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Review of International Health Accounts Standards and their Relation to SNA¹

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ABSTRACT

The present paper includes a review of the statistical and conceptual standards developed in the OECD Manual on 'A System of Health Accounts' (SHA) and also makes references to the WHO/World Bank that is based on the OECD standards, as well as to country practices. The work on Health satellite standards started with the work by a Harvard Advisory Group.² The result of that work was more closely linked to SNA standards in the OECD Manual on Health Satellite Accounts (SHA)³, which presented the first international standards in this field. The OECD standards were reinterpreted in a more practical format for use by developing countries by WHO and WB⁴, and further supported by a Netherlands study dealing with International Comparisons of Health Care Expenditures.⁵ In the interim, several countries⁶ developed their own version of the SHA, while making use of the Harvard initiatives, with some modifications introduced in the OECD and WHO Manuals.

It is the purpose of the paper to review⁷ these efforts from the point of view of SNA concepts and practices, and also provide recommendations for a more effective use of the OECD standards, in view of recent experiences with SNA satellite accounting.⁸ The first part of the paper deals with the SHA scope and the second part includes comments on the concepts and classifications proposed in the SHA.

² Peter Berman, National Health accounts in Development Countries: Appropriate Methods and Recent applications, Harvard University, 1996

³ OECD, A System of Health Accounts, version 1.0, OECD 2000

⁴ World Bank, WHO, US-AID, Guide to Producing National Health Accounts, 2003

⁵ Cornelis J.P.M. Van Mosseveld, International comparison of Health care Expenditure, Statistics Netherlands 2003

⁶ -Argentina, Estimaciones del gasto en salud, año 1997 y proyecciones;

-Eva Orosx and David Morgan, SHA based National Health Accounts in Thirteen OECD Countries: A Comparative Analysis, OECD Health working Papers 16, August 2004

⁷ In order to assess the review of the present paper, the reader should be aware that the author of the paper is very familiar with concepts in SNA and satellite accounts, as he has been closely associated as former UN staff member with the development of the 1993 SNA, but is less familiar with the specialized issues of health statistics, economics and management.

⁸ -United Nations, Integrated Environment and Economic Accounting, published in series Handbook of National Accounting , 1993

- Commission of the European Communities/Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, Integrated Environment and Economic Accounting 2003, published in series Handbook of National Accounting , Draft 2003

-Commission of the European Communities, Eurostat, Organisation for Economic Cooperation and Development, World Tourism Organization, United Nations Statistics Division, Tourism Satellite Account: Recommended Methodological Framework, Luxembourg, Madrid, New York, Paris, 2001

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I. SHA versus integrated health satellite accounts

When designing a satellite accounts framework, one should be clear about its analytical objective and the statistical limitations that are addressed. This is not different for the SHA. It is therefore a pity, that some of the information on the scope of SHA versus health satellite accounts is only presented at the end of the Manual in chapter 8. It would have been better to deal with this in the beginning of the Manual, so that from the start it would be clear what the basis was of the concepts and the scope in terms of tables, as defined in chapters 1-7. Below are considered three issues that are related to the material presented explicitly in chapter 8 and more implicitly referred to in the previous chapters. One concerns the relation between the statistical scope of SHA, in terms of health care services covered, and the recommended conceptual refinements based on SNA, another deals with the conceptual delineation between the SHA and integrated health satellite accounts, and a third one assesses the scope of the SHA in terms of tables.

A. Statistical and conceptual scope of SHA

In our view, SHA implementation should have to take into account the scope of statistics and corresponding reconciliation of data, when deciding about some of the conceptual refinements.

The Manual proposes a System of Health Accounts that is based on only a very limited reconciliation of data. This orientation of the data compilation is not made very explicit, however, and can only be assumed, given the type of data to be compiled and the distinction that is highlighted in Chapter 8 between the SHA and integrated health satellite accounts. That such reconciliation is not needed can be concluded from the main tables (1-5) that are proposed in the SHA, which focus almost entirely on healthcare expenditures that are classified according to three dimensions, i.e. types of health expenditures, by provider and by source of finance. From chapter 8 it is clear that the Manual recommends only a limited reconciliation of expenditures through the use of an IEA that focuses on health expenditures and corresponding social and other current transfers, but that it does not require any reconciliation of data between the supply (output and imports) and use (expenditures) of health care products.

This does not mean, however, that no data reconciliation is needed at all. If the data are based on a set of unique sources, from which all three dimensions of the expenditures can be obtained, there is, indeed, no need for reconciliation of data. This would be the case, if all data are obtained from providers of health care, such as hospitals, clinics and the like, and all three dimensions of the expenditures can be derived from these data sources. If, however, alternative data sources are used, some form of reconciliation is needed between them. This is the case, when data on health care services are not only obtained from providers such as hospitals and clinics, but also are used data on medicine use based on indirect data sources such as suppliers and imports of medicines, and some data are

based on HH health surveys and sources of finance, such as the social security system, insurance companies or the government itself. As these different data sources unavoidably cover overlapping data on health care expenditures, they need to be reconciled between them.

The extent to which reconciliation is needed has important implications for the scope of the health accounts. If the objective of the SHA were to compile health statistics on the basis of a few non-overlapping data sources, the SHA data would be internally consistent, even if some health care services, providers or funding agencies would be missing. In that case the SHA could be based on a quantitatively important segment of the health sector, without being necessarily complete. However, if there are overlapping data sources and data reconciliation is needed; some health care services and products may need to be imputed. For instance, if there is inconsistency between the data on health services between HH surveys and hospital records, additional health care services would need to be added either to the data obtained from HH or to the data provided by hospitals, clinics and the like, depending on which data source is more complete.

For a clear understanding of the scope of health care products in the manual, it is therefore not sufficient only to delineate the conceptual scope, as is emphasized in the manual, but also the statistical scope. The two should be dealt with in close coordination with each other. If the manual would recommend a very limited set of statistical imputations of health care services and other products, one might wonder whether such limitations of the statistical scope would not also require that the conceptual imputations be limited. In our view it is not very useful to introduce many conceptual refinements into the SHA tables, while not including refinements of the statistical scope.

B. Scope of SHA versus integrated health satellite accounts

The distinction between SHA and integrated satellite accounts should be reconsidered. Instead of making a distinction between two types of compilation and accounts and frameworks, a distinction should be made between three subsequent steps in the compilation of health accounts. The first one is the compilation of the present SHA as reflected in the expenditures tables 1-5. The second one is an extended framework, in which the IEA and SUT formats, as presented in chapter 8, are used to integrate health care expenditure data with social and other current transfer data (table 6.3) and health care expenditure data with output and import data (SUT table 8.2). And the third one would constitute a further extension, in which the SUT and IEA are used to integrate health data with other data of the economy.

When the 1993 SNA was written, a large segment of the Chapter on satellite accounts was based on French experiences with satellite accounts, which are called in the SNA chapter *functional* satellite accounts. The *functional* satellite accounts are data systems that use selected segments of the SNA to develop specialized data structures, in which some of the SNA concepts were adapted and extended with other, often physical

information related to the specialized area. This means that *functional* satellite systems can only be partly linked with the SNA, as they include only selected segments of the System. These types of *functional* satellite accounts are distinguished in the same SNA chapter from so-called *integrated* satellite accounts in which all SNA segments were covered and adapted concepts were changed throughout the system. The SNA Chapter presents economic-environmental accounts as an example of integrated satellite accounts. The example was used as a basis for the development of the 1993 SEEA (System of Integrated Economic Environmental Accounts) and is also being used as such for the recently published and revised 2003 SEEA.⁹

Based in this, the SHA and even the second extension including the IEA and SUT integration of health care services, could be considered as functional satellite accounts. The third extension, in which the link is established between health care services and the rest of the economy, is a genuinely integrated satellite accounts system, as it deals with all aspects of the economy.

In the first step of the compilation health statisticians should compile the basic data from financial statements and other administrative data from financial agents involved in the provision and financing of health services. The data would be brought together in specialized health statistics tables, which are as close as possible to the formats of the data sources, but take into account, where possible, SNA concepts and classifications. The first stage of specialized tables may not include any of the statistical imputations, channeling and estimations needed for the integration of data with the SNA, but would include as much detail as is needed in order to integrate in the second stage the specialized health statistics tables with the SNA compilation. In this first step also specialized tables with physical data on the number of visits by patients with specification of the type of diseases, etc. (pars. 3.16 - 3.21 and tables 3.2 and 3.3) may be compiled. The specialized health statistics tables at this stage of the compilation may not necessarily cover all agents involved in health care and financing of health care. And also the physical data may only refer to those agents covered in the specialized health statistics, as available statistics are not yet fully covering all health care providers, financers and users, aspects of the . In due course, when statistical coverage of these agents improves, of course, the scope of the specialized statistics may be expanded.

It is a question of judgment and statistical convenience, what the exact scope should be of the specialized health statistics tables. They certainly should include data of hospitals, clinics, and other medical providers on which there are administrative or survey data. They also need to cover the medical insurance sector, the GOV sector and social security sector, being important sectors of finance, and in some instances also important providers of health care services. It should also include an analysis of HH or family budget surveys, in order to determine the outlays of HH's on medicine and health services, if available. It may not necessarily include occupational health services, as those may only be a minor

⁹ See for references footnote 8

part of the health sector and require specialized knowledge in order to be separated from the total intermediate cost of production of enterprises.

The scope of the health sector in the first stage of the specialized health statistics compilation should be the same for the monetary data on outlays and revenues and the physical data on health care patients. Thus, they can be used jointly in internal cost-benefit and other analysis of the health sector. By including for instance physical data on the incidence of diseases, it may be possible to confront those with the outlays (cost-benefit analysis), in order to determine the effectiveness of outlays in responding to various aspects of disease prevention and control. By having these data available over time, it would be possible to assess improvements in the effectiveness over time and by making comparisons between countries, the information may show that certain policies pursued in selected countries are more cost-effective than those pursued by other countries.

When entering the second stage of the compilation, i.e. including the SUT and IEA instruments to integrate health care expenditures with supply of health care services and social and other transfers, the objective not to expand the health statistics data set, but rather to improve the internal consistency of the data. There is no different analytical objective at this stage, only the analysis will be more accurate as it is based on more consistent, i.e. better integrated data sets. Both this first and second step in the compilation of health accounts may be carried out by health statisticians taking the lead, with minor assistance by national accountants.¹⁰

The third is a major step, because it integrates the health statistics with data on the rest of the economy. This step can best be performed by national accountants, as they are familiar with the intricacies of concepts and classifications of the SNA. Also at this stage conceptual adjustments are essential, as otherwise health statistics data cannot be integrated with other data of the economy. Integration of the health statistics tables with the SNA at the third stage would reveal various contributions and shares of health services to totals in the national economy. Thus, SNA links should measure the contribution that health services make to GDP and employment, the share of health expenditures in HH final consumption and actual final consumption, the share of health services capital formation in total capital formation, and also identify the share of medicines and health services in imports, and the share of health services in exports. It furthermore should be clear from the links between the specialized health statistics tables and the SNA, what the share of health is in social and other current and capital transfers, and the share of health in the incurrence of liabilities by hospitals, clinics and other health

¹⁰ This would be in the traditional of French functional satellite accounts, which in the past have been initiated by INSEE and thereafter responsibility has been transferred to the substantive Ministries and other GOV agencies: Satellite accounts on Education compiled by the Ministry of Education, satellite accounts of Health compiled by the Ministry of Health, satellite accounts on Tourism compiled by the Ministry of Tourism, etc..

services' institutions, and which sectors are the counterpart holders of the financial assets issued by the health sector.

It is a question of judgment, whether the SHA Manual should only deal with steps 1 and 2 of the development of health accounts, or also with step, i.e. the integration with other data of the SNA. Within the more limited scope of the SHA covering only steps 1 and 2, we consider the compilation of expenditure tables (1-5) as the first priority. Integration of health care data through the IEA and SUT tables focused on health care should only be done, once the scope and quality of the underlying health data are adequate. If SUT and IEA integration of health expenditures or even integration with other SNA data is initiated too early on in the process, too many assumptions would be needed to estimate missing data and reconcile overlapping data, and that would lead to unreliable estimates. On the other hand, once the underlying health statistics are well developed, the integration through SUT and IEA of health care would actually contribute to more reliable estimates, as unreliable data are checked with help of reliable data.

C. Scope of tables of the SHA

In the previous section was explained the relation between the number of data sources and the need to reconcile data. An extension of this is that if more tables are compiled, more data sources are needed and therefore also more data reconciliations are needed. This, of course holds in particular with regard to the IEA table 6.3 and the SUT table 8.2, but also would apply if tables 6-10 are compiled in addition to tables 1-5. Of course, in countries where data on health statistics have been more developed, and health providers, services and health care funding agencies are better covered, such reconciliation would be easier. If the data sources are still of a low quality, data reconciliation would be much more difficult and the SHA would necessarily have to be restricted to fewer tables.

It is in this light that all relevant tables of the SHA are reviewed below, and an assessment is made of the statistical feasibility of their compilation and their usefulness in analysis.

- Tables 1-5, and also table 6.2, all covering health expenditures, would necessarily have to be included in the SHA, as those tables generally can be based on a limited number of data sources and would require minimal data reconciliation, as explained above. These SHA tables could be considered as the monetary core (OECD Manual para. 1.34)¹¹ of the integrated health satellite accounts. One condition, however, may be imposed. If data on the HH sector are not covered through HH Health surveys, no effort should be made to incorporate data in the HH sector columns. In principle estimates could be included in these columns, if indirect data sources were used, but this would require extensive reconciliation of data between providers and agencies funding health care services and products on the one hand, and users, i.e. HH's, which

¹¹ All para. references are to OECD Manual of Health Satellite accounts, unless otherwise stated

cannot be well done if no direct information is available on the HH sector. If such estimates are made nevertheless, they would be very dependent on the assumptions made by national accountants in the compilation process and thus not very reliable.

- Tables 6 and 7 on personal expenditures on health obviously can only be included if detailed HH health surveys are conducted. Even if detailed information is available from some of the health providers of such services, it will not be possible to elaborate these tables. Once HH survey information is available however, it would be very useful to compile tables, as they would provide the link between monetary data and physical data on diseases, treatments and ages and other information of individuals treated, and thus provide a basis for assessing the effectiveness of the health system.
- Table 8 on price indices of market and non-market health care could generally be developed, if detailed price surveys are held in the country and/or health special price information as explained in chapter 7 of the Manual. But even if this information is available, one may need to be careful in using it, because the scope of the price indices in terms of units producing those services may not necessarily be the same as the scope of health care providers that are included in the SHA. If the two scopes are far apart, and based on our suggestion above not to make extensive imputations in the implementation of the SHA, it is recommended not to include this table.
- Table 9 on international trade in health services would only be possible if BOP detail on this has been well developed and data have been reconciled between the expenditure data based on other data sources and the BOP. If such reconciliation has not taken place, it would be inconvenient to include this table, as it would incorrectly suggest data precision on the relation between health expenditure data and imports and exports health care services.
- When including health employment data as suggested in table 10 of the Manual, one also should be aware of the reconciliation issue. Employment data may be obtained from labour force surveys and other HH based surveys. These data sources may have a very different scope and classification of employment, as compared with employment data based on the data sources of hospitals, clinics and the like, which also provide data on health care expenditures. If there are such large differences in the employment scope and detail of health employment, it is suggested not to include this table in SHA data sets.

There is no need to repeat in detail what has been said above about the reconciliation between health expenditures and social and other current transfers and the reconciliation between health expenditures and the supply of health care services in table 8.2. These tables can only be compiled well if data on health expenditures in tables 1-5 are well developed, and if HH survey data on health expenditures are available. If this is not the case, these tables would be beyond the feasible scope of the SHA when implemented in selected countries.

II. Concepts and classifications of the SHA

The comments below on concepts and classifications of health accounts should be considered as applying to either the SHA proper, SHA including IEA and SUT on health services or to integrated health accounts, depending on the statistical scope of SHA in a country. If fewer conceptual adjustments are made in the SHA context, because of the limited development of specialized health statistics, most conceptual refinements would take place in the context of SHA with IEA and/or SUT health care extensions, or fully integrated health accounts. Once the statistical scope of the SHA is improving, more conceptual adjustments can be made in the SHA context and more of the comments would apply to the SHA itself.

A. Statistical unit and classifications of the ICHA

The issue of classifications and statistical units is fundamental to the SHA and thus applies to the specialized health expenditure tables, SHA extended to IEA and SUT extensions, as well as to the tables of the integrated health accounts.

It has been emphasized throughout the OECD Manual that ICHA has three dimensions, providers (HP), uses (HC) and financiers (HF). Thus, on page 55 (4.14) it is stated that the statistical unit for all three classifications is the same; this is done in order to allow for a cross-classifications. However, on page 48 (3.26) it is mentioned that the units of classification of the ICHA-HP (page 48) are the expenditure categories that can be observed separately or could be reasonably split up. There is no direct reference to the CPC, but this classification may be used to arrive at more detail. On page 51 (4.3) it is said that the unit of classification of the providers may be the institutional unit, and on page 56 (4.16) reference is made to establishments. Para. 3.14 seems to stress the separation between administration and health insurance functions on the one hand and medical goods and services on the other; para 4.16 also stresses the establishment basis of the SHA when it comes to identifying sectors of funding. In chapter 6 a direct link is established with the SNA sector classification.

When reviewing these references, it seems that no clear distinction has been made between two aspects of a classification, i.e. its statistical unit and the categories of the classification. It seems to us that there is correctly emphasis in the Manual is on the use of a harmonized set of ICHA categories, which are used to classify health providers (HP), expenditures or health services (HC) and funding sectors of health care (HF). It is possible to link those categories to other international classifications as is done in the Manual. Thus ISIC is linked to the ICHA-HP (annex A.5), the CPC, COICOP and other purpose classifications are linked to the ICHA-CS (annexes A.4 and A.6), and the ICHA-HF is linked to the institutional sector classification of the SNA. When linking, however, each of those versions of the ICHA to other international classifications, it does not mean that the units of classification are the same. The unit of classification of the ICHA-HP is

the establishment. If no distinction is made between an institutional unit and an establishment unit, establishments can also be used as the statistical unit of the ICA-HF. On the other hand, the statistical unit of the ICHA-HC is a very different one: they are the unit health services generated by providers.

Thus a general hospital, which is classified as a unit in HP 1.1 of the ICHA-HP may produce different health services, ranging from in-patient care, to services of day care, and also medical goods to outside patients. If the hospital is a separate entity, the services may be financed by other units, such as insurance, social security system, or the government itself. If the hospital is part of social security system, as it is in many developing countries, the services are financed by the same social, security system. In that case the statistical unit of the provider is the hospital and the statistical unit funding the health services is another part of the social security system. If the two are separated in the accounts, the establishment is the unit of classification of both HP and HF. If the unit is not split up, the social security system is the provider and also the unit funding the hospital services.

Using the same categories for the three dimensions of the ICHA classification thus facilitates cross-classifications of the dimensions. If there is a close correlation between the categories of the ICHA classification in the three uses, there will be unique links between the categories of the provider (HP), the type of health service they produce (HC) and the financing unit. If a provider, however, produces many different services and also the finance may vary considerably, the unique on-to-one correspondences may not exist at all.

B. Scope of current and total expenditure on health

In line with separation of concepts between health statistics and SNA, specialized health statistics tables 1-7 need to refer to expenditure concepts. Expenditure concepts are concepts that approximate final use concepts of the SHA, such as final consumption and capital formation. Thus, current expenditures refer to final consumption, which could be HH, NPI or GOV final consumption. Personal expenditures should refer only to HH final consumption, and total expenditures should refer to final consumption and gross fixed capital formation by HH's, GOV and/or NPI's.¹²

At present the two types of concepts are not clearly distinguished in the presentation of the specialized tables or in the text. The table headings (tables 1-5) generally refer to expenditures, while in the descriptive text below the tables reference is made to final uses. Instead, the convention may be adopted that the specialized health statistics tables refer to current, personal and total expenditures and that in SUT of table 8.2 and IEA of 6.3 references are made to final uses. Any differences between the two concepts would then need to be accommodated in the conversion from the specialized to the SNA related

¹² It should be also stated explicitly that changes in stocks are not considered in the Manual.

tables. This assumes that the expenditure concepts are approximate concepts for two reasons. First of all, they are approximate, because the scope of the expenditure tables, being based on administrative and data may be incomplete. Small units providing and/or financing health services may not be covered. Complete HH sector data on health expenditures may be missing, because there is no HH survey on health. And also imputations like the ones for occupational health services (section II.D), trade margins on medicines (next section II.C) or some other conceptual adjustments may not have been made. The differences between the expenditure concepts of the specialized health tables (1-7) and the final use concepts of the SHA should be further elaborated.

C. The scope of the health sector in the SHA

The scope of the health sector is defined in the Manual through the scope of the health products that it produces. The health services thus covered are described in table 3.1. Defining the scope of the SHA in this manner may imply that some of the in its producing health products may also produce other products that are not part of the SHA. This is the reason why health related functions are identified in table 3.1 and described in paras. 3.22-3.24. The definition and table 3.1 describing the scope raises a number of issues, which concern in particular the internal consistency of integrated health accounts. They are dealt with one by one below.

The first question that should be raised is whether the list of health related functions is exhaustive and covers all activities of health care agencies. This may not necessarily be so. Hospitals and clinics, for instance, may have cafeterias, where staff and patients could eat, or have retail outlets that also sell non-health products. Including these products explicitly in the list of health-related products is the best way of proceeding, as their separate registration could be taken into accounts when reconciling output with uses of health care products. If they are not separately identified, they may be implicitly included in health care services and this would then lead to incompatibilities between supply and use of health care services. If they are deducted as is suggested in the Manual (explanatory text below table 2) it would also lead to incompatibilities of data, but this time between output from which selected products are deducted and inputs, which reflect the total of output.

There is furthermore a near-conceptual difference between capital formation and other health-related functions. Functions such as education and training, research, food, hygiene, drinking water control and also administration are functions that give rise to separate services produced by the health agencies involved. Capital formation, however, is a type of expenditure by health agencies, which is of the same nature as intermediate consumption, compensation of employees, taxes, and so on. They are expenses to outside producers or importers of capital goods, in order to produce health services. Thus capital formation in principle is not a function that should be excluded from the main scope of the health services, if the corresponding health services are included. There may be one exception to this, and that is when the same health unit also includes a department which

produces capital goods, such as a hospital or clinic which is constructing its own laboratory. In the latter case, the construction department is a health related function that is distinct from the production of health services themselves. The rule of thumb would be to include in health related functions the production of those services that are produced by separate establishments in the SNA sense. Capital formation is clearly not of that type.

Another comment is on the inclusion of ancillary services related to health in the scope of health care services. They are (page 118) health services by paramedical and medical technical personnel without medical doctor supervision, including laboratory testing, diagnosis imaging and patient transport. It seems to us that these are ancillary services of a similar nature as those mentioned under health-related functions and thus should be separated from the scope of health care services and goods. Another issue, of course, is whether they can be separated in statistical terms, because the accounts of ancillary activities may be fully integrated with the main accounts of the health care services. But this statistical issue may also apply to some of the health related functions.

Similar incompatibilities between the scope of health services produced and health providers would occur if health products were produced by establishments that are not considered part of the health system. One important example are the medical goods dispensed to out-patients. They are produced by pharmaceutical companies, which are not part of the health system. The SHA has accommodated this by including as health providers the retail sale and other providers of medical goods. This, however, is inconsistent with the treatment in the SNA, which considers the output of those producers of trade services covered by trade margins, rather than as producers of the medical goods themselves.¹³ As a consequence of this treatment, there would be incompatibility between the output of the retail units (which includes only the margins) and the use of medical goods which covers the total value of the medicines. There may also be health services produced by non-health providers, in which case the same incompatibility between output and use would occur.

D. Output of occupational health care

Another recommendation made in the Manual is that occupational health services be included in the scope of health care services. It is suggested that this imputation is made as part of the integrated health accounts and that the expenditures of the specialized health statistics tables do not include those.

In principle, this imputation is a useful suggestion in the context of health satellite accounts and should be implemented. However the conceptual recommendations of the Manual on how to do it, may need some adjustments. The Manual recommends that the output of those occupational services be based on the cost of personnel employed

¹³ The Manual recognizes this SNA treatment in para. 5.26, but does not seem to draw the conclusion of data incompatibility suggested here.

(Manual para. 5.7). However, this would be an incomplete treatment, as also the medicines may be supplied and also other intermediate cost and depreciation of the health facilities may need to be covered. Furthermore, the number of employees staffing the occupational health clinics should be added to employment in health services. This implies that occupational health clinics, which are ancillary units in the SNA, for the purposes of health accounting should be separated out as establishments with separate production accounts, separate measurement of output, intermediate consumption, value added, employment and also capital formation; those values should be kept separate from those of the establishments/.enterprises within which they operate.

In order assess, however, the impact of these occupational expenses on HH health care, also an enlarged concept of actual final consumption may be considered. It may include the output of the health ancillary units thus separated out, which instead of being treated as intermediate consumption of the major establishment/enterprise to which they belong, should be allocated to actual final consumption of HH's through a corresponding transfer in kind from enterprises to the HH sector. This proposed treatment, which may be justified in the context of health satellite accounts, is not envisaged in the SNA, which does not recognize transfers in kind between enterprises and HH's.

E. Scope and treatment of HH expenditures in the SHA

The incorporation of the HH sector in the SHA requires some further comments, in addition to the ones already made in the context of satellite accounting (see section I B). There is was noted that the HH sector data may not be included in the SHA, if there is no HH survey covering the health care expenses of HH's and thus only indirect estimates of HH expenses can be made. Two additional comments may be made here. One has to do with the special treatment of medicines directly purchased by HH's, for which HH output of medical care services is imputed in order to derive the value of voluntary services in HH health care. Another comment has to do with the different classification of HH health care expenses, which are allocated to the HH sector in the SHA only if they involve out-of-pocket expenses, while the SNA allocates those services to the HH sector if they are not 'paid for' by transfers in kind.

1. Imputation of HH output of health services

The imputation of non-market HH production valued on the basis of transfers paid (paras. 5.8-5.12) raises questions, which relate mainly to the development of integrated health accounts.

The Manual suggests including in output of health care services those generated by HH's for in-house care of the elderly, terminally ill, etc. As it would be very difficult to arrive a comprehensive scope of those in-house health services produced by HH's, it suggests that

the output be made equal to cash transfers by GOV to HH's and that way implicitly volunteer services provided for in-house care by HH's would be valued.

The main question is whether there is really a need to impute HH production and therefore value added of unpaid work, or is there is the other possibility to cover HH expenses through consumption without production. Most GOV transfers will not pay for HH unpaid work, but only for the medicines and other goods purchased. Should also unpaid work be imputed when there are no transfers? And what valuation should be given to the HH unpaid work in this case? The SHA alters the SNA principle that no imputations are made for services for own final use, if they are not marketed. By altering these principles, there should be clear guidelines on the scope of the health services to be imputed within HH production. There is another SNA principle that is altered, i.e. that when GOV makes transfers to HH's to reimburse for HH consumption, the purchases are initially treated as GOV final consumption and then transferred to HH consumption as part of the alternative SNA concept of HH actual final consumption.

The suggested deviation from the SNA has some drawbacks, which may require that it be reconsidered and an alternative treatment be adopted which may serve an analysis that is similar to the one that was intended. A first drawback is that the transfers in most instances would not cover the volunteer services, but only the purchase of medicines and other medical goods. If those transfers are reimbursements for medicines and the like, they are considered in the SNA actually as D631 Social benefits in kind, and as explained above they would be included in actual final consumption by HH. In view of this, it may be better to follow the SNA recommendations on actual final consumption, and thus not make any imputations for HH output of health care services, as suggested. The only justification for imputing output would be to value the volunteer serves as part of value added, but given the type of reimbursements, such valuation of volunteer would not materialize in practice.

2. Classification of HH consumption of health care services

The bulk of the health care services should be included in the SHA tables as expenses by Social Security Funds, Private Social Insurance Funds or General Government or Non-Profit Institutions if they are the financing agencies of those expenses. A relatively minor portion of the expenses should be treated as Private Household Out-of-Pocket payments. One may assume that a similar classification applies in table 6.3 on transfers in health care, even though there is no explicit mentioning of this in the paras. accompanying this table.

The SNA, on the other hand, allocates final consumption expenses generally to the HH sector if HH's are the beneficiaries of those expenses. This would apply in all instances that HH's themselves pay for the services, and also if they receive reimbursements in cash from the social security (D.621 Social security benefits in cash) and insurance schemes (D.622 Private funded social benefits and D.72 Non-life insurance claims). It

wood even apply if they receive cash benefits from the GOV (D.624 Social assistance benefits in cash) or receive benefits in cash or in kind from their employers (D.623 Unfunded employee social benefits). The exception are health care expenses by GOV and NPI's, which are included in GOV and NPISH final consumption expenditures and transferred to HH sector through D.63 Social transfers in kind and the concept of HH actual final consumption.

As a special case should be mentioned the HH expenditures that are made for in-patient care in institutional households. The Manual does not include any reference to this concept, even though it may be quantitatively very important. The SNA states (SNA para. 4.136) that "Persons living permanently in an institution, or who may be expected to reside in an institution for a very long, or indefinite, period of time are treated as belonging to a single institutional household when they have little or no autonomy of action or decision in economic matters". As an example it mentions "Long-term patients in hospitals, including mental hospitals". In the SHA-ICHA classification this refers to in-patient curative care (HC11), rehabilitative care (HC21), and long-term nursing care (HC31). In the SNA these expenditures would normally be treated as part of HH final consumption expenditure, as in most instances payments by social security systems and private insurers would be reimbursements for the services that are rendered by in-patient care institutions.

This difference between SHA and SNA classifications needs to be bridged, when the HH sector expenditures in SHA tables 1-7 are converted to HH actual individual HH consumption in IEA table 6.3.

3. Scope HH final demand and actual final demand of health products

Actual final consumption by HH was introduced in the 1993 SNA on the basis of similar concepts that existed in the Material Product System used at that time by Centrally Planned Economies. The purpose was to bring together in an alternative HH final consumption concept (actual final consumption of HH's) all consumption goods and services, which benefited HH's, independent of whether HH paid for those or not. The latter included selected consumption expenses paid for by GOV and NPI's on health, education, cultural services, social protection and recreation, , which directly benefit individuals. Thus all health expenses, except the general administration cost of Ministries of Health, are treated in the SNA as individual consumption and added to HH actual final consumption. In the case of NPI's it was assumed, for convenience sake, that there is no collective consumption, and that thus all expenditures, including those for general administrative purposes of NPI's, are individual consumption, and thus added to HH actual final consumption.

The SHA uses three HH related concepts. In tables 1, 2 and 5 dealing with funding of health expenditures, it uses the concept of 'HF23 Private Household Out-of-Pocket payments'. In tables 6 and 7 it uses the concept of 'personal expenditures on health'. And

in the matrix table 6.3 of transfers and in accounts P3 (annex 6.1) it refers to respectively to 'Households' and 'Private Households', when dealing with 'actual individual consumption' and social transfers. The descriptions of what to include in flows related to households in these tables, however, is poor (paras. 6.21 and 6.25-6.28) and definitely insufficient to guide SHA compilers, when establishing the correct relation between these tables and the SNA.

In order to remedy this, it is suggested that a table similar to table 1 below dealing with SNA social transfers, be presented in the SHA and used to further detail the explanations and arrive at correct links with the SNA. The descriptions contained in table 1 are taken from the relevant SNA paras. in chapters VIII and IX of the SNA. Only health related transfers are shown and within the descriptions health related references are presented in *italics and underlined*.

The SNA makes a distinction between three types of social transfers on the benefit side, i.e.

- 62 Social benefits other than social transfers in kind, covering benefits paid by the social security system (D621), by private insurance companies that administering social schemes for employers (D622), and unfunded payments imputed for benefits by employers (D623)
- D7 Other current transfers, covering among others non-life insurance benefits granted to individuals with insurance policies
- D.63 Social transfers in kind, which included social security benefits in kind (D6311 and D6312 Social assistance benefits in kind, e.g. to the poor, which are not covered by the social security system or by private insurance policies (D6313), and transfers imputed to the HH sector for so-called 'non-market individual' GOV expenses, among others on health (D632)

The difference between HH final consumption expenditures and HH actual final consumption is equal to the sum of the third category, i.e. D6312 Social assistance benefits in kind.

Our assumption is that the concept of 'private HH out-of-pocket payments' in SHA tables 1, 2 and 5 is less comprehensive than the SNA concept of HH final consumption, as it does not include medical expenses by HH's that are paid for the social security system or insurance companies (SNA transfer items D.6.2 and D.7 in table 1).

In order to arrive at the HH actual final consumption figures in table 6.3, it is therefore necessary to account for all social benefits listed above, i.e. D62, D7 and D63, in order to convert the data from the HH scope in tables 1, 2 and 5 to that of the matrix table 6.3. As this conversion is very complex indeed and would require much detailed SNA knowledge, it was recommended above (see sections I.B and C) that table 6.3 be only compiled as part of SHA implementation in countries, where health statistics have been well developed and much SNA knowledge is available.

Table 1 Social Transfers in SNA, relevant to Health Care

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| D.62 Social benefits other than social transfers in kind | <u>D.621 Social security benefits in cash</u> | <p>These are social insurance benefits payable in cash to households by social security funds. They may take the form of:</p> <ul style="list-style-type: none"> ▪ <i>Sickness and invalidity benefits</i> ▪ Maternity allowances ▪ Children’s or family allowances, other dependants' allowances ▪ Other non-health related benefits |
| | <u>D.622 Private funded social benefits</u> | <p>These are social insurance benefits payable to households by insurance enterprises or other institutional units administering private funded social insurance schemes. The kinds of benefits provided are similar to those listed above for social security funds. Unlike social security benefits, however, no distinction is made between benefits in cash and in kind as private funded benefits cannot be social transfers in kind. Both types of benefits are recorded in the secondary distribution of income account.</p> |
| | <u>D.623 Unfunded employee social benefits</u> | <p>These are social benefits payable to their employees, their dependants or survivors by employers administering unfunded social insurance schemes. All unfunded benefits are recorded in the secondary distribution of income account whether in cash or in kind. They typically include:</p> <ul style="list-style-type: none"> ▪ The continued payment of normal or reduced wages during periods of absence from work as a result of ill health, accidents, maternity needs, etc.; ▪ The payment of family, education or other allowances in respect of dependants; ▪ The payment of retirement or survivors' pensions to former employees or their survivors, and the payment of severance allowances to workers or their survivors in the event of redundancy, incapacity, accidental death, etc.; ▪ <i>General medical services not related to the employee's work;</i> ▪ <i>Convalescent and retirement homes</i> |
| | <u>D.624 Social assistance benefits in cash</u> | <p>Social assistance benefits are current transfers payable to households by government units or NPISHs to meet the same needs as social insurance benefits but which are not made under a social insurance scheme incorporating social contributions and social insurance benefits. They therefore exclude all benefits paid by social security funds. They may be payable in cash and in kind. Those in kind are part of social transfers in kind, entered in the redistribution of income in kind account.</p> <p>Social assistance benefits may be payable in the following circumstances:</p> <ul style="list-style-type: none"> ▪ No social insurance scheme exists to cover the circumstances in question; ▪ Although a social insurance scheme, or schemes, may exist, the households in question do not participate and are not eligible for social insurance benefits; ▪ Social insurance benefits are deemed to be inadequate to cover the needs in question, the social assistance benefits being paid in addition. |

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| | | <p>Social assistance benefits do not include current transfers paid in response to events or circumstances that are not normally covered by social insurance schemes. Thus, social assistance benefits do not cover transfers in cash or in kind made in response to natural disasters such as drought, floods or earthquakes. Such transfers are recorded separately under other current transfers.</p> |
| D7. Other current transfers | <u>D.72 Non-life insurance claims</u> | <p>Non-life insurance claims do not include payments to households in the form of social insurance benefits. They are the amounts payable in settlement of claims that become due during the current accounting period. Claims become due at the moment when the eventuality occurs which gives rise to a valid claim accepted by the insurance enterprise. As the service charges on non-life insurance are calculated by subtracting claims due from the combined value of the premiums earned and premium supplements, it follows that the total claims due for an insurance enterprise must equal the net non-life premiums receivable by that enterprise during the same accounting period. This emphasizes the fact that the essential function of non-life insurance is to redistribute resources.</p> <p>The settlement of a non-life insurance claim is treated as a transfer to the claimant. Such payments are always treated as current transfers, even when large sums may be involved as a result of the accidental destruction of a fixed asset or <i>serious personal injury to an individual</i>. The amounts received by claimants are usually not committed for any particular purpose and goods or assets which have been damaged or destroyed need not necessarily be repaired or replaced.</p> <p>Some claims arise because of damages or injuries that the policyholders cause to the property or persons of third parties, for example, the damages or <i>injuries that insured drivers of vehicles may cause to other vehicles or persons</i>. In these cases, valid claims are recorded as being payable directly by the insurance enterprise to the injured parties and not indirectly via the policyholder.</p> |
| D.63 Social transfers in kind | <u>D.6311 Social security benefits, reimbursements</u> | <p>The reimbursement by social security funds of approved expenditures made by households on specified goods or services is a form of social benefit in kind. Examples of expenditures that may be <i>reimbursable are expenditures on medicines, medical or dental treatments, hospital bills, optometrists' bills</i>, etc.</p> <p>When a household purchases a good or service for which it is subsequently reimbursed, in part or in whole, by a social security fund, the household can be regarded as if it were an agent acting on behalf of the social security fund. In effect, the household provides a short-term credit to the social security fund that is liquidated as soon as the household is reimbursed. The amount of the expenditure reimbursed is recorded as being incurred directly by the social security fund at the time the household makes the purchase, while the only expenditure recorded for the household is the difference, if any, between the purchaser's price paid and the amount reimbursed. Thus, the amount of the expenditure reimbursed is not treated as a current transfer in cash from the social security fund to households.</p> |
| | <u>D.6312</u> | <p>These consist of social transfers in kind, except reimbursements, made by social security funds to</p> |

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| <p><u>Other social security benefits in kind</u></p> | <p>households. Most are likely to consist of <i>medical or dental treatments, surgery, hospital accommodation, spectacles or contact lenses, medical appliances or equipment, and similar goods or services associated with the provision of health care.</i> The services may be provided by market or non-market producers and should be valued accordingly. In both cases any nominal payments made by the householders themselves should be deducted. The transfers should be recorded at the times the goods are transferred or services provided.</p> |
| <p><u>D.6313 Social assistance benefits in kind</u></p> | <p>These consist of transfers in kind provided to households by government units or NPISHs that are similar in nature to social security benefits in kind but are not provided in the context of a social insurance scheme. Like social assistance benefits in cash, they tend to be provided under the following circumstances:</p> <ul style="list-style-type: none"> ▪ No social insurance scheme exists to cover the circumstances in question; ▪ Although a social insurance scheme, or schemes, may exist, the households in question do not participate and are not eligible for its social benefits; ▪ Social insurance benefits are deemed to be inadequate to cover the needs in question, the social assistance benefits being paid in addition. |
| <p><u>D.632 Transfers of individual non-market goods and services</u></p> | <p>These consist of goods or services provided to individual households free, or at prices which are not economically significant, by non-market producers of government units or NPISHs. Although some of the non-market services produced by NPISHs have some of the characteristics of collective services, all the non-market services produced by NPISHs are, for simplicity and by convention, treated as individual in nature. Non-market producers are described in more detail in chapter VI. Services provided free, or at prices that are not economically significant, to households are described as individual services to distinguish them from collective services provided to the community as a whole, or large sections of the community. Individual services consist mainly of education and health services, although other kinds of services such as housing services, cultural and recreational services are also frequently provided. They may be provided either by market or non-market producers and are valued accordingly.</p> <p>By convention, all government final consumption expenditures under each of the following headings should be treated as expenditures on individual services <i>except for expenditures on general administration, regulation, research, etc.:</i></p> <p><u>07 Health</u> 08.1 Recreational and sporting services 08.2 Cultural services 09 Education 10 Social protection.</p> <p>The services provided as social transfers in kind to households are recorded at the times they are</p> |

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| | | provided. These are the times at which they are produced. Any goods provided directly to households by non-market producers should be recorded at the times the change of ownership takes place. |
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