

Proposal Unit 1

Purposes and principles of the System of Health Accounts

Summary

This draft of Unit 1 proposes that an adapted Health Systems framework from the WHO World Health Report 2000 is used to guide the revision of SHA. The framework can contribute in two ways. First, the functional approach of the WHO framework can assist in the delineation of the health boundaries and thus ensure that health expenditures are as comprehensive as possible. Second, the Health Systems framework provides the basic health system objectives and thus guides us in developing health accounts which are useful for analytical purposes. Furthermore Unit 1 outlines current or future possible developments which have the potential to enhance health accounting.

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The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation for Economic Co-operation and Development or of the governments of its member countries, those of the World Health Organization or those of EUROSTAT or the European Commission.

1. Background

1. Health accounts are a systematic description of financial flows related to health. In their current form, the primary purpose of these accounts is to capture three elements of these financial flows, namely: Who is spending funds on health? How much are they spending? What are they spending these funds on?
2. Although the systematic development and use of health accounts is comparatively recent, efforts to describe financial flows associated with health can be traced as far back as the 1960s. In the early 1960s, Abel-Smith and others carried out a number of studies measuring health expenditures in developing countries (Berman 1997). Beginning in the 1970s (and in some country cases, the 1960s), countries belonging to the OECD were regularly estimating health expenditures, combined with relatively aggregated information on private and public sources of funding (Orosz 2005). Of these initial efforts, perhaps the most comprehensive exercise was undertaken by the United States that provided detailed information on the sources of health financing, along with associated expenditure data (Berman 1997). Over the years, such exercises have been undertaken to describe financial flows for a subset of health expenditure categories (e.g., HIV/AIDS and tuberculosis, regions and socioeconomic groups).
3. The above efforts, in turn, likely reflected the systematic development of national economic accounts, beginning with the work of Simon Kuznets in the 1930s, as a means to measure aggregate economic activity. A comprehensive manual for assembling internationally comparable national accounts data was developed under the auspices of the United Nations in 1953, with subsequent revisions in 1968 and 1993.
4. In recent years, there have been two recent efforts to systematize the collection of information on financial flows related to health. These include the publication of the System of Health Accounts Version 1.0 of the OECD in the year 2000 and an associated classification of financial flows (labeled ICHA); and the combined efforts of the WHO, World Bank, and USAID that led to the development of the NHA Producers Guide in 2003. This was the first standard to receive a wider acceptance and use in producing health expenditure data globally. It has also contributed to a considerable amount of studies carried out in low-and middle-income countries.
5. The current revision reflects a desire to further enhance cross-country comparability of health expenditure and financing data, and to make SHA more adaptable to rapidly evolving health systems around the world, particularly in developing countries and thereby increase the

analytical use of data produced according to the SHA. Moreover, it is hoped that any revision of the SHA would help enhance the usefulness of SHA as a tool in the evaluation of health systems, and as an indicator of the importance of the health sector in the economy. To the three basic questions stated above, more are added: Who is funding health? On whom are the funds spent? How much is spent on different diseases? While such an endeavor may substantially increase data requirements, in an environment of rapidly improving technology and large data storage capacities, this is par for the course.

6. This revised SHA is intended as a global standard which can be implemented in countries, regardless of income level or health system characteristics. It can and should be adapted to country context and the implementation may differ between countries depending on the starting point, and need for this tool. However, by applying the same definitions and classifications, the consistency over time and between countries is ensured.

2. Uses of National Health Accounts Data

7. Information from National Health Accounts and associated efforts has been used in a variety of ways by policymakers and researchers. For example, information on health expenditure flows (derived from NHA) has been used to study the growth of health expenditures in the United States and other OECD countries and its potential determinants; and also more recently, in China and India (Newhouse 1992; Yip and Mahal 2008). Newhouse (1992), for instance, used health expenditure for the United States to argue that technological change was the single most important factor driving health care costs in the United States. Other studies have sought to measure the relationship between GDP growth and health spending to assess the “income elasticity of demand” for health care, and projecting health care spending.
8. Another popular use of national health expenditure data has been to assess the impact of ageing on health expenditures (e.g., Uwe Gerdtham, Poldar et al). These studies have utilized the panel structure of health expenditure data (cross-section time series) to examine how the growth in the population of the elderly has influenced health expenditure increases in OECD and other countries. A central conclusion of this literature is that the effect of age per se, on overall health spending is likely to be small.
9. Cross-country and cross-provincial health expenditure data, in conjunction with information on indicators of health outcomes, such as life expectancy at birth have been used to assess the “overall efficiency” of health spending, often using sophisticated stochastic frontier techniques (references for OECD countries, province-level analyses for India). Moreover, some

studies have used specific components of health spending information available from health accounts data, for instance, public spending on health, to inquire about its impact on health (Anand and Ravallion 1993). Some analyses have also been conducted that compare health system characteristics across countries in terms of their impact on health expenditures.

10. In a survey of the literature, Berman (1997) argued that careful national health accounts analyses can contribute towards a better understanding of the health system. He noted, for instance, how national health accounts data shed light on the fact that the public sector played only a small role in the provision of primary care in India, despite years of public investment in primary care provision. As another example, he discussed the case of Mexico, whereby following NHA, estimates of both private and overall national health spending went up significantly. Berman also argued that national health accounts data could offer a useful aggregate picture of the impacts of health reform efforts, including making expenditure projections, and assessing sustainability (e.g., Berman et al. 2003). Information on patterns of financing, such as a high share of private out of pocket spending by households, have been used in various policy documents to highlight the lack of risk-pooling mechanisms. Large shares of foreign funding in health have been used to point out problems with predictability and sustainability of funding.
11. More recent instances of how data from national health accounts analyses have been used at the country level are available from the case of Turkey that showed differences in health spending by age and socio-economic groups (Turkish Ministry of Health 2003). A number of analyses at country level have focused on disease-specific sub-accounts, specifically, HIV/AIDS, highlighting both overall allocations, the distribution of spending between preventive and curative care and patterns of international financing.
12. There is limited documented about the use of NHA in low income countries where large efforts have been made to collate health expenditure information using the NHA tool during last 10 years. A study of how NHA data has been used for evidence in policy making in 21 low- and middle income countries gives several examples of how new data has informed decision making. (De, Dmytraczenko, Brinkerhoff and Tien 2003). The study shows that the main users in these 21 countries are the ministry of health and the donors. However, in countries, the data has been very little used among other public institutions or academic researchers. Some examples from the study are;

- off-budget and fragmented donor support to the health sector revealed in the NHA work supported the development of a Sector Wide Approach in Tanzania,
 - NHA and non expenditure data was instrumental when Egypt increased spending on primary health care, after data showed lack of alignment between actual spending and public policy, and a heavy reliance on households' payments,
 - in South Africa the NHA studies have shown how inequitably health is funded, across regions and across income groups.
13. There is no doubt from the preceding section that the information on financial flows from existing health accounts work has been used for different types of policy and research activities, and particularly for cross-country and cross-provincial comparative analyses. These achievements notwithstanding, health accounts data seems remarkably underutilized when viewed in the context of the broader research and policy literature on health financing and health systems.
14. One important reason for this limited role is aggregate nature of NHA data, whereas much of the research in the health financing field is conducted at the individual level. Consider for instance, the link between health spending and ageing. Some of the most fascinating work in this area has focused on the concentration of health spending at the time shortly before death, and not so much ageing per se, as being a major driver of health expenditures (e.g., Zweifel 2004). However, most of these analyses rely heavily on individual-level information from insurers and household surveys. Similarly, analyses of the impact of reform efforts – such as the introduction of user fees in India, or medical savings schemes in China – typically rely on individual level information that is not accessible from NHA data. As another example, analyses of the introduction of a school health insurance scheme in Egypt (Yip and Berman 2001) and price controls on hospital services in China (Eggleston and Yip 2004) all required either household-level information, or at the level of individual hospitals.
15. Second, even when the concern is with aggregated variables, NHA data on financial flows can turn out to be inadequate because health, itself, turns out to have a very broad meaning. The World Health Organization's own definition of health a health system, "a health system consists of all the organizations, institutions, resources and people whose primary purpose is to improve health", is not necessarily captured in health accounting currently. It means that a substantial body of financing research on health has data requirements that lie outside the ambit of the NHA as currently executed. For instance, policy analyses of the cost of scaling up

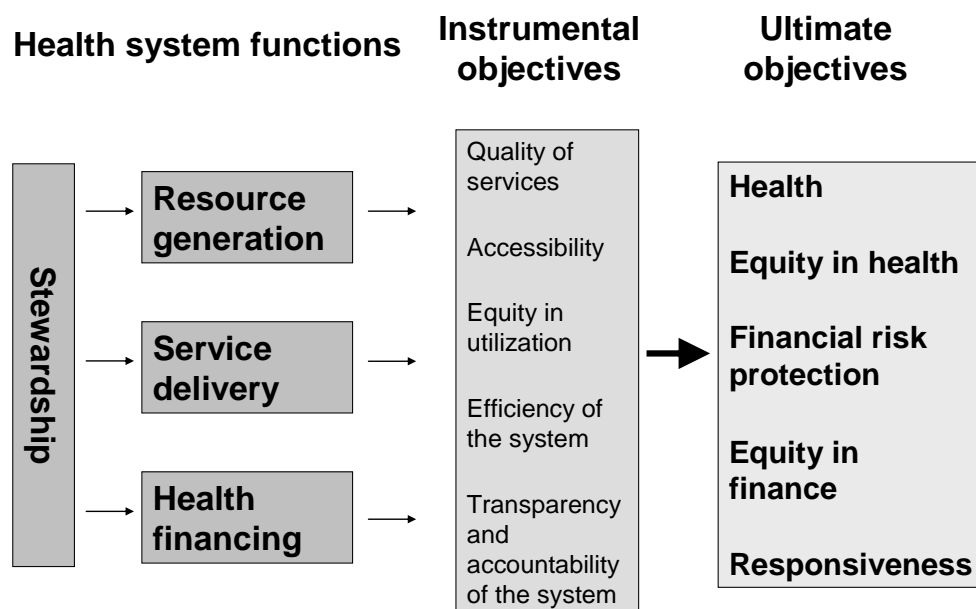
nutritional programs for children expenditures (food/micronutrient supplements, fortification, growth monitoring) very often are not collected as part of NHA activities. Similarly, private and public expenditures on activities supporting clean water and improved sanitation are not likely to be available in NHA data. If health systems were defined very broadly, and included these other activities, SHA would have a limited role in its current version.

3. The System of Health Accounts, Health and Health Systems

16. Health systems are complex with strong elements cultural, political and economic influence and linked across sectors of economic activity, public administration and social participation.
17. Due to the multi-factorial nature of health, and the multi-sectoral contribution to health status, a health systems' approach is helpful to identify boundaries and functions in health expenditures.
18. Figure 1 describes the four basic functions provided by a health system and the final objectives, by which its ultimate performance is measured. What health systems actually do can be described in different ways and there are many ways to describe the functions they provide. The World Health Report 2000 provides a framework for analysis of health systems which is well known and can help defining boundaries and functions of the system and its performance. The four functions in this framework represent what any given health system produce:
 - Stewardship/Governance** - oversight of the system including policy making, regulation and monitoring.
 - Resource creation** - production of medical goods and investments in human and physical capital,
 - Financing** - raising revenue for health, pooling resources and purchasing services,
 - Service delivery** - production of personal and non-personal health services.
19. The functional approach provides a descriptive tool which aims to be comprehensive about the health system. This is important for the SHA as the standard tool to describe the health system from an expenditure perspective.

20. In addition the descriptive tool we need SHA to produce expenditure data which can help us measure the performance of the health system. The framework provides a set of objectives (Figure 1). These objectives can vary in importance over time and between countries. But the attainment of them is dependent on how the functions perform. All these ultimate and instrumental objectives are, in various forms and by various names, all subject to measurement in analysis and monitoring of health systems and their performance.

Figure 1. The four functions of the health system and how they contribute to the objectives of the health system.



(Adopted from: WHO, World Health Report 2000. Health Systems: Improving Performance, and Kutzin 2008)

4. Description and analysis of health systems - need for development

21. In light of the above, how can the financial flow information provided by SHA be useful for describing health systems, and become more effective in health system assessment,

monitoring and evaluation of these intermediate and ultimate objectives? The System of Health Accounts should reflect the role of the health system through its dimensions of financing, provision and consumption.

22. Given that financial flow data will certainly be aggregated to a degree, it is unlikely that it can take the place of micro-experimental or observational studies. However, in circumstances where more aggregate financial information is useful, it is possible to construct financial flows under SHA in a manner consistent with a broader notion of “health spending” (e.g., including nutrition and clean water).
23. For financial flows under SHA to be really useful in health system assessments, they ought firstly, to help shed light (or keep track of) on the achievement of policy objectives relevant to any given system. For instance, if we want a health system to function in ways that promote cost control, efficiency, financial risk protection, financial sustainability, and access to services, the financial flows describing health sector transactions ought to suitably capture these. Of course, the existing SHA system does capture these goals to an extent. For instance, out of pocket payments for healthcare by households versus payments by insurers give an indication of financial risk protection, and can be used for building indicators. But it is de facto indicators, not exact measurements of these objectives. Similarly, information about how services are provided, e.g. in-patient or out-patient, can under certain assumptions be used as indicators of efficiency, but is not a measurement thereof. Furthermore, existing financial flows provide us with little information on the quality of care, and will never do, unless expenditure data is combined with non-expenditure data.
24. We may also be concerned, from a cross-country and cross-regional perspective, about how different health system characteristics are associated with differential (health) policy outcomes. The current classification of Financing Agents is built on institutions, which does not necessarily provide information about how the funding is organized, e.g. when a compulsory social insurance scheme is operated by private insurers (sometimes in conjunction with public insurers, and/or separate voluntary insurance business). Using institutions (private and public) as a classification guide is not sufficient as a description of the financing function. Another case where this type of distinction was seen to be important is in China, where public sector health care facilities essentially operate as private sector facilities, being paid on a fee for service motive, and being motivated by profit. Comparability may require a better understanding of contextual factors – such as widespread corruption and/or a poor regulatory

environment. In this way several elements directly linked to financing which are of great importance, are not directly captured by the current classifications, and can not fully be described and analysed with financial data. These include payment systems (e.g., capitation versus fee for service), organization of financing and provision, the state of regulation, the number and structure of actors in a specific area, e.g. if a social insurance scheme were being operated by two insurers or five, or whether they were non-profit insurers, or for-profit.

25. Several of these aspects have increased in importance since the first version of SHA, and SHA will be the global standard with a life-span of at least a decade, probably more. The analytical use of the SHA will depend on how well it meets both the changes in research and policy focus, and how well it can capture developments in the health systems. The financing of health has become even more complex, with innovative mixtures of funding arrangements. Private and public mixes in financial contributions and organizational arrangements are increasing, so do the forms of prepaid arrangements. Medical and information technologies are developing with increasing speed which has a strong impact on how services are delivered. For example, the presence of the internet and increased availability of information facilitates health literacy and individuals are increasingly engaged in self care, whether in promotion, preventive or even curative care. Individuals can now check their medical records, perform their own monitoring, relay information to their practitioners and order drugs on the internet. There are strong trends in consumption alternative medicine and engagement in health promoting activities such as company subsidized gym subscriptions. Similarly we live in an increasingly globalizing world resulting in the movement of goods and services across national borders with its clearest manifestation in the phenomenon of medical tourism. These emerging health trends not only make it difficult to capture the flow of funds at country level, it also raises new needs for definitions, assessments and monitoring.

5. Purposes of the *System of Health Accounts 2.0*

26. SHA 2.0 provides a framework for analysis of health systems from an economic point of view, consistent with national accounting rules. A general principle underlying the development of this manual has been to further adopt definitions and concepts from existing statistical systems, approved and defined under the auspices of the United Nations and other international and regional organizations.

27. The SHA 2 gives definitions of health and its expenditures. It provides the standard for classifying these expenditures and describes the flow of funds in a health system to clearly distinguish transactions from entities financing those transactions. It gives guidance and methodological support to data collection, although this will always differ between countries. It will not provide practical guidance to how to organize the implementation of the standard, who is responsible for data collection and resources needed. A practical implementation guide might be needed to complement this standard.
28. The main purposes of the *System of Health Accounts 2.0* are;
- to define internationally harmonized boundaries of health,
 - to define critical and for analytical purposes useful dimensions of health,
 - to define basic categories within these dimensions,
 - to propose a framework for consistent reporting on health expenditures over time and hereby be a tool in monitoring of health reform and health policy,
 - to present an economic model of supply and use of health services – as a tool to show the conceptual links between the *System of Health Accounts* and health satellite accounts.
 - to provide a set of internationally comparable health accounts in the form of standard tables;
 - to distinguish core health care functions from health-related functions and to emphasize inter-sectoral aspects of health as a common concern of social and economic policy,
 - to provide a framework of main aggregates relevant to international comparison of health expenditures, and health systems analysis.

6. Data and Statistical Issues

29. The SHA shares the goal of the System of National Accounts to constitute an integrated system of *comprehensive*, internally *consistent*, and internationally *comparable* accounts, which should be *compatible* with other aggregate economic and social statistics as far as possible.
30. The SHA provides a comprehensive accounting framework for the whole field of health care activities. It is not limited to a specific range of public and private programs, as is still the case in several countries' National Health Accounts. In accordance with the functional approach, all programs designed to provide health care or a substantial amount of health

status enhancement by medical means should be included, whether labeled “healthcare” or not in national statistics.

31. The use of the boundaries and data distributions proposed by the ICHA should result in data collections which are more comparable across countries and more *consistent over time*. The uniform boundaries, for example, should prevent national expenditure aggregates from suddenly changing due to the migration of health care programs from one ministry to another or from one level of government to another.
32. Mapping national data to ICHA-categories should make data collections less affected by changing national definitions over time. The resulting time series should be capable of monitoring past structural changes and serve as input for simulation and forecasting models. The latter are especially demanding in terms of quality and consistency of data over time.
33. The SHA is *internally consistent* by providing identities and accounting rules for crosschecking the validity of estimates derived along the different dimensions of the SHA. The reporting in the SHA on production, consumption and financing of health care in a consistent way serves as a means of identifying gaps and deficiencies in current reporting systems and health accounts, indicating where priorities should be set for continued quality improvement of the statistical basis.
34. During the implementation of SHA 1.0 and the Producers' Guide, a considerable amount of progress in term of comprehensiveness has been shown. The accounts and the data produced more often include a more comprehensive picture of the health system. For example, the inclusion of funding or an institutional entity is no longer questioned on the basis that it is not public, which has earlier been an argument for not including it in a nations health spending.
35. With compatibility increasing with other statistical systems such as the System of National accounts, the consistency of data produced according to this revised standard should increase. Especially important when developing SHA 2 is the alignment with the first version, to make it feasible for countries to migrate from the old to the new standard, and build time series which are consistent.
36. These demands are also constraints in the development of SHA 2. The quality criteria of the SHA are competing with the goals of *timeliness* and *precision* in reporting. National accounting rules and principles sometimes go against the need of data in health policy

analysis causing conflict with the *policy sensitivity* and *relevance* of the indicators provided by the SHA. In addition, these considerations limit the possible expansion of expenditure boundaries and the extent to which classification of expenditure categories can be developed.

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