National health expenditure estimates: goals, concepts, applications - Global experience

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Overview

- History
- National Health Accounts (NHA)
- OECD SHA
- Disease Analyses
- Strategies



History of National Health Expenditure Estimation

1940-60s: Academic studies in a few countries
UK, USA

1960: USA Medicare

Establishment of US National Health Accounts

1963 - 67: First cross-country studies

WHO (Abel-Smith, 1963-67)

1970s: OECD mandate

OECD co-operation to control health spending ⇒ OECD Health Data ⇒ Comparative analysis of determinants of health spending

1990s: Shift from NHE to NHA
Extension of NHA outside OECD region

China, Philippines, Thailand, Egypt, Russia, Hong Kong, Sri Lanka . . .



What Are National Health Accounts?

A statistical system comprising descriptive accounts that describe the totality of expenditure flows in both the government and non-government sectors. They describe the source of all funds utilized in the sector and the destination and uses of those funds.



Typical Health Account Table

Example: Functions by sources

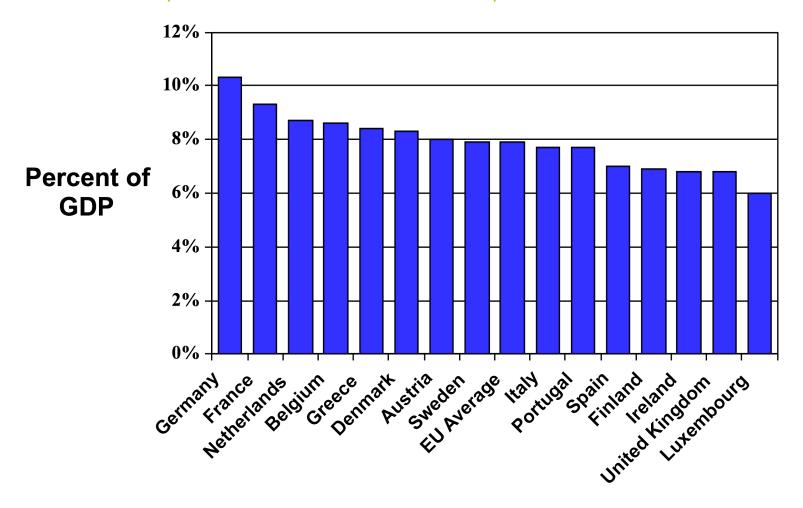
	Total	Government	Private Insurance	Households
Total	100%	48%	1%	51%
Inpatient care	35%	24%	<2%	9%
Outpatient care & medicines	57%	16%		42%
Public health services	6%	6%	-	-
Administration	2%	2%	0%	-

Total spending = 4.2% of GDP, \$50 per capita



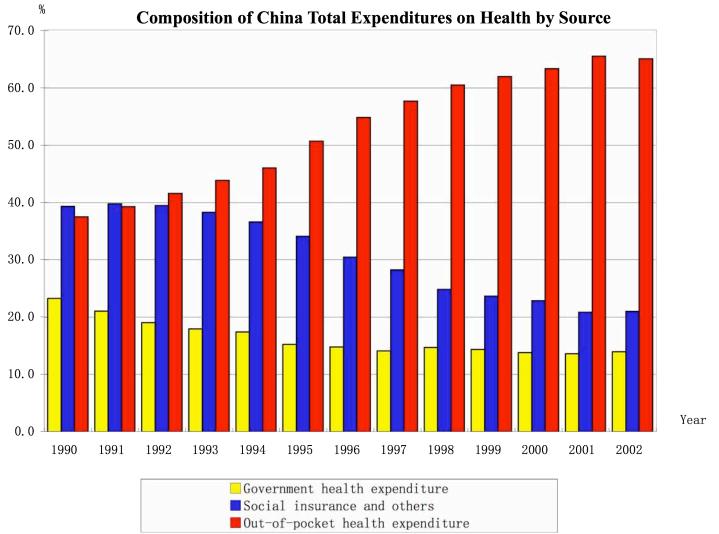
NHA Uses: International Comparisons

Health Expenditure as a Share of GDP in European Union Countries, 1998





NHA Uses: China - Trends in Health Spending



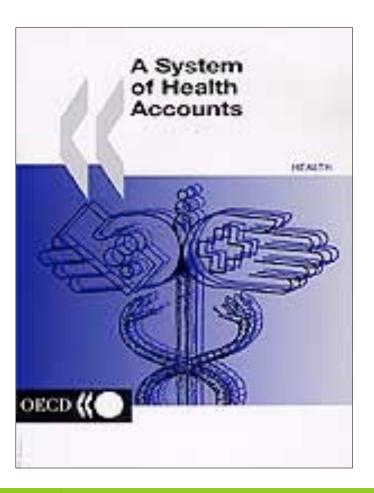


Problems in late 1990s

- Lack of comparability in published NHA estimates for most OECD countries
- Tendency for estimates to be changed every year
 - Development of OECD Standard for NHA reporting
- Lack of standardisation and compilation of data outside OECD
 - Establishment of WHO NHA Unit, 1998
 - Annual WHO NHA reporting



A "System of Health Accounts" OECD (2000)

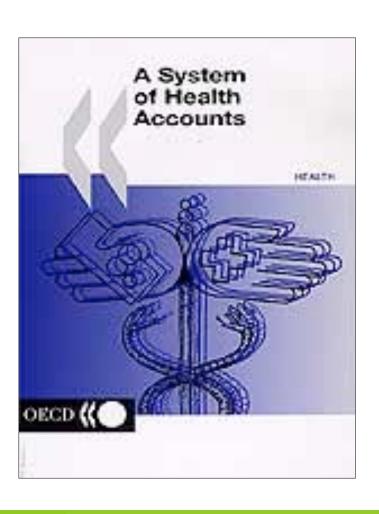


OECD SHA:

- To provide standard reporting tables for international comparison
- To provide an internationally harmonized boundary for health care activities
- To provide a consistent framework for analyzing health systems
- To provide a rigid framework for building NHA to permit consistent reporting over time



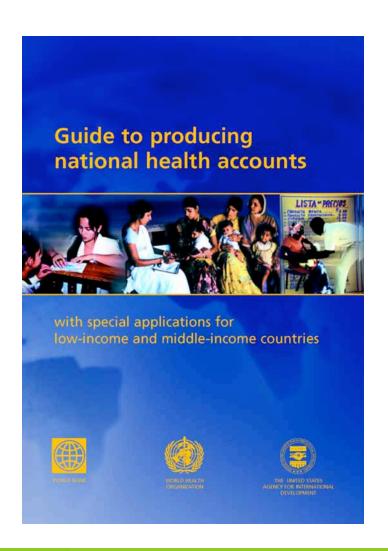
Features of OECD SHA



- Provides explicit and comprehensive boundary of health and health-related production
- Analyzes health expenditures in three dimensions: sources, providers and functions
- Detailed sets of classifications for the uses of spending: providers and functions
- Linkages with other international classifications, including SNA
- Basis for adaptation to meet specific national requirements



Recent trends



- OECD SHA adopted by OECD and Eurostat for statistical use 2005
- Endorsed by WHO, World Bank for international comparison
- WHO NHA Producers Guide to assist countries
- Adopted for international reporting by 60+ countries outside OECD, including Ukraine, Russia, Georgia, China, Thailand, etc.
- 2007-2009: Development of SHA 2.0 by OECD, WHO and Eurostat

SHA Classification of Functions

- **HC.1 Services of curative care**
 - **HC.1.1** Inpatient care
 - **HC.1.2** Day cases of curative care
 - **HC1.3** Outpatient care
 - **HC1.4** Home care
- **HC.2 Services of rehabilitative care**
- HC.3 Services of long-term nursing care
- **HC.4 Ancillary services to health care**
- **HC.5 Medical goods dispensed to out-patients**
- HC.6 Prevention and public health services
- HC.7 Health administration and health insurance



SHA categories

HC.1 Services of curative care

HC.2 Services of rehabilitative care

HC.3 Services of long-term nursing care

HC.4 Ancillary services to health care

HC.5 Medical goods dispensed to out-patients

HC.6 Prevention and public health services

HC.7 Health administration and health insurance

HC.R.1 Capital formation

HC.R.2 Education and training

HC.R.3 Research and development

HC.R.4 Food, hygiene and drinking water control

HC.R.5 Environmental health

HC.R.6 Social services in-kind

HC.R.7 Health-related cash-benefits

Total
Current
Expenditure
on Health

Total
Expenditure
on Health
(TEH)

General
Expenditure
on Health
(GEH)



Disease analyses

- 2 available approaches:
 - 1. Disease Subaccounts: Standalone estimation of expenditure on a single disease, e.g., TB, HIV
 - Full Disease Accounts: Extension of SHA to capture disease spending

Issues:

- SHA classification categories do not match required disease categories
- Some disease expenditures may be outside the SHA boundary, e.g, care for HIV orphans
- Some expenditures can be counted in more than one disease, e.g., TB in HIV patients



Full Disease Accounts

SHA categories

Disease categories (ICD-10)

Inpatient care

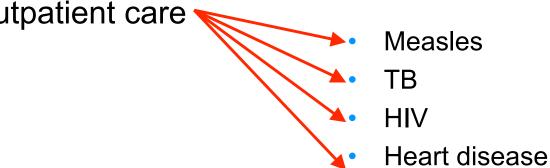
Measles

TB

HIV

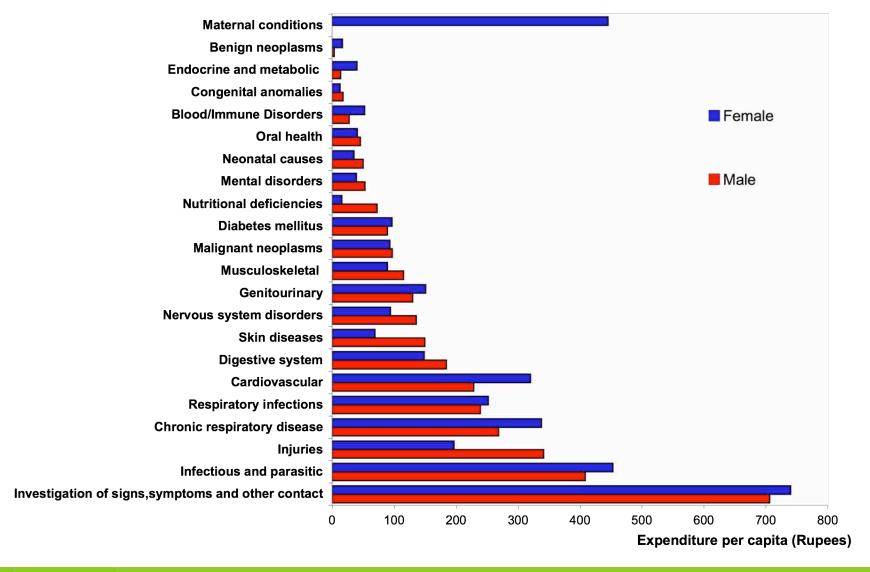
Heart disease

Outpatient care





Full Disease Accounts



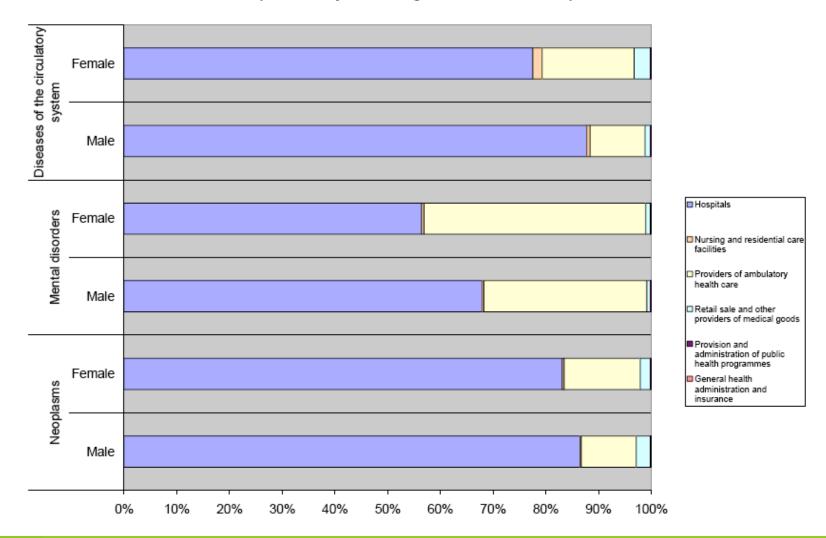




Full Disease Accounts

CZECH-REPUBLIC

Health expenditure by diseases, gender and health care provider in 2004



Disease Subaccounts

Examples

- Ukraine AIDS Accounts
- UNAIDS National AIDS Spending Assessment (NASA)

Issues

- SHA categories do not meet needs
- NASA estimates may not match NHA estimates of health expenditure
- NHA agency may lack data/expertise for disease analysis



An Approach to Managing Multiple Expenditure Accounts

- Use the main NHA as the starting point
- Two step approach:
 - Use secondary analyses to disaggregate main categories in SHA classification
 - Collect additional data where necessary to estimate additional items for HIV/AIDS estimates, eg for NASA
- Separate responsibility between agencies for NHA and AIDS estimates, but with close coordination of work

