Iraq National Health Account

IRAQ 2008

WHO Library Cataloguing in Publication Data

WHO. Regional Office for the Eastern Mediterranean
Iraq national health account 2008 / World Health Organization. Regional Office for the Eastern Mediterranean
p.
1. National Health Programs - Iraq 2. Health Expenditures - statistics and numerical data 3. Health Care Costs - statistics and numerical data 4. Public Health -economics I. Title II Regional Office for the Eastern Mediterranean
WHO-EM/HEC/038/E (NLM Classification: W 16)

Contents

Foreword

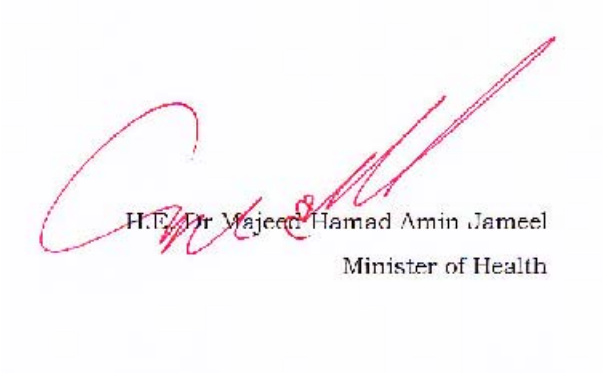
Iraq is witnessing a demographic and epidemiological transition, creating additional constraints for the health system in managing the double burden of communicable and non-communicable diseases and adapting the supply of services and human resources to emerging needs and higher population expectations. With relatively limited financial resources and increasing cost of care, providing universal access to health services remains a major concern for the Government of Iraq.

The Ministry of Health is examining the various health system functions and building blocks including health care financing with technical support from WHO. In this respect, the Ministry seeks to find answers to the following basic questions: how much money is being spent on health in Iraq? Where does the money for health come from? Who manages the resources flowing in the health sector? How much money is being spent on the various types of providers? How much money is being spent on the various activities and services provided within the health sector? To what extent does the allocation of health resources succeed in ensuring equity? What is the burden on households from demanding and using health care services?

In order to provide elements of answers to the above mentioned questions, the Ministry of Health, in collaboration with WHO, embarked on several studies related to health care financing, including developing a system of national health accounts. A systematic effort was put by WHO and the Iraqi national health account team to collect information from both the public and private sectors. The Iraqi Household Socio-Economic Survey-2007 (IHSES 2007) provided information on direct household and individual contributions to health care expenditures, namely out-of-pocket expenditures. Other surveys were used to collect additional information from some providers of health care services in the public and private sectors and from the insurance industry.

National health accounts are designed to give a comprehensive description of financial resources flowing in the health care system and to analyse their utilization in order to produce the necessary health services for the population served. Although previous health care expenditure studies have been carried out in Iraq, here the national health account methodology was used for the first time. The findings and conclusions of national health account analysis will have a great impact on shaping policy reforms in the field of health financing in Iraq. The present national health account study

represents a milestone in assessing health care financing in Iraq and in improving the overall health system performance in order to achieve the health system goals of improving health, reducing health inequalities, securing equity in financing and responding to the population's needs and expectations.



Abbreviations

GDP	Gross domestic product
ID	Iraq dinar
IFHS	Iraq Family Health Survey
IHSES	Iraq Household Socio-Economic Survey
IMF	International Monetary Fund
IPSM	Iraq Public Sector Modernization
NHA	National health account
OECD	Organization for Economic Co-operation and Development
OOP	Out-of-pocket
PHC	Primary health care
PSM-TF	Public sector modernization task force
THE	Total health expenditure
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization

Introduction

Iraq is a Member State of the WHO Eastern Mediterranean Region with a population of 31 895 637 and a per capita GDP of about US$ 4208 (a large percentage of which comes from natural resources and government revenues). The country is facing challenges to the health and security of its population, with increasing social and economic vulnerability.

During the past seven years there have been significant efforts to reinforce reconstruction and overall development in most sectors, including health. However, these efforts have been impeded by increasing demands for quality health care and limited health system infrastructure.

One of the goals of the Ministry of Health is to improve the health status of all citizens through a national health system that assures universal coverage for the population with quality and affordable health care services in line with the principles of primary health care.

The national health system depends largely on general government revenues with some household out-of-pocket spending that finances mainly health services purchased privately. In recent years various reforms of health care financing have been discussed, including development of contributive mechanisms through social and private health insurance. However, evidence was not available to support policy change. Indeed data on health care financing in general was fragmented and information about private health care spending was largely absent.

To address this situation, efforts are being made by the Ministry of Health, with support from WHO, to improve data collection and analysis in the field of health care financing, through national health accounts, initiation of some costing services and estimation of public expenditures in primary care settings. Data on private health expenditures were generated by the Iraqi Household Socio-Economic Survey (IHSES), carried out in 2007 with financial support from the World Bank.

National teams were trained on national health account methodology and were involved in data collection from ministries of health, finance, social security and labour and from some institutions providing health care services to some categories including military, prisoners and workers in some national companies. Surveys were also sent to some public and private facilities, to service providers in the private sector and to some private insurers.

Figures collected from public providers, and through IHSES for private health care expenditures by households, were analysed using the national health account methodology in a workshop in Amman 27 February to 1 March 2011. Matrices (Annex 1) were populated with the support of WHO consultants and a first draft report was prepared on the national health account.

NHA development context

The national health account (NHA) is an internationally accepted tool for collecting, cataloguing and estimating financial flows throughout the health system, regardless of the origin or destination of funds. It is a comprehensive system that details the financing sources, financing agents, providers and functions related to the health sector. The NHA exercise provides the necessary information to improve health system performance and evaluate public policies in the health sector. To date, NHA studies have been conducted in more than 100 middle-income and low-income countries.NHA estimates are currently used as an information guide on the nature of health care expenditures and the system of health care providers.

After the year 2000, the NHA methodology became the 'light at the end of the tunnel' for public and private actors within the health systems all over the world. NHAs lay out solid foundations for governments to manage and sustain scarce resources in the health sector and provide basic information related to health financing needed to develop health care financing policies.

The figures and estimates in this NHA report are based on surveys, secondary data and interviews with policy-makers, policy analysts, economists, and the staff and officials of the Ministry of Health, Ministry of Finance, and other stakeholders including the private sector and donors. The information presented provides further data needed by the Government of Iraq and donors agencies in making policy and planning decisions to guide the development of the health sector.

Health account structure

Formatted in a standard set of tables, NHA methodology organizes, tabulates, and presents various aspects of a country's health expenditures. This format is one that can be easily understood and interpreted by all policy-makers. The report tries to assess the "financial pulse" of the Iraqi national health systems by answering the following questions.

- How is health care being financed?
- Who pays? How much? And for what types of services?
- How are resources for health and health care organized and managed?
- How are funds distributed across different providers and functions?
- Who benefits from health expenditure?

National health account activities

Methodology

Iraq NHA study followed the methodology provided by the *Guide to producing national health accounts* prepared by the World Health Organization (WHO) in collaboration with the World Bank and United States Agency for International Development (USAID). Adjustments were made to the classification schemes as necessary to bring them in line with national specifications. Several criteria were used to adapt the classifications: transactions were grouped and partitioned so that they each represent an important, policy-relevant dimension. Partitioned transactions are mutually exclusive and exhaustive, so each transaction of interest is placed in one – and only one – category.

The NHA methodology is based on four information matrices that allow for four levels of analysis: **sources of health funds**, **financing agents** who handle the funds, **providers** of services and **health functions**. The following is a list of the four major components of the four NHA matrices.

1. **Sources of health funds**
    - Ministry of Finance
    - Private sector (employers and households)
    - Donors

2. **Financing agents**
    - Major public financing agent: Ministry of Health
    - Private sector financing agents (household out-of-pocket payment, private insurance companies, nongovernmental organizations, employer benefit schemes, etc.)
    - Donors as financing agents

3. **Providers of health**
    - Ministry of Health facilities (hospitals and health centres)
    - Private facilities (hospitals, general practitioners, pharmacists and dentists)
    - Private pharmacies
    - Health administration providers
    - Other providers of health-related functions

4. **Functional classification of health services**
    - Inpatient care services
    - Outpatient care services
    - Medical goods and pharmaceuticals
    - Preventive and public health services
    - Health administration
    - Other health-related functions

The compilation of national health accounts 2008 for Iraq started in October 2009 with extensive meetings between WHO, Ministry of Health, Ministry of Finance, related stakeholders and the NHA working team. The aim of this round of NHA is to support and

guide the National Health Steering Committee, the Ministry of Health and the Government of Iraq in building solid information supporting the new Iraqi Public Sector Modernization Project (I-PSM). I-PSM addresses reforming most of the governmental sectors, mainly the health sector; as well as, guiding the Government of Iraq in highlighting the key financers and assessing national health expenditures (both public and private).

The present round of NHA 2008 provides information about total health expenditure, traces the flow of health spending and resources allocation within the entire health sector and indicates the major line items on which public and private financial resources are spent.

Data sources

Efforts were made, to the extent possible, to consider existing international standards and conventions when placing certain transactions into groups and to secure international comparability of the Iraqi data. While preparing preliminary 2008 NHA matrices and tables, the WHO consultant and the national NHA team relied on existing data sources and, where absolutely essential, additional efforts were made to compile further information.

The following sources of information helped establishing the present report:

- Ministry of Finance
- Ministry of Health statistical reports
- The 2007 Iraq Household Socio-Economic Survey (IHSES)
- The 2006–2007 Iraqi Family Health Survey (IFHS)
- Private and public big firms and providers market information
- Reports of the ministries of health and finance to obtain details on public financing by functions and providers
- For donor financing and nongovernmental organizations, in addition to information extracted from Ministry of Health sources, special enquiries were made to capture the size of donor assistance and the purpose of funds/programmes and projects
- For information about imported pharmaceuticals and other medical goods, consultation was made with the national drug firm (al Shareka al Aama Lil Adwya) to validate the providers' survey data
- Other national reports.

Definitions used during NHA preparation were documented and were subject to thorough review by the national NHA team. After their revisions and approval during a workshop in Amman in February 2011, the required changes were made to the preliminary estimates and a final NHA for 2008 was produced.

Study limitations

NHA production showed several strengths as well as shortcomings of the existing system and data. This is the first NHA estimate prepared in a critical security situation. It attempts to achieve a compromise between timeliness and details on one side, and data

quality and availability on the other. As with any such estimation, revisions will be necessary to the methodology and numbers as new data sources become available.

The main challenges faced included the following.

- Household-level expenditure captured by IHSES 2007 was not sufficiently detailed for NHA purposes. It was available only by broad expenditure categories, which did not allow the disaggregation of data according to specific types of providers and/or functions. The volume of private spending in total health expenditure (THE) and the inability to disaggregate it by provider and function put limitations on private expenditure analysis. Hence, surveying most of the major actors within the private sector dealing with households was performed to validate the estimations of total out-of-pocket (OOP) spending.
- Household data extracted from IFHS 2006–2007 was also insufficient but in some instances was used to validate and double check figures provided by the IHSES 2007 survey.
- Significant variation existed between the government classification of accounts and the NHA producers' guide classification. These concerns were shared with the NHA national team and Ministry of Health officials for future data quality improvement.
- Disaggregating spending by other ministries and the army medical scheme proved impossible. However, in average these agents manage less than 1% of THE and most of the services for their clients are provided at Ministry of Health facilities. Consequently, this is not expected to have significant impact on the findings.
- This exercise excludes in-kind donations by some donors (equipment, services, personnel and training)
- It was not possible to get data from private insurance companies in the absence of major insurance schemes.
- It was also not possible to capture nongovernmental organization expenditure data. Consequently, approximations were made using Ministry of Health public health department instead.
- Information on the private market of pharmaceuticals was derived mainly from the national drug firm and OOP estimates from IHSES 2007 survey.

Actual volumes of health expenditures described in this first ever NHA report for Iraq reflects the best possible estimates. Routine revisions will therefore be necessary in the future in order to maintain and improve the quality and usefulness of NHA, as well as, to update it with new information when it becomes available.

NHA main findings

Iraqi medical services are provided mainly through government hospitals, health centres and sub-centres and stations in the peripheries. The private sector consists of a network of hospitals, general practitioners and pharmacists practising mainly in urban areas. The Ministry of Health of Iraq is currently leading the financing and provision of health services.

Summary results (FY 2008)

The health sector in Iraq faces considerable challenges for its future development. While general health outcomes are relatively good (i.e. infant, under-five mortality rates), "system-related" issues warrant careful and prompt attention. The health sector is divided into two main financing arrangements, a public sector financed by the government, and a growing private sector financed through OOP payments. Private health insurance scheme covers minor part of the population while most of the population is covered de facto by the Ministry of Health.

This NHA exercise found that Iraq spends more than what it was estimated by previous studies. It is estimated that in 2008:

- 3.3% of GDP and a per capita spending of US$ 137 were directed to health services. This figure represents only cash expenditures; it excludes in-kind donations (equipment, services, personnel, and training activities) estimated by some researchers.
- Public funding accounted for 74% of health spending, donor support represents 1%, and private spending amounts to 25%.
- The majority of health care spending is for public health programmes and primary care.
- A significant proportion of spending is on pharmaceuticals (36.8%) and for administration (22.4%).

One of the most important aspects of the NHA was the analysis of private spending. This revealed a high level of private out-of-pocket spending on private physicians and on pharmaceuticals. Families allocate around 9% of their private health expenditures to transportation which reflects some geographic access problems in some governorates.

The main findings inferred from the NHA study matrices are summarized in Table 1.

Table 1. Summary NHA 2008 findings

Population (2008)	31 895 637		
	Total ID	**Per capita ID**	**Per capita US$**
Total health expenditures	5 121 125 173 810	160 559	137.23
Total Ministry of Health expenditures	3 758 039 934 851	117 823	100.70
Total government expenditures	77 709 000 000 000		
GDP estimates for Iraq (ID)	157 026 061 000 000	4 923 120	4207.80
GDP estimates for Iraq (US$)	134 210 308 547		
Percent GDP spent on health	3.3%		

Analysing the sources of funds

In 2008, total expenditure on health care in Iraq amounted to ID 5121 billion with per capita expenditures of ID 160 559 (US$ 137) (Table 2). It represents 3.3% of the GDP. This level of expenditure remains l**ower** than that observed in countries in the region with similar socioeconomic background. Indeed, this level of expenditure is more in line with low-income countries.

Table 2. Sources of health funds, 2008

Source	Amount (ID)	Percentage	Per capita ID	Per capita US$
Ministry of Finance	3 773 802 999 621	73.69%	118 317.22	101.13
Parastatal funds	1 473 868 640	0.03%	46.21	0.04
Household funds (FS.2.2)	1 283 447 718 099	25.06%	40 238.97	34.39
Other private funds	141 786 450	0.00%	4.45	0.00
Donors funds (FS.3)	62 258 801 000	1.22%	1 951.95	1.67
Total	5 121 125 173 810	100.00%	160 558.80	137.23

Public sources account for 73.7% and private sources for 25.1% of health care financing (Figure 1). International donors account for the remaining 1.2%. Of the total US$ 137 spent per capita on health in Iraq in 2008, the government paid approximately US$ 101 per person per year, households and individuals paid approximately US$ 34 per capita, and donors paid the remaining US$ 2. The proportion of government expenditure out of total health expenditure is relatively high, and is even higher than its equivalent in other middle-income countries in the Eastern Mediterranean Region. This represents the important role played by the government and its ministries in providing health care coverage to the entire Iraqi population and in securing universal social health protection.

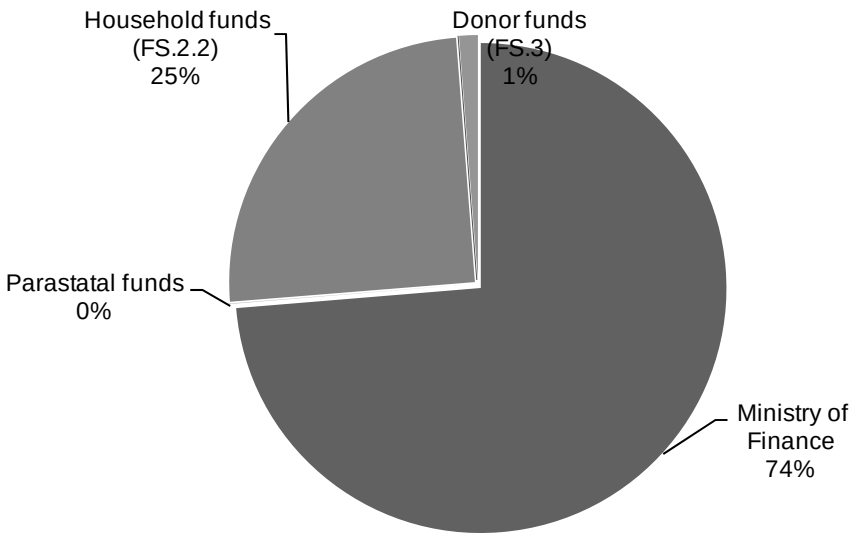


Figure 1. Sources of health funds

Analysing financing agent spending

A breakdown of total health expenditures by financing agents indicates that expenditures by public financing agents are the highest (Table 3). Overall, more than 73% of total health expenditures is managed and spent by the Ministry of Health, 25.35% by private financing agents as out-of-pocket, and as little as 1.2% by donors and international agents (Figure 2). The Ministry of Health runs and manages most of the public financing resources. Most of its public health resources were financed by the government budget. Donors transfer most of their funds to the Ministry of Health and secondly to their own donor-run health services facilities. The private insurance market is still negligible in Iraq. Households transfer their health funds directly to providers as user fees as well as payments in private pharmacies.

Table 3. Administration of health funds, 2008

Financing agent	Amount (ID)	Percentage	Per capita ID	Per capita US$
Ministry of Health	3 758 039 934 851	73.38	117823.01	100.70
Other ministries	1 072 560 871	0.02	33.63	0.03
Others public	1 473 868 640	0.03	46.21	0.04
Private household out-of-pocket payments	1 298 280 008 448	25.35	40 704.00	34.79
Donors	62 258 801 000	1.22	1 951.95	1.67
Total	5 138 643 117 106	100.00	160 558.80	137.23

In Iraq, financing agents (mainly the Ministry of Health) receive the majority of their funding from public sources and use the majority of those funds in government facilities.

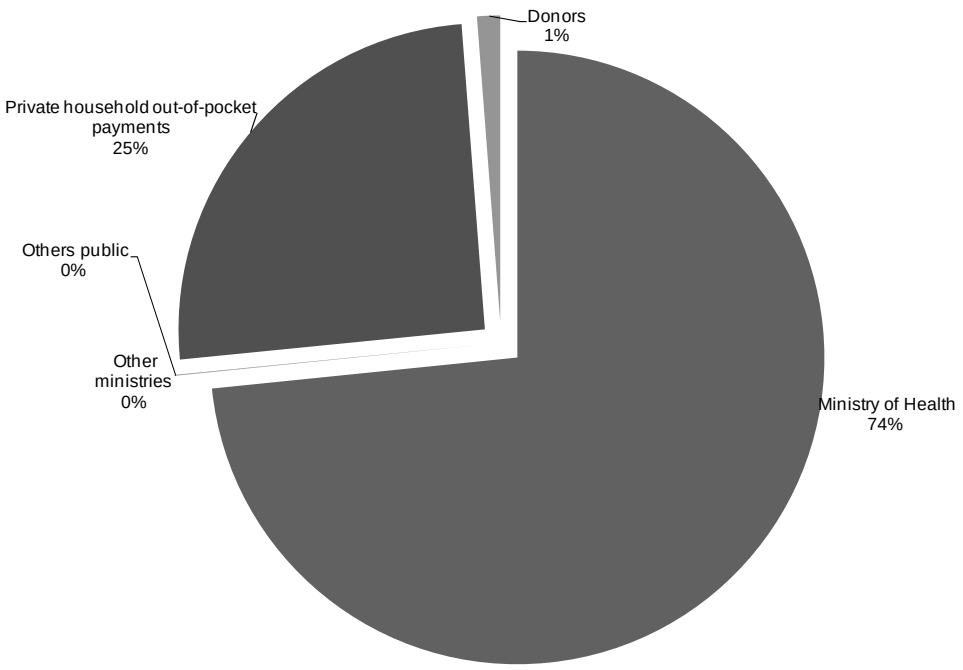


Figure 2. Financing agents, 2008

Analysing the use of health funds by providers

In terms of provision of national hospitals, inpatient care accounted for less than 15%; Ministry of Health primary health care (PHC) centres for 25.1%; pharmacies of the Ministry of Health for 26.7%; and private pharmacies accounted for almost 10.2% (Table 4, Figure 3). The provision of public health administration accounts for more than 22.4% and provision of health-related functions, mainly medical staff training and research, accounts for almost 1.1% of total health expenditures.

Table 4. Providers of health care expenditures, 2008

Provider	Amount (ID)	Percentage	Per capita ID	Per capita US$
General hospitals	745 911 503 474	14.6	23 386	19.99
Ministry of Health primary health care centres	1 286 579 622 930	25.1	40 337	34.48
Pharmacies of Ministry of Health	1 365 298 225 915	26.7	42 805	36.59
Private pharmacies	520 202 399 555	10.2	16 310	13.94
Administration of health	1 147 085 680 919	22.4	35 964	30.74
Providers of health related functions	56 047 741 017	1.1	1 757	1.50
Total	5 121 125 173 810	100.0	160 559	137.23

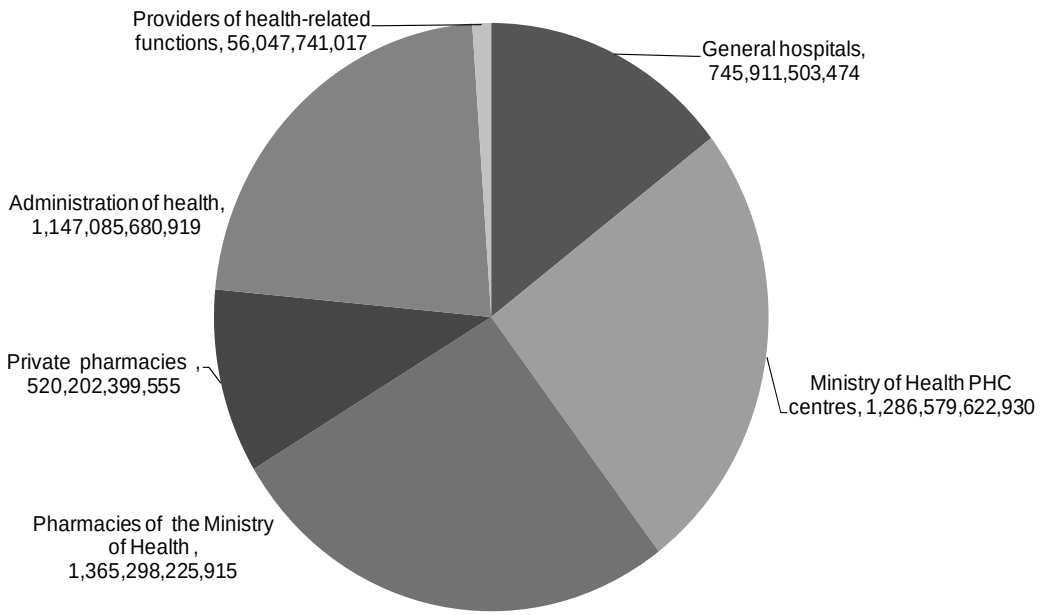


Figure 3. Total health expenditures by provider, 2008

Analysing the uses of health funds by function

In general, Iraqi health funds are primarily spent on curative care (more than 37%). A considerable share, 36.8%, goes towards pharmaceuticals dispensed for outpatient care, and 22.4% is spent on administration cost and salaries (Table 5, Figure 4).

Table 5. Functional distribution of health care expenditures, 2008

Function	Amount (ID)	Percentage	Per capita ID	Per capita US$
Inpatient curative care	614 161 503 474	11.99	19353.95	16.54
Basic medical and diagnostic services	1 303 505 329 730	25.45	41053.06	35.09
Pharmaceuticals and other medical non-durables	1 885 500 625 470	36.81	59331.50	50.71
General government administration of health	1 147 085 680 919	22.39	35963.72	30.74
Health administration and health insurance: private	473 633 600	0.01	14.85	0.01
Health-related functions	171 947 747 017	3.36	5390.95	4.61
Total	5 122 674 520 210	100.00	161108.03	137.70

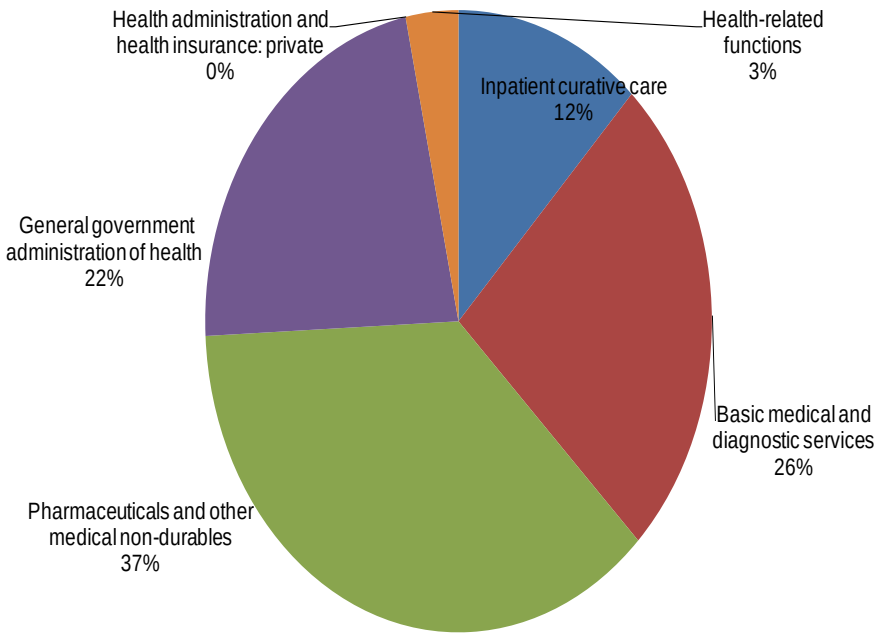


Figure 4. Classification by function

Analysing out-of-pocket spending by function

In this round of NHA, the IHSES 2007 survey (which is the only household survey available) was used to estimate the total out-of-pocket (OOP) spending.

As per IHSES 2007, overall 18% of OOP direct spending is the share of hospital care, and around 34% is for private physicians and 39% for pharmaceuticals and technology. Transportation absorbs 9% of OOP health spending. Table 6 shows that the medical cost of private expenditure in Iraq is high and amounted to over US$ 1 billion.

Table 6. Out-of-pocket expenditures, 2007

Category of expenditure	Per capita monthly expenditure (ID)	Per capita annual expenditure (ID)	Per capita annual expenditure (US$)*	Percentage distribution	Total expenditure (ID)	Total expenditure (US$)
Private expenditures on medicine and technology	1 339	16 068	12.8	39.5	512 499 095 316	406 745 314
Private expenditures on ambulatory services	1 144	13 728	10.9	33.7	437 863 304 736	347 510 559
Private expenditures on hospital care	609	7 308	5.8	18.0	233 093 315 196	184 994 695
Transportation	300	3 600	2.9	8.8	114 824 293 200	91 130 391
Total private expenditures on health	3 392	40 704	32.3	100.0%	1 298 289 008 448	1 030 380 959

*Based on 2007 US$ average exchange rate (US$ 1 = ID 1260)

Sector analysis

Ministry of Health

The Ministry of Health is the largest financier in Iraq and is the major player as regulator and provider of health care services. The study of Ministry of Health financing is very important due to its weight in the national health system.

Level of budget

The Ministry of Health budget is currently is mainly provided by government through Ministry of Finance and accounts for 4.9% of the government budget. Such a level of government spending is less than the average of high-middle income countries of the Eastern Mediterranean Region. It exceeds US$ 101 per inhabitant and represents almost 2.4% of GDP.

Variation in budget

Health is a true priority for the Government of Iraq. With the high population growth and increasing demands for health care services, the changes in budget allocated to the Ministry of Health have been reflected comparing to the government budget and the GDP. Figure 5 shows the ongoing evolution of the Ministry of Health budget per capita in US$ after the crises of 2003. Over the past 7 years, the Ministry of Health budget has been increasing gradually to reach almost US$ 100 per capita.

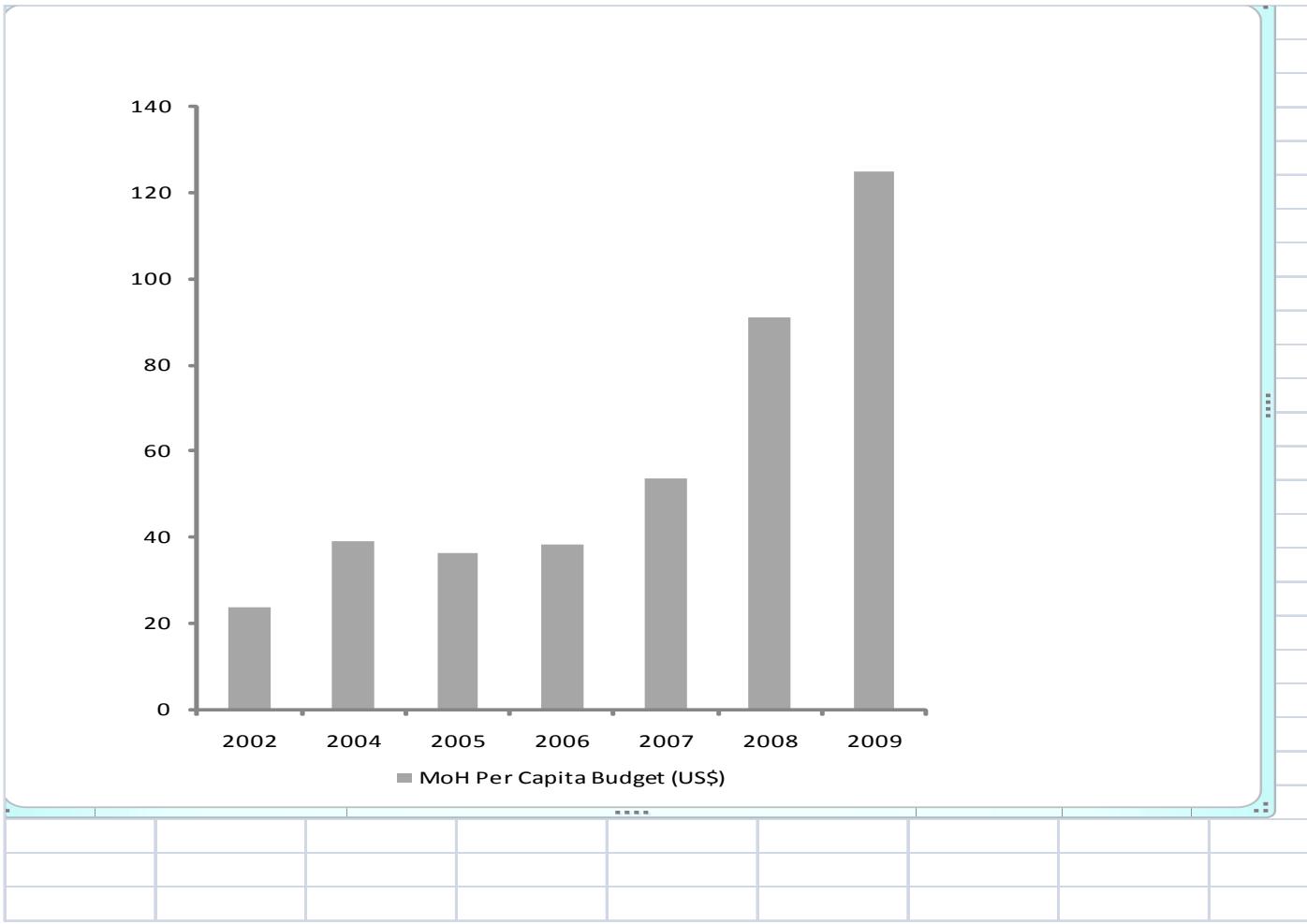


Figure 5. Evolution of the Ministry of Health budget per capita, 2002–2009

Sources of funds

The main source of Ministry of Health funds is the government budget, and accounts for almost 99% of total Ministry expenditures, versus an unremarkable share of 1% coming from households in 2008 (Figure 6). These resources are collected as user charges in government facilities.

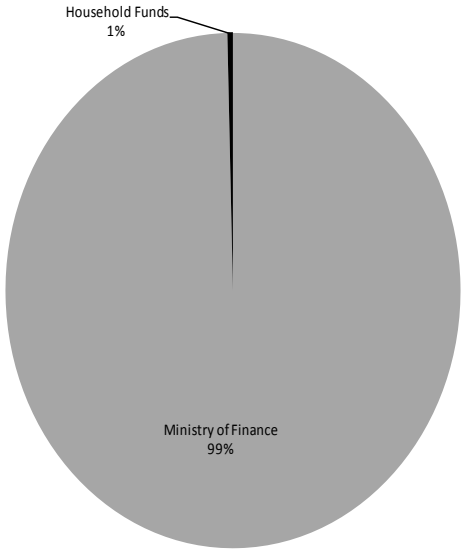


Figure 6. Sources of Ministry of Health funds, 2008

Ministry of Health functions

Of all the budget funds allocated by the Ministry of Health, 23% are used for outpatient care including primary health services versus 11% for inpatient secondary curative care (Figure 7). Medicines and supplies accounted for 36% of the total Ministry of Health budget. Administration and operating costs absorb 30% of the Ministry of Health budget, mostly in salaries and wages.

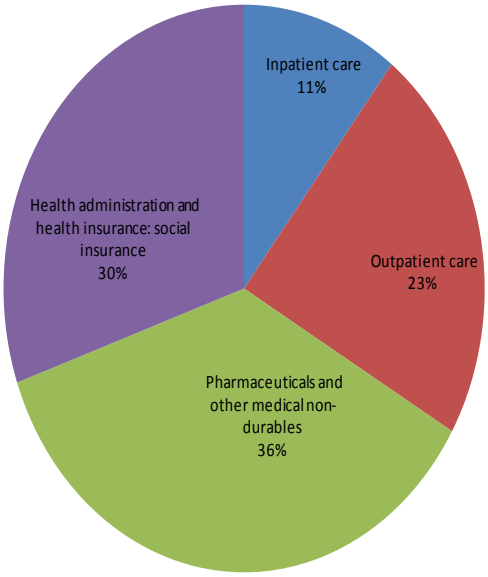


Figure 7. Ministry of Health functions, 2008

National expenditures on health

Examination of the changes in the Ministry of Health's budget (Figure 8) compared to the government budget and GDP shows that during the past seven years, the government has made great efforts in this sector in maintaining its level of allocation, despite the fluctuation of the government budget.

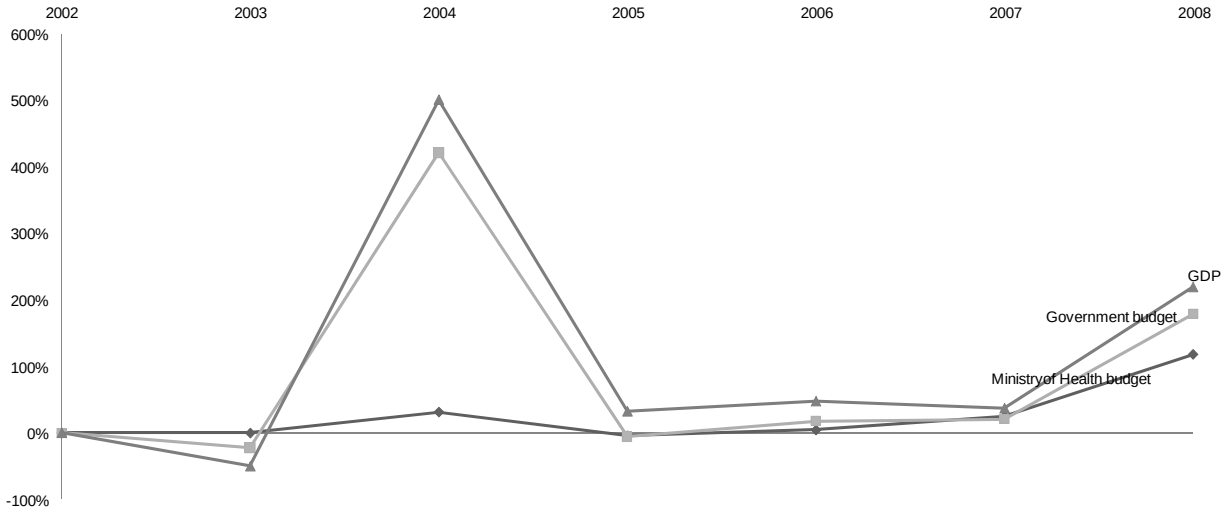
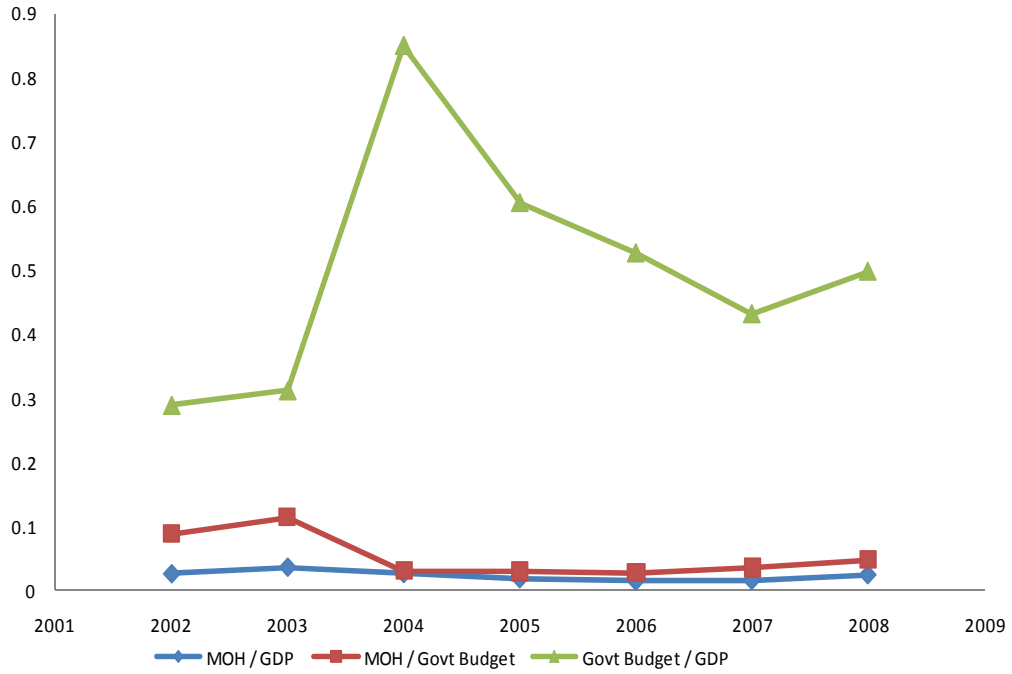


Figure 8. Ministry of Health, government budget and GDP evolution, 2002–2008

Sources: Ministry of Health and Ministry of Finance annual reports
WHO, WB, IMF recent economic development reports

Government expenditure on health as a proportion of total national expenditure decreased during the year of war that witnessed the change in regime (see 2003 and 2004 in Figure 9). It has increased gradually since then. Table 7 shows the increase in the total government budget on health in recent years, which rose from 2.8% in 2006 to 4.9% in 2008.



Sources: Ministry of Health and Ministry of Finance annual reports
WHO, WB, IMF Recent Economic Development Reports

Figure 9. Ministry of Health budget as a share of government expenditure and GDP, 2002–2008

The level of increase in the government budget over GDP was highest in 2004 (85%) and decreased slightly to reach an average of 43% to 50% in 2007 and 2008.

Table 7. Ministry of Health budget as a share of total government expenditure and GDP, 2002–2008

Year	Ministry of Health budget/GDP (%)	Ministry of Health/ government budgets (%)	Government budget/GDP (%)
2002	2.6	8.9	28.9
2003	3.6	11.4	31.2
2004	2.6	3.1	85.0
2005	1.8	3.0	60.5
2006	1.5	2.8	52.7
2007	1.6	3.6	43.2

2008	2.4	4.9	49.5

Sources: Ministry of Health and Ministry of Finance annual reports
WHO, WB, IMF recent economic development reports

In summary, there was a steady annual increase in health expenditure since 2002, both local and federal support. While there has been this overall increase of health expenditures, its proportion over the overall national expenditure has been fluctuating due to instability in the government as well as the change the Iraqi regime. The increase has not been uniformly steady, with some fluctuations in the financial years between 2002 and 2004. Between 2005 and 2008, the overall health budget nearly doubled.

Pharmaceutical sector

The Ministry of Health budget on medicines in 2008 amounted to ID 826 billion and averages 39.6% of the total Ministry of Health budget (Table 8). The Ministry supplies essential medicines through its central warehouse and public health care dispensaries. A minor user fee is in place which covers less than 1% of the cost per prescription.

At the same time, there is a growing private sector in Iraq. It consists of a network of main pharmacies selling medicines per prescription and over the counter. The number of private pharmacies in Iraq has increased in the past few years. This had a direct impact on availability of medicines, but not necessarily on accessibility and affordability.

Table 8. Ministry of Health budget per capita, 2002–2007

Year	Operating expenditures without medicines		Medicine expenditures		Current Ministry of Health operating expenditures	
	Total in million ID	Per capita in US$	Total in million ID	Per capita in US$	Total in million ID	Per capita in US$
2002	72 851	1.6	982 400	22.1	1 055 251	23.7
Population = 22 207 864						
(US$1 = ID 2000)						
2004	666 273	18.9	719 610	20.4	1 385 883	39.3
(Population =23 559 669)						
(US$1 = ID 1500)						
2005	610 109	16.8	719 610	19.8	1 329 719	36.6
(Population =24 266 172)						
(US$1 = ID 1500)						
2006	671 291	18.4	719 610	19.8	1 390 901	38.2
(Population =24 266 172)						
(US$1 = ID 1500)						
2007	1 132 470	34.9	604 472	18.6	1 736 942	53.5
(Population =25 740 550)						
(US$ 1 = ID 1260)						

Sources: Ministry of Health annual reports 2002–2008

Estimating the size of the private pharmaceutical sector

Pharmaceutical expenditures accounted for over 37% of total health expenditures in 2008. However there is uncertainty about the size and composition of the private pharmaceutical sector in Iraq. Most of the pharmaceuticals sold in Iraq are trade names with generics accounting for less than 5% as per the MINISTRY OF HEALTH officials. Imported medicines account for almost all consumption with almost limited locally manufactured medicines. Efforts are made by the government to increase production of medicines inside Iraq by providing incentives to national and international investors

Private spending on pharmaceuticals, or household out-of-pocket expenditures on pharmaceuticals, amounted to US$ 407 million, which accounts for 28% of the spending on pharmaceuticals (ID 1 885 501 million) with an average of US$ 12.8 per capita (refer to Household section below). Public spending on pharmaceuticals remains the largest part and amounts to US$ 13 per capita.

It is clear that at 36% of total health expenditures, the pharmaceutical sector is a major area of the health sector that needs to be better managed and regulated if health care costs are to be controlled and contained. The rapid growth in the pharmaceutical sector, the near complete reliance on brand name medicines, and imports to meet demand make rationalizing expenditures on pharmaceuticals a key area for policy reform.

Private insurance market

As part of the NHA study, various efforts were made to collect more accurate information on the private insurance sector. Two methods were used for this purpose. Firstly, attempts were made to collect data through the big firms and corporations working in Iraq with two main insurance companies. Secondly, all insurance companies in Iraq were approached. According to the private insurance company survey, a first attempt for privately insuring people took place in the mid 1990s when one insurance company started a special medical insurance scheme. Today, the health insurance market in Iraq is still at a very early stage and does not represent any remarkable share in the health sector. This market was not considered in this NHA report as it is shared mostly by two main insurers that provide life insurance including a health plan covering outpatients and medicines with some offering additional benefits (evacuation and treatment abroad).

Provider market

In this section, data were collected from some providers of health care services to supplement information on service delivery and to try to look at resource allocation. The number of providers surveyed and their distribution are summarized in Table 9.

Table 9. Number of providers surveyed in governorates

Governorate	Providers surveyed
Anbar	82
Babil	45
Baghdad Karkh	23
Baghdad Rasafa	45
Basra	47
Erbeel	25
Dewaniya	22
Diala	20
Duhok	48
Karbala	15
Kerkuk	25
Medical City	2
Misan	26
Muthanna	29
Najaf	17
Nenawa	46
Salahuddine	25
Sulaimaniaya	71
Thi Qar	43
Wasit	27
Total	683

The information provided by these surveys did not allow detailed analysis of flows of funds. Specific attention should be paid to improving financial management in public facilities in order to get better information about the distribution of resources between programmes and levels of service delivery.

Household health care expenditures

Using the IHSES 2007 and IFHS 2006 to extrapolate data on household expenditures was not enough. Additional NHA surveys of the major providers in Iraq were used to validate total out-of-pocket spending.

Sources of data to estimate the total household expenditures on health

After reconciliation, the estimated household expenditures in this report are based on the IHSES 2007 survey conducted by the government and considered as the official document to estimate private expenditures by the different ministries.

Nevertheless, a variety of data sources were used to calculate the household expenditures.

- The IHSES 2007 estimated total out-of-pocket health expenditures at ID 1298 billion (based on 2007 average and projected to 2008 population). It is assumed herein that most of these expenditures are reflected in the provider data and to add the out-of-pocket expenditures to the total would result in significant over-reporting.

- The IFHS 2007 and the general practitioner and private pharmacy surveys were also used to validate the OOP expenditures at private providers.

- The private insurance survey was not able to estimate total premium paid by household as it is unremarkable.

- Total household spending at public facilities is included.

- Data from the IHSES were also used to estimate household spending on patient transport

Estimating the size of the household out-of-pocket expenditures on health

Household out-of-pocket expenditures account for almost 25.4% of total health expenditures in Iraq (see Table 6). The limited household contribution to total health care expenditures confirms the quasi universal access to free health care services provided by government and signals equity in health care financing.

Cross-country comparative analysis

Table 10 shows Iraq and other countries of the WHO Eastern Mediterranean Region in relation to the level and structure of health care spending. Such comparison is important for assessing equity in financing and coverage by social health protection.

While Iraq spends less (as per capita and as a share of GDP) than the average of countries of similar income level, the structure of health care spending shows a high share of government contribution which signals equity in health care financing and good coverage by social health protection (Figure 10).

Table 10. Regional comparison of health expenditures as a % of GDP

Country/region	Per capita GDP, 2008	Health expenditure		OOP as % of THE	Public share as % of THE	Share of health expenditures (%)		
	(US$)	% of GDP	(per capita US$)			Public	Private	Donors
Regional average	221	6.0		42	53	33	61	6
Djibouti	953	8.5	81	24	77	27	44	29
Egypt	2313	4.8	111	59	38	41	56	3
Iraq	4208	3.3	137	25	73	73	25	1
Iran, Islamic Republic of	4667	6.3	294	52	47	30	70	0
Jordan	3000	9.1	273	33	61	45	47	8
Lebanon	6261	8.8	551	40	45	18	80	2
Morocco	2509	5.3	133	56	34	32	67	1
Tunisia	3550	6.0	213	43	51	35	65	0
Sudan	1545	5.6	111	67	28			
Syrian Arab Republic	1689	4.5	76	55	46			

Sources: WHO, WB, IMF recent economic development reports; country NHA estimates as per WHO NHA site

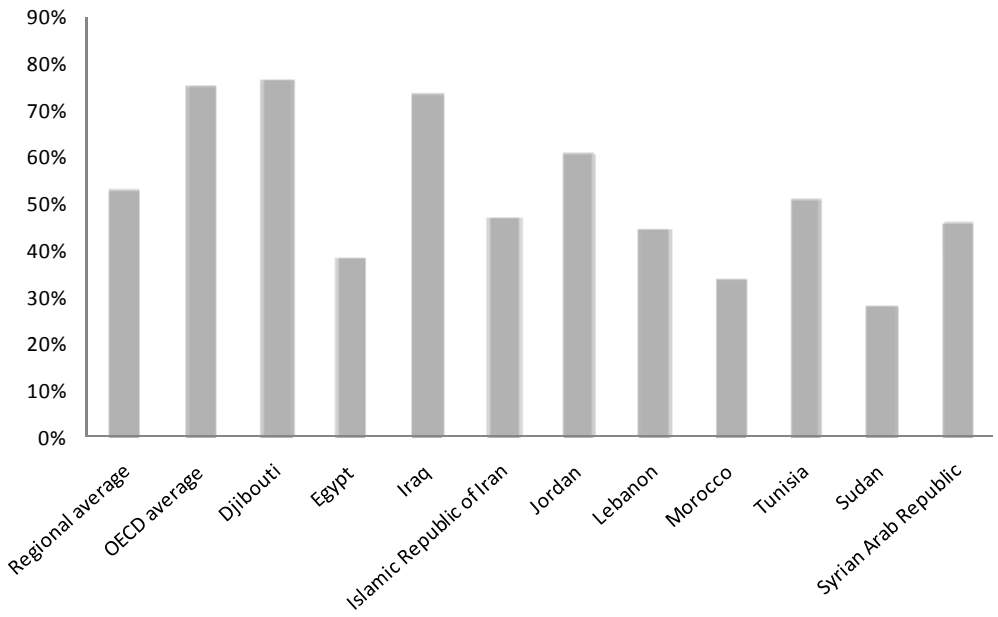


Figure 10. Regional comparison of public share of total expenditures

Conclusions and policy recommendations

- The national health account is a powerful analytical tool used to assess health care financing function in health system. The analysis provides some directions for reforms and improvement in order to better achieve the health system goals of equity and protection against health financial risks. The first round of national health accounting represents an excellent achievement of national health teams and the Ministry of Health will continue its efforts to improve both its methodology and data sources.

- The national health account exercise, which has involved teams from the Ministry of Health (Iraq and Kurdistan Regional Government), has faced some difficulties to access data related to health care expenditures from households and for services bought from private providers. Efforts were also made to improve collection of financial data from various ministries and agencies and from nongovernmental organizations and insurers.

- This first attempt has shed some light on health care financing in Iraq and has provided some important findings. The level of health care spending, as per capita and as share of GDP, remains less than the average of countries with similar income. However the structure of health care financing shows a fair degree of equity in view of the limited burden on households who share only one fourth of the total health bill.

- The high level of government contribution in health care financing reflects the constitutional commitment of the state to secure health and social security to individuals and families. Government through the Ministry of Health is providing

universal coverage by social health protection, which constitutes an important achievement of the Iraqi health care system. However concerns over the sustainability of such a level of commitment have been raised for the medium and long term and citizens are seeking better access through to private health care providers.

- Findings related to spending on major line items, show a relatively high share of total spending on health and biomedical technology, similar middle-income countries in the WHO Eastern Mediterranean Region. Total spending on medicines is shared almost equally between government and families, which highlights the importance of technology as an important cost centre and as an area where efficiency savings are needed in terms of procurement system, appropriate selection and rational use.

- The present structure of health care spending for both the Ministry of Health and households does not allow a refined analysis of utilization of financial resources inside the health care system. However spending on health workforce, as a percentage of national budget, remains lower than the average of countries of the Region of similar level of income, despite a higher health workforce density. Allocation of public resources between various health programmes and between the various tiers of public network was not made.

Based on the preliminary analysis provided by the first national health account, the following recommendations are offered to the Ministry of Health and government officials.

1. Secure ownership of the national health account exercise by internalizing it within the Ministry of Health set up, by coordinating the efforts with major stakeholders including the Ministry of Finance, planning and development cooperation, Central Organization for Statistics and Information Technology, private sector, etc. and by providing more training on national health accounts methodology.

2. Ensure wide dissemination of the first national health account findings among health professionals, stakeholders, parliament, media and the public at large in order to increase knowledge and awareness about the health care financing function and its contribution to improving health system performance.

3. Improve quality of data collected from various related ministries and agencies and initiate a better costing system and financial management inside the Ministry of Health. In order to improve data on household expenditures, it is recommended to implement a survey on dedicated household health expenditures and utilization with technical support from WHO and other partners.

4. Promote a culture of costing and cost analysis in the health system in order to improve financial management and cost containment strategies.

5. Make a case for investing in health by mobilizing additional resources from government budget, local government, taxation and communities in order to rationalize the use of free public services.

6. Initiate feasibility studies related to the development of contributive systems of social and preventive health insurance, with technical support from WHO, International Labour Organisation and other development partners.

7. Strive to improve the efficient use of public resources through better selection of technology, rational use and the development of a health technology assessment function.

Annex 1. NHA matrices

Matrix 1. Sources of funds to financing agents, 2008

		FS.1 Public funds		FS.2 Private funds		FS.3 Rest of the world	Total
		Ministry of Finance	Parastatal funds	Household funds (FS.2.2)	Other private funds	Donor funds (FS.3)	
HF. A	Public sector						
HF. 1.1	Territorial government						
HF. 1.1.1	Central government						
HF.1.1.1.1	Ministry of Health	3 758 039 934,851					3 758 039 934 851
HF.1.1.1.6	Other ministries	930 774 421			141 786 450		1 072 560 871
HF.1.1.1.9	Others public		1 473 868 640				1 473 868 640
HF.1.2.	Social security fund						-
HF.B	Non-public sector						-
HF.2.3	Private household out-of-pocket payments	14 832 290 349		1 283 447 718 099			1 298 280 008 448
HF.2.4	Non-profit institutions (other than social insurance)						-
HF.3	Rest of the world						-
HF.3.1	Donors					62 258 801 000	62 258 801 000
HF.3.2	International nongovernmental organizations						-
Total		3 773 802 999 621	1 473 868 640	1 283 447 718 099	141 786 450	62 258 801 000	5 121 125 173 810

Matrix 2. Financing agents to providers, 2008

Health care provider		Financing agents					Total
		Public sector			Private sector	Rest of the world	
		Ministry of Health	Other ministries	Parastatal companies	Private household out-of-pocket payments	Donors	
HP.1	Hospitals						
HP.1.1	General hospitals	527 603 465 723	47 012 904	–	218 261 024 847	–	**745 911 503 474**
HP.3.4	Physicians and primary health care centres	733 017 425 838	638 976 422	235 622 734	552 687 597 936	–	**1 286 579 622 930**
HP.4.1	Pharmacies of Ministry of Health	1 365 298 225 915	–	–	–	–	**1 365 298 225 915**
HP.4.1	Private pharmacies	–	250 656 047	1 084 322 492	512 499 095 316	6 368 325 700	**520 202 399 555**
HP.6	General administration of health and insurance	–	–	–	–	–	–
HP.6.1	Government administration	1 146 953 152 421	132 528 498	–	–	–	**1 147 085 680 919**
HP.6.2	Private Insurance administration	–	–	–	–	–	–
HP.6.9	Other institutions and administrations	–	–	–	–	473 633 600	**473 633 600**
HP.8	Institution providing health related services	–	3 387 000	153 923 414	–	–	**157 310 414**
HP.8.2	Education and training institutions	–	–	–	–	–	–
HP.8.3	Other institutions providing health related services	–	–	–	–	55 416 797 003	**55 416 797 003**
HP.9	Rest of the world	–	–	–	–	–	–
HP. N.S.K	Provider not specified by kind	–	–	–	–	–	–
	Total providers	**3 772 872 269 897**	**1 072 560 871**	**1 473 868 640**	**1 283 447 718 099**	**62 258 756 303**	**5 121 125 173 810**

Matrix 3. Financing agents to functions, 2008

Functions of health care		Financing agents					Total
		Public sector			Private sector	Rest of the world	
		Ministry of Health	Other ministries	Parastatal companies	Private household out-of-pocket payments	Donors	
HC.1	Services of curative care	-	-	-	-	-	-
HC.1.1	Inpatient curative care	395 853 465 723	47 012 904	-	218 261 024 847	-	**614 161 503 474**
HC.1.2	Day cases of curative care	-	-	-	-	-	**-**
HC.1.3	Outpatient curative care	-	-	-	-	-	**-**
HC.1.3.1	Basic medical and diagnostic services	864 767 425 838	583 426 847	-	437 863 304 736	-	**1 303 214 157 421**
HC.1.3.2	Outpatient dental care	-	13 295 250	-	-	-	**13 295 250**
HC.4	Ancillary services to health care	-	-	-	-	-	**-**
HC.4.1	Clinical laboratory	-	23 606 700	235 622 734	-	-	**259 229 434**
HC.4.2	Diagnostic imaging	-	18 647 625	-	-	-	**18 647 625**
HC.4.3	Patient transport and emergency rescue	-	-	-	114 824 293 200	-	**114 824 293 200**
HC.4.3.1	Ambulance services	-	-	-	-	-	**-**
HC.4.3.2	Rescue services	-	-	-	-	-	**-**
HC.5	Medical goods dispensed to out-patients	-	-	-	-	-	**-**
HC.5.1	Pharmaceuticals and other medical non-durables	1 365 298 225 915	250 656 047	1 084 322 492	512 499 095 316	6 368 325 700	**1 885 500 625 470**
HC.7	Health administration and health insurance	-	-	-	-	-	**-**
HC.7.1	General government		132 528 498	-	-	-	**1 147 085 680 919**

	administration of health	1 146 953 152 421					
HC.7.1.1	General government administration of health (except social security)	-	-	-	-	-	**-**
HC.7.2	Health administration and health insurance: private	-	-	-	-	473 633 600	**473 633 600**
HC.R.1	Capital formation of health care provider institutions	-	387 000	153 923 414	-	34 848 147 400	**35 002 457 814**
HC.R.2	Education and training of health personnel	-	3 000 000	-	-	18 553 243 500	**18 556 243 500**
HC.R.3	Research and development in health	-	-	-	-	2 015 406 103	**2 015 406 103**
HC.R.nsk	HC.R expenditure not specified by kind	-	-	-	-	-	**-**
Total functions		**3 772 872 269 897**	**1 072 560 871**	**1 473 868 640**	**1 283 447 718 099**	**62 258 756 303**	**5 121 125 173 810**

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