to-pay in low and lower-middle income territories, and that unlike in Europe indirect taxes are universally progressive in developing Asia (O'Donnell et al, 2005a). Moreover, Equitap's study of the catastrophic impact of health financing on households revealed that, despite the concentration of catastrophic payments on the better-off in the majority of low-income countries, out-of-pocket payments still push many families poverty. In this study, 2.7 percent of the total population was pushed below the poverty threshold of USD $1 per day due to health care payments (van Doorslaer et al, 2005).

Note: Erasmus University and LSE are no longer members of Equitap. Equitap has built sufficient capacity such that it no longer needs technical assistance.

regional-level in the event that they need technical assistance (Rathe, 2010).

Challenges to materializing the value-add of regional agencies

While regional agencies can add value, they require substantive financial commitments and a sound governance structure and coordinating body to support activities at country-level. These are discussed in turn below:

- *Financial commitments.* Regional agencies often lack adequate financing to support their work. In particular, financial sustainability remains a concern for the regional NHA networks. Networks have typically been supported by donors, as countries have been unable to contribute to the financial costs the networks require. For example, with respect to the Euro-Asia network, member countries themselves (with the exception of Russia and possibly others) have few resources to support the network given limited domestic budgets. This calls in question the sustainability of the network in the absence of sustained donor funding.

An alternative is to pursue innovative financing solutions to support regional NHA activities. For example, networks can incorporate NHA activities into disease-specific studies, or loans and grants related to health system strengthening. This approach would further align NHA with policy making and broader reform issues. Another approach is piggy-backing on NHA-related discussions with other forums where similar people are likely to be present (e.g., the International Health

Economics Association meeting typically follows the national health accounts meeting every two years).

For example, a large part of the APNHAN's funding comes from projects and research grants, as well as some government support. APNHAN also receives funds through the Australian Agency for International Development (AusAID), of which a component is explicitly for APNHAN support; this is currently the largest form of support to APNHAN by an external sponsor. In addition, APNHAN has secured funding from the Rockefeller Foundation and European Union (2001), (PHFI, 2010). Other networks like REDACS are supported by the LAC Health Observatory, launched by *Funsalud* and the Carlos Slim Institute for Health, which has an agreement with the Health Metrics Institute, financed by the Gates Foundation, to launch a series of "research networks" (including REDACS), along with the Harvard School of Public Health. Additional funding for REDACS will be obtained through specific projects currently under development. In this way, funding for REDACS is tied to broader sources of funding that go beyond NHA so that the network is not solely reliant on WHO or member country support (Rathe, 2010).

- *Governance and coordination of regional agencies.* Regional agencies also require a strong governance structure and coordinating body to manage and govern their activities. Governance may require transferring coordination activities to agency members directly, but this may prove difficult given members' own responsibilities in their respective countries. For example, in an effort to hand over leadership from donors to countries in the Euro-Asia network, WHO's Euro office initiated and sponsored a series of smaller working group meetings with the most engaged countries. The group has met and discussed specific technical issues and functioned as an organizing committee for the network meetings. Donors have had difficulty transferring responsibilities, however, as countries have limited time and funds to support the networks. Country ownership will become more important as a network strives to move beyond its traditional focus on production to increased demand and use of NHA among member countries; this will require broadening the network's participants to include policy makers beyond the technical experts who typically attend the network meetings (Wilkens, 2010).

Regional activities have proven their value in promoting peer learning and in serving as a repository for knowledge and expertise to generate cost efficiencies for member countries. However, they also require country ownership and practical plans to support their own financing and governance. Further exploration is needed for countries and international development partners alike to make the best use of regional cooperation.

Conclusion

Country experiences presented in this report demonstrate how National Health Accounts, if translated into relevant policy analyses, can add value to health system design, financing prioritization, and performance monitoring. Countries that have institutionalized NHA have used evidence to reduce the financial burdens borne by households, increase their total health expenditure for wider health care coverage, and identify opportunities to improve cost efficiency in government spending.

On the other hand, country experiences also show that a supply-driven model—where the connections between production and use have been weak—has limited the potential for NHA to detect resource gaps, inequities and inefficiencies in the health system, and thereby inform policy in a sustained manner.

The connection between production and use of NHA can be strengthened through a long-term strategy, developed and owned by the countries and supported by the international community, which addresses bottlenecks and ensures sustainable investments in the entire cycle of the NHA process. For such a strategy to be effective, it will need to include a detailed plan on governance, capacity building and financing based on a country's unique resource environment and institutional capacity.

It is hoped that the country experiences synthesized in this report will encourage countries and international development partners to plan strategically and advance the journey towards NHA institutionalization in the spirit of genuine partnership and mutual responsibility. Routine use of NHA will generate valuable information and evidence base that responds to increasing national and international demands for transparency and accountability in the use of resources.

Significant international efforts are being launched to improve transparency and accountability in the health sector through a more coherent and effective resource tracking approaches. Following the 2004 High-Level Forum on the Health MDGs which identified the improvement of information on resource flows as a priority for action, the Global Health Resource Tracking Working Group conducted a series of background analyses and called for a more coherent

long-term support to improve government budgetary and financial systems in the developing world, including the integration of NHA into policy making (High-Level Forum on the Health MDGs, 2004; Global Health Indicators Working Group, 2007). More recently, the Commission on Information and Accountability for Women's and Children's Health developed a framework for improved global reporting, oversight, and accountability on women's and children's health.

A synthesis of the country experiences reveals that NHA are moving into a new era—one in which NHA activities can no longer be addressed in isolation, but will need to be undertaken strategically and sustainably as a critical component in a broader resource tracking effort that will inform policy. NHA can help countries plan and track the progress of health reforms when they are linked to national policy priorities, such as the expansion of health coverage through health insurance schemes. NHA can serve as an input to key national budgeting and planning tools and processes such as Medium Term Economic Frameworks and Public Expenditure Reviews. Moreover, NHA will continue to be an essential tool to track progress towards international policy targets and priorities, including the Health MDGs, as highlighted in the recommendations of the Commission on Information and Accountability on tracking resources and results for maternal and child health indicators.

To be effective, the cycle of NHA activities will need to be firmly embedded within the national process for evidence based policy, and owned by all the stakeholders in the system. This will require a fundamental shift in the nature of the partnership among all the stakeholders. This partnership starts with national and international leaders committing to mutual accountability in the use of national and international resources towards the goal of improving the performance of health systems and the health outcomes of the populations they serve. The journey towards that goal will involve many stakeholders. National governments, citizens and civil societies, development partners, and technical agencies all have a stake in ensuring a responsible use of resources. Collectively, these actors can ensure an effective use of NHA to improve the performance of a country's health system, and ultimately, to a better health and well-being of its people.

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Individuals and Organizations Consulted and Providing Inputs into the Strategic Guide

This Strategic Guide has been developed through a process of consultation with many countries and international development partners; interviews with country producers and policy makers in more than twenty countries; written contributions from country NHA champions and consultants; online surveys to countries on financing and costing; and through participation at several international conferences and regional consultations. Monthly, meetings were held by the NHA Technical Advisory Group, and an extensive consultation process was held in October 2010. Countries, development partners, and regional country networks have provided important contributions that reflect their experiences throughout the NHA institutionalization process.

International Conferences

International Health Economics Association (iHEA), Beijing, China, July 2009
Prince Mahidol Award Conference (PMAC), Bangkok, Thailand, January 2010
Global Consultation on the Strategic Guide, Washington DC, USA, October 2010
"Where is the Money" Resource Tracking for Better Health Outcomes and Greater Health Systems Accountability, Geneva, Switzerland, May 2011
International Health Economics Association (iHEA), Toronto, Canada, July 2011

Regional Consultations

South and East Asia Region, Delhi, India (December 2008), with Afghanistan, Bangladesh, India, Malaysia, Maldives, Nepal, Pakistan, and Sri Lanka (primarily government officials) participating. Development partners that contributed were GTZ (regional office), WHO

(regional office), The World Bank (headquarters and regional office).

Latin America. Mexico City, Mexico (January 2009), with Argentina, Bolivia, Brazil, Costa Rica, Colombia, Dominican Republic, Ecuador, Mexico, and Peru (LAC Network Countries) participating. The development partners participating were Eurostat, OECD, and WHO.

Africa, Nairobi, Kenya (April 2009), with Benin, Burkina Faso, Côte d'Ivoire, Ethiopia, Gambia, Kenya, Mauritius, Namibia, Niger, Senegal, Sierra Leone, Tanzania, Zambia, Zimbabwe (government officials and technical experts) participating. Development partners that participated were Eurostat, OECD and WHO (country offices).

Europe and Central Asia, Yerevan, Armenia (November 2009), with Armenia, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Turkmenistan, and Tajikistan, Ukraine, Uzbekistan (ECSA Network countries) participating. Development partners that participated were USAID, WHO (country and regional offices) and The World Bank (Headquarters and country offices).

Country Consultations with Development Partners

Bamako, Mali (April 2009), with Mali (representatives from National Public Health Department, National Statistics and Information Department, Ministry of Finance, Department of General Budget) and with Afristat, CIDA (Canadian Cooperation Office—Mali), Co-operation Dutch, and WHO (Burkina Faso) participating. The World Bank representative was: Ousmane Diadie Haidara.

Bogota, Colombia (April 2009, September 2009), with Colombia (Ministry of Social Protection, Department of Planning, Department of Statistics Javeriana University), and Mexico (consultant) and with The World Bank (headquarters and country office) participating. The World Bank representatives were: Andre Medici, Maria Ariano (consultant), and (Juan Carlos Junca consultant).

Ouagadougou, Burkina Faso (June 2009), with Burkina Faso (Ministry of Health, Ministry of Statistics), Mali (MOH), and Niger (MOH) and with WHO (West Africa regional office) participating. The World Bank representatives were: Ousmane Diadie Haidara and Tshiya A. Subayi (involved in initial stages).

Ulaanbaatar, Mongolia (July 2009), with Mongolia (Department of Health, Department of External Relations and several other stakeholders) and with WHO (Western Pacific region) participating. The World Bank representatives were: Tungalag Chuluun, John C. Langenbrunner, and Aparnaa Somanathan.

Rabat, Morocco (February 2010), with Morocco (Ministry of Health, Ministry of Economy and Finance, Ministry of Planning—Division of Statistics, National Security Fund) and with The World Bank and WHO participating. The World Bank representative was: Heba Elgazzar.

Accra, Ghana (July 2011), with Ghana (Ministry of Health, Institute of Statistical, Social and Economic Research) and with WHO (West Africa regional office) and The World Bank (headquarters and country office) participating. The World Bank representatives were: Karima Saleh, Akiko Maeda (headquarters) and Margareta Harrit (headquarters).

Amman, Jordan (August 2011), with Jordan (High Health Council, Ministry of Finance, Ministry of Health, 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

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Country Case Study Contributors (2008, 2011)

Ten case studies were commissioned by The World Bank in 2008 (for Ethiopia, Georgia, Guatemala, Indonesia, Madagascar, Mongolia, Nicaragua, Philippines, Rwanda, and Thailand). These were authored by staff of The World Bank, and by staff of the Health Systems 20/20 project in Ethiopia. The studies were summarized with the help of Rubama Ahmed, Vaibhav Gupta, Geir Sølve Sande Lie, and Shubhra Saxena of Columbia University under the guidance of Charu Garg. In 2011, fifteen case studies were commissioned by The World Bank—several of these built on the 2008 case studies.

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Appendix Contents

Appendix A. NHA in Brief

A1. An Overview of National Health Accounts

NHA are a tool designed to assist policy makers in their efforts to understand their health systems and to improve health system performance (WHO, 2011[54]).

NHA constitute a systematic, comprehensive, and consistent monitoring of resource flows in a country's health system for a given period and reflect the main functions of health care financing: resource mobilization and allocation; pooling and insurance; purchasing of care; and the distribution of benefits (WHO, 2011[55]).

NHA can help identify expenditure gaps and assess the performance of a health system in terms of inputs related to health outputs and outcomes. NHA go beyond the provision of estimates for the resource input envelope, and also enables an assessment of the extent to which resources may be misallocated.

What Questions Can NHA Answer?

NHA can answer key policy questions, including:

- Where do the resources come from?
- Where do the resources go?
- What kinds of services and goods do they purchase?
- Who provides what services?
- What inputs are used for providing services?
- Whom do they benefit?

[54] Available at: *http://www.who.int/nha/what/en/index.html*
[55] Available at: *http://www.who.int/nha/what/en/index.html*

What Boundaries Does NHA Include?

National health expenditure encompasses all expenditures for activities whose primary purpose is to restore, improve and maintain health during a defined period of time. This definition applies regardless of the type of the institution or entity providing or paying for the health activity. In addition to the above, NHA are comparable across time and space, allowing evaluation of changes in health expenditure over the years and of differences in experience among different geopolitical entities.[56]

What are the Six Key Dimensions of NHA?

NHA comprise data tables that enable systematic tracking of the flow of resources in a country's health system (Figure A.1). NHA takes into account both public and private sector activities in health, and are a key input in the design, implementation, and evaluation of health policies.

Financing sources – defined as resources that enter initially into the health system for health goods and services, whether from tax-based, social security, other private entities such as firms, NGOs, households, or other entities (principally funding from external resources).

Financing agents – defined as institutions receiving and managing funds from financing sources to pay for or purchase health goods and services, including social security schemes, ministries of health, medical private insurance, NGOs and firms. Households, who bear a large share of the total health bill, are added to round-up to total expenditure although they do not exert an intermediary function.

Providers – defined as entities who receive financial resources and use those resources to produce health goods and services, include public and private hospitals, clinics, nursing homes, community health centers, private practices, etc.

Functions – defined as the categories of goods and services consumed, include inpatient services, ambulatory services, public health interventions, etc. Health-related functions, part of the total, refer to investment, training and R&D.

Cost of Factors of Production (often referred to as "line items") – defined as the type of resources allocated to health care. It includes variables such as labor, drugs and pharmaceuticals, medical equipment, etc.

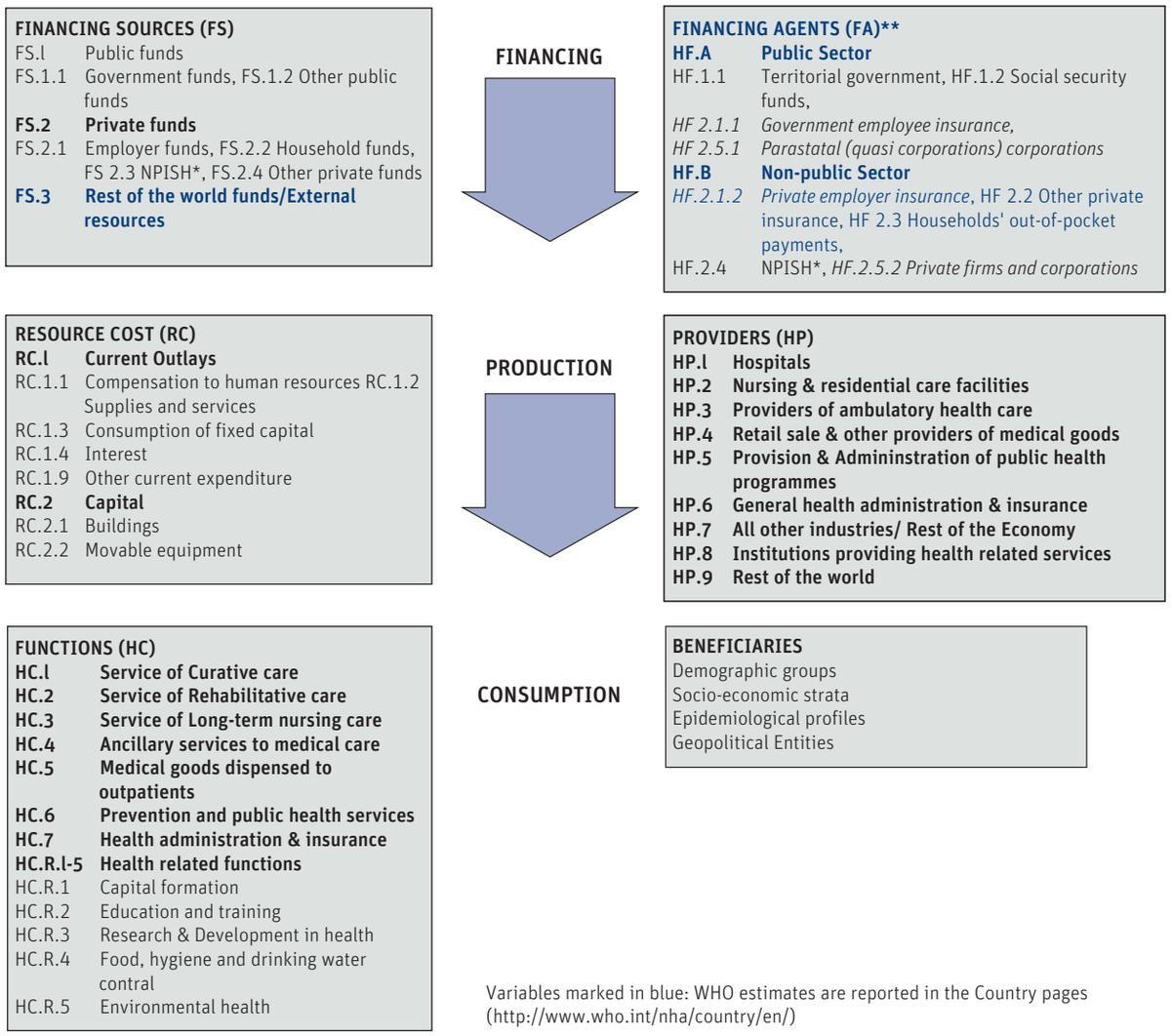
Beneficiaries – defined through distributional tables in which the value of goods and services produced are classified according to: geographic boundaries, demographic characteristics, economic strata and disease categories/interventions.

A2. An Overview of A System of Health Accounts 2011

As demands from analysts and policy-makers for more comparable, more detailed and more policy relevant health expenditure and financing information increase, more countries implement and institutionalize health accounts. Health accounts provide a systematic description of the financial flows related to the consumption of health care goods and services.

[56] Available at: *http://www.who.int/nha/what/en/index.html*

Figure A.1. Financing Flow in the Health System



Source: WHO, www.who.int/nha.
* Non-profit Institutions Serving Households
** WHO accounts for "Expenditures by the Rest of the World" (HF.3 as per the International Classification of Health Accounts) under General government expenditure on health and Private expenditure on health.

What is *A System of Health Accounts*?

- *A System of Health Accounts* (SHA) is a statistical framework for presenting NHA results in an internationally comparable manner. It provides a standard framework for producing a set of comprehensive, consistent and internationally comparable health accounts to meet the needs of public and private-sector health analysts and policy-makers. The SHA Manual establishes a conceptual basis of statistical reporting rules that are compatible with other economic and social statistics. Furthermore, it provides an International Classification for Health Accounts (ICHA) across different dimensions of the health system.
- OECD produced its first *A System of Health Accounts* manual in 2000 in order to establish an internationally accepted common statistical framework that would allow comparisons of health accounts data across countries.

How do National Health Accounts and *A System of Health Accounts* Differ?

- NHA is a generic methodology for health expenditure analysis, and does not imply any particular statistical framework. Historically, NHA estimates were produced using accounting categories and boundaries that reflected the particular structure of the national health systems, and were not necessarily comparable across countries. Since the introduction of *A System of Health Accounts* by OECD, almost all OECD member countries now report their NHA numbers using the SHA statistical framework. While many non-OECD countries continue to produce NHA using their own classifications, an increasing number are beginning to apply the same statistical framework for international comparability (some countries conduct dual reporting—presenting one according to local classifications, and the other according to SHA for international purposes).
- As a statistical framework, SHA does not provide guidance on how to collect data or calculate the numbers. To fill this methodological gap, the World Bank, WHO and USAID led the work on the *Guide to Producing National Health Accounts, 2003.* This NHA Producer's Guide was developed primarily to provide producers of health accounts with a step-by-step approach to collecting and calculating the numbers. It should be emphasized that the NHA Producer Guide does not offer an alternative statistical framework to SHA; in fact, the Guide endorses SHA as the statistical format for international comparison, and follows the same guiding principles as the SHA.

Why Was a Revised A System of Health Accounts Necessary?

- Across the globe, health systems have been constantly changing and evolving with the introduction of new technologies, organizational reforms, and demographic changes, and the demands on the SHA have also been changing over the years.
- *A System of Health Accounts 2011* is the result of a four-year collaborative effort between OECD, WHO and the European Commission, and attempts to update the SHA to better meet the evolving needs and demands from a wide range of countries. The SHA 2011 Manual takes into account the range of health care systems around the globe with very different organizational and financing arrangements.
- It has been prepared after an extensive consultation process, with hearings held in all regions of the world.
- Importantly, it brings together the original SHA manual with methodological work of the NHA Producer Guide into a single framework to be able to track resource flows through the health system from sources to uses.

How Will SHA 2011 Be Used?

- Essentially, SHA 2011 is a statistical reference manual, setting out in detail the boundaries, the definitions and the concepts, and responding to all health systems around the globe—from the simplest to the more complicated.
- It is not a set of guidelines for producing health accounts and, critically, it does not prescribe the level of detail of data that should be collected. Rather, the manual should be used as a reference and as a source of definitions to help statisticians facing particularly complex issues.

- Like any statistical manual, countries will find different aspects of it more useful than others. It is up to each country to apply parts that are most relevant to their own circumstances and adapt its application to their individual needs and capacities.

Is SHA 2011 Complicated?

- Efforts have been made to ensure that the SHA 2011 Manual is considerably clearer than the 2000 version. Many concepts have been clarified and many examples have been included.
- SHA 2011 follows exactly the same approach as the previous version, in that it is built around the three dimensions of health functions; health providers and health financing.
- It is much longer than the previous Manual because more materials have been added to cover the needs of health systems around the world with very different organizational and financing arrangements, including countries with complex health systems requiring finer and more detailed definitions and classifications. These additional features will not affect the vast majority of countries which do not require this level of detail.
- Pilot exercises by a number of countries have concluded that the new system does not pose any significant new mapping or implementation issues.

Does SHA 2011 Imply a "One-Size-Fits-All" Approach to Data Collection?

- No. Different countries (and different data collections) will want to focus on what matters for the purposes they have in mind.
- For instance, many analysts, and not exclusively in lower and middle income countries, may view the tracking of sources of financing as an inherent part of the development of their health accounts, while some higher income countries may place a higher importance on estimations of trade in health care or developing price and volume measures. SHA 2011 will help accountants in both cases, but does not require them to invest time and resources in doing something which is of, at best, marginal relevance.
- In summary, SHA is intended as a reference guide and a flexible toolkit for the health accountants.

Are New Guidelines for Producing SHA 2011 also Needed?

- Yes. New guidelines for compiling consistent overall health expenditures, including lighter and more rapid methodologies for capacity constrained countries, are necessary. The health care financing framework allows for a systematic assessment of how finances are mobilized, managed and used. Accounting tools would allow for improved resource tracking with both domestic financing and external aid and importantly mapping to already established statistical collections on aid flows (OECD CRS).
- Similarly, further guidance for producing disease specific accounts within the overall health expenditure framework with resources dedicated to piloting in more low income, high aid countries is seen as a priority.

Appendix B. NHA Toolkits

To help countries to improve and institutionalize the NHA cycle, a number of tools are being developed in consultation with other development partners and agencies. The tools introduced below can facilitate countries' assessment, planning of NHA institutionalization activities, improvement in data collection and translation, and their policy use.

Planning

B1. Country Planning Tool Examples

Several countries have developed long-term institutionalization plans for NHA, based on the framework of NHA cycle. This section introduces a sample structure and work plan format for countries to see how they can structure the institutionalization plan.

B1.1 Sample structure of a country's institutionalization strategy (illustrative)

Introduction

Global context

- Introduce the context of resource tracking initiatives, i.e. national and international demands for greater accountability, transparency or specific targets (e.g., health insurance reforms, MDGs, tracking results for maternal and child health).
- Adjust the NHA cycle of activities to align with a given country context and priorities including: demand for data by country leaders; production of NHA; dissemination and translation of NHA data; and the use of NHA for policy decisions, and governance structure, capacity, and finance as core elements that influence the performance of the cycle.

Country context

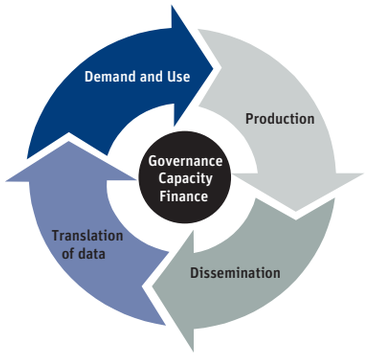
- Describe brief history, challenges and progress of NHA institutionalization in the country.
- Analyze the current situation along the framework from governance structure, capacity, and financing perspectives to identify key issues.

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



4. Translation of data and dissemination of specific analysis

- 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

3. Dissemination

- 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

- Production (data collection, data management, validation)
- Translation of data
- Dissemination of data
- Use and demand for policy making

Institutionalization Plan

Goals of institutionalization

- Define broad goals of the institutionalization with a target time frame.

Objectives and actions towards institutionalization

- Objectives and an explicit action plan can be developed for each elements/process of the cycle of the NHA activities; for example (example of a country starting up NHA):
  - Establish the national NHA governance structure
  - Develop core technical capacities in-country for production and use of NHA
  - Undertake at least one full round of the NHA cycle, and prepare a plan for more regular update
  - Integrate key aspects of NHA data collection into routine information systems, including national surveys
  - Demonstrate the value of NHA to policy makers through specific policy-related analyses
  - Effectively disseminate and communicate NHA findings to enhance their use

Arrangement of governance structure

- Choose governance model
  - Analyze strengths and challenges of each model in country specific context
  - Explore approaches to preempt the challenges of the selected model
- Define members, roles, and responsibilities of:
  - Policy Advisory Group
  - Coordinating Body
  - Technical Consultative Group

Detailed activities to achieve each objective

- Develop key activities to achieve the defined objectives.

Financing plan for the next five years

- Cost each activity, and define the cost sharing between a country and development partners (who pays what, how much)

B1.2 Institutionalization Work Plan Sample

Sample for Translation of NHA data

Sub Objective 1. Build Capacity at NHA Team to Analyze Data

Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Train NHA team on data analysis																				
2. Train NHA team on health financing																				
3. Study trip to countries that uses NHA for planning and budgeting																				

Sub Objective 2. Conduct NHA Analyses

Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Establish technical committee																				
2. Develop method to conduct study																				
3. Conduct analyses																				
4. Prepare draft report																				
5. Discuss with steering committee and finalize report																				
6. Prepare policy brief																				

Sample for Dissemination of NHA data

Sub Objective 1. Develop NHA Website

Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Form a committee on website design																				
2. Prepare web design specifications																				
3. Create a website																				
4. Maintain and update the website																				

Sub Objective 2. Organize Dissemination Events

Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Annual NHA Workshop																				
2. Arrange periodic TV interview about health spending (once a quarter)																				
3. Annual press release on NHA Findings																				
4. Meetings with users to discuss NHA Findings, in regular planing/budgeting meetings																				

Sub Objective 3. Distribute NHA Report and Findings

Activity	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Distribute NHA report to broad range of stakeholders																				
2. Distribute and present Policy Briefs to policy makers																				
3. Distribute Technical Reports to research institutes and ministries																				

B2. Country Assessment Tool

The Country Assessment Tool[57] has been developed to test constraints and assess country readiness for NHA institutionalization. The tool is structured based on specific components of NHA institutionalization: governance structure, resources (financial, human resource), data sources and collection, data management, quality and validity, products/indicators, and dissemination and use. Assessments using the tool will help build a strategic plan for NHA institutionalization with the goal of increasing the availability, quality, value, and use of timely and accurate health information.

Objectives

- Support countries in identifying major constraints to NHA institutionalization
- Provide information for baseline and follow-up evaluation
- Inform stakeholders about aspects of the NHA—HIS with which they may not be familiar
- Build a consensus to strengthen components important for institutionalization
- Mobilize joint technical and financial support for implementation of a strategic plan that identifies priority investments during the short (1–2 years), medium (3–5 years), and long term (10 years)

Methodology. Each element is analyzed with the help of questions that have been identified based on the findings of case studies, interviews with stakeholders, and pilot workshops (Figure B.2). This tool can be best filled in a workshop organized with various stakeholders.

Results. The tool has yielded critical inputs regarding areas of weakness for the pilot countries, and subsequently informed the work plans for institutionalization. Summary results from Mali are presented in Figure B.2.2.

B3. Sample Indicators to Measure NHA Institutionalization

A set of 12 qualitative and quantitative indicators are set out in Table B.3.1, which have been developed to assess the NHA institutionalization status of a country. The indicators are structured according to four criteria of NHA institutionalization, based on literature reviews and interviews. The indicators can be used by countries as a checklist to assess the stage they have reached in the process of institutionalization and the area they could further strengthen.

Production/Translation

B4. National Health Account Production Tool

The NHA Production Tool is a software tool being developed by the USAID-funded Health Systems 20/20 project with input and support from key NHA stakeholders including WHO and the World Bank. The tool aims to lessen the complexity of the NHA exercise by providing step-by-step guidance to in-country NHA teams, thereby reducing the need for technical assistance, increasing local capacity for NHA production, and capturing cost-efficiency.[58]

[57] World Bank. 2011. "Country Readiness Tool" available at: *http://intranet.worldbank.org/WBSITE/INTRANET/SECTORS/HEALTHNUTRITIONANDPOPULATION/INTHSD/0,,contentMDK:22668361~menuPK:376286~pagePK:210082~piPK:210098~theSitePK:376279~isCURL:Y,00.html*

[58] Health Systems 20/20. 2011a. "National Health Account Production Tool". Brochure.

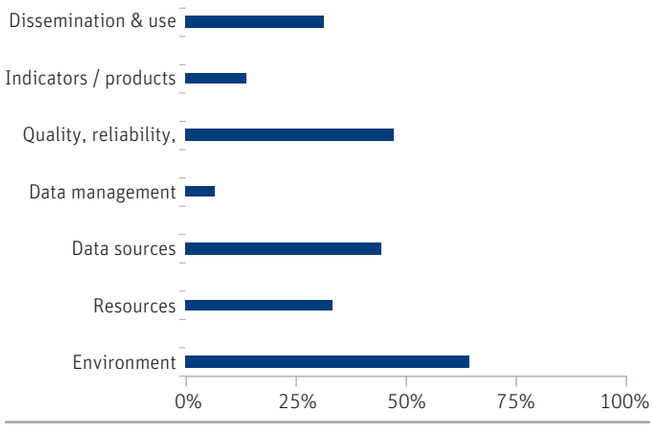
Figure B.2.1. Assessment Sheet for Dissemination and Use (example)[a]

VII. Use and Dissemination
a. Analysis and Use of the Information

Items		Fully satisfactory 3	Satisfactory 2	Exists, but not satisfactory 1	Unsatisfactory 0	Comments	Responses 1 2 3 4 5 6 7	Average
VII.a.1	Graphs are often used to present the health expenditure data	Yes	Yes, graphs are used, but users do not understand them well	Some graphs are used, but they are not updated	No graphs are used			0.0
VII.a.2	Maps are used to present the health expenditure data	Yes	Yes, maps are used, but users do not understand them well	Some maps are used but they are not updated	No maps are used			0.0
VII.a.3	The unit responsible for the NHAs does detailed analyses that answer important questions [In the comments section, please specify who demand the analysis]	Yes, strategic planning and development policies are based on data in the NHAs	The unit responsible for the NHAs regularly provides information, but the detailed analysis does not usually contribute to policy planning and development	The unit responsible for the NHAs provides information, but it is not regular or timely for policy planning and development	No information is provided			0.0
VII.a.4	Decision makers use health expenditure information to evaluate system performance and set priorities	There is systematic use of health expenditure information, which is accepted as valid and reliable	Health expenditure information is often used, but there are concerns about its validity and reliability	Health expenditure information is rarely used	Health expenditure information is not used			0.0

Source: The World Bank, 2011.
[a] ibid

Figure B.2.2. Results of Assessment Tool for Mali (example)[a, b]



Source: The World Bank, 2011
[a] Percentage figures demonstrate the assessment of the achievement in each component. High scores means higher achievement in the component, and the component with the lowest score can be regarded as the bottleneck.
[b] ibid

Key functions of the tool include:

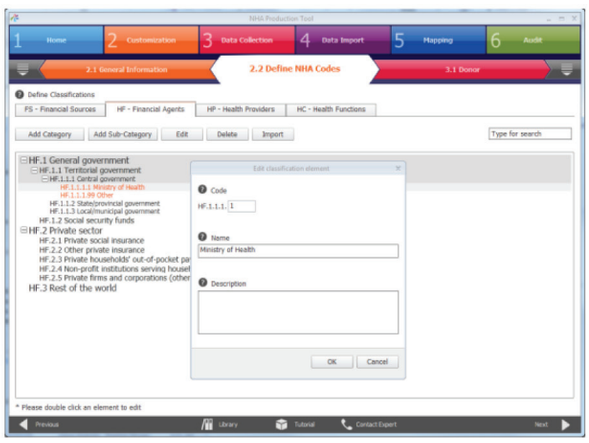
- Step-by-step directions to help guide country teams through the NHA methodology
- Platform to manage complex datasets and reduce the burden of data management
- Survey creator and an import function to streamline the data-collection and data-analysis process
- Built-in auditing function to facilitate review, and correction for possible double-counting
- Report generator for simplified NHA table creation
- Interactive diagram feature to help NHA teams visualize and critically analyze the flow of funding through the health sector

The tool was pilot-tested in Tanzania in August 2011 and is expected to be released in late fall 2011.[59]

B5. Health Resource Tracker

The Health Resource Tracker is a web-based tool that the Government of Rwanda and the USAID-funded Health Systems 20/20 project are building in collaboration with other stakeholders in Rwanda. The tool aims to streamline the collection of detailed health spending information from government agencies, donors, and NGOs active in the health sector,[60] and inform NHA efficiently. The tool reduces the burden of reporting and analyzing surveys, builds analytical linkages between different resource tracking exercises (e.g., NHA and NASA) to improve policy impact and use, and create a permanent home for resource tracking data.[61] The tool was developed in Rwanda and is now been transferred to Kenya.

[59] ibid
[60] Rwanda Health Resource Tracker, Available at *https://resourcetracking.heroku.com/*; Health Systems 20/20. 2011b. "Health Resource Tracker". Brochure; Rajkotia et al, 2011.
[61] ibid



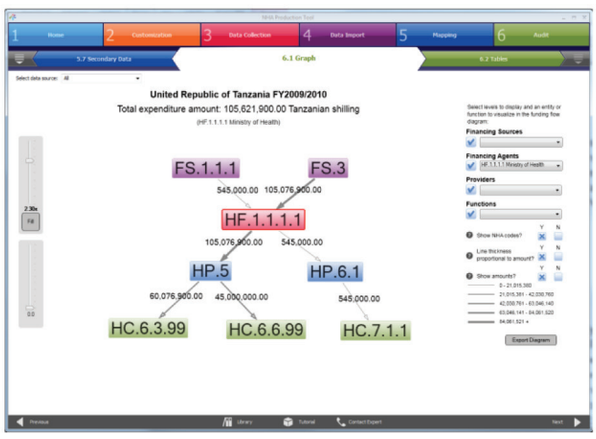


Table B.3.1. Indicators to Measure NHA Institutionalization

Criteria for Institutionalization	Key Elements	Indicators	Type of Indicator
(i) Consistent use of NHA data	Data is effectively disseminated, analyzed, and used	Collected data is available publicly on website	Binary
		NHA data is analyzed and policy relevant information is produced	Binary
		NHA data is used for reporting health expenditures in government documents every year	Binary
		NHA information is used to inform at least one of the following government priorities every year: health policy, budgetary planning, financial sustainability, resource tracking, transparent funding, and efficiency and equity of health spending.	Binary
(ii) Adequate financial, human, and institutional capacity to routinely produce, disseminate, analyze, and use health accounts	NHA is government-mandated and local capacity exists	Law/regulation/decree mandating production and use	Binary
		"Institutional home"* identified for NHA	Binary
		Government budget earmarked for NHA activities	Binary
		Skills to produce, analyze, and use health accounts information adequately available in the country	
(iii) Consistent production of NHA data	NHA production is a regular/routine activity, i.e. NHA is produced regularly and data reported annually	Public expenditure data collected and compiled annually	Binary
		Private** expenditure data collected at least once every five years and estimated annually	Binary
	Minimum set of internationally accepted data is produced	Key health expenditure indicators are produced and reported annually	Binary
(iv) Use of health accounts methodology	An internationally accepted methodology is applied consistently	Data is consistent with NHA boundary definition	Binary
		Local classifications are mapped to NHA classifications	Binary

Source: Authors' analysis.
* government agency primarily responsible for production of health accounts
** data such as household health expenditure

Key features of the tool include:

- A dynamic and flexible user interface that donors, NGOs, and government agencies can use to report budgeted and realized expenditures as well as activity descriptions for their health programs
- Low maintenance and user-friendly site administration that allows the government to collect and store annual budget and spending data more efficiently than with paper surveys
- Impactful reporting features that are tied to country priorities and facilitate broad access to data for relevant stakeholders
- Customized data reporting that can inform resource tracking estimations, such as NHA
- Open-source code that can be refined further in the future and adapted to suit the needs of other countries

B6 Sample List of Basic Indicators in NHA

A sample list of basic indicators for NHA is presented in Table B.6.1. Countries can start from this list in building the data format for NHA, collecting the essential data, and then build a more detailed list depending on their available resources.

Table B.6.1. Basic NHA Indicators

Expenditure Ratios	1. Total expenditure on health (THE) as % of GDP
Financing Sources Measurement	1. General government expenditure on health (excluding social security funds) as % of THE 2. Private expenditure on health as % of THE 3. External expenditure on health as % of THE
Financing Agents Measurement	1. General government expenditure on health as % of THE 2. Private expenditure on health as % of THE 3. External expenditure on health as % of THE a. External expenditure on health as % of THE (Direct) b. External expenditure on health as % of THE (channeled to government) c. External expenditure on health as % of THE (channeled to NGOs) 4. Government expenditures on health (including social security funds) as % of general government expenditure 5. Social security funds as % of general government expenditure on health 6. Private insurance as % of private expenditure on health 7. Out of pocket expenditure as % of private expenditure on health
Selected Per Capita Indicators for Expenditures on Health	1. Total expenditure on health/capita at exchange rate 2. Total expenditure on health/capita at purchasing power parity 3. General government expenditure on health/cap exchange rate 4. General government expenditure on health/cap purchasing power parity (NCU per US$)
Expenditures on Health by Providers	1. Hospital expenditures as % of THE
Expenditures on Health by Function	1. Capital expenditures as % of THE 2. Outpatient care expenditures as % of THE 3. Inpatient care expenditures as % of THE 4. Preventive care expenditures as % of THE
Expenditures on Health by Inputs	1. Drug and commodity expenditures as % of THE 2. Health worker expenditures as % of THE
Expenditures on Health by Disease Type Specific to Meeting Health-related MDGs	1. HIV/AIDS expenditures as % of THE 2. Tuberculosis expenditures as % of THE 3. Malaria expenditures as % of THE 4. Newborn and maternal health expenditures as % of THE 5. Reproductive health expenditures as % of THE

Note: Some of these indicators may not be easy to trace for the private sector as they need specific surveys, which many countries do not conduct regularly. Hence for these indicators, public and external expenditures indicators suffice.

B7. Suggested Additional Questions to DHS

Carlson and Glandon in Health Systems 20/20 proposed that by adding the following questions to a section of the household questionnaire, DHS could provide a complete substitute for the household survey usually conducted as part of the NHA (Carlson and Glandon, 2009).

Questions to ADD

Type and number of Questions	Questions	Estimated % of respondents*
1 General question	Was <name> ill or injured in the last four weeks? (Y/N)	100%
1 Outpatient screening question	Did <name> visit/consult a health provider (including Pharmacy/chemist &Traditional Healers) in the last four weeks without staying overnight in the facility? (Y/N)	100%
4 Outpatient questions	Did <name> have more than one visit in the last four weeks? (Interviewer: If <name> had more than one visit in the last four weeks, ask the following questions about each visit. Repeat for all other members of the household)	14%
	What was the type of the health provider that <name> visited? (See Provider Codes table below)	
	How much money did <name> spend on treatment/ services received?	
	What were the MAIN health reasons for <name> seeking care? (See Symptom Codes table below)	16%
1 Inpatient screening question	Was any member of the household admitted to stay overnight at a medical facility during the last 6 months? If yes, ask the questions below for each admission.	100%
4 Inpatient questions	Did <name> have more than one visit in the last 6 months? (Y/N)	< 3%
	(Interviewer: If <name> had more than one visit in the last 6 months, ask the following questions about each visit. Repeat for all other members of the household)	
	What was the type of health provider that <name> visited? (See Provider Codes table below)	
	How much money did <name> spend on treatment/ services received?	
	What were the MAIN health reasons for <name> seeking care? (See Symptom Codes table below)	
1 Prevention/ health maintenance question	Apart from the health expenses from the medical visits you told me about, how much did all members of your household spend on health and healthrelated commodities in the last four weeks (e.g. routine medication, family planning commodities and services (condoms, pills, etc.), ORS, vitamin supplements (e.g. cod liver, oil, etc.)?	

* This is the estimated percentage of people surveyed who would be asked these questions. Estimates are based on household surveys in Kenya in 2003 and 2007.

PROVIDER CODES		
Public Sector:	**Private not-for profit (NGO incl. faithbased) sector**:	**Private for-profit sectors:**
1) Govt. Hospital	8) NGO hospital	14) Private hospital
2) Govt. health center/clinic/ post	9) NGO health center/clinic/post	15) Private clinics
3) Gov. dispensary	10) Govt. Nursing/maternity home	16) Private doctors/nurses/ midwife
4) Public pharmacy/chemist	11) NGO Community-based health worker	17) Company/parastatal clinic
5) Govt. Nursing/maternity home	12) Community pharmacies (Bamako)	18) Private pharmacy/shop/ mobile vendor
6) Govt. Community-based health worker (incl. TBA, CHW)	13) Other	19) Private laboratory
7) Other		20) Traditional Healer
		21) Other

Source: Carlson and Glandon, 2009.

Further, Carlson and Glandon also proposed the following modification of the questions on children less than five years of age to capture sufficient health expenditure information to inform child health sub-accounts of NHA (Carlson and Glandon, 2009).

Change	Add item 546A "[In addition to the illness you just described] has <NAME> had any other illness or injury at any time during the last two weeks?"
Respondents	All children under the age of 5
Rationale	National Health Accounts are based on total spending. In addition, analysis of access to care is more powerful.
Change	[If yes to item 546A, add] "What sort of sickness/injury did <NAME> suffer?" Pain in back, limbs or joints Skin problems Ear, nose or throat Eye Dental Accident Other
Respondents	Children under 5 with additional illness. In the most recent Kenya household survey, this is 1.7% of children.
Rationale	This item converts a partial description of illness to a total description with minimal impact on respondent burden.
Change	Add item "What was the type of the health provider that <NAME> visited? (Including Chemists & Traditional Healers) [modify list as nationally appropriate]
Respondents	Children under 5 with health care visits. Typically, this is about 5% to 10% of children who had an additional illness (or only up to about 0.2% of all children).
Rationale	NHA tables are indexed by economic sector
Change	Add item "How much money did <name> spend on treatment/ services received?"
Respondents	Children under 5 with health care visits.
Rationale	Dependent variable for NHA

Source: Carlson and Glandon, 2009.

B8. ADePT

ADePT, the Software Platform for Automated Economic Analysis, is a free program designed to simplify and speed-up the production of analytical reports. Created by the Research Department (DECRG) of the World Bank, it can be used to generate summary tables and charts from micro-level surveys and present them in a print-ready form. ADePT can generate sets of about 50 print-ready tables and graphs in different areas of economic analysis, including the Health sector.[62]

ADePT helps minimize human errors and facilitate effective translation of NHA and survey data into policy analysis. The functionalities of the BIA component of the health module include (Wagstaff et al, 2011):

- Production of tables showing the distribution across living-standards groups (e.g., quintiles of per capita consumption) of utilization (by subsector) and subsidies (by subsector and in total)
- Computation of the concentration indices for subsidies for each subsector, and for total subsidies
- Generation of charts showing the concentration curves for subsidies for each subsector, and for total subsidies

Box B.1 shows the example of the use of ADePT in Vietnam and in Zambia.

[62] World Bank. 2009. "ADePT: A Great Software for Data & Analytical Reports". Blog submitted by Ihssane Loudiyi." [Online], Available at: *http://blogs.worldbank.org/growth/adept-great-software-data-analytical-reports* [accessed 4 November 2009].

Box B.1. NHA to Inform Benefit Incidence Analysis and Assess the Progressivity of Health Care Payments Through ADePT

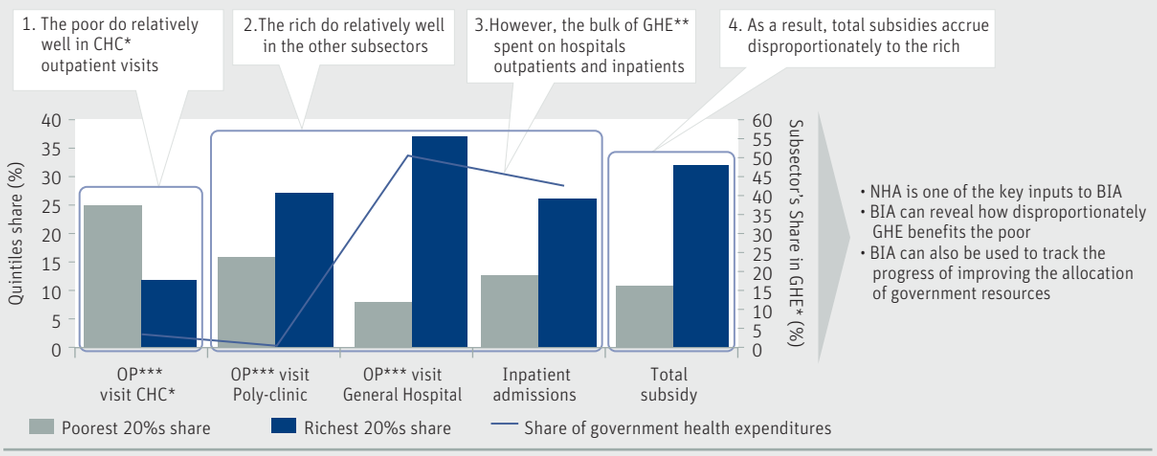
While it is generally accepted that government health expenditures should disproportionately benefit the poor, in practice in most developing countries the opposite is the case, although there are exceptions such as Malaysia, Sri Lanka, and Thailand. Using NHA data and other sources, Benefit Incidence Analysis (BIA) has been conducted using the World Bank's ADePT tool in the contexts of Vietnam and Zambia,. BIA tries to allocate government health expenditures (GHE) across households to see whether it is the poor or better off who benefit disproportionately. NHA are one of two data sources used to conduct BIA, the results of which have been used to translate data into insightful analysis that informs policy.

For example, a recent study by Wagstaff (2010) uses household survey and NHA data to analyze the benefit incidence of health sector subsidies in Vietnam, exploring the sensitivity of the results to different assumptions about the link between the unit cost of government-provided services and the out-of-pocket payments paid by the patient. In Vietnam, subsidies emerge as pro-rich under most assumptions, but are more pro-rich if higher out-of-pocket payments are assumed to reflect more costly care. His study uses government health expenditure from NHA in conjunction with household survey data to conduct the BIA (Figure B.4).

In Zambia as well, ADePT has been used to determine the extent to which government expenditures for health disproportionately benefit the poor. Table B.3 shows the incidence of government spending on health across service area using three sets of estimates of the distribution of subsidies across consumption quintiles (i.e. constant unit-cost assumption; constant unit subsidy assumption; and proportional cost assumption). In Zambia, 63.4% of government subsidies are spent on inpatient care in public hospitals, 30% on outpatient care in these hospitals, and 7.1% on health centers and health posts. Taken together, these BHAs show that government spending on health seems to favor the poor, especially at the lowest level of outpatient care, but the results do depend on the assumptions invoked.

In Zambia, the progressivity of health financing was analyzed using ADePT. Health care payments are considered progressive if the poorest quintile's share in total household consumption exceeds its share in total payments, while the opposite is true of the richest quintile. In 2006, health care financing in Zambia was fairly progressive. The financing sources that contribute to the overall progressivity of health care finance are general taxation, which finances 42% of domestic spending on health, and contributions made by private employers, which finance 9% of spending. An additional contribution to overall progressivity is made through pre-payment mechanisms, but this remains fairly limited given that they only represent 1% of total health finance. Out-of-pocket health payments are proportional to income, with only slight and not statistically significant evidence of progressivity. Given the considerable share of this financing source (47%), it off-sets part of the progressivity of taxation and employer contributions, roughly halving their overall progressivity.

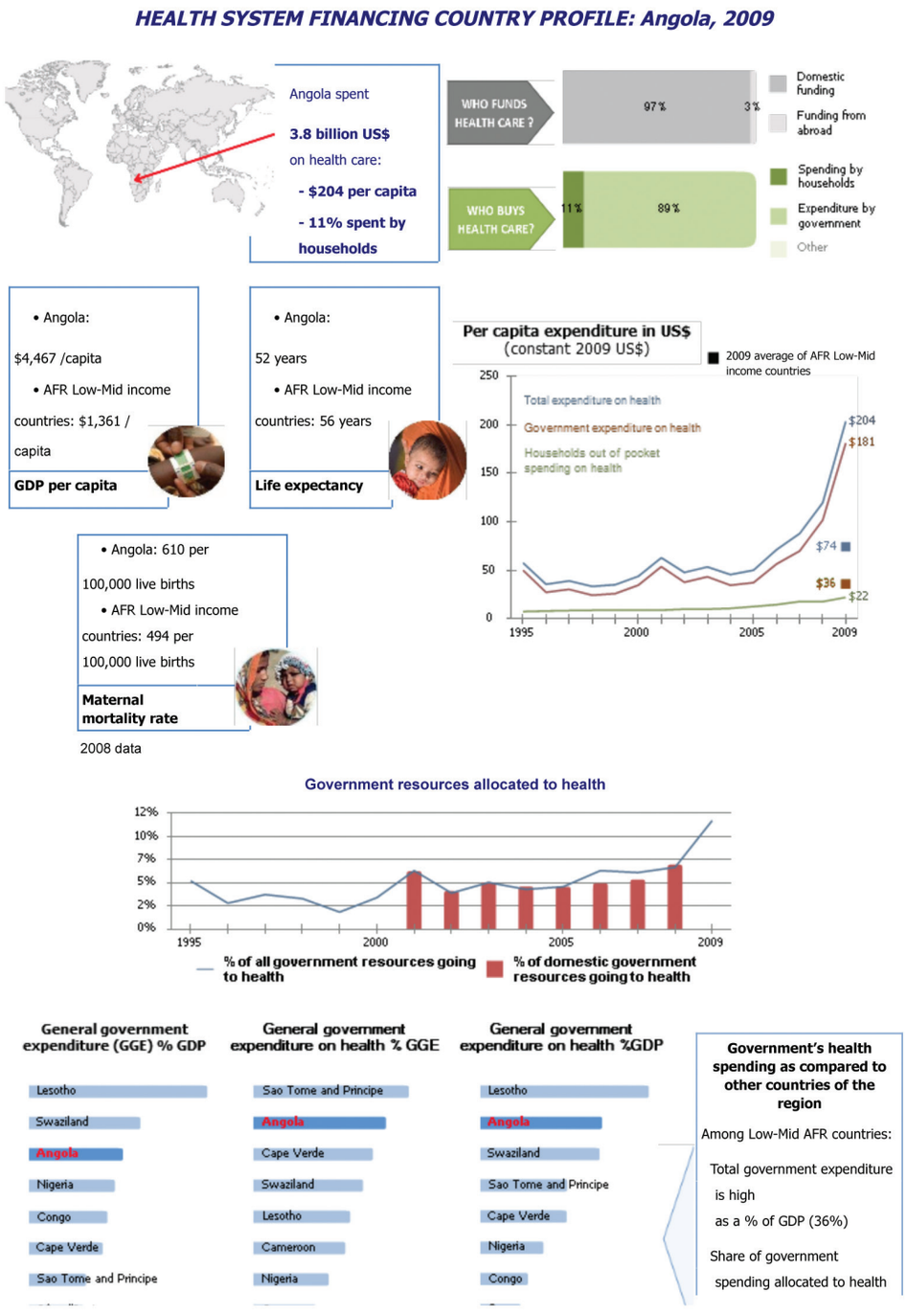
Figure B.4. BIA Shows the Rich do Better than the Poor from Government Subsidies



Source: Wagstaff, Adam. 2010. "Benefit Incidence Analysis Are Government Health Expenditures More Pro-rich Than We Think?" Policy Research Working Paper 5234. Development Research Group, The World Bank; and Bredenkamp, Caryn, Wagstaff, Adam, Bilger, Marcel, Buisman, Leander, Prencipe, Leah, and Darwin Young. 2011. "Health Equity and Financial Protection in Zambia." Washington, D.C.: The World Bank.

B9. Health System Financing Profile

WHO has recently launched an online Global Health Expenditure Database that permits easy access to the totality of NHA information. The tool allows for quick cross-national comparisons, country-specific summary statistics, and a variety of easy-to-produce figures and reports on health expenditures, including the Health System Financing Profile.



Source: WHO website: *http://apps.who.int/nha/database/ChoiceDataExplorerRegime.aspx*

Appendix C: Other Documents

C.1 Literature Review on NHA Institutionalization

Table C.1 below presents a compilation of studies, which have examined progress on NHA institutionalization in various regions, and the list of elements considered in each case to assess the level of institutionalization.

C2. Survey Questionnaire for the World Bank Survey on Costs of Health Accounting, 2010

Thank you for taking the time to complete this survey designed by the Health Accounts Institutionalization Support Team of the World Bank. Your feedback is important to us to better support the countries in routinely producing and using health accounts information. This survey consists of 10 questions and should take 10 minutes of your time. Your answers will be completely anonymous. You may state approximate figures if you are not sure of precise costs. If you have any questions, please contact us (Charu Garg or Mahesh Shukla) at cgarg@worldbank.org or mahesh@gwmail.gwu.edu.

The term "National Health Accounts (NHA)"' is used for health accounting at national level and also includes System of Health Accounts (SHA) and Health Satellite Accounts (HSA) for the purpose of this survey.

- **Please answer these initial questions with regard to health accounting in your country.**

1. Please name your country.
2. What is the health accounting methodology used? (NHA/NHEA/SHA/HSA/any other)
3. What was the approach used in building the last health accounts, top-down or bottom-up?
4. When was the last NHA exercise done?

Table C.1. Analysis of Literature on NHA Institutionalization

Source	Sponsoring Organization(s)	Elements	Explicit Definition of Institutionalization
Bura M. (2003). "Institutionalization of National Health Accounts in ECSA: Progress Report". Paper presented at the 3rd International NHA Symposium San Francisco, California, June 13–14.	Commonwealth Regional Health Community for East, Central and Southern Africa	Training and mobilizing resources for NHA Policy makers sensitized Government decision made to conduct NHA NHA committee exists NHA a budget line item Number of NHA committee meetings NHA lead person in place Resources for NHA available Number of national workshop attendees Number of regional workshop attendees 1st NHA conducted and disseminated 2nd NHA undertaken NHA impact on policy demonstrated Tools for NHA data analysis adopted Household surveys undertaken	YES
Center for Global Development (2005). "Following the Money in Global Health". Global Health Policy Research Network.	Gates Foundation/ Center for Global Development	Adoption of standard methodology Production of NHA on regular basis Availability of capacity to produce NHA Availability of resources Political will to produce NHA Coordination among development partners Comprehensiveness of NHA Coverage of public and private sectors Accuracy of NHA data Timeliness for reporting and dissemination of NHA	NO
Glenngård A H, Hjalte F and Hjortsberg C. (2006). "National Health Accounts – Developments, Institutionalization and Policy Implications". Selected Papers from IHE Studies.	The Institute for Health Economics	Participation in NHA regional networks Information campaigns about NHA Capacity-building needs Sources of financing for NHA activities Composition of country teams Analysis and international comparisons Formation of NHA "communities" Use of NHA Constraints in financial and human resources Role of development partners Integration with national statistical systems and SNA	YES

(*continued on next page*)

Table C.1. Analysis of Literature on NHA Institutionalization (*continued*)

Source	Sponsoring Organization(s)	Elements	Explicit Definition of Institutionalization
Hjortsberg C. (2001). "Where are we today?" Issue Paper on National Health Accounts. SIDA Health Division Document 6.	SIDA/The Institute for Health Economics (IHE)	Type of NHA methodology used Source of financing for NHA Housing of NHA Existence of a Policy Advisory Group Participation in regional network Routinization of NHA production	NO
Merino Juárez MF. and Raciborska DA (2008). "Institutionalization of country health accounts: conceptual framework". USAID Health Systems 20/20, IDB, and the Health Metrics Network.	USAID/Health Systems 20/20, IDB, Health Metrics Network	Demand for information Resources (human and financial) Environment (information policies and organizational structure) Indicators reporting Data sources Comprehensiveness, timeliness, and regularity of NHA production Rules for data administration and management Reporting on main indicators (timeliness, regularity, consistency, coverage) Presentation, dissemination, and use of NHA data	YES
OECD Health Policy Unit (2002). "The State of Implementation of the OECD Manual: A System of Health Accounts (SHA) in OECD Member Countries".	OECD	Pilot implementation of SHA manual Full implementation of SHA manual Several standard SHA tables available for 1 year Availability of core SHA tables Availability of comprehensive and detailed national health accounts (as opposed to only as part of NHA)	NO
Raciborska, D., Hernandez, P., A. Glassman (2008). "Accounting for Health Spending in Developing Countries". Health Affairs.27(5):1371–80.	IDB/WHO	At least one comprehensive NHA undertaken More than 2 NHA undertaken NA with aperture for health Detailed health and social expenditure account (COFOG)	YES
Fernando,T., and Rannan-Eliya, Ravindra.P. (2005). "Status of National Health Accounts in Asia-Pacific Region: Findings from the APNHAN Survey 2005". APNHAN Regional Meeting	Asia-Pacific NHA Network	Number and regularity of NHA estimations Institutional responsibility for NHA Coverage/comprehensiveness of NHA Adoption of OECD methodology Source of financing for NHA activities	YES

5. How many NHA exercises have been done so far?
6. How many years of NHA data are available?

i) Who conducted the last health accounting exercise?

Government, National Agency or Institute other than Government, International Entity

ii) Please name the ministry or office of the government or the non-government agency or entity that conducted the last NHA.

- **What was the total cost of the last NHA exercise? You may give approximate figure if you are not sure of precise figure.**

1. Cost and the name of local currency
2. Cost in US dollars

i) Who paid the cost of the last NHA?

Government, development partner or donor, part-government part-donor

ii) If the government met the cost fully or in part, was it provided through budget of the Government? How much and what proportion of total cost?

- **What are the major cost drivers of national health accounting exercise?**

1. Staff salaries and benefits
2. Consultant costs
3. Office costs
4. Information technology costs
5. Training costs
6. Survey costs
7. Dissemination costs
8. Number of the core NHA matrices completed (FA × P, P × F, FA × F, FS × FA, FS × F, P × RC, FA × RC, others)
9. Whether the country has a centralized or a decentralized form of governance structure
10. Whether the data are collected for central and regional level analyses, or only for central level analysis
11. Any other cost drivers? Does your country carry out surveys such as household survey or provider survey especially for health accounting purpose or use 'piggy-backing on existing surveys' approach? Or both? You may offer additional comments on how to minimize NHA costs in general and survey cost in particular while maintaining quality.

- **Please give break-up of total cost of the last health accounting exercise in US dollars or local currency (please state the name of the local currency). If you are not sure of precise figures, please feel free to give approximate estimates.**

1. Staff salaries and benefits
2. Consultant fees and other costs
3. Office space, equipment, materials and furniture
4. Information technology equipment and maintenance
5. Travel costs
6. Training costs
7. Survey costs
8. NHA Dissemination costs
9. Other costs

- **What is the total number of staff that worked on the last NHA?**

1. Number of full-time staff
2. Number of full-year part-time staff
3. Number of part-year part-time staff
4. Number of full-time consultants
5. Number of part-time consultants

- **Please give particulars of staff and consultants enumerated in earlier question.**

  i) **How many of them were statisticians, health economists, public health or health policy specialists, medical specialists, information technology specialists, data analysts, etc.?**

  ii) You may also state if and how many were generalist civil servants.

  iii) Please, mention if and how many international consultants worked on the last NHA? For how long? What was the additional cost (in US dollars or in local currency: please state the currency) of any subaccount your country ever did? You may give year of subaccount and approximate cost figure or percentage if you are not sure of precise figure.

  1. HIV/AIDS
  2. Malaria
  3. Tuberculosis
  4. Reproductive health
  5. Child health
  6. Subnational health accounts
  7. Any other disease-specific account (please name the account and state the cost

  If ever in your country health accounting exercise was supported by a donor/development partner, how much did it cost? Please compare this cost with the cost in the year when it was solely funded by your government. Please state the years, and costs in US dollars or local currency.

C3. Survey Questionnaire for the World Bank Survey on Financing of Health Accounting, 2011

Dear Sir, Madam,

We thank you for making the time to complete this survey. Your feedback during the global consultation in October 2010 enriched the draft Strategic Guide for the Institutionalization of National Health Accounts. The Strategic Guide provides an opportunity to take ownership of a journey towards sustainable and country-driven resource tracking by international standards. We hope our joint efforts will result in you implementing the necessary tools and capabilities successfully. A small group of countries will soon start drafting a financing strategy to provide guidance on the costing of implementation of NHA. Your response to this survey will provide crucial insights to your priorities and costing assessments.

The term "health accounts" includes National Health Accounts (NHA), System of Health Accounts (SHA), National Health Expenditure Accounts (NHEA) and Health Satellite Accounts (HSA) for the purpose of this survey. Should you have a question, comment or a concern; please feel free to contact us (Margareta Harrit at mharrit@worldbank.org or Mahesh Shukla at *mahesh@gwmail.gwu.edu*).

1. Countries conduct national health accounts to track resource allocation to their health sector and to achieve transparency, equity and efficiency in their health spending. From the perspective of your country, what is the business case for institutionalizing health accounts?

- Ensures adequate funds for protecting public health
- Useful in tracking health funds
- Helps meet demand for expenditure information from external and internal stakeholders
- Useful in making evidence-based health policy
- Helps achieve equity and efficiency in health spending
- Ensures financial sustainability of health funding
- Improves timeliness and consistency of health expenditure information thus making it more useful over time

2. Overall, health expenditure information is useful to the countries for making health policy, tracking health resources and achieving financial sustainability, equity and efficiency in their health spending. Different countries may have used it differently e.g., to inform their resource allocation decisions especially during recent financial crisis, to inform their equity analysis, or to provide an evidence base for their particular health reform decisions. Please identify at serial number 1. key stakeholders who have an interest in using health expenditure information in your country and state at serial numbers 2–6 specific examples of how your country has used health expenditure information in different ways.

1. Stakeholders
2. How used

3. During the Global Consultation that you attended in Washington, DC on 20–21 October 2010, 25 countries committed to preparing their national institutionalization plans by early 2011. In this context, please respond to the following questions.

- Please name your country.
- Please name your ministry and bureau/department.
- Has the institutionalization plan been developed?
- If yes, is it approved by the government?
- What is the duration of this plan?
- Is it costed?
- If costed, what is the cost in local currency and in US dollars?
- Are you willing to share this plan with us at this time?
- If the plan is not developed at this time, by when do you expect the plan will be ready?
- Do you need any technical assistance in developing this plan?
- If yes, please tell us in brief what kind of technical assistance you need.
- Does your country have a functioning Policy Advisory Group?
- Is health accounting a budget item with its own budget code?
- Does your government have a mandate (legislative/executive) for production/institutionalization of health accounting?

4. For your country to put in place effective and sustainable capacity for the production, dissemination, analysis and use of health accounts, what time commitment and support would you expect from donors and development partners?

- 3 years
- 5 years
- 6–8 years
- 9–10 years
- More than 10 years

A comment, observation or suggestion

5. As you build country capacity, which of the following costs is your government likely to fund from its own budget?

- Staff salaries and benefits
- International consultant fees
- Regional consultant fees
- National consultant fees

- Office space, equipment, materials and furniture
- IT hardware, software
- IT maintenance Survey costs
- Analysis costs
- Dissemination costs
- Costs of using health expenditure information
- Travel
- International training
- Training in the continent
- National training

A comment on which of these costs your government may expect external sources to meet and their approximate value

6. Is your country likely to support one or more innovative financing mechanisms to sustain institutionalization? You may suggest any other financing mechanism best suited to your country's situation.

- Loan buy-down (loan buy-down or loans to grants conversion triggered by the achievement of pre-defined results)
- Results-based transfers of donor aid to the government
- Debt2Health like instrument (Donors cancel a fraction of debt held by recipient countries in return for specific investments in health projects)

An innovative mechanism to raise internal or external finance that will work well for your country

7. Establishing a Health Policy Analysis Center in a University setting is one way to build capacity in the country for analyzing and using health expenditure information. Which new investments aimed at building analytical capacity is your country likely to propose? Please name these investments and their likely cost. Please tell us also about what investments in Information Technology, Survey and other physical infrastructure and human resources your country is likely to make and their likely cost.

1. Investments in analytical capacity
2. Investments in capacity to use NHA
3. Information Technology infrastructure
4. Survey infrastructure
5. Other physical infrastructure
6. New Investments in Human Resources

8. Provide us with a cost estimate of the latest health accounts in your country. If you are not sure of precise figures, please use estimates.

- Government paid what percentage of the total cost
- Donors paid what percentage of the total cost
- Name of the donor or donors (if applicable)
- Total cost of the last health accounts in local currency
- Total cost of the last health accounts in US dollars
- Cost of staff salaries and benefits
- Consultant fees
- Cost of office space, equipment and furniture
- Cost of information technology
- Travel costs
- Training costs
- Survey costs
- Dissemination costs
- Analysis and use costs
- Other costs
- Name of the local currency
- US dollar conversion rate

9. International technical assistance is expensive and often does not result in transfer of capacity and skills to country officials. Institutionalization can help bring down this cost through gradual substitution of international consultants by regional and national consultants eventually building the capacity within the government. Please

tell us about costs related to international technical assistance for health accounts in your country in the latest 5 health accounts. You may base on the best of information you have given number of international consultants, time they worked, name of the donor who funded them and cost in US dollars or local currency (in brief: number of international consultants/duration/donor/cost).

- The latest health accounts
- The second latest health accounts
- The third latest health accounts
- The fourth latest health accounts
- The fifth latest health accounts
- Compare the overall cost of donor-funded NHA versus government-funded NHA

10. Please answer the following questions related to health sub-accounts.

- Do you track HIV/AIDS expenditures? *Please answer the following questions related to health sub-accounts.
- Do you track Tuberculosis expenditures?
- Do you track Malaria expenditures?
- Do you track any other disease-specific expenditures?
- Do you track public expenditures on Maternal and Child Health?
- Do you track private expenditures on Maternal and Child Health?
- Do you track donor expenditures on Maternal and Child Health?
- Do you track public expenditures on Family Planning?
- Do you track private expenditures on Family Planning?
- Do you track donor expenditures on Family Planning?
- Would you be willing to share the sub-accounts with us?
- Would you be willing to integrate Maternal and Child Health sub-accounts in your national institutionalization plan?