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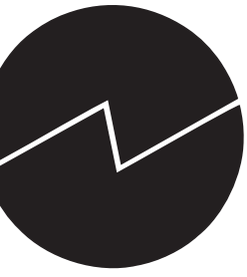

Statistisk sentralbyrå

Ann-Kristin Brændvang

Documents

Norwegian Health Accounts

Eurostat project report

Statistics Norway/Division for National Accounts

1. Introduction

This report is a documentation of the project financed jointly by Eurostat and Statistics Norway, and describes the compilation of the Norwegian health accounts.

The Norwegian health accounts (N-SHA) are compiled on a yearly basis. The set of tables is based on common concepts, definitions, classifications and accounting rules described in A System of Health Accounts (OECD, 2000). The first results were published in 2005, with time series back to 1997. Since then the figures are annually updated, in both current and constant prices. So far only the main tables of the system has been implemented (table 1-5), but it is possible to extend the system to also include for instance labor accounts.

The health accounts are designed to provide a model for uniform reporting for countries with different ways of organising their national health system. The Norwegian health accounts are based on the National Accounts (NR), calculated as an integrated and consistent part of the accounts.

This report describes the sources and methods of the Norwegian health accounts focusing on the link to the National Accounts. The structure of this publication is:

- Chapter 2 an overview of the implementation process
- Chapter 3 describes the link between the health accounts and National Accounts
- Chapter 4 presents the System of Health Accounts, and gives a detailed description of the mapping from National Accounts to the Norwegian health accounts
- Chapter 5 further development of the health accounts
- Annexes

2. The implementation process

The Norwegian System of Health Accounts (N-SHA) was first published in 2005. Previous to the implementation of the System of Health Accounts (SHA), data on health expenditures reported to the OECD were for several years calculated on the basis of the National Accounts (NA). These data were not sufficient for the details required in the SHA-tables. The main problem was that the NA-classifications were not detailed enough to meet the requirements in the System of Health Accounts when these were introduced in the beginning of this decade.

To meet the need for more sufficient and internationally comparable statistics it was in 2000 decided to implement the System of Health Account in Norway. It was early on decided to compile the Norwegian health accounts as an integrated part of the National Accounts, as a 'satellite account'. The main reasons for using the NA-platform was that this gives access to the enormous source of high quality data organised within this system, and in addition the NA provides an efficient technical system for updating SHA tables annually. A thorough evaluation of the data available and some adjustments of the NA-system were necessary to ensure efficient mapping from NA to SHA.

The implementation of SHA could be described in the following three phases:

1. Planning and adjustments in the National Accounts
2. Improving and implementing new sources
3. Mapping from NA to N-SHA

2.1 Planning and adjustments in NA

One of the key issues when establishing the technical system for N-SHA was to design a system that enabled us to maintain the relevant data through the system of National Accounts, in addition to make it possible to map the data from NA to SHA. Certain adjustments were needed in order to ensure that all relevant details were kept within the system, and not aggregated during the NA-process.

The NA is a flexible system regarding the necessary adjustments. The discussion was more related to which details were relevant and adequate for SHA, and which criteria should be used to separate health from other goods and services. Our main focus was therefore related to the development of new data sources and the implementation of these.

2.2 Improving and implementing new sources

The main focus during the early phase was how to implement a new data source covering about 70 per cent of the health expenditure. This data source was a result of a pilot project launched in 1995 for developing a new reporting system from local government. The project was called KOSTRA, which is an abbreviation for "Municipality-State-Reporting". The pilot project developed a first version of a new system for electronic data reporting and publishing. The project started with data from four municipalities. The number of participating municipalities gradually increased. In March 2002 the first full scale reporting took place, covering data for the year 2001, see chapter 3.5 for further details.

Public hospitals were at that time part of the regional government, and hospital data where thus included in the KOSTRA reporting. In 2002 the ownership of public hospitals was moved from the regional government to central government. However, it was decided that the reporting system should follow the same principles as put forward in KOSTRA.

Health data within KOSTRA was developed through close cooperation with all relevant bodies (Statistics Norway, Ministry of Health and Social Affaires, The Norwegian Board of Health and the Norwegian Institute of Public Health). All the required details for a complete SHA were not available, but the most essential parts were covered. The focus in SHA and the standard classifications within the system is to a large extent in line with the national focus set in KOSTRA.

2.3 Mapping from NA to SHA

Based on the extensive range of data for health goods and services, the last phase was to complete the mapping from the NA to the SHA. This last part was carried out within a short period of time, at about a month. This classification is described in chapter 4.

The result is a flexible system within the NA framework. The integrated system has also strengthened the health figures in NA, as the SHA compilations also serves as a quality control of the health data within the comprehensive and balanced NA. The link between NA and SHA is described in the next chapter.

This report will focus on data sources used, and describe the mapping from National Accounts to N-SHA.

3. The System of Health Accounts (SHA) and the National Accounts (NA)

One of the main purposes of the health accounts is to provide a common framework for increased comparability of data over time and across countries. There are considerable variations in the health expenditures between countries, and there is ongoing concern regarding the adequacy of resource levels for health care and the way those resources are used. To meet the growing demands from health policy analysts to address such questions as:

- What are the main drivers accounting for health expenditure growth?
- What factors explain the observed differences between countries?
- What are the main structural differences in health spending between countries?
- How are changes in the structure of health spending and performance of health systems related?

These issues have been challenging the traditional system of health expenditure statistics over recent decades. The OECD manual, A System of Health Accounts (SHA) provides a standard framework for producing a set of comprehensive, consistent and internationally comparable accounts that are compatible with other economic and social statistics. To meet the needs of public and private-sector health analysts and policy-makers the set of tables in the SHA addresses three basic questions:

- What kinds of (functionally defined) services are provided and what types of goods are purchased?
- Where does the money go? (provider of health care services and goods)
- Where does the money come from? (source of funding)

Consequently the International Classification for Health Accounts (ICHA) - currently in its 1.0 version - covers three dimensions of health care:

- Health care functions (ICHA-HC);
- Health care service provider industries (ICHA-HP);
- Sources of financing health care (ICHA-HF)

Standard SHA tables cross classify expenditures under the three basic classifications providing new and deeper analysis on how health services and goods are financed and provided. Chapter 4 will in detail describe the calculations of these three dimensions in the N-SHA.

3.1 The basic concepts of the health account

The SHA definition of healthcare expenditure:

The total expenditure on health measures the final use of resident units of health care goods and services plus gross capital formation in health care provider industries (institutions where health care is the predominant activity)

The boundary of health care is crucial for the compilation of a health expenditures and health account.

A starting point for defining health care in the OECD manual is the functional classification as it is designed to provide detailed guidelines for drawing harmonised, uniform boundaries. The functional boundary refers to the ***purpose*** of health care such as disease prevention, health promotion, treatment, rehabilitation or long-term care. This functional classification will be explained in more detail in chapter 4. The following summary provides the most important basic concepts and boundary criteria for delimiting the field of health care for the purposes of SHA. The concepts of health care underlying the design of the functional classification (OECD, 2000):

Table 3.1. Activities of health care

Activities of health care in a country comprises the sum of activities performed either by institutions or individuals pursuing, through the application of medical, paramedical and nursing knowledge and technology, the goals of:

- Promoting health and preventing disease
- Curing illness and reducing premature mortality
- Caring for persons affected by chronic illness who require nursing care
- Caring for persons with health related impairment, disability, and handicaps who require nursing care
- Assisting persons to die with dignity
- Providing and administering public health
- Providing and administering health programmes, health insurance and other funding arrangements.

Total expenditure on health measures the total resources spent on the activities listed above. In other words the total health expenditure measure the economic resources spent by a country on the SHA functions HC.1 to HC.7 of health care services, plus gross capital formation (HC.R.1). The distinction between total current expenditure (HC.1-7) and gross capital formation in the health care industries (HC.R.1) is important. According to the SHA manual the distinction is:

- Current expenditure on health measures **the final consumption of health care goods and services**. This includes activities such as hospital treatments, paramedical services at home and also supporting activities directly involved in the production and provision of these activities (administration, technical and other supporting activities performed in hospitals etc).
- The gross capital formation in the health care industries are those expenditures that add to the stock of resources of the health care system and last more that an annual accounting period (SHA-manual §5.2)

The expenditure on health includes both public and private spending.

Table 3.2: ICHA-HC functional classification of health care

HC 1 Service of curative care
+ HC 2 Service of rehabilitative care
+ HC 3 Service of long term nursing care
+ HC 4 Service of ancillary services to health care
+ HC 5 Medical goods dispensed to out-patients
= Total personal expenditure on health
+ HC 6 Prevention and public health services
+ HC 7 Health administration and health insurance
= Total current expenditure on health (sum of HC.1 to HC.7 = TCHE)
+ HC:R.1 Capital formation of health care provider institutions
= **Total expenditure on health (TCHE + HC. R.1)**

The two major components of current health expenditure are expenditure on personal health care and expenditure on collective services. Personal health care services provided directly to individuals such as curative care, rehabilitation, long-term health care, ancillary health care services, and medical goods dispensed to out-patients. Collective services comprise public health tasks such as health promotion and disease prevention services and health administration, which are delivered to society at large.

In some cases the boundaries between health care and other services are complex and the differences in applying these definitions distort the comparability of data. One of the main factors that continue to affect comparability is the various treatment of long-term nursing care among countries. Ongoing work on "refinement and extension of the International Classification for the health accounts (ICHA)" is expected to result in a revised functional classification. In the meantime an interim guidance is provided for the joint SHA data collection by OECD, EUROSTAT and WHO. The method applied in the N-SHA is described and discussed in chapter 4 item HC.3.

In addition to the core tables, the manual defines a set of health related functions. Examples are food, hygiene and drinking water control, environmental health etc. These functions are not compiled in the N-SHA.

3.2 The Norwegian health accounts as a 'satellite' to National Accounts

The Norwegian health accounts are based on the common concepts, definitions, classifications and accounting rules described in A System of Health Accounts (OECD, 2000). This manual is in turn based on the United Nations System of National Accounts (SNA 1993). The accounting system of the Norwegian National Accounts is based on SNA 1993 and ESA 95 (European System of Accounts 1995).

The National Accounts constitute a consistent and integrated set of macroeconomic accounts, based on a set of internationally agreed concepts, definitions, classifications and accounting rules. They provide a comprehensive accounting framework. Economic data are compiled and presented in a format that is designed for purposes of economic analysis, decision-making and policy-making.

The health accounts are linked to the regular National Accounts as a so-called 'satellite'. A satellite account is normally linked to the central framework of National Accounts and to the main body of integrated economic statistics, but it will be more specific to a given field or topic. Thus, the compilation of SHA directs more attention to the details concerning health.

The health expenditures could alternatively be compiled on the range of data directly. The linkage to NA is a question of technical solutions for the decoding of the Norwegian health expenditures into the international classification of health accounts (ICHA). The essential issue is the quality of the data available, and the thorough examination of which goods and services should be included and how to classify them according to SHA.

The main reason for using the NA-platform was to utilise the enormous source of high quality data organised within this system. The 'satellite' is flexible, and with minor efforts the components of NA is adjusted to enable the compilation of the health accounts in a very efficient way. Establishing health accounts as a satellite to NA means that detailed data from a range of sources integrated in the National Accounts serve as a tool for presenting the health expenditure. Once the NA for a given year is compiled, the set of SHA tables can easily be derived.

In order to arrange the data in NA to meet the SHA requirements, a thorough examination of the relevant goods and services in NA were undertaken. The main focus was to classify and arrange the data to maintain the level of details from the input data to the final NA-figures. To enable this, the classifications in NA were extended to fit the requirements needed to classify the health figures according to the ICHA classifications. Then, when the National Accounts for a given year has been established and reconciled, the data are easily classified into the international classification for health accounts (ICHA). Subsequently the required sets of SHA-tables will be compiled.

The health accounts are compiled on an annual basis. The final figures are published about two years after the end of the reference year, and are based on detailed sources. The preliminary figures are based on more aggregated sources and to some extent estimations. The preliminary figures are normally published three months after the end of the reference year and are less detailed than the final figures. This implies that some of the ICHA–categories are not available for the two most recent years. The Norwegian health accounts provide data in current and constant prices. The calculations in constant prices are based on the National Accounts methods

The core component in the compilation of SHA is the **product classification** in combination with data on purpose.

3.2 The product classification and the method of mapping from NA to N-SHA

The main part of the compilation of the health accounts consists of linking data from the National Accounts to the health accounts according to the classifications defined in the OECD manual.

Important in the Norwegian Health Accounts is the classification of all the goods and services. This product classification is based on the EU-specific product classification CPA (Statistical Classification of Products by Activity in the European Community), but adopted to fit special Norwegian requirements. CPA is a product grouping by activity, i.e. the characteristic or principal products of the activities, as related to the activity classification of NACE Rev.1

The product as a basis for mapping from NA to SHA

The classification of products consists of a six digit code. One can tell by the product number the type of service, the producer of the service, and to some extent the financing source. The product classification combined with data on purpose, also from the national accounts, is the basis for the mapping from NA to SHA. For each and every specific combination of product X purpose there is a link to a specific HC, HF and HP. This code list is established as an integrated part of the technical framework of the system of NA, and the mapping is carried out within this framework.

Our main focus prior to and during the implementation has been to adjust the classification codes in NA –**products** – sufficiently detailed for the SHA-classification (ICHA). This implied that a range of new products were established e.g. rehabilitative care, out patient specialised health care services, diagnostic imaging and clinical laboratory etc.

The final annual NA consists of approximately 190 industries and 1200 products, of these about 65 is health related. Supply equals use for all products within this comprehensive and balanced NA-system.

The result of the method of linking each product to the ICHA is a flexible and robust system. Every item concerning health within the economy is given specific SHA codes. This implies that one can easily construct the tables, aggregated as one would need. To compile the SHA tables is in practical terms only reorganisation of the ICHA-classified dataset from NA. Every entry concerning health can be organised according to their ICHA-codes as required.

3.3 Health expenditure within the concepts of NA

Total expenditure on health is defined as: “The final use of resident units of health care goods and services plus gross capital formation in health care provider industries.” The health expenditure is defined from the demand side delimited by the functional approach of health expenditure. These expenditure components must be identified within the NA and mapped according to the ICHA. This section describes how these expenditures are related to the components of NA.

The Norwegian Annual National Accounts (NNA) consists of integrated supply and use accounts. For each product the total supply equals total use for every product in NA. In other words, each good and service, either produced domestically or imported, is consumed, used as input in the industries (intermediate consumption), exported, invested or will be stored (changes of inventories).

Table 3.3, Supply and use in NA

Total supply and use within the National Accounts
Total supply is defined as:
Output (at basic prices)
+ Taxes on products - Subsidies on products
+ Imports
The total use is defined as:
Final consumption expenditure
+ Gross fixed capital formation
+ Changes in inventories
+ Exports
+ Intermediate consumption

According to the equation and description in table 3.3 the total supply of health products is either produced domestically or imported. Supply of products is valued at basic prices, while use of products is valued at purchasers' prices. Purchaser's price is the amount actually paid by the purchaser, including any taxes on products less subsidies. To compile the health expenditure at purchasers' prices the net taxes on product (taxes less subsidies) must be added to the supply measured at basic prices. The health expenditure consists of the use of health care goods and services included in the following components of NA:

1. The final consumption expenditure. Here both public and private expenditure are included.
2. Gross fixed capital formation within the health provider industries.
3. Intermediate consumption (only occupational health care is included directly from this component, see comments below.)

Concerning the other components of NA, there is no health expenses included in the NA-figures for inventory and export. Health care services provided to non-residents are excluded from the Norwegian health expenditure. These expenses should be included in the health expenditures within the country importing the services. Correspondingly the health related parts of import is included in the Norwegian health expenditures as being paid for by Norwegian residents. Information on the import and export of health care services can be found in the Hospital Accounts and the Central government fiscal accounts

Concerning item 1: The component measures the total expenditure on different health goods and services. Final consumption expenditure includes the goods and services provided for final use, regardless of the financing source.

Concerning item 2: Includes the gross fixed capital formation within the industries defined as health care provider industries

Concerning item 3: Intermediate consumption. Goods and services included are delivered for input in different production processes. This means that the expenditure will be included in the value of the output in the industries receiving the input.

This implies for a given supply of e.g. pharmaceuticals that the health expenditures are included either in final consumption expenditures (HC 4), or as intermediate consumption in health care services. The latter will be included in the value of the health service provided by

the hospital and nursing homes etc. as this is calculated as the sum of all relevant cost components.

However, there is one exception from the described treatment of intermediate consumption, namely the treatment of occupational health care. In NA the range of health care goods and services provided for occupational health care, is treated as intermediate consumption within the industry receiving the health care. This is due to the principle of NA, accounting this as a part of the input in the industries employing the person receiving the health care paid for by the employees. But according to the system of SHA, occupational health care should be included in the final consumption of health care. Therefore these items are identified in the NA system and included in the health expenditure.

The accrual principle
The accounting rules for NA are based on the accrual principal. This is a principle for recording flows in the accounts. Accrual basis means that output is recorded at the time the activity takes place, not when the product is paid by a purchaser, and assets are recorded when change in ownership occurs, not when paid.

Other special issues, informal sector, subsidies and households production of health care
The informal sector should be included in SHA to enable international comparison. This is in line with the NA-framework.

Subsidies are transfers to marked producers designed to reduce the price paid by the final consumer. The health expenditures at purchasers' price do consequently not reflect the total costs. To record the total expenditures in the SHA when subsidies occur, the subsidies are added to the expenditures measured at purchasers' prices in NA. This is in line with the SHA recommendations.

The production of health care services in private households provided by family members is by convention not included in the NA (production for own final use within the household). In the SHA context this value should be imputed and added, see the manual 5.8-5.12 for further details. In Norway we consider these services of insignificant value and, thus, they are not imputed and included in the health expenditures.

The components from NA included in SHA are described in table 3.4.

NA-components	Description
Actual final consumption expenditure on health by household	Households expenditure on health (out of pocket payment
+ Actual final consumption expenditure on health by NPISHs	The health goods and services provided by NPISH subtrac out of pocket payment etc.
+ Actual final consumption on health by general government	Goods and services provided and financed by government transfers in kind (goods and services transferred to househ and financed by the government)
= Actual final consumption expenditure in kind	
+ Government subsidies to health care providers (net) in order to lower the price of output	Government subsidies in order to lower the price, excludi benefits in kind.
+ Occupational health care measured as intermediate consumption	Occupational health care not a part as final consumption i
+ Unpaid household production	No value is implemented in the Norwegian SHA
= Adjusted total actual final consumption on health	Current expenditure on health
+ Gross fixed capital formation in health provider industries	Investments in the industries defined as health industries
Total expenditure on health care	

3.4 Reconciliation of data

Within the equation listed in table 3.3 the supply equals total use of each product within the NA framework. This implies that all data from the range of sources are reconciled. Since the system of National Accounts is an integrated system containing routines for consistency checks of data, one assumes that the National Accounts contribute to reduce the uncertainty in source data. Calculating SHA as a 'satellite' to NA ensures consistency for all health components, and double counting is avoided.

3.5 The sources

Detailed data from a range of sources integrated in the National Accounts serve as a tool for presenting the health expenditure.

The most important sources for compiling health expenditure are public accounts reported via the KOSTRA system or via general government accounts, statistics from public and private hospitals (specialist nursing homes, convalescence and rehabilitation institutions and hospitals) and the Survey of Consumer Expenditure. Furthermore, all relevant data from the National Accounts are reorganised and utilised in the health accounts.

Public accounts

Norway has three levels of public government:

1. the national level
2. the regional level (19 counties, included Oslo)
3. the local level (434 municipalities, 2006)

Central and local governments are responsible for the finance of current expenditure and investment in hospitals, primary health care and prevention. Local authorities are responsible for local planning and for services for the inhabitants such as parts of the primary health services and social work. In addition to the central and local government the public accounts also provides data for the social security fund that refunds a large part of the private consumption of medicines, dentists, general practitioners etc.

KOSTRA ("Municipality-State-Reporting")

An important source in the Norwegian system of health accounts is the reporting system developed for reporting data from local to central government (KOSTRA). When the first pilot-project started in 1995, the hospitals were a part of the regional government which implied that KOSTRA covered about 70 per cent of the total health expenditures. Consequently the development of this system played a central role in the compilation of the Norwegian health accounts.

The first KOSTRA pilot-reporting established a system for electronic reporting and publishing. After this first pilot the government decided that all local and regional governments should report according to the new system. In March 2002 the first full scale reporting took place, covering data for the year 2001. The Hospital accounts continued to report according to a similar system after the change in ownership to the central government (2002).

KOSTRA focuses on several purposes of which two are:
1) To give better information about the municipalities, both for the central and for the local governments. This includes a more coherent data collection, which makes it possible to combine data from many sources, for example combination of data on business accounts and data on services and

personnel. The focus has also been on comparability between municipalities, to make benchmarking possible as a part of the management process.

2) More efficient reporting, including lower response burden for the municipalities. All data reported from the municipalities are electronic, by use of electronic forms or file extracts. And the same data should be collected only once, even if it is used for several purposes. The publishing includes a number of fixed indicators on the municipalities' priorities, productivity and the coverage of needs. It is structured to enable the comparisons of one municipality with the average for the comparable group of municipalities, the region or the country.

The data from KOSTRA is reported according to similar principles as the hospital accounts. The data for economic transactions are broken down by:

1. Type of function, such as maternal and child health care, dental care, basic medical and diagnostic services etc.
2. Type of expenditure, like salaries and other production costs, investments, transfers by recipients etc.

Based on these sources unique products have been created for each SHA relevant combinations of 1 and 2 above, sufficient to enable SHA calculations. The main focus has been to maintain the details from the data sources when NA is compiled, which enables an efficient system for mapping from NA to SHA

Hospital Accounts

The ownership of public hospitals was moved from the regional government to central government in 2002. The new organizational structure was a Health Enterprise model with five[1] Regional Health Enterprises (RHE) being the owners of subsidiary Health Enterprises (HE).

The Hospital Accounts are structured in line with the KOSTRA system, in a two axis system which provides adequate details for the ICHA-implementation. All economic transactions are broken down by type of function and type of expenditure. Data are collected via electronic schemes and electronic account files. Response deadline for accounts is March the following year. Statistics Norway performs automatic sum controls of the data material. In addition, the data are compared with information from previous years, and with other sources (data on activity, personnel and patients). Institutions are contacted if there are missing data or discrepancies in the data.

The hospital statistics cover all general and specialised hospitals, psychiatric hospitals, convalescence and rehabilitation institutions, ambulance service, operating agreements with private specialists and clinical psychologists and specialised substance abuse institutions. The hospitals/institutions are covered whether they are public, private or non-profit institutions.

Central government fiscal account, revenues and expenditures

The main source in the National Accounts for the central government and the social security fund is the Central government fiscal accounts. This account provides detailed data on several figures relevant for the SHA, such as transfers to health care providers and transfers in kind.

Revenue and expenditure are classified in main groups by type of transaction, whether services are offered in return or not, and what kind of economic function the individual transaction has.

[1] Reduced to 4 from June 2007

Survey of Consumer Expenditure

An important source in the NA is the Survey of Consumer Expenditure. By balancing the supply and use tables in the NA all information on both supply and use are taken into account and the balancing procedures serve as a quality control for the figures in the National Accounts.

The principal aim of the survey has been to provide a detailed description of the consumption of private households in order to update the weight used in calculating the consumer price index.

The aim has also been to study consumption in various groups of households. Since 1974 Statistics Norway has carried out an annual survey of consumer expenditure. The survey is based on personal interviews and detailed accounting in a representative sample of private households based on drawn persons from 0 to 79 years of age. The sample is annually 2200 persons. Institutional households such as hospitals, boarding houses etc. are not included.

There have been some difficulties concerning the use of this source over the recent years. This is mainly due to the high non-respondent rate and the fact that these non-respondents are unequally distributed among all the household groups. Even if corrections have been made for the non-response, some of results on a detailed level are quite volatile from year to year.

As a consequence some details are only partly taken into account in NA, and other data sources considered more essential and robust have been used in the balancing of supply and use. For the health part of NA, data from KOSTRA and the Hospital accounts provide us with details on out-of-pocket payments. These accounts distribute the income according to type of service and kind of income like out of pocket, rent, transfers etc., and thus give details on the out-of-pocket payments related to a range of services.

The Survey of Consumer Expenditure is still used as it gives an overview of the total expenditure and thus serves as an overall quality control.

The DRG-system

The DRG system is used to separate between HC.1.1 inpatient curative care, and HC.1.2 day cases of curative care. DRG (Diagnosis Related Groups) is a patient classification system that yields a simplified description of hospitals activity and patient mix. The DRG-system is also used as a basis for reimbursements from the state to the hospitals in Norway. 60 per cent of the hospital costs are funded en bloc, while the remaining 40 per cent is due to activity based on the DRG-system.

The first DRG system was developed at Yale University in the USA in the 1970s, and is widely used in many countries. Different versions have been developed, using different numbers of groups, for example. The Norwegian version of the DRG system consists of some 500 groups / DRGs, and is the result of a pan-Nordic collaboration on adaptation of the system to local conditions.

Each individual DRG represents both medical and financial information. Patients that are classified together in the same DRG are medically very similar and require roughly equal resources to be treated. Each DRG is ascribed a cost weight expressing what a hospital stay in this DRG costs on average compared to the average of all stays. Diagnoses and medical procedures represent the medical information, and the cost weight represents use of resources. On the basis of the medical and administrative information, each stay in a hospital is classified into one DRG. Within this system every patient is coded as day-patient or in-patient. This makes it possible to separate between expenditure on in-patient and day-care, which are grouped together in the hospital cost data.
The sum of DRGs (corrected for readmission) related to day-patients and in-patients are the source for distributing the expenditures on HC.1.1 and HC.1.2.

The following chapter describes how these above listed data sources are used as a basis for the mapping from health data to SHA.

4. The Compilation of the Norwegian health account

This chapter describes the mapping from NA to SHA. Based on the range of data available the goods and services related to health are classified according to the System of Health Accounts. The chapter describes the most important basic concepts, the data sources and boundary criteria used for delimiting the field of health. The presentation is linked to the three dimensions of SHA:

1. Health care by **functions** (ICHA-HC)
2. **Financing** agents of health care (ICHA-HF)
3. Health care **provider** industries (ICHA-HP

As previously described, the technical framework for the SHA-calculation is linked to the **product-**classification in the National Accounts. One of the key issues during the implementation of SHA was to maintain relevant information through the system of National Accounts, to simplify the mapping to the international classification for health accounts (ICHA). This was accomplished by revising the product classifications in the light of SHA, and establishing new products when necessary. Though these changes were mainly carried out during the planning process, prior to the calculation of SHA, the system allows creating new products whenever requested i.e. new available sources etc.

The mapping is done by defining a correspondence between each specific healthcare-product (goods and services) and the ICHA / SHA-classifications. Each health related product in NA is linked to the three dimensions listed above. The crucial point is to define the goods and services to be included according to the definitions in SHA, and as described in chapter 3.1 the boundary of health expenditures is defined by **the purpose** of the goods and services used. This implies in particular that health expenses include both characteristic and non-characteristic health products.

A table presenting a brief summary of the three dimensions, the main components and the corresponding sources is given in annex A.

4.1 Compilation of health care by function (ICHA-HC)

The functional classifications is one of the three dimensions in SHA, designed to provide detailed guidelines for drawing harmonised, uniform boundaries for the health care system, independently of the way the health care system is organised. Functional classification of health care is classified as HC-groups. The functional approach refers to the goals or purposes of health care. Different producers may provide the same kind of health care functions, e.g. hospital services can be produced for several purposes like rehabilitative care, curative care, diagnostic imaging etc. The functions in the Norwegian Health Accounts are as follows:

HC.1.1	In-patient curative care
HC.1.2	Day cases of curative care
HC.1.3.1	Basic medical and diagnostic services
HC.1.3.2	Out-patient dental care
HC.1.3.3	All other specialised health care services
HC.1.3.9	All other out-patient curative care
HC.1.4	Services of curative home care
HC.2	In-patient rehabilitative care
HC.3.1	In-patient long-term nursing care
HC.3.3	Long-term nursing care: home care
HC.4.1:4.2	Diagnostic imaging and clinical laboratory
HC.4.3	Patient transport and emergency rescue
HC.5.1.1:5.1.2	Medicines (Prescribed and over-the-counter)
HC.5.1.3	Other medical non-durables

HC.5.2.1	Glasses and other vision products
HC.5.2.2	Orthopaedic appliances and other prosthetics
HC.5.2.3	Hearing aids
HC.5.2.4:5.2.9	Medico-technical devices, including wheelchairs
HC.6.1	Maternal and child health; family planning and counselling
HC.6.4	Prevention of communicable and non-communicable disease
HC.6.5	Occupational health care
HC.7	Health administration and health insurance

For cross-classifications of the functional approach with the SNA 93 functional classifications, like COFOG (classification of the functions of government) and COICOP (classification of individual consumption by purpose), see: A System of Health Accounts (OECD, 2000).

In the following sections each of these main HC-groups in N-SHA is described. The description of each ICHA-group are introduced by recapturing the definitions from the System of Health Accounts.

HC.1 Services of curative care
"This item comprises medical and paramedical services delivered during an episode of curative care. An episode of curative care is one in which the principal medical intent is to relieve symptoms of illness or injury, to reduce the severity of an illness or injury or to protect against exacerbation and/or complication of an illness and/or injury which could threaten life or normal function."

According to the manual the provision of services from laboratories and diagnostic imaging during an episode of in-patient care should be recorded under this item. These services are in the N-SHA recorded under HC.4.1 and the reason is that the hospitals show their costs on laboratory services and curative care respectively. It is not possible to identify the costs on laboratory services related to the treatment of own patients and services provided to other institutions or physicians. Since the total cost on laboratory and diagnostic imaging are recorded under item 4.1 the total costs related to the various services such as in-patient care and day care are underestimated.

HC.1.1 In-patient curative care
"In-patient curative care comprises medical and paramedical services delivered to in-patients during an episode of curative care for an admitted patient."

Overnight stays should be included according to the manual. During an overnight stay, in-patients leave the hospital or other institutions the day following the day of admission but usually not less than twelve hours after admission.

The source for this item is the hospital accounts. **As described in section 3.5 these accounts are structured in a two axis system which provides us adequate details for the ICHA-implementation**. All economic transactions (costs and income) are broken down by:

1. Type of service, such as curative care, diagnostic imaging, rehabilitative care etc.
2. Type of expenditure, like salaries and other production costs, investments, transfers by receiver such as private specialists etc.

Based on the detailed data we can distribute the expenditures on the different services (ICHA), and we can distinguish between what is provided by public hospitals and private hospitals. Households' out of pocket payments are also identified in the hospital accounts and coded as a separate product for later identification. To identify these expenditures within the NA framework to enable the SHA-calculations, the sum of current costs related to a specific type of service is defined as a product, given a specific product-code. The NA-product is when possible defined in line with the ICHA-

classification. E.g. public expenses on public provided in-hospital curative care are coded as 851161, whereas private expenses on the same service given the product code 851171. The similar service provided by a private hospital is included in product 851111. Subsequently these products are linked to the ICHA.

In combination with data on purpose the SHA-codes are decided. The data source for the purpose code in NA is the public accounts, hospital accounts and the Survey of Consumer Expenditure. The hospital accounts includes data both on the public expenses (when the government is responsible for the payment), and it also provides us with data on the hospitals income distributed by private households etc.

NA provides data for an episode of curative care within hospitals, but the mode of production is not defined. To separate the in-patient form out-patients and day-care services, other sources are used. The DRG-system and data from the refund for outpatient services in hospitals are used to distribute these services according to modes of production. The calculations are performed by first deducting the out-patient expenditures from the total (based on the reimbursements for outpatient services), and thereafter distributed on in-patient and day-patients by using the DRG-data. See chapter 3.5 for further details about the DRGs.

HC.1.2 Day cases of curative care

"Services of curative day care comprise medical and paramedical services delivered to day-care patients during an episode of curative care such as ambulatory surgery, dialysis, and oncological care.

This item includes: Ambulatory surgery day care, which is all elective invasive therapies provided, under general or local anaesthesia, to day-care patients whose post-surveillance and convalescence stay requires no overnight stay as an in-patient."

As described under HC.1.1 the hospital accounts provide expenditure data for both inpatient, day cases and out patient. The distribution of expenditures according to modes of production is calculated by using data from the reimbursement system from the health authorities to the providers, please see HC.1.1.

HC.1.3 Out-patient curative care

"Services of out-patient curative care comprise medical and paramedical services delivered to out-patients during an episode of curative care. Outpatient health care comprises mainly services delivered to out-patients by physicians in establishments of the ambulatory health care industry. Out-patients may also be treated in establishments of the hospital industry, for example in specialised out-patient wards, and in community or other integrated care facilities."

HC.1.3.1 Basic medical and diagnostic services

"This item comprises services of medical diagnosis and therapy that are common components of most medical encounters and that are provided by physicians to out-patients. These include routine examinations, medical assessments, prescription of pharmaceuticals, routine counselling of patients, dietary regime, injections and vaccination (only if not covered under public-health prevention programmes). They can be part of initial medical attention and consultation or of follow-up contacts. Routine administrative procedures like filling in and updating patients' records are usually an integral part of basic medical services."

Within this HC-group the home visits by general practitioners and primary care physicians should be excluded. These services of curative care are not possible to exclude in the N-SHA, due to lack of data. In addition, we suppose such home visits play an insignificant role in this context.

In Norway basic medical and diagnostic services are mainly provided by private physicians. The services are financed partly by the local government, and partly by social security fund and households' out of pocket payments. The expenditures for these services are easily identified within the accounts for local government (KOSTRA). The data from KOSTRA is reported to similar principles as the hospital accounts. The data for economic transactions are broken down by:

1. Type of function, such as basic medical and diagnostic services.
2. Type of expenditure, like salaries and other production costs, investments, transfers by recipients etc.

Based on these data the expenditures related to the basic medical and diagnostic services are identified. Together with the public accounts for the social security fund and the data on from the Survey of Consumer Expenditure, the NA-products in line with the need for ICHA-data are calculated. As an example, the provision of publicly provided services within this group is given the product 881185 when they are publicly financed, whereas the private consumption of these publicly provided services is classified as 851195.

HC.1.3.2 Out-patient dental care

"This item comprises dental medical services (including dental prosthesis) provided to out-patients by physicians. It includes the whole range of services performed usually by medical specialists of dental care in an out-patient setting such as tooth extraction, fitting of dental prosthesis and dental implants.

Note: dental prostheses are treated in the SHA as intermediate products to the production of services of dental care and thus are always included under expenditure on dental care."

Dental care provided by private and public providers to outpatients is included here. The sources are KOSTRA which provide data for own production and reimbursement to private producers for dental care, the social security fund and the Survey of Consumer Expenditure. These expenditures are through the NA system given specific products relevant for the subsequent calculation of SHA.

HC.1.3.3 All other specialised health care services

"This item comprises all specialised medical services provided to out-patients by physicians other than basic medical and diagnostic services and dental care. Included are mental health and substance abuse therapy and out-patient surgery."

In N-SHA this item includes services provided either by hospitals or by private specialists. These services are co-financed by the social security fund and the household's out-of-pocket payments. The main data sources are the hospital accounts, the public accounts and the Survey of Consumer Expenditures.

For calculation of the out-patient care provided in hospitals see HC.1.1.

The expenditures related to the private specialists are calculated by summing the reimbursements and the out-of-pocket payments. The reimbursements related to private specialists are specified in the public accounts if financed by the social security, and it is also identified in the hospital accounts. The inclusion within the Hospital Accounts is a consequence of the way the specialized health services are organized in Norway. From 2002 the responsibility for a range of specialised services was given the Regional Health Enterprises, implying that for certain services the funding is channelled through these enterprises. Over the last years these regions have been given responsibility for a range of services previously administrated by the social security fund. So is the case for co-payments for diagnostic imaging, laboratory services, patient transportation etc.

HC.1.3.9 All other out-patient curative care

"This item comprises all other miscellaneous medical and paramedical services provided to out-patients by physicians or paramedical practitioners. Included are services provided to outpatients by paramedical professionals such as chiropractors, occupational therapists, and audiologists. Included are also paramedical mental health and substance abuse therapy, and speech therapy. This item includes paramedical traditional health care services."

Here all paramedical services should be included. Expenditures related to chiropractors and physiotherapists are specified in KOSTRA and in the social security fund. These will together with information from the Survey of Consumer Expenditure identify the expenditures on these services, and thus the relevant products are compiled.

HC.1.4 Services of curative home care

"This item comprises all medical and paramedical curative services provided to patients at home. Note: this includes home visits to provide curative care, including diagnostic procedures by general practitioners, specialised services such as home dialysis, obstetric services, telematic services. When curative home care is provided in combination with social services such as homemaking or "meals on wheels", these services should be recorded separately as they are not part of expenditure on health in the definition of the SHA."

This item is relatively insignificant in the N-SHA. Included here are services administrated by the hospitals. Source for this item is a particular part of the hospital accounts.

HC.2 In-patient rehabilitative care

"This item comprises medical and paramedical services delivered to patients during an episode of rehabilitative care. Rehabilitative care comprises services where the emphasis lies on improving the functional levels of the persons served and where the functional limitations are either due to a recent event of illness or injury or of a recurrent nature (regression or progression). Included are services delivered to persons where the onset of disease or impairment to be treated occurred further in the past or has not been subject to prior rehabilitation services.

Note: rehabilitative care is generally more intensive than traditional nursing facility care and less than acute (curative) care. It requires frequent (daily to weekly) recurrent patient assessment and review of the clinical course and treatment plan for a limited (several days to several months) time period, until a condition is stabilised or a pre- determined treatment course is completed."

HC.2 is not separated into subcategories in the N-SHA. These services are provided in hospitals or in other types of convalescence or rehabilitation care facilities. The sources are the hospital accounts, which provide data on the services provided in hospitals. For the services provided in private and non-profit institutions the sources are hospital accounts together with KOSTRA and social security fund accounts.

HC.3 Services of long-term nursing care

"Long-term health care comprises ongoing health and nursing care given to in-patients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and activities of daily living. In-patient long-term care is provided in institutions or community facilities. Long-term care is typically a mix of medical (including nursing care) and social services. Only the former is recorded in the SHA under health expenditure."

The separation between health and social care has been a challenge in the context of health accounts. Studying the systems of long-term care and the related statistics has been one of the key issues on the international agenda of the SHA work over the last years. The focus on data on long-term nursing care expenditure and the interpretation of the guidelines is an ongoing discussion. The ongoing work on

“refinement and extension of the International Classification for the health accounts (ICHA)“ is expected to result in a revised functional classification. In the meantime an interim guidance is provided for the joint OECD, Eurostat and WHO SHA data collection (JHAQ).

LTC accounts for about 25 per cent of the current health expenditures in Norway, which is the highest share within the OECD-countries. The objective within the context of SHA is to ensure that the most relevant and extensive data available are utilized in the Norwegian health accounts.

The definition of long-term health care is in N-SHA defined according to the LTC guidelines used in the JHAQ. In theory the long term health care should only include activities of daily living (ADL) while instrumental activity of daily living (IADL) should be excluded:

- Long-term nursing care comprises a range of services required by persons with a reduced degree of functional capacity, either physical or cognitive, who are consequently dependent on help with basic activities of daily living (ADL), such as bathing, dressing, eating, getting in and out of bed or chair, moving, around and using the bathroom. This physical or mental disability can be the consequence of chronic illness, frailty in old age, mental retardation or other limitations of mental functioning and/or cognitive capacity. In addition, help with monitoring status of patients in order to avoid further worsening of ADL status.
- This central personal care component is frequently provided **in combination** with help with basic medical services such as help with wound dressing, pain management, medication, health monitoring, prevention, rehabilitation or services of palliative care. Long-term nursing and personal care services may be provided and remunerated as integrated services with lower-level care of home help or help with instrumental activities of daily living (IADL) more generally, such as help with activities of home making, meals etc., transport and social activities. (Note: expenditure on these services should be reported under HC.R.6.1).

Further the recommendations for JHAQ suggests that based on the dominant character f the particular program, experts should decide where to classify these expenditures and further, if a practise is already established it is proposed to not to change until the envisaged revision of the ICHA-HA.

Future work in the field of LTC, related to the examination of a new data source for estimating the long-term nursing care expenditures.
We will also examine a new data source; National statistics linked to individual needs for care (IPLOS). IPLOS is an information system, which provides a standardised set of information about any recipient of health or social care (both for in-patient and home care) from local authorities. All the information from local authorities is gathered in a national database, the IPLOS registry.

For each client receiving these services there is gathered information distributed among the following categories:
1. Personal information and housing conditions
2. Assessment by the relevant health professionals
3. Functional disability level
4. Diagnoses
5. Health and social services received from the local authorities
6. 24-hour care from non-local authority sources

This new data set will be published on an annual basis. The first pilot results were available from February 2008. However the first results covering 2006 could unfortunately not be used in the SHA calculations as the data were incomplete due to difficulties concerning the quality of the data submitted. Though almost 90 per cent of the municipalities delivered data for 2006, less than half of them were published. The lack of good quality resulted in a delayed and less comprehensive publishing of the IPLOS-figures, and thus the figures could not be utilised in the N-SHA calculations. For the coming years the quality will most likely be improved and the results implemented in N-SHA.

The objective will be to examine this new data source and if necessary revise the health accounts when the envisaged revision of the ICHA-HC is implemented.

HC.3.1 In-patient long-term nursing care

"This item comprises nursing care delivered to inpatients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and activities of daily living. In-patient long-term nursing care is provided in institutions or community facilities. Long-term care is typically a mix of medical and social services. Only health care services are recorded in the SHA under personal health care services.

Includes: long-term health care for dependent elderly patients. This includes respite care and care provided in homes for the aged by specially trained persons, where medical nursing care is an important component. This type of care can be provided in combination with social services that - should, however, be recorded separately, as they are not part of expenditure on health in the SHA. This includes hospice or palliative care (medical, paramedical and nursing care services to the terminally ill, including the counselling for their families). Hospice care is usually provided in nursing homes or similar specialised institutions. Also included is in-patient long-term nursing care for mental health and substance abuse patients where the care need is due to chronic or recurrent psychiatric conditions as defined by the list provided in ICD-9-CM, code 94."

In N-SHA HC 3.1 cover the health expenditures for the LTC-services provided in institutions for the elderly and disabled. These institutions are offering full-time services with personnel present 24 hours a day. Other institutions and municipal dwellings reserved for persons in need for help because of old age or handicap, without full time services are not included in HC.3.1. Some of these institutions are offering nursing services part of the day. These services are included in home-services HC.3.3.

In the Norwegian National Accounts (NNA) the data from the KOSTRA-system provide us with expenditure data specified for the LTC-services provided in institutions for the elderly and disabled. The total expenditures for these services are included in relevant products in NA. Even if the main component of these services is considered health, a mix of health and social care is also included. The health share to be included in HC.3.1 is annually calculated on the basis of the statistics "number of beds in institutions". The data is provided according to three main categories of such services. These are 'beds in nursing homes', 'beds in elderly people's homes' and 'other beds'. Only the first category – 'beds in nursing homes' - is included as health. These calculations are based on the assumption that the costs per bed are relatively similar, and the method is used in lack of more sufficient data. Further investigations regarding the calculation of the health care share will be carried out once IPLOS-data is available.

HC.3.2 Day cases of long-term nursing care

"This item comprises nursing care delivered to day cases of patients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and activities of daily living. Day-care nursing care is provided in institutions or community facilities. Includes: day cases of long-term nursing care for dependent elderly patients."

Day care nursing care is in Norway mainly provided to residents in private homes or in dwellings and institutions special adjusted for functionally disabled people without a full time service. These services are included in HC.3.3, home-care. This is due to the insignificant role of these services, and the lack of data to identify these expenses as they are reported together with the home-care services in KOSTRA.

HC.3.3 Long-term nursing care: home care

"This item comprises ongoing medical and paramedical (nursing) health care provided to patients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and activities of daily living. This type of home care can include social services such

as homemaking and "meals on wheels" which should, however, be recorded separately, as they are not part of expenditure on health."

As for HC.3.1 the KOSTRA-system provide data for the total health and social care for this home care service. Based on different indicators the health part that is included in HC.3 is calculated as a share of the total. Indicator for making the split between health and social care is based on information from the statistics on the number of recipients of home based services (see: http://www.ssb.no/english/subjects/03/02/helsetjko_en/tab-2005-12-02-06-en.html for further details concerning this statistics.

This statistics provide data on the users classified in three groups; those who are solely receiving nursing care, those receiving personal care services (mixed services/ADL) and users of home help (IADL). The latter is excluded in our figures reported in HC 3.3. This method provides quite rough estimates for the SHA-shares of the totals reported in NA for these services. Further examinations of the data and more research in this field are an ongoing process. A source of error could first of all be that the ADL part is overestimated, meaning that a part of this should be recorded under HC R.6.1. The ADL-part accounts for more than 55 per cent of HC.3.3. We will continue the further research and if necessary revise these figures when the envisaged revision of the ICHA-HC is implemented. Until then we have continued the established practice of calculating this HC-group as recommended in the JHAQ. See HC 3.

HC.4 Ancillary services to health care
"This item comprises a variety of services, mainly performed by paramedical or medical technical personnel with or without the direct supervision of a medical doctor, such as laboratory, diagnosis imaging and patient transport."

HC.4.1 Clinical laboratory
"This item covers the following services: urine, physical and chemical tests, blood chemistry, automated blood chemistry profiles, haematology, immunology, faeces, microbiologic cultures, microscopic examination, specialised cytology and tissue pathology, all other miscellaneous laboratory tests."

HC.4.1 and HC.4.2 are reported together in the N-SHA. See HC.4.2.

HC.4.2 Diagnostic imaging
"This item comprises diagnostic imaging services provided to out-patients.

Note: Diagnostic imaging comprises the following items described in the ICD-9-CM procedure component: 87 Diagnostic radiology, 88 other diagnostic radiology and related techniques. The corresponding sub-headings given in the ICProcess-PC (IC-Process-PC, 1986, Section 3) are: Plain X-ray, bone; Soft tissue imaging, plain (excluding nuclear scanning, nuclear magnetic resonance, ultrasound); Contrast X-rays or photoimaging; Computerised tomography and nuclear magnetic imaging; Nuclear scanning; diagnostic ultrasound; All other miscellaneous diagnostic imaging (arteriography using contrast material, angiocardiography, phlebography, thermography, bone mineral density studies)."

HC.4.1 and HC.4.2 are reported together in the N-SHA. The reason is that these services are jointly collected in the sources. The main sources for these expenses as for HC.1.3.3 is the hospital accounts, together with the social security fund. The hospital accounts provide detailed data for the services provided as they are in charge of the public provided services and responsible for co-funding of the private provided. The hospital accounts also identify the households' out-of-pocket payments.

In N-SHA we are not yet able to separate these services according to modes of production, hence the total costs related to diagnostic imaging and laboratory services are included HC.4.1-4.2. The reason

for not allocating these costs to the relevant range of services is that we are unable to identify the costs on laboratory services related to the treatment of own patients and services provided to other institutions or physicians.

HC.4.3 Patient transport and emergency rescue

"This item comprises transportation in a specially-equipped surface vehicle or in a designated air ambulance to and from facilities for the purposes of receiving medical and surgical care. It also includes transportation in conventional vehicles, such as taxi, when the latter is authorised and the costs are reimbursed to the patient (e.g. for patients undergoing renal dialysis or chemotherapy).

Includes: emergency transport services of public fire rescue departments or defence that operate on a regular basis for civilian emergency services (not only for catastrophe medicine)."

The Regional Health Enterprises (RHE) are responsible for the provision of these services. The hospitals are either providing these services, or funding the private providers. Some of the services included here are co-funded by the households' out-of-pocket payments. The main sources are the hospital accounts and the public accounts. The health accounts provide details sufficient for the ICHA-classification based on the detailed NA-products.

HC.5 Medical goods dispensed to out-patients

"This item comprises medical goods dispensed to out-patients and the services connected with dispensing, such as retail trade, fitting, maintaining, and renting of medical goods and appliances. Included are services of public pharmacies, opticians, sanitary shops, and other specialised or nonspecialised retail traders including mail ordering and teleshopping.

Note: the group of goods covered comprises essentially the products listed in the Classification of Individual Consumption by Purpose (COICOP, United Nations, 1998b) under 06.1, Medical products, appliances and equipment (see Annex A.6 to this manual).

This group covers medicaments, prostheses, medical appliances and equipment and other health related products provided to individuals, either with or without a prescription, usually from dispensing chemists, pharmacists or medical equipment suppliers and intended for consumption or use by a single individual or household outside a health facility or institution.

With COICOP being a one-dimensional classification, not primarily designed for the purposes of health accounting, a different regrouping was chosen for the proposed ICHA-HC. Renting and repair of therapeutic appliances and equipment is reported under the corresponding categories of goods. Also included is the service of dispensing medical goods, fitting of prostheses and services like eye tests, in those cases where these services are performed by specially trained retail traders and not by medical professions.

Following COICOP recommendations, the following items are excluded: protective goggles, belts and supports for sport; veterinary products; sun-glasses not fitted with corrective lenses; medicinal soaps. The COICOP classifies all the medical products listed above as non-durables, whereas in several National Health Accounts, "Durable medical goods" are distinguished from consumable or disposable products.

Excludes: pharmaceuticals, prostheses, and other medical and health-related goods supplied to inpatients and day-care patients or products delivered to out-patients as part of treatment provided within the facilities of ambulatory care"

HC.5.1 Pharmaceuticals and other medical non-durables

"This item comprises pharmaceuticals such as medicinal preparations, branded and generic medicines, drugs, patent medicines, serums and vaccines, vitamins and minerals and oral contraceptives."

HC.5.1.1 Prescribed medicines
"Prescribed medicines are medicines, exclusively sold to customers with a medical voucher, irrespective of whether it is covered by public or private funding and include branded and generic products. In the SHA, this includes the full price with a breakdown for cost-sharing."

In the reported figures the over-the-counter medicines have so far not been separated form prescribed medicines. A new register, the Norwegian Prescription Database (NorPD), will be implemented from 2006 and onwards. The Database monitors drugs that are dispensed by prescription in Norway. Drugs that are purchased without prescription (OTC drugs) are not included. This register was established on 1st January 2004.

The total expenditures on medicines, prescribed and over-the-counter, are based on several sources and identified as a separate product in the NA. The sources for the supply are structural business statistics for the retail sale industries combined with trade and manufacturing statistics. For the demand the final use are calculated on the basis of the Survey of Consumer Expenditure, and data for the public expenditures in kind from the Social Security Fund.

Other sources taken into account for balancing the supply and use of pharmaceuticals are the data for the intermediate consumption in the hospitals, available from the hospital accounts. These expenses are not included under HC5, and thus deducted from the total supply when HC.5 is calculated. These expenses are included in the services provided by hospitals and other providers using medicines as input, and included under the related HC-groups respectively.

HC.5.1.2 Over-the-counter medicines
"Over-the-counter medicines (OTC medicines) are classified as private households' pharmaceutical expenditure of non-prescription medicines.

Note: non-prescription medicines are often called over-the-counter (OTC). They may be included in physician prescriptions, though not reimbursed"

HC.5.1.2 is reported together and described under HC.5.1.1.

HC.5.1.3 Other medical non-durables
"This item comprises a wide range of medical nondurables such as bandages, elastic stockings, incontinence articles, condoms and other mechanical contraceptive devices."

The expenditure under his item is restricted to a few specific products in the NA. All these non-durable products are classified into three CPA-products. Based on information from the various sources on expenditure, such as government accounts, the products are mapped to the relevant HC-group. The source for final use is the Survey of Consumer Expenditure, and data for the public expenditures in kind is from the Social Security Fund. The sources for the supply are structural business statistics for the retail sale industries combined with trade and manufacturing statistics

HC.5.2 Therapeutic appliances and other medical durables
"This item comprises a wide range of medical durable goods such as glasses, hearing aids and other medical devices."

HC.5.2 is calculated by examining the relevant products in NA, and defining the products to be included. For each of the subcategories under HC.5.2 specific NA-products are classified according to the HC-groups. The different subcategories are compiled by identifying and mapping these products

within the NA-system. The same sources are used for the three following HC-groups and for that reason not repeated under each item.

The sources for calculating the use of these specific products are the Survey of Consumer Expenditure, and data for the public expenditures in kind from the social security fund.

HC.5.2.1 Glasses and other vision products
"This item comprises corrective eye-glasses and contact lenses as well as the corresponding cleansing fluid and the fitting by opticians."

See HC.5.2.

HC.5.2.2 Orthopaedic appliances & other prosthetics
"This item comprises orthopaedic appliances and other prosthetics: orthopaedic shoes, artificial limbs and other prosthetic devices, orthopaedic braces and supports, surgical belts, trusses and supports, neck braces.

Excludes: implants (HC.1, Curative care)."

See HC.5.2.

HC.5.2.3 Hearing aids
"This item comprises all kinds of removable hearing aids (including cleaning, adjustment and batteries). Excludes: audiological diagnosis and treatment by physicians (HC.1.3.3); implants (HC.1, Curative care); audiological training (HC.1.3.9)."

See HC.5.2.

HC.5.2.4 Medico-technical devices, incl. wheelchairs
"This item comprises a variety of medico-technical devices such as wheelchairs (powered and unpowered) and invalid carriages."
HC.5.2.4 is reported together with HC.5.2.9. For sources see HC.5.2.

HC.5.2.9 All other miscellaneous medical durables
"This item comprises a wide variety of miscellaneous durable medical products not elsewhere classified such as blood pressure instruments."

HC.5.2.4 is reported together with HC.5.2.9. For sources see HC.5.2.

HC.6. Prevention and public health services
"Prevention and public health services comprise services designed to enhance the health status of the population as distinct from the curative services, which repair health dysfunction. Typical services are vaccination campaigns and programmes. Note: prevention and public health functions included in the ICHA-HC do not cover all fields of public health in the broadest sense of a cross-functional common concern for health matters and public actions. Some of these broadly defined public health functions, such as emergency plans and environmental protection, are not part of expenditure on health. The most important of these public health functions are classified under various health-related functions in the ICHA-HC. A cross-classification of public health functions according to a broad WHO list of Essential public health functions [EPHFs, Bettcher (1998)] with ICHA-HC and COFOG (United Nations, 1998b) is provided in Annex 9.3 of this chapter."

HC.6.1 Maternal and child health; family planning and counselling

"Maternal and child health covers a wide range of health care services such as genetic counselling and prevention of specific congenital abnormalities, prenatal and postnatal medical attention, baby health care, pre-school and school child health, and vaccinations.

Note: an illustration of the range of activities covered under this item is provided by the cross-classification with ICPM presented in Table 9.2 in the SHA-manual."

HC.6.1 and HC.6.2 are reported together under this item due to the sources in NA. These services are provided by public outpatient care centres operated by the municipalities. Hence the source is KOSTRA, which define these to HC-group as one KOSTRA-'function'. As a consequence these services are included in only one product in NA, and we do not have adequate data to separate into the two related HC-groups. Included here are a range of services like school health services, postnatal medical attention, child health and the related vaccination programmes. Regarding prenatal counselling some minor parts of these services are also provided by physicians and specialists and hence included under HC.1.3.1 and HC.1.3.3.

HC.6.2 School health services

"This item comprises a variety of services of health education and screening (for example, by dentists), disease prevention, and the promotion of healthy living conditions and lifestyles provided in school. This includes basic medical treatment if provided as an integral part of the public health function, such as dental treatment.

Includes: interventions against smoking, alcohol and substance abuse."

Included in HC.6.1.

HC.6.3 Prevention of communicable diseases

"This item comprises compulsory reporting and notification of certain communicable diseases and epidemiological enquiries into communicable disease; efforts to trace possible contacts and origin of disease; prevention of tuberculosis and tuberculosis control (including systematic screening of high risk groups); immunisation/vaccination programmes (compulsory and voluntary); vaccination under maternity and child health care.

Excludes: vaccination for occupational health (HC.6.5); vaccination for travel and tourism on the patients' own initiative (HC.1.3.1)."

Reported under HC.6.4.

HC.6.4 Prevention of non-communicable disease

"This item comprises public health services of health education, disease prevention, and the promotion of healthy living conditions and lifestyles such as services provided by centres for disease surveillance and control; and programmes for the avoidance of risks incurred and the improvement of the health status of nations even when not specifically directed towards communicable diseases.

Includes: interventions against smoking, alcohol and substance abuse such as anti-smoking campaigns; activities of community workers; services provided by self-help groups; general health education and health information of the public; health education campaigns; campaigns in favour of healthier life-styles, safe sex, etc.; information exchanges: e.g. alcoholism, drug addiction.

Excludes: public health environmental surveillance and public information on environmental conditions.

Note: health promotion and disease prevention presents a difficult boundary issue for which no international classification exists. The boundaries drawn in National Health Accounts are usually

linked to the identification of specific programmes of screening and health check-ups with a legally or administratively defined, limited coverage reimbursed separately under public or private health programmes. Examples are screening of blood pressure, diabetes, and certain forms of cancer, dental health, and "health check-ups". Prevention is, in many instances, a reason for encounter in primary care and not a separate procedure. This means that the same procedure (for example, many diagnostic procedures) can be either performed as preventive measures for screening purposes or as diagnostic procedures in the case of an acute health problem. The criterion for including services under this item is whether prevention is provided as a social programme (public or private, including occupational health) or is requested on the patient's own initiative."

The costs related to a range of entities are included under this item. These services are public provided by the general government and the municipalities, and so the sources are both KOSTRA and the public accounts.

HC.6.5 Occupational health care

"Occupational health care comprises a wide variety of health services such as surveillance of employee health (routine medical check-ups) and therapeutic care (including emergency health care services) on or off-business premises (including government and non-profit institutions serving households). This excludes, however, remuneration-in-kind of health services and goods that constitute household actual final consumption rather than intermediate consumption of business.

Note: occupational health care corresponds to class 05.2: Health in the Classification of the Outlays of Producers by Purpose (United Nations, 1998b) applied to intermediate consumption of producers. Occupational health care is an intermediate consumption within the business sector. Occupational health care is only part of a broader range of activities that aim at improving the working environment in its relation to health. Occupational health activities to improve ergonomy, safety and health and environmental protection at the workplace, accident prevention, etc., should be distinguished from occupational health care. They are not to be recorded under health care activities in the SHA."

Occupational health cares provided by medical health centres are included in the enterprises as intermediate consumption. In these cases, as is the most common situation in Norway, the expenses on occupational health care are included in HC.6.5. At present sources for the range of industries in NA are used.

However this item constitutes a challenge and further analysis within the context of SHA and NA is needed. In the Norwegian SHA we are not able to identify the occupational health care provided and used within the same enterprise as is the case if health personnel are employed directly by the enterprice. If this is the case the cost related to these services will be excluded in the health expenditure.

HC.6.9 All other miscellaneous public health services

"This item comprises a variety of miscellaneous public health services, such as operation and administration of blood and organ banks, and the preparation and dissemination of information on public health matters not classified elsewhere.

Includes: public health environmental surveillance and public information on environmental conditions."

HC.7 Health administration and health insurance

"Health administration and health insurance are activities of private insurers and central and local authorities, and social security. Included are the planning, management, regulation, and collection of funds and handling of claims of the delivery system."

HC.7.1 General government administration of health
This item is not broken down into subcategories. The main components are administration in the four regional health enterprises and the Ministry of Health and Social affairs, but also some other administrative expenses such as Norwegian Board of health Supervision and Norwegian Medicines Agency are included. The sources are the hospital accounts and the central government fiscal account.

HC.7.2 Health administration and health insurance: private
In most cases these unreported figures are negligible or presumed insignificant, and therefore have not yet been given high priority, i.e. private insurance. More data is needed and further research into the field will be done in the coming years.

HC.R.1 Capital formation of health care provider institutions
"This item comprises gross capital formation of domestic health care provider institutions excluding those listed under HP.4, Retail sale and other providers of medical goods."

Included here is the gross capital formation within the health care provider industries. The calculations are based on the data from NA according to the definitions in the HP-classifications.

4.2 Compilation of health care financing agents (ICHA-HF)

When the total expenditures for health had been identified and recorded according to the boundaries given by the functional classification, the next step was to classify according to the HF- and HP-classification. The purpose of the cross-classification to HF is to identify the units that incur the expenditure and hence finance the services specified in the HC-groups.

These calculations are quite straight forward once the total health expenditures are compiled. The mapping is basically about tracking the financing source of every **NR- product** included in SHA. These calculations are not described as detailed as the preceding HC-mapping.

In Norway, health care goods and services are financed both by private and public sources. Central government, local government and the social security fund are the public sources, while the private sources mainly consist of household out-of-pocket payments. The classification of health care financing in Norway[2] is listed in the table below:

HF.1.1.1	Central government
HF.1.1.2, 1.1.3	Local government
HF.1.2	Social security funds
HF.2.3	Private household out-of-pocket expenditure
HF.2.5	Corporations
HF.3	Rest of the world

HF.1.1 General government excluding social security funds
According to the manual this item comprises all institutional units of central, state or local government. Included are non-market non-profit institutions that are controlled and mainly financed by government units.

HF.1.1.1 Central government
The most important component of this group is the expenditures administrated and channelled through the 4 Regional Health Enterprises (RHE). In Norway these regional units, funded by the state, are responsible for the provision of a range of services within the area of specialised health care services. Hospitals and other specialist health care services are organised as independent health trusts under the

[2] The N-SHA does not data for all categories listed in the manual. Please see annex B, table B2 for further details.

four regional health authorities. These regional health authorities have ownership responsibility for the health trusts in their corresponding region, and they are also responsible for the distribution of health care services in the region.

All expenditures related to these services are recorded in the Hospital accounts. The types of expenditure are, as stated in chapter 3.5, distributed according to type of services. One may establish from the accounts whether these services are provided by public hospitals, or if it is funding of private provided services. The main expenses included in HF.1.1.1 are related to services provided by public hospitals, though reimbursements to the private sector are also included.

Another item included in HF.1.1.1 is transfers from the central government to the non-profit health provider institutions. Several of these institutions are included in the regional health plans, and the financing is channelled through the four regional enterprises.

The general government accounts for the largest share of the public funding with around 40 per cent of the total health spending in 2006. In-patient and day cases of curative care make up the highest share of central government expenditure. Day cases contributed an increasing share during the period 1997-2006.

HF.1.1.2, 1.1.3 Local government

This item comprises all municipalities and counties in Norway. The main source is the KOSTRA system providing expenditures by type of transaction. One may establish from the accounts whether the expenses are related to the local government's own production, or reimbursements for services provided by other units like private practitioners etc.

Since 2002, when central government assumed responsibility for the specialist health service from the local government, the main component of local government health expenditure has been related to long-term nursing care. These services accounts for 24 per cent of the total health spending in 2006. Other components are the basic medical services and the child- and school-health services.

HF.1.2 Social security funds

The Social security fund is funding the public part of the medical goods dispensed to out-patients. The fund is also co-funding the out-patient services provided by private practitioners. The main source is the central government fiscal accounts.

The social security fund accounts for about 20 per cent of public health spending in 2006. During the recent years some of their responsibilities have been transferred to central government, e.g. patient transportation from 2004, co-funding of rehabilitative care, laboratories and diagnostic imaging.

HF.2. Private sector

Private sector comprises two components in the Norwegian SHA, HF.2.3 and HF.2.5. The remaining categories suggested in the manual are not provided due to lack of data and to their insignificant role within the health system. Regarding the funding of the non-profit institutions see item HF.1.1.1.

HF.2.3 Private household out-of-pocket expenditure

The private health funding is mainly out of pocket expenditure for out-patient curative care – especially dental care. The other main components are pharmaceuticals and long-term nursing care. These expenditures are identified in the NA-system, which in turn is based on a range of sources. The most important ones in addition to the the Survey of Consumer Expenditure are information from the KOSTRA system and Hospital accounts on payments from the households regarding health services.

HF.2.5 Corporations

This sector comprises all corporations whose principal activity is the production of market goods or services. The compilation is done within the NA-system, and the expenditures included are the health

products reported as intermediate consumption in NA. These figures are calculated on the basis of the range of sources for the various industries in NA.

HF.3 Rest of the world

This item comprises institutional units that are resident abroad. These expenditures are identified within the NA-framework. This item is recorded as export and thus not included in the Norwegian health expenditures. Hence, these expenditures should be recorded as health expenses within the resident country of the one purchasing these services.

4.3 Compilation of providers of health care goods and services

A classification of health care industries serves the purpose of arranging country specific institutions into common internationally applicable categories. The provider classification comprises both primary and secondary producers of health care services. The classification of health care provider industries is listed in the table below:

HP.1.1	General hospitals
HP.1.2	Mental health and substance abuse hospitals
HP.1.3	Speciality hospitals
HP.2.1	Nursing care facilities
HP.3.1	Offices of physicians
HP.3.2	Offices of dentists
HP.3.3	Offices of other health practitioners
HP.3.4	Out-patient care centres
HP.3.5	Medical and diagnostic laboratories
HP.3.6	Providers of home health care services
HP.3.9	Other providers of ambulatory health care services
HP.4	Retail sale and other providers of medical goods
HP.5, 6	Health administration etc.
HP.7	All other industries as secondary producers of health care
HP.9	Rest of the world

When the total health expenditures had been calculated according to the functional boundaries of SHA, the total health expenditures define a set of NA-products to be included. The last step for the ICHA classification was then to map these expenses to the relevant HP-groups. This was done by connecting these products to the specific provider industry within the NA-system. In order to classify the health expenditures, these products are designed in a way such as sufficient data for the HP-classification is maintained. The mapping is then easily carried out.

The health expenditure is calculated at purchasers' prices. Consequently the total expenditures distributed according to the provider industries are also measured at purchasers' prices.

The ICHA-HP provider classification is a refined and modified version of the health-relevant parts of the International Standard Industrial Classification, ISIC, Rev. 3. This classification is in line with the activity classification used in the Norwegian National Accounts, which is an elaboration of the EU-standard NACE Rev.1 (Nomenclature générale des Activités economiques dans les Communautés Européenes).

The HP-classification is described in table B3 in annex A. The table also presents a short description of the units included, and the main data sources. To sum up; the main data-sources for the HP-groups are:

- HP.1 – HP.3: The hospital accounts and KOSTRA. The hospital accounts (covering both private and public hospitals) provide data on the local units and together with the functional classification of the expenditures within these accounts the HP-calculations are carried out. For HP.3.9 the structural business statistics is the main source and the health share are calculated according to the functional approach.
- HP.4 and HP.7: The value of the production is calculated on the basis of the structural business statistics, and so is the retail sale within this category. For HP. 4, retail sale and other providers of medical goods the expenditures are calculated in one HP-group, and not distributed according to margins and producers prices.
- HP.5 –HP.6: The hospital accounts and the central government fiscal account.
- HP.9: The total health expenditures for these specific products are calculated on data for the public expenditures in kind are from the Social Security Fund. The source for the supply of these products is the structural business statistics for the retail sale industries combined with trade and manufacturing statistics.

It is important to stress that only the goods and services with a health purpose are included in the health expenditure, i.e. delimited by the functional classifications HC.1 to HC.7 and R.1.

5. Further development of the system

Concerning the comprehensiveness of the Norwegian SHA, there are still a few matters to be discussed further. This is mainly due to lack of sufficient data for separating health expenditures into SHA categories. One of the main issues is the borderline between health and social care in the field of long term care. This is a matter of further discussion in Norway as for other countries implementing this system. This topic will be further investigated when the new revised manual will be implemented in 2009-2010. See HC.3 for more details.

Data from the patient register will be taken into account, most likely from the final accounts for 2006. This data source will enable the expenditures for over-the-counter medicines to be separated form prescribed medicines.

Another item in need for further analysis within the context of SHA and NA is the occupational health care. At present sources for the range of industries in NA are used. The expenditures included are those reported as intermediate consumption in NA, which implies that the provision of these services within enterprises not providing health care goods and services are excluded. Further investigations within this field are required.

Annex A The main components of N-SHA

Some of the ICHA categories are not reported in the present SHA-tables. This is for some categories due to lack of data, for others the category may not be applicable. Generally priority has been given to the categories chosen due to their importance in the context of the Norwegian Health system, together with the availability of data (and the estimated costs for providing extensive data).

Table B1

ICHA-HC	SHA Manual	Description of content, sources and methods in the Norwegian SHA
HC.1	**Services of curative care**	
HC.1.1	In-patient curative care	The most important sources are public accounts, statistics from public and private hospitals (specialist nursing homes, convalescence and rehabilitation institutions and hospitals). Furthermore, all relevant data from the National Accounts supply and use- tables are reorganised and utilised in the health accounts.
HC.1.2	Day cases of curative care	
HC.1.3	Out-patient curative care	
HC.1.3.1	Basic medical and diagnostic services	These services are provided by public or private physicians to outpatient. The services are financed by the local government, social security fund and households. The sources are KOSTRA which provide data for own production and reimbursement to private producers, the social security fund and the Survey of Consumer Expenditure.
HC.1.3.2	Out-patient dental care	Dental care provided by private and public providers to outpatients. The sources are KOSTRA which provide data for own production and reimbursement to private producers, the social security fund and the Survey of Consumer Expenditure.
HC.1.3.3	All other specialised health care	This item includes services provided by specialists, either as outpatients in hospitals or by private specialists.
HC.1.3.9	All other out-patient curative care	Here all paramedical services should be included. The chiropractors and physiotherapists are included. The sources are KOSTRA, the social security fund and the Survey of consumer expenditure.
HC.1.4	Services of curative home care	These services is mainly provided by ambulatory team.
HC.2	**Services of rehabilitative care**	Not separated into subcategories. This item includes services provided where the emphasis lies on improving the functional levels after a recent event of illness or injury, or of a recurrent nature (regression or progression). These services are provided in hospitals or in other types of convalescence or rehabilitation care facilities. The sources are the hospital accounts, which provide data on the services provided in hospitals. These accounts together with KOSTRA and social security fund provide data for the reimbursements to private institutions for providing these specific services.
HC.2.1	In-patient rehabilitative care	
HC.2.2	Day cases of rehabilitative care	
HC.2.3	Out-patient rehabilitative care	
HC.2.4	Services of rehabilitative home care	
HC.3	**Services of long-term nursing care**	
HC.3.1	In-patient long-term nursing care	Data from local government (KOSTRA). This has been a full scale reporting system since 2002. Figures are reported by modes of production according to SHA, but the data are not adequate concerning the functional approach of IADL versus ADL. Further calculations are performed to estimate HC3.1.
HC.3.2	Day cases of long-term nursing care	Does not exist within our health system, the services of day-care is included in social care.

HC.3.3	Long-term nursing care: home care	The services of IADL are only included when provided together with ADL-services. The inclusion in HC.3.3 is based on the dominant character of the service provided. (The calculations will be revised when the envisaged revision of ICHA_HC is completed. Until then we report according to the established national practise as suggested in the explanatory notes.
HC.4	**Ancillary services to health care**	
HC.4.1	Clinical laboratory	HC.4.1 and HC.4.2 are not separated in the N-SHA. Until the 2004-report all laboratory and diagnostic imaging are reported here, regardless the mode of production. This is due to lack of sources for separating between inpatient, day-care and out-patient care. As you can see from the table of HCxHP a great share of these services are provided in hospitals. Though, hospitals also provide these services to outpatients. From 2003 the part of HC. 4.3 provided in hospitals are separated and reported under HP 1.1, whereas reported under HP. 3.9 in the 2002-tables and the previous years (treated as local KAUs). The sources are Hospital accounts, the social security fund and the Survey of Consumer Expenditure.
HC.4.2	Diagnostic imaging	Reported under HC.4.1.
HC.4.3	Patient transport and emergency rescue	
HC.4.9	All other miscellaneous ancillary services	
HC.5	**Medical goods dispensed to out-patients**	
HC.5.1	Pharmaceutical and other medical non-durables	Structural business statistics for the retail sale industries combined with trade and manufacturing statistics. Another source is the Survey of Consumer Expenditure, and data for other use, i.e. hospitals.
HC.5.1.1	Prescribed medicines	This sub- category is not yet calculated. A new source, "reseptregisteret" will be taken into account during the 2005-compilation.
HC.5.1.2	Over-the-counter medicines	This sub- category is not yet calculated. A new source, "reseptregisteret" will be taken into account during the 2005-compilation.
HC.5.1.3	Other medical non-durables	This sub- category is not yet calculated.
HC.5.2	Therapeutic appliances and other medical durables	
HC.5.2.1	Glasses and other vision products	Public accounts and other data from the social security fund.
HC.5.2.2	Orthopaedic appliances and other prosthetics	Public accounts and other data from the social security fund.
HC.5.2.3	Hearing aids	Public accounts and other data from the social security fund.
HC.5.2.4	Medico-technical devices, including wheelchairs	Public accounts and other data from the social security fund.
HC.5.2.9	All other miscellaneous medical durables	Category not applicable
HC.6	**Prevention and public health services**	
HC.6.1	Maternal and child health; family planning and counselling	Includes HC:6.1 and HC.6.2. Source is KOSTRA that specifies these services in one specific expenditure group.
HC.6.2	School health services	
HC.6.3	Prevention of communicable diseases	
HC.6.4	Prevention of non-communicable diseases	Includes HC:6.3 and HC.6.4. Source is KOSTRA and public accounts.

HC.6.5	Occupational health care	This item is one of the challenging parts that need further investigation. At present, sources for the range of industries in NA are used. The expenditures included are those reported as intermediate consumption in NA, meaning that the provision of these services within enterprises not included in health (i.e. other industries than health) are not included.
HC.6.9	All other miscellaneous public health services	
HC.7	**Health administration and health insurance**	This item is not broken down into subcategories. The main component is the administration within the regional health enterprises, and The Ministry of Health and Care Services. Sources are hospital and public accounts.
HC.7.1	General government administration of health	
HC.7.1.1	General government administration of health (except social security)	
HC.7.1.2	Admin., operation & support activities of soc. Sec. funds	
HC.7.2	Health administration and health insurance: private	
HC.7.2.1	Health administration and health insurance: social insurance	
HC.7.2.2	Health administration and health insurance: other private	
HC. 9	Not specified by kind	Not in use in the Norwegian SHA

Table B2

ICHA-HF	SHA Manual	Deviations from ICHA currently found in the N-SHA compilation
HF.1	General government	
HF.1.1	General government (excl. social security) = Territorial government	
HF.1.1.1	Central government	Not separated into subcategories
HF.1.1.1.1	Ministry of Health	
HF.1.1.1.2	Other Ministries	
HF.1.1.2	State / provincial government	Reported together with 1.1.3
HF.1.1.3	Local / municipal government	Reported together with 1.1.2
HF.1.2	Social security funds	
HF.2	Private sector	
HF.2.1	Private social insurance	This category is presumed insignificant, and therefore not yet been given high priority. In the future more data is needed and more research into the field will be done in the coming years.
HF.2.2	Private insurance (other than social insurance)	Category not applicable /Negligible, see HF.2.1.
HF.2.1-HF.2.2	Private insurance	Category not applicable /Negligible, see HF.2.1.
HF.2.3	Private households out-of-pocket exp.	Not separated into subcategories
HF.2.3.1	Out-of-pocket excluding cost-sharing	
HF.2.3.2-HF.2.3.5	Cost-sharing: central government; state / provincial government; Local / municipal government; Social security funds	
HF.2.3.6-HF.2.3.7	Cost-sharing: Private insurance	
HF.2.3.9	All other cost-sharing	
HF.2.4	Non-profit institutions serving households	Included in HF.1
HF.2.5	Corporations (other than health insurance)	
HF.3	Rest of the world	

Table B3

Health Expenditure by Provider		
ICHA-HP	**SHA Manual**	**Description of content, sources and methods in the Norwegian SHA**
HP.1	Hospitals	The most important sources are public accounts, statistics from public and private hospitals (specialist nursing homes, convalescence and rehabilitation institutions and hospitals). Furthermore, all relevant data from the National Accounts supply and use- tables are reorganised and utilised in the health accounts.
HP.1.1	General hospitals	
HP.1.2	Mental health and substance abuse hospitals	
HP.1.3	Speciality (other then mental health and substance abuse hospitals)	
HP.2	Nursing and residential care facilities	Not separated in to sub-categories
HP.2.1	Nursing care facilities	
HP.2.2	Residential mental retardation, mental health and substance abuse facilities	
HP.2.3	Community care facilities for the elderly	
HP.2.9	All other residential care facilities	
HP.3	Providers of ambulatory health care	
HP.3.1	Offices of physicians	The main sources are Kostra and the hospital accounts for estimating the expenditures and connecting the services to the relevant HP-groups
HP.3.2	Offices of dentists	The main source is Kostra and the social security fund.

HP.3.3	Offices of other health practitioners	The main source is Kostra and the social security fund.
HP.3.4	Out-patient care centres	The main source is Kostra, the hospital accounts and the social security fund.
HP.3.5	Medical and diagnostic laboratories	The main source are Hospital accounts.From 2003 the part of HC. 4.3 provided in hospitals are separated and reported under HP 1.1, whereas reported under HP. 3.9 in the 2002-tables and the previous years (treated as local KAUs).
HP.3.6	Providers of home health care services	Hospital accounts and Kostra
HP.3.9	Other providers of ambulatory health care	Not separated into sub-categories. The sources are Hospital accounts and the structural buisness survey.
HP.3.9.1	Ambulance services	
HP.3.9.2	Blood and organ banks	
HP.3.9.9	Providers of all other amb. health care serv.	
HP.4	Retail sale & other providers of medical goods	Not separated into sub-categories.The value of the production is calculated on the basis of the structural business statistics, and so is the retail sale within this category
HP.4.1	Dispensing chemists = Pharmacies	
HP.4.2	Retail sale and other suppliers of optical glasses and other vision products	
HP.4.3	Retail sale and other suppliers of hearing aids	
HP.4.4-HP.4.9	Retail sale/other suppliers of medical appliances; All other misc. sale/other suppliers of pharma. & medical goods	
HP.5	Provision & admin. of public health programs	Reported together with HP.6. The sources are the hospital accounts and the central government fiscal account.
HP.6	General health administration and insurance	Reported together with HP.5.
HP.6.1	Government administration of health	
HP.6.2	Social security funds	
HP.6.3	Other social insurance	
HP.6.4	Other (private) insurance	
HP.6.3-4	Providers of private insurance	
HP.6.9	All other providers of health administration	
HP.7	Other industries (rest of the economy)	Not separated into sub-categories. the supply and use of these specific products are calculated on data from the structural business statistics for the retail sale industries combined with trade and manufacturing statistics.
HP.7.1	Est. as providers of occupational health care services	
HP.7.2	Private households as providers of home care	
HP.7.9	All other ind. as secondary producers of health care	
HP.9	Rest of the world	The balance of payments
Memorandum items:		
M.1(HP)	Providers of health related goods and services	Not reported

Annex B Some figures from the Norwegian SHA.

The per capita total health expenditure is relatively high in Norway compared to other OECD countries, with a per capita spending more than 50 per cent higher than the OECD average. The Norwegian health share of GDP is x percentage points higher than the OECD average. Over the period 1997-2006 the ratio varied between 8.4 and 10 per cent, with the highest share in 2003. The relatively large variations over time reflect fluctuations in the price of oil. In years with a relatively high oil price the GDP ratio will decline compared to more normal years.

In this annex some of the results from the SHA-calculations are presented. For updated tables and more information see the tables on Statistics Norway's website, on: http://www.ssb.no/helsesat_en/

Health expenditure, key figures. 1997-2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005*	2006*
Total expenditure on health. NOK million	**94 008**	**105 500**	**115 711**	**124 728**	**135 266**	**150 029**	**159 572**	**168 237**	**176 031**	**186 396**
HC R.1 Capital formation of health care provider institutions. NOK million	5 635	7 480	8 945	8 496	9 778	9 528	10 262	10 956	11 411	11 780
Total current expenditure on health. NOK million	***88 373***	***98 021***	***106 766***	***116 232***	***125 488***	***140 501***	***149 310***	***157 281***	***164 620***	***174 616***
Total expenditure on health in current prices per capita	21 340	23 807	25 933	27 773	29 968	33 059	34 957	36 638	38 075	39 993
Total expenditure on health financed by private sources. NOK million	17 568	18 791	20 184	21 844	22 242	24 791	25 997	27 661	28 908	30 393
Total expenditure on health financed by public sources. NOK million	76440	86709	95527	102884	113024	125238	133575	140576	147123	156003
Total expenditure on health at constant NOK in 2000. NOK million	108 391	114 248	121 512	124 728	128 933	139 294	143 087	147 107	150 807	153 518
Total expenditure on health at constant NOK in 2000. Percentage change in volume from the previous year		5,4	6,4	2,6	3,4	8,0	2,7	2,8	2,5	1,8
Total expenditure on health at constant NOK in 2000 per capita	24 606	25 781	27 233	27 773	28 564	30 694	31 345	32 036	32 619	32 939
Total expenditure on health at constant 2000-prices per capita. Percentage change in volume from the previous year		4,8	5,6	2,0	2,8	7,5	2,1	2,2	1,8	1,0
Total expenditure on healt in current prices in per cent of GDP	8,4	9,3	9,3	8,4	8,8	9,8	10	9,7	9,1	8,7
Total expenditure on health in current prices in per cent of GDP Mainland Norway	10,2	10,6	11,1	11,2	11,5	12,3	12,5	12,4	12,2	11,9
Share of total expenditure on health funded by the public sector. Per cent	81,312	82,189	82,556	82,487	83,557	83,476	83,708	83,558	83,578	83,694
Share og total expenditure on health funded by private sector. Per cent	18,7	17,8	17,4	17,5	16,4	16,5	16,3	16,4	16,4	16,3
Public share of health spending in per cent of general government total expenditure	15,795	16,679	17,407	17,676	17,935	18,582	18,431	18,916	19,152	19,087

#Preliminary figures.

Annex C Acronyms and abbreviations

CPA	Statistical Classification of Products by Activity in the European Community
DRG	Diagnosis Related Groups
EU	European Union
ICHA	International Classification for Health Accounts
ISIC Rev.3	International Standard Industrial Classification
JHAQ	Joint Health Accounts Questionnaire
KOSTRA	Municipality-State-Reporting
NA	National Accounts
NACE Rev.1	Nomenclature générale des Activités economiques dans les Communautés Européenes
N-SHA	Norwegian Health Accounts
OECD	Organisation for Economic Co-operation and Development
RHE	Regional Health Enterprises
SHA	System of Health Accounts
WHO	World Health Organization