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# SHA-Based Health Accounts in the Asia/Pacific Region
# : **Chinese Taipei** 1998

Jui-fen Rachel Lu

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# SHA-BASED HEALTH ACCOUNTS IN THE ASIA/PACIFIC REGION : CHINESE TAIPEI 1998

**Jui-fen Rachel Lu**

*JEL Classification : I10, H51*

# THE JOINT OECD/KOREA RCHSP SHA TECHNICAL PAPERS

This series is designed to make available to a wider readership Health and Social Policy studies with a focus on the Asia/Pacific region. The papers are generally available only in English, and principal authors are named.



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## ABSTRACT

National Health Accounts (NHA) is a set of accounts which has been developed for describing the expenditure flows in both the public and private components of the health sector. It is important data for health policy decision-making and a tool for comparing health system performance and characteristics across nations. NHA provides consistent methods, concepts, category definitions and comparable data compilation techniques that enable meaningful international comparisons in health resources allocation. The analytical framework of the current NHA is based largely on the OECD's work that has been accepted by the WHO and World Bank as the international standard. It employs a "source and uses" matrix and identifies the "flow of funds". Three aspects of the flow of funds are included in the analysis: sources of funds, financing intermediary and uses of funds.

Data sources for government and social insurance include comprehensive budget and settlement documents from all levels of government, NHI statistics, industry census and written request forms. For private sector spending, the researchers rely on Directorate General of Budget, Accounting and statistics (DGBAS) household survey on income and expenditures and private insurance reports. In addition, data from several surveys on out-of-pocket expenditures were also collected, analyzed and validated. Adjustments were then made to the DGBAS household survey data to enhance the accuracy and completeness of the estimates.

This paper presents national health expenditures using the NHA approach for Chinese Taipei. A detailed description of the methodology and its institutional arrangements are presented along with the implications of the empirical results.

The results show that the estimated 1998 national health care expenditures are NT$ 516,183 million (US$ 17,206 million), about NT$ 24,030 (US$ 801) per capita, representing 6.02% of GDP. With the National Health Insurance (NHI) scheme in place since 1995, the NHI has been the single most important funding agent, accounting for 52.1% of total health care financing, with private household direct payment being responsible for 28.9% of total financing. In terms of uses of funds by providers, hospitals and providers of ambulatory care were the two major providers, accounting for 51.5% and 30.5% of the current health expenditures, respectively.



*Keywords:* National Health Accounts, system of health accounts, sources of funding, financing intermediary, uses of funds.

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# INTRODUCTION

1. Growing health expenditure is a world-wide phenomenon that essentially every government has experienced over the past decade. How much a nation is spending on the health sector is a question often asked. Understanding the amount of resources devoted to health is even more crucial when a nation is facing lagging economy growth. Standardized methods to estimate economic growth have been well established for decades, but joint efforts by the international community to compile national health expenditure are a relatively recent phenomenon. Recently, international efforts, in particular, by the World Health Organisation (WHO), the World Bank and the Organisation for Economic Cooperation and Development (OECD), have focused on developing an internationally accepted standard framework for National Health Accounts (NHA).

2. NHA is a set of accounts which has been developed for describing the expenditure flows in both the public and private components of the health sector. It is important data for health policy decision-making and is a tool for comparing health system performance and characteristics across nations. The OECD has systematically estimated and compiled national health expenditures for its member states for several decades. The NHA methodology is being modified and updated continually by the OECD (OECD, 2000).

3. Recognizing the importance of having its health expenditure data presented in a format which facilitated international comparisons, the government decided to recompile its 1998 national health expenditures based on the OECD methodology (OECD, 1998). This paper is set forth to documenting the development of the NHA system in Chinese Taipei. The methodology and validation process of the NHA estimates, in particular, the private sector estimates, are largely based on a research report by Hsiao and Lu (2000) and a paper by Lu and Hsiao (2001).

4. Recently, a three-year research project has been undertaken in 2007, with an aim to update the NHE estimates based on the most recent version of OECD SHA methodology and the next set of SHA-based health expenditure estimates of 2005-6 is expected to be released in 2008.

# NATIONAL HEALTH ACCOUNTS

## Overview

5. Chinese Taipei's 22 million people live in a densely populated area of 36,000 sq. km, the size of the Netherlands. During the 1980's and 1990's, Chinese Taipei experienced strong and persistent growth with the economy growing at an average rate of 7.64 % between 1981 and 1993, with average income per capita reaching US$ 11,950 by 1997. The health status of the people as measured by common indicators is closer to those of developed countries than developing countries: life expectancy at birth is 74.9 years and the infant mortality rate is 6.5 per 1000 live births. These relatively good health outcomes have been achieved with only modest spending on health care, with 6.0% of GDP spent on health in 1998 (Lu and Hsiao, 2001).

6. Chinese Taipei implemented a National Health Insurance (NHI) program in 1995, offering universal coverage and comprehensive care for all of its residents. The NHI benefits include ambulatory care as well as in-patient services. Visits to licensed traditional medicine practitioners and dentists are also covered, but only to a limited extent. This social safety net greatly reduced health related financial risks for many individuals and families. NHI revenue relies on payroll-based premiums with the government subsidizing the poor, veterans, and farmers.

7. Chinese Taipei has a market-oriented, pluralistic, health care delivery system, reflecting its free-enterprise economy (Lu and Hsiao, 2003). Hospital ownership is mixed where public hospitals account for only 35% of all beds (Department of Health, 2003). Sixty-three percent of allopathic physicians are salaried employees of hospitals with the remainder being fee-for-service private practitioners. Chinese medicine practitioners, who are licensed medical professionals (although not all have received formal structured education), mainly practice in privately-owned clinics. Over the years, hospitals have developed large out-patient departments and affiliated clinics for primary care in order to maintain in-patient volume and compete with private practitioners who operate free-standing clinics with beds (Lu and Hsieh, 2003).

8. Table 1 presents key socioeconomic indicators as well as the system characteristics of the universal health insurance program.

**Table 1 The socio-demographic and universal health system characteristics of Chinese Taipei, 1998**

| **Socio-demographic characteristics** | **Chinese Taipei** |
|---|---|
| Population size | 21.8m |
| GDP per capita (US$) | 12,769 |
| NHE as % of GDP | 6.02 |
| Health exp per capita (US$) | 801 |
| Infant mortality rate (per 1,000 live births) | 6.5 |
| Life expectancy | 74.9 |
| **Universal Health Insurance program** | |
| Year of implementation | 1995 |
| Coverage schemes before universal social insurance was introduced | Mainly employment-based insurance programs and fully subsidized low-income household insurance |
| NHI Administration | Single-payer (Bureau of National Health Insurance) |
| Current % of population coverage rate (soc ins) | 99.9 |
| The uninsured | Overseas nationals, fugitives, aboriginal people migrating into cities, marginal poor (illiterate) |
| **I. Financing** | |
| Premium base | Wage income |
| Current contribution rate (% of wage income) | 4.55 |
| Financing mix in 2000 | Government: 8.84%<br>Social Insurance: 51.78%<br>Household direct payment: 30.15%<br>Private insurance: 8.9%<br>Other private: 0.33% |
| Risk pooling | Common risk pool |
| Government subsidies | Government pays for all the operating expenses of NHI; subsidize 10% of the premium for workers; subsidize premium fully for the low-income households, veterans and military service personnel |
| Total government outlay as a % total NHI revenues (including subsidies to premium contribution, but not as an employer) | 28.3% |

**Table 1 The socio-demographic and universal health system characteristics of Chinese Taipei, 1998**

| **II. Delivery** | |
|---|---|
| Hospital beds<br>(private: public %) | Mixed ownership<br>65:35 |
| Ratio of in-patient expenditure to out-patient expenditure (under social insurance program) | 34:66 |
| Uniform fee schedule | Yes |
| Payment mechanism | Mainly fee-for-service(FFS)<br>Capitation for remote island experimental sites; case payment method (prototype of DRG) for 50 selected treatment procedures; quality-based FFS is experimented on selected disease types; separate global budget for Chinese medicine, dental services, primary care clinics, and hospitals. |
| Co-payment | Yes<br>$5-8 for out-patient visits (depending upon type of institutions);<br>10% for in-patient services |
| Cap on co-payment | Yes<br>Only on in-patient services, cap on co-payment for each admission (year) is set at 6% (10%) of the previous year's per capita national income. |

Sources: Health and Vital Statistics, Department of Health, the Executive Yuan, 1998;
Lu J.R. and W.C. Hsiao, 2001. "Development of Taiwan's national health account", Taiwan Economic Review, 29(4): 547-576;
Department of Investment Services, Ministry of Economic Affairs http://investintaiwan.nat.gov.tw/en/.

# INSTITUTIONAL ARRANGEMENTS

9. The Office of Statistics in the Department of Health (DOH) is the official agency which is primarily responsible for compiling and estimating the national health expenditures for Chinese Taipei and has published health data since 1991. Prior to 1991, the annual Health and Vital Statistics publication only covered expenditures from the government sector. The methodology adopted has not conformed to international standards and consequently has not allowed for meaningful international comparisons, DOH health data has served as a major source of information for health service research. To increase the comparability of its data with those produced by the international community, DOH contracted Professors William Hsiao of Harvard University and J Rachel Lu of Chang Gung University in 1999 for a one-year research project to establish a NHA system for Chinese Taipei based on the OECD's methodology.

10. To facilitate the data collection process, a task force composed of representatives from the Directorate-General of Budget, Accounting and Statistics (DGBAS, the responsible agency for compiling and releasing annual household survey data on family income and expenditure), health departments of local governments and the Bureau of National Health Insurance, was formed. Specific problems were tackled and a consensus was reached in the three task force meetings which were chaired by the Vice Minister of Health. The project also engaged expert consultant, Dr. Ravi Rannan-Eliya to validate the private sector estimates and review the final estimates. The research project was completed in the summer of 2000. Along with a final report which contains the estimated figures, all the documentation for the methodology, technical notes and worksheets were transferred to DOH at the completion of the project. The annual NHE estimates are to be updated and maintained by the DOH's Office of Statistics based on the newly developed NHA methodology.

# STRUCTURE OF HEALTH EXPENDITURES

11. The analytical framework of the current NHA is based largely on the OECD's methodology that has been accepted by the WHO and World Bank as the international standard. It employs a "sources and uses" matrix and identifies the "flow of funds". Three aspects of the flow of funds are included in the analysis: sources of funds, financing intermediary and uses of funds.

12. Sources of funds include central and local government health budgets and health expenditures from public and private enterprises, charity organizations and households.

13. Financing agents act as fund managers, both collecting funds and using the funds to pay for services. The main financing intermediaries are government agencies such as the Department of Health (DOH), the Ministry of Education (MOE), the Ministry of Defense (MOD), the Bureau of National Health Insurance (BNHI) and the health departments of local governments etc. In addition, commercial insurers and household out-of-pocket expenditures on health are also included as financing intermediaries in the private sector.

14. Two aspects of the uses of funds are presented: the flow of funds from financing agents to providers is first examined, and then the distribution of funds by functions is estimated. The medical institutions are classified according to whether their ownership is public or private. The definitions for providers and functions are consistent with those adopted by the OECD.

**Comparative results in NHE between SHA-based estimates and DOH statistics**

15. Table 2 compares the SHA-based NHE and DOH statistics on sources of funds for 1998. The total differences in estimates between the two sets of statistics was NT$55.0 billion, with the estimates for the private sector representing 73% of the total difference, the estimates of the Government sector representing 19% and the insurance sector making up the remaining 8% difference. The estimates for private insurance premiums and household direct payments on health represented two major sources of variation in the private sector estimates: Firstly DOH statistics did not include estimates of private health insurance premiums whilst NHA included NT$ 29.4 billon spent by households on private health insurance (Annex 1). Second, DOH estimates for household direct payments on health were based solely on the

survey results from the DGBAS[1] Household Survey on Income and Expenditures (with minor adjustments), whereas the NHA project validated the estimates using 13 sets of survey data and came up with an estimate of NT$ 152.4 billion (Annex 1).

**Table 2 Sources of Funds: Comparison of DOH Health Statistics and National Health Accounts, 1998**

Unit: million NT dollars

| | DOH | | NHA | | Difference | |
|---|---|---|---|---|---|---|
| | amount | % | amount | % | amount | % |
| Governmental sector | **36,287** | **7.69** | **40,422** | **7.83** | **4,135** | **9.31** |
| Health administration agencies | 14,577 | 3.09 | 6,384 | 1.24 | -8,193 | -18.44 |
| Current account | 12,121 | 2.57 | 4,533 | 0.88 | -7,588 | -17.08 |
| Capital account | 2,456 | 0.52 | 1,851 | 0.35 | -605 | -1.36 |
| Medical care institutions | 21,248 | 4.50 | 32,298 | 6.13 | 11,050 | 24.87 |
| Current account | 19,639 | 4.16 | 27,325 | 5.19 | 7,686 | 17.30 |
| Capital account | 1,609 | 0.34 | 4,973 | 0.94 | 3,364 | 7.57 |
| Other government sector | 461 | 0.10 | 1,740 | 0.33 | 1,279 | 2.88 |
| Insurance sector | **269,120** | **57.05** | **269,416** | **52.19** | **296** | **0.67** |
| Bureau national health insurance medical benefits | 263,565 | 55.87 | 263,861 | 51.12 | 296 | 0.67 |
| Administration cost | 5,555 | 1.18 | 5,555 | 1.05 | 0 | 0.00 |
| Private sector | **166,348** | **35.26** | **206,345** | **39.17** | **39,997** | **90.03** |
| Household | 147,824 | 31.33 | 181,812 | 34.52 | 33,988 | 76.50 |
| Non-profit organization | 633 | 0.13 | 577 | 0.11 | -56 | -0.13 |
| Capital investment | 17,891 | 3.79 | 23,177 | 4.40 | 5,286 | 11.90 |
| Automobile liability insurance | — | — | 779 | 0.15 | 779 | 1.75 |
| Grand total | **471,755** | **100.00** | **516,183** | **100.00** | **44,428** | **100.00** |

Note：
For the ease of comparison, this table is prepared based on the format adopted by DOH; household payout included premiums paid for commercial insurance programs.

[1] The Directorate General of Budget, Accounting and Statistics (DGBAS) of Executive Yuan, a cabinet-level office, handles most of the duties of the nation’s Comptroller’s Office and Census Bureau combined. It has been in existence for over 70 years and has been reorganized numerous times since its inception.

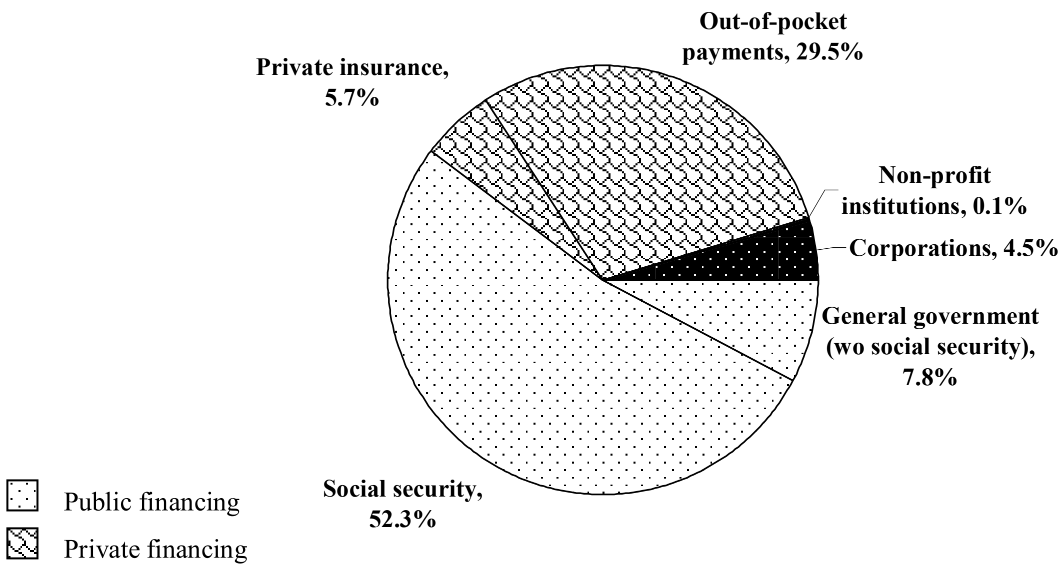
16. Differences in the estimates for the government and insurance sectors reflected partly timing - the NHA project was conducted at a later point of time and hence used updated figures for government and insurance sectors. Further, the NHA included a wider range of agencies in the government sector than the DOH statistics. The NHA also excluded cash benefits paid out by the government agencies which were included in the DOH statistics.

**Total health expenditure by financing agents (Figure 1, Table A1)**

17. The estimated 1998 national health care expenditure was NT$ 516,183 million (US$ 17,206 million), which accounted for 6.02% of GDP, about NT$ 24,030 (US$ 801) per capita.

18. As shown in Figure 1, public spending was the major source of funding due to the implementation of NHI which accounted for 52.3% of the total health care financing. The second largest source of funding was private household out-of-pocket payment (29.5%) with general government (7.8%), private insurance (5.7%), corporations (4.5%) and not-profit institutions (0.1%) providing the remaining sources of health financing.

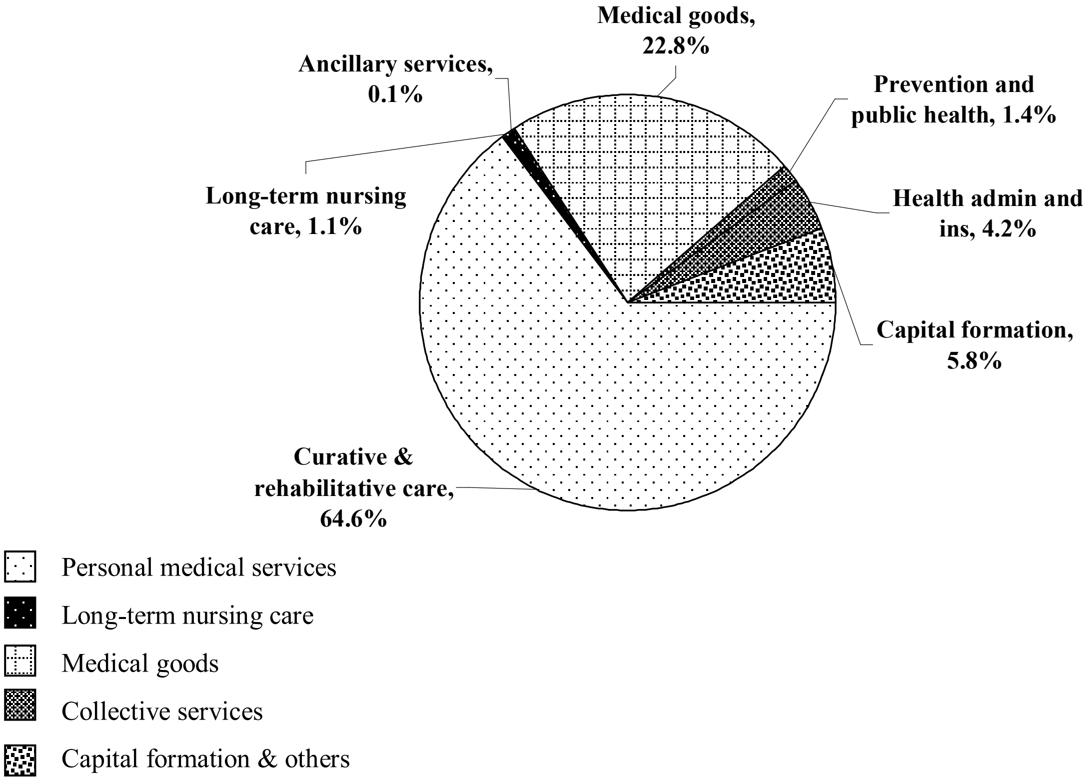
Figure 1 **Total health expenditure by financing agents**
(Total health expenditure = 100)
**Chinese Taipei, 1998**



**Total health expenditure by function (Figure 2, Table A2)**

19. In 1998, curative and rehabilitative care (personal medical care services) was the major category of total health spending (64.6%), of which services provided in the out-patient setting accounted for 40.9% and the reminder 23.7% was for in-patient services. The second largest category was medical goods dispensed to out-patients which accounted for 22.8%, followed by capital formation of health care provider institutions, 5.8%, and health administration and insurance, 4.2%. Compared to other functions, Chinese Taipei devoted only a small share of 1.4% of its total spending on prevention and public health. As long-term care is largely provided by the informal sector and funded by private means in Chinese Taipei, the NHA figures (1.1%) represented a lower bound estimate.

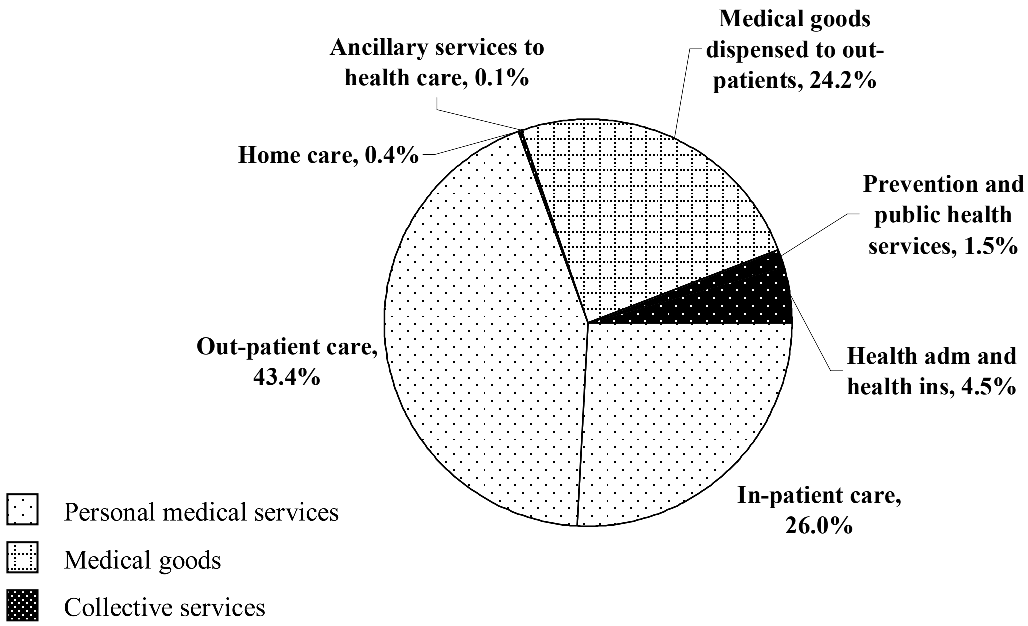
Figure 2 **Total health expenditure by function**
(Total health expenditure = 100)
**Chinese Taipei, 1998**



## Current health expenditure by mode of production (Figure 3, Table A3)

20. Personal medical services, comprising out-patient care (43.4%), in-patient care (26.0%) and home care (0.4%), is the major mode of production. Medical goods dispensed to out-patients (24.2%), mainly composed of pharmaceuticals and other medical non-durables represented the second largest mode of production. The remaining categories are health administration and health insurance (4.5%), prevention and public health services (1.5%) and ancillary services to health care (0.1%).

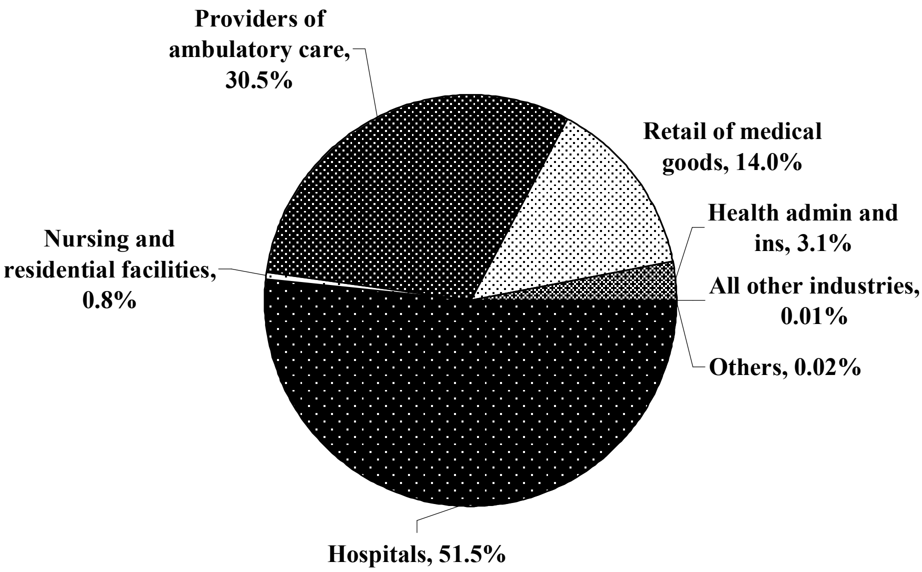
Figure 3 **Current health expenditure by mode of production**
(Current health expenditure = 100)
**Chinese Taipei, 1998**



**Current health expenditure by provider (Table A4, Figure 4)**

21. Reflecting the fact that most of the hospitals operate large out-patient departments, the largest share of current expenditures was spent on hospitals. Providers of ambulatory care represented the second largest providers, accounting for 30.5% of the current health expenditures. The third largest provider was retail sale and other providers of medical goods (14.0%) with other providers being general health administration and insurance (3.1%), and other industries (0.01%). With nursing and residential facilities, as mentioned above, being mainly provided by the informal sector and funded by private means, this category accounted for a small share of 0.8% of current expenditures.

Figure 4 **Current health expenditure by provider**
(Current health expenditure = 100)
**Chinese Taipei, 1998**



**Current health expenditure by function and provider (SHA Tables 2.1-2.3)**

22. In 1998, Chinese Taipei spent NT$ 126,174 million (26.0% of the current health expenditures) on in-patient care. Hospitals accounted for 95.8% of this expenditure, with the remainder being nursing and residential care facilities (3.0%), and offices of physicians (1.2%).

23. Expenditure on out-patient care was NT$ 211,013 million (43.4% of current health expenditures) with providers of ambulatory health care (56.8%) accounting for the bulk of this and hospitals (43.2%) the remainder.

24. Expenditure on medical goods dispensed to out-patients was NT$ 117,827 million (24.2% of current health expenditures) which was distributed between retail sale and other providers of medical goods (49.6%), hospitals (31.2%), providers of ambulatory health care (17.5%) and general health administration and insurance (1.6%).

25. Of the NT$ 1,731 million expenditure on home care (0.4% of current health expenditures), 53.6% was incurred at hospitals and 46.4% was allocated to providers of ambulatory health care.

**Current health expenditure by provider and financing agent (SHA Tables 3.1-3.3)**

*Spending structure of the financing agents*

26. Chinese Taipei implemented NHI in 1995, and since then, NHI has been the single most important financing agent for funding expenditure on health. In 1998, NHI accounted for 87.0% (251,689 million) of public health expenditure of NT$ 289,217 million, and 51.8% of current health expenditure (NT$ 486,182 million). The NHI program devoted most of its funding to hospitals (61.3%) and providers of ambulatory care (36%).

27. General government (excluding the NHI program) accounted for 13.0% of public health expenditure and 7.7% of current health expenditure, with 68.5% of its funding going to hospitals, 20.9% of its funding covering general health administration and insurance, 10.4% to providers of ambulatory care and 0.2% to nursing and residential care facilities.

28. The private household direct payments constituted the bulk of private sector

expenditure (75.4% of NT$196,965 million) and 30.6% of the total 40.5% of current health expenditure. The private household direct payments covered a wide range of providers, of which 38.6% was devoted to retail sale and other providers of medical goods, 36.2% to providers of ambulatory health care and 21.4% to hospitals.

29. Private insurance was relatively small making up 13.9% of private sector expenditure, and 5.6% of current health expenditure. Private insurance provided funding for hospitals (64.7%) and retail sale and other providers of medical goods (35.3%).

30. The only other significant source of funding was corporations (other than health insurance) which provided 4.2% of current health insurance. This funding was provided entirely to hospitals.

*How different providers are financed*

31. In 1998, NT$ 250,574 million expenditure (51.5% of the current health expenditure) was allocated to hospitals, of which 61.6% of the expenditure was funded by the NHI program and 12.7% by private household out-of-pocket payments. The rest was mainly financed by general government other than NHI (10.3%) corporations other than health insurance (8.2%) and private insurance (7.0%)

32. Expenditure distributed to providers of ambulatory health care was NT$ 148,327 million (30.5% of the current health expenditure) which was financed by the NHI program (61.1%), private households (36.3%), and non-NHI general government (2.6%).

**Current health expenditure by function and financing agent (SHA Tables 4.1-4.3)**

*Functional structure of spending by financing agents*

33. Although both public and private sectors allocated most of their resources to personal health services, the financing agents demonstrated different distributional patterns. NHI and the private household direct payment spent more on out-patient services, with 52.1% and 37.8% respectively of each agent’s total funding directed at this function, while government, private insurance, nonprofit institutions and corporations spent more on in-patient services, with 33.2%, 31.4%, 48.8% and 48.8% respectively.

34. In 1998, NHI spent NT$ 207,255 million on personal health care services, of which 52.1% and 29.9% were spent on out-patient and in-patient services, respectively. The rest of the funding went to medical goods dispensed to out-patients (14.5%), health administration and health insurance (2.3%) and prevention and public health services (0.9%).

35. Of the non-NHI general government sector's NT$ 37,528 million expenditure, 33.2% was allocated to in-patient services, 26% to out-patient services and the rest of the service functions were health administration (16.9%), prevention and public health services (12.0%) and medical goods dispensed to out-patients (11.5%).

36. Total current expenditure borne by private insurance was NT$ 27,289 million, of which 31.4% was for in-patient services, 23.5% for out-patient services, 28.6% for medical goods dispensed to out-patients, and the rest was mainly spent on health administration (16.0%).

37. Private household direct payments totaled NT$148,546 million, and was mainly directed at two major functions, personal health services (51.3%, of which 37.8% was on out-patient services, 13.2% on in-patient services and 0.3% on home care services) and medical goods dispensed to out-patients (44.5%). The remainder was expended on health administration and health insurance (3.5%), ancillary services to health care (0.4%) and prevention and public health services (0.2%).

*How the different functions are financed*

38. Personal health care service was mainly funded by NHI (61.2%) and private household out-of-pocket payment (22.5%), with the rest shared by government (6.6%), corporations (5.2%) and nonprofit institutions (0.1%). The NHI and private household out-of-pocket payments represented the two predominant funding agents across all the different service functions of personal health care services.

39. Private household direct payment (56.2%) and NHI (31.0%) were the two major funding agents for medical goods dispensed to out-patients (of which 85.9% was for pharmaceuticals and other medical non-durables) and the rest was shared among private insurance (6.6%), non-NHI general government revenues (3.7%) and other private funds (2.6%).

# CONCLUSIONS

**Summary of findings**

40. In 1998, Chinese Taipei devoted NT$ 516,183 million (US$ 17,206 million) to health care, which accounted for 6.02% of GDP, averaging NT$ 24,030 (US$ 801) per capita.

41. With the implementation of NHI in 1995, NHI became the major source of funding (51.8% of the total expenditures on health – statistics in this section relate to 1998) for health care providers, 61.6% of the total funding for hospitals and 61.1% of funding for providers of ambulatory health care. Private household direct payments still played a significant role in financing health care accounting for 30.6% of the total health expenditures, of which 38.6% was allocated to retail sale and other providers of medical goods, 36.2% to providers of ambulatory health care, 21.4% to hospitals and 2.5% to nursing and residential care facilities. Despite its modest contribution to funding total health expenditure (5.6%), private health insurance warrants attention as it is likely to increase significantly in the future. Private health insurance funded hospitals (64.7% of total funds) with the remaining 35.3% funding sales of medical goods (other than goods sold through dispensing chemists).

42. As long-term care was mainly provided by the informal sector and funded by private means, estimates were difficult to derive accurately, and therefore the figures in NHA should be considered as a lower-bound estimate.

**Lessons learnt**

43. When the NHA project was initiated, several approaches were used to facilitate the successful execution of the project. Its experience with these different approaches offers valuable lessons which may be helpful for other countries in future iterations of their SHA-based accounts.

44. First, the importance of strong leadership and coordination needs to be emphasized. When the project first commenced, an inter-departmental/agency task force composed of representatives from the Directorate-General of Budget, Accounting and Statistics (DGBAS, the responsible agent for compiling and releasing annual household survey data on family income and expenditure), health departments of local governments and the Bureau of National Health Insurance, was formed to facilitate the data collection process. In addition,

the Vice Minister of Health assumed an active role in ensuring all the responsible agencies produced relevant data for the establishment of NHA system. His chairing of three task force meetings which tackled specific problems associated with the project ensured consensus was reached and enhanced the success of the project.

45. Second, collaboration with academics is very worthwhile. When DOH decided to recompile its health accounts to conform to international standards, recognizing its lack of capacity, DOH contracted Professors William Hsiao of Harvard University and J Rachel Lu of Chang Gung University for a one-year research project to establish a NHA system based on OECD standards. This project also engaged expert consultant, Dr. Ravi Rannan-Eliya to validate the private sector estimates and review the final estimates. Given DOH's expertise and experience in data collection and production of annual statistics on health expenditures, joint collaboration with academics was one way to strengthen DOH's resource input. The consultants were able to validate the estimates for the private sector, and successfully facilitated DOH's health accounts being prepared to international standards.

*The direction of future work*

46. Notwithstanding the effort in this paper to validate private sector estimates, future work is required to produce valid estimates of private insurance payouts and household direct payments. Despite the important role of NHI in funding health expenditures, the growing share taken up by private insurance and the significant portion borne by private household direct payments deserves special attention in the future.

47. As Chinese Taipei mainly relies on private means and informal support to fund long-term care, there has been a lack of reliable estimates for this statistic. Given Chinese Taipei has a rapidly ageing population and an increasing demand for elderly care, a routine data collection process should be instituted and estimates be validated for long-term care.

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# ANNEX 1: METHODOLOGY

**Data sources**

48. The data required for compiling the health expenditures statistics were collected from five major sources (Table 1.1): official government statistics, information from DOH, written requests sent to various government agencies for specific items on health, DGBAS, household surveys and published industry statistics. The public sector health expenditures largely rely on the detailed office budgets in various government agencies which DOH Office of Statistics has collected routinely. However, the Harvard NHA research project has thoroughly reviewed the health-related items by the non-DOH government agencies and has identified a few government agencies with health budgets which were not included in the DOH compilation. Also, cash benefits for the elderly and the disabled, which are not directly related to health, were excluded from the estimates. In the process of developing the NHA estimates for household out-of-pocket expenditures on health, data from several pieces of academic research were used to validate the currently available public survey figures. This will be described more fully in the validation section.

**Table 1.1 Major data sources for compiling the Chinese Taipei NHA estimates**

| Sector \ Sources | Official Govt. statistics | 1998-1999 DOH data | Request | DGBAS | Household Surveys | Industry Statistics |
|---|---|---|---|---|---|---|
| Governmental Sector<br>Ministry of Health | 1998 Central Govt settlement 1999 Central Govt budgets | | | | | |
| Ministry of Education | | | ✓ | | | |
| Ministry of National Defense | | ✓ | | | | |
| Ministry of Justice | | ✓ | | | | |
| Veterans Administration | | ✓ | | | | |
| National Health Insurance | 1998 National Health Insurance Annual Statistical Report | | ✓ | | | |
| Health Dept, Provincial Govt | | ✓ | | | | |
| Health Dept, Taipei City Govt | | | ✓ | | | |
| Health Dept, Kaohsiung City Govt | | ✓ | | | | |
| Health Dept, 21 County & City Govts | | ✓ | | | | |
| Ministry of Internal Affairs | | ✓ | | | | |
| Council of Labor Affairs | 1998 Institute of Occupational Safety & Health settlement 1999 Institute of Occupational Safety & Health budgets | | | | | |
| National Science Council | | | ✓ | | | |
| Environmental Protection Adm | | | ✓ | | | |
| Private Sector<br>Private Health Insurance | | | | | | Annual Report of Life Insurance |
| Households' Out-of-Pocket Payment | | | | Household Survey on Income and Expenditures | ✓ | |
| Non-Profit Organization | | | | ✓ | | |
| Private Hospital Capital Investment | | | | ✓ | | |

**Validation and adjustments made to the private sector estimates**

49. The validation performed focuses on the household out-of -pocket expenditures on health care and private health insurance.

***Household out-of –pocket expenditures on health care***

50. In compiling Chinese Taipei’s NHA, a major challenge was to produce an accurate estimation of household out-of-pocket spending on health services. The project’s aim was to develop a method that could be used to estimate out-of-pocket spending consistently and accurately over several years. In developing a method, the current estimation method was first evaluated by assessing whether the data could produce a reasonable and accurate estimate. At the same time, new methods were developed and other data sources were identified to ascertain which approach and data sources might produce the most accurate estimates.

51. Chinese Taipei has relied on the annual Household Income and Expenditure Survey conducted by DGBAS to estimate out-of-pocket spending. Across the world, household surveys of expenditures have typically underestimated household spending. Respondents to household surveys understate expenditures due to memory lapse and recall bias. For these reasons, any estimate of household spending based on household survey data must be adjusted to compensate for this underestimation.

52. In order to validate the DGBAS survey results and develop adjustments with some confidence, extensive studies were conducted to examine data from other household surveys of health expenditures and the results were compared with DGBAS figures. In the process, the most reliable available data for estimating out-of-pocket spending were identified.

Analysis of household surveys

53. In order to validate the accuracy of the household survey results, the household spending on health services was disaggregated into two components: utilization rates and unit price. This method of analysis was adopted because Chinese Taipei has two sources of reliable utilization rates: hospital admission rates and visits to Western medical practitioners obtained from the NHI claim records, and DOH annual health statistics on hospital admission rates reported by all hospitals. The survey results can be validated with these more reliable

data. Unfortunately, NHI and DOH records do not give the prices paid out-of-pocket by patients. Also the NHI utilization rates for visits to Chinese medical clinics and dental visits are not very reliable because the NHI does not cover all of these services.

54. The NHI data was considered to be the most reliable information base and was used to evaluate the accuracy of utilization rates reported in the DOH annual health statistics, obtained from administrative reports. Whenever possible, the results derived from the surveys were compared with those from the NHI and DOH statistical data files. Using comparative analyses, the validity of various sources of household survey data could be assessed and reasonable adjustments could be made to the DGBAS estimates.

55. With the assistance of DOH, twelve data sets were obtained for the validity tests - DGBAS for 1991, 1992, 1996, 1998; DOH survey (1992 and 1996); Chiang (1994); Li (1994, 1995); and Cheng (1995, 1996, 1997). All these data sets were processed to compile, analyze and compare the out-of-pocket information gathered by each survey. As utilization rates are a key to estimating overall household expenditures, expenditures were disaggregated into utilization rates by service categories. The unit prices and total expenditures paid directly by patients for each type of service were also analyzed. Table 1.2 summarizes the data collected by the household surveys analyzed by this project.

**Table 1.2 Overview of household surveys analyzed**

| Survey | Year | Coverage | Sample size | Recall period | |
|---|---|---|---|---|---|
| | | | | Hospitalization | Out-patient |
| DGBAS | 1991 | National | 16,434 | 1 year | 1 year |
| DGBAS | 1992 | National | 16,434 | 1 year | 1 year |
| DOH | 1992 | National | 21,672 | 1 year | 4 weeks |
| Chiang | 1994 | National | 11,925 | 1 year | 2 weeks |
| Lee | 1994 | Central area | 2,164 | 8 weeks | 8 weeks |
| Lee | 1995 | Central area | 3,102 | 8 weeks | 8 weeks |
| Cheng | 1995 | National | 1,021 | 1 year | 2 weeks |
| DOH | 1996 | National | 5,284 | 1 year | 4 weeks |
| Cheng | 1996 | National | 1,510 | 1 year | 2 weeks |
| DGBAS | 1996 | National | 13,702 | 1 year | 1 year |
| Cheng | 1997 | National | 1,520 | 1 year | 2 weeks |
| DGBAS | 1997 | National | 13,701 | 1 year | 1 year |
| DGBAS | 1998 | National | 14,031 | 1 year | 1 year |

56. These surveys are inconsistent in their sample sizes and recall periods. These factors are important because sampling errors are inversely related to sample size – that is sample error increases as sample size decreases. The different results obtained by the surveys conducted in Chinese Taipei are in fact ***entirely consistent with initial expectations*** for ***every type of expenditure examined***, with the typical characteristics of recall bias. This consistency is not only with respect to the direction of apparent bias, but also its magnitude. In fact, once *a priori* expectations of recall bias are taken into consideration, the various surveys report quite similar utilization patterns.

57. Similar patterns are found with respect to reporting of self-purchase of Western and Chinese drugs, out-patient visits to Chinese medical providers, and emergency visits. Substantial under-reporting occurs in the surveys with emergency visits when one compares the results with DOH statistics on emergency visits, consistent with the one-year recall period used by all the surveys and the out-patient nature of emergency visits.

58. For hospitalization, all the surveys employed one-year recall except Lee's two surveys (1994 and 1995). Lee's surveys, which used an eight-week recall period, reported the highest admission rates, whilst the others reported rates in the range of 9-11% per capita per year. When compared with DOH admissions data, the apparent under-reporting is about 8-9% for hospitalization in the surveys that used one-year recall.

59. In comparison with recall of utilization of health services, upward bias in the average price reported can be expected if the less expensive treatment is subject to greater recall loss. This implies that where recall bias is evidently great, caution should be taken in relying on price data, but where recall bias is considered non-significant, price data can be trusted. For these reasons, two approaches were adopted in making adjustments to the estimates of household out-of-pocket expenditures: the **indirect method** and the **direct method**.

<u>Indirect method</u>

60. The **indirect estimation** of the household out-of-pocket expenditures is made by independently estimating utilization rate and unit price.

A. Estimating the true utilization rate.
B. Estimating the true mean unit price paid.

***Estimation of utilization rates***

61. The various surveys and other administrative data have been carefully reviewed. The analyses and findings are described below and then the estimated utilization rates are summarized in Table 1.3.

*Hospital admissions*

62. DOH admission statistics are consistent with NHI statistics for annual admissions. Admissions according to DOH statistics are 3-8% greater than NHI data. A positive difference is expected since NHI data pertain only to the insured population, while hospitals will be reporting all utilization to DOH. Other household surveys show utilization rates 8-9% less than the DOH rates. These results are consistent given the bias we expect from household surveys.

63. We conclude that the DOH statistical returns appear the most reliable information for hospital admission rates and visits to emergency rooms, and we should rely on these reported statistics instead of the household survey data.

*Western out-patient visits*

64. NHI data give the annual per capita rate of out-patient visits for the insured population after 1995. The national rate for 1996 onwards is estimated assuming that this rate applies to the whole population. For 1995, the rate reported by NHI for March – December is used to generate an annualized rate for the whole year.

65. For the period prior to NHI, we used the DOH statistical returns, adjusted upward since they exclude private clinics. We make the simple assumption that the proportion of all Western out-patient visits counted in the DOH statistical returns remains constant in years prior to 1996. This proportion is 48.2% in 1995. Applying it to the DOH data for out-patient visits in other years generates utilization rates for 1992-1994.

*Chinese out-patient visits*

66. Unlike Western out-patient visits, visits to Chinese medicine providers are not all covered by NHI. NHI data for such out-patient visits for the insured population thus

underestimate the national rate. To estimate the national rate, we make two assumptions:

A. That the degree of recall bias in the household surveys for Chinese out-patient visits is the equal to that for Western out-patient visits in the same surveys, when the same recall period is used.
B. That the rates of Western out-patient visits estimated according to the methodology outlined above are correct.

67. The data are consistent with the fact that a substantial proportion of Chinese out-patient consultations are not being covered by NHI. The NHI data indicate that the ratio of Chinese out-patient claims to Western out-patient claims declined from 0.13 to 0.11 during the period 1995 to 1997. These ratios are likely to be much too low, however, because the Chinese out-patient consultations are not covered by NHI. The observed shift from Chinese medical consultations to Western medical consultations during the period under a review is confirmed separately in the household survey data and the NHI claims data.

68. Using these data, we assumed the following ratios of Chinese to Western out-patient visits: 0.25 (1992-1995), 0.21 (1996), and 0.17 (1997-1998). The flat ratio of 0.25 for 1992-95 is a conservative estimate taking into account the reported ratios of DOH (1992) and Chiang (1994). The rate of 0.17 is the average for the three surveys from 1996-97, and is consistent with the apparent patients' shift to Western out-patient providers that seems to be apparent both in the survey data and NHI claims data. The rate for 1996 is derived by simple linear interpolation.

*Dental out-patient visits*

69. We tried to derive a rate for dental out-patient visits by employing a similar approach to that for Chinese out-patient visits. However, we cannot directly compare reporting of dental visits with those for Western out-patient visits in most of the surveys, since a one year recall period was used for dental visits, except in the DOH surveys. The most comparable item with a one year recall period in the other surveys was emergency visits, which is an also an out-patient visit. However, emergency visits occur infrequently and by their nature it is more likely that patients would remember these events. Dental visits are more routine and less memorable for patients than emergency visits, and therefore we concluded that we did not have a reasonable method to validate and adjust the dental utilization rates.

*Self-purchases of Western medicines*

70. Reporting of visits to self-purchase Western medicines is problematic, and all the surveys suggest much higher spending on this item than indicated by DGBAS surveys. The following is thus conservative in the choice of assumptions.

71. All three national surveys (DOH 1992, Chiang and Cheng) collected data on this type of visit, but the Cheng surveys only asked whether respondents had made any such visits. Cheng did not ask how many such visits were made in the case of respondents who reported some positive utilization. Since DOH 1996 did not collect information on this type of visit, we are left with only the Cheng surveys for the post-NHI period.

72. DOH (1992) and Chiang report an average of 2.0 and 1.7 visits per respondent respectively reporting purchases of Western medicines. In the absence of any other data, the lower figure of 1.7 visits per positive user is used to conservatively estimate the number of visits implied by Cheng's figures. Note also that Chiang used a 2 week recall period instead of the 4 week recall period in DOH, so the Chiang survey should be expected to more accurate and certainly close to the actual number. These then give two estimates of 6.6 and 3.9 visits per capita per year in 1996 and 1997 respectively. Again being conservative, the higher number of 6.6 visits per capita is disregarded. For years prior to 1995, the figure reported by Chiang, which is 5.3 for 1994 is used. The DOH survey reports a higher figure, but the lower figure of Chiang is used to again be conservative. Rates for years between 1994 and 1997 are derived by simple linear interpolation between the two estimates for those 1994 and 1997. For years prior to 1994, the 1994 figure is assumed to hold constant.

*Self-purchases of Chinese medicines*

73. Reporting of visits to self-purchase Chinese medicines is more problematic than with Western medicines, since Cheng's surveys did not collect information on this item at all. The rate reported by Chiang is 2.35 visits per capita per year. In the absence of any other reliable data on trends, the rate of 2.35 is taken as the rate for all years.

74. Table 1.3 presents the estimated utilization rates for various services, derived from the methods that are explained above.

**Table 1.3 A summary of the "Best" Estimations of Utilization Rates Per Capita Per Year for Various Years**

| Service | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|---|---|---|---|---|---|---|
| **Hospital admissions** | – | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 |
| **Emergency visits** | – | 0.20 | 0.21 | 0.22 | 0.23 | 0.24 | 0.25 |
| **Western out-patient visits** | – | 10.96 | 10.94 | 10.45 | 11.43 | 12.09 | 12.68 |
| **Chinese out-patient visits** | – | 2.70 | 2.70 | 2.60 | 2.40 | 2.00 | 2.00 |
| **Dental visits** | – | 0.94 | 0.99 | 1.05 | 1.12 | 1.19 | 1.19 |
| **Self-purchases of Western medicines** | 5.30 | 5.30 | 5.30 | 4.80 | 4.50 | 3.90 | 3.90 |
| **Self-purchases of Chinese medicines** | 2.35 | 2.35 | 2.35 | 2.35 | 2.35 | 2.35 | 2.35 |

***Estimation of average prices***

75. The estimation strategy for prices is to examine the unit price reported for various years from various household surveys. First, we tried to determine one or more reliable price points based on the available data, ideally from the same source in order to prevent spurious time trends being produced. If there are gaps in the time series, these are filled through a judicious use of interpolation, or by extrapolation using a price index. Since Chinese Taipei has no medical price index that is both appropriate and available, the GDP deflator is used as the price index.

**Hospitalization visits to emergency room and western out-patient clinics**

76. As already noted, recall bias with prices is expected *a priori* to be insignificant when recall bias with the utilization rate is insignificant. To estimate prices per treatment visit, where a choice of data sources exists, only the data from those surveys with minimum recall bias were used. For hospitalization, these were DOH (1992, 1996) and Chiang (1994). DOH (1992) and Chiang (1994) report similar prices, while DOH (1996) reports an average price almost half that in the previous surveys. However, this decrease is consistent with the impact of the introduction of NHI. The results of the three surveys suggest the possibility of bias in reported prices is small, since the reported hospitalization rate in each survey is very close to the actual level.

77. The price for 1993 is taken as the average of the prices reported in DOH (1992) and Chiang (1994). This is then extrapolated to 1994 and years prior to 1993 using the GDP deflator to adjust for price changes. For 1996, the price is taken as that reported in DOH 1996. This is extrapolated to subsequent years using the GDP deflator. The average price for 1995 is estimated as the weighted average of the 1994 and 1996 prices to take into account the introduction of NHI in March 1995.

78. Average prices for visits to emergency rooms and western out-patient clinics are estimated using an approach identical to that used for hospitalization.

**Chinese out-patient visits**

79. Evaluation of the recall bias for each of the surveys indicates that only Chiang and Cheng (1995) were associated with minimal recall bias. As they provide price points for both before and after the introduction of NHI, they can be used to generate a price series. Figures for other years are obtained by interpolation using the GDP deflator.

**Dental visits and self-purchases of Western and Chinese drugs**

80. Prices are estimated from the available data for the other items using similar approaches. Chiang is used for 1994, and a mix of Cheng and DOH (1996) are used for post-1995 prices. Table 1.4 presents the estimated out-of-pocket payments for various services, derived by the indirect method.

**Table 1.4 A summary of the estimated out-of-pocket payments (NT$) for each unit of service for various years**

| Service | 1992 | 1993 | 1994* | 1995* | 1996 | 1997 | 1998 |
|---|---|---|---|---|---|---|---|
| **Hospitalization** | 14,357 | 14,861 | 15,141 | 8,640 | 7,339 | 7,475 | 7,625 |
| **Emergency visit** | 2,087 | 2,160 | 2,201 | 1,150 | 940 | 957 | 977 |
| **Western out-patient visit** | 320 | 332 | 338 | 271 | 257 | 262 | 267 |
| **Chinese out-patient visit** | 323 | 335 | 341 | 305 | 313 | 319 | 325 |
| **Dental visit** | 1,994 | 2,064 | 2,103 | 2,457 | 2,528 | 2,575 | 2,626 |
| **Each self-purchase of Western medicines** | 219 | 227 | 231 | 258 | 264 | 264 | 274 |
| **Each self-purchase of Chinese medicines** | 521 | 539 | 549 | 560 | 575 | 585 | 597 |

* The NHI was introduced in March 1995.

Direct method

81. International studies have found that people's recall of the out-of-pocket payments per visit or per admission can be highly variable. Recall can be particularly poor when the respondent to a household survey is not the patient who paid the bill. Consequently, in addition to estimating the out-of-pocket payment per unit of service from the surveys, a direct method was also developed based on the copayment requirements under the current NHI program.

82. The out-of-pocket payments were estimated as follows:

A. Hospitalization - we took 10% of the total paid by NHI for in-patient hospital service as patients' out-of-pocket payments. While the coinsurance is capped, the use of the simple 10% rate will allow for some self payments for private rooms and other uncovered services.
B. Visits to western and Chinese medical clinics - we took the standard registration fee and copayment for each level of clinic, weighted by their frequency to derive a weighted average of NT $170 per visit to western clinics and NT $150 to Chinese clinics. Then the average number of visits per capita is multiplied by these out-of-pocket payment rates.
C. Dental visits, self purchased Chinese and western drugs - because of the lack of

reliable information, the direct method took the average of the DGBAS figure (a low estimate) and the figure estimated by the indirect method (a high estimate).

83. Under NHI, the law stipulates the registration fees and the coinsurance amounts that the patients have to pay for visits to emergency rooms, and to various levels of western and Chinese medical institutions. The law also stipulates the coinsurance amounts that patients have to pay for hospital charges. The utilization rates and total hospital charges can be used to estimate the amount of registration fees and coinsurance that patients would have paid if the legal provisions were followed. This approach will give a reasonable estimate of out-of-pocket payments made by the insured persons for the services covered by NHI.

84. However, the aggregated estimates of out-of-pocket payments derived from the direct method would be a low estimate because there is approximately 7% of the population not enrolled in NHI. When they use medical services and purchase drugs, the uninsured would have to pay the full costs and these costs should be included in the estimated out-of-pocket costs for out-patient visits. However, this omission is not large as it first appears, as most of the uninsured are young and self-employed or live in very remote areas. Their utilization rates would typically be lower than Chinese Taipei's average rates. However, information on this population is not available and therefore no reasonable adjustments can be made.

85. NHI does not cover many ancillary services such as private rooms, laboratory tests determined to be medically unnecessary, cosmetic surgery, dentures and dental implants, experimental procedures and drugs. Services rendered by the providers unregistered with NHI are also not covered. Since there is little reliable information available on these uncovered health expenditure, it was decided that no adjustment would be made. By ignoring these extra payments, it is clear that the direct method will produce low estimates of out-of-pocket payments.

86. Table 1.5 lists the estimates of household out-of-pocket payments derived from the direct and indirect methods. The Harvard NHA project used DGBAS estimates as a base and made adjustments using estimates from the direct method.

**Table 1.5 Estimated household out-of-pocket expenses, 1998**

| Service | Household out-of-pocket expenditures per person per year in NT dollars | | |
|---|---|---|---|
| | DGBAS survey | Direct estimation | Indirect estimation (P*Q) |
| Hospitalization | 595 (20) | 768 (26) | 936 (31) |
| Emergency visit | NA | 200 (7) | 244 (8) |
| Dental visit | 866 (29) | 1477 (49) | 3000 (100) |
| Western out-patient visit | 1152 (38) | 2207 (74) | 3202 (107) |
| Chinese out-patient visit | 252 (8) | 300 (10) | 663 (22) |
| Self-purchase of Western medicines | 660 (22) | 850 (28) | 1059 (35) |
| Self-purchase of Chinese medicines | 840 (28) | 1100 (37) | 1404 (47) |
| Grand total | 4365 (146) | 6902 (230) | 10508 (350) |
| % of GDP | **5.39** | **6.02** | **6.93** |

Note: US dollars in parentheses (1 US dollar = 30 NT dollar).

***Estimates of household payments on private health insurance premiums***

87. Household payments on private health insurance were not taken into account in the DOH estimates. However, the information is available from the industry statistics, Annual Report of Life Insurance, which reports the annual premium incomes and health-related benefits payouts from all private insurance companies. According to the Annual Report of Life Insurance, 1998, there are three types of private health-related insurance programs: health insurance, supplementary health insurance under life insurance and accident insurance.

88. There are two issues in estimating the household out-of-pocket payment on private health premiums: one is the proportion of the premiums paid by the household; second, the proportion of the premiums for health-related benefits for the supplementary health insurance and accident insurance programs. Since the details of the data are not available, assumptions have to be made. Conventionally, the majority of employers will not contribute to health insurance premiums for their employees except for the NHI program which is mandated by the government. Hence, it is fair to assume that households will bear the full cost of private health insurance protection. Regarding the proportion of the premiums which should be attributed to health-related benefits, the issue arises because benefits are not totally health related - for example cash benefits for loss of income may also be covered. In principle, the health premium dollar is the sum of the loading fee (the risk margin, tax payment and operating expenses that the insurance company bears), and the health benefits payout. There are two assumptions made in deriving the estimates on the loading fee and the premiums, one is that the loading fee occurs when the benefits payout was made; second, the Ministry of Finance (MOF) regulations on premium structure are effectively enforced. The estimated premium income, benefits payout and loading fees for private insurance programs are listed in Table 1.6.

**Table 1.6 Estimated premium income, benefits payout and loading fees for private insurance programs, by insurance types**

Unit: NT thousand dollars

| Types of commercial insurance / Item | Health insurance | | | Supplementary health insurance under life insurance | | Accident insurance | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|
| | individual | group | sub-total | individual | group | individual | group | sub-total | |
| Regulation: loading fee as % of premiums | 36% | 14% | – | 24% | 24% | 36% | 14% | – | – |
| Estimated premium (actual*) | 44,089,762* (1,469,659*) | 2,960,420* (98,681*) | 47,050,182* (1,568,339*) | 3,935,941 (131,198) | | 8,450,109 (281,670) | 411,220 (13,707) | 8,861,329 (295,378) | 59,847,452 (1,994,915) |
| Actual benefits payout | 9,478,096 (315,937) | 1,584,677 (52,823) | 11,062,773 (368,759) | 2,991,315 (99,711) | | 5,408,070 (180,269) | 353,649 (11,788) | 5,761,719 (192,057) | 19,815,807 (660,527) |
| Estimated loading fee | 5,331,429 (177,714) | 257,971 (8,599) | 5,589,400 (186,313) | 944,626 (31,488) | | 3,042,039 (101,401) | 57,571 (1,919) | 3,099,610 (103,320) | 9,633,636 (321,121) |
| Private health insurance reserves | 29,280,237 (976,008) | 1,117,772 (37,259) | 30,398,009 (1,013,267) | 0 | | 0 | 0 | 0 | 30,398,009 (1,013,267) |

Note: US dollars in parentheses (1 US dollar = 30 NT dollar).

# ANNEX 2: TABLES

**Table A1 Total expenditure on health by financing agents, 1998**

| | | NTD(millions) | Percent |
|---|---|---|---|
| HF.1 | General government | 310,617 | 60.2 |
| HF.1.1 | General government excluding social security funds | 40,423 | 7.8 |
| HF.1.1.1 | Central government | 18,492 | 3.6 |
| HF.1.1.2;1.1.3 | Provincial/local government | 21,931 | 4.2 |
| HF.1.2 | Social security funds | 270,194 | 52.3 |
| HF.2 | Private sector | 205,566 | 39.8 |
| HF.2.1 | Private social insurance | - | - |
| HF.2.2 | Private insurance enterprises (other than social insurance) | 29,449 | 5.7 |
| HF.2.3 | Private household out-of-pocket expenditure | 152,363 | 29.5 |
| HF.2.4 | Non-profit institutions serving households (other than social insurance) | 577 | 0.1 |
| HF.2.5 | Corporations (other than health insurance) | 23,177 | 4.5 |
| | **Total expenditure on health** | **516,183** | **100.0** |

**Table A2 Total health expenditure by function of care, 1998**

| | | NTD(millions) | Percent |
|---|---|---|---|
| HC.1;2 | Services of curative & rehabilitative care | 333,436 | 64.6 |
| HC.1.1;2.1 | In-patient curative & rehabilitative care | 122,423 | 23.7 |
| HC.1.2;2.2 | Day cases of curative & rehabilitative care | - | - |
| HC.1.3;2.3 | Out-patient curative & rehabilitative care | 211,013 | 40.9 |
| HC.1.4;2.4 | Home care (curative & rehabilitative) | - | - |
| HC.3 | Services of long-term nursing care | 5,483 | 1.1 |
| HC.3.1 | In-patient long-term nursing care | 3,752 | 0.7 |
| HC.3.2 | Day cases of long-term nursing care | - | - |
| HC.3.3 | Home care (long term nursing care) | 1,731 | 0.3 |
| HC.4 | Ancillary services to health care | 589 | 0.1 |
| HC.4.1 | Clinical laboratory | 589 | 0.1 |
| HC.4.2 | Diagnostic imaging | - | - |
| HC.4.3 | Patient trans port and emergency rescue | - | - |
| HC.4.9 | All other miscellaneous ancillary services | - | - |
| HC.5 | Medical goods dispensed to out-patients | 117,827 | 22.8 |
| HC.5.1 | Pharmaceuticals and other medical durables | 101,258 | 19.6 |
| HC.5.2 | Therapeutic appliances and other medical durables | 16,569 | 3.2 |
| HC.6 | Prevention and public health services | 7,158 | 1.4 |
| HC.7 | Health administration and health insurance | 21,689 | 4.2 |
| | **Current health expenditure** | **486,182** | **94.2** |
| HC.R.1 | Capital formation of health care provider institutions | 30,001 | 5.8 |
| | **Total expenditure on health** | **516,183** | **100.0** |
| HC.R.2 | Education and training of health personnel | 4,692 | |
| HC.R.3 | Research and development in health | 5,552 | |
| HC.R.4 | Food, hygiene and drinking water control | 131 | |
| HC.R.5 | Environmental health | - | |
| HC.R.6 | Administration and provision of social services in kind to assist living with disease and impairment | 33 | |
| HC.R.7 | Administration and provision of health-related cash-benefits | 154 | |

**Table A3 Current health expenditure by mode of production, 1998**

| | | NTD(millions) | Percent |
|---|---|---|---|
| | In-patient care | 126,174 | 26.0 |
| HC.1.1;2.1 | Curative & rehabilitative care | 122,423 | 25.2 |
| HC.3.1 | Long-term nursing care | 3,752 | 0.8 |
| | Services of day-care | - | - |
| HC.1.2;2.2 | Day cases of curative & rehabilitative care | - | - |
| HC.3.2 | Day cases of long-term nursing care | - | - |
| | Out-patient care | 211,013 | 43.4 |
| HC.1.3;2.3 | Out-patient curative & rehabilitative care | 211,013 | 43.4 |
| HC.1.3.1 | Basic medical and diagnostic services | 135,576 | 27.9 |
| HC.1.3.2 | Out-patient dental care | 52,941 | 10.9 |
| HC.1.3.3 | All other specialized health care | 18,057 | 3.7 |
| HC.1.3.9;2.3 | All other out-patient curative care | 4,438 | 0.9 |
| | Home care | 1,731 | 0.4 |
| HC.1.4;2.4 | Home care (curative & rehabilitative) | - | - |
| HC.3.3 | Home care (long term nursing care) | 1,731 | 0.4 |
| HC.4 | Ancillary services to health care | 589 | 0.1 |
| HC.5 | Medical goods dispensed to out-patients | 117,730 | 24.2 |
| HC.5.1 | Pharmaceuticals and other medical non-durables | 101,258 | 20.8 |
| HC.5.2 | Therapeutic appliances and other medical durables | 16,569 | 3.4 |
| | **Total expenditure on personal health care** | **457,335** | **94.1** |
| HC.6 | Prevention and public health services | 7,158 | 1.5 |
| HC.7 | Health administration and health insurance | 21,689 | 4.5 |
| | **Current health expenditure** | **486,182** | **100.0** |

**Table A4 Current health expenditure by provider, 1998**

| | | NTD(millions) | Percent |
|---|---|---|---|
| HP.1 | Hospitals | 250,574 | 51.5 |
| HP.2 | Nursing and residential care facilities | 3,742 | 0.8 |
| HP.3 | Providers of ambulatory health care | 148,327 | 30.5 |
| HP.3.1 | Offices of physicians | 77,635 | 16.0 |
| HP.3.2 | Offices of dentists | 48,694 | 10.0 |
| HP.3.3 | Offices of other health practitioners | 14,245 | 2.9 |
| HP.3.4 | Out-patient care centers | 6,288 | 1.3 |
| HP.3.5 | Medical and diagnostic laboratories | 589 | 0.1 |
| HP.3.6 | Providers of home health care services | 711 | 0.1 |
| HP.3.9 | Other providers of ambulatory health care | 164 | 0.0 |
| HP.4 | Retail sale and other providers of medical goods | 68,070 | 14.0 |
| HP.5 | Provision and administration of public health | - | - |
| HP.6 | General health administration and insurance | 15,314 | 3.1 |
| HP.6.1 | Government administration of health | 7,831 | 1.6 |
| HP.6.2 | Social security funds | 5,555 | 1.1 |
| HP.6.3;6.4 | Other social insurance | 1,928 | 0.4 |
| HP.7 | Other industries (rest of the economy) | 59 | 0.0 |
| HP.7.1 | Occupational health care services | - | - |
| HP.7.2 | Private households as providers of home care | - | - |
| HP.7.9 | All other secondary producers of health care | 59 | 0.0 |
| HP.8 | Others | 98 | 0.0 |
| | **Current health expenditure** | **486,182** | **100.0** |

# ANNEX 3: Chinese Taipei 1998 SHA TABLES

**SHA Table 1 Current health expenditure by function of care, provider and source of funding (NTD, millions)**

| | | | | ICHA-HF source of funding | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **HF.1** | HF.1.1 | HF.1.2 | **HF.2** | HF.2.1 + HF.2.2 | HF.2.1 | HF.2.2 | HF.2.3 | HF.2.4 | HF.2.5 | **HF.3** |
| **Expenditure category** | **ICHA-HC (function of health care)** | **ICHA-HP (provider industry)** | Total current expenditure on health | General government | General government (excl. social security) | Social security funds | Private sector | Private insurance | Private social insurance | Other private insurance | Private household out-of-pocket expenditure | Non-profit organizations serving households (other than social insurance) | Corporations (other than health insurance) | Rest of the world |
| *In-patient care including day cases* | | All industries | 126,174 | 87,415 | 11,809 | 75,606 | 38,759 | 8,628 | - | 8,628 | 19,765 | 252 | 10,114 | - |
| *Curative and rehabilitative care* | HC.1.1; 1.2; 2.1; 2.2; | | 122,423 | 87,335 | 11,735 | 75,600 | 35,088 | 8,628 | - | 8,628 | 16,095 | 252 | 10,113 | - |
| General hospitals | | HP.1.1 | 116,035 | 82,235 | 10,285 | 71,950 | 33,800 | 8,482 | - | 8,482 | 14,952 | 252 | 10,113 | - |
| Specialty hospitals | | HP.1.2+1.3 | 4,815 | 4,117 | 1,450 | 2,667 | 698 | 145 | - | 145 | 553 | - | - | - |
| Nursing and residential care facilities | | HP.2 | - | - | - | - | - | - | - | - | - | - | - | - |
| All other providers | | All other | 1,573 | 983 | | 983 | 590 | - | - | - | 590 | - | - | - |
| *Long-term nursing care* | HC.3.1; 3.2 | All industries | 3,752 | 80 | 74 | 6 | 3,672 | 1 | - | 1 | 3,670 | 0 | 1 | - |
| General hospitals | | HP.1.1 | 10 | 7 | 1 | 6 | 3 | 1 | - | 1 | 1 | 0 | 1 | - |
| Specialty hospitals | | HP.1.2+1.3 | - | - | - | - | - | - | - | - | - | - | - | - |
| Nursing and residential care facilities | | HP.2 | 3,742 | 73 | 73 | - | 3,669 | - | - | - | 3,669 | - | - | - |
| All other providers | | All other | 1,179 | - | - | - | 1,179 | - | - | - | 1,179 | - | - | - |
| *Out-patient curative and rehabilitative care* | HC.1.3; 2.3 | All industries | 211,013 | 140,655 | 9,269 | 131,387 | 70,358 | 6,442 | - | 6,442 | 56,225 | 187 | 7,503 | - |
| Hospitals | | HP.1 | 91,113 | 65,436 | 8,758 | 56,679 | 25,677 | 6,442 | - | 6,442 | 11,545 | 187 | 7,503 | - |
| Offices of physicians | | HP.3.1 | 59,032 | 36,898 | - | 36,898 | 22,134 | - | - | - | 22,134 | - | - | - |
| Offices of dentists | | HP.3.2 | 48,640 | 30,403 | | 30,403 | 18,237 | - | - | | 18,237 | | - | - |
| Offices of other health practitioners (1) | | HP.3.3 | 11,405 | 7,129 | - | 7,129 | 4,276 | - | - | - | 4,276 | - | - | - |
| Out-patient care centers | | HP.3.4 | 823 | 790 | 511 | 279 | 33 | - | - | - | 33 | - | - | - |
| All other providers | | All other | - | - | - | - | - | - | - | - | - | - | - | - |
| *Home health care* | HC.1.4; 2.4; 3.3 | All industries | 1,731 | 1,191 | 140 | 1,051 | 540 | 68 | - | 68 | 390 | 2 | 81 | - |
| *Ancillary services to health care (2)* | HC.4 | All industries | 589 | - | - | - | 589 | - | - | - | 589 | - | - | - |
| *Medical goods dispensed to out-patients (3)* | HC.5 | All industries | 117,827 | 40,835 | 4,315 | 36,520 | 76,993 | 7,801 | - | 7,801 | 66,173 | 73 | 2,946 | - |
| Pharmaceuticals; other med. non-durables | HC.5.1 | | 101,258 | 40,701 | 4,121 | 36,580 | 60,557 | 2,557 | - | 2,557 | 54,962 | 74 | 2,964 | - |
| Prescribed medicines | HC.5.1.1 | | 58,497 | 39,668 | 4,121 | 35,547 | 18,830 | 2,557 | - | 2,557 | 13,235 | 74 | 2,964 | - |
| Over-the-counter medicines | HC.5.1.2 | | 42,761 | 1,033 | - | 1,033 | 41,727 | - | - | - | 41,727 | - | - | - |
| Other medical non-durables | HC.5.1.3 | | - | - | - | - | - | - | - | - | - | - | - | - |
| *Therapeutical appl.; other medical durables* | HC.5.2 | | 16,569 | 71 | - | 71 | 16,498 | 5,260 | - | 5,260 | 11,238 | - | - | - |
| Glasses and other vision products | HC.5.2.1 | | 11,585 | - | - | - | 11,585 | 5,260 | - | 5,260 | 6,325 | - | - | - |
| Orthopedic appliances; other prosthetics | HC.5.2.2 | | - | - | - | - | - | - | - | - | - | - | - | - |
| All other misc. durable medical goods | HC.5.2.3-5.2.9 | | 4,984 | 71 | - | 71 | 4,913 | - | - | - | 4,913 | - | - | - |
| *Prevention and public health services* | HC.6 | All industries | 7,158 | 6,694 | 4,494 | 2,200 | 464 | 70 | - | 70 | 308 | 2 | 83 | - |
| *Health administration and health insurance* | HC.7 | All industries | 21,689 | 12,055 | 6,337 | 5,719 | 9,634 | 4,374 | - | 4,374 | 5,260 | - | - | - |
| ***Current health expenditure*** | **HC.1-HC.7** | **All industries** | **486,182** | **288,846** | **36,364** | **252,482** | **197,337** | **27,383** | - | **27,383** | **148,711** | **516** | **20,728** | - |

(1) E.g. paramedical practitioners and providers of alternative medicine.

(2) This item includes freestanding clinical laboratory; diagnostic imaging; and patient transport.

(3) Included are fitting of prosthesis; eye tests and other services of providers of these goods.

## SHA Table 2.1 Current health expenditure by function of care and provider industry (NTD, millions)

| Health care by function | ICHA-HC code | Total current health expenditure | HP.1 Hospitals | HP.2 Nursing and residential care facilities | HP.3 Providers of ambulatory health care | 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 centers | HP.3.5 Medical and diagnostic laboratories | HP.3.6 Providers of home health care services | HP.3.9 All other providers of ambulatory health care | HP.4 Retail sale and other providers of medical goods | HP.4.1 Dispensing chemists | HP.4.2-4.9 All other sales of medical goods | HP.5 Provision and administration of public health programmes | HP.6 General health administration and insurance | 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.6.9 All other health administration | HP.7 All other industries (Other industries) | HP.8 Other (RoW) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *In-patient care* | | 126,174 | 120,859 | 3,742 | 1,573 | 1,573 | - | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.1; 2.1 | 122,423 | 120,850 | - | 1,573 | 1,573 | - | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.1 | 3,752 | 9 | 3,742 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Services of day-care* | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.2; 2.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Out-patient care* | | 211,013 | 91,113 | - | 119,900 | 59,032 | 48,640 | 11,405 | 823 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Basic medical and diagnostic services | HC.1.3.1 | 135,576 | 77,494 | - | 58,082 | 57,305 | - | - | 778 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Out-patient dental care | HC.1.3.2 | 52,941 | 4,257 | - | 48,685 | - | 48,640 | - | 45 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| All other specialized health care | HC.1.3.3 | 18,057 | 6,162 | - | 11,895 | 490 | - | 11,405 | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| All other out-patient care | HC.1.3.9;2.3 | 4,438 | 3,201 | - | 1,237 | 1,237 | - | - | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Home care* | | 1,731 | 927 | - | 804 | - | - | - | 93 | - | 711 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.4; 2.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.3 | 1,731 | 927 | - | 804 | - | - | - | 93 | - | 711 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Ancillary services to health care* | HC.4 | 589 | - | - | 589 | - | - | - | - | 589 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Medical goods dispensed to out-patients* | HC.5 | 117,827 | 36,717 | - | 20,648 | 17,030 | 54 | 2,840 | 724 | - | - | - | 58,436 | 46,851 | 11,585 | - | 1,928 | - | - | - | 1,928 | - | - | 98 |
| Pharmaceut. and other medical non-durables | HC.5.1 | 101,258 | 36,717 | - | 20,648 | 17,030 | 54 | 2,840 | 724 | - | - | - | 43,893 | 43,893 | - | - | - | - | - | - | - | - | - | - |
| Therap. appliances and other med. durables | HC.5.2 | 16,569 | - | - | - | - | - | - | - | - | - | - | 14,543 | 2,958 | 11,585 | - | 1,928 | - | - | - | 1,928 | - | - | 98 |
| **Total expenditure on personal health care** | | **457,335** | **249,617** | **3,742** | **143,514** | **77,635** | **48,694** | **14,245** | **1,639** | **589** | **711** | **-** | **58,436** | **46,851** | **11,585** | **-** | **1,928** | **-** | | **-** | **1,928** | **-** | **-** | **98** |
| Prevention and public health services | HC.6 | 7,158 | 957 | - | 4,649 | - | - | - | 4,649 | - | - | - | - | - | - | - | 1,494 | 1,494 | - | - | - | - | 59 | |
| Health administration and health insurance | HC.7 | 21,689 | - | - | 164 | - | - | - | - | - | - | 164 | 9,634 | - | 9,634 | - | 11,891 | 6,337 | 5,555 | - | - | - | - | - |
| **Current health expenditure** | | **486,182** | **250,574** | **3,742** | **148,327** | **77,635** | **48,694** | **14,245** | **6,288** | **589** | **711** | **164** | **68,070** | **46,851** | **21,218** | **-** | **15,314** | **7,831** | **5,555** | **-** | **1,928** | **-** | **59** | **98** |

**SHA Table 2.2 Current health expenditure by function of care and provider industry (% of expenditure on functional categories)**

| Health care by function | ICHA-HC code | **Total current health expenditure** | **HP.1** Hospitals | **HP.2** Nursing and residential care facilities | **HP.3** Providers of ambulatory health care | 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 centers | HP.3.5 Medical and diagnostic laboratories | HP.3.6 Providers of home health care services | HP.3.9 All other providers of ambulatory health care | **HP.4** Retail sale and other providers of medical goods | HP.4.1 Dispensing chemists | HP.4.2-4.9 All other sales of medical goods | **HP.5** Provision and administration of public health programmes | **HP.6** General health administration and insurance | 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.6.9 All other health administration | Other industries **HP.7** All other industries | RoW **HP.8** Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Health care provider industry | | | | | | | | | | | | | | | | | | | | | |
| *In-patient care* | | 100.0 | 95.8 | 3.0 | 1.2 | 1.2 | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.1; 2.1 | 100.0 | 98.7 | - | 1.3 | 1.3 | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.1 | 100.0 | 0.3 | 99.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Services of day-care* | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.2; 2.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Out-patient care* | | 100.0 | 43.2 | - | 56.8 | 28.0 | 23.1 | 5.4 | 0.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Basic medical and diagnostic services | HC.1.3.1 | 100.0 | 57.2 | - | 42.8 | 42.3 | - | - | 0.6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Out-patient dental care | HC.1.3.2 | 100.0 | 8.0 | - | 92.0 | - | 91.9 | - | 0.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| All other specialized health care | HC.1.3.3 | 100.0 | 34.1 | - | 65.9 | 2.7 | - | 63.2 | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| All other out-patient care | HC.1.3.9;2.3 | 100.0 | 72.1 | - | 27.9 | 27.9 | - | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Home care* | | 100.0 | 53.6 | - | 46.4 | - | - | - | 5.4 | - | 41.1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.4; 2.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.3 | 100.0 | 53.6 | - | 46.4 | - | - | - | 5.4 | - | 41.1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Ancillary services to health care* | HC.4 | 100.0 | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Medical goods dispensed to out-patients* | HC.5 | 100.0 | 31.2 | - | 17.5 | 14.5 | 0.0 | 2.4 | 0.6 | - | - | - | 49.6 | 39.8 | 9.8 | - | 1.6 | - | - | - | 1.6 | - | - | 0.1 |
| Pharmaceut. and other medical non-durables | HC.5.1 | 100.0 | 36.3 | - | 20.4 | 16.8 | 0.1 | 2.8 | 0.7 | - | - | - | 43.3 | 43.3 | - | - | - | - | - | - | - | - | - | - |
| Therap. appliances and other med. durables | HC.5.2 | 100.0 | - | - | - | - | - | - | - | - | - | - | 87.8 | 17.9 | 69.9 | - | 11.6 | - | - | - | 11.6 | - | - | 0.6 |
| **Total expenditure on personal health care** | | **100.0** | **54.6** | **0.8** | **31.4** | **17.0** | **10.6** | **3.1** | **0.4** | **0.1** | **0.2** | **-** | **12.8** | **10.2** | **2.5** | **-** | **0.4** | **-** | | **-** | **0.4** | **-** | **-** | **0.6** |
| Prevention and public health services | HC.6 | 100.0 | 13.4 | - | 64.9 | - | - | - | 64.9 | - | - | - | - | - | - | - | 20.9 | 20.9 | - | - | - | - | 0.8 | - |
| Health administration and health insurance | HC.7 | 100.0 | - | - | 0.8 | - | - | - | - | - | - | 0.8 | 44.4 | - | 44.4 | - | 54.8 | 29.2 | 25.6 | - | - | - | - | - |
| **Current health expenditure** | | **100.0** | **51.5** | **0.8** | **30.5** | **16.0** | **10.0** | **2.9** | **1.3** | **0.1** | **0.1** | **0.0** | **14.0** | **9.6** | **4.4** | **-** | **3.1** | **1.6** | **1.1** | **-** | **0.4** | **-** | **0.0** | **0.0** |

## SHA Table 2.3 Current health expenditure by function of care and provider industry (% of provider category expenditure)

| Health care by function | ICHA-HC code | Total current health expenditure | HP.1 Hospitals | HP.2 Nursing and residential care facilities | HP.3 Providers of ambulatory health care | 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 centers | HP.3.5 Medical and diagnostic laboratories | HP.3.6 Providers of home health care services | HP.3.9 All other providers of ambulatory health care | HP.4 Retail sale and other providers of medical goods | HP.4.1 Dispensing chemists | HP.4.2-4.9 All other sales of medical goods | HP.5 Provision and administration of public health programmes | HP.6 General health administration and insurance | 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.6.9 All other health administration | HP.7 All other industries (Other industries) | HP.8 Other (RoW) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *In-patient care* | | 26.0 | 48.2 | 100.0 | 1.1 | 2.0 | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.1; 2.1 | 25.2 | 48.2 | - | 1.1 | 2.0 | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.1 | 0.8 | 0.0 | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Services of day-care* | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.2; 2.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Out-patient care* | | 43.4 | 36.4 | - | 80.8 | 76.0 | 99.9 | 80.1 | 13.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Basic medical and diagnostic services | HC.1.3.1 | 27.9 | 30.9 | - | 39.2 | 73.8 | - | - | 12.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Out-patient dental care | HC.1.3.2 | 10.9 | 1.7 | - | 32.8 | - | 99.9 | - | 0.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| All other specialized health care | HC.1.3.3 | 3.7 | 2.5 | - | 8.0 | 0.6 | - | 80.1 | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| All other out-patient care | HC.1.3.9;2.3 | 0.9 | 1.3 | - | 0.8 | 1.6 | - | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Home care* | | 0.4 | 0.4 | - | 0.5 | - | - | - | 1.5 | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Curative and rehabilitative care | HC.1.4; 2.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Long-term nursing care | HC.3.3 | 0.4 | 0.4 | - | 0.5 | - | - | - | 1.5 | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Ancillary services to health care* | HC.4 | 0.1 | - | - | 0.4 | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| *Medical goods dispensed to out-patients* | HC.5 | 24.2 | 14.7 | - | 13.9 | 21.9 | 0.1 | 19.9 | 11.5 | - | - | - | 85.8 | 100.0 | 54.6 | - | 12.6 | - | - | - | 100.0 | - | - | 100.0 |
| Pharmaceut. and other medical non-durables | HC.5.1 | 20.8 | 14.7 | - | 13.9 | 21.9 | 0.1 | 19.9 | 11.5 | - | - | - | 64.5 | 93.7 | - | - | - | - | - | - | - | - | - | - |
| Therap. appliances and other med. durables | HC.5.2 | 3.4 | - | - | - | - | - | - | - | - | - | - | 21.4 | 6.3 | 54.6 | - | 12.6 | - | - | - | 100.0 | - | - | 100.0 |
| **Total expenditure on personal health care** | | **94.1** | **99.6** | **100.0** | **96.8** | **100.0** | **100.0** | **100.0** | **26.1** | **100.0** | **100.0** | - | **85.8** | **100.0** | **54.6** | - | **12.6** | - | | - | **100.0** | - | - | **100.0** |
| Prevention and public health services | HC.6 | 1.5 | 0.4 | - | 3.1 | - | - | - | 73.9 | - | - | - | - | - | - | - | 9.8 | 19.1 | - | - | - | - | 100.0 | - |
| Health administration and health insurance | HC.7 | 4.5 | - | - | 0.1 | - | - | - | - | - | - | 100.0 | 14.2 | - | 45.4 | - | 77.7 | 80.9 | 100.0 | - | - | - | - | - |
| **Current health expenditure** | | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | - | **100.0** | **100.0** | **100.0** | - | **100.0** | - | **100.0** | **100.0** |

Header groups: "Health care provider industry" spans HP.1–HP.6.9; HP.7 falls under "Other industries" and HP.8 under "RoW".

## SHA Table 3.1 Current health expenditure by provider industry and financing agent (NTD, millions)

| | | | **HF.1** | HF.1.1 | HF.1.2 | **HF.2** | HF.2.1 + HF.2.2 | | | HF.2.3 | HF.2.4 | HF.2.5 | **HF.3** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Health care provider category | ICHA-HP code | Total current expenditure on health | General government | General government (excl. social security) | Social security funds | Private sector | Private insurance | HF.2.1 Private social insurance | HF.2.2 Other private insurance | Private household out-of-pocket payments | Non-profit organisations (other than social ins.) | Corporations (other than health insurance) | Rest of the world |
| Hospitals | HP.1 | 250,574 | 180,056 | 25,690 | 154,366 | 70,518 | 17,656 | - | 17,656 | 31,733 | 513 | 20,616 | - |
| Nursing and residential care facilities | HP.2 | 3,742 | 73 | 73 | - | 3,669 | - | - | - | 3,669 | - | - | - |
| Providers of ambulatory health care | HP.3 | 148,327 | 94,512 | 3,908 | 90,604 | 53,814 | - | - | - | 53,814 | - | - | - |
| Offices of physicians | HP.3.1 | 77,635 | 48,526 | - | 48,526 | 29,109 | - | - | - | 29,109 | - | - | - |
| Offices of dentists | HP.3.2 | 48,694 | 30,436 | - | 30,436 | 18,258 | - | - | - | 18,258 | - | - | - |
| Offices of other health practitioners | HP.3.3 | 14,245 | 8,904 | - | 8,904 | 5,341 | - | - | - | 5,341 | - | - | - |
| Out-patient care centres | HP.3.4 | 6,288 | 6,038 | 3,908 | 2,130 | 250 | - | - | - | 250 | - | - | - |
| Medical and diagnostic laboratories | HP.3.5 | 589 | - | - | - | 589 | - | - | - | 589 | - | - | - |
| Providers of home health care services | HP.3.6 | 711 | 445 | - | 445 | 267 | - | - | - | 267 | - | - | - |
| Other providers of ambulatory health care | HP.3.9 | 164 | 164 | - | 164 | - | - | - | - | - | - | - | - |
| Retail sale and other providers of medical goods | HP.4 | 68,070 | 1,132 | - | 1,132 | 66,937 | 9,634 | - | 9,634 | 57,304 | - | - | - |
| Dispensing chemists | HP.4.1 | 46,851 | 1,132 | - | 1,132 | 45,719 | - | - | - | 45,719 | - | - | - |
| All other sales of medical goods | HP.4.2-4.9 | 21,218 | - | - | - | 21,218 | 9,634 | - | 9,634 | 11,585 | - | - | - |
| Provision and administration of public health programmes | HP.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| General health administration and insurance | HP.6 | 15,314 | 13,385 | 7,831 | 5,555 | 1,928 | - | - | - | 1,928 | - | - | - |
| Government (excluding social insurance) | HP.6.1 | 7,831 | 7,831 | 7,831 | - | - | - | - | - | - | - | - | - |
| Social security funds | HP.6.2 | 5,555 | 5,555 | - | 5,555 | - | - | - | - | - | - | - | - |
| Other social insurance | HP.6.3 | - | - | - | - | - | - | - | - | - | - | - | - |
| Other (private) insurance | HP.6.4 | 1,928 | - | - | - | 1,928 | - | - | - | 1,928 | - | - | - |
| All other providers of health administration | HP.6.9 | - | - | - | - | - | - | - | - | - | - | - | - |
| Other industries (rest of the economy) | HP.7 | 59 | 59 | 27 | 32 | - | - | - | - | - | - | - | - |
| Occupational health care | HP.7.1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Private households | HP.7.2 | - | - | - | - | - | - | - | - | - | - | - | - |
| All other secondary producers | HP.7.9 | 59 | 59 | 27 | 32 | - | - | - | - | - | - | - | - |
| Others | HP.8 | 98 | - | - | - | 98 | - | - | - | 98 | - | - | - |
| **Current health expenditure** | | **486,182** | **289,217** | **37,528** | **251,689** | **196,965** | **27,289** | **-** | **27,289** | **148,546** | **513** | **20,616** | **-** |

## SHA Table 3.2 Current health expenditure by provider industry and financing agent (% of provider category expenditure)

| | | | **HF.1** | HF.1.1 | HF.1.2 | **HF.2** | HF.2.1 + HF.2.2 | | | HF.2.3 | HF.2.4 | HF.2.5 | **HF.3** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Health care provider category | ICHA-HP code | Total current expenditure on health | General government | General government (excl. social security) | Social security funds | Private sector | Private insurance | HF.2.1 Private social insurance | HF.2.2 Other private insurance | Private household out-of-pocket payments | Non-profit organisations (other than social ins.) | Corporations (other than health insurance) | Rest of the world |
| Hospitals | HP.1 | 100.0 | 71.9 | 10.3 | 61.6 | 28.1 | 7.0 | - | 7.0 | 12.7 | 0.2 | 8.2 | - |
| Nursing and residential care facilities | HP.2 | 100.0 | 2.0 | 2.0 | - | 98.0 | - | - | - | 98.0 | - | - | - |
| Providers of ambulatory health care | HP.3 | 100.0 | 63.7 | 2.6 | 61.1 | 36.3 | - | - | - | 36.3 | - | - | - |
| Offices of physicians | HP.3.1 | 100.0 | 62.5 | - | 62.5 | 37.5 | - | - | - | 37.5 | - | - | - |
| Offices of dentists | HP.3.2 | 100.0 | 62.5 | - | 62.5 | 37.5 | - | - | - | 37.5 | - | - | - |
| Offices of other health practitioners | HP.3.3 | 100.0 | 62.5 | - | 62.5 | 37.5 | - | - | - | 37.5 | - | - | - |
| Out-patient care centres | HP.3.4 | 100.0 | 96.0 | 62.1 | 33.9 | 4.0 | - | - | - | 4.0 | - | - | - |
| Medical and diagnostic laboratories | HP.3.5 | 100.0 | - | - | - | 100.0 | - | - | - | 100.0 | - | - | - |
| Providers of home health care services | HP.3.6 | 100.0 | 62.5 | - | 62.5 | 37.5 | - | - | - | 37.5 | - | - | - |
| Other providers of ambulatory health care | HP.3.9 | 100.0 | 100.0 | - | 100.0 | - | - | - | - | - | - | - | - |
| Retail sale and other providers of medical goods | HP.4 | 100.0 | 1.7 | - | 1.7 | 98.3 | 14.2 | - | 14.2 | 84.2 | - | - | - |
| Dispensing chemists | HP.4.1 | 100.0 | 2.4 | - | 2.4 | 97.6 | - | - | - | 97.6 | - | - | - |
| All other sales of medical goods | HP.4.2-4.9 | 100.0 | - | - | - | 100.0 | 45.4 | - | 45.4 | 54.6 | - | - | - |
| Provision and administration of public health programmes | HP.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| General health administration and insurance | HP.6 | 100.0 | 87.4 | 51.1 | 36.3 | 12.6 | - | - | - | 12.6 | - | - | - |
| Government (excluding social insurance) | HP.6.1 | 100.0 | 100.0 | 100.0 | - | - | - | - | - | - | - | - | - |
| Social security funds | HP.6.2 | 100.0 | 100.0 | - | 100.0 | - | - | - | - | - | - | - | - |
| Other social insurance | HP.6.3 | - | - | - | - | - | - | - | - | - | - | - | - |
| Other (private) insurance | HP.6.4 | 100.0 | - | - | - | 100.0 | - | - | - | 100.0 | - | - | - |
| All other providers of health administration | HP.6.9 | - | - | - | - | - | - | - | - | - | - | - | - |
| Other industries (rest of the economy) | HP.7 | 100.0 | 100.0 | 45.5 | 54.5 | - | - | - | - | - | - | - | - |
| Occupational health care | HP.7.1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Private households | HP.7.2 | - | - | - | - | - | - | - | - | - | - | - | - |
| All other secondary producers | HP.7.9 | 100.0 | 100.0 | 45.5 | 54.5 | - | - | - | - | - | - | - | - |
| Others | HP.8 | 100.0 | - | - | - | 100.0 | - | - | - | 100.0 | - | - | - |
| **Current health expenditure** | | **100.0** | **59.5** | **7.7** | **51.8** | **40.5** | **5.6** | **-** | **5.6** | **30.6** | **0.1** | **4.2** | **-** |

**SHA Table 3.3 Current health expenditure by provider industry and financing agent (% of expenditure by financing agent category)**

| Health care provider category | ICHA-HP code | Total current expenditure on health | **HF.1** General government | HF.1.1 General government (excl. social security) | HF.1.2 Social security funds | **HF.2** Private sector | HF.2.1 + HF.2.2 Private insurance | HF.2.1 Private social insurance | HF.2.2 Other private insurance | HF.2.3 Private household out-of-pocket payments | HF.2.4 Non-profit organisations (other than social ins.) | HF.2.5 Corporations (other than health insurance) | **HF.3** Rest of the world |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hospitals | HP.1 | 51.5 | 62.3 | 68.5 | 61.3 | 35.8 | 64.7 | - | 64.7 | 21.4 | 100.0 | 100.0 | - |
| Nursing and residential care facilities | HP.2 | 0.8 | 0.0 | 0.2 | - | 1.9 | - | - | - | 2.5 | - | - | - |
| Providers of ambulatory health care | HP.3 | 30.5 | 32.7 | 10.4 | 36.0 | 27.3 | - | - | - | 36.2 | - | - | - |
| Offices of physicians | HP.3.1 | 16.0 | 16.8 | - | 19.3 | 14.8 | - | - | - | 19.6 | - | - | - |
| Offices of dentists | HP.3.2 | 10.0 | 10.5 | - | 12.1 | 9.3 | - | - | - | 12.3 | - | - | - |
| Offices of other health practitioners | HP.3.3 | 2.9 | 3.1 | - | 3.5 | 2.7 | - | - | - | 3.6 | - | - | - |
| Out-patient care centres | HP.3.4 | 1.3 | 2.1 | 10.4 | 0.8 | 0.1 | - | - | - | 0.2 | - | - | - |
| Medical and diagnostic laboratories | HP.3.5 | 0.1 | - | - | - | 0.3 | - | - | - | 0.4 | - | - | - |
| Providers of home health care services | HP.3.6 | 0.1 | 0.2 | - | 0.2 | 0.1 | - | - | - | 0.2 | - | - | - |
| Other providers of ambulatory health care | HP.3.9 | 0.0 | 0.1 | - | 0.1 | - | - | - | - | - | - | - | - |
| Retail sale and other providers of medical goods | HP.4 | 14.0 | 0.4 | - | 0.4 | 34.0 | 35.3 | - | 35.3 | 38.6 | - | - | - |
| Dispensing chemists | HP.4.1 | 1.0 | 0.0 | - | 0.0 | - | - | - | - | 3.1 | - | - | - |
| All other sales of medical goods | HP.4.2-4.9 | 4.4 | - | - | - | 10.8 | 35.3 | - | 35.3 | 7.8 | - | - | - |
| Provision and administration of public health programmes | HP.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| General health administration and insurance | HP.6 | 3.1 | 4.6 | 20.9 | 2.2 | 1.0 | - | - | - | 1.3 | - | - | - |
| Government (excluding social insurance) | HP.6.1 | 1.6 | 2.7 | 20.9 | - | - | - | - | - | - | - | - | - |
| Social security funds | HP.6.2 | 1.1 | 1.9 | - | 2.2 | - | - | - | - | - | - | - | - |
| Other social insurance | HP.6.3 | - | - | - | - | - | - | - | - | - | - | - | - |
| Other (private) insurance | HP.6.4 | 0.4 | - | - | - | 1.0 | - | - | - | 1.3 | - | - | - |
| All other providers of health administration | HP.6.9 | - | - | - | - | - | - | - | - | - | - | - | - |
| Other industries (rest of the economy) | HP.7 | 0.0 | 0.0 | 0.1 | 0.0 | - | - | - | - | - | - | - | - |
| Occupational health care | HP.7.1 | - | - | - | - | - | - | - | - | - | - | - | - |
| Private households | HP.7.2 | - | - | - | - | - | - | - | - | - | - | - | - |
| All other secondary producers | HP.7.9 | 0.0 | 0.0 | 0.1 | 0.0 | - | - | - | - | - | - | - | - |
| Others | HP.8 | 0.0 | - | - | - | 0.0 | - | - | - | 0.1 | - | - | - |
| **Current health expenditure** | | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **-** | **100.0** | **100.0** | **100.0** | **100.0** | **-** |

**SHA Table 4.1 Current health expenditure by function of care and financing agent (NTD, millions)**

| Health care function | ICHA-HC code | Total current expenditure | **HF.1** General government | HF.1.1 General government (excl. social security) | HF.1.2 Social security funds | **HF.2** Private sector | HF.2.1 + HF.2.2 Private insurance | HF.2.1 Private social insurance schemes | HF.2.2 Other private insurance | HF.2.3 Private household out-of-pocket payments | HF.2.4 Non-profit institutions (other than social insurance) | HF.2.5 Corporations (other than health insurance) | **HF.3** Rest of the world |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Personal health care services | HC.1-HC.3 | 338,918 | 229,631 | 22,376 | 207,255 | 109,287 | 15,045 | - | 15,045 | 76,216 | 438 | 17,588 | - |
| In-patient services | | 126,174 | 87,627 | 12,471 | 75,155 | 38,548 | 8,575 | - | 8,575 | 19,671 | 250 | 10,051 | - |
| Day care services | | - | - | - | - | - | - | - | - | - | - | - | - |
| Out-patient services | | 211,013 | 140,812 | 9,760 | 131,052 | 70,201 | 6,403 | - | 6,403 | 56,156 | 186 | 7,456 | - |
| Home care services | | 1,731 | 1,192 | 145 | 1,047 | 539 | 67 | - | 67 | 389 | 2 | 80 | - |
| Ancillary services to health care | HC.4 | 589 | - | - | - | 589 | - | - | - | 589 | - | - | - |
| Medical goods dispensed to out-patients | HC.5 | 117,827 | 40,835 | 4,315 | 36,520 | 76,993 | 7,801 | - | 7,801 | 66,173 | 73 | 2,946 | - |
| Pharmaceuticals and other medical non-durables | HC.5.1 | 101,258 | 40,763 | 4,315 | 36,448 | 60,495 | 2,541 | - | 2,541 | 54,935 | 73 | 2,946 | - |
| Therapeutic appliances and other medical durables | HC.5.2 | 16,569 | 71 | - | 71 | 16,498 | 5,260 | - | 5,260 | 11,238 | - | - | - |
| Personal health care services and goods | HC.1-HC.5 | 457,335 | 270,466 | 26,691 | 243,774 | 186,869 | 22,846 | - | 22,846 | 142,978 | 511 | 20,533 | - |
| Prevention and public health services | HC.6 | 7,158 | 6,696 | 4,500 | 2,196 | 462 | 69 | - | 69 | 308 | 2 | 83 | - |
| Health administration and health insurance | HC.7 | 21,689 | 12,055 | 6,337 | 5,719 | 9,634 | 4,374 | - | 4,374 | 5,260 | - | - | - |
| **Current health expenditure** | | **486,182** | **289,217** | **37,528** | **251,689** | **196,965** | **27,289** | **-** | **27,289** | **148,546** | **513** | **20,616** | **-** |

**SHA Table 4.2 Current health expenditure by function of care and financing agent (% of expenditure on functional category (mode of production))**

| Health care function | ICHA-HC code | Total expenditure | **HF.1** General government | HF.1.1 General government (excl. social security) | HF.1.2 Social security funds | **HF.2** Private sector | HF.2.1 + HF.2.2 Private insurance | HF.2.1 Private social insurance schemes | HF.2.2 Other private insurance | HF.2.3 Private household out-of-pocket payments | HF.2.4 Non-profit institutions (other than social insurance) | HF.2.5 Corporations (other than health insurance) | **HF.3** Rest of the world |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Personal health care services | HC.1-HC.3 | 100.0 | 67.8 | 6.6 | 61.2 | 32.2 | 4.4 | - | 4.4 | 22.5 | 0.1 | 5.2 | - |
| In-patient services | | 100.0 | 69.4 | 9.9 | 59.6 | 30.6 | 6.8 | - | 6.8 | 15.6 | 0.2 | 8.0 | - |
| Day care services | | - | - | - | - | - | - | - | - | - | - | - | - |
| Out-patient services | | 100.0 | 66.7 | 4.6 | 62.1 | 33.3 | 3.0 | - | 3.0 | 26.6 | 0.1 | 3.5 | - |
| Home care services | | 100.0 | 68.9 | 8.4 | 60.5 | 31.1 | 3.9 | - | 3.9 | 22.5 | 0.1 | 4.6 | - |
| Ancillary services to health care | HC.4 | 100.0 | - | - | - | 100.0 | - | - | - | 100.0 | - | - | - |
| Medical goods dispensed to out-patients | HC.5 | 100.0 | 34.7 | 3.7 | 31.0 | 65.3 | 6.6 | - | 6.6 | 56.2 | 0.1 | 2.5 | - |
| Pharmaceuticals and other medical non-durables | HC.5.1 | 100.0 | 40.3 | 4.3 | 36.0 | 59.7 | 2.5 | - | 2.5 | 54.3 | 0.1 | 2.9 | - |
| Therapeutic appliances and other medical durables | HC.5.2 | 100.0 | 0.4 | - | 0.4 | 99.6 | 31.7 | - | 31.7 | 67.8 | - | - | - |
| Personal health care services and goods | HC.1-HC.5 | 100.0 | 59.1 | 5.8 | 53.3 | 40.9 | 5.0 | - | 5.0 | 31.3 | 0.1 | 4.5 | - |
| Prevention and public health services | HC.6 | 100.0 | 93.5 | 62.9 | 30.7 | 6.5 | 1.0 | - | 1.0 | 4.3 | 0.0 | 1.2 | - |
| Health administration and health insurance | HC.7 | 100.0 | 55.6 | 29.2 | 26.4 | 44.4 | 20.2 | - | 20.2 | 24.3 | - | - | - |
| **Current health expenditure** | | **100.0** | **59.5** | **7.7** | **51.8** | **40.5** | **5.6** | **-** | **5.6** | **30.6** | **0.1** | **4.2** | **-** |

**SHA Table 4.3 Current health expenditure by function of care and financing agent (% of expenditure by financing agent category)**

| Health care function | ICHA-HC code | Total expenditure | **HF.1** General government | HF.1.1 General government (excl. social security) | HF.1.2 Social security funds | **HF.2** Private sector | HF.2.1 + HF.2.2 Private insurance | HF.2.1 Private social insurance schemes | HF.2.2 Other private insurance | HF.2.3 Private household out-of-pocket payments | HF.2.4 Non-profit institutions (other than social insurance) | HF.2.5 Corporations (other than health insurance) | **HF.3** Rest of the world |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Personal health care services | HC.1-HC.3 | 69.7 | 79.4 | 59.6 | 82.3 | 55.5 | 55.1 | - | 55.1 | 51.3 | 85.3 | 85.3 | - |
| In-patient services | | 26.0 | 30.3 | 33.2 | 29.9 | 19.6 | 31.4 | - | 31.4 | 13.2 | 48.8 | 48.8 | - |
| Day care services | | - | - | - | - | - | - | - | - | - | - | - | - |
| Out-patient services | | 43.4 | 48.7 | 26.0 | 52.1 | 35.6 | 23.5 | - | 23.5 | 37.8 | 36.2 | 36.2 | - |
| Home care services | | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | - | 0.2 | 0.3 | 0.4 | 0.4 | - |
| Ancillary services to health care | HC.4 | 0.1 | - | - | - | 0.3 | - | - | - | 0.4 | - | - | - |
| Medical goods dispensed to out-patients | HC.5 | 24.2 | 14.1 | 11.5 | 14.5 | 39.1 | 28.6 | - | 28.6 | 44.5 | 14.3 | 14.3 | - |
| Pharmaceuticals and other medical non-durables | HC.5.1 | 20.8 | 14.1 | 11.5 | 14.5 | 30.7 | 9.3 | - | 9.3 | 37.0 | 14.3 | 14.3 | - |
| Therapeutic appliances and other medical durables | HC.5.2 | 3.4 | 0.0 | - | 0.0 | 8.4 | 19.3 | - | 19.3 | 7.6 | - | - | - |
| Personal health care services and goods | HC.1-HC.5 | 94.1 | 93.5 | 71.1 | 96.9 | 94.9 | 83.7 | - | 83.7 | 96.3 | 99.6 | 99.6 | - |
| Prevention and public health services | HC.6 | 1.5 | 2.3 | 12.0 | 0.9 | 0.2 | 0.3 | - | 0.3 | 0.2 | 0.4 | 0.4 | - |
| Health administration and health insurance | HC.7 | 4.5 | 4.2 | 16.9 | 2.3 | 4.9 | 16.0 | - | 16.0 | 3.5 | - | - | - |
| **Current health expenditure** | | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **-** | **100.0** | **100.0** | **100.0** | **100.0** | **-** |

**SHA Table 5.1 Total expenditure on health including health-related functions (NTD, millions)**

| | | | HF.1 | HF.1.1 | HF.1.2 | HF.2 | HF.2.1 + HF.2.2 | | | HF.2.3 | HF.2.4 | HF.2.5 | HF.3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Health care function | ICHA-HC code | Total expenditure | General government | General government (excl. social security) | Social security funds | Private Sector | Private insurance | HF.2.1 Private social insurance | HF.2.2 Other private insurance | Private household out-of-pocket payments | Non-profit institutions (other than social ins.) | Corporations (other than health insurance) | Rest of the world |
| Services of curative and rehabilitative care | HC.1, HC.2 | 333,436 | 228,359 | 22,157 | 206,202 | 105,076 | 14,977 | - | 14,977 | 72,157 | 436 | 17,506 | - |
| Services of long-term nursing care | HC.3 | 5,483 | 1,272 | 219 | 1,053 | 4,211 | 68 | - | 68 | 4,059 | 2 | 81 | - |
| Ancillary services to health care | HC.4 | 589 | - | - | - | 589 | - | - | - | 589 | - | - | - |
| Medical goods dispensed to out-patients | HC.5 | 117,827 | 40,835 | 4,315 | 36,520 | 76,993 | 7,801 | - | 7,801 | 66,173 | 73 | 2,946 | - |
| Pharmaceuticals and other med. non-durables | HC.5.1 | 101,258 | 40,763 | 4,315 | 36,448 | 60,495 | 2,541 | - | 2,541 | 54,935 | 73 | 2,946 | - |
| Therap. appliances and other med. durables | HC.5.2 | 16,569 | 71 | - | 71 | 16,498 | 5,260 | - | 5,260 | 11,238 | - | - | - |
| Personal medical services and goods | HC.1 - HC.5 | 457,335 | 270,466 | 26,691 | 243,774 | 186,869 | 22,846 | - | 22,846 | 142,978 | 511 | 20,533 | - |
| Prevention and public health services | HC.6 | 7,158 | 6,696 | 4,500 | 2,196 | 462 | 69 | - | 69 | 308 | 2 | 83 | - |
| Health administration and health insurance | HC.7 | 21,689 | 12,055 | 6,337 | 5,719 | 9,634 | 4,374 | - | 4,374 | 5,260 | - | - | - |
| **Current health expenditure** | | **486,182** | **289,217** | **37,528** | **251,689** | **196,965** | **27,289** | **-** | **27,289** | **148,546** | **513** | **20,616** | **-** |
| Gross capital formation | HC.R.1 | 30,001 | 21,884 | 4,412 | 17,472 | 8,117 | 2,038 | - | 2,038 | 3,603 | 60 | 2,416 | - |
| **Total expenditure on health** | | **516,183** | **311,102** | **41,940** | **269,162** | **205,081** | **29,328** | **-** | **29,328** | **152,148** | **573** | **23,032** | **-** |
| *Memorandum items: Further health related functions* | | | | | | | | | | | | | |
| Education and training of health personnel | HC.R.2 | 4,692 | 4,692 | 2,148 | 2,544 | - | - | - | - | - | - | - | - |
| Research and development in health | HC.R.3 | 5,552 | 5,067 | 2,207 | 2,859 | 485 | 122 | - | 122 | 215 | 4 | 145 | - |
| Food, hygiene and drinking water control | HC.R.4 | 131 | 131 | 131 | - | - | - | - | - | - | - | - | - |
| Environmental health | HC.R.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| Administration and provision of social services in kind to assist living with disease and impairment | HC.R.6 | 33 | 33 | 33 | - | - | - | - | - | - | - | - | - |
| Administration and provision of health-related cash-benefits | HC.R.7 | 154 | 154 | 154 | - | - | - | - | - | - | - | - | - |

**SHA Table 5.2 Total expenditure on health including health-related functions (% of expenditure on functional category)**

| Health care function | ICHA-HC code | Total expenditure | **HF.1** General government | HF.1.1 General government (excl. social security) | HF.1.2 Social security funds | **HF.2** Private Sector | HF.2.1 + HF.2.2 Private insurance | HF.2.1 Private social insurance | HF.2.2 Other private insurance | HF.2.3 Private household out-of-pocket payments | HF.2.4 Non-profit institutions (other than social ins.) | HF.2.5 Corporations (other than health insurance) | **HF.3** Rest of the world |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Services of curative and rehabilitative care | HC.1, HC.2 | 100.0 | 68.5 | 6.6 | 61.8 | 31.5 | 4.5 | - | 4.5 | 21.6 | 0.1 | 5.3 | - |
| Services of long-term nursing care | HC.3 | 100.0 | 23.2 | 4.0 | 19.2 | 76.8 | 1.2 | - | 1.2 | 74.0 | 0.0 | 1.5 | - |
| Ancillary services to health care | HC.4 | 100.0 | - | - | - | 100.0 | - | - | - | 100.0 | - | - | - |
| Medical goods dispensed to out-patients | HC.5 | 100.0 | 34.7 | 3.7 | 31.0 | 65.3 | 6.6 | - | 6.6 | 56.2 | 0.1 | 2.5 | - |
| Pharmaceuticals and other med. non-durables | HC.5.1 | 100.0 | 40.3 | 4.3 | 36.0 | 59.7 | 2.5 | - | 2.5 | 54.3 | 0.1 | 2.9 | - |
| Therap. appliances and other med. durables | HC.5.2 | 100.0 | 0.4 | - | 0.4 | 99.6 | 31.7 | - | 31.7 | 67.8 | - | - | - |
| Personal medical services and goods | HC.1 - HC.5 | 100.0 | 59.1 | 5.8 | 53.3 | 40.9 | 5.0 | - | 5.0 | 31.3 | 0.1 | 4.5 | - |
| Prevention and public health services | HC.6 | 100.0 | 93.5 | 62.9 | 30.7 | 6.5 | 1.0 | - | 1.0 | 4.3 | 0.0 | 1.2 | - |
| Health administration and health insurance | HC.7 | 100.0 | 55.6 | 29.2 | 26.4 | 44.4 | 20.2 | - | 20.2 | 24.3 | - | - | - |
| **Current health expenditure** | | **100.0** | **59.5** | **7.7** | **51.8** | **40.5** | **5.6** | **-** | **5.6** | **30.6** | **0.1** | **4.2** | **-** |
| Gross capital formation | HC.R.1 | 100.0 | 72.9 | 14.7 | 58.2 | 27.1 | 6.8 | - | 6.8 | 12.0 | 0.2 | 8.1 | - |
| **Total expenditure on health** | | **100.0** | **60.3** | **8.1** | **52.1** | **39.7** | **5.7** | **-** | **5.7** | **29.5** | **0.1** | **4.5** | **-** |
| *Memorandum items: Further health related functions* | | | | | | | | | | | | | |
| Education and training of health personnel | HC.R.2 | 100.0 | 100.0 | 45.8 | 54.2 | - | - | - | - | - | - | - | - |
| Research and development in health | HC.R.3 | 100.0 | 91.3 | 39.8 | 51.5 | 8.7 | 2.2 | - | 2.2 | 3.9 | 0.1 | 2.6 | - |
| Food, hygiene and drinking water control | HC.R.4 | 100.0 | 100.0 | 100.0 | - | - | - | - | - | - | - | - | - |
| Environmental health | HC.R.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| Administration and provision of social services in kind to assist living with disease and impairment | HC.R.6 | 100.0 | 100.0 | 100.0 | - | - | - | - | - | - | - | - | - |
| Administration and provision of health-related cash-benefits | HC.R.7 | 100.0 | 100.0 | 100.0 | - | - | - | - | - | - | - | - | - |

**SHA Table 5.3 Total expenditure on health including health-related functions (% of expenditure by financing agent category)**

| Health care function | ICHA-HC code | Total expenditure | **HF.1** General government | HF.1.1 General government (excl. social security) | HF.1.2 Social security funds | **HF.2** Private Sector | HF.2.1 + HF.2.2 Private insurance | HF.2.1 Private social insurance | HF.2.2 Other private insurance | HF.2.3 Private household out-of-pocket payments | HF.2.4 Non-profit institutions (other than social ins.) | HF.2.5 Corporations (other than health insurance) | **HF.3** Rest of the world |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Services of curative and rehabilitative care | HC.1, HC.2 | 64.6 | 73.4 | 52.8 | 76.6 | 51.2 | 51.1 | - | 51.1 | 47.4 | 76.0 | 76.0 | - |
| Services of long-term nursing care | HC.3 | 1.1 | 0.4 | 0.5 | 0.4 | 2.1 | 0.2 | - | 0.2 | 2.7 | 0.4 | 0.4 | - |
| Ancillary services to health care | HC.4 | 0.1 | - | - | - | 0.3 | - | - | - | 0.4 | - | - | - |
| Medical goods dispensed to out-patients | HC.5 | 22.8 | 13.1 | 10.3 | 13.6 | 37.5 | 26.6 | - | 26.6 | 43.5 | 12.8 | 12.8 | - |
| Pharmaceuticals and other med. non-durables | HC.5.1 | 19.6 | 13.1 | 10.3 | 13.5 | 29.5 | 8.7 | - | 8.7 | 36.1 | 12.8 | 12.8 | - |
| Therap. appliances and other med. durables | HC.5.2 | 3.2 | 0.0 | - | 0.0 | 8.0 | 17.9 | - | 17.9 | 7.4 | - | - | - |
| Personal medical services and goods | HC.1 - HC.5 | 88.6 | 86.9 | 63.6 | 90.6 | 91.1 | 77.9 | - | 77.9 | 94.0 | 89.2 | 89.2 | - |
| Prevention and public health services | HC.6 | 1.4 | 2.2 | 10.7 | 0.8 | 0.2 | 0.2 | - | 0.2 | 0.2 | 0.4 | 0.4 | - |
| Health administration and health insurance | HC.7 | 4.2 | 3.9 | 15.1 | 2.1 | 4.7 | 14.9 | - | 14.9 | 3.5 | - | - | - |
| **Current health expenditure** | | **94.2** | **93.0** | **89.5** | **93.5** | **96.0** | **93.0** | **-** | **93.0** | **97.6** | **89.5** | **89.5** | **-** |
| Gross capital formation | HC.R.1 | 5.8 | 7.0 | 10.5 | 6.5 | 4.0 | 7.0 | - | 7.0 | 2.4 | 10.5 | 10.5 | - |
| **Total expenditure on health** | | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **-** | **100.0** | **100.0** | **100.0** | **100.0** | **-** |
| *Memorandum items: Further health related functions* | | | | | | | | | | | | | |
| Education and training of health personnel | HC.R.2 | | | | | | | | | | | | |
| Research and development in health | HC.R.3 | | | | | | | | | | | | |
| Food, hygiene and drinking water control | HC.R.4 | | | | | | | | | | | | |
| Environmental health | HC.R.5 | | | | | | | | | | | | |
| Administration and provision of social services in kind to assist living with disease and impairment | HC.R.6 | | | | | | | | | | | | |
| Administration and provision of health-related cash-benefits | HC.R.7 | | | | | | | | | | | | |

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