Has Improved Availability of Health Expenditure Data Contributed to Evidence-Based Policymaking? Country Experiences with National Health Accounts

May 2003

Prepared by:

Susna De, MSc, MPH
Abt Associates Inc.

Tania Dmytraczenko, PhD
Abt Associates Inc.

Derick Brinkerhoff, PhD
Abt Associates Inc.

Marie Tien, MHS
Abt Associates Inc.

In collaboration with:
Development Associates, Inc.  Emory University Rollins School of Public Health  Philoxenia International Travel, Inc.  Program for Appropriate Training in Health  SAG Corporation  Social Sectors Development Strategies, Inc.  Training Resource Group  Tulane University School of Public Health and Tropical Medicine  University Research Co., LLC.

Funded by:
U.S. Agency for International Development

Order No. TE 022
Mission

Partners for Health Reformplus is USAID’s flagship project for health policy and health system strengthening in developing and transitional countries. The five-year project (2000-2005) builds on the predecessor Partnerships for Health Reform Project, continuing PHR’s focus on health policy, financing, and organization, with new emphasis on community participation, infectious disease surveillance, and information systems that support the management and delivery of appropriate health services. PHRplus will focus on the following results:

- Implementation of appropriate health system reform.
- Generation of new financing for health care, as well as more effective use of existing funds.
- Design and implementation of health information systems for disease surveillance.
- Delivery of quality services by health workers.
- Availability and appropriate use of health commodities.

May 2003

Recommended Citation


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Contract/Project No.: HRN-C-00-00-00019-00

Submitted to: Karen Cavanaugh, CTO
Policy and Sector Reform Division
Office of Health and Nutrition
Center for Population, Health and Nutrition
Bureau for Global Programs, Field Support and Research
United States Agency for International Development

The opinions stated in this document are solely those of the authors and do not necessarily reflect the views of USAID.
National Health Accounts (NHA) is a tool designed to inform the health policy process. It aims to do so by providing policymakers with valuable information on the distribution of health funds within the system. NHA was introduced and implemented in a number of middle- and low-income countries in the mid- to late 1990s. As sufficient time has passed for NHA findings to penetrate the policy processes in these countries, this study sets out to determine if NHA has actually met its principal goal of contributing to evidence-based policymaking. The paper examines the policy impact of NHA in 21 developing countries from the Latin America and the Caribbean region, East and Southern Africa, the Middle East and North Africa, and the Asia Pacific region. The study describes how policymakers have used NHA and assesses the various factors and influences that determine the extent to which NHA impacts the policy process. It is hoped that lessons learned from this study can help other countries as they move forward with efforts to inform health policymaking using health expenditure information.
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Acronyms

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<th>Definition</th>
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<tr>
<td>APHEN</td>
<td>Asia Pacific Health Economics Network</td>
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<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>EMRO</td>
<td>Eastern Mediterranean Regional Office</td>
</tr>
<tr>
<td>ESA</td>
<td>East and Southern Africa</td>
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<tr>
<td>FUNSALUD</td>
<td><em>La Fundación para la Salud</em></td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GOK</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome</td>
</tr>
<tr>
<td>LAC</td>
<td>Latin America and Caribbean</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>MOHP</td>
<td>Ministry of Health and Population</td>
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<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
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<tr>
<td>NHA</td>
<td>National Health Accounts</td>
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<td>PHR</td>
<td>Partnerships for Health Reform</td>
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<tr>
<td>PHRplus</td>
<td>Partners for Health Reformplus</td>
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<tr>
<td>Sida</td>
<td>Swedish International Development Cooperation Agency</td>
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<tr>
<td>SWAp</td>
<td>Sector Wide Approach</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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</table>
Many thanks are extended to Sara Bennett, who technically reviewed the paper, and to Susan Scribner, whose work on an earlier unpublished study of policy use helped shape some of the ideas discussed in this paper. The authors also thank the many key informants for sharing their experiences with National Health Accounts through interviews, written policy use narratives, and work to confirm the validity of the data reported in this paper: Manjiri Bhawalkar, Tania Dmytraczenko, Fatina Halawani, Josue Samuel Hernandez, Patricia Hernandez, Catharina Hjortsberg, Driss Il-Idrissi, Christine Kirunga, Gilbert Kombe, Fernando Lavandez, Maximillian Mapunda, Leonard Mbwanda, Di McIntyre, Steve Muchiri, Patricio Murgueytio, Takondwe Mwase, Chris Mwikisa, A.K. Nandakumar, Racel Racelis, Magdalena Rathe, Belgacem Sabri, Hossein Salehi, Pia Schneider, Brad Shwartz, Andrew Thompson, and Francisco Vallejo.
National Health Accounts (NHA) is an internationally accepted tool that comprehensively measures health expenditures, including those incurred by the government, private actors such as households, and donors. Designed to influence a country’s health policy process, NHA offers a transparent and consistent way of describing health expenditures by financing sources and by application. In other words, NHA carefully tracks the flow of funds from one health care dimension to another, such as the distribution of funds from the Ministry of Health (MOH) to each government health provider and health service program. In its provision of such important information, NHA aims to first and foremost be used to shape policy and contribute to evidence-based policymaking.

This study examines whether or not NHA has met its intended purpose of facilitating evidence-based policymaking in those countries that have used this tool, and it identifies the factors that contribute and detract from the possibility that decision makers will use NHA findings. The paper examines the experiences of the following 21 middle- and low-income countries that were among the first developing countries to conduct NHA:

- **Latin America and Caribbean Region** – Bolivia, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico
- **Middle East and North Africa Region** – Egypt, Iran, Jordan, Lebanon, Morocco, Tunisia
- **East and Southern Africa Region** – Kenya, Malawi, Rwanda, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe
- **Asia Pacific Health Economics Network** – Philippines

Data from these countries consisted of interviews and written assessments solicited from key informants, principally, government health sector officials, and individuals involved in the provision of technical assistance to the country’s NHA process.

Based on information received from key informants, it appears that NHA has met its intended policy purpose. In 19 of the 21 countries studied, there was at least one reported instance in which NHA informed the policy process. NHA utilization was noted at each major stage of the country’s health policy process, including advocacy and policy dialogue, policy formulation and implementation, and monitoring and evaluation. The “policy use stories” reported by key informants are documented in this study.

In terms of users of NHA data, key informants relayed that not only did the Ministry of Health use the data, but a number of other stakeholders did as well, including the prime ministers of various countries, ministries of finance, central banks, other ministries, donors, nongovernmental organizations, and pharmaceutical associations.

Although NHA was used in policy in the majority of the countries studied, the degree to which it affected policy varied. When asked what affected the extent to which NHA facilitated evidence-based policymaking, respondents noted a number of issues and factors. Upon analysis of their responses, the
study team observed that the degree of use depended partly on the nature of the findings but more so on the “perception” of those findings, particularly the government’s perception. Because the intent was to use the data to impact policy, data were evaluated within the political context and risked being “politicized.”

Country governments generally “perceived” NHA findings in one of three ways: data were supportive and helpful to a particular government direction, data were counter to a preferred government leaning but still were considered positive or favorable, or data countered a government direction and therefore were considered negative or critical. If findings were seen to contribute and inform a preferred government direction, policymakers had a greater tendency to use the data in their health policy. Sometimes this occurred even when the data seemed to be incomplete (as assessed by the study team) and not necessarily unequivocally supportive of a particular government policy leaning. If data were perceived to be counter to a preferred government policy but the findings were still considered favorable, such as in the case of Jordan where NHA showed that health care coverage was surprisingly equitable, then NHA findings could shift a country’s policy directions completely. In Jordan, for example, the government moved from focusing on achieving equity to achieving cost containment. If data were found to be critical of the government as well as counter to current political discourse and debate, the NHA report tended to be suppressed in draft form; however, even these draft reports were shown to have a subtle effect on health policy.

This study found that several factors affected the way in which governments perceived the NHA findings. These factors can be grouped into two categories: those that are considered “controllable” by the country NHA team and those that are generally outside the purview of the team’s influence, which for the purpose of this paper are called “chance” factors. In terms of the controllable factors, NHA was able to better impact policy if there was a greater degree of stakeholder involvement, country ownership, a well-thought-out dissemination strategy, inclusion of policy issues in the NHA design, and credibility and timeliness associated with the report. In terms of chance factors, the presence of policy advocates, stable governments, and critical political opportunities all greatly benefited the incorporation of health expenditure data into the policy process.

Based on the lessons learned from the key informants interviewed for this study, the authors propose that a country’s NHA team take the following steps to enhance the use of NHA by policymakers:

- Communicate to policymakers that NHA exists
- Obtain stakeholder buy-in from onset
  - Peak the interest of decision makers; target relevant policy issues
  - Develop a strong dissemination strategy
- Be aware of and prepare for policymakers’ “perception” of findings
  - Develop a credible NHA report
  - Develop a timely NHA report
1. Introduction

Policymakers in middle- and low-income countries face the challenge of meeting the health care needs of their populations with limited and, in some cases, decreasing health budgets. Such a challenge necessitates a wise use of available resources to meet health demands. This may be more difficult than realized. Often health planners in developing countries do not have accurate and basic information on the status of their health systems, thereby making it difficult to develop prudent policy choices on how to move forward. In an effort to empower policymakers to make sound decisions and avert potentially adverse ones, international researchers and donors recommend various tools to facilitate an evidence-based approach to policy formulation. This approach seeks to inject empirical data and analysis into policy development in order to counteract a reliance on perceptions or anecdotal claims.

One internationally recognized policy tool that has been heavily promoted worldwide since the early 1990s is the National Health Accounts (NHA). This tool provides decision makers with a broad picture of the financial status of their health systems. It documents the actual flow of health funds through the health sector, from its various sources, such as the government, to its end uses, such as hospital and ambulatory health care services. In its provision of comprehensive health spending information, NHA intends to inform the policymaking process surrounding resource mobilization and allocation, similar to the use of demographic or epidemiological data for health programming purposes.

Although this is the intention of NHA, has it actually transpired? Now that many developing countries have implemented at least one round of NHA (54 countries [Hjortsberg, 2001]) and sufficient time has passed for the utilization of the results of NHA exercises to be documented, this question can be answered. This study examines whether NHA has contributed to evidence-based health policymaking and, if so, in what ways. Lessons learned from this study can help other countries as they move forward with efforts to inform health policymaking with financial data.
2. Objectives

This study focuses on the experiences of 21 middle- and low-income countries, all of which have conducted at least one round of NHA. To determine their experiences, the study sought to answer the following questions: Have analytic reports on national health spending patterns led to increased evidence-based policymaking in middle- and low-income countries? If so, how was the link made between NHA and the policymaking process? Was simply producing the report enough to ensure use by decision makers? What factors contribute to the acceptance or rejection of NHA-generated health expenditure data? To answer these questions, the study pursued three objectives:

▲ Determine if countries have actually used their NHA findings for health policy purposes

▲ Document how NHA was used in those countries that reported a contribution to evidence-based policymaking

▲ Identify factors that determined the extent to which NHA was used and/or not used
3. Methodology

The study team collected data on 21 middle- and low-income countries that were among the first developing countries to undertake an NHA exercise. These data consisted of interviews and written assessments solicited from key informants, principally government health sector officials and individuals involved in providing technical assistance to the country’s NHA process. Partners for Health Reform (PHR) staff and other international consultants working with NHA teams in the various countries assisted in the identification of the key informants.

3.1 Countries Included in Study

The countries represented in this study mainly belong to one of three regional NHA networks. A network is a regional group of country NHA teams that meet at least three times over the course of two years to learn and discuss the NHA implementation process. The networks included in this paper are the East and Southern Africa (ESA) network, the Latin America and Caribbean (LAC) network, and the Middle East and North Africa (MENA) network. All three of these networks were supported by multidonor efforts (e.g., World Health Organization [WHO], World Bank, United States Agency for International Development [USAID], Swedish International Development Cooperation Agency [Sida]) with prime technical support being provided from the USAID Partnerships for Health Reform (PHR) and PHRplus projects. In addition to supporting regional meetings and training workshops, both PHR projects provided in-country, one-on-one technical assistance. All three networks are in existence today and have expanded their membership considerably.

Of the original 26 member countries in the three networks, 20 countries are represented in this study, based on NHA policy use information the authors were able to obtain from key informants. In addition, the authors obtained information from the Philippines, a country outside the three networks and affiliated with the Asia Pacific Health Economics Network (APHEN). This network has not received USAID assistance nor assistance from many other donors; rather, APHEN has been largely independent of donor assistance, receiving support mainly from the member countries themselves and from private foundations.

For this study, data obtained from key informants relayed NHA experiences from the following 21 countries (see Figure 1):

- **Latin America and Caribbean Region** – Bolivia, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico
- **Middle East and North Africa Region** – Egypt, Iran, Jordan, Lebanon, Morocco, Tunisia

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1 It should be noted that the study team comprises individuals who work on the NHA activity for the PHRplus project. These individuals offer technical assistance in implementing the methodology with the aim of using health-spending data for policy purposes.
3.2 Key Informants and Formats of Retrieved Data

Key informants were individuals affiliated with different parts of the NHA implementation process who represented a diverse range of perspectives. They included a policymaker (senior level Ministry of Health (MOH) official at the minister or deputy minister level), former and current NHA team members (generally mid-level government officials), as well as individuals involved in providing technical assistance to the NHA process (see Table 1). It should be noted that in several cases, information for a single country was obtained from more than one key informant. Key informants were identified through consultations with PHR plus and other donor NHA representatives who were involved in health accounts efforts in all countries in the original three networks, either directly or indirectly, through regional trainings. Although the study team is aware of the use of NHA data in the policy process of multilateral organizations, the focus of this study was the in-country use of NHA and hence information from these stakeholders was not directly obtained.
Data were obtained from verbal interviews, written narratives of policy use, and other mechanisms, such as published reports and discussions at regional conferences. Formal interviews were conducted over the phone. The questions asked during these interviews are listed in Annex A. Verbal responses of key informants were transcribed and then sent back to the interviewee for verification of accuracy. Only verified interview reports were used in this study. If key informants submitted written narratives, they generally provided less detailed information and attempted to respond to only a few broad questions, which also are listed in Annex A.

Table 1: Key Informants and Data Formats

<table>
<thead>
<tr>
<th>Countries</th>
<th>Number and Type of Key Informants</th>
<th>Format of Data</th>
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<tr>
<td></td>
<td>Present &amp;/Former Team Member</td>
<td>Policymaker</td>
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<tr>
<td>Bolivia</td>
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<td>Dominican Republic</td>
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<td>Philippines</td>
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*Includes information obtained from published documents and discussions at NHA meetings
3.3 Limitations

One may ask why more policymakers were not obtained as key informants, particularly for a study investigating the policy use of NHA. High government turnover in the studied countries meant that many of the policymakers who might have used the data for policy purposes had moved on to completely new positions outside of the institution housing the NHA team (e.g., the MOH) and, as a result, they were difficult to access for interviews.

However, the paucity of decision makers as key informants does not necessarily detract from the accuracy and quality of the data obtained. It has been the authors’ experience that policymakers approach their work on a macro-level and as such may not be the most appropriate individuals to pinpoint particular pieces of information or the extent to which each data source contributes to the policy process. Others studying the effect of research on policy have also noted this observation. One researcher (Thomas as quoted in Bulmer 1986) uses the analogy of water falling on limestone: the water may be absorbed, but it may not be known what route it takes through the different strata of stone or where it will come out. When interviewing one policymaker for this study, authors noted how quickly the individual drifted to describing the big picture of the health sector strategy and relaying a more indirect use of NHA in policy. For that reason, key informants who were country NHA team members, particularly those responsible for disseminating NHA findings to decision makers, were able to draw more direct and specific links between NHA and policy.

Another issue to consider when reviewing the types of key informants used in this study is the possibility of positive bias towards the reporting of NHA use in policy. Since the majority of key informants are close to the NHA implementation process (such as team members and technical assistance consultants), they may tend to overstate the impacts. Although this may be the case in some countries, effort was made whenever possible to validate the information provided by key informants, either through the consultation of published national documents (including country NHA reports themselves), through statements made at conferences, or by attempting to talk to more than one person affiliated with NHA in a country.
This section provides a brief overview of evidence-based policymaking as well as further details on NHA to provide a context for the inferences drawn from this study. Concern for informing policy decisions with empirical knowledge and analysis is not new. Program evaluators have long sought to increase the chances that policymakers will find evaluation results both accessible and useful (e.g., Patton, 1982, 1997; Weiss, 1972). A major thread in the policy analysis literature concentrates on how research can best be crafted to achieve impact on policy agendas, program designs, service delivery, and budget decisions. The term “evidence-based policymaking,” which has gained in popularity, reflects the latest vocabulary used in discussions of policy research, analysis, and evaluation (Niessen et al., 2000; Davies and Nutley, 2002). As with any popular nomenclature that on the surface appears self-explanatory, evidence-based policy and policymaking are often glibly used and rarely defined, even in academic literature, leading some authors to describe it as “exceedingly ambiguous” (Porter, 1995; Weiss and Bucuvalas, 1980). Among the points of debate are determinations of what constitutes evidence and the extent to which evidence can and does influence policy choices.

For purposes of this study, evidence-based policy is defined as the formulation of policies based to an important extent on empirical data or research findings, not on anecdotal claims or unsubstantiated opinions. Because policymaking is fundamentally a political undertaking, many other factors besides data and analysis come into play, such as the nature of the policy process, the various policy actors and stakeholders, their agendas (espoused and hidden), institutional arrangements, social relations, and so forth. Davies and Nutley, members of the Evidence-based Policy and Practice Network in England (2002), write that they would prefer the use of the term “evidence-influenced” or perhaps “evidence-aware” to reflect a more realistic view of the limited role that evidence can, does, or even should play in the policy process. The authors of this study view evidence-based policymaking as reflective of the relative prominence of evidence in the policy process in comparison to these other political, institutional, and social factors.

The links between research and policymaking have been studied extensively, particularly in industrialized countries. Simply producing research or policy-relevant evidence is not enough to ensure its incorporation into the policy process. Recognizing this, academics and researchers have proposed numerous ideal and descriptive models on linking of evidence/research into the policy process.

In terms of an ideal approach, the classic rational model of decision making assumes that decision makers make rational choices based on a complete assessment of all the evidence and scientifically plausible options (Stone et al., 2001; Walt, 1994). It assumes that policymakers follow a neat, logical, time-ordered sequence of steps beginning with problem identification and definition, problem analysis, generation of policy alternatives, choice among alternatives, and, finally, formulation of policy followed by implementation and evaluation. Evidence in this model is seen as being both apolitical and synoptic; the role of the researcher is to research and present all policy options (Stone et al., 2001).
On the other end of the spectrum, Lindblom (1959) criticizes the rational model as being unrealistic and instead suggests the descriptive model of incrementalism, where policymaking occurs in small steps, incrementally, by decision makers essentially “muddling through” the process. He argues that there is rarely the time, resources, or inclination to assess all the evidence and inform policy. Rather politicians aim for pragmatism to ensure the functioning of the government as well as their ability to cope with the pressures of various groups and demands. With such an approach, decision makers are forced to take small steps or short cuts and only introduce incremental changes when necessary. In the incremental model, research and evidence have relatively little impact since policymakers will use findings only to make marginal adjustments to existing policy directions.

The enlightenment approach is another classic model that purports that knowledge and research accumulate over time and percolate into policy (Weiss, 1977; Walt, 1994). This model, also known as the knowledge utilization school of thought, is based on the notion of research as providing a backdrop of ideas that feed into policy; the effect of these ideas is not immediate and is more visible long term and indirectly. As with the rational school, the enlightenment model views evidence as being neutral and eventually permeating through policy. To assess the extent to which policy is affected by research, Weiss argues that it is important to ask how the research is disseminated to decision makers.

Although these three models describe how evidence should and actually does influence policy, they do not delve deeply into recommended steps that can be taken to improve the use of evidence so that it may have a more direct impact on the policy process that goes beyond the diffuse enlightenment or incrementalist routes. Nevertheless, there is widespread agreement among researchers that various factors and determinants will need to be called upon (in addition to the researchers itself) to effect greater use of evidence in the policy process (Porter, 1995). Some of these prescriptive plans will be discussed later against the backdrop of this study’s findings. What is important to note at this stage, however, is that there is academic consensus that more than just evidence alone is needed to induce evidence-based policies, thus keeping in line with the definition of the concept as used in this paper (mentioned above).
This chapter focuses on explaining NHA and why it is promoted as a tool to inform health policy. Briefly, NHA is an internationally accepted framework for measuring total – public, private, and donor – national health expenditures. In addition to determining how much each financing source spends on health care, NHA carefully tracks the flow of funds from one health care actor to another, such as the distribution of funds from the MOH to each government health provider and health service. It presents such financial data in a standard set of tables that follow a user-friendly format intended for country policymakers, including those without financial or economic backgrounds (see Figure 2).

**Figure 2: Illustrative NHA Tables and Their Documentation of the Flow of Funds**

<table>
<thead>
<tr>
<th>Financing Sources</th>
<th>FS.1.1.1 Central Government Revenue</th>
<th>FS.1.1.2 Regional and Municipal Gov Revenue</th>
<th>FS. Employer Funds</th>
<th>FS.2.2 Household Funds</th>
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* Direct transfer of payment

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Principal questions that NHA can answer include the following:

- Who in the county is financing health services?
- How much do they spend?
- How are funds distributed across different health services, interventions, and activities?
- Who benefits from these services? (e.g., Are urban populations benefiting more than rural groups?)

The flexibility of the NHA framework also allows for specific detailed analyses of health care spending on targeted populations or disease-specific activities, such as services provided for maternal and child health care or HIV/AIDS. Simply put, NHA allows for greater transparency of country health systems.

NHA reports are not intended to be solely academic exercises that may or may not be used by policymakers or that may collect dust in government offices; rather, these reports are intended to be an integral part of a country’s policy process and debate, as are the national census and other government surveys. NHA reveals the actual “financial health” of a country’s health system, and when these data are assessed in combination with other types of data (e.g., provider utilization rates, poverty levels), decision makers will be better able to determine whether their country’s health funds are being spent efficiently, effectively, and equitably. Since NHA is an internationally utilized and recognized methodology, a country can assess its health spending patterns in comparison to that of other countries – this is of particular value to policymakers because they can learn from the spending patterns and health system outcomes of countries with similar socioeconomic backgrounds. Such comparative information can help when setting performance objectives and benchmarks. If implemented on a regular basis, NHA can track trends in health care financing. Such temporal data are useful for health care monitoring and evaluation purposes and for making financial projections of a country’s health care needs.
6. Findings

On the whole, key informants reported that NHA findings were indeed used for health policy purposes in their countries. Of the 21 countries studied, 19 had at least one reported instance where NHA contributed to policy and hence to an evidence-based policy process. Health accounts were used in various ways and to varying degrees in each country, with no discernable patterns among regional lines. The following section presents a selection of country “policy stories” that describe how NHA informed particular stages of the policy process. Afterwards, the paper presents factors that were reported to have contributed to the extent to which NHA results were used. For those countries that did not use NHA in their policy processes, the reasons will be discussed in the section dealing with factors detracting from NHA utilization.

6.1 How Were NHA Findings Used?

6.1.1 Users of NHA Data

Before reviewing country policy use narratives, this paper will describe the “users” of the data as relayed by key informants. As one may expect from its leadership role in the health sector, the MOH is a principal user of health care financing data. However, numerous other stakeholders have also used the data for their own policy purposes (see Table 2).

According to key informants, a variety of government entities, including ministries of finance, central banks (primarily in Latin American and Caribbean countries), regional governments, ministers, and even leaders (such as prime ministers) of countries, used NHA extensively. In Bolivia, one key informant recounted how a local government even used health accounts data against the central MOH to negotiate a better allocation of human resources to the municipality. After the local government made this argument based on NHA findings, the MOH increased its human resource spending in that municipality. In Morocco, the prime minister used NHA data that described inequities in the health sector to defend health reform, specifically for expanded social insurance and insurance for the poor.
**Table 2: Users of NHA Data as Identified by Respondents**

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<th></th>
<th>Donors</th>
<th>The President/Prime Minister</th>
<th>Ministry of Finance, National Treasury</th>
<th>Ministry of Health*</th>
<th>Minister of Health</th>
<th>Central Bank</th>
<th>Gov. Municipalities</th>
<th>Members of Congress</th>
<th>Private Sector**</th>
<th>Universities and Other Research Institutions</th>
<th>Various Commissions***</th>
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*Includes the Vice Minister, Director of Planning, and other key policymakers in the Ministry

**Includes pharmaceutical industry, medical associations.

***Includes the Health Sector Reform Commission, and the Financial and Fiscal commission for South Africa, which makes recommendations on how intergovernmental transfers should work.
Nongovernment stakeholders also use health spending information. Donors, such as WHO, USAID, the International Development Bank, World Bank, and Pan American Health Organization, were found to refer to NHA on numerous occasions when designing their assistance programs and resource allocation amounts. For example, the WHO/Eastern Mediterranean Regional Office, when asked to propose a budget for the MOH in Afghanistan after the fall of the Taliban Government, developed its preliminary calculations based on NHA data from countries of similar socioeconomic backgrounds in the region.

NHA data were also found to be useful by private sector stakeholders, including the pharmaceutical industry and medical associations. Respondents stated that upcoming rounds of NHA are increasingly designed to also maximize use by other private actors, such as private hospital associations. Kenya, in its present implementation of a second NHA estimation, is addressing policy questions of interest to private insurance companies; for example, some are interested in identifying the type of services that Kenyan nationals seek overseas and the amount they spend to obtain them. Based on this information, the insurance companies will examine the possibility of designing benefits packages for these services in an effort to retain within the country those health funds spent overseas.

6.1.2 Policy Use Stories

An assessment of country-reported “policy use stories” revealed at least one instance of NHA utilization in each major stage of the health policy process, including advocacy and policy dialogue, policy formulation and implementation, and monitoring and evaluation. Rather than describe the 19 documented policy uses of NHA, a select few are listed below.

6.1.2.1 Advocacy and Policy Dialogue

Advocacy of issues and policy dialogue contribute to one of the earliest stages of the policy process, as described by the popular four-stages model of policy making, namely the first phase of “problem identification and issue recognition” (Walt, 1994). This stage determines how issues get onto the policy agenda and whether or not they are even discussed. As can be seen from the policy stories below, health expenditure information has been helpful in informing policy discussion and debate as well as in setting agenda priorities.

_Gaining support for donor basket funding and the Sector Wide Approach in Tanzania:_ Although it was never officially approved, the first NHA study conducted in Tanzania (1999) has caused some significant policy developments. Upon examination of the country’s sources of health funds, the government noticed that a significant portion of the health sector was financed by donors (approximately 23 percent) and that these funds were channeled “off the government” budget by donors bypassing the government and directly funding their own health programs (see Figure 3). The government believed that this lessened its leadership over the health sector and its direction of growth. Seeking to increase its stewardship and obtain some oversight in the use of these health funds, the government used the NHA finding to internally advocate for the revision of donor coordination mechanisms and the adoption of the Sector Wide Approach (SWAp). The SWAp went further and encouraged most bilateral donors to channel their funds into basket funds managed by the government.

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Informing discussions to restructure primary health care in Egypt: The Egyptian Ministry of Health and Population (MOHP) and collaborating international agencies (World Bank, USAID, and European Commission [EC]) used findings from NHA as well as nonfinancial data to initiate a policy dialogue that led to the design and ongoing implementation of a primary health care restructuring initiative. NHA results contributed to the promotion of this initiative by showing that Egypt spent nearly 4 percent of its gross domestic product (GDP) on health care, with household out-of-pocket expenditures amounting to almost 50 percent of total expenditures and the MOHP accounting for less than 20 percent of the total (see Figure 4). While the sum spent on primary care should be adequate to provide a set of basic services to all, most of these resources were not organized or allocated efficiently. The burden of expenditures was inequitably distributed, with the poor paying the largest share of their income for care. This form of financing also resulted in lower levels of access by the poor and those living in rural areas.

Such findings provided the then Egyptian Minister of Health and Population with the needed information to convince the People’s Assembly, the public, and those working within the MOHP of the need to significantly restructure the way primary health care was organized and financed in Egypt. In addition, NHA provided valuable information to the World Bank, USAID, and EC to inform their own discussions with the government. Consequently, the Minister of Health and the international donors, through a series of discussions, were able to arrive at a mutually acceptable reform agenda as well as receive financing support.³

³ Contributed by A.K. Nandakumar, lead USAID/PHRplus technical consultant for the first implementation of NHA in Egypt.
Figure 4: Household Out-of-Pocket Expenditures as a Share of Total Health Care Spending in Egypt

Source: Data from Rannan-Eliya et al., 1998

Raising awareness of the need for cost containment: The 1998 NHA results in Lebanon highlighted excessive expenditures on health care – far higher than other countries in the Middle East with similar socioeconomic characteristics. Almost 12.5 percent of the GDP was spent in the health sector. A probe into the reasons for such high expenditures revealed that the government allowed a “fee for service” policy, whereby in the absence of any public health providers, individuals could seek care in the private sector and get reimbursed by the government for each service. Such a practice contributed to high utilization rates and, therefore, high costs. As a result of this revelation, the Lebanese government is now taking steps to implement provider payment reforms. These reforms will introduce a system of capitated payments and a schedule of fees, as well as identify current inpatient services that can be conducted on an outpatient or day basis.  

6.1.2.2 Policy Formulation and Implementation

Policy formulation and implementation refer to the second and third phases of the four-stage policymaking framework (Walt, 1994). These stages describe how policies are designed and translated into action based on the evaluation of resource availability and contemplation of various strategies for enforcement of policy changes. The narratives below illustrate how NHA findings have contributed to the shaping of major policy initiatives and implementation strategies.

Helping the government of South Africa to achieve equity in health care: Soon after the end of apartheid in South Africa, one of the government’s major policy objectives was to achieve a more equitable distribution of health resources. The government tailored NHA to meet this policy objective by showing the distribution of resources on a district and income-level basis. South Africa’s NHA analysis revealed that less money was being invested in government health services delivered in poor magisterial districts compared with wealthier districts. Findings showed that the average public health expenditure per person was 3.6 times higher in the country’s richest districts than in the poorest ones. Also, the poorest districts – which tended to be areas facing the greatest health problems and having a

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4 Contributed by M. Bhawalkar and A.K. Nandakumar, USAID/PHRplus technical consultants for implementation of NHA in Lebanon.
high concentration of black South Africans – had the worst geographical access to health workers, hospitals, and clinics.

These NHA findings served as an impetus to design new policies to geographically redistribute South Africa’s health resources in a more equitable manner. For example, the government placed a moratorium on the construction of private hospitals, which were usually built in the richest neighborhoods, where access to good health care already existed. Now, before any hospital can be built, the country requires a “certificate of need” that shows the surrounding population truly needs the facility. The equity issues highlighted by NHA findings also contributed to the shifting of government health funds to primary care services and infrastructure, particularly in poor and rural regions of the country (McIntyre et al., 1995).

Prompting donors to increase funding for HIV/AIDS in Rwanda: HIV/AIDS affects 11.2 percent of the adult population of Rwanda. Given the severe impact of the disease on its population, the government of Rwanda believed that an understanding of the sources of financing for HIV/AIDS services and the distribution of these funds could be instrumental to designing effective and financially sound interventions for dealing with the pandemic. As a result, when Rwanda began its NHA activity in 1999, it extended the framework to include a subanalysis specifically dealing with HIV/AIDS-related expenditures.

The NHA subanalysis revealed that only 10 percent of all health funds were used to target the prevention and treatment of the disease. Moreover, while donors financed over half of health expenditures, NHA exposed that only 1 percent of their funds actually went towards financing HIV/AIDS services. Closer examination of HIV/AIDS funds showed that households were actually the primary financiers of HIV/AIDS services, accounting for approximately 93.5 percent of such funds; donors filled the remaining gap of 6 percent, and the government accounted for less than 1 percent of total HIV/AIDS funding (see Figure 5). Quantification of the financial burden of the disease on households and the paucity of donor funds to address the epidemic contributed to the donor community’s decision to increase its HIV/AIDS-specific contributions from US $0.5 million in 1998 to more than $1.6 million in 2000 (Barnett et al., February 2001). In addition to donors using the finding for their policy purposes, NHA enabled the Rwandan MOH to design and implement targeted policy interventions aimed at improving the financing of prevention activities and increasing access to basic health care services for people living with HIV/AIDS.5

5 Based on information provided by Pia Schneider, former USAID/PHR technical consultant to the Rwandan Ministry of Health for NHA and NHA/HIV initiatives.
Improving insurance coverage to avoid catastrophic health expenditures in Mexico: When the first NHA estimation was performed in Mexico in 1994, it was used to complement an ongoing health system study concerned with sustaining health reform initiatives (Frenk et al., 1995). NHA allowed for a comprehensive analysis of private health spending that had never been done before. In its provision of private health spending data, NHA identified catastrophic health expenditures in low-income groups. Catastrophic spending refers to household spending on health care that exceeds 50 percent of household disposable income. The breakdown of such expenditures has been used to propose a new insurance scheme to cover low-income groups that lack other insurance and thus help them avoid catastrophic expenditures. This project is currently in an exploratory stage (information on this new scheme is available on www.ssa.gob.mx).  

6.1.2.3 Monitoring and Evaluation

The last stage of the four-stages policy process (Walt, 1994) describes the importance of measuring the impact of a health care intervention, determining whether it actually meets its policy objectives, and critically evaluating it for any unintended adverse consequences. In countries where NHA is used periodically, trend comparisons have contributed to this evaluation stage and have helped in assessing whether implemented strategies have achieved their anticipated impact.

Monitoring resource allocation to the most needy states in Mexico. As stated earlier, Mexico has been implementing NHA estimations since 1994. Measurement of the public expenditures on health care has been instrumental in improving regional distribution of health care resources. NHA disaggregated per capita health expenditures by state and found that states with major health needs were receiving lower transfers in the system. Such a conclusion was made by combining health spending data with health status data, including data derived from measurement of the epidemiological transition indicator, which incorporates mortality rates for adults and infants (those

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6 Contributed by Patricia Hernandez, former NHA team member of Mexico.
under one year of age). Once evidence pointed to an inequitable distribution of public subsidies among states, the allocation of public funds was increasingly channeled to protect the population of those states in major need. NHA is now monitoring this policy. Figure 6 shows the initial status for 1995 measured in the NHA project and the follow-up the MOH developed.  

**Figure 6: Allocation of Resources for the Uninsured Population Does Not Favor States with Greater Epidemiologic Challenges**

The allocation of resources for the uninsured population favours less the states with greater epidemiologic challenges.

Source: Fundacion Mexicana para la Salud, 1999

Monitoring and evaluating decentralization policies in the Philippines: The government of the Philippines has used NHA to evaluate the impact of its decentralization policy on the health sector (enacted in 1993). Prior to health sector reforms, both central and regional health funding was low, and in the case of the central government, funding for health care was actually decreasing significantly. After the reforms, NHA found that public health care (benefits to the community at large, in addition to the individual [e.g., immunization]) actually increased from 25 to 35 percent of government health spending between 1991 and 1997. This increase was largely due to increased funding from local governments that allocated more than half their resources to public health care in 1997 (see Figure 7). Thus, NHA revealed

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7 Contributed by Patricia Hernandez, former NHA team member of Mexico.
that the decentralization process had not adversely affected the allocation of public health expenditures for local governments, and it showed that expenditures actually increased at the local level. NHA and, in particular, its implementation on an annual basis provided significant insight into the impact of decentralization on health care (Schwartz, 2000).

**Figure 7: National and Local Government Expenditures on Public Health Care**

(at constant 1991 prices)

![Graph showing national and local government expenditures on public health care](source: Schwartz et al., 2000)

### 6.1.2.4 NHA in Combination with Other Data Types

As can be seen from the above narratives of policy use, at times NHA data influenced the policy process when used in combination with other data types, such as provider utilization data, health statistics, geographical distribution data, other financial data, quality of health care information, and resource distribution data (such as number of facilities, beds, staffs). Although NHA information was useful in itself, many countries found that used alone it did not impact policy to the same extent as when its findings were combined with other data types. Key informants commented that this was because NHA contributed to a large “piece” of the health policy “puzzle,” but many other pieces of data were required to complete the puzzle and aid policymakers in obtaining a clear visual of their health sectors in their entirety. See Table 3 for a list of those countries that reported the use of additional data types in their interviews and policy stories.\(^8\)

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\(^8\) Note: Countries were not necessarily prompted to report other data types and did so of their own accord, with an exception of some of those who were verbally interviewed.
### Table 3: Other Data Types Combined with NHA to Impact Policy

<table>
<thead>
<tr>
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<th>Health statistics</th>
<th>Geographical distribution data</th>
<th>Other financial data</th>
<th>Quality of health care</th>
<th>Resource distribution data e.g., number of facilities, beds, staff</th>
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<td>Morocco</td>
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<td>South Africa</td>
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<td>Tanzania</td>
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<tr>
<td>Zimbabwe</td>
<td>✓ (for second round)</td>
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Key informants described how the various data types mentioned in Table 1 were used along with NHA results in order to address policy concerns. In terms of provider utilization data, for example, some countries combined such information with health expenditure data to design ratios and indicators that measured the meaningful issue of health system efficiency. Several key informants stated that by analyzing NHA information in the context of health statistical data (such as epidemiological information and disease prevalence levels), they were able to determine if financial resources were being spent on the populations with the highest need for health improvement. In Rwanda, without an understanding of the HIV/AIDS prevalence levels and the health impact of the disease on the population, it would be difficult to ascertain that there was indeed a paucity of HIV/AIDS targeted funds. Currently, several countries, such as Bolivia and Honduras, are working to design software programs and information systems that readily combine health financing data with epidemiological information. Geographical distribution data were important especially in countries with decentralized infrastructures. For such nations, measuring health-spending patterns by region or by urban and rural distributions gave them crucial information on how equitable resources were distributed throughout the country. In South Africa, such information was critical for a post-apartheid government seeking to redistribute resources more equitably. Other financial data refers to information on household income levels, user fee levels, and so forth. This information, when combined with NHA data, provided countries with greater detail on the distribution of health funds and the burden on various segments of the population. The Zimbabwean key informant noted that quality of health care information would be ascertained (when the next NHA round is completed) to
assess whether health spending patterns necessarily paralleled the distribution of quality health care services. Finally, resource distribution data, such as the number of facilities, beds, and staff, were used for further equity and efficiency analyses of the health sector in South Africa.

6.2 What Affected the Use of NHA in Policy?

6.2.1 Perception of the Data

When the authors of this study examined reported factors that were believed to influence the extent to which NHA influenced policy, they found that the degree of use depended in part on the nature of the NHA findings themselves but even more so on the “perception” of those findings.

6.2.1.1 When NHA Findings Support a Government Policy Direction

NHA findings that were perceived to be supportive or informative to a general government policy direction or discourse were readily incorporated into the policy process. For example, prior to NHA, the general policy direction of the South African government was to achieve equity in the distribution of health resources – the underlying assumption being that there was inequity at the time. NHA findings supported this assumption and revealed where and how the system was inequitable. This lent support to the government’s chosen direction and NHA was readily used in policy debate and design. In Egypt, the Minister of Health sought to reform primary health care; NHA revealed the inefficiencies in the health care system, and this provided needed “ammunition” to convince other key stakeholders of the need to reform primary health care. By supporting a general policy direction, NHA findings tended to easily penetrate the policy process.

In many of the documented policy narratives of this study, policymakers were described as looking for (and consequently using) NHA data to “feed” into a particular policy direction rather than first assessing the evidence to determine a policy direction (as espoused in the rational model of the policymaking). In so doing, the authors of this study observed that decision makers would use different levels of rigor in their search for “supportive evidence.” In some cases, this search led to policy decisions being based on questionable evidence. For example, the authors noted some instances where policymakers used “incomplete” data (as evaluated by the authors) to shape their policy in support of the political leanings of the government in power. In one country, key informants reported that the government stated that NHA had found high pharmaceutical spending amounts; however, when the authors delved into the actual country report, they could not identify such findings. Nevertheless, that country has moved forward using NHA as a justification for improving the rationalization of drug use.

Because of the sensitive nature of this observation, this paper will not identify those countries but will describe some of the general instances that reflect this phenomenon. For example, in some countries, rising household spending was quickly interpreted as being a burden on households and, therefore, seen as a definite justification for the expansion of social insurance coverage. Although social insurance expansion may well be the appropriate response, such a conclusion should be based on an analysis of the burden of out-of-pocket expenditures and insurance coverage. NHA data for household spending were viewed with the lens of the government in power, and possibly the data were molded or “politicized” to fit the government predisposition to expand social insurance.
In another example of data “politicization,” this study found that the same piece of data could produce different conclusions in different governments; for example, in some countries significant private hospital spending was viewed as a “negative” or “bad” trait; however, in the United States, where the health system relies on the private sector, such a view is not necessarily taken and the consequent policy intervention may also differ. With NHA at least, the authors noted that political and cultural values of the ruling government drive the perception of the data and affect its potential use in health policy.

6.2.1.2 When NHA Findings Counter a Particular Government Policy Direction

What happened when NHA data did not support a predetermined policy route? Did governments use such data in their health policy, and, if so, to what extent? According to this study, NHA findings perceived to run counter to a policy direction but still seen as being positive did result in a change of policy direction. Such findings occurred rarely; however, Jordan is one example where a country changed its policy as a result of such contradictory findings. Before NHA was conducted, Jordan was interested in implementing universal insurance based on an unsubstantiated belief that a large proportion of the population was uninsured and that there was inequity in financial access to health care. However, after NHA was conducted (an analysis of household data in particular), the country learned that insurance coverage of the population was not a critical issue and 20 percent of Jordanians actually had multiple insurance coverage. This caused the country to shift its policy focus to make the system more efficient and contain excessive costs, such as those stemming from multiple insurance coverage; strengthen primary health care in a more financially sustainable manner; and identify subgroups of populations that may need specific health care interventions tailored to their health needs. As a result, NHA findings were able to effect a change in policy despite the fact that they ran counter to the country’s predisposed policy route.

What happened to NHA findings that ran counter to general government policy direction but were viewed as being negative or critical of the government’s management of the health sector? The study team noted that such findings tended to be suppressed, with the NHA report being kept in draft form (and not recognized officially). However, discussions with key informants revealed that draft reports still affected policy in a subtle and face-saving manner.

This was the case in Kenya. The first NHA was conducted in 1998, using 1994 data. Prior to NHA, the perception among the key policymakers was that the government was the major financier of health care services. However, NHA revealed that more than 53 percent of health care expenditures actually came from households, with the Kenyan government financing only 19 percent (see Figure 8). The high amount of household spending was particularly alarming as 56 percent of the population lived below the poverty line. Such findings also were shocking to policymakers, and they did not officially approve the report. There has been, however, a gradual recognition and understanding of the report’s findings as a result of government officials being shown the health accounts of neighboring countries that exhibited similar expenditure patterns, particularly with regard to household spending. The first Kenya NHA report has prompted government officials to examine equity issues and, consequently, policymakers are commissioning a series of in-depth studies on the burden of health financing in the country. For example, since the household expenditures in the Kenyan report were derived from secondary data (the 1994 Welfare Monitoring Survey, discussed in Deolalikar, 1997), policymakers have suggested and are currently implementing a health-spending-specific household survey (for the second round of NHA) to obtain more credible and methodologically sound evidence. In addition, the first NHA report has prompted the government to track public health expenditures to
assess how favorable to the poor their practices truly are. This is being done under the Public Expenditure Review initiative.

Figure 8: Sources of Health Funds in Kenya

![Figure 8: Sources of Health Funds in Kenya](image)

*Source: Kenya Ministry of Health, n.d.*

Tanzania illustrates another example of the subtle policy influence of negatively perceived findings. In that country as well the NHA report has been kept in draft form largely because it revealed high out-of-pocket expenditures. However, Tanzania is still planning its second round of NHA and the first report has been internally used for policy purposes as stated earlier in this paper. The NHA report showed that a large portion of donor spending was off-government budget, and, as a result, Tanzania is using that evidence to lobby for internal support for basket funding under the SWAp. Moreover, the findings from the first NHA have motivated the government to design collaboration strategies with the private sector to contain costs and meet equity objectives.

In Guatemala, the government has used NHA results to track its progress in meeting targets set in the peace accords, namely that government health expenditures should increase by 50 percent between 1995 and 2000, and there should have been a 50/50 split of public spending between prevention and curative health care activities by the end of that five-year period. NHA results show that the first target has been met. Measuring the second target is more controversial, as the government accounting system does not allow for a disaggregation of expenditures into preventive and curative care. The methodology that was used yielded a 30/70 split between preventive and curative care. This estimate of the preventive/curative ratio has not been widely accepted, with methodological flaws cited as the principal reason, despite the fact that the methodology was vetted through various stakeholders, including the MOH, prior to its application.

6.2.2 External Factors Influencing the Policy Use of NHA

Since perception of data was critical to the use of NHA in policy, the study team investigated the external factors that affected the perception of the data and hence its impact on policy. Figure 9 summarizes the factors mentioned by respondents.
Factors contributing to the policy use of NHA may be grouped into two categories: those that are seemingly controllable by the NHA team and those that occur simply by good fortune or “chance.” Table 4 provides a list of these factors.

Among the seemingly controllable factors, strong dissemination strategies were the most cited mechanism for the incorporation of NHA into the policy process. Key informants noted the importance of policy briefs, press conferences, and presentations that were tailored to each type of stakeholder, such as those in the government and the private-for-profit sector. In South Africa, the NHA team noted the key concerns of each stakeholder and highlighted these issues in the dissemination talks. For the Ministry of Finance, the presentations illustrated the use of NHA in future budgeting decisions. Some countries, such as Bolivia, found it useful to have a distinct “dissemination team,” separate from the NHA technical team; Bolivia had created a “health equity observatory” that was charged with health policy analysis and became a principal actor in disseminating NHA analyses. Peer-to-peer distribution of the findings was considered an additional strength in a successful dissemination approach. Senior-level officials presenting NHA data carried more weight and attention than did the mid-level technical experts comprising the core NHA team.
Table 4: Factors Respondents Thought Contributed to the Policy Use of NHA in Studied Countries

<table>
<thead>
<tr>
<th>Factors that CAN Be Influenced by NHA Team</th>
<th>&quot;Chance&quot; Factors; Difficult for NHA Team to Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good dissemination strategy (multi-sectoral)</td>
<td>Credibility of report</td>
</tr>
<tr>
<td>Bolivia</td>
<td>✓</td>
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<tr>
<td>Dominican Republic</td>
<td>✓</td>
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<tr>
<td>Honduras</td>
<td>✓</td>
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<tr>
<td>Mexico</td>
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<tr>
<td>Egypt</td>
<td></td>
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<tr>
<td>Iran</td>
<td>✓</td>
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<tr>
<td>Jordan</td>
<td>✓</td>
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<td>Lebanon</td>
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<tr>
<td>Morocco</td>
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<td>Malawi</td>
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<td>Rwanda</td>
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<td>South Africa</td>
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<td>Tanzania</td>
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<tr>
<td>Philippines</td>
<td>✓</td>
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</table>

* NHA seen as arising from a home-grown demand
**Includes window of opportunity, culture of transparency

Note: Unfilled boxes may be because countries provided a written statement that did not delve into contributing and detracting factors for NHA's policy use.

The perceived credibility of the report was another controllable factor affecting the ability of NHA to impact policy. Credible and methodologically sound reports prevent their findings from being easily dismissed and overlooked, even when they counter a particular government disposition. This was the case in Morocco, Iran, and Mexico. Credibility was so important in Iran that the NHA team was housed in a politically neutral body, namely the Central Bureau of Statistics. This institution was respected as providing methodologically sound and unbiased information; thus, its NHA findings, including the ones that showed decreasing government financing of health care, were respected and given proper consideration. This contributed to successful advocacy efforts to obtain a larger government health care budget in Iran.

Respondents in Morocco and Honduras cited stakeholder buy-in as being a particularly helpful factor for three reasons. First, it facilitated the retrieval of data from each of the domains represented by various stakeholders, particularly the private sector. Second, the involvement of major stakeholders in the NHA process kept NHA on the “radar” screen, which meant that the NHA dissemination process did not just begin at the end, when the findings were produced, but rather throughout the course of implementation. Finally, stakeholder buy-in (not just government buy-in)
strengthened the country’s sense of ownership of the data and its design. With such personal investment there was a greater propensity to use the data than there would be in more donor-driven NHA processes.

To facilitate stakeholder buy-in, many respondents noted the importance of designing health accounts with priority policy issues in mind to ensure that the estimation would yield policy-relevant indicators. For example, concerned about rising HIV/AIDS prevalence levels, the Rwandan government conducted an NHA subanalysis to specifically investigate expenses associated with the provision of services to combat the disease. Morocco also conducted a subanalysis to address the government policy regarding the distribution of financial resources for maternal and child health care services. South Africa, the Philippines, and the Dominican Republic focused on equity as their NHA research objective. In all cases, NHA findings were able to influence their targeted issues at the policy level.

A number of key informants spoke of contextual factors that the NHA team could not easily control but rather occurred as chance situations that helped to catalyze the utilization of NHA in the policy process. The most cited “chance” factor was the presence of a strong NHA policy advocate. Such an advocate is a senior-level government official with a solid understanding of the dynamics and politics of the health system as well as sound knowledge of NHA data and its policy implications. This advocate maintains a link and dialogue between NHA data generators and users. It should be noted that the presence of an advocate is not entirely a result of pure chance; rather, the core NHA team may have some influence in shaping an “advocate.” For example, in Honduras and the Dominican Republic, the Vice Ministers of Health attended NHA seminars held at the regional level overseas. When these individuals returned home, they had a heightened enthusiasm for and understanding of the NHA endeavor and became strong advocates of its implementation.

Another chance factor is the presence of a supportive political environment to receive health expenditure information. Key informants stressed the importance of having a culture of transparency, where policymakers are receptive to using this information in their jobs. Iran was one such country where the use of NHA data was facilitated by the country’s openness to acknowledge and consider data in its health sector planning process. Many countries mentioned the importance of political “windows of opportunity” that existed when NHA estimates were being carried out in the country. Such windows of opportunity refer to serendipitous political demand for information and evidence. For example, in many Latin American and Caribbean countries in the mid-1990s, there was a strong movement to implement health care reform. To facilitate this process and help identify areas in need of reform, these countries needed data on the financing of their health systems, and NHA helped to fill this demand. In South Africa, NHA was implemented soon after the end of apartheid, when the government was most interested in achieving equity and needed information on what inequities existed. NHA again was a perfect fit. Some key informants noted the importance of the regional NHA networks and their regional meetings in maintaining a high profile of NHA and, consequently, policymaker interest.

6.2.2.2 Detracting Factors

Factors hindering the policy use of NHA could be divided into the same two categories (see Table 5): factors that could potentially be manipulated by the NHA team and factors that are outside the team’s control. Fortunately, many of the factors key informants identified are ones that, in the

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9 “Chance” factors are those that can possibly be influenced, but this is generally outside the scope of the NHA team.
opinion of the authors, can be influenced and minimized by the technical team’s actions. Some are the reverse of previously mentioned contributing factors, such as weaknesses in dissemination strategies, lack of government ownership and stakeholder buy-in, and weak policy design of NHA.

In some countries, the NHA exercise ended at the completion of the report itself; however, key informants stated that this was premature. A crucial step received little attention, namely the dissemination of the findings. Without a concerted and thought-out strategy for dissemination, NHA findings had a tendency to be shelved and “collect dust in people’s offices.” Government officials in Zambia, one of the few countries that did not report any policy use of NHA, stated that although some presentations on NHA were delivered to them, they still did not grasp the full value and significance of the data. If presentations were not tailored to potential users in a manner that they could understand or value, NHA generally met with limited success in influencing policy. In some cases, NHA teams were limited in their ability to hold dissemination meetings. For example, in the case of El Salvador, government officials were concerned that certain findings could be politicized and, as a result, dissemination campaigns were significantly curbed.

Weak government ownership significantly hindered the realization of NHA’s potential to inform policy. In Zambia and Kenya, this was cited as one of the principal reasons for weak policy use – NHA was seen as donor driven, and in the case of Zambia, was conducted outside the MOH at the University of Zambia. Another reason for weak government ownership was the “housing” of the NHA team. Generally, NHA is housed in the MOH, which is considered to be the prime steward of the health sector and, hence, the institution with the greatest stake in using NHA results. However, in Mexico, the first several rounds of NHA took place in an independent research institution, namely FUNSALUD (La Fundación para la Salud). Although FUNSALUD was highly credible and had strong contacts to the private sector, it was not successful in gaining much government use of NHA findings until its head became the Minister of Health. In the Dominican Republic, a slightly different housing scenario detracted from the maximal policy use of NHA. Although the NHA team was housed in the Dominican Republic’s MOH, the Ministry’s role as steward over the health system has steadily diminished because of the political situation. The Ministry will no longer provide health care services but will retain a role in policy guidance. Key informants from the Dominican Republic reported that housing the NHA team in an institution with limited power and control over health care reduced the potential use of NHA in government policy.

Weak stakeholder buy-in, particularly from the private sector, weakened the accessibility of NHA teams to private sector data and this lessened the credibility of the report as a comprehensive assessment of the health system. Acting on this lesson learned, Zimbabwe, for its second round of NHA, began the process by hosting a multisectoral conference where all key stakeholders (public, private, and donors) were invited to discuss their concerns about NHA. This conference prompted a better understanding of the value of the tool. For its second round, Kenya has invited key private stakeholders to participate in the process of conducting NHA, including designing the questionnaires and collecting private sector data. In the first Kenyan NHA, donor technical consultants who tried to obtain data from the private sector were met with closed doors due to suspicions about the purpose of NHA. Many private health care entities raised concern that the data would be used for tax purposes and, thus, chose not to participate. Proper education regarding the purpose of NHA and the potential value it can bring to all health system stakeholders is a key aim of current NHA strategies in Zimbabwe, Kenya, Jordan, and Tanzania.
Table 5: Reported Factors that Detracted from NHA’s Policy Use in Studied Countries

<table>
<thead>
<tr>
<th></th>
<th>Weaknesses in dissemination approach*</th>
<th>Lengthiness of NHA production Time</th>
<th>Perceived or real methodological limitations</th>
<th>Lack of stakeholder buy-in</th>
<th>Viewed as donor driven/weak government ownership</th>
<th>Not designed to provide policy-specific data</th>
<th>Lack of NHA policy advocate</th>
<th>High government turnover</th>
<th>Nonsupportive political environment**</th>
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<tr>
<td>Bolivia</td>
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<td>Dominican Republic</td>
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*e.g results "were not simplified enough" for potential users, presentation and implication of data was not understood by policymakers

**e.g Policies are not generally "evidence-based", Policymakers may not necessarily be appreciative of health financing issues (e.g "if they are predominantly medical doctors"); lack of institutional capacity

Note: unfilled boxes may be because countries provided a written statement that did not delve into contributing and detracting factors for NHA's policy use
When asked why Zimbabwe’s first round of NHA did not affect policy, the country’s key informant responded that the principal reason was because the report failed to produce “policy-specific data.” The country was concerned with its private sector spending patterns and hoped to increase public-private collaboration; however, the NHA report had weak private sector data and was thus unable to inform this policy issue. As stated earlier, the country held a multisectoral stakeholder conference for the second round of NHA; one of the purposes of such a meeting was to identify the key policy priorities of multiple actors that could shape the next NHA initiative.

Key informants noted some detracting factors that could to a certain extent be controlled and influenced by NHA teams. One such detractor was the perceived or real methodological limitations in the NHA reports. In all the studied countries that had NHA findings perceived as being contrary to a preferred government policy direction, policymakers usually cited methodological weaknesses as reasons to doubt the report’s findings and not give it official approval. Such was the case in Guatemala, Kenya, and Tanzania. For example, weak private sector estimates limited the extent to which NHA could be informative in policy. As stated earlier, in Guatemala the NHA finding revealed that the preventive/curative split of expenditures was 30/70 and not the desired 50/50 ratio. Critics raised methodological issues in their opposition to the findings, despite the fact that the estimation method used was vetted through key stakeholders at the onset of the NHA endeavor.

Although NHA teams are well advised to produce a methodologically sound and credible report, this may come at the expense of producing a timely report. If the report is produced and disseminated three or four years after its year of estimation, its findings, though they may be credible, will not be as useful to policymakers wishing to get a good estimation of the current state of national health spending. Moreover, delayed reports give policymakers a reason to ignore data that may suggest an extreme reversal in health policy direction. Morocco and South Africa, both of which have very thorough health expenditure estimates, reported that the time versus quality tradeoff put significant pressure on the NHA team to make sacrifices in methodological detail in order to publish the report within a policy-relevant timeframe.

Countries also reported a number of chance factors that reduced the potential impact of NHA. These included the lack of policy advocates, nonsupportive political environments, and high government turnover. The first two detracting factors mentioned are the reverse of previously stated contributing factors. Lack of policy advocates generally translated into poor dissemination and awareness of NHA among decision makers. Nonsupportive political environments were generally those lacking cultures of transparency. One key informant stated that “policy [in his country] is not always based on evidence” and there are certain personal policy agendas of key decision makers that are more influential in health policy than evidence. For example, the Zimbabwean prime minister is not eager to use NHA findings, particularly if they suggest a need to introduce user fees. The NHA team, hoping to preserve the influence of NHA in government policy, has decided to present its second NHA findings in a way that offers various cost-containment options, including insurance plans, user fees, and so forth. In doing so, NHA is being given a high profile regardless of the political agenda.

Politicians that simply may not have an appreciation for financial information also contribute to unsupportive political environments. For example, in Tanzania, many key decision makers are former physicians with strong medical backgrounds and, thus, they tend to make their decisions based on health statistics and effective health care interventions rather than on financial information. The need for an institutional capacity to “use” these data is critical to the success of NHA in health sector policy. Key informants voiced a need to first convince policymakers of the value of financial data before introducing the concept of NHA.
Former NHA team members voiced frustration over the *high government turnover*. Some stated that after having just convinced certain policymakers of the usefulness of NHA, “there was almost no time for officials to implement what they had bought” before they were shifted to other positions. Jordan had numerous Ministers of Health in a very short time. In Bolivia, the key informant mentioned that politicians with short terms in office (typically a year or so) were less likely to advocate for NHA stating, “why should I support NHA if it takes two years to do the analysis and my term finishes in one year? I will not see the benefits of this study.” High turnover of NHA “team members” in Malawi caused difficulties in producing the NHA report within a policy-relevant timeframe.
7. Discussion and Conclusions

In brief, first-time NHA endeavors in developing countries have impacted national policy processes. The extent of that impact has depended on the perception of NHA findings (whether they were seen as positive or negative) as well as on a number of external factors, many of which can be controlled by the NHA team.

7.1 Perception of Data

In the countries studied, NHA findings were not simply evaluated in an objective and unbiased vacuum. The intent was to use the data to impact policy; therefore, data were evaluated within the political context and risked being “politicized.” Country governments generally perceived NHA findings in one of three ways: data were supportive and helpful to a particular government direction, data were counter to a preferred government leaning but still were considered “positive” or favorable, or data countered a government direction and therefore were considered negative. How NHA findings were used and to what degree depended on which of these three perceptions government policymakers adopted.

If findings were seen to contribute and inform a preferred government direction, policymakers had a greater tendency to use the data in their health policy. Sometimes this occurred even when the data seemed to be incomplete and not necessarily unequivocally supportive of a particular government policy leaning. Thus, it appeared that policymakers exhibited varying levels of resolve when trying to find data to support issues of concern. Supportive data elicited laxer standards of what was deemed to be acceptable for use in policy.

This observation is not new to the field of knowledge use in policy. Many researchers have described the tendency for data politicization in evidence-based policymaking (Weiss, 1991; Walt 1994). These academics caution that data are not “unbiased” and understandably are affected by the social constructs of the world interpreting it; moreover policymakers may choose to remember information in a selective manner, perhaps weeding out what is contrary to their preferred direction. In his proposed framework for knowledge use in the African policy process, Porter (1995) recommends that researchers recognize that “every issue and problem has an interpretive emotive element” and that the “emotional ‘tone’ of a policy problem largely determines how people will respond to it.” In a paper outlining recommendations on how to achieve the United Kingdom’s goal to impact health policy in developing countries, Coe, Luetchford, and Kingham (2002) describe research disseminated with the intention of influencing policy as being an inherently “political intervention in a political context, and it is thus vulnerable to political exploitation and distortion.” Many of the government officials that Coe, Luetchford, and Kingham interviewed relayed research as a “conferrer of spurious objectivity”; one parliamentary lobbyist described research as being wheeled out to “give credibility to a pre-determined [policy] route.” The results of this study partially support these assertions.

From the above discussion, it may seem that only supportive evidence gets used in policy; however, this paper found that evidence counter to a predetermined policy route did manage to also
affect health policy. If data were perceived to be counter but still favorable, such as in the case of Jordan where NHA showed that health care was surprisingly equitable, NHA findings could shift policy directions completely. Jordan moved from focusing on achieving equity to achieving cost containment as a result of NHA data.

If data were found to be critical of the government as well as counter to current political discourse and debate, the NHA report tended to be suppressed in draft form, although it still subtly affected policy. In such cases, decision makers reacted first by questioning the methodology and credibility of the report. If there appeared to be some justification for the findings, rather than acknowledging the findings directly, policymakers began to make changes gradually. One example is Kenya, where high, out-of-pocket spending estimates were not officially recognized; nevertheless, the government has sanctioned more detailed household surveys and is examining how favorable towards the poor its policies really are. It should be noted that the slow uptake of counter and negative data in policy is not unique to the developing country context. When faced with scientific medical evidence relating the clear relationship between lung cancer and tobacco, industrialized countries were initially reluctant to act on such findings and introduce regulations on tobacco (British Journal of Addiction, 1991). This is largely because a number of external factors, such as tobacco lobbyists, economic implications, and others, came into play to influence government reaction to the findings; nevertheless, change was ultimately enacted approximately 10 years later.

### 7.2 Lessons Learned for Increasing Policymakers’ Use of Health Accounts

As stated above, the policymakers’ “perception” of NHA is critical to how the data are used. Key informants noted a number of factors that affects the perception of policymakers. Based on these lessons learned, the authors propose the following strategies to encourage the influence of NHA in policy.

1. **Communicate to policymakers that NHA exists**

   The first step is to get policymakers to recognize, or “perceive,” the existence of NHA and its findings. How policymakers view the findings is secondary at this stage. Placing NHA on the “radar” screen of decision makers may seem obvious and intuitive, but it is a challenging undertaking. This study found that many strategies had been used to accomplish this in the 21 countries studied, and a few of these will be described as recommended approaches.

2. **Obtain stakeholder buy-in from the onset**

   Stakeholders should be brought on board the NHA process from the onset. They should be informed of what NHA is and what it attempts to do. Stakeholder buy-in to the NHA process from the beginning raises their awareness of the tool and increases their sense of ownership. NHA reports viewed as being donor driven tend to be used mainly by the donors themselves and not necessarily by policymakers.

2a) **Peak the interest of decision makers; target relevant policy issues**

   To obtain stakeholder buy-in and ownership, NHA must first and foremost peak their interest. This can be accomplished by designing the report so that it will address those policy issues of interest to health sector stakeholders. For example, if policymakers are interested in achieving a more equitable health system, let them know that NHA can be designed to include a measurement of expenditures at the provincial/state level and to allow a comparison of resource distribution patterns.
across a country. The easiest way to identify such policy issues is through the stakeholders. Conducting a series of “steering committee” meetings with the stakeholders can direct the way in which health accounts are produced. However, bringing stakeholders together is a difficult undertaking and requires an NHA policy advocate to facilitate the process. Such an advocate is generally a mid-level senior official who is well connected to the key players in the health sector and is very aware of the principal policy issues that they are facing. The role of the advocate is critical; with his or her understanding of the priority policy issues, the advocate can better market the concept of NHA and facilitate a gathering of these stakeholders that will generate further awareness and acceptance of the NHA process and design.

2b) Develop a strong dissemination strategy

Another way to raise awareness of NHA among policymakers is to have a strong dissemination strategy. This does not necessarily mean disseminating the report once it is completed; rather, the dissemination process can be ongoing throughout the NHA exercise. Some methods that can be used to disseminate the information include issuing updates, producing newsletters, and calling mid-term meetings of all the stakeholders. Essentially, NHA must be kept on the policymakers’ radar screen throughout the process and not just initially. This approach is also useful in countries with high government turnover; in such situations, many NHA teams found it tiring but necessary to continually educate new policymakers. Once the report is finished, policy briefs, dissemination meetings, and tailored presentations can all be employed to communicate the findings to policymakers.

3. Be aware of and prepared for policymakers’ “perception” of findings

Once stakeholders are aware of the existence of NHA, the degree of influence NHA will have in the policy process depends largely on how policymakers “perceive” the findings – whether they are seen as supportive and informative or simply critical of the present government.

3a) Develop a credible NHA report

As this study discovered, NHA findings were generally viewed as critical or negative if they pointed to a radical policy shift in the midst of an unsupportive political environment. In such cases, policymakers often resort to a number of common arguments that can quickly negate the data and minimize any influence it may have in the policy process. One of the principal arguments for negating an NHA report is that it has significant methodological limitations and flaws, thus its credibility is undermined. For example, some NHA exercises failed to capture private sector spending, thus raising doubts as to the comprehensiveness of the study.

3b) Develop a timely NHA report

If it takes too long to produce the NHA report, policymakers may view the findings as outdated and, consequently, of little use to the policy process.

When NHA reveals information that points to a radical policy shift, the NHA team should be prepared to defend its findings as being credible, methodologically sound, and timely. By doing so, it is harder for policymakers to dismiss the use of health accounts in the policy process.

In conclusion, simply producing an NHA report will not impact policy. This study found that the perception of the report is critical: policymakers should be able to “perceive” or be aware of NHA in the first place. Secondly, the way in which policymakers perceive the data is critical; the NHA team
should attempt to anticipate policymakers’ reactions when designing a strategy for the promotion of NHA in the policy process.
Annex A: Key Informant Questions

Verbal interviews included the following questions:

1) Question for an update on country situation:
   a) Has there been a second round of NHA?
   b) Have there been any recent policy developments stemming in part from use of NHA?

2) **Who** specifically has used NHA for policy purposes? e.g., have other ministries and stakeholders besides the MoH used the data, such as donors? If so how have they used the data?

3) What has been the strategy or **process** of getting NHA findings to be used by the government for policy purposes? In other words what has been the effective strategy to involving NHA in the policy process?
   a) e.g., Have there been "NHA policy advocates" within the Ministry?
   b) e.g., Were NHA dissemination meetings held? or stakeholders’ meetings?
   c) e.g., Were policy briefs written?

4) What **positive** contributing factors influenced the use of NHA in policy? e.g., was there a favorable policy environment – such as strong support for evidenced-based planning? was the timing of the NHA publication opportune? Was NHA designed to meet a major policy concern of the government, hence more interest was taken into the findings?

5) We know that NHA alone does not lead to a policy change, so what other types of data or influences were combined with NHA findings to contribute to the policy process? i.e. perhaps hospital utilization data in combination with NHA findings help one country look at the issue of efficiency in hospitals.

6) What were some of the **negative** factors that deterred NHA findings from being used in the policy process? e.g., perhaps there was “unfavorable” data, high turnover among policymakers etc

7) What is the status of institutionalization on NHA in your country?
   a) Is there a government budget line item? Does NHA get external donor support?
   b) How regularly is NHA scheduled to be conducted?
   c) What systems or long-term mechanisms have been put in place to retrieve accurate data from the private sector? Has there been any legislation supporting the retrieval of such data?
   d) Has anything been done keep the government trained in the methodology in light of high-government turnover? e.g., developing links with university professors trained in NHA, etc.
Written statements from key informants generally provided less detailed information, and if informants chose to send in written “policy stories,” they attempted to respond to the following broad questions:

1) *With your expertise and involvement in NHA, would you please tell me if you know whether NHA findings were ever used to influence policy in any way in the Philippines?* For example, South Africa’s NHA analysis revealed that less money was being invested in government health services delivered in poorer magisterial districts compared with wealthier districts. These NHA findings served as an impetus to design new policies to geographically redistribute South Africa’s health resources in a more equitable manner. For instance, the government put into place a moratorium on the construction of new private hospitals, which usually occurred in the wealthier districts where access to health resources was not a problem. Thus, NHA findings prompted the government to take more control over resource allocation in both the public and private sector.

2) *If NHA was used to contribute to the policy process, would you please write one or two paragraphs outlining its influence in the Philippines?* We understand that NHA is not the only tool factoring into the development of a particular policy, rather nonfinancial data may be used, such as hospital utilization data. However, we would like to capture how much NHA itself has contributed to the policy process. I would appreciate it if you could also notify me if NHA has **not** been used recently for policy in the Philippines.

3) *Please also outline some of the factors you believe may have contributed to its use or non-use in the health care decision-making process.* For example, perhaps NHA findings never made it to the desks of key policymakers and hence were not used, or perhaps a strategized approach was employed to win the attention of important policymakers.


