

National Health Accounts and Public Expenditure Reviews: Redundant or Complementary Tools?

BACKGROUND

In the late 1980s and 1990s, poor health outcomes in sub-Saharan African countries were critical issues in discussions at global and regional forums. A common belief was that poor health outcomes in these countries were due partly to inadequate financing of social sectors and social protection-related services. However, what was not known was:

- the extent to which health was under financed,
- who was financing health care,
- who managed health resources,
- how much was allocated to different providers,
- how much was allocated to different public health functions, and
- which services were well financed and which were not.

These issues were informed when countries start conducting **National Health Accounts** (NHA), an internationally endorsed framework for tracking the flow of all health funds (public, private, and donor) in a health system, from their financing sources to their end uses. Over the past two decades, more than 100 low- and middle-income countries (27 of them in Africa) have conducted NHA estimations

that generated evidence for country-level policy decision-making as well as for cross-country comparisons. Now, many countries are trying to institutionalize the NHA methodology so that they can carry out NHA on a regular basis and report on health financing trends.

Just as the NHA framework was evolving in the 1990s, development thinking was undergoing a paradigm shift. The World Bank and International Monetary Fund began to move from an emphasis on growth promotion in all developing countries to one on poverty reduction (Ishikawa 2006). As the World Bank's 2001 annual report stated, "effective public spending is crucial for poverty reduction, and strong public expenditure management (PEM) systems are essential to ensure that development assistance is utilized as intended" (World Bank 2001). These shifts led to more regular and intensive use of the **Public Expenditure Review** (PER).

PERs were developed to assess public spending in different social sectors and to examine the expenditures' effect on improving sector efficiency, effectiveness, and equity, as well as the sustainability of the expenditures. Because the PER is linked to a broader public financing and economic rationale for public spending, it is becoming



more significant with the focus of the World Bank and other major donors on promoting government investments in poverty-reducing sectors, namely, education, social protection, and maintaining law and order and health. Indeed, health is one of the sectors that PERs make part of a general exercise or the subject of a specific study (World Bank 1999, DFID 2001).

Government and donor promotion of both NHA and PER raises the question, Is there a need to conduct NHA in countries that are undertaking PER and vice versa, or are these tools redundant? This issue is of particular concern to African countries and to development partners including the World Bank that are increasingly implementing NHA and conducting an increasing number of PERs in Africa (of 155 PERs undertaken by the Bank from 1957 to 1993, 45 percent were in the Africa region).

CONCEPTUAL FRAMEWORKS AND EVOLUTION OF THE METHODOLOGIES

NATIONAL HEALTH ACCOUNTS

NHA is a framework for tracking the flow of all health funds (public, private, and donor) in a country; it is intended to inform the policy process. The framework consists of a series of well-defined categories and boundaries of health expenditures and a set of standard two-dimensional tables to illustrate the funds flow (WHO et al. 2003; Partners for Health Reformplus 2003a). Methodologically, NHA is an extension of the System of Health Accounts (SHA) used by member countries of the Organization for Economic Cooperation and Development (OECD). NHA is based on the SHA's International Classification for Health Accounts (ICHA) with a few modifications/extensions, such as the addition of a "financing source" dimension and of sub-specifications of ICHA categories; these modifications facilitate implementation in low- and middle-income countries.

NHA attempts to track actual spending on health care, meaning it does not measure commitments that have not materialized, or budgets that have not been spent or were spent in unintended ways. This tracking of actual spending provides a true picture of health care financing.

NHA shows the flow of funding from original sources to specific services for which payments are made to health care providers. It assesses the flow of resources from the central treasury, households, employers, and donors (**financing sources**) to the Ministry of Health and other intermediary players (**financing agents**) like insurance schemes, other ministries, and nongovernmental organizations with programmatic control over allocation of funding to providers. From the financing agent level, NHA tracks the flow of funds to health care service **providers**, which can be public, semi-public, and private providers (including traditional healers). The framework also examines the purpose and specific types of health care services (functions) for which resources at the provider level are actually spent inpatient curative care, outpatient curative care, preventive and public health programs, administration, etc. In summary, it measures the "**financial pulse**" of the health system in a given country (WHO et al. 2003, Partners for Health Reformplus 2003a) and organizes complicated flows of health funds (see figure 1 next page) within a standard framework.

Recently, in an effort to provide more detailed information for priority areas, the NHA framework was adapted to produce 'subaccounts,' detailed reviews of funding flows for a particular area such as child health, reproductive health, HIV/AIDS, tuberculosis, and malaria.

General NHA (which measures overall health expenditures) and the subaccounts provide answers to the following important policy questions related to financing of health care (Partners for Health Reformplus 2003a, WHO et al. 2003):

- Who in the country pays for health care?
- How much do they spend and on what types of services?
- How are funds distributed across different health services?
- Who benefits from health expenditures? And if household surveys are part of the NHA, what is the burden of financing on households?
- To what extent is resource utilization in the health system in line with national health care policies and strategic plans?
- How much of government resources are going to the private sector because of outsourcing of health care services?

FIGURE I

1) Financing Sources					
Financing Agents	FS.1.1.1 Central Gov. (Ministry of Finance)	FS.3. Rest of the World (Donors)	FS.2.1 Employer Funds	FS.2.2 Household Funds	TOTALS
HF.1.1.1.1 Ministry of Health	A	B			A+B
HF.1.1.1.2 Ministry of Education	C				C
HF.2.2 Private Insurance Enterprises			D	E	D+E
HF.2.3 Private households' out-of-				F*	F*
TOTALS					G
2) Financing Agents					
Providers	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 Ministry of Education	HF.2.2 Private Insurance Enterprises	HF.2.3 Households	TOTALS
HP.1.1.1 Public General Hospitals	W		X		
HP.1.1.2 Private General Hospitals		C		F	
HP.3.4.5.1 Public Outpatient Clinics			Y		
	W=A+B	C	X+Y= D+E	F	G



- What is the reliance on donors for health care financing? Is this sustainable?

NHA findings on health expenditure, when examined together with health output (or outcome) data, can shed light on efficiency of national health systems. Similarly, provincial- or district-level health accounts can be used together with the health outputs (or outcomes) to assess the efficiency in health care at each level of the health system (Kirigia et al. 2007). NHA is intended to be used first and foremost as a policy tool. For example, NHA findings have been instrumental in designing pro-poor resource allocation decisions for districts in post-apartheid South Africa. NHA findings in Kenya revealed high out-of-pocket spending from a population whose majority lived below the poverty line. This allowed the Ministry of Health to successfully lobby the Ministry of Finance for a 30 percent increase in its budget allocation, the largest increase since 1963 (Partners for Health Reformplus 2003b). In Ethiopia, NHA findings were used for policy advocacy to pursue various health care financing reform components as well as to set higher financing targets under the Health Sector Development Program (HSDP-III). In Nigeria, NHA information fed into the development of a

comprehensive health financing policy. NHA has also impacted the policy process in a number of other African countries, including Egypt, Malawi, Rwanda, Tanzania, Uganda, Zambia and Zimbabwe.

Because of its standardized framework, NHA findings can be compared across countries with similar and varying socioeconomic development status. In turn, the global community can compare how much is being spent between developing and developed countries; further analysis can be made against the burden of disease. NHA generates critical evidence that are needed on a regular basis for international and national stakeholders policy and management decision making.

PUBLIC EXPENDITURE REVIEW

PER examines the appropriateness of policies and reforms in developing countries to achieve poverty reduction and examines effectiveness, efficiency, and equity impacts achieved or not achieved through public investment in the sector under review. In addition, PER examines the sustainability of expenditures according to the macroeconomic framework and the managerial capability of institutions to execute plans and budgets.

It poses questions on the role of state and public sector reform agenda and its realization. It investigates whether government interventions/spending are intended for the poor and, if so, whether they reach the poor effectively. As the public sector is only one actor, PER checks whether public programs merely crowd out private activities or produce services that the private sector is not capable of delivering. PERs are considered as measures for changing aid modality. In relation to this, the British government's 1997 White Paper stated that "where we have confidence in the policies and budgetary allocation process and in the capacity for effective implementation in the partner government, we will consider moving away from supporting specific projects to providing resources more strategically in support of sector-wide programs or the economy as a whole" (quoted in DFID 2001).

An Aid and Public Expenditure Guide developed for the British Overseas Development Institute substantiated the need to understand budgets and public expenditure in a range of different contexts, from global policy to the appraisal of specific aid interventions (Foster and Fozzard 2000). Its ideas are outlined below.

- **Global discussion of aid policy:** aid effectiveness and the problem of fungibility are becoming issues of debate. The development of new aid instruments has progressed towards budget support increasingly at macro levels, with the World Bank having developed ideas for a Public Expenditure Reform Credit. PERs are considered important tools to measure aid effectiveness.
- **Aid policy and implementation instruments:** including issues to be addressed in considering how best to support poverty-reducing public expenditure. The design of program aid, sector support, and project aid needs to be pursued in a wider context of budgetary policy that assesses longer-term sustainability and medium-term accountability issues within the government budget system.
- **Advice on country policy:** including Country Strategy Papers, advice on aid levels, and assessments of which aid instruments to use in differing country circumstances.
- **Identification, design, appraisal, monitoring, and evaluation of program aid, sector**

programs, and budget reform programs: and indeed any project that involves support disbursed to a public sector body.

As its name implies, PER focuses on public sector expenditure. With regard to sectoral focus and coverage, it may be comprehensive and examine the role of the public sector in areas encompassing at least all social and social protection sectors (health, education, etc.), and it could include other priority and public spending sectors (agriculture, infrastructure, etc.) (DFID 2001; World Bank 2003).

It may also be sector specific and examine public sector involvement and expenditure in the chosen or priority sector of public spending. Thus, public expenditure in the health sector

NHA tables, which are often sufficiently disaggregated, provide data for benefit incidence and other analyses in the PER framework.

could be examined as part of a comprehensive PER or health sector specific PER could be carried out.

PER does not have any fixed or mandatory requirements, frameworks, or classifications, in contrast to NHA's standard tables on actual health sector expenditures and resource flows. PER is more a policy review, and economic efficiency and equity analysis framework. It is flexible in considering country-specific issues, priorities, and characteristics rather than using predetermined standards and classifications. "The PER is about finance. But finance is not an end in itself. It is a means to enable and facilitate the provision of health care in an equitable and efficient manner. This is what distinguishes a PER from National Health Accounts" (World Bank 2003).

Overall, a general public expenditure analysis asks mainly centralized questions (Foster and Fozzard 2000):

- Are the roles which government proposes to play in the economy appropriate?
- Are they adequately financed, in ways which are consistent with healthy growth of the private sector?
- Are priorities consistent with poverty reduction?
- Are standards replicable across the country and sustainable through time?
- Are there pressures to improve equity and effectiveness, including sufficient attention to ensuring that government is accountable, in the widest sense, to those intended to benefit?

- Is there a credible program for improving performance over time?
- How should donor support be provided?

Guidelines were provided by the World Bank to guide PER in health. In the health sector, the PER is expected to address the following broad questions (World Bank 2003):

- How are health spending and services distributed among the population?
- How efficient is the provision of health care and other related interventions?
- What are the macroeconomic consequences of revenues and expenditures?
- What is the impact on equity of sources and levels of revenues?

There is no systematic framework or methodology for carrying out a public expenditure analysis. Despite tremendous effort exerted in doing PERs in a number of countries, in 1993 a World Bank assessment of PERs highlighted their major methodological problems. "A review of World Bank PERs found them to be uneven in quality. Many did not use any explicit criteria to analyze public spending; they did not analyze relevant expenditure categories (e.g., major programs within sectors); and they did not analyze institutional processes nor followed-up to build government capacity in client countries" (Pradhan 1996). Some developments have been made to outline a broader guide for undertaking PER. In 2003, the World Bank developed *Core Guidance: Preparing PERs for Human Development*, which gives a broader framework for undertaking PER in social and social-protection sectors, but it is not like NHA's standardized and defined international classifications. PER is more a country-level investigation tool for policy relevance, efficiency and equity analysis of public sector spending without standard categories and classifications.

THE COMPLEMENTARITIES OF NHA AND PER

PERs and NHA share certain aspects, but, having been developed for different purposes, they are more complementary than redundant; as such, they are not in competition, and a country is justified in using both tools. This section discusses their complementarities, which countries should understand to avoid duplication of effort - as well as time and resources - where that is possible.

The Core Guidance: Preparing PERs for Human Development states "PERs and NHA are highly complementary. NHAs provides the data for analysis, and they can be an essential component of a PER" (World Bank 2003). NHA tables, which are often sufficiently disaggregated, provide data for benefit incidence and other analyses in the PER framework.

The NHA approach to data collection first looks at secondary data (available records, reports etc.), resorting to primary data collection (surveys) only where secondary data are lacking. Thus, where in-depth PER data exist; they can be input for NHA. For instance, in institutionalizing its health sector reform, Nepal established a Health Economics and Financing Unit (HEFU) that has initiated research studies and indicated that developing NHA was an important priority. Also in Nepal, the 2003 health sector PER, conducted with the support of the British Council, was considered as "part of the National Health Accounts" (British Council 2003). Nevertheless, while PER findings can be important inputs to NHA, they are just one part of a NHA estimate, which also comprises off-budget donor and NGO spending, household out-of-pocket spending, private insurance and company spending, and other spending on health care.

PERs and NHAs are highly complementary. NHA can inform PERs and the converse is also true.

Reversing the approach, NHA's comprehensive picture of expenditures from all actors in the health sector provides the data and framework needed to understand the operation of health systems. These expenditures therefore are useful inputs for PER assessment and analysis of government policies, the effectiveness of government budgeting and expenditure to realize the policies, as well as the efficiency and equity aspects of government spending in the health sector.

In addition to NHA being an important source of data for PER, it helps to frame the PER health sector analysis according to country-specific contexts and priorities. As such, NHA could be an important (pre-condition for conducting general or health sector-specific PERs.

In summary, the NHA and PER methodologies are complementary yet clearly unique tools. The following table summarizes their similarities and distinctions.

TABLE 1. SIMILARITIES AND DISTINCTIONS BETWEEN NHA AND PER

Feature	NHA	PER
Historical emergence and evolution	<ul style="list-style-type: none"> ● Emerged/evolved within the broader framework of NIA[[what is NIA?]] and SHA of OECDs ● Adopted to developing-country contexts in late 1980s and early 1990s 	<ul style="list-style-type: none"> ● Mainly evolved with the poverty-reduction policies in the 1990s ● It basically evolved to measure annual spending/budget of the medium-term expenditure framework (MTEF), and to examine poverty-reduction policy and implementation issues
Primary focus and purpose of methodology/framework	<ul style="list-style-type: none"> ● Tracking total spending and resource flow in the health sector ● Purpose: to inform policy; can answer critical policy questions: <ul style="list-style-type: none"> ○ Who in the country pays for health care? ○ How much is spent and on what types of services? ○ How are funds distributed across different health services? ○ Who benefits from health expenditures? If household surveys are part of the NHA estimate, what is the burden of financing on households? ○ To what extent is resource utilization in the health system in line with the country health care policy and strategic plan? ○ What level of government resources are going to private sector because of outsourcing of health care services? ○ To where in the health system are donor funds going? 	<ul style="list-style-type: none"> ● Analyzing public sector spending against policy, efficiency, effectiveness, equity, and sustainability parameters ● Focused on spending in social sectors (health and education) and social protection depends on the country priority; other sectors are being considered. ● Purpose: To provide policy and finance management information by answering the following questions: <ul style="list-style-type: none"> ○ Are the roles that government proposes to play in the economy appropriate? ○ Are they adequately financed, in ways that are consistent with healthy growth of the private sector? ○ Are priorities consistent with poverty reduction? ○ Are standards replicable across the country and sustainable through time? ○ Are there pressures to improve equity and effectiveness, including sufficient attention to ensuring that government is accountable, in the widest sense, to those intended to benefit? ○ Is there a credible program for improving performance over time? ○ How should donor support be provided? ● Purpose of health sector PER: <ul style="list-style-type: none"> ○ How are health spending and services distributed among the population? ○ How efficient is the provision of health care and related interventions? ○ What are the macroeconomic consequences of revenues and expenditures? ○ What is the impact on equity of sources and levels of revenues?
Scope and nature of methodology	<ul style="list-style-type: none"> ● Limited to health sector ● Tries to track/capture actual spending ● Comprehensive within the health sector (tracks all spending/from all sources to the health sector); includes public, private, and donor spending 	<ul style="list-style-type: none"> ● Not limited to health sector; or health can be one of multiple sectors analyzed ● Some PERs analyze only the health sector ● Primarily focus on public sector spending
Use of standard international classification	<ul style="list-style-type: none"> ● Uses International Classification for Health Accounts (IHCA) of SHA of OECD ● Flexible to accommodate country data needs by inserting sub-classifications 	<ul style="list-style-type: none"> ● No standard classifications ● Flexible according to country specificities/contexts/priorities
Comparability across countries	<ul style="list-style-type: none"> ● Standard classifications enable cross-country comparisons 	<ul style="list-style-type: none"> ● Lack of standard classifications impede cross-country comparisons
Focus on health	<ul style="list-style-type: none"> ● Health is only focus (non health is captured as addendum item, "below the line") ● Institutionalization (doing NHA on a regular basis) is the goal 	<ul style="list-style-type: none"> ● Depends on country-specific needs and priorities (health-focused PER, health included in general PER, or not included at all) ● Regular PERs are promoted
Data generated as per country priorities and health system organizations	<ul style="list-style-type: none"> ● Can expand framework using international classifications to accommodate country-level needs 	<ul style="list-style-type: none"> ● Can develop in line with country needs and policy priorities

THE WAY FORWARD

NHA is an important policy tool. Understanding detailed financial data as well as the role of different actors and flows of resources is crucial for policy-making. By using NHA evidence, policymakers can influence the direction of different actors by creating incentives that support the desired policy goals. Similarly, PER examines expenditures with a focus on public sector spending and analyzing the policy relevance, efficiency, and equity of such spending.

For health sector related PER, NHA results are valuable inputs and, by using the detailed data generated through the NHA exercise, a further analysis of the role of the public sector can be incorporated into the PER framework. PER teams could substantially benefit from seeing and understanding the general picture of financial resource flows in the health sector; the effectiveness of current and future government policies and interventions in the sector in a more comprehensive way.

NHA results are valuable evidences that the international community can use to set benchmark performance. The results also can be used for advocacy for improved allocation of health resources across countries. NHA evidence shows substantial differences in health outcomes regardless of the level of per capita spending on health care. Such findings are important for further analysis across countries' health systems and performance as well as to initiate policy reforms. Country-level policymakers and the international community could select countries with better performance as benchmarks, taking into account country-specific contexts.

NHA results are most useful when they are generated on regular basis, but doing so is only possible when the methodology is well understood and institutionalized by countries. While governments of many low-income countries are working to institutionalize NHA, most lack the human and financial resources to complete the task.

PERs, in addition to generating evidence on government spending examines appropriateness of policies, reforms and financing in terms of achieving the poverty reduction objective of the country under review. It further examines effectiveness, efficiency and equity of public investment.

Because, as shown above, NHA and PER are complementary, conducting one methodology is not a substitute for conducting the other. NHA's detailed, up-to-date and multiyear data can substantially benefit PER, and past PER data and future data needs can inform the direction that an NHA estimation takes. This leveraging of information will benefit both methodologies, and save time and finances in the resource-constrained developing countries and their donor counterparts.

Following are suggestions for maximizing the complementary roles between PER and NHA to benefit from each others undertakings.

- **Revamp country-level institutionalization and coordination efforts:** NHA and PER results are primarily for country-level policy decision-making, so all countries should take it as a responsibility to generate such evidence and institutionalize both methodologies. When preparing an NHA study, PER data needs should be considered and the needed data generated. In addition, there is strong need for continuous technical and capacity building support for these countries.
- **Create regular/ad hoc forums:** At global and country levels, PER and NHA teams need to discuss how to complement each other in order to maximize the use of resources and evidence.
- **Coordinate among donors:** Both PER and NHA are sponsored by major donors, which should coordinate efforts and share information to save their own resources. "Donors and technical agencies should coordinate to assure that NHA is integrated into and builds on ongoing efforts including (among others) the Health Metrics Network, Virtual Poverty Funds, *Medium Term Expenditure Framework* (MTEF) and *Public Expenditure and Financial Accountability* (PEFA). For example, in the preparation of public expenditure reviews, the World Bank and its partners should make use of existing national health accounts data or, when NHA data are unavailable, support the collection of data using the standard methods" (CFGD: 2007).

- **Involve both teams in data design and analysis:** NHA and PER teams would benefit greatly by participating in each others' data analysis and collaborating when deciding on the information that each of their studies needs to generate. More synergy could also be created by

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