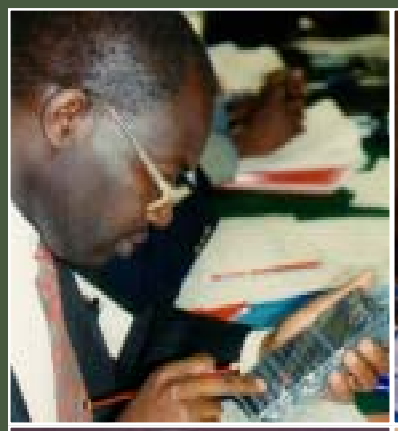

National Health Accounts

Participant Manual

PHRplus

USAID

National Health Accounts Participants Manual

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June 2004

Dear National Health Accounts Participant,

The Partners for Health Reform*plus* (PHR*plus*) project is pleased to present this *National Health Accounts (NHA) Training Manual*. The short-term objective of the manual is, as its name implies, to train in NHA. As such, it fulfills the need for guidance on teaching the NHA methodology that has been voiced by numerous NHA teams. Its longer-term objective is to contribute to the creation of a cadre of academic and technical experts on the subject of NHA and thereby increase the accessibility and use of the methodology worldwide. The manual – a complete toolkit with lectures, PowerPoint presentations, interactive exercises, and supplemental readings – was produced by the NHA team of the U.S. Agency for International Development-funded PHR*plus* project and follows closely the internationally accepted methodology presented in the *Guide to Producing National Health Accounts* with special application for low-income and middle-income countries, a recently published reference on NHA.

Many countries around the world are reforming their health systems in an effort to improve the efficiency and management of health services as well as the equitable distribution of these services, particularly among the poor. NHA is a crucial tool for optimizing resource allocation. It is designed specifically to assist policymakers in their efforts to understand their health systems and to improve system performance by ascertaining the inefficiencies in the system; monitoring health expenditure trends; and using globally accepted indicators to compare their country's health system performance to that of other countries.

PHR*plus* and its partners have been in the forefront of conducting NHA worldwide and refining the methodology to suit the developing country context. The project has coordinated regional and in-country trainings for more than 45 middle- and low-income countries. In the process, PHR*plus* has become quite familiar with the unique challenges and issues that arise when implementing NHA in developing countries. Using this experience as well as the Guide to producing national health accounts, the project's NHA team has incorporated their training tools into this manual. It is hoped that the manual will assist existing and new NHA teams as well as academic researchers worldwide in learning and teaching the methodology, and ultimately facilitating institutionalization and replication of NHA in more countries.

On behalf of PHR*plus*, I hope that you find this manual useful in your endeavor to impart the methodology to others.

Sincerely,

Nancy Pielemeier, DrPH,
Project Director

Acknowledgements

The training manual was written and compiled by Susna De, Manjiri Bhawalkar, and Marie Tien of the NHA team at the USAID/PHR*plus* project.

Putting together the manual took an extended period of time as it was repeatedly field-tested in-country and regional NHA trainings in Anglophone Africa, Francophone Africa, the Middle East and North Africa, and the Latin America and Caribbean region. The training participants are too numerous to name individually, but the authors thank each of them for their valuable comments, from which the manual benefited immensely.

The authors also appreciate the insights and suggestions of workshop trainers, including Takondwa Mwase, Hossein Salehi, Magdalena Rathe, M. Driss Zine-Eddine el-Idrissi, and Steve Muchiri, who represent different United Nations technical bodies as well as public agencies and private organizations in the countries that support implementation of the NHA methodology.

The authors would also like to thank PHR*plus* project staff who provided extensive and thoughtful input into the design and review of the training manual. They include AK Nandakumar, Catherine Connor, Tania Dmytraczenko, Yann Derriennic, Kathleen Novak, Janet Edmond, and Lonna Milburn.

The training manual has been translated into Spanish, French, and Russian and has been field-tested in these languages. Sincerest thanks go to those persons who patiently and painstakingly worked on and reviewed the translations to ensure that the concepts were clearly communicated. They include M. Driss Zine-Eddine el-Idrissi, Natalie van de Maele, Najib Oubnichou, Rafael Martinez, Lisa Phillips, Ann Vaughan, Francisco Vallejo, and Roselyn Ramos.

Finally, the authors are extremely grateful to Linda Moll at PHR*plus* who edited the manual. We would also like to thank Michelle Munro and Maria Claudia De Valdenebro who both did a wonderful job in formatting the toolkit and perfecting the very difficult NHA tables.

In the near future, the training manual will be supplemented with training guidelines for the HIV/AIDS subanalysis.

We hope that this manual will be used not only by the PHR*plus* project, but also by donor partners and country NHA teams themselves.

Contents

Introduction to the National Health Accounts Participant Manual

The Need for National Health Accounts Training Materials

With health systems growing in scope and complexity, policymakers need tools such as National Health Accounts (NHA) to manage their health care resources. NHA is a globally accepted framework and approach for measuring total – public, private, and donor – national health expenditures. Conducting NHA provides crucial financial information to health care decision makers, because it answers important questions such as: Who in the country finances health services? How much do they spend? On what type of services? Who benefits from these health expenditures?

To date, more than 68 countries worldwide have implemented the methodology and numerous others are about to follow suit. While some of these are the high-income countries of the Organization for Economic Cooperation and Development (OECD), NHA is increasingly being adopted by low- and middle-income countries around the world for use as an essential policy tool. The NHA methodology is particularly suited to the unique health sector environments and challenges exhibited in these countries, where financial information systems may not be readily developed, data from the private sector may not be forthcoming, and the general size of the health system may not have been previously estimated.

To facilitate adoption of NHA, the United States Agency for International Development (USAID)-funded Partners for Health Reform*plus* (PHR*plus*) project developed this manual to assist NHA trainers from low- and middle-income countries to design and conduct NHA trainings both in their own countries and at regional workshops, where multiple countries train together.

The manual is intended to accompany the recently published the *Guide to producing National Health Accounts with special application for low-income and middle-income countries (World Health Organization, World Bank, and U.S. Agency for International Development 2003)*, a

reference book on the latest internationally accepted technical developments for persons who conduct health accounts in developing countries. The manual aims to fulfill the worldwide need for guidance on teaching the NHA methodology. It has been pre-tested at four regional and in-country training sessions, and feedback from workshop participants and trainers has been incorporated into it.

Participant Information Sheet

1) What NHA topics are you most interested in learning? Please check as many as necessary.

- ☐ Overall conceptual NHA framework
- ☐ Planning for NHA
- ☐ Understanding the main components
- ☐ Financing sources
- ☐ Financing agents
- ☐ Uses
- ☐ Classification and boundaries of health expenditure definitions
- ☐ Detailed analysis of the core tables/matrices
- ☐ Identifying sources of information for data (data collection)
- ☐ Identifying data gaps and overcoming them
- ☐ Filling in the tables
- ☐ Policy implications
- ☐ Policy subanalyses (e.g., HIV/AIDS, regional health accounts)
- ☐ Institutionalization

2) What do you know about NHA? Please explain briefly the extent of your knowledge.

3) What is your area of work expertise (e.g., government accounting, health financing, epidemiology, medicine)?

Agenda

I

Pre-test for National Health Accounts Training

Directions: Please answer the following questions. Outline or bullet form is acceptable.

Concept of NHA

Question 1

What is the purpose of NHA?

Answer

Question 2

Please explain the following terms: financing source, financing agent, provider, and function. Give an example of each.

Answer

Boundaries and Expenditures

Exercise

Rahim, who is employed in the formal sector and is a member of the Social Security Commission (SSC), is critically injured at work. The injury requires his hospitalization at Al Basheer Hospital. During his hospital stay, Rahim receives some compensation from Workmen's Compensation Fund. Separate from the fund, he also receives some financial support (welfare) from the Ministry of Health and Social Services (MOH). After an extended hospitalization, during which a great deal of expense is incurred by the MOH, Rahim's relatives (both in cash and in-kind by helping to care for him at night), and his former employer, Rahim dies. Family members and the SSC pay the funeral expenses.

- When doing NHA, which of the following expenditures do you include? (There are no right or wrong answers, but please justify your answers)

- Compensation received from the Workmen's Compensation Fund?

- Welfare payments from MOH?

- Hospital expenses?

- Funeral expenses?

Question 3

How would you classify traditional healer charms that are bought with the intention of improving health? (Use table below if needed)

Code	Description
HC.1	Services of curative care
HC.1.1	Inpatient curative care
HC.1.2	Day cases of curative care
HC.1.3	Outpatient curative care
HC.1.3.1	Basic medical and diagnostic services
HC.1.3.2	Outpatient dental care
HC.2	Services of rehabilitative care
HC.3	Services of long-term nursing care
HC.4	Ancillary services to medical care
HC.4.1	Clinical laboratory
HC.4.2	Diagnostic imaging
HC.4.3	Patient transport and emergency rescue
HC.5	Medical goods dispensed to outpatients
HC.5.1	Pharmaceuticals and other medical nondurables
HC.5.1.1	Prescribed medicines
HC.5.1.2	Over-the-counter medicines
HC.5.1.3	Other medical nondurables
HC.6	Prevention and public health services
HC.7	Health administration and health insurance
HC.*n.s.k*	*HC expenditure not specified by kind*
HCR.1-5	Health care-related functions
HCR.1	Capital formation for health care provider institutions
HCR.2	Education and training of health personnel
HCR.3	Research and development in health
HCR.4	Food, hygiene and drinking water control
HCR.5	Environmental health
HCR.n.s.k	*HC.R expenditure not specified by kind*

Note: HC = health care, HCR = health care-related

Filling in the NHA Tables

Question 4a

When filling in the tables which "dimension"(FS, HF, HP, or Func) should the team start with?

Answer

Question 4b

Which table should be done first?

Answer

Question 5

You are working on the FS x FA table and are faced with the following scenario:

The MOH reimburses the regional government (not the regional government hospitals!) for services that the government coordinates and delivers to the poor. Which entity would be considered the "source of funds" and which would be the "financing agent"? Why?

Answer

Post-test for National Health Accounts Training

Directions: Please answer the following questions. Outline or bullet form is acceptable.

Concept of NHA

Question 1

What is the purpose of NHA?

Answer

Question 2

Please explain the following terms: financing source, financing agent, provider, and function. Give an example of each.

Answer

Boundaries and Expenditures

Exercise

Rahim, who is employed in the formal sector and is a member of the Social Security Commission (SSC), is critically injured at work. The injury requires his hospitalization at Al Basheer Hospital. During his hospital stay, Rahim receives some compensation from Workmen's Compensation Fund. Separate from the fund, he also receives some financial support (welfare) from the Ministry of Health and Social Services (MOH). After an extended hospitalization, during which a great deal of expense is incurred by the MOH, Rahim's relatives (both in cash and in-kind by helping to care for him at night), and his former employer, Rahim dies. Family members and the SSC pay the funeral expenses.

- When doing NHA, which of the following expenditures do you include?

  (There are no right or wrong answers, but please justify your answers)

- Compensation received from the Workmen's Compensation Fund?

- Welfare payments from MOH?

- Hospital expenses?

- Funeral expenses?

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HC.3	Services of long-term nursing care
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HC.4.1	Clinical laboratory
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Question 4a

When filling in the tables which "dimension"(FS, HF, HP, or Func) should the team start with?

Answer

Question 4b

Which table should be done first?

Answer

Question 5

You are working on the FS x FA table and are faced with the following scenario:

The MOH reimburses the regional government (not the regional government hospitals!) for services that the government coordinates and delivers to the poor. Which entity would be considered the "source of funds" and which would be the "financing agent"? Why?

Answer

Post-test for National Health Accounts Training – Answer Key

Directions: Please answer the following questions. Outline or bullet form is acceptable.

Concept of NHA

Question 1

What is the purpose of NHA?

Answer

Use: Methodology used to determine a nation's health patterns.

Describes the FLOW of funds through a health system. It answer the questions:

- Who finances health care?
- How much do they spend?
- Where do their health funds go, i.e., what is the distribution among providers and ultimately among services provided?
- Who benefits from this health expenditure pattern?

Purpose: MOST IMPORTANT – To contribute to the health policy process. Can lead to better informed health policy decisions and avoid potentially adverse policy choices. The standardized methodology also benefits donors (in their funding allocation decisions) and international researchers (to further the field of international development)

Question 2

Please explain the following terms: financing source, financing agent, provider, and function. Give an example of each.

Answer

Financing Sources: Entities that provide health funds

Answers: "Where does the money come from?"

Examples: MOF, households, donors

Financing Agents: Have the power and control over how the funds are used, i.e., PROGRAMATIC RESPONSIBILITIES

Answers: "How are funds organized and managed?" Formerly known as "financing intermediaries," receive funds from sources and use them to pay for health services, products (e.g., pharmaceuticals), or activities

Examples: MOH, insurance companies

Providers: Entities that provide or deliver health care and health-related services.

Answers: "Who/where" provides the services?

Examples: Hospitals, clinics, pharmacies

Functions: Actual services or activities delivered by providers

Answers: "What type of service, product, or activity was actually produced?"

Examples: Curative care, pharmaceuticals, outpatient care, prevention programs

I Boundaries and Expenditures

Exercise

Rahim, who is employed in the formal sector and is a member of the Social Security Commission (SSC), is critically injured at work. The injury requires his hospitalization at Al Basheer Hospital. During his hospital stay, Rahim receives some compensation from Workmen's Compensation Fund. Separate from the fund, he also receives some financial support (welfare) from the Ministry of Health and Social Services (MOH). After an extended hospitalization, during which a great deal of expense is incurred by the MOH, Rahim's relatives (both in cash and in-kind by helping to care for him at night), and his former employer, Rahim dies. Family members and the SSC pay the funeral expenses.

❖ When doing NHA, which of the following expenditures do you include? There are no right or wrong answers, but please justify your answers.

Answer

When doing NHA, which of the following expenditures do you include? There are no right or wrong answers, but please justify your answers.

❖Do you include: Compensation received from the Workmen's Compensation Fund?

No- because lost wages are not health care expenses. Workmen's Comp. is generally excluded anyway because it is difficult to determine the proportion that goes into health care. If the proportion is known, then yes, it can be included.

❖The welfare support

No- because this financial support is to cover general living expenses (i.e., food subsidies) regardless of who is paying. NHA include only funds whose primary purpose is health. You will just include any funds that go directly to health care services.

❖The expenses incurred while in hospital?

Yes.

❖The funeral expenses?

Usually, no. However, in countries where HIV/AIDS or other epidemics have taken a financial toll, countries have voted to include this as a "health expenditure." Also, many "health insurance" companies in these countries will cover these costs.

Question 3

How would you classify traditional healer charms that are bought with the intention of improving health? (Use table below if needed)

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HCR.4	Food, hygiene and drinking water control
HCR.5	Environmental health
HCR.n.s.k	*HC.R expenditure not specified by kind*

HC. 5.1.3 other medical non-durables or HC.5.1.4 charms (latter is newly created code).

I Filling in the Matrices

Question 4a

When filling in the tables which "dimension"-(FS, HF, HP, or Func) should the team start with?

Answer

HF- start in the middle.

Question 4b

Which table should be done first?

Answer

FS x HF

Question 5

You are working on the FS x FA table and are faced with the following scenario:

The MOH reimburses the regional government (not the regional government hospitals!) for services that the government coordinates and delivers to the poor. Which entity would be considered the "source of funds" and which would be the "financing agent"? Why?

Answer

The MOH is a FINANCING SOURCE and the regional government is a FINANCING AGENT. This is different than if the MOH were reimbursing the regional government providers directly, in which case the MOH would be the financing agent (since the providers are just pass-through "contractors" of MOH services). If the regional government is managing the services delivered to the poor, i.e., receiving the hospital bills, determining the criteria for who is poor, etc., then the regional government is playing a larger role and is deemed a financing agent.

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Unit 1

Conceptual Overview of National Health Accounts

Time

:60 minutes

Learning Objectives

At the end of this unit, participants will:

- Understand the context and reasons for the development of the NHA methodology
- Be able to communicate the basic concept of NHA, what it attempts to measure, and its role as a tool for the policy process
- Recognize the differences and similarities of various tools for measuring health expenditures

Content

- Setting the context:
  - Overview of health care financing
  - Importance of *standardized* methodology for making international comparisons and drawing lessons
- Definition of NHA
- Purposes of NHA
- Basic framework of NHA
- Development of the NHA methodology
- SNA/SHA: How NHA compares

Exercises

- Discussion questions

References

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Unit 1 - Slide Presentation

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Unit 1: Conceptual Overview of National Health Accounts

The PHR*plus* Project is funded by U.S. Agency for International Development and implemented by:

Abt Associates Inc. and partners, Development Associates, Inc.; Emory University Rollins School of Public Health; Philoxenia International Travel, Inc. Program for Appropriate Technology in Health; SAG Corp.; Social Sectors Development Strategies, Inc.; Training Resources Group; Tulane University School of Public Health and Tropical Medicine; University Research Co., LLC.

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Learning Objectives

- ▲ Understand the context and reasons for the development of NHA methodology
- ▲ Be able to communicate the basic concept of NHA, what it attempts to measure, and its role as a tool for the policy process
- ▲ Recognize the differences and similarities of various framework tools for measuring health expenditures

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3

NHA Provides Comprehensive Information of the FINANCIAL Status of a Health System

- Why is the financial status so important?
  - "Financial resources provide a means to an end," i.e., the health sector's goal of maintaining and improving a population's health status
  - W/o financing info, health care policymakers are less informed, which may lead to misguided policy decisions
  - WHO strongly recommends collecting and using financing data to strengthen health sector policies

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NHA Measures Health Care Expenditures

- Why expenditures? To see how much was truly SPENT on health care
  - Budgeted funds may not be spent accordingly and thus do not reflect how much money actually goes into the health sector
  - Budget info is collected only for major institutions, not other key players e.g. households
  - Expenditure data can reflect financial cost of major disease burdens or epidemics, whereas budget info merely estimates future needs
  - Ultimately, the budgeting process can benefit from knowing how much has already been spent to deliver health services

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Importance of "Standardized" Methodology to Collect Health Expenditures – Example of Multiple Estimates

Health Spending as a % of GDP						
	World Health Report 2000 (WHO)			World Development Report 2000 (WB)		
Country	Total	Public	Private	Total	Public	Private
Djibouti	**2.8**	2.0	0.8	NA	NA	NA
Egypt	3.7	1.0	2.7	3.8	1.8	2
Iran	4.4	1.9	2.5	NA	NA	NA
Jordan	5.2	3.5	1.7	NA	NA	NA
Lebanon	10.1	3.0	7.1	10	3	7
Morocco	5.3	**2.2**	3.1	4	**1.3**	2.7
Tunisia	5.4	2.3	3.1	NA	NA	NA
Yemen	**3.4**	**1.3**	2.1	**5**	**2.1**	2.9

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The Concept of NHA

- Uses a comprehensive approach, looks at TOTAL national health expenditures including public, private, and donor contributions
- Is a standard set of tables that organizes info in an easy-to-understand manner
- Easily understood by policymakers, including those without a background in economics

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What is National Health Accounts?

- Methodology used to determine a nation's health expenditure patterns
- Describes the FLOW of funds through a health system
  - Who finances health care?
  - How much do they spend?
  - Where do their health funds go, i.e., what is the distribution among providers and ultimately among services provided?
  - Who benefits from this health expenditure pattern?

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Purpose of NHA

- Single most important purpose: Contribute to the health policy process
  - Can lead to *better informed* health policy decisions and *avoid potentially adverse* policy choices
- Inform donor funding decisions
- Further international development

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Why Is NHA Particularly Useful as a Policy Tool?

1. Inclusive of all financing actors: public, parastatal (semi-public), private, and international
   - Therefore, policymakers are better informed about the *entire* health sector not just the government portion

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Why Is NHA Particularly Useful as a Policy Tool? cont'd

2. Offers an international standard to allow policymakers to COMPARE their health spending patterns and outcomes with other countries of similar socioeconomic status
   - △ Lessons learned in one country may be applicable and relevant to another.

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Why Is NHA Particularly Useful as a Policy Tool? cont'd

3. Presents health spending information in an easy-to-understand format

   Therefore, its implications are easily understood by policymakers

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Other Benefits of NHA

- Provides more accurate estimates to replace "guesstimates" made by international donors
  - NHA is country-derived
  - NHA estimates are inclusive of all financing actors
  - NHA is an internationally recognized methodology

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NHA in Comparison to "Guesstimates"

Health Spending as a % of GDP									
	NHA Findings			World Health Report 2000 (WHO)			World Development Report 2000 (WB)		
Country	Total	Public	Private	Total	Public	Private	Total	Public	Private
Djibouti	**5.1**	2.9	2.2	**2.8**	2.0	0.8	NA	NA	NA
Egypt	3.7	1.6	2.1	3.7	1.0	2.7	3.8	1.8	2
Iran	5.7	1.7	4	4.4	1.9	2.5	NA	NA	NA
Jordan	**9.1**	4.6	4.5	**5.2**	3.5	1.7	**NA**	NA	NA
Lebanon	**12.3**	2.4	**9.9**	**10.1**	3.0	**7.1**	10	3	**7**
Morocco	4.5	**1.6**	2.9	5.3	**2.2**	3.1	4	**1.3**	2.7
Tunisia	5.9	3	2.9	5.4	2.3	3.1	NA	NA	NA
Yemen	5	2.1	2.9	3.4	1.3	2.1	5	2.1	2.9

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The Essence of NHA

- Health spending as a % of GDP
- 9 tables suggested, but at a minimum do the following 4
  - Financing Sources → Financing Agents
  - Financing Agents → Providers
  - Financing Agents → Functions
  - Providers → Functions
    - Each table states:
      - How much is spent by each actor
      - Where exactly their funds go

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The Four Principal Dimensions

- *Financing Sources*: provide health funds
  - Answer "where does the money come from?"
    e.g., MOF, households, donors
- *Financing Agents*: have power and control over how funds are used i.e., programmatic responsibilities
  - Answer "Who manages and organizes the funds?"
    e.g., MOH, insurance companies

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The Four Principal Dimensions cont'd

- *Providers*: are end users of health care funds, entities that actually provide/deliver the health service
  - Answer "Where did the money go?"
    e.g., hospitals, clinics, health stations, pharmacies
- *Functions*: are actual services delivered.
  - Answer "what type of service was actually produced?"
    e.g., curative care, preventive care, medical goods such as pharmaceuticals, administration

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Illustrative Figure of First Two Tables

1)	*Financing Sources*				
Financing Agents	FS.1.1.1 Central Govt. (MOF)	FS.3. Rest of World (Donors)	FS.2.1 Employer Funds	FS.2.2 Household Funds	**TOTALS**
HF.1.1.1.1 Ministry of Health	A	B			**A +B**
HF.1.1.1.2 Ministry of Education	C				**C**
HF.2.2 Private Insurance Enterprises			D	E	**D +E**
HF. 2.3 Private households' out-of-pocket payment				F*	**F***
TOTALS					

2)	*Financing Agents*				
Providers	HF.1.1.1.1 MOH	HF.1.1.1. 2 MOE	HF.2.2 Private Insurance Enterprises	HF.2.3 Households	**TOTALS**
HP.1.1.1 Public General Hospitals	W		X		
HP.1.1.2 Private General Hospitals		C		F	
HP.3.4.5.1 Public Outpatient Clinics			Y		
TOTALS	**W=A+B**	**C**	**X+Y= D+E**	**F**	
* direct transfer of payment					

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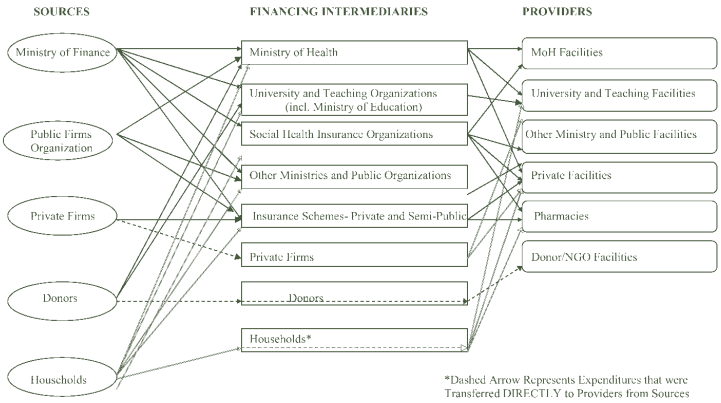
The Tables Show the FLOW of Funds



*Dashed Arrow Represents Expenditures that were Transferred DIRECTLY to Providers from Sources

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SHA and NHA

- SHA (System of Health Accounts)
  - Classification scheme developed by OECD (called ICHA)
  - Covers three health care dimensions: Financing Agents, Providers, Functions
- NHA (extension of SHA)
  - Is "SHA for Developing Countries"
  - Extends SHA classifications of health expenditures to developing country context by adding subcategories
  - Has a fourth health care dimension: Financing Sources

Note: All NHA classifications are linked to the SHA categories.

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Take-Home Message

- NHA provides a comprehensive financial picture of countries' health sectors
  - Describes the FLOW of funds and answers the following questions
    - Who spends in the health sector?
    - How much do they spend?
    - What types of health services are bought?
- Due to above, NHA's easy-to-understand format, and its internationally accepted methodology, NHA can *aid* countries to address their main policy concerns
- NHA is "SHA for developing countries"

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Unit 1 - Exercises

Discussion questions

Question 1

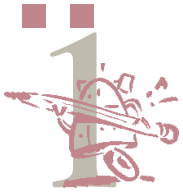
In order to get a comprehensive overview of the financial status of a health system, what type of information should be collected: expenditure information or budgetary information? Why?

Answer

Question 2

What types of issues or concerns arise when inaccurate and non-standardized expenditure information is used by international organizations?

Answer



Question 3

What indicators – besides health care spending as a percentage of the GDP – can NHA results produce and how are they relevant?

Answer

Unit 1 - Answers

Discussion questions

Question 1

To get a comprehensive overview of the financial status of a health system, which type of information should be collected: expenditure information or budgetary information?

Possible Answer

Expenditure information. This allows for a more accurate assessment of what is spent on health care by a country. Though funds may be budgeted for certain functions, they may not be spent accordingly. Also, budgetary information can only be collected for major institutions, generally governments, and not from other key contributors to health care financing, such as households. Expenditure data can reflect the financial cost of major disease burdens or epidemics, whereas budget information merely estimates future needs. Ultimately the budgeting process can benefit greatly from knowing how much has already been spent to deliver health services.

Question 2

What types of issues do you see arising from international organizations using inaccurate and nonstandardized expenditure information?

Possible Answer

In the course of discussion to this question, participants should mention the following points:

- Often donors use internationally published estimates in their decision making about how much to allocate to which country and which sector. Inaccurate or inconsistent estimates may lead to misguided decisions regarding donor funding allocation decisions.
- Estimates collected using different methodologies also hinder cross-country comparisons of expenditures. Policymakers are not able to compare their country spending patterns with others, and useful lessons – for example, how one country can spend less on health but have better health outcomes – may not be shared with other countries. The inability to do cross-country comparison also has adverse implications for international researchers and their efforts to offer countries sound technical assistance to improve health system performance.

Question 3

What indicators – besides health spending as percent of GDP – do NHA results produce, and how are the indicators relevant to policymakers?

Possible Answer

Other indicators include the following:

1. Public health expenditures as percent of total health spending – to ascertain government's role in providing health care to its population
2. Household expenditures as a percent of total health spending – to estimate the burden of out-of-pocket expenditures borne by households
3. Donor expenditures as a percent of total health spending – to evaluate how much the government will have to allocate in the future after the donor aid ceases.

2

Unit 2
Planning the NHA Process

Time

180 minutes

Learning Objectives

At the end of this unit, participants will:

- Be familiar with the skills and tasks required of individual NHA team members and NHA steering committee
- Be familiar with the principle of the NHA process

Content

- Building demand for NHA
- Setting up the NHA team
- Finding a "home" for NHA
- Organizing the steering committee
- Developing the workplan

Exercises

- Questions and draft workplan

References

No specific readings

Unit 2 - Slide Presentation

1

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Unit 2:
Planning the NHA Process

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Abt Associates Inc. and partners, Development Associates, Inc.; Emory University Rollins School of Public Health; Philoxenia International Travel, Inc. Program for Appropriate Technology in Health; SAG Corp.; Social Sectors Development Strategies, Inc.; Training Resources Group; Tulane University School of Public Health and Tropical Medicine; University Research Co., LLC.

2

Learning Objectives

- Be familiar with the suggested tasks and milestones for conducting NHA from start to finish
- Be aware of the skills and tasks required of individual NHA team members and NHA steering committee

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Planning the NHA Process

- ▲ Building the demand for NHA
- ▲ Setting up the NHA team
- ▲ Finding a "home" for NHA
- ▲ Organizing the steering committee and its relationship to the NHA team
- ▲ Developing the workplan

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Building the Demand for NHA

- ▲ Identify the "NHA advocate" in the government
- ▲ Identify health policy issues or questions that NHA can shed light on

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Setting up the NHA Team

- Discuss alternatives for where NHA will be housed
- Identify the skills and personnel that will be needed to conduct NHA
- Usually can be divided into "team leader tasks" and "technical level" tasks
- The team should clearly understand the level and amount of work that each person is assigned

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Setting up the NHA Team cont'd Team Leader(s) TASKS

1. Manage the team
   - Supervise all technical work
   - Ensure accomplishment of all senior tasks (do or delegate)
   - Keep the momentum going at all times
2. Manage stakeholders
   - Lead steering committee meetings
   - Lead, champion, advocate the NHA effort and process
   - Link NHA to top policy issues
   - Coordinate and ensure contributions of all stakeholders
   - Ensure that all team members are doing their assigned tasks
   - Define NHA process, policy design, classifications, and boundaries in collaboration with health sector stakeholders

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Setting up the NHA Team cont'd Team Leader(s) TASKS

3. Lead the data collection effort
   - ▲ Review data collection forms
   - ▲ Facilitate data collection from key stakeholders by maintaining their interest in the activity
   - ▲ Help get permission/approvals for technical staff to access data at relevant organizations
4. Oversee data analysis and interpretation of results
   - ▲ Be aware of data gaps and conflicts and lead the team in resolving the problems
   - ▲ Check the accuracy of the filled-in tables
   - ▲ Obtain the "big picture" analysis by tasking the NHA team to combine NHA data with other specific data (e.g., utilization, epidemiological, health status, macroeconomic, cross-country comparisons)
   - ▲ Identify health system policy issues revealed through the data analysis (can be done in consultation with key stakeholders)

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Setting up the NHA Team cont'd Team Leader(s) TASKS

5. Participate in creation of NHA documents (reports, policy briefs, press releases, presentations, etc.)
   - ▲ Help design appropriate documents for different audiences
   - ▲ Contribute to the writing of documents
   - ▲ Manage document writing, review, and production of documents
6. Disseminate findings
   - ▲ Plan, organize, and present at
     - ▲ Meetings with stakeholders (who should be kept informed by team leader(s) of progress throughout the NHA implementation process)
     - ▲ Press briefings
     - ▲ Academic events

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Setting up the team cont'd Team Leader – Level of SKILLS and Knowledge

- Broad understanding of the health sector
- A deep understanding of NHA and its potential use in the country
- Good contacts throughout the health system
- Excellent management and coordination skills
- Knowledge about the country health system (issues and policies)
- A financing background
- Analytical skills
- A thorough understanding of the target audience
- Strong writing skills
- Strong presentation skills
- Facilitation skills

10

Setting up the NHA Team cont'd Technical Level TASKS

1. Assist with documentation of
   - Stakeholder policy interests in NHA
   - Updating the NHA process
   - Definitions of expenditures and boundaries
   - Country specific NHA classifications

11

Setting up the NHA Team cont'd Technical Level TASKS

2. Collect data
   - ▲ Primary data
     - ▲ Design and update survey instruments
     - ▲ Contact organizations to explain what data are needed, review instruments
     - ▲ Follow up with contacts to get complete data
     - ▲ Input data into spreadsheets
     - ▲ Carefully document all sources, references, and calculations
   - ▲ Secondary data (with assistance of team leader with extensive knowledge of health system and activities)
     - ▲ Identify and secure copies of secondary data sources
     - ▲ Review and collect relevant data
     - ▲ Input data into spreadsheets
     - ▲ Carefully document all sources, references, and calculations, especially noting multiple sources for the same data

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Setting up the NHA Team cont'd Technical Level TASKS

3. Tabulate data and draft the NHA tables
   - ▲ Fill in NHA tables, carefully tracing original sources and calculations for all inputs
   - ▲ Identify errors, missing data, conflicting data
   - ▲ Review primary and secondary data sources to resolve errors, conflicts, and missing data
   - ▲ Continue to update documentation of all sources, references, and calculations
4. Analyze data
   - ▲ Identify and resolve data gaps and conflicts
   - ▲ Combine NHA data with non-financial data
   - ▲ Prepare graphs and tables
5. Write up methodology and results

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Setting up the NHA Team cont'd Technical Level SKILLS and KNOWLEDGE

- Knowledge of government accounting
- Experience in spreadsheet and word processing (Excel and MSWord)
- Good organization skills
- Familiarity with health data sources
- Research skills
- Analytical skills
- Training in NHA methodology, understanding of NHA tables and classifications
- Experience in developing and conducting surveys
- Interpersonal skills

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Finding a "Home" for NHA

- Determine where NHA will be housed (done in collaboration with NHA advocate)
  - May need to "market" NHA to other members of the ministry
    - In doing so, remember the need to stress the "policy purpose" and "institutionalization" goal from the outset
  - Institutional home for production and publication of NHA

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Finding a "Home" for NHA

- Determine where key NHA staff are employed and where the work will be based
  - MOH, MOF, statistical bureau, university
  - Other criteria
    - Capacity to do NHA
    - Interest, commitment
    - Proximity to users of NHA
    - Credibility
    - Feasibility

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NHA Steering Committee and NHA Team

- Tasks of steering committee
  - Communicate policy concerns to NHA team
  - Give feedback to NHA team on results and findings
  - Facilitate any difficulties NHA team might encounter
  - Assist in interpreting the NHA results and drawing policy implications
- Identify steering committee members (Who are the key stakeholders – public and private – in the health sector?)

An organogram helps to visualize the roles of the various players

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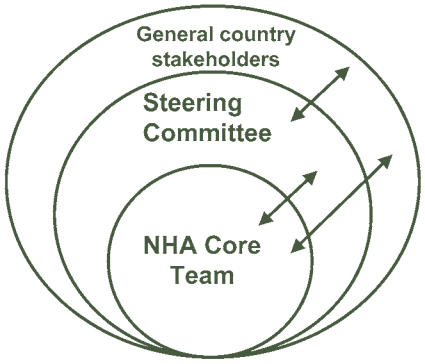
NHA Steering Committee and NHA Team cont'd

This is an illustration of the relationship and dialogue of NHA players



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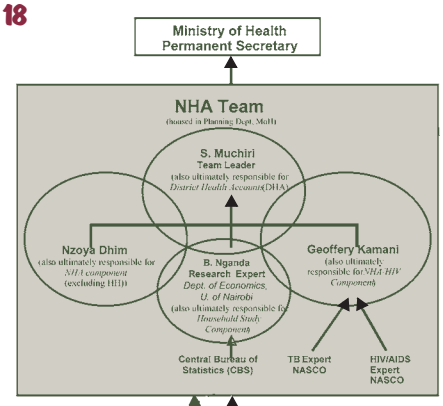

NHA Steering Committee and NHA Team cont'd

Kenya NHA Organogram

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Develop the Workplan

- Workplan should include
  - NHA tasks needed
  - Strategies & actions needed for completion of tasks
  - Person responsible
  - Timeline for completion

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Develop the Workplan: Key Tasks

- Identify strategies, actions, person responsible, timeline for each task
- Key tasks
  - Hold launch conference for steering committee
    - Identify policy objectives of NHA
  - Hold NHA team training workshop on methodology
    - Agree on classifications and boundaries
    - Develop NHA framework and approach
    - Identify primary and secondary data sources
    - Develop data plan as stated in earlier presentation

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Develop the Workplan: Key Tasks cont'd

- Develop survey instruments
- Determine sampling framework and number of enumerators
- Pilot test and finalize survey instruments
- Draw clear procedures for data collection and entry
- If doing HH survey, hold training of trainers and training of enumerators workshops

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Develop the Workplan: Key Tasks cont'd

- Monitor of data collection process
- Debrief "senior data collector" supervisors
- Edit and entry data
- Clean data
- Develop data analysis plan and populate the matrices
- KEEP SC INFORMED THROUGHOUT NHA PROCESS
- Identify and reconcile errors, conflicts, and missing data
- Draft report
- Disseminate draft NHA report for SC approval
- Finalize report and policy briefs

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Tasks for In–country Training

1. Who are NHA policy advocates?
2. Who are team leaders?
3. Who are "technical-level" team members?
4. Identify steering committee members
5. Determine the organizational arrangement of the NHA team and draw organogram
6. Design workplan

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Unit 2 - Exercises

Question 1

Who is, or could be, the NHA advocate in your country?

Answer

Discussion Question 2

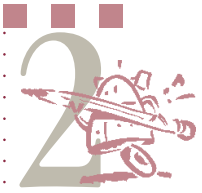
What are the top health sector issues, debates or questions in your country? How can NHA findings contribute to resolving these issues?

Possible Answer

Question 3

Who are the "team leaders" and "technical" team members in your country's NHA team?

Answer



Question 4

List the names of organizations, institutions, associations, etc. in your country that could be represented on the steering committee.

Answer

Question 5

Draw an organogram that depicts the relationship of members within the NHA team and the relationships of the team to the NHA steering committee.

Answer

Question 6

Use the following table to draft your country's NHA workplan. List tasks to be completed, the person assigned to perform each task, the way each task will be implemented, and the due date for completion of each task.

Components of NHA Workplan for (Country)			
NHA Tasks	**Person responsible**	**Strategy to implement task**	**Due date of completion**

Unit 2 - Answers

Question 1

Who is, or could be, the NHA advocate in your country?

Answer

Discussion Question 2

What are the top health sector issues, debates or questions in your country? How can NHA findings contribute to resolving these issues?

Possible Answer

Question 3

Who are the "team leaders" and "technical" team members in your country's NHA team?

Answer

Answering these questions helps participants to visualize the various roles and duties of each team member. The questions are particularly useful at regional trainings, especially for countries that are just beginning to plan their NHA process. They are less pertinent to small in-country trainings where the team and the trainer know who serves at which level.

* If a country is also embarking upon a NHA subanalysis, such as NHA/HIV, or a subnational analysis, such as for a province, include the individuals working on those subanalysis teams.

Question 4

List the names of organizations, institutions, associations, etc. in your country that could be represented on the steering committee.

Answer

Question 5

Draw an organogram that depicts the relationship of members within the NHA team and the relationships of the team to the NHA steering committee.

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Components of NHA Workplan for (Country)			
NHA Tasks	**Person responsible**	**Strategy to implement task**	**Due date of completion**

3

Unit 3

Defining Expenditures and Boundaries

Time

Regional training 160 minutes.

Country training 190 minutes

Learning Objectives

At the end of this unit, participants will:

- Understand what constitutes health expenditures
- Be familiar with functional definition and space and time boundaries for health expenditures
- Be able to capture appropriate and accurate expenditures associated with health care in their country

Content

- Defining crucial terms: "expenditure," "health care," and "health care expenditure"
- Functional definition of health expenditures
- Space boundaries
- Time boundaries
- Criteria for inclusion of health care expenditures
- Other important issues when determining what to include as a health expense
- Health care-*related* activities

Exercises

- Discussion and application questions

References

Organization for Economic Cooperation and Development (OECD). 2000. *A System of Health Accounts*. Chapters 1, 3, 5, 9, 10, and 11. Paris: OECD (On NHA Resources CD)

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Unit 3 - Slide Presentation

1

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Unit 3:
Defining Expenditures and Boundaries for NHA

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Abt Associates Inc. and partners, Development Associates, Inc.; Emory University Rollins School of Public Health; Philoxenia International Travel, Inc. Program for Appropriate Technology in Health; SAG Corp.; Social Sectors Development Strategies, Inc.; Training Resources Group; Tulane University School of Public Health and Tropical Medicine; University Research Co., LLC.

2

Learning Objectives

- Understand what constitutes health expenditures
- Be familiar with functional definition and its space and time boundaries for health expenditures
- Be able to capture appropriate and accurate costs associated with health care in your country

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3

Measuring Health Expenditures

- The NHA team should clearly understand:
  - What is an 'expenditure'?
  - How do you define health?
  - SPACE boundary of health expenditures
  - TIME boundary of health expenditures

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The Importance of CLEARLY Defining Health Expenditures

- Minimizes variance of expenditure estimates
- Facilitates cross-country comparisons (need clear country definitions that are compatible with international standards)

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What is an *Expenditure?*

- Measures in monetary terms the value of consumption of the goods and services of interest
  - What was SPENT on a particular service or product?

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What are Health Care Activities?

- SHA defines health care activities as:
  - Promoting health and preventing disease
  - Curing illness and reducing premature mortality
  - Providing nursing care for chronically ill persons
  - Providing nursing care for persons with health-related impairments, disabilities, and handicaps
  - Assisting patients to die with dignity
  - Providing and administering public health
  - Providing and administering health programs, health insurance, and other funding arrangements

Note: SHA definition is restricted to those based on "medical technology"

NHA broadens this and includes spending on informal and possibly illegal health care providers including non-traditional providers

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What is *Health Care*?

- ▲ *Activities* whose *primary purpose* is health restoration, maintenance, and improvement for the nation during a defined period of time
- ▲ NHA uses a FUNCTIONAL definition
  - ▲ The stress is on "activities" intended for health care REGARDLESS of the provider or paying institution/entity
- ▲ What is the *primary* purpose of the *activity*?

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NHA Definition of "Direct" Health Care Expenditure?

- ▲ All expenditures for *activities* whose *primary purpose* is to restore, improve, and maintain health for the nation during a defined period of time

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Defining a *Space* Boundary for Health Expenditures

- Not limited to the activity that takes place within the national border
  - INCLUDES health expenditures by citizens and residents temporarily abroad
  - EXCLUDES health spending by foreign nationals on health care in that country
  - INCLUDES donor spending (both cash and in-kind) whose primary purpose is the production of health and health-related goods and services in a country
  - EXCLUDES donor spending on the planning and administration of such health care assistance

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Defining a *Time* Boundary

- Fiscal or calendar year should be specified
- NHA uses an *accrual* method i.e.,
  - Goods and services are accounted for in the same year they were provided, rather than when they are actually paid for

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Criteria for Including Health Expenditures in NHA

- The 2% threshold (rule of thumb)
  - Include an expenditure if it is more than 2% of total health expenditures
- Policy relevance
  - When in doubt, include those expenditures that are a priority to policymakers

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Criteria for Measuring Health Expenditures in NHA

- Transparency
  - Must be able to clearly document all assumptions and calculations in the NHA report
- International compatibility
  - To see "How do we compare with others?"
- Measurement feasibility
  - Should be able to measure the expenditure within the timeframe and resources agreed upon in your country

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Issues When Measuring Health Expenditures

- Use the final market price in the private-for-profit sector
  - Private clinic: Clinic revenue; not the revenue of clinic suppliers
  - Private hospital: Hospital revenue; not the revenue of hospital suppliers
  - Drugs: Revenue of retail pharmacies; not the drug manufacturers or distributors

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What to do When there is no Market Price?

- Free health goods and services — get the entity's expenditure data
- Donated goods — use the market price of the donated item
- Barter exchanges — use the market price of the chicken, or exclude if less than 2%
- Uncompensated care — exclude

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Capital Expenditures

- Capital goods have a useful life > 1 year
- Buildings, equipment, vehicles
- Full cost the year it was purchased

16

Other Issues to Consider when Determining What to Include

- Fixed capital formation and consumption
  - For example, new equipment or building should be included in the *year they were acquired*
  - Recommendation for consumption of capital: ideally monetary value should be distributed over the lifespan of the product.
  - Capital formation on health care is captured separately under health-*related* functions.

17

Health Care-RELATED Activities

- Should be distinguished from DIRECT health care activities (that have been described up untill now)
- May be important for national policy interests
- "Broadens" the health expenditure boundary, so should not use too expansive a notion of what may be health-related

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Health Care-RELATED Activities

- What is a health-RELATED activity?
  - An activity that may overlap with other sectors, such as education, overall "social" expenditure, research and development, and infrastructure
  - May be closely linked to health care in terms of operations, institutions, and personnel but should, to the extent possible, be excluded when measuring activities belonging to DIRECT health care functions

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Examples of Health-RELATED Activities

Type of Activity	Included as Health-Related	Unlikely to Be Included as Health-Related
Water supply and hygiene activities	*Surveillance of drinking water quality*; construction of water protection to eliminate water-borne disease	*Construction and maintenance of large urban water supply systems* whose primary purpose is access to water for the urban population
Nutrition support activities	*Nutrition counseling and supplementary feeding* program to reduce children's malnutrition	*General school lunch programs and general subsidies for food prices*, whose primary purposes are income support or security
Education and training	*Medical research, medical education, and in-service training for paramedical workers*	*Secondary school education received by future physicians or health workers*
Research	*Health services research to improve program performance*	*Basic scientific research* in biology and chemistry

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Exercise on Boundaries

- ▲ Break into small groups (20 minutes)
  - ▲ Group 1: Discuss and justify your group answer to question 1
  - ▲ Group 2: Discuss and justify your group answer to questions 2 and 3
  - ▲ Group 3: Discuss and justify your group answer to questions 4 and 5
  - ▲ Group 4: Discuss and justify your group answer to questions 6 and 7
- ▲ Elect a spokesperson to report back to the class
- ▲ Report back and discuss

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RHA-Specific Space Boundary Issues

- What will the space boundary be for your country's regions?
  - Defined according to place of residence of beneficiaries?
    - Reflects differences in regional patterns in USE of health services
  - Defined according to place where expenditures are incurred?
    - Reflects *USE* of funds by regional authorities

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Unit 3 - Exercises

Discussion Question 1a

Health care in prisons provided and paid for by the Ministry of Justice?

Answer

Discussion Question 1b

Disposal of used syringes and gloves at a health clinic?

Answer

Discussion Question 2a

What is your country's space boundary with respect to NHA? Justify your answer.

Will you include health care spending by foreign nationals in your country?

Answer

Discussion Question 2b

What donor expenses will you capture in your NHA? For example, will you exclude all administrative and foreign technical assistance costs?

Answer

Discussion Question 3a

What is your country's time boundary with respect to NHA?

Answer

Discussion Question 3b

Between what dates will you be estimating NHA expenditures in this round of NHA?

Answer

Discussion Question 4

Will your country NHA include any health-related activities? If so, which ones? Why? (What is the policy interest?)

Answer

Application Exercises on Boundaries

Functional definition exercise 1

Persistent shortage of rainfall has caused the ManNa river to dry up significantly. The severe drought has made it necessary to build water and sanitation infrastructures and institute water control surveillance (to measure quality of water) systems. The drought has also diminished food baskets; the Ministry of Health has set up nutrition programs where expectant mothers and children receive food and vitamin supplements. Donor agencies have also provided food aid; the donors incur administrative costs to implement the food program.

Do you include expenditures as either as direct or health-care related on:

- ☐ *Water and sanitation infrastructure?*

Answer

- ☐ *Water control surveillance?*

Answer

- ☐ *Food relief programs?*

Answer

- ☐ *Vitamin supplements?*

Answer

- ☐ *Donor administrative costs (donor office in country)?*

Answer

Functional definition exercise 2

The World Bank has given a $3 million loan to Susmania to upgrade its primary health care facilities. Can you include this loan and its interest payments as health expenditure? If so, what entities are considered the source of funds for the loan and/or interest payments?

Answer

Functional definition exercise 3

Household surveys have shown high use of traditional healers. A medical association study shows that most treatments used by traditional healers are not effective. As a result of the study the medical association is offering grants to improve the effectiveness of treatments delivered by traditional healers. The association also offers scholarships for medical practitioners interested in going to rural areas and working with traditional healers. As a further result of the study, the MOH is allocating some of its resources to train its personnel to deliver services in a more culturally sensitive way.

Do you include (as either direct or health-related expenditure):

- ☐ *Expenditures on ineffective treatment administered by traditional healers?*

Answer

- *Expenditures on lucky charms and talismans?*

Answer

- *Payment in-kind (barter exchanges) for the services?*

Answer

- *Research grants to study traditional healer approaches?*

Answer

- *Scholarships for participants to work with traditional healers?*

Answer

- *Resources allocated to train MOH personnel?*

Answer

Time boundary exercise 1

In Susmania, government clinics refer patients to a specialty hospital for secondary and tertiary care. The government reimburses the hospital for the services in a lump sum amount that is paid in the subsequent fiscal year. In 2001 the hospital purchased five dialysis machines to treat the additional referral patients; the government reimburses the hospital in 2002.

Do you include in NHA for FY 2001:

- ☐ *Hospital expenses incurred in FY 2001 that are reimbursed to the hospital in FY 2002?*

Answer

- ☐ *Operating costs for the dialysis machines?*

Answer

- ☐ *The purchase of the five dialysis machines?*

Answer

Time boundary exercise 2

Once every five years the Susmania MOH conducts a household health care utilization and expenditure survey. The last one was conducted in 2000. Now, in 2004, the NHA team is conducting the first round of NHA. The expenditure data collected are for the current year except for household out-of-pocket expenditures. In addition to these data being outdated, the Susmanian currency (cruton) has been volatile, with wide fluctuations in its value in the international markets.

Do you include:

- ☐ *Out-of-pocket expenditures from 2000? If so, how?*

Answer

- ☐ *Which exchange rate (start of 2004, end of 2004, in 2000, etc.) would you use to convert Susmanian crutons into U.S. dollars for international comparison?*

Answer

Space boundary exercise 1

Sharmeen Scherzade is a government employee and is enrolled in the National Insurance Program. She is diagnosed with a rare form of red blood corpuscles disease. There are no physicians or facilities in her home country to perform the complicated surgery. Sharmeen is flown to the Royal College of Surgery Hospital in London for the treatment. She undergoes the surgery successfully, and recovers with extensive post-operative care. Her family spends the three months with her in London. All of the medical expenses are borne by the National Insurance Program (NIP) in her country.

Do you include:

☐ *Sharmeen's and her family's airfare to London and back?*

Answer

☐ *Surgery expenses?*

Answer

☐ *Post-operative care expenses?*

Answer

☐ *Hospital charges:?*

Answer

☐ *Doctor fees?*

Answer

☐ *The family's living expenses in London?*

Answer

Space boundary exercise 2

A good medical infrastructure, and highly skilled physicians and support staff makes Susmania a natural destination for medical tourism. In fact, a conscious decision was made by the government to attract medical tourists from neighboring countries. The MOH provided subsidized housing arrangements for the family, effective financial networks to facilitate payment for hospital fees, etc.

Do you include:

- ☐ *Health expenditures incurred by foreign nationals in Susmania?*

Answer

- ☐ *Subsidized housing for the family members of medical tourists?*

Answer

Space boundary exercise 3

In the neighboring country of DeKar less than 1 percent of the total health care expenditures are incurred on foreign nationals, and the MOH has no interest in developing the medical tourism industry there.

Do you include:

- ☐ *Health expenditures incurred by foreign nationals in DeKar?*

Answer

Unit 3 - Answers

Discussion Question 1a

Should expenditures on the following health care activities be included in NHA? Justify your answer.

Health care in prisons provided and paid for by the Ministry of Justice?

Answer

Yes. Remember that NHA definition of health care is "functional;" the purpose of this activity is health care, no matter who or what pays for the activity.

Discussion Question 1b

Disposal of used syringes and gloves at a health clinic?

Answer

Yes. This procedure impacts environmental health care.

Discussion Question 2a

What is your country's space boundary with respect to NHA? Justify your answer.

Answer

Will you include health care spending by foreign nationals in your country?

Answer

Discussion Question 2b

What donor expenses will you capture in your NHA? For example, will you exclude all administrative and foreign technical assistance costs?

Answer

Discussion Question 3a

What is your country's time boundary with respect to NHA?

Answer

Discussion Question 3b

Between what dates will you be estimating NHA expenditures in this round of NHA?

Answer

Discussion Question 4

Will your country NHA include any health-related activities? If so, which ones? Why? (What is the policy interest?)

Answer

Application Exercises on Boundaries

Functional definition exercise 1

Persistent shortage of rainfall has caused the ManNa river to dry up significantly. The severe drought has made it necessary to build water and sanitation infrastructures and institute water control surveillance (to measure quality of water) systems. The drought has also diminished food baskets; the Ministry of Health has set up nutrition programs where expectant mothers and children receive food and vitamin supplements. Donor agencies have also provided food aid; the donors incur administrative costs to implement the food program.

Do you include expenditures as either direct or health-care related on:

☐ *Water and sanitation infrastructure?*

Answer

No, this is outside the functional definition of health, because construction and maintenance of large urban water supply systems has the primary purpose to distribute water to the population.

☐ *Water control surveillance?*

Answer

This is outside the functional definition of direct health care expense, but it can be considered health care-related because its primary purpose is to eliminate waterborne diseases. Particularly important for policy, it could be included as health care-related expense.

☐ *Food relief programs?*

Answer

No, this is outside the functional definition of health, because its primary purpose is to eliminate hunger and provide general income support, not necessarily to improve health, which is a side effect of food relief programs.

☐ *Vitamin supplements?*

Answer

Yes, although this is outside the functional definition of health – but if important for policy, it could be included as a health care-related expense as these vitamin supplements are to assist recovery from acute malnutrition.

- ☐ *Donor administrative costs (donor office in country)?*

Answer

No, because donor administration generally does not have policy relevance to the country. Donor expenses, such as the hiring of foreign nationals, do not reflect *local* financial realities and therefore overestimate costs.

Functional definition exercise 2

The World Bank has given a $3 million loan to Susmania to upgrade its primary health care facilities. Can you include this loan and its interest payments as health expenditure? If so, what entities are considered the source of funds for the loan and/or interest payments?

Answer

Yes, you include the proportion of the loan that is used in the health sector, and the interest payment. The source of this money, however, is not the donor but the Ministry of Finance. If the loan is $3 million, but only $1 million is used, include only $1 million in the given year. You would include interest payments in the year they are *due* but place them in the "other" category (*accrual* and not cash).

Functional definition exercise 3

Household surveys have shown high use of traditional healers. A medical association study shows that most treatments used by traditional healers are not effective. As a result of the study the medical association is offering grants to improve the effectiveness of treatments delivered by traditional healers. The association also offers scholarships for medical practitioners interested in going to rural areas and working with traditional healers. As a further result of the study, the MOH is allocating some of its resources to train its personnel to deliver services in a more culturally sensitive way.

Do you include (as either direct or health-related expenditure):

- ☐ *Expenditures on ineffective treatment administered by traditional healers?*

Answer

Yes, if the primary purpose of purchasing the treatment was to improve one's health, even if the treatment is ineffective.

☐ *Expenditures on lucky charms and talismans?*

Answer

This is debatable; however, many countries have chosen to include these as health expenditures. The argument was that such charms are bought to improve one's well-being or general health disposition.

☐ *Payment in-kind (barter exchanges) for the services?*

Answer

Yes, but in-kind payments should be monetized at the current value. This is usually done by going to the local market to determine the value of the bartered object (chicken, etc.).

☐ *Research grants to study traditional healer approaches?*

Answer

Yes, this can be included as a health care-related expenditure if the primary purpose of the research is to improve program performance.

☐ *Scholarships for practitioners to work with traditional healers?*

Answer

No, because the primary purpose of the scholarship is to educate participants and not directly for health care.

☐ *Resources allocated to train MOH personnel?*

Answer

Yes, it can be included as a health care-related expenditure.

Time boundary exercise 1

In Susmania, government clinics refer patients to a specialty hospital for secondary and tertiary care. The government reimburses the hospital for the services in a lump sum amount that is paid in the subsequent fiscal year. In 2001, the hospital purchased five dialysis machines to treat the additional referral patients; the government reimburses the hospital in 2002.

Do you include in NHA for FY 2001:

- ☐ *Hospital expenses incurred in FY 2001 that are reimbursed to the hospital in FY 2002?*

Answer

Yes, because the service was delivered in 2001. NHA uses the accrual method to define its time boundary. (Operating expenses include labor, electricity, saline solution, other supplies to operate the dialysis machines.)

- ☐ *Operating costs for the dialysis machines?*

Answer

Yes, this will be included as a direct health care expense.

- ☐ *The purchase of the five dialysis machines*?

Answer

It can be included as a health-related function, classified under "HCR.1 Capital formation for health care provider institutions."

Time boundary exercise 2

Once every five years the Susmania MOH conducts a household health care utilization and expenditure survey. The last one was conducted in 2000. Now, in 2004, the NHA team is conducting the first round of NHA. The expenditure data collected are for the current year except for household out-of-pocket expenditures. In addition to these data being outdated, the Susmanian currency (cruton) has been volatile, with wide fluctuations in its value in the international markets.

Do you include:

- ☐ *Out-of-pocket expenditures from 2000? If so, how?*

Answer

Yes, based on estimates for 2000, the out-of-pocket expenditures are extrapolated for the year 2004 by using the yearly inflation/deflation rates.

- ☐ *Which exchange rate (start of 2004, end of 2004, in 2000, etc) would you use to convert Susmanian crutons into U.S. dollars for international comparison?*

Answer

The average exchange rate for 2004.

Space boundary exercise 1

Sharmeen Scherzade is a government employee and is enrolled in the National Insurance Program. She is diagnosed with a rare form of red blood corpuscles disease. There are no physicians or facilities in her home country to perform the complicated surgery. Sharmeen is flown to the Royal College of Surgery Hospital in London for the treatment. She undergoes the surgery successfully, and recovers with extensive post-operative care. Her family spends the three months with her in London. All of the medical expenses are borne by the National Insurance Program (NIP) in her country.

Do you include:

- ☐ *Sharmeen's and her family's airfare to London and back?*

Answer

Yes, because the NIP is paying the costs as a health care expense. Note, NHA does include spending by citizens temporarily abroad, whether or not their care is funded out-of-pocket or paid by the government.

☐ *Surgery expenses?*

Answer

Yes.

☐ *Post-operative care expenses?*

Answer

Yes.

☐ *Hospital charges?*

Answer

Yes.

☐ *Doctor fees?*

Answer

Yes.

☐ *The family's living expenses in London?*

Answer

No, because this is not a direct health care cost, and because the family would have incurred living expenses regardless of the country location.

Space boundary exercise 2

A good medical infrastructure, and highly skilled physicians and support staff makes Susmania a natural destination for medical tourism. In fact, a conscious decision was made by the government to attract medical tourists from neighboring countries. The MOH provided subsidized housing arrangements for the family, effective financial networks to facilitate payment for hospital fees, etc.

Do you include:

☐ *Health expenditures incurred by foreign nationals in Susmania?*

Answer

No, because it is outside the space boundary definition. However, the expenditures can be included as an addendum item if the country wishes to track this for policy purposes.

☐ *Subsidized housing for the family members of medical tourists?*

Answer

No, again because it is outside the space boundary definition. However, the expenditures can be included as an addendum item if the country wishes to track this for policy purposes.

Space boundary exercise 3

In the neighboring country of DeKar less than 1 percent of the total health care expenditures are incurred for foreign nationals, and the MOH has no interest in developing the medical tourism industry there.

Do you include:

☐ *Health expenditures incurred by foreign nationals in DeKar?*

Answer

No, because these expenditures fall outside of the space boundary definition, there is no policy relevance to the country and the amount is less than the recommended 2 percent threshold.

4

Unit 4
Understanding NHA Classifications and the NHA Framework

Time

Regional training:

90 minutes for FS and HF presentation and exercises.

180 minutes for HP and HC presentation and exercises.

In-country training:

90 minutes for FS and HF presentation and exercises.

180 minutes for HP and HC presentation and exercises.

Learning Objectives

At the end of this unit, participants will:

- Be familiar with the International Classification for Health Accounts (ICHA) and its coding system
- Understand the NHA approach to classifications that allows the insertion of nationally relevant categories within the broader ICHA categories
- Identify and classify financing sources and financing agents
- Identify and classify providers and functions
- Understand the structure of each table
- Be able to set up the tables and label the table headings using the ICHA coding system

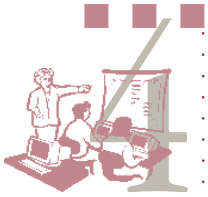
Content

- Overview of the International Classification for Health Accounts.
- The NHA approach to classifications: Flexibility to meet country needs
- Classifications for Financing Sources
- Classifications for Financing Agents
- Classifications for Providers

References

Organization for Economic Cooperation and Development. 2000. *A System of Health Accounts.* Paris. OECD. (On NHA Resources CD)

PHR*plus*. 2003. *Understanding National Health Accounts: The Methodology and Implementation Process*. Primer for Policymakers. Bethesda, MD: PHR*plus*, Abt Associates Inc. (On NHA Resources CD)



Unit 4 - Slide Presentation

1

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Unit 4 (a): Understanding Classifications and Tables

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2

Learning Objectives

- Become familiar with the International Classification for Health Accounts (ICHA) and its numerical coding system
- Understand the NHA approach to classifications that allows the introduction of nationally relevant categories within the broader ones identified by ICHA

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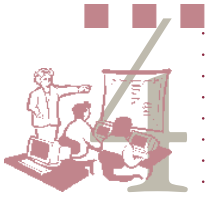
What is the International Classification for Health Accounts (ICHA)?

- It describes the principal dimensions of health expenditures (e.g., sources, financing agents, providers, and functions) – in terms of CATEGORIES with COMMON CHARACTERISTICS
  - For example, sources of funding may be divided into the following categories
    - Public funds
    - Private funds
    - Rest of the world funds

4

What is ICHA? cont'd

- Developed by OECD for System of Health Accounts (SHA)
- Each NHA table categorizes health care entities in accordance with ICHA
- Because it is an "internationally" accepted standard, ICHA allows for country comparisons of health expenditures



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ICHA Approach: The Principal Categories

- Begins with letter code
  - "Financing Sources" denoted by "FS"
  - "Financing Agents" denoted by "HF"
  - "Health Providers" denoted by "HP"
  - "Health Care Functions" denoted by "HC"

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ICHA Approach: Specifying Entities Within Principal Categories

- Within the broad category (e.g., financing sources), specific entities (e.g., public funds) are identified by a letter and numerical code followed by the ICHA name
  - Procedure for coding "public funds" (see handout)
    - Begin with *letter* code for the principal ICHA category; therefore,"FS" for Financing Sources
    - This should be followed by *numerical* code; therefore, "FS.1"
    - Finally, add the ICHA *descriptive name* for this sub-category; therefore "FS.1 Public Funds"

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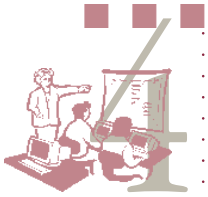
NHA Approach to Classifications

- NHA builds upon SHA (i.e., ICHA) approach
- NHA uses ICHA classifications but allows the addition of "sub-categories" to accommodate unique features of countries' health care structures

8

NHA Approach: Classifications Should Follow Certain Criteria

1. Respect, to the extent possible, the existing international standards and conventions (i.e., ICHA)
   - BUT also be flexible to meet specific POLICY needs of national analysis
     - Therefore, can introduce nationally relevant categories BUT do so within broader categories identified by ICHA
       - e.g., an ICHA code may be: HP1.1 General Hospitals
       - If a country wants to compare spending between govt. and private hospitals, it may want to add subcategories:
         - HP.1.1.1 *Government* General Hospitals
         - HP.1.1.2 *Non-government* General Hospitals



9

NHA Approach: Classification Criteria cont'd

1. Adding sub-classifications:
   - The first two numbers of the code should match ICHA categories
   - The numbers that follow are "new" and designate the nationally relevant "sub-category" classification

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NHA Approach: Classification Criteria cont'd

2. Each category should be mutually exclusive and exhaustive
   - i.e., each expenditure transaction should only fit in one – and only one – category
3. Each category should be feasible

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Unit 4 (b): Classifying Financing Sources and Financing Agents

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2

Learning Objectives

- Identify financing sources and financing agents
- Classify financing sources and financing agents using the NHA approach and maintain consistency with the ICHA categories

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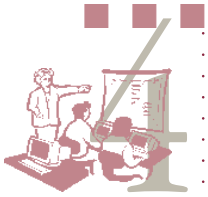

3

Financing Sources

- Definition: entity that provides health funds
  - Answers: "Where does the money come from?"
  - Examples: MOF, households, donors

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Classifications of Financing Sources

Code	Description
FS.1	Public Funds
FS.1.1	Territorial Government Funds
FS.1.1.1	-Central Government Revenue
FS.1.1.2	-Regional and Municipal Government Revenue
FS.1.2	Other Public Funds
FS.1.2.1	- Return on Assets Held by a Public Entity
FS.1.2.2	- Other
FS.2	Private Funds
FS.2.1	-Employer Funds
FS.2.1.1	-Parastatal Employer Funds
FS.2.1.2	-Other Employer Funds
FS.2.2	Household Funds
FS.2.3	Non-profit Institutions Serving Individuals
FS.2.4	Other Private Funds
FS.2.4.1	-Return on assets held by a private entity
FS. 2.4.2	- Other
FS.3	Rest of the World Funds

Shaded rows are additional subclassifications not included in ICHA

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Classifications of Financing Agents

- **Definition: Have the power and control over how the funds are used i.e., HAVE PROGRAMMATIC RESPONSIBILITIES**

  Answers: "How are funds organized and managed?" Formerly known as "financing intermediaries"

  Receive funds from sources and use them to pay for health services, products (e.g., pharmaceuticals) or activities.

  Examples: MOH, insurance companies

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Classifications of Financing Agents

Code	Description
HF.A	Public Sector
HF.1.1	Territorial Government
HF.1.1.1	Central Government
HF.1.1.1.1	-Ministry of Health
HF. 1.1.2	State/Provincial Government
HF. 1.1.3	Local/Municipal Government
HF.1.2	Social Security Funds
HF.2.1.1	-Government Employees Insurance Programmes
HF.2.5.1	-Parastatal Companies
HF.B	Non-public Sector
HF.2.1.2	-Private Employer Insurance Programmes
HF.2.2	-Private Insurance Enterprises (other than social insurance)
HF.2.3	-Household Out-of-Pocket
HF.2.4	-Non-profit institutions (NGO)
HF.2.5.2	-Private Non-Parastatal Firms and Corporations (other than health insurance)
HF.3	Rest of the World

Shaded rows are additional subclassifications not included in ICHA

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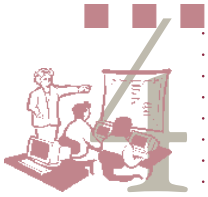

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Exercise

1. Identify the health care entities listed on the next slides as Financing Sources and/or Financing Agents
2. Then determine how you would classify them in accordance with the broad ICHA categories

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Exercise
Sort and Classify into FS and/or HF

- Armed Forces Medical Services (MOD)
- Health Foundation (NGO)
- Households
- International Development Agency
- Ministry of Education
- Ministry of Finance
- Ministry of Health
- Ministry of Justice
- National Airline Company
- National Insurance Program
- Oil and Natural Gas Commission
- Private Firms (e.g. Coca-Cola)
- Private Insurance Inc.

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Exercise

1. What are the main health care entities in your country? Draw a flowchart of your national/regional health care structures
2. How would you sort these entities into financing sources and financing agents?

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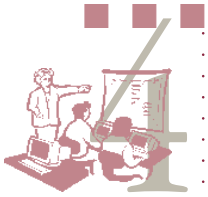

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Unit 4 (c): Classifying Providers and Functions

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2

Learning Objectives

- Identify providers and functions
- Classify providers and functions using the NHA approach and maintain consistency with the ICHA categories

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3

Classifications of Providers

- ▲ Definition: entities that provide or deliver health care and health-related services
- ▲ Answers: "Who/where" provides the services?
- ▲ Examples: hospitals, clinics, pharmacies

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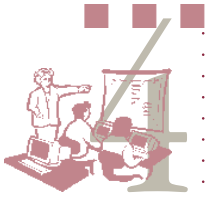
Code	Description
HP.1	Hospitals
HP.1.1	General Hospitals
HP.1.1.1	Government-owned general hospitals
HP.1.1.2	Private-for-profit owned general hospitals
HP.1.2	Mental Health and Substance Abuse Hospitals
HP. 1.3	Specialty Hospitals (other than mental health and substance abuse)
HP.2.	Nursing and residential care facilities
HP.3.	Providers of ambulatory health care
HP3.1	Offices of Physicians
HP3.2	Offices of Dentists
HP.3.3	Offices of Other Health Practitioners
HP.3.4	Outpatient care centers
HP.3.4.1	Family Planning Centers
HP.3.4.2	Outpatient mental health and substance abuse centers
HP.3.4.3	Free-standing ambulatory surgery centers
HP.3.4.4	Dialysis care centers
HP.3.4.5	All Other outpatient multi specialty and cooperative service centers
HP.3.5	Medical and Diagnostic Laboratories
HP.4	Retail Sale and other providers of medical goods
HP. 4.1	Dispensing Chemists
HP 5.	Provision and administration of public health programs
HP 6.	General health administration and insurance
HP 7	All other industries (rest of the economy)
HP 8	*Institutions providing health related services*
HP 9.	Rest of the World
HP. *nsk*	Provider expenditure not specified by kind

Classifications of PROVIDERS

Highlighted Rows are additional sub-classifications not included in ICHA



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Classifications of FUNCTIONS

- ▲ Definition: Actual service or activities delivered by providers
- ▲ Answers: "What type of service, product or activity was actually produced?"
- ▲ Example: Curative care, pharmaceuticals, outpatient care, prevention programs

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Code	Description
HC.1	Services of Curative Care
HC.1.1	Inpatient Curative Care
HC.1.2	Day Cases of Curative Care*
HC. 1.3	Outpatient curative care*
HC. 1.3.1	Basic Medical and Diagnostic Services*
HC.1.3.2	Outpatient Dental Care
HC.2	Services of Rehabilitative Care
HC.3	Services of Long-term Nursing Care
HC.4	Ancillary Services to Medical Care
HC.4.1	Clinical Laboratory
HC.4.2	Diagnostic Imaging
HC.4.3	Patient Transport and Emergency Rescue
HC.5	Medical Goods Dispensed to Outpatients
HC.5.1	Pharmaceuticals and other Medical non-Durables
HC.5.1.1	Prescribed medicines
HC.5.1.2	Over-the-counter medicines
HC.5.1.3	Other medical non-durables
HC.6	Prevention and Public Health Services
HC.7	Health Administration and Health Insurance
HC.*n.s.k*	*HC expenditure not specified by any kind*
HCR.1-5	Health-related Functions
HCR.1	Capital formation for health care provider institutions
HCR.2	Education and Training of Health Personnel
HCR.3	Research and development in health
HCR.4	Food, hygiene and Drinking Water Control
HCR.5	Environmental Health
HCR. n.s.k	*HCR expenditure not specified by any kind*

Highlighted Rows are additional sub-classifications not included in ICHA

Classifications of FUNCTIONS

7

Exercise

1. Identify the health-care entities listed on the next slides as providers or functions
2. Then determine how you would classify them in accordance with the broad ICHA categories

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8

Synthesis Exercise on Functional Classification

▲ How would you classify the activities below into functional set of classification?

Donors have reported their expenditures in the following breakdown:	NHA Classification?
Primary Care Services	
Secondary/Tertiary Care Services	
Training	
Research	
Information, Education and Communication	
Administration	

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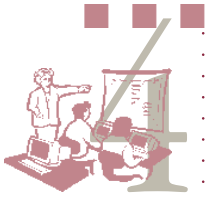

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Synthesis Exercise on Functional Classification

▲ How would you classify the activities below into functional set of classification?

Donors have reported their expenditures in the following breakdown:	NHA Classification?
Primary Care Services	
Secondary/Tertiary Care Services	
Training	
Research	
Information, Education and Communication	
Administration	

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10

Exercise

1. What are the main health care providers and services in your country?
2. How would you sort these entities into providers and functions?

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Unit 4 (d): Setting up and Reading the Tables

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Learning Objectives

- Understand the structure of each table
- Be able to label the headings of rows and columns of each table based on ICHA

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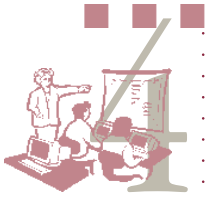

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Basic NHA Tables (1-4)

- It is recommended that countries work through at least the following four tables:
  - Table 1. FS x HF
  - Table 2. HF x HP
  - Table 3. HF x HC
  - Table 4. HP x HC

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Reading an NHA Table (FS x HF)

HF.A Public Sector						
HF. 1.1 Territorial government						
HF.1.1.1 Central government						
HF.1.1.1.1 Ministry of Health						
HF. 1.1.1.2 Ministry of Defense						
HF. 1.1.1.3 Ministry of Education						
HF.1.1.3 Municipal government						
HF.1.2 Social Security Funds						
HF.2.1.1 Government employee insurance programmes						
HF.2.5.1 Parastatal government						
Public subtotal						
HF. B Non Public Sector						
HF.2.1Private Social Insurance						
HF.2.2 Private Insurance Enterprises (other than social insurance)						
HF.2.3 Private Households' out-of-pocket			Direct Transfer			
HF. 2.4 Non-profit Institutions Serving Households (other than social insurance						
HF. 2.5. Private Firms and Corporations						
HF.2.5.2 Private Nonparastatal Firms and Corporations (other than health insurance						
Private subtotal						
HF.3. Rest of the World						
Total						

5

Reading an NHA Table (FS x HF)

HF.A Public Sector						
HF. 1.1 Territorial government						
HF.1.1.1 Central government						
HF.1.1.1.1 Ministry of Health						
HF. 1.1.1.2 Ministry of Defense						
HF. 1.1.1.3 Ministry of Education						
HF.1.1.3 Municipal government						
HF.1.2 Social Security Funds						
HF.2.1.1 Government employee insurance programmes						
HF.2.5.1 Parastatal government						
Public subtotal						
HF. B Non Public Sector						
HF.2.1Private Social Insurance						
HF.2.2 Private Insurance Enterprises (other than social insurance)						
HF.2.3 Private Households' out-of-pocket			Direct Transfer			
HF. 2.4 Non-profit Institutions Serving Households (other than social insurance						
HF. 2.5. Private Firms and Corporations						
HF.2.5.2 Private Nonparastatal Firms and Corporations (other than health insurance						
Private subtotal						
HF.3. Rest of the World						
Total						

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Understanding Flows Between Tables

- ▲ *Row* headings of one table become column headings or "originators" of the next table
- ▲ Therefore, *row* totals of first table become *column* "totals" of the second table
- ▲ Total Health Expenditure (THE) – the number contained in the cell at the bottom right corner of each table – is the same in every table

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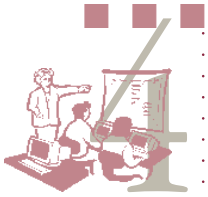

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Possible "Total" Health Expenditure Estimates

For purposes of international comparison:

- Total Current Expenditure on Health (TCEH) – made up of HC.1-7 only
  - This includes spending for personal health care, plus spending for collective health services and for the operation of the system's financing agents
- Total Expenditure on Health (THE) – made up of HC.1-7 and HCR.1 (capital formation of health care provider institutions). This is what is usually measured by most countries

For national purposes:

- National Health Expenditure (NHE) – This total estimate best addresses the needs and concerns of policymakers. It may or may not include any of the health-related functions from HC.R.2-5

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Reading an NHA Table (FS x HF)

HF.A Public Sector						
HF. 1.1 Territorial government						
HF.1.1.1 Central government						
HF.1.1.1.1 Ministry of Health						
HF. 1.1.1.2 Ministry of Defense						
HF. 1.1.1.3 Ministry of Education						
HF.1.1.3 Municipal government						
HF.1.2 Social Security Funds						
HF.2.1.1 Government employee insurance programmes						
HF.2.5.1 Parastatal government						
Public subtotal						
HF. B Non Public Sector						
HF.2.1Private Social Insurance						
HF.2.2 Private Insurance Enterprises (other than social insurance)						
HF.2.3 Private Households' out-of-pocket			Direct Transfer			
HF. 2.4 Non-profit Institutions Serving Households (other than social insurance						
HF. 2.5. Private Firms and Corporations						
HF.2.5.2 Private Nonparastatal Firms and Corporations (other than health insurance						
Private subtotal						
HF.3. Rest of the World						
Total						

9

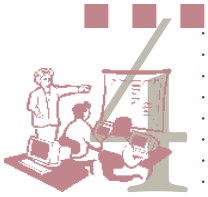
Financing Agents to Providers

	Financing Agent										
	HF.A Public Sector					HF.B Non Public Sector					
		HF.1.1 Territorial government			HF.2.5.1	HF.2.1	HF.2.3	HF.2.5.2	HF.3	Row totals
Provider	HF.1.1.1 Central government	HF.1.1.2 State/provincial government	HF.1.2 Social security funds	HF.2.1.1 Government employee insurance programmes	Parastatal companies	private social insurance	Private HH out-of-pocket payments	Private nonparastatal firms and corp.	Rest of the world	and total exp. measures
HP.1 Hospitals										
HP.2 Nursing & resid care										
HP.3 Providers of Amb care										
HP.4 retail sale & prov med gds										
HP.5 Prov & Admin PH										
HP.6 Gnl hlth admin & insur										
HP.7 All other industries										
HP.8 Institutions providing health related services										
HP.9 rest of the world										

10

Financing Agents to Functions

	HF x HC									
	HF.A Public Sector					HF.B Non Public Sector				
		HF.1.1 Territorial government		HF.2.1.1	HF.2.5.1	HF.2.1	HF.2.3	HF.2.5.2	HF.3	Row totals
	HF.1.1.1 Central government	HF.1.1.2 State/provincial government	HF.1.2 Social security funds	Government employee insurance programmes	Parastatal companies	Private social insurance	Private HH out-of-pocket payments	Private nonparastatal firms and corp.	Rest of the world	and total exp. measures
HC.1 and HC.2 Services of curative care and rehabilitative care										
HC.3 Services of long-term nursing care										
HC.4 Ancillary services to health care										
HC.5 Medical goods dispensed to outpatients										
HC.6 Prevention and public health services										
HC.7 Health program administration and health insurance										
(Additional row entries for HC.R if chosen by country)										
National Health Expenditure										



11 Providers to Functions

HP x HC										
	HP 1	HP 2	HP 3	HP 4	HP 5	HP 6	HP 7	HP 8	HP 9	
	Hospitals	Nursing and residential care facilities	Providers of ambulatory health care	Retail sale and other providers of medical goods	Provision and adm. of public health programs	General health adm. and insurance	All other industries (rest of the economy)	Inst. providing health care related services	Rest of the world	Row Totals and Health Expenditure Totals
HC 1 and HC 2 Services of curative care and rehabilitative care										
HC 3 Services of long-term nursing care										
HC4 Ancillary services to health care										
HC5 Medical goods dispensed to outpatients										
HC 6 Prevention and public health services										
HC 7 Health program administration and health insurance										
Subtotal: Total current expnd on Health										
(Additional row entries for HC.R										
if chosen by country)										
National Health Expenditure										

12 Understanding Flows Between Tables

1)	*Financing Sources*				
Financing Agents	FS.1.1 Territorial government	FS.3. Rest of the World (Donors)	FS.2.1 Employer Funds	FS.2.2 Household Funds	TOTALS
HF.1.1.1.1 Ministry of Health	A	B			A +B
HF.1.1.1.2 Ministry of Education	C				C
HF.2.2 Private Insurance Enterprises			D	E	D +E
HF. 2.3 Private Households' Out-of-pocket Payment				F	F*
TOTALS					G

2)	*Financing Agents*				
Providers	HF.1.1.1.1 MOH	HF.1.1.1.2 MOE	HF.2.2 Private Insurance Enterprises	HF.2.3 Households	TOTALS
HP.1.1.1 Public General Hospitals	W		X		
HP.1.1.2 Private General Hospitals		C			
HP.3.4.5.1 Public Outpatient Clinics			Y		
TOTALS	W=A+B	C	X+Y= D+E	F	G
* direct transfer of payment					

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Additional NHA Tables

- Total current expenditure on health (TCEH) across population age and gender groups (HF x A/G)
- Health expenditures across region (HF x R)
- Current expenditure on health by financing agents to the population classified by per capita household expenditure quintile (HF x SES)
- Allocating different types of inputs by financial agents (HF x I): classification of inputs are for those goods that are used to produce health care and health-related services
- The distribution of current expenditure on health by financing agents to the population classified by disease group (HF x GBD)

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Additional Tables: e.g. Financing Agents x Region

	Financing Agent									
	HF.A Public Sector					HF.B Non Public Sector				
	HF.1.1 Territorial government			HF.2.1.1	HF.2.5.1	HF.2.1	HF.2.3	HF.2.5.2	HF.3	Row totals
	HF.1.1.1 Central government	HF.1.1.2 State/provincial government	HF.1.2 Social security funds	Government employee insurance programmes	Parastatal companies	Private social insurance	Private HH out-of-pocket payments	Private nonparastatal firms and corp.	Rest of the world	and total exp. measures
Region I										
Region II										
Region III										
Region IV										
Region V										

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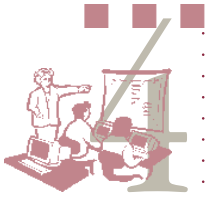

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Additional Tables: e.g. Financing Agents x per Capita Household Expenditure Quintile

	Financing Agent									
	HF.A Public Sector					HF.Non Public Sector				
	HF.1.1 Territorial government			HF.2.1.1	HF.2.5.1	HF.2.1	HF.2.3	HF.2.5.2	HF.3	Row totals and total exp. measures
	HF.1.1.1 Central government	HF.1.1.2 State/provincial government	HF.1.2 Social security funds	Government employee insurance programmes	Parastatal companies	Private social insurance	Private HH out-of-pocket payments	Private nonparastatal firms and corp.	Rest of the world	
Lowest quintile										
Expenditure quintile II										
Expenditure quintile III										
Expenditure quintile IV										
Highest quintile										

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Additional Tables: e.g. Financing Agents x Inputs

	HF x I									
	HF.A Public Sector					HF.B Non Public Sector				
	HF.1.1 Territorial government			HF.2.1.1	HF.2.5.1	HF.2.1	HF.2.3	HF.2.5.2	HF.3	Row totals and total exp. measures
	HF.1.1.1 Central government	HF.1.1.2 State/provincial government	HF.1.2 Social security funds	Government employee insurance programmes	Parastatal companies	Private social insurance	Private HH out-of-pocket payments	Private nonparastatal firms and corp.	Rest of the world	
Labor										
Non-labor services										
Maternal supplies										
Pharmaceuticals										
Other supplies										
Medical equipment										
Other equipment and durable goods										
Capital goods										
Buildings and structures										
Other capital goods										
Total										

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Additional Tables: e.g. Financing Agents x Disease Group

HF x I											
Disease Groups	HF.A Public Sector					HF.B Non Public Sector			HF.3 Rest of the world	Row totals and total exp. measures
	HF.1.1 Territorial government			HF.2.1.1 Government employee insurance programmes	HF.2.5.1 Parastatal companies	HF.2.1 Private social insurance	HF.2.3 Private HH out-of-pocket payments	HF.2.5.2 Private nonparastatal firms and corp.		
	HF.1.1.* Central government	HF.1.1.2 State/provincial government	HF.1.2 Social security funds							
GBD.1 Communicable diseases, maternal and perinatal conditions and nutritional deficiencies										
GBD.1.1.2 Sexually transmitted diseases										
GBD.2 Non-communicable conditions										
GBD.3 Injuries										
Total										

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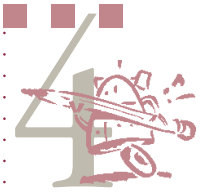
Unit 4 - Exercises

Discussion Question 1

What is social insurance, and when is it deemed private or public?

Answer



Regional Training Exercise 1

Sort the entities below into financing sources, financing agents, providers, and functions.

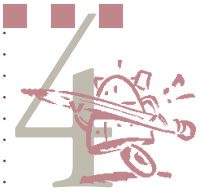
Administration of National Insurance Program
Ambulance transport
Armed Forces Medical Services
CATSCAN
Central government hospital
Dental care
Elderly nursing care
Family Planning Clinic
Health Foundation (NGO)
Health prevention and education program
Hearing aids
Households
Inpatient care
International Development Agency (IDA)
Lab test
Medical University
Midwife
Ministry of Finance
Ministry of Health
Ministry of Justice
Ministry of Education
National Airline Company
National Insurance Program (NIP)
Oil and Natural Gas Commission
Private clinics
Private firms, e.g., Coca-Cola
Private Insurance Inc.
Private pharmacies
Public pharmacies
Salaries of doctors
Salaries of MOH personnel
Traditional healer
Women's Health Clinic (NGO)

NOTE: some entities may be a financing source as well as a financing agent, e.g. MOH or regional governments. This depends on the country context and the nature of the funds received and allocated. However this is a good starting point for any country team. This list may be changed and updated as the team learns more and more about its health system while collecting data.

Regional Training Exercise 2

Determine how you would classify the entities in the previous list in accordance with the broad ICHA categories.

Answer to Exercises 1 and 2



In-country Training Exercise 1

What are the main health care entities in your country and how would you sort them into financing sources and financing agents?

In-country Training Exercise 2

How would you classify your country's financing sources and financing agents (accommodating national and international needs)?

In-country Training Exercise 3

What are the main health care entities in your country and how would you sort them into financing sources, financing agents, providers, and functions?

Answer to Exercises 1, 2 and 3

When developing country classifications, there are no right or wrong answers but we encourage countries to classify their health care expenditures according to the ICHA. You may wish to begin diagramming the structure of your health system in the space provided.

Contry Identifiaction and Classification of Financing Sources

ICHA code	Description

Contry Identifiaction and Classification of Financing Agents

ICHA code	Description

Contry Identifiaction and Classification of Providers

ICHA code	Description

Contry Identifiaction and Classification of Functions

ICHA code	Description

Synthesis Exercise

How would you classify the activities below into functional set of classification?

Donors have reported their expenditures in the following breakdown:	NHA Classification?
Primary Care Services	
Secondary/Tertiary Care Services	
Training	
Research	
Information, Education and Communication	
Administration	

Unit 4 - Answers

Discussion Question 1

What is social insurance? When is it deemed private or public?

Answer

A simple definition is that, when insurance is mandated by the government (a decree or law), it is regarded as social insurance. How the insurance funds are managed determines whether the scheme is a private or public social insurance.

In-country Training Exercise 1

What are the main health care entities in your country and how would you sort them into financing sources and financing agents?

In-country Training Exercise 2

How would you classify your country's financing sources and financing agents (accommodating national and international needs)?

In-country Training Exercise 3

What are the main health care entities in your country and how would you sort them into financing sources, financing agents, providers, and functions?

Answer to Exercises 1, 2 and 3

When developing country classifications, there are no right or wrong answers but we encourage countries to classify their health care expenditures according to the ICHA.

Regional Training Exercise 1

Sort the entities below into financing sources, financing agents, providers, and functions.

Administration of National Insurance Program
Ambulance transport
Armed Forces Medical Services
CATSCAN
Central government hospital
Dental care
Elderly nursing care
Family Planning Clinic
Health Foundation (NGO)
Health prevention and education program
Hearing aids
Households
Inpatient care
International Development Agency (IDA)
Lab test
Medical University
Midwife
Ministry of Finance
Ministry of Health
Ministry of Justice
Ministry of Education
National Airline Company
National Insurance Program (NIP)
Oil and Natural Gas Commission
Private clinics
Private firms, e.g., Coca-Cola
Private Insurance Inc.
Private pharmacies
Public pharmacies
Salaries of doctors
Salaries of MOH personnel
Traditional healer
Women's Health Clinic (NGO)

NOTE: some entities may be a financing source as well as a financing agent, e.g. MOH or regional governments. This depends on the country context and the nature of the funds received and allocated. However this is a good starting point for any country team. This list may be changed and updated as the team learns more and more about its health system while collecting data.

Regional Training Exercise 2

Determine how you would classify the entities in the previous list in accordance with the broad ICHA categories.

Answer to Exercises 1 and 2

Administration of National Insurance Program (Function HC.7.2.1 – Health administration and health insurance; social insurance)

Ambulance transport (Function HC.4.3 – Patient transport and emergency rescue)

Armed Forces Medical Services (Financing Agent – HF.1.1.1 Central government excluding social security funds, Provider – depends on the type of service delivery)

CATSCAN (Function HCR.1 – Capital formation for health care provider institutions)

Central government hospital (Provider HP.1.1.1 – Public general hospitals)

Dental care (Function HC.1.3.2 – Outpatient dental care)

Elderly nursing care (Function HC.3.3 – Long-term nursing care

Family Planning Clinic (Provider HP 3.4.1 – Family planning centers)

Health Foundation (FS.2.3.1 Non-profit institutions –Health Foundation and HF. 2.4 – Non-profit institutions serving HH)

Health prevention and education program (Function HC.6 – Prevention and public health services)

Hearing aids (Function HC.5.2.3 – Hearing aids)

Households (Financing Sources FS.2.2 – Household funds and Financing Agents HF.2.3 – Private household out-of-pocket payments)

Inpatient care (Function HC.1.1 – Inpatient curative care)

International Development Agency (IDA) (FS.3 – Rest of the world and HF.3 – ROW)

Lab test (Function HC.4.1 – Clinical laboratory)

Medical University Hospital (HP.1.2 – University general hospitals)

Midwife (Provider HP.3.3.1 – Office of other health practitioners – midwife)

Ministry of Education (Financing Agent HF.1.1.1.2 – Central government revenue – Ministry of Education)

Ministry of Finance (Financing Source FS.1.1 – Territorial Government Funds)

Ministry of Health (Financing Agent HF.1.1.1.1 – Central government revenue – MOH or can be [rarely] a financing source FS.1.1.1 – MOH)

Ministry of Justice (Financing Agent HF.1.1.1.3 – Central government revenue – Ministry of Justice)

National Airline Company (Most often Financing Agent HF.2.5.1 – State-owned enterprises depending on how autonomous the airline is, it can be placed under either public or private sector classification. Occasionally it can be classified as a source, FS.1.3. (Recommended by the PG)

National Insurance Program (Financing Agent HF.1.2.1 – Within social security funds – public social insurance)

Oil and Natural Gas Commission (Most often Financing Agent HF.2.5.1 – State owned enterprises, depending on how autonomous the commission is, it can be placed under either public or private sector classification. Occasionally it can be classified as financing source FS.1.3)

Private clinics (Provider – HP.3.1.1 – Office of private physicians)

Private firms (Financing Source FS.2.1 –Employer funds)

Private Insurance Inc. (Financing Agent – HF.2.2 Private Insurance Enterprises)

Private pharmacies (Provider HP.4.1.1 – Private dispensing chemists)

Public pharmacies (Provider HP.4.1.2 – Public dispensing chemists)

Salaries of doctors* (trick question!) Salaries have to be divided proportionally among the functional classifications of inpatient and outpatient care. The same applies to maintenance.

Salaries of MOH personnel (Function HC.7.1.1 – General government administration of health)

Traditional healer (Provider HP 3.9.3 – Offices of other health practitioners – Traditional healers)

Women's Health Clinic (NGO) (Provider HP.3.4.9 – All other outpatient community and other integrated care centers)

Regional Training Exercise 1

Sort the entities below into financing sources, financing agents, providers, and functions.

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Ambulance transport
Armed Forces Medical Services
CATSCAN
Central government hospital
Dental care
Elderly nursing care
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Health Foundation (NGO)
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Households
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International Development Agency (IDA)
Lab test
Medical University
Midwife
Ministry of Finance
Ministry of Health
Ministry of Justice
Ministry of Education
National Airline Company
National Insurance Program (NIP)
Oil and Natural Gas Commission
Private clinics
Private firms, e.g., Coca-Cola
Private Insurance Inc.
Private pharmacies
Public pharmacies
Salaries of doctors
Salaries of MOH personnel
Traditional healer
Women's Health Clinic (NGO)

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Regional Training Exercise 2

Determine how you would classify the entities in the previous list in accordance with the broad ICHA categories.

Answer to Exercises 1 and 2

Administration of National Insurance Program (Function HC.7.2.1 – Health administration and health insurance; social insurance)

Ambulance transport (Function HC.4.3 – Patient transport and emergency rescue)

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Inpatient care (Function HC.1.1 – Inpatient curative care)

International Development Agency (IDA) (FS.3 – Rest of the world and HF.3 – ROW)

Lab test (Function HC.4.1 – Clinical laboratory)

Medical University Hospital (HP.1.2 – University general hospitals)

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Ministry of Justice (Financing Agent HF.1.1.1.3 – Central government revenue – Ministry of Justice)

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Oil and Natural Gas Commission (Most often Financing Agent HF.2.5.1 – State owned enterprises, depending on how autonomous the commission is, it can be placed under either public or private sector classification. Occasionally it can be classified as financing source FS.1.3)

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Private Insurance Inc. (Financing Agent – HF.2.2 Private Insurance Enterprises)

Private pharmacies (Provider HP.4.1.1 – Private dispensing chemists)

Public pharmacies (Provider HP.4.1.2 – Public dispensing chemists)

Salaries of doctors* (trick question!) Salaries have to be divided proportionally among the functional classifications of inpatient and outpatient care. The same applies to maintenance.

Salaries of MOH personnel (Function HC.7.1.1 – General government administration of health)

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Synthesis Exercise

How would you classify the activities below into functional set of classification?

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Primary Care Services	
Secondary/Tertiary Care Services	
Training	
Research	
Information, Education and Communication	
Administration	

5

Unit 5
Collecting Data

Time

Regional training: 60 minutes

In-country training: 60 minutes

Learning Objectives

At the end of this unit, participants will:

- Learn of recommended steps for organizing the data collection process, including the data plan
- Know basic tips for strengthening the accuracy and relevance of collected data
- Be familiar with different secondary sources of data, and their strengths and weaknesses
- Understand when to resort to primary data collection and what to consider when designing certain survey instruments

Content

- The data collection process
- Creating a data plan
- Tips for getting accurate and relevant data
- Identifying secondary data sources: their strengths, their weaknesses, and overcoming the weaknesses.
- Primary data collection – key elements of survey questionnaires

Exercises

- Discuss strengths and weaknesses of your country's data sources

References

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Unit 5 - Slide Presentation

1

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Unit 5:
Collecting Data

The PHR*plus* Project is funded by U.S. Agency for International Development and implemented by:
Abt Associates Inc. and partners, Development Associates, Inc.; Emory University Rollins School of Public Health; Philoxenia International Travel, Inc. Program for Appropriate Technology in Health; SAG Corp.; Social Sectors Development Strategies, Inc.; Training Resources Group; Tulane University School of Public Health and Tropical Medicine; University Research Co., LLC.

2

Learning Objectives

- ▲ Learn of recommended steps for organizing the data collection process, including the data plan
- ▲ Know basic tips for strengthening the accuracy and relevance of collected data
- ▲ Be familiar with different secondary sources of data, including their strengths and weaknesses
- ▲ Understand when to resort to primary data collection and what to consider when designing certain survey instruments

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Organizing the Data Collection Process

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4

Collecting the Right Data – Initial Questions to Answer

- What are the definitions and boundaries of health expenditures?
- What are the policy issues being addressed by NHA?
- What level of detail is desired? How disaggregated should the data be?
  - e.g., regional or national?

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5

Creating a Data Plan

- Outlines the action plan for collecting primary and secondary data and clearly answers the following:
- Who is ultimately responsible for collecting each type of data?
- What types of information is needed? What is the level of detail? What time period should the data cover?
- When will the data be collected? What is the deadline for obtaining the data?
- Where should the team get the data?
  - Ask the steering committee to:
    - Identify secondary data sources
    - Facilitate access to the data

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Creating a Data Plan cont'd

Why?

- To ensure timeliness of the activity
- Division of labor among team members makes the process easier to manage
- Easier to identify any breakdown in the data collection process when it is divided into small chunks

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Example of a Data Plan for Secondary Sources

Kenya NHA Data Plan		
For Secondary Sources	*RECORD-KEEPER: Nzoya Dhim*	
Name of data source	**NHA Team Member Responsible for Getting Data**	**Person to contact (eg. From Steering Committee) to Obtain Information**
Government Records:		
MOH Executed budgets or Expenditure Returns 2001-2002 June-July (for all levels such as provincial, district,etc)	Mosira M Martin (responsible)- Finance Department, MoH; Henry G Onyiego (assisting)- Department of Planning, MoH	No need to contact 3rd party
Expenditure returns (2001-2002)Other Ministries (incl. MoE, MoD, MoLocal Government, MoHome Affairs)	Mosira M Martin (responsible)- Finance Department, MoH; Henry G Onyiego (assisting)- Department of Planning, MoH	Need to contact each Ministry PS; Steven Muchiri- Department of Planning, MoH will facilitate making the contacts

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Example of a Data Plan for Primary Sources

Kenya NHA Data Plan					
For Primary Sources	*RECORD-KEEPER: Geoffery Kimani Department of Planning, MOH*				
Name of data source	**NHA Team Member Responsible for Coordinating Survey Instrument Design and Development of Specific Workplan**	**Person to Contact (e.g. From Steering Committee) to consult when designing the survey**	**Deadline to meet with contact person and finalize survey instrument**	**Deadline to Pre-test**	**Deadline to Implement Survey and Collect Data**
Insurance Company Survey	Nzoya Dhim, Department of Planning, Ministry of Health	Commissioner of Insurance	30-Nov-02	15-Jan-03	15-Feb-03
Household Survey	Professor Nganda, University of Nairobi	David Nalo, CBS Director	15-Oct-02	30-Nov-03	15-Feb - 15-Mar-03

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Tips for Data Collection

- Remember your purpose: to populate the NHA tables
  - Don't get side-tracked by interesting data sources or to repair weaknesses in data set – wastes time and energy
- Check first to see if data is available elsewhere before doing a survey
- Remember to be "critical" even when using available data
- Try to obtain the same estimate from at least two sources i.e., triangulate the data

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Tips for Data Collection

- Also remember:
  - Is the data valid? Was the methodology sound?
  - What are the classifications used in the data source? And what are the definitions and boundaries?
  - Cash vs. accrual estimates?
  - Can data be extrapolated nationally?
  - Is it a large enough sample size?

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Starting with SECONDARY Sources

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12

Data Sources

Government Records

Data Sources	Strengths	Weaknesses
▲Budget Expenditures (executed budgets) ▲Economic Census Data ▲Tax Reports ▲Import and Export Records	▲Most accessible type of data ▲Reliable and accurate ▲Comprehensive in coverage of relevant activity ▲Available on regular basis ▲Consistent reporting rules	▲May be distorted to misrepresent/ protect/ advance a program ▲May be disaggregated in a manner that differs from NHA categories ▲Discrepancies between audited and unaudited records ▲Tend to have a time lag (b/c of bureaucratic process of auditing)

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Data Sources

- For government records
  - Note that line items may be organized as
    - recurrent vs. capital costs
    - departments
    - programs
    - a mixture of all three
  - To analyze for NHA purposes do the following:
    - Know exactly what the definitions and boundaries are for government classifications
    - Check to see if cash or accrual
    - Map government line item codes to NHA codes

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Data Sources

Other Public Records

Data Sources	Strengths	Weaknesses
▲Govt. task force reports (special documents) ▲Academic studies ▲NGO reports or studies ▲Donor country reports	▲Rich in details on specific issues ▲Good for triangulation ▲Limited availability (only at the end of the fiscal year)	▲Limited geographic or demographic scope ▲Variable analytic rigor ▲Categories may not match NHA needs

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Data Sources

Insurer Records

Data Sources	Strengths	Weaknesses
▲Individual insurance companies or organizations ▲Industry associations ▲Government regulatory body for insurance (or health insurance specifically) ▲Government tax authority may have data on revenues of insurance companies	▲Strong focus on health care and related expenditures ▲Limited availability (only at the end of the fiscal year)	▲Lack of functional detail for NHA ▲Likely to exclude patient payments in terms of co-pays and deductibles ▲No central info system and difficult to pursue every single insurance provider in a country ▲ General unwillingness to share at least some proprietary information, such as profit-loss ratios

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Data Sources

Provider Records

Data Sources	Strengths	Weaknesses
▲Providers ▲Regulatory (i.e. licensing) or financial (e.g. tax) agencies ▲Industry associations ▲Existing provider survey ▲Existing household survey	▲Specific and comprehensive of relevant health expenditures ▲Records fall within the boundary of health	▲ Accuracy of such info is questionable as some providers (e.g., private) may be reluctant to share *true* financial information (e.g., for tax purposes) ▲There may be many providers in a given country and it may be difficult to get an adequate sample ▲Presence of large informal sector (traditional healers) makes is difficult to capture expenditure data

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Data Sources

Household Records

Data Sources	Strengths	Weaknesses
▲DHS ▲LSMS ▲Labor surveys ▲Household expenditure surveys ▲Censuses	▲ Directly linked to social, economic, demographic, and other characteristics of patients ▲ Can be designed to capture exact info health accounts are looking for ▲ Most accurate info on out-of-pocket expenditures - useful for conducting equity analysis	▲ Specific surveys are expensive and time consuming to conduct, therefore data might be old or have to be extrapolated to the current year. Extrapolations result in loss of accuracy ▲Possibility of sampling and non-sampling errors ▲Records relate only to personal medical services, and cannot be used to estimate expenditure on collective and public health services ▲Routine generic HH surveys (e.g. DHS, household income and welfare surveys) more regular but do not necessarily include all the relevant questions for health care

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Data Sources

Donor Records

Data Sources	Strengths	Weaknesses
▲Health sector studies ▲Public expenditure reports ▲DHS ▲Independent reports on selected health services (e.g. RH) ▲Donor records of their health sector contributions	▲ Routine annual surveys of all donor assistance ▲ Provides country background and health sector info (e.g., WB Health Sector Report) ▲ Lists key players in health sector	▲Sometimes too generic ▲Difficult to monetize in-kind donations ▲When donors make donations directly to a NGO or a local entity, the financing data are likely to be missed ▲Difference in disbursements between donors and ministries

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Primary Sources of Information: Surveys, etc.

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Improving Quality of Survey Data

- Reduce Sampling Frame Bias – occurs when sample is not truly representative of population (i.e., don't know your denominator)
- Reduce Sampling Error – occurs when results are based on a sample and generalized for the entire universe; can decrease by increasing sample size
- Reduce Non-sampling Error – occurs when survey questions do not ask for what is wanted or do not get what is being asked for; resolved by careful survey design and field testing before rolling it out

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Health Insurance Questionnaires

1. Specify if private for-profit, state-owned, private not-for-profit
2. Try to get breakdown between number of "Group/Company" and "Individual/Family" subscribers
3. Get same breakdown for premiums and benefits (usually on provider level; difficult to get functional)

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Health Insurance Questionnaires cont'd

4. Ask whether they are reported in cash or accrual
5. If receive grants from govt., cash or in-kind
6. If receive loans or grants from donors
7. Ask what portion of premiums of combined life/health policies goes to life coverage and to health coverage

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Employer Questionnaires

1. Ownership status (parastatal, private, etc.)
2. Principal activity of company
3. Whether the company is self-insured (covers employee health expenses directly) or pays an external health insurance company or simply contributes to a public health insurance program
4. Number of employees covered by insurance and whether dependents are included

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Employer Questionnaires cont'd

5. What health services are covered?
6. Total amount firm paid for benefits during reporting period
7. Whether employees contribute to health insurance; if so, how much?
8. Whether any other govt. or org. contributes to health care benefits provided by firm

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Employer Questionnaires cont'd

9. Whether firm reimbursed employees for medical expenses they incurred. If so, how much?
   - How much does firm reimburse to private and public facilities?
10. Does firm provide on-site services. If so, what are they? Does any other NGO make contributions to these services?

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Donor Questionnaires

- What projects are being funded by donor and how much are these projects funded?
- What is the beneficiary institution of the funds? (Be sure to note any NGO providers that receive funds)
- Whether multilateral/bilateral

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Private Provider Questionnaires

- Total funds received from various entities, e.g., patients, govt., employers, insurance co., etc.
- Where does the money go? What types of functions?
- If possible, have all service providers indicate how much of their revenues are spent on drugs, if any.

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Traditional Healer Questionnaires

1. How do patients acknowledge TH services? Through cash, payment-in-kind, or "gifts"?
   - Determine market value of non-monetary "gifts"/payments
2. Why did patients come to TH (opinion of TH)? For health reasons, well-being etc? (remember health expenditure boundaries!)
3. Recall period should be short (1 month or less), unless TH keep records
4. Can capture HIV/AIDS on this survey? Will be difficult

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Exercise

- ▲ Identify the secondary sources in your country and/or region
- ▲ Identify the primary sources in your country and/or region
- ▲ Develop your country data plan

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Unit 5 - Exercises

Discussion Question 1

As the trainer goes over each category of data sources, he/she should also ask the class what types of data sources are available in their countries and what their strengths and weaknesses are.

Team members need to pool their knowledge and identify various forms of data sources in their country. They should write their answers in the handouts sheets provided by the trainer. Copies will also be found in the Participants Manual. This will help with the application question that asks trainees to develop their own data plan.

Answer Government Records

Name of Records	Strengths	Weakness

Answer Other Public Records

Name of Records	Strengths	Weakness

Answer Insurer Records

Name of Records	Strengths	Weakness

Answer Provider Records

Name of Records	Strengths	Weakness

Answer Household Records

Name of Records	Strengths	Weakness

Answer Donor Records

Name of Records	Strengths	Weakness

Application Questions

Directions: Participants will now determine the team's data collection plan. This can be led by a senior member of the team (or country teams if this is a regional training). Agreements on each task should be written on a flip chart; participants can also write them in the student exercise and handout book.

Data Plan: Secondary Resources

Record Keeper:

Name of Data Source	Team member responsible for getting data	Person to contact (e.g. steering committee member) to obtain information	Deadline to collect data source and report back to team
Government records			
Other public records			
Insurer records			
Provider records			
Household records			
Donor records			

Data Plan: Primary Sources

Record Keeper:

Name of survey instrument	Team member responsible for coordinating survey instrument design and developement of specific workplan	Person to contact (e.g. steering committee member) to consult when designing the survey	Deadline to meet with contact person and finalize survey instrument	Deadline to pre-test	Deadline to implement survey and collect data

Unit 5 - Answers

Discussion Question 1

As the trainer goes over each category of data sources, he/she should also ask the class what types of data sources are available in their countries and what their strengths and weaknesses are.

Team members need to pool their knowledge and identify various forms of data sources in their country. They should write their answers in the handouts sheets provided by the trainer. Copies will also be found in the Participants Manual. This will help with the application question that asks trainees to develop their own data plan.

6

Unit 6
Organizing Data for Filling in the NHA Tables

Time

90 minutes

Learning Objectives

At the end of this unit, participants will:

- Understand the recommended approach to filling in the NHA tables
- Be able to identify and resolve some principal data issues (e.g., double-counting) and data conflicts

Content

- General approach to filling in the tables
- How to fill in the FS x HF and HF x HP tables
- How to fill in the HF x Func and HP x Func tables
- Resolving data conflicts
- Avoiding double-counting
- Recommended order for filling in the tables

Exercise

- Discussion and application questions

Unit 6 - Slide Presentation

1

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Unit 6: Organizing the Data for Filling in the Tables

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2

Learning Objectives

- Understand the recommended approach to filling in (FS x HF, HF x HP) and (HF x HC, HP x HC) tables
- Be able to identify and resolve some key data issues (e.g., double-counting) and data conflicts

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Keep in Mind When Populating the Tables

- Countries should attempt appropriate tables from a menu of 9 NHA tables. The choice of tables and their order is driven by policy concerns and data availability. The most common ones countries attempt are FS x HF and HF x HP
- Relevance and reliability of data plays critical role in determining what numbers to use for filling the chosen tables
- Having at least two views of every entry in the accounts (originators and users) helps validate and confirm the data This is the beauty of NHA table structure
- Because data sources overlap, avoid double-counting expenditures
- Stay within the definition of health

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Keep in Mind When Populating the Tables cont'd

- Is the expenditure reporting system cash or accrual?
- Data collected must be for the same time period
- The first approximation of the tables is tentative and will undergo several iterations
- Document every decision

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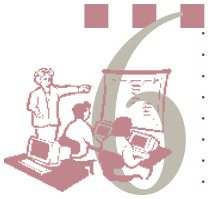

5

Making the First Approximation – FS x HF Table

1. Good to start with the actors in the MIDDLE of the NHA basic tables: Financing Agents
   - Why?
     - You can go forward (uses) and backwards (sources)
     - Fewer HFs, therefore relatively easy to capture
     - Data pertaining to HFs is the soundest, and thus the strongest dimension of NHA

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Making the First Approximation – FS x HF

2. Attempt the FS x HF table
3. List and classify all the potential Financing Agents

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FS x HF Table

Financing Agents	Financing Sources				
	FS.1 Public Funds	FS.2 Private Funds			FS.3 Rest of the World Funds
	FS.1.1 Territorial government funds	FS.2.1 Employer funds	FS.2.2 Household funds	*Private subtotal*	
HF.A Public Sector					
HF. 1.1 Territorial government					
HF.1.1.1 Central government					
HF.1.1.1.1 Ministry of Health					
HF. 1.1.1.2 Ministry of Defense					
HF. 1.1.1.3 Ministry of Education					
HF.1.1.3 Municipal government					
HF.1.2 Social Security Funds					
HF.2.1.1 Government employee insurance programmes					
HF.2.5.1 Parastatal government					
Public subtotal					
HF. B Non Public Sector					
HF.2.1Private Social Insurance					
HF.2.2 Private Insurance Enterprises (other than social insurance)					
HF.2.3 Private Households' out-of-pocket			Direct Transfer		
HF. 2.4 Non-profit institutions serving households (other than social insurance)					
HF. 2.5. Private Firms and Corporations					
HF.2.5.2 Private nonparastatal firms and corporations (other than health)					
Private subtotal					
HF.3. Rest of the World					
Total					

8

Making the First Approximation – FS x HF cont'd

4. **Sort the types of expenditure transactions related to HFs**
   a. **Funds used to own and operate a provider or health programs are funds allocated by HFs to providers and functions. For example:**
      i. MOH payment to non-MOH provider for delivering care to MOH- insured patient
      ii. MOH spending for public health
      iii. MOH operating its own clinic (is a provider in this case but , essentially, MOH is a HF to its own providers)
   b. **Funds transferred to an organization/individual that is the actual payer of health services are funds received by HFs from sources. For example:**
      i. MOF transfer of funds to MOH
   c. **Identify and exclude HF spending NOT used for health care. For example:**
      i. MOH spending on old-age retirement homes

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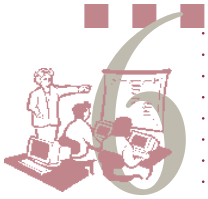

9

Making the First Approximation – FS x HF cont'd

- Estimate amounts of HF expenditures
  - Easiest to start with central govt. units, e.g., MOH
  - Identify sources for each HF
  - Use a T-account for each HF

MOH HEALTH Expenditures		HEALTH Revenue	
Program	15,000 Cr	MOF	12,000 Cr
Capital	5,000 Cr	USAID	5,000 Cr
Training	2,000 Cr	Other Rev.	5,000 C
Total	**22,000 Cr**	**Total**	**22,000 Cr**

  - Then start to populate the FS x HF table

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Making the First Approximation – FS x HF cont'd

6. Once a first pass at population is done, examine the row and column totals
   - DO THEY MAKE SENSE? If something looks wrong, reassess the cell entries
7. May need to revise initial list of HFs; if need to add another HF, then make the appropriate change in the T-account and table

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The HF x HP Table

8. **Start again from the HF level but instead of looking backward, look forward, to providers**
   - ▲ Process can be complicated, b/c often there is overlap between entities that produce and finance health care, e.g., MOH can be a HF and a provider
   - ▲ NHA team must distinguish between these two roles
     - △ Columns reflect financing of health care (HF resources)
     - △ Rows reflect production of health care (Provider resources)

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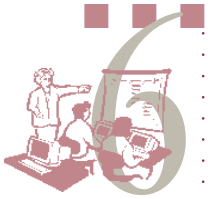
HF x HP Table

	Financing Agent									
	HF.A Public Sector					HF.B Non Public Sector				
	HF.1.1 Territorial government			HF.2.1.1	HF.2.5.1	HF.2.1	HF.2.3	HF.2.5.2	HF.3	Row totals
Provider	HF.1.1.1 Central government	HF.1.1.2 State/provincial government	HF.1.2 Social security funds	Government employee insurance programmes	Parastatal companies	private social insurance	Private HH out-of-pocket payments	Private nonparastatal firms and corp.	Rest of the world	and total exp. measures
HP.1 Hospitals										
HP.2 Nursing & resd care										
HP.3 Providers of Amb care										
HP.4 Retail sale & prov med gds										
HP.5 Prov & Admin PH										
HP.6 Gnl hlth admin & inscr										
HP.7 All other industries										
HP.8 Institutions providing health related services										
HP.9 Rest of the world										



13

The HF x HP Table cont'd

9. Break down HF spending by provider type
   (It is not necessary to insert numbers now, just identify providers)
   - Budgetary breakdowns can usually be found for the major HF's, e.g., MOH
   - If not available, look for survey info
   - If no direct info on breakdown of HF expenditure - use other estimation methods, e.g., interview an expert source:
     - Statement such as, "Our health insurance policies only cover physician services and a small amount of drugs" can be of tremendous value.

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The HF x HP Table cont'd

10. Classify the list of providers by ICHA code
11. Add newly discovered entities that receive funds from HF (insert provider rows) if needed
12. Take ROW totals from FS x HF table and place them as COLUMN "trial sum" totals in the HF x HP table
13. Place the initial reported total estimates at the end of each provider row

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The HF x HP Table cont'd

14. **Consult providers to learn where they claim their revenue comes from – check against the HF estimates (columns) to verify that provider data are accurate**
    - △ **It is very unlikely that the two will match**
    - △ **General rule: if two estimates differ by 2 percent (or more) of THE try to reconcile the estimates**

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16

Question for Class

1a) **HH user fees incurred at MOH hospitals are returned to MOH and not retained by the provider**
- ▲ **Where are those fees captured?**
  - △ **HH are HF for the amount of fees**
  - △ **Therefore, spending by govt. is net of those fees, e.g.,**
    - △ MOH operates a hospital at a cost of 2500 Cr
    - △ MOH hospital collects 150 Cr from user fees
    - △ Therefore, HH as HF would be 150 Cr and MOH would be HF for 2500 – 150 = 2350

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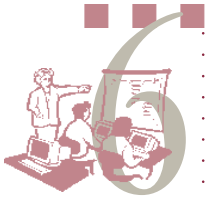

17

Question for Class

1b) HH user fees incurred at MOH hospitals are returned to MOF and not retained by the provider

- Where are those fees captured?
  - HH are HF for the amount of fees
  - Therefore, spending by government is net of those fees, e.g.,
    - MOH operates a hospital at a cost of 2500 Cr
    - MOH hospital collects 150 Cr from user fees
    - Therefore, HH as HF would be 150 Cr and MOH would be HF for 2500 – 150 = 2350

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18

Question for Class

1c) HH user fees incurred at MOH hospitals are retained by the provider

- Where are those fees captured?
  - HH are HFs
  - Considered supplemental to MOH resources given to provider
  - Therefore, no need to subtract the fee amount from the MOH (HF) amount designated for hospitals

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PG RECOMMENDED Answers to questions 1a-c

User fees (150 Cr) returned to MOH	**MOH-Central Govt**	Private Firms and Corp	Priv. Insurance	**Private HH out-of-pocket Expnd.**	Rest of the World	Row Totals and Total Expnd. Measures
HP1.1 MOH Hospitals	2500-150=**2350**			**150**		**2500**

User fees (150 Cr) returned to MOF	**MOH-Central Govt**	Private Firms and Corp	Priv. Insurance	**Private HH out-of-pocket Expnd.**	Rest of the World	Row Totals and Total Expnd. Measures
HP1.1 MOH Hospitals **(PG 10.15)**	2500-150=**2350**			**150**		**2500**

User fees (150 Cr) retained by provider	**MOH-Central Govt**	Private Firms and Corp	Priv. Insurance	**Private HH out-of-pocket Expnd.**	Rest of the World	Row Totals and Total Expnd. Measures
HP1.1 MOH Hospitals	**2500**			**150**		2500=150=**2650**

20

Why Get Functional Level Information?

- Two functional tables: HF x HC and HP x HC. This information is difficult to compile yet relevant for policymakers
- Policymakers can estimate exactly how the expenditures are used (tables answer the questions):
  - How much is being spent on curative care vs. prevention?
  - How much is going towards pharmaceuticals?
  - How much is spent on administration?
  - How much is spent on maternal and child health?
- These tables need not reflect all health spending because they measure only specific dimensions of the health sector

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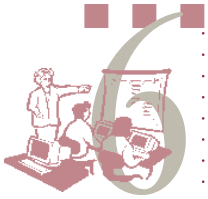

21

Which Table to Populate? HF x HC or HP x HC?

- Both tables are recommended by NHA countries. Decide to do one or both depending on policy relevance
  - Country X may be more concerned with WHERE the services are provided. Therefore, the HP x HC table is useful
  - Country Y may be more concerned with WHO pays for the various services. Therefore, the HF x HC table is useful

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Which Table to Populate? HF x HC or HP x HC? cont'd

- Access to data and their availability
  - How country accounting and payment systems are set up
  - Easier to do HF x HC if payment is made for each service consumed (such is the case with countries where social insurance schemes predominate)
  - Difficult to do HF x HC if public sector budgets are not allocated by function but by provider

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23

Which Table to Populate? HF x HC or HP x HC? cont'd

- Regardless which table is done, OPERATIONALLY it is likely that one table can't be done without working on the other
  - Suggest STARTING (not a final table) by doing a COMBINATION TABLE – HF x Providers x Functions
  - Helpful to piece together all available info
  - Helpful in cross-checking accuracy of HFs and providers estimates with reports of functional breakdowns

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24

Filling out the Combination Table

- Begin by determining the functional breakdown of HF. Identify what types of functions are carried out – inpatient, outpatient, dental, etc.
  - For HFs that have no existing functional breakdown, it usually is possible to disaggregate based on provider type. (This amount will be placed in the HF x Provider cell)

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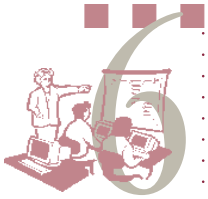

25

Filling out the Combination Table cont'd

- Group the identified functions under appropriate providers (see sample combination table, below). (Use list of providers from HF x HP table)
  - Functional breakdown of "single-function" providers (that offer services in only one NHA functional classification) is easy, e.g.,
    - Place full amount spent at pharmacies in " HC 5.1. Pharmaceuticals and other non-durables"

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26

Filling out the Combination Table cont'd

- Functional breakdown of "multifunction" providers (offer services in more than one NHA functional classification) is more difficult, e.g.,
  - Hospitals that offer inpatient and outpatient services – Do records distinguish between these functions; if not, check for specialized cost studies (supplement info with HH health studies)
  - General and admin expenses usually are difficult to allocate. Note: admin expenses of a provider do NOT go to "HC.7 health admin and health insurance." Rather, they are included as part of the cost of services provided

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27

Sample Combination Table (HF x Providers and Functions)

Provider and Function		Financing Agent							
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Government group insurance	HF.2.3 Households	Total	Check against FA x P
HP.1.1.1.1	MOH general hospitals								
	HC.1.1 Inpatient Curative								
	HC.1.3 Outpatient Curative								
	HC.R.1 Capital Formation								
HP.1.1.1.2	MOD hospitals								
	HC1.1 Inpatient Curative								
	HC1.3 Outpatient Curative								
	HC4 Ancillary Services								
	HCR.1 Capital Formation								
HP.1.1.1.3	Regional general hospitals								
	HC.1.1								
	HC.1.3								
	Total FA spending								
	Check against FAxP								

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28

Filling out the Combination Table cont'd

- ▲ Identify data sources
  - ▲ When data are available use:
    - △ Social insurance systems
    - △ Households
    - △ Donors
    - △ Other cost studies
  - ▲ Where data are not available use:
    - △ Government program budgets
    - △ Private sector data

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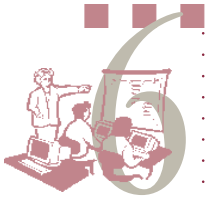

29

Filling out the Combination Table cont'd

- Populate the combination table by combining and reconciling results from the preceding three steps
  - If fully completed:
    - Can disaggregate easily into HF x HC and HP x HC tables
  - If partially completed
    - See which level has most data – HF x HC or HP x HC? Try to complete that table using various estimation techniques

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30

Reconciling Data Conflicts

- When estimates for the same cell differ
  - Use the 2% of THE rule. If the difference is more than 2%, reconcile the difference; if it is less than 2%, ignore the difference
- Reconciling the difference
  - The difference may be explicable, e.g.,
    - The absence of data from one HF contributed to its numbers being underestimated
    - One data source is more reliable
  - For large inexplicable differences, thoroughly reexamine the estimates:
    - Do they measure the same data?
    - Do they conform to the same boundaries?
    - Do they measure the same time period?
    - Is one estimate cash and the other accrual?

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Reconciling Data Conflicts, cont'd

- Step back and check whether numbers seem reasonable
- Avoid double-counting. NHA team should be vigilant that the same piece of info may be captured in more than one data source

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Reconciling Data Conflicts, cont'd

- Examples of double-counting
  - HH surveys may report spending made to certain providers. However, an employer survey may show that employers have reimbursed their workers for some of these expenses
    - Care must be taken to avoid counting this money under both employers and households.
  - Insurance expenditures – Firms may make payments to insurance companies, which make direct payments to providers
    - Count only ONE of these payment transactions, (not both firm payment to insurance companies and insurance payment to provider)

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Unit 6 - Exercises

Discussion Question 1

The user fees that are incurred by households for health care services provided to household (HH) members at MOH hospitals are sent to the central MOH, i.e., they are not retained by the hospital that collects them. (The fees are, however, used for heath care purposes in the future.) Where are these fees captured in the table?

Answer

Discussion Question 2

The user fees that are incurred by households for health care services provided to household members at MOH hospitals are sent to the Ministry of Finance as part of general tax revenue; they are not retained by the hospital. Where are those fees captured in the table?

Answer

Discussion Question 3

The user fees that are incurred by households for health care services provided to household members at MOH hospitals are retained by the hospital. Where are those fees captured in the table?

Answer

Discussion Question 4

What are examples of other common data conflicts?

Answer

Unit 6 - Answers

Discussion Question 1

The user fees that are incurred by households for health care services provided to household (HH) members at MOH hospitals are sent to the central MOH, i.e., they are not retained by the hospital that collects them. (The fees are, however, used for heath care purposes in the future.) Where are these fees captured in the table? (PG: pg. 142, 10.15)

Answer

Households are the financing agent for the amount of the fee they pay. Therefore, spending by government is a net of those fees. For example, the MOH operates a hospital at a cost of 2500 Cr. MOH hospital collects 150 Cr from user fees. Therefore, the household, functioning as a HF, would be assigned 150 Cr in the table; the MOH would be the HF for the remaining 2350 Cr (2500 - 150 = 2350).

Discussion Question 2

The user fees that are incurred by households for health care services provided to household members at MOH hospitals are sent to the Ministry of Finance as part of general tax revenue; they are not retained by the hospital. Where are those fees captured in the table? (PG: pg. 142, 10.15)

Answer

These fees are not assigned to the MOH as a HF or provider. In fact, they are not counted by NHA at all, because they are mingled with general revenues and may not be used for health purposes. The value of services at MOH hospitals is whatever MOH gives them.

Discussion Question 3

The user fees that are incurred by households for health care services provided to household members at MOH hospitals are retained by the hospital. Where are those fees captured in the table? (PG: pg. 142, 10.15)

Answer

Households are HFs. Their user fees are considered supplemental to MOH resources given to providers. Therefore, there is no need to subtract the fee amount from the MOH (HF) amount designated for hospitals, which would be in the cell that is the intersection of households as HFs and MOH hospitals as Ps in the HF x HP table.

Discussion Question 4

What are examples of other common data conflicts?

Answer

USAID gives $1 million in aid for instituting a vaccination program, but the MOH spends only $800,000 of it. From USAID's perspective, the expenditure is $1 million, whereas from the MOH's perspective, it is $800,000. In such a case, only the actual expenditure made on the vaccination program – $800,000 – should be captured for the year in question.

7

Unit 7

Susmania Case Studies: Applying the Methodology

Time

Regional training:

Case study I: 1 - 2 hours

Case study II: 90 minutes

Case study III: 3.5 hours

In-country training:

Case study I: 90 minutes

Case study II: 90 minutes

Case study III: 3 hours

Learning Objectives

At the end of this unit, participants will:

- Gain practical experience in filling in the FS x HF table through the Susmania Case Studies
- Be able to sort through responses on NHA questionnaires and determine which ones are relevant to the Financing Agent x Provider table
- Gain practical experience in filling in the HF x Func and HP x Func tables.

  Note: this is not a continuation of the previous Susmania exercise and new expenditure estimates are used

Content

- The FS x HF table
- Interpreting the data for the HF x HP table
- Interpreting the data for the HF x Func and HP x Func tables

Exercises

- Case study and three exercises

References

Organization for Economic Cooperation and Development. 2000. A System of Health Accounts. Paris. OECD. (On NHA Resources CD) PHR*plus*. 2002.

PHR*plus*. 2003. *Understanding National Health Accounts : The Methodology and Implementation Process*. Primer for Policymakers. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc. (May). (On NHA Resources CD)

Unit 7 - Slide Presentation

1

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Unit 7(a):
Susmania Case Study I
Filling in the FS x HF Table

The PHR*plus* Project is funded by U.S. Agency for International Development and implemented by:

Abt Associates Inc. and partners, Development Associates, Inc.; Emory University Rollins School of Public Health; Philoxenia International Travel, Inc. Program for Appropriate Technology in Health; SAG Corp.; Social Sectors Development Strategies, Inc.; Training Resources Group; Tulane University School of Public Health and Tropical Medicine; University Research Co., LLC.

2

Learning Objective

- Gain practical experience in filling in the FS x HF table through the Susmania Case Study

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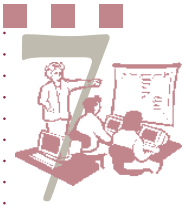

3

Overview of Susmania

- ▲ Small, low-moderate income country
- ▲ Was an autocratic central government; has undergone some decentralization and reforms
- ▲ Has a new government with prime minister and several ministries
- ▲ Currency is the "cruton" (Cr)

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4

Government Structure Relating to Health

- ▲ Central Govt.: MOF, MOH, MOE, MOD, National Insurance Agency (NIA)
- ▲ Parastatal: AZap, country's electric utility
- ▲ Local Govt.: Established in 4 regions; has own taxing authority; regional tax revenue supplemented by central government

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5

Health System Structure

- Most hospitals and polyclinics are govt. owned
  - Primary care clinics and hospitals are owned and operated by regional government
  - Secondary, tertiary hosp & clinics owned and operated by MOH
- MOD owns and operates its own hospitals for military personnel and their dependents
- Some new private hospitals and clinics have emerged as a result of the reforms
- Interior region has heavy reliance on traditional healers
- Few employers have on-site clinics for workers
- Most outpatient drugs bought from community pharmacies

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Health System Structure cont'd

- Health Insurance: Entire population is covered by NIA
  - NIA- is financed by
    - Payroll taxes
    - MOH payments (budget transfers)
    - Co-payments
  - NIA covers services provided at govt. facilities only
- Employers offer supplemental insurance to cover co-payments and care administered at non-govt. facilities
- Individuals may purchase their own supplemental insurance
- External Assistance:
  - Local NGO facilities financed through donor funds.
  - Have foreign donors such as MSF, Red Crescent, Project Hope

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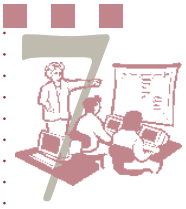

7

Policy Motivation for NHA

1. Understanding the burden of health care financing on households
2. Understand to what extent the NHA really covers the population's health expenditures
3. Provide reports to international lenders to evaluate efficiency of loans
4. Respond to WHO about health statistics

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8

FS x HF Table for Susmania

As a Susmania NHA team member, you have just completed the 4 initial steps (1. Start in the middle, 2. Identify HFs, 3. Type of expenditure, 4. Estimate amounts for each HF)

NHA Code	Entity	Expenditure Amount
HF.1.1.1.1	MOH	32,096
HF.1.1.1.2	MOE	329
HF.1.1.1.3	MOD	635
HF.1.1.2	Regional government	21,015
HF.1.2	NIA	60,837
HF.2.1.1	Government employee insurance programmes	563
HF.2.1.2	Private employer insurance programmes	2,130
HF.2.2	Private insurance enterprises (other than social insurance)	3,280
HF.2.3	Private households' out-of-pocket payment	82,092-90,734
HF.2.4	NGOs	2,888
HF.2.5.2	Private nonparastatal firms and corporations (other than health insurance)	3,024
HF.2.5.1	Parastatal companies (Azap)	1,905
HF.3	Rest of the world	599

9 Starting point

FS x HF Table for Susmania

Financing Agents	Financing Sources							Total
	FS.1 Public Funds			FS.2 Private Funds			FS.3 Rest of the World Funds	
	FS.1.1.1 Central government revenue			FS.2.1 Employer Funds	FS.2.2 Household Funds			
HF.1.1.1.1 MOH								32,096
HF.1.1.1.2 MOE								329
HF.1.1.1.3 MOD								635
HF.1.1.2 Regional government								21,015
HF.1.2 NIA								60,837
HF.2.1.1 Government employee insurance programmes								563
HF.2.1.2 Private employer insurance programmes								2,130
HF.2.2 Private insurance enterprises (other than social insurance)								3,280
HF.2.3 Private households' out-of-pocket payment								82,092-90,734
HF.2.4 NGOs								2,888
HF.2.5.2 Private firms								3,024
HF.2.5.1 Parastatal companies (Azap)								1,905
HF.3 Rest of the world								599
Trial Sum								
Estimated Total								

10

Exercise

- Start to disaggregate HF spending by sources:
  - Public funds, private funds, rest of the world funds
  - 1) Begin with govt. HFs:
    - MOE and MOD get their funds only from MOF
    - MOH gets its funds from only two sources: MOF and donors Donors gave 1,538 Cr to MOH
    - What cells can you fill in for the MOE, MOD, and MOH based on the above information?
  - 2) MOH is usually a HF but can be a source; e.g., it gives grants to regional govt. (986 Cr) and to NIA (1,106 Cr)
    - Where do you account for the grants funds?
    - How do you reduce the HF figure for MOH total?
    - Fill in the remaining POSSIBLE cells for MOH as a HF

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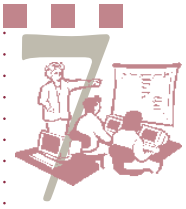

11 FS x HF Table for Susmania

Financing Agents	Financing Sources								
	FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	Total
	FS.1.1.1 Central govt. Revenue				FS.2.1 Employer Funds	FS.2.2 Household Funds			
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1 MOH	28,466							1,538	30,004
HF.1.1.1.2 MOE	329								329
HF.1.1.1.3 MOD	635								635
HF.1.1.2 Regional government		986							21,015
HF.1.2 NIA		1,106							60,837
HF.2.1.1 Government employee insurance programmes									563
HF.2.1.2 Private employer insurance programmes									2,130
HF.2.2 Private insurance enterprises (other than social insurance)									3,280
HF.2.3 Private households' out-of-pocket payment									82,092-90,734
HF.2.4 NGOs									2,888
HF.2.5.2 Private firms									3,024
HF.2.5.1 Parastatal companies (Azap)									1,905
HF.3 Rest of the world									599
Trial Sum									
Estimated Total									

12 Exercise

3. Your team finds that MOH reimburses 11,772 Cr to regional govt. for its hospitals services provided to unemployed people (on behalf of the MOH). Regional governments get their health funds from regional taxes and from the MOH
   a) Which is the financing agent in this case? The MOH or the regional govt.?
   b) This amount (11,772 Cr) has been double-counted: once with the MOH and once with the regional govt. How do you eliminate the double-counting from regional govt.?
   c) With the remaining amount for the regional govt. (i.e., not allocated to grants or reimbursements), where do you place that number?

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13
Q3

FS x HF Table for Susmania

Financing Agents	Financing Sources						
	FS.1 Public Funds		FS.2 Private Funds			FS.3 Rest of the World Funds	Total
	FS.1.1.1 Central government revenue	FS.1.1.2 Regional Government Revenue	FS.2.1 Employer Funds	FS.2.2 Household Funds			
	FS.1.1.1.1 MOF FS.1.1.1.2 MOH						
HF.1.1.1.1 MOH	28,466					1,538	30,004
HF.1.1.1.2 MOE	329						329
HF.1.1.1.3 MOD	635						635
HF.1.1.2 Regional government	986	8,257					9,243
HF.1.2 NIA	1,106						60,837
HF.2.1.1 Government employee insurance programmes							563
HF.2.1.2 Private employer insurance programmes							2,130
HF.2.2 Private insurance enterprises (other than social insurance)							3,280
HF.2.3 Private households' out-of-pocket payment							82,092 90,734
HF.2.4 NGOs							2,868
HF.2.5.2 Private firms							3,024
HF.2.5.1 Parastatal companies (Azap)							1,905
HF.3 Rest of the world							599
Trial Sum							
Estimated Total							

14

Exercise

4. **NIA**
   a. **Where would you put "interest income" (566 Cr), which is used to help pay the benefits and admin. expenses provided by the NIA?**
   b. **NIA does not have records on what proportion is received from employers and employees. However, you learn that the norm in the public sector is a ratio of 3:1employers to employees. Allocate the remaining amount between employers and employees (excluding the interest income and the MOH grant). Note this is an ESTIMATE**

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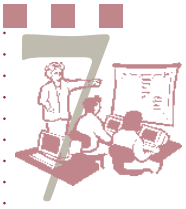

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FS x HF Table for Susmania

Financing Agents	Financing Sources							Total
	FS.1 Public Funds				FS.2 Private Funds		FS.3 Rest of the World Funds	
	FS.1.1.1 Central govt. Revenue		FS.1.1.2 Regional Government Revenue	FS.1.2 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds		
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH						
HF.1.1.1.1 MOH	28,466						1,538	30,004
HF.1.1.1.2 MOE	329							329
HF.1.1.1.3 MOD	635							635
HF.1.1.2 Regional government		986	8,257					9,243
HF.1.2 NA		1,106		566	44,374	14,791		60,837
HF.2.1.1 Government employee insurance programmes								563
HF.2.1.2 Private employer insurance programmes								2,130
HF.2.2 Private insurance enterprises (other than social insurance)								3,280
HF.2.3 Private households' out-of-pocket payment								82,092-90,734
HF.2.4 NGOs								2,888
HF.2.5.2 Private firms								3,024
HF.2.5.1 Parastatal companies (Azap)								1,905
HF.3 Rest of the world								599
Trial Sum								
Estimated Total								

16

Exercise

5. **Government employer insurance programmes (GEIP)**

   (an insurance program for government employees ONLY), receives funds from the government and employees

   - **GEIP is unable to distinguish between employer and employee contributions. How would you distribute its total of 563Cr?**
   - **The rules governing the fund state that 25% of funds be collected from employees and the remainder from the employer**

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17

Exercise

6. **Private employer insurance programmes (PEIP)**
   - ▲ PEIP is also unable to distinguish between employer and employee contributions. How would you temporarily allocate its total of 2,130 Cr?
7. **What source finances private individual insurance (3280 Cr) and where would you place this amount?**

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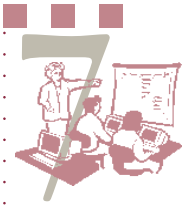
FS x HF Table for Susmania

Financing Agents	Financing Sources							Total
	FS.1 Public Funds				FS.2 Private Funds		FS.3 Rest of the World Funds	
	FS.1.1.1 Central Government Revenue		FS.1.1.2 Regional Government Revenue	FS.1.2 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds		
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH						
HF.1.1.1.1 MOH	28,466						1,538	30,004
HF.1.1.1.2 MOE	329							329
HF.1.1.1.3 MOD	635							635
HF.1.1.2 Regional government		986	8,257					9,243
HF.1.2 NA		1,106		566	44,374	14,791		60,837
HF.2.1.1 Government employee insurance programmes					422	141		563
HF.2.1.2 Private employer insurance programmes					x	2,130-x		2,130
HF.2.2 Private insurance enterprises (other than social insurance)						3,280		3,280
HF.2.3 Private households' out-of-pocket payment								82,092-90,734
HF.2.4 NGOs								2,888
HF.2.5.2 Private firms								3,024
HF.2.5.1 Parastatal companies (Azap)								1,905
HF.3 Rest of the world								599
Trial Sum								
Estimated Total								



19

Exercise

8. Your team now finds that the household survey figure for insurance spending varies significantly from the estimates reported by the insurance companies (just entered in previous questions)
   - ▲ The HH Survey reports:
   - ▲ 14,000 Cr to NIA
   - ▲ 2,200 Cr to Private Employer Insurance Programmes
   - ▲ 3,450 to Private Individual Insurance
   - ▲ What should you do with these conflicting estimates?

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FS x HF Table for Susmania

	Financing Sources							
	FS.1 Public Funds				FS.2 Private Funds			
Financing Agents	FS.1.1.1 Central Government Revenue		FS.1.1.2 Regional Government Revenue	FS.1.2 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds	FS.3 Rest of the World Funds	Total
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH						
HF.1.1.1.1 MOH	28,466						1,538	30,004
HF.1.1.1.2 MOE	329							329
HF.1.1.1.3 MOD	635							635
HF.1.1.2 Regional government		986	8,257					9,243
HF.1.2 NIA		1,106		568	44,374	14,791 (14,000)h		60,837
HF.2.1.1 Government employee insurance programmes					422	141		563
HF.2.1.2 Private employer insurance programmes					x	2130-x (2,200)h		2,130
HF.2.2 Private insurance enterprises (other than social insurance)						3280 (3,450)h		3,280
HF.2.3 Private households' out-of-pocket payment								82,092-90,734
HF.2.4 NGOs								2,888
HF.2.5.2 Private firms								3,024
HF.2.5.1 Parastatal companies (Azap)								1,905
HF.3 Rest of the world								599
Trial Sum								
Estimated Total								

21

Exercise

9. NGOs
   - ▲ Receive 1,653 Cr from donors
   - ▲ Receive 1,235 Cr from local philanthropy
   - ▲ Enter these estimates in the table

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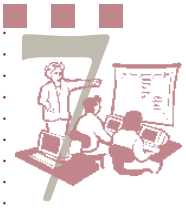
22

FS x HF Table for Susmania

Financing Agents	Financing Sources: FS.1 Public Funds — FS.1.1.1 Central Government Revenue	FS.1.1.2 Regional Government Revenue	FS.1.2 Other Public Funds	FS.2 Private Funds — FS.2.1 Employer Funds	FS.2.2 Household Funds	FS.2.3 Non profit Institutions	FS.3 Rest of the World Funds	Total
	FS.1.1.1.1 MOF FS.1.1.1.2 MOH							
HF.1.1.1.1 MOH	28,466						1,538	30,004
HF.1.1.1.2 MOE	329							329
HF.1.1.1.3 MOD	635							635
HF.1.1.2 Regional government	986	8,257						9,243
HF.1.2 NIA	1,108		566	44,374	14,791 (14,000) h			60,837
HF.2.1.1 Government employee insurance programmes				422	141			563
HF.2.1.2 Private employer insurance programmes				x	2130-x (2,200) h			2,130
HF.2.2 Private insurance enterprises (other than social insurance)					3280 (3450) h			3,280
HF.2.3 Private households' out-of-pocket payment								82,092-90,734
HF.2.4 NGOs						1,235	1,653	2,888
HF.2.5.2 Private firms								3,024
HF.2.5.1 Parastatal companies (Azap)								1,905
HF.3 Rest of the world								599
Trial Sum								
Estimated Total								



23

Exercise

10. Resolving the distribution ratio of private insurance between HH and employers (x)
    - A survey of employers provides a second estimate of premiums paid to private insurance and also provides the employer/employee split of those premiums (1/3 employer / 2/3 HH)

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Exercise

11. Simple data entry
    - AZap reported getting its entire (1905 Cr) funds from its own profits
    - Firms spend 3024 Cr in their own facilities
    - MSF (donor) funds its own facilities at an expense of 599Cr
    - Where do you enter these amounts?

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25

Exercise

12. Starting the reconciliation process
    a. Do a trial sum of the columns
    b. After doing the trail sum you learn that another estimate for the total amount financed by donors (as sources) is 8180 Cr.
       Place this in the "estimated total" row

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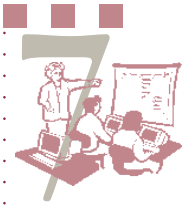
FS x HF Table for Susmania

Financing Agents	Financing Sources								
	FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of the World Funds	Total
	FS.1.1.1 Central Government Revenue		FS.1.1.2 Regional Government Revenue	FS.1.2 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds	FS.2.3 Non-profit Institutions		
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1 MOH	28,466							1,538	30,004
HF.1.1.1.2 MOE	329								329
HF.1.1.1.3 MOD	635								635
HF.1.1.2 Regional government		986	8,257						9,243
HF.1.2 NA		1,106		566	44,374	14,791 (14,000)h	566		60,837
HF.2.1.1 Government employee insurance programmes					422	141			563
HF.2.1.2 Private employer insurance programmes					710	1,420 (2,200) h			2,130
HF.2.2 Private insurance enterprises (other than social insurance)						3280 (3450)h			3,280
HF.2.3 Private households' out-of-pocket payment									82,092- 90,734
HF.2.4 NGOs							1,235	1,653	2,888
HF.2.5.2 Private firms					3,024				3,024
HF.2.5.1 Parastatal companies (Azap)					1,905				1,905
HF.3 Rest of the world								599	599
Trial Sum	29,430	2,092	8,257	566	50,435	?	1235	3,790	
Estimated Total								8,180	



27

Exercise

13. To reconcile amounts
    a. You learn that the NIA report is more reliable than HH survey estimate because it has rigid accounting systems
        - What estimate should you keep?
    b. You also learn that the insurance firm surveys have a higher response rate than the HH survey and therefore are more reliable
        - What estimate should you keep?

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Exercise

13. To reconcile amounts (cont'd)
    - The NHA team finishes analysis of Susmania's HH survey! This causes great joy and the team proclaims that HH out-of-pocket contributions were 86,413 Cr. How convenient! Enter this amount in the appropriate place
    - After re-examining the donor expenditure amount (8180 Cr), you learn that the estimate includes food and sanitation expenditures. Which estimate should you take (8180 Cr or the trial sum estimate)?

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Exercise

14. Next Step

- DO ROW AND COLUMN TOTALS ADD UP (to the same number)?

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30

FS x HF Table for Susmania

Financing Agents	Financing Sources								
	FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of the World Funds	Total
	FS.1.1.1 Central Government Revenue		FS.1.1.2 Regional Government Revenue	FS.1.2 Other Public Funds	FS.2.1 Employer Funds	FS.2.1 Household Funds	FS.2.3 Non-profit Institutions		
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1 MOH	28,466							1,538	30,004
HF.1.1.1.2 MOE	329								329
HF.1.1.1.3 MOD	635								635
HF.1.1.2 Regional government		986	8,257						9,243
HF.1.2 NA		1,106		566	44,374	14,791			60,837
HF.2.1.1 Government employee insurance programmes					422	141			563
HF.2.1.2 Private employer insurance programmes					710	1,420			2,130
HF.2.2 Private insurance enterprises (other than social insurance)						3280			3,280
HF.2.3 Private households' out-of-pocket payment						86,413			86,413
HF.2.4 NGOs							1,235	1,653	2,888
HF.2.5.2 Private firms					3,024				3,024
HF.2.5.1 Parastatal companies (Azap)					1,905				1,905
HF.3 Rest of the world								599	599
Trial Sum	29,430	2,092	8,257	566	50,435	106,045	1235	3,790	201,850
Estimated Total								8,180	

1

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Unit 7(b): Susmania Case Study II Interpreting Survey Data for Filling in the HF x HP Table

The PHR*plus* Project is funded by U.S. Agency for International Development and implemented by:

Abt Associates Inc. and partners, Development Associates, Inc.; Emory University Rollins School of Public Health; Philoxenia International Travel, Inc. Program for Appropriate Technology in Health; SAG Corp.; Social Sectors Development Strategies, Inc.; Training Resources Group; Tulane University School of Public Health and Tropical Medicine; University Research Co., LLC.

2

Learning Objective

- Be able to sort through responses on NHA questionnaires and determine which ones are relevant to the Financing Agent x Provider table

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3

Table 2: Allocation to Health Care Providers by Payers/Purchasers:
FA x P

	HF.A Public Sector						HF.B Non Public Sector					
	HF.1.1:Territorial Government											
	HF.1.1.1 Central govt.	HF.1.1.2 State/ provincial govt.	HF.1.1.3 Local / municipal govt.	HF.1.2 Social security funds	HF.2.1.1 Insurance for govt. Employees	HF.2.5.1 Parastatal Companies	HF.2.5.2 Private firms and Corp.	HF.2.1.2 & HF.2.2 Priv. insurance	HF.2.3 Private HH out-of-pocket exp.	HF.2.4 NPISH*	HF.3 Rest of the world	Row Totals and Total Exp. Measures
HP.1 Hospitals												
HP2 Nursing and Residential care facilities												
HP.3 Providers of Ambulatory Health Care												
HP.4 Retail sale and other providers of medical goods HP.5 Provision and administration of public health programs												
HP.6 General health administration and insurance HP.7 All other industries (rest of the economy)												
HP.8 Institutions providing health related services												
HP.9 Rest of the world Column totals												

4

Exercise for HF x HP

Look at Health Insurance Questionnaire (Exhibit 7b.1)

1a) Classify the "bold-type" terms into ICHA codes

1b) As you can see from the above table, the insurance firms were not able to disaggregate benefits between "Group" and "Individual" policy- holders. How would you separate the amounts?

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5

Exercise cont'd

Look at Employer Survey (Exhibit 7b.2)

2a) Which of the two expenditure estimates provided in this survey, should be placed in the HF x HP table?

2b) How would you classify it (as a provider)? What ICHA codes would you use?

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6

Exercise cont'd

Look at External Aid (Exhibit 7b.3)

3a) Which of the expenditures shown in the survey would be placed in the HF x HP table?

3b) How would you classify it?

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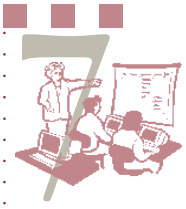

7

Exercise cont'd

Look at Exhibit 7b.4

4a) Which of the categories of expenditures can be placed in the HF x HP table?

4b) You've learned from patient admission records that HHs visit private clinics as opposed to public clinics in a ratio of 3:2 and that they visit private hospitals vs. public hospitals in a ratio of 2:3

- How would you distribute the co-payments in hospitals and polyclinics between public and private facilities?

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Unit 7(c): Susmania Case Study III Filling in the HF x Func and HP x Func Tables

The PHR*plus* Project is funded by U.S. Agency for International Development and implemented by:

Abt Associates Inc. and partners, Development Associates, Inc.; Emory University Rollins School of Public Health; Philoxenia International Travel, Inc. Program for Appropriate Technology in Health; SAG Corp.; Social Sectors Development Strategies, Inc.; Training Resources Group; Tulane University School of Public Health and Tropical Medicine; University Research Co., LLC.

2

Learning Objective

- Gain practical experience in filling in the HF x Func and HP x Func tables

  Note: this is not a continuation of the previous Susmania exercise and new expenditure estimates are used

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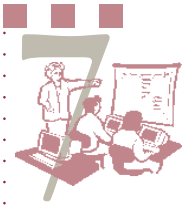

3

Exercise

- The NHA team finds that it would be easier to start this estimation by attempting a "Financing Agents x Provider and Function" combination table
- The first step is to organize the general row and column headings. (This has already been done for you). Also, some additional data are included

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4

Exercise

Regional General Hospital	Households	NIA	Govt. Employee Insurance Program
Inpatient	0	9422	60
Outpatient	201	4640	49
Total	201	14,062	109

You receive the above data and know that these numbers should be placed in the table. To your surprise, you learn that this has already been done for you (by the NHA fairy!)

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5

Worksheet
Susmania Case Study III - NHA Combined Table of Financing Agent by Providers and Function

Provider and Function		Financing Agent							
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Government Employee Insurance Programme	HF.2.3 Private Household Out-of-pocket	Total	Check against FA x P
HP.1.1.1.1	MOH general hospitals								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.2	MOD hospitals								
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals				14,062	109	201		
	HC.1.1 Inpatient Curative				9,422	60			
	HC.1.3 Outpatient Curative				4,640	49	201		
	Total FA spending	0	0	0	14,062	109	201	0	
	Check against FAxP								

6

Exercise cont'd

- NHA team is magically handed the expenditure totals for HF and providers (usually this would be obtained after completing HF x HP table)
- Place these totals (as seen on the next slide) in the appropriate cells on your combination table shell

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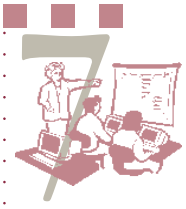

7

Exercise cont'd

1. The totals for Financing Agents

NHA Code	Entity	Expenditure Amount
HF.1.1.1.1	MOH	7,839
HF.1.1.1.3	MOD	8,569
HF.1.1.2	Regional government	41
HF.1.2	NIA	20,802
HF.2.1.1	Government Employee Insurance	109
HF.2.3	Household out-of-pocket	308
	TOTAL	37,668

The totals for providers

HP.1.1.1.1	MOH General Hospitals	9,387
HP.1.1.1.2	Ministry of Defense Hospitals	8,569
HP.1.1.1.3	Regional General Hospitals	19,712
	TOTAL	37,668

8

Question 1
Susmania Case Study III - NHA Combined Table of Financing Agent by Providers and Function

Provider and Function		Financing Agent							
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Government Employee Insurance Programme	HF.2.3 Private Household out-of-pocket	Total	Check against FA x P
HP.1.1.1.1	MOH general hospitals								9,387
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.2	MOD hospitals								8,569
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals				14,062	109	201		19,712
	HC.1.1 Inpatient Curative				9,422	60			
	HC.1.3 Outpatient Curative				4,640	49	201		
	Total FA spending	0	0	0	14,062	109	201	0	37,668
	Check against FAxP	7,839	8,569	41	20,802	109	308	37,668	

9

Exercise

2. **MOH general hospital records state the following totals (for all MOH hospitals combined):**
   - △ General administrative expenses (3,676 Cr). You learn that the GA estimate includes capital formation of 717 Cr
   - △ TOTAL inpatient expenditures were 4,693 Cr
   - △ Outpatient Care 1,018Cr
   - ▲ How will you allocate these estimates in the table?
     - a) Where does the capital formation estimate go?
     - b) How do you handle GA estimate?
     - c) Finally, input inpatient and outpatient estimates

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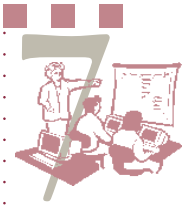
10

Susmania Case Study III - NHA Combined Table of Financing Agent by Providers and Function

Provider and Function		Financing Agent							
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Government Employee Insurance Programme	HF.2.3 Private household out-of-pocket	Total	Check against FA x P
HP.1.1.1.1	MOH general hospitals							9,387	9,387
	HC.1.1 Inpatient Curative							7,125	
	HC.1.3 Outpatient Curative							1,545	
	HC.R.1 Capital Formation							717	
HP.1.1.1.2	MOD hospitals								8,569
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals				14,062	109	201		19,712
	HC.1.1 Inpatient Curative				9,422	60			
	HC.1.3 Outpatient Curative				4,640	49	201		
	Total FA spending	0	0	0	14,062	109	201	9,387	37,668
	Check against FAxP	7,839	8,569	41	20,802	109	308	37,668	



11

Exercise

3. In terms of Financing Agents that contribute to MOH hospitals
   a. You learn from the household survey that households pay 107 Cr at MOH hospitals and the full amount goes to co-payments for outpatient care
      Where do you place this estimate in your table?
   b. You learn that NIA has reimbursed the MOH for services incurred by NIA's beneficiaries. NIA's total payment to MOH is 6,740 Cr and 88% of this amount goes to Inpatient Curative and remainder to Outpatient Curative
      - △ Place NIA's functional contribution to MOH hospitals in the appropriate cells of the table

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Exercise

3c) You learn that the only other contributor to MOH facilities is the MOH itself

- ▲ What is the MOH share of expenditures going to its hospitals?
- ▲ And what is the subsequent functional breakdown? You learn that MOH contributes the full capital formation costs for its facilities

Check to see that the rows add up for MOH hospitals

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Question 3
Susmania Case Study III - NHA Combined Table of Financing Agent by Providers and Function

Provider and Function		Financing Agent							
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Government Employee Insurance Programme	HF.2.3 Private Household out-of-pocket	Total	Check against FA x P
HP.1.1.1.1	MOH general hospitals	2,540			6,740		107	9,387	9,387
	HC.1.1 Inpatient Curative	1194			5,931			7,125	
	HC.1.3 Outpatient Curative	629			809		107	1,545	
	HC.R.1 Capital Formation	717						717	
HP.1.1.1.2	MOD hospitals								8,569
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals				14,062	109	201		19,712
	HC.1.1 Inpatient Curative				9,422	60			
	HC.1.3 Outpatient Curative				4,640	49	201		
	Total FA spending	2,540	0	0	20,802	109	308	9,387	37,668
	Check against FAxP	7,839	8,569	41	20,802	109	308	37,668	

14

Exercise

4. For regional government hospitals:
   a. From the regional hospitals you discover that their TOTAL expenditures are 19,712 Cr. This is broken down functionally into 12,419 Cr for Inpatient and 7293 Cr for Outpatient.

      Place these estimates in the appropriate cells
   b. You learn that regional government spends 41 Cr total at their own hospitals. The MOH pays 5,299 Cr total for regional hospitals. But the functional breakdown for these two FAs is not known
      - △ You also know that these are the only two remaining FAs (that have not been accounted for previously) that contribute to regional hospitals
      - △ What do you do? How do you account for regional government and MOH functional spending at regional hospitals? This is an estimation technique

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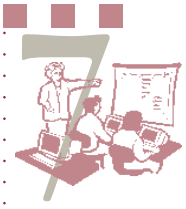

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Question 4
Susmania Case Study III -NHA Combined Table of Financing Agent by Providers and Function

Provider and Function		Financing Agent							
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Government Employee Insurance Programme	HF.2.3 Private Household Out-of-pocket	Total	Check against FA x P
HP.1.1.1.1	MOH general hospitals	2,540			6,740		107	9,387	9,387
	HC.1.1 Inpatient Curative	1194			5,931			7,125	
	HC.1.3 Outpatient Curative	629			809		107	1,545	
	HC.R.1 Capital Formation	717						717	
HP.1.1.1.2	MOD hospitals								8,569
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals	5,299		41	14,062	109	201	19,712	19,712
	HC.1.1 Inpatient Curative	2,914		23	9,422	60		12,419	
	HC.1.3 Outpatient Curative	2,385		18	4,640	49	201	7,293	
	Total FA spending	7,839	0	41	20,802	109	308	37,668	37,668

16

Exercise

5. You receive the following breakdown (see next slide) of expenditures at MOD general hospitals. It doesn't exactly match ICHA classifications

- ▲ A cost study conducted by ChrisJay Univ. Estimated that the relative sizes of inpatient & outpatient share is 3:1
- ▲ You learn the MOD is the only contributor of expenditures at its hospitals

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5a) How would you classify these expenditures as ICHA functional categories? b) What expenditure estimates would you use? Enter them into the table

	MOD General Hospital Expenditures	8,569
7.01.01	Salaries	1,963
7.01.02	Drugs	1,227
7.01.03	Laboratory & x-rays	981
7.01.04	General Administrative Costs	573
7.01.05	Meals	41
7.01.06	Laundry	40
7.01.07	Maintenance	900
7.01.08	Construction	717
7.01.09	Janitorial Services	491
7.01.10	Medical Equipment	1,636

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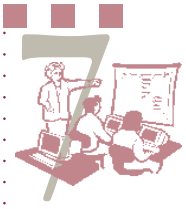
Question 5
Susmania Case Study III - NHA Combined Table of Financing Agent by Providers and Function

Provider and Function		Financing Agent						Total	Check against FA x P
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Government Employee Insurance Programme	HF.2.3 Private household out-of-pocket		
HP.1.1.1.1	MOH general hospitals	2,540			6,740		107	9,387	9,387
	HC.1.1 Inpatient Curative	1194			5,931			7,125	
	HC.1.3 Outpatient Curative	629			809		107	1,545	
	HC.R.1 Capital Formation	717						717	
HP.1.1.1.2	MOD hospitals		8,569					8,569	8,569
	HC1.1 Inpatient Curative		3,946					3,946	
	HC1.3 Outpatient Curative		1,289					1,289	
	HC4 Ancilliary Services		981					981	
	HCR.1 Capital Formation		2,353					2,353	
HP.1.1.1.3	Regional general hospitals	5,299		41	14,062	109	201	19,712	19,712
	HC.1.1 Inpatient curative	2,914		23	9,422	60		12,419	
	HC.1.3 Outpatient curative	2,385		18	4,640	49	201	7,293	
	Total FA spending	7,839	8,569	41	20,802	109	308	37,668	37,668
	Check against FAxP	7,839	8,569	41	20,802	109	308	37,668	



19

Exercise

Next Steps

- SEE IF ROW AND COLUMN TOTALS ADD UP.
- Do the totals that you've just calculated match the totals that were obtained from the HF x HP table?
  - Note: if they don't match, go back and see if there was a mistake with the HF x HP table or with your present table.
    - There will be a lot of going back and forth to recheck estimates in a real NHA endeavor.

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Question 6
Providers by Function table

Function	Provider			Total
	HF.1.1.1.1 MOH General Hospitals	HF.1.1.1.2 Ministry of Defense Hospitals	HF.1.1.1.3 Regional Govt. General Hospitals	
HC1.1 Inpatient Curative	7,125	3,946	12,419	23,490
HC1.3 Outpatient Curative	1,545	1,289	7,293	10,127
HC4 Ancilliary Services		981		981
HCR 1 Capital Formation	717	2,353		3,070
Total Provider Spending	9,387	8,569	19,712	37,668
Check against FAxP	9,387	8,569	19,712	37,668

21

Exercise cont'd

6. Now that you have the combined table, your next task is to separate the expenditures into:
   - HF x Func table
   - HP x Func table (for purposes of this exercise the NHA fairy has completed this table for you)

   Use the handout to complete the HF x Func table

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Financing Agents by Function Table

Function	Financing Agent						
	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Government Employee Insurance Programme	HF.2.3 Private Household out-of-pocket	Total
HC1.1 Inpatient Curative	4108	3,946	23	15,353	60		23,490
HC1.3 Outpatient Curative	3014	1,289	18	5,449	49	308	10,127
HC4 Ancilliary Services		981					981
HCR.1 Capital Formation	717	2,353					3,070
Total FA spending	7,839	8,569	41	20,802	109	308	37,668
Check against FAxP	7,839	8,569	41	20,802	109	308	37,668

Total inpatient expenditures as a percentage of THE	**62.36%**
Total outpatient expenditures as a percentage of THE	**26.88%**
Total ancilliary services expenditures as a percentage of THE	**2.60%**
Total capital formation expenditures as a percentage of THE	**8.15%**

Unit 7 - Exercises

Directions

Read the following narrative and questions and enter the appropiate expenditure amounts into the shell of your FS x HF table.

Setting the country context for the case studies: the land of Susmania

Susmania is a small, low-moderate income country. It once had an autocratic central government but has undergone significant decentralization and reforms. The country now has a new government comprises of a prime minister and several ministries.

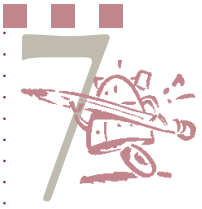
The Susmanian currency is called the Cruton (Cr).

Government structure relating to health

The central government comprises the Ministry of Finance (MOF), Ministry of Health (MOH), Ministry of Education (MOE), Ministry of Defense (MOD), and the National Insurance Agency (NIA). There is only one parastatal company, namely AZap, Susmania's electric utility. As the country has decentralized, it has established local governments in four regions. Each regional government has its own taxing authority; this revenue is supplemented with funds from the central government.

Providers in the health sector

Most hospitals and polyclinics are government-owned. Regions generally run and manage primary care clinics and hospitals, while the MOH runs most secondary and tertiary hospitals and clinics. The MOD owns and operates its own hospitals for military personnel and their dependents. Some new private hospitals and clinics have emerged as a result of the reforms. Residents of one region, the Interior region, rely heavily on traditional healers for their health care. A few employers have on-site clinics for workers. Most outpatient drugs are bought from community pharmacies.



Health insurance programs in Susmania

Theoretically, all citizens are covered by health insurance from the National Insurance Agency (NIA) for care delivered at government facilities. NIA is financed by 1) payroll taxes, 2) MOH payments, and 3) co-payments. Employers offer supplemental insurance (private group insurance) to cover co-payments and care administered at non-governmental facilities. In addition, individuals may purchase their own supplemental insurance.

Other actors in the health system

Since Susmania is a low-moderate income country, it receives external financial assistance for many of its sectors, including health care. Foreign donors involved in the health sector include Médicine sans Frontière (MSF), Red Crescent, and Project Hope. Local NGO facilities are financed through donor funds.

Policy motivation for NHA

- Provide reports to international lenders to evaluate efficiency of loans
- Respond to WHO about health statistics
- Understand the effectiveness of reforms
- Understand how NIA fits into health sector

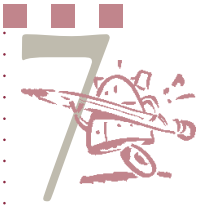
7a. Susmania Case Study I – Filling in the FS x HF Table

For this exercise, participants should refer to the blank table presented in their handouts sheets provided by the trainer. Copies will also be found in the Participants Manual.

As a Susmania NHA team member, you have just completed the four initial steps for filling in the tables, i.e., you have 1) started in the middle (HF table), 2) identified financing agents 3) determined the various types of expenditures, and 4) estimated the amounts for each HF.

You obtain the total spending amounts for each HF and have already placed these numbers in the appropriate row total cells of your table.

Susmania Financing Agent Expenditures – Preliminary List		
NHA Code	**Entity**	**Expenditure Amount**
HF.1.1.1.1	MOH	32,096
HF.1.1.1.2	MOE	329
HF.1.1.1.3	MOD	635
HF.1.1.2	Regional government	21,015
HF.1.2	NIA	60,837
HF.2.1.1	Government group insurance	563
HF.2.1.2	Private group insurance	2,130
HF.2.2	Individual insurance	3,280
HF.2.3	Households	82,092 - 90,734
HF.2.4	NGOs	2,888
HF.2.5.1	Private nonparastatal companies	3,024
HF.2.5.2	Parastatal companies (AZap)	1,905
HF.3	Rest of World	599



Exercise 1

You begin to fill in the FS x HF table by disaggregating the funds that HFs receive by the funds' original source: i.e., government, private, and rest of the world. You start by analyzing government HFs. After thorough research and investigation, you learn that:

- The MOE and MOD get their funds only from the MOF.
- The MOH gets its funds from only two sources: MOF and donors. Donors gave 1,538 Cr to the MOH.

Which cells can you fill in for the MOE, MOD, and MOH based on the above information?

Answer

Exercise 2

An MOH is usually a financing agent, but in some instances it can be a financing source: In Susmania, the team learns that the MOH gives grants to the regional government (986 Cr) and to NIA (1,106 Cr).

a. Where do you account for the grant funds?

Answer

b. Based on this information, how do you reduce the HF TOTAL figure for the MOH?

Answer

c. Fill in the remaining POSSIBLE cells for MOH as financing agent

Answer

Exercise 3

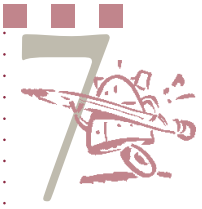
Your team finds that the MOH reimburses (11,772 Cr) to the regional governments for its hospital services provided to unemployed people (on behalf of the MOH). Note that regional governments get their health funds from regional taxes and from the MOH.

a. Which is the financing agent in this case: The MOH or the regional government?

Answer

b. This amount (11,772 Cr) has been double-counted: Once with the MOH and once with the regional governments.
How do you eliminate the double- counting from regional governments?

Answer



c. Where do you place the remaining amount for the regional government (i.e., not allocated to grants or reimbursements)?

Answer

Exercise 4

Moving on to NIA (National Insurance Agency)

a. Where would you put "interest income" (566 Cr), which is used to help pay the benefits and administrative expenses provided by the NIA?

Answer

b. In a large fire two years ago, NIA lost all its records on employer and employee contributions. So there is no accurate record of what proportion is received from employers and employees. However, you learn that the norm in the country is a ratio of 3:1, employers to employees. Allocate the remaining amount between employers and employees (excluding the interest income and the MOH grant). Note: this is an ESTIMATE.

Answer

Exercise 5

Government Employer Insurance Program (GEIP) is an insurance program for government employees ONLY; it receives funds from the government and employees.

- GEIP is unable to distinguish between employer (note: government can be the private employer) and employee contributions. The rules governing the fund state that one-quarter of funds be collected from employees and the remainder from the employer. How would you distribute its total of 563Cr?

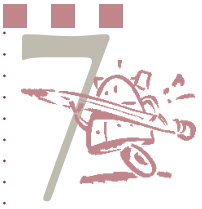
Answer

Exercise 6

Private Employer Insurance Program (PEIP)

- The PEIP company is also unable to distinguish between employer and employee contributions. How would you TEMPORARILY allocate its total of 2,130 Cr?

Answer



Exercise 7

What source finances Private Individual Insurance (PII) (3280 Cr) and where would you place this amount?

Answer

Exercise 8

Your team now finds that the household survey figure for insurance spending varies significantly from the estimates reported by the insurance companies that were just entered in previous questions.

Household Survey reports:

- 14,000 Cr to NIA
- 2,200 Cr to Private Group Insurance
- 3,450 to Private Individual Insurance

So what should you do with these conflicting estimates?

Answer

Exercise 9

NGOs:

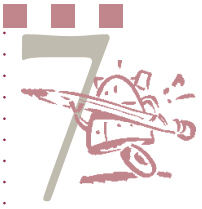
a. Receive 1,653 Cr from donors.
b. Receive 1,235 Cr from local philanthropy.

Answer

Exercise 10

The distribution ratio of private insurance between households and employers (x) must be determined: A survey of employers provides a second estimate of premiums paid to private insurance and also provides the employer/employee split of those premiums (one-third employer/two-third household)

Answer



Exercise 11

Simple data entry:

Where do you enter these amounts?

a. AZap reported getting its entire (1905 Cr) funds from its own profits.
b. Firms spend 3024 Cr in their own facilities.
c. MSF (donor) funds its own facilities at an expense of 599 Cr.

Answer

Exercise 12

Starting the reconciliation process:

a. Do a trial sum of the columns.

Answer

b. After doing the trial sum you learn that another estimate for the total amount financed by donors (as sources) is 8180 Cr. Place this in the "estimated total" row.

Answer

Exercise 13

To reconcile amounts:

a. You learn that the NIA report is more reliable than the household survey estimate because it has rigid accounting systems. Which estimate should you keep?

Answer

b. You also learn that the insurance firm surveys have a higher response rate than the household survey and therefore is more reliable. What estimate should you keep?

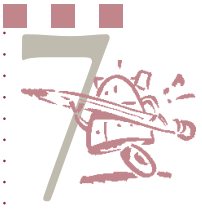
Answer

c. The NHA team finishes analysis of Susmania's HH Survey!! This causes great joy and the team proclaims that HH out-of-pocket contributions were 86,413 Cr – How Convenient! Enter this amount in the appropriate place.

Answer

d. After re-examining the donor expenditure amount (8180 Cr), you learn that the estimate includes food and sanitation expenditures. Which estimate should you take (8180 Cr or the trial sum estimate)?

Answer



Exercise 14

Next steps: SEE IF ROW AND COLUMN TOTALS ADD UP to the same number.

Answer

Worksheet for Susmania Case Study I: Filling in the FS x HF Table										
Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue				FS.2.1 Employer Funds	FS.2.2 Household Funds			
HF.1.1.1.1	MOH									32096
HF.1.1.1.2	MOE									329
HF.1.1.1.3	MOD									635
HF.1.1.2	Regional government									21015
HF.1.2	NIA									60837
HF.2.1.1	Government employee insurance programme									563
HF.2.1.2	Private employer insurance programme									2130
HF.2.2	Private insurance enterprises (other than social-insurance)									3280
HF.2.3	Private household out-of-pocket payment									82092 -90734
HF.2.4	NGOs									2888
HF.2.5.1	Parastatal companies (AZap)									1905
HF.2.5.2	Private firms									3024
HF.3	Rest of World									599
	Trial Sum									
	Estimated Total									

7b. Susmania Case Study II – Interpreting Survey Data for Filling in the HF x HP Table

Directions

Based on the information from the survey questionnaires presented as exhibits, answer the following questions

Question 1

Review Exhibit 7b.1, the Health Insurance Questionnaire.

a. Classify the "bold-type" terms into ICHA codes.

Answer

b. As you can see from the table in exhibit 7b.1, the insurance firms were not able to disaggregate benefits between "group" and "individual" policyholders. How would you separate the amounts?

Answer

Exhibit 7b.1
Susmania National Health Accounts: Health Insurance Questionnaire

Form ID No.___/___

The information provided will be treated with strict confidentiality.

1. General information

Name of NGO: AGGREGATION
Name of respondent:
Position of respondent:
Date of interview:
Location:
Reporting period - Calendar Year 1999 or:

Type of insurance company (circle one)
1 = State-owned/parastatal
(2 = Private, for-profit)
3 = Private, non-profit

2. In the table below, please indicate the number of subscribers (for health insurance only) to your organization at the end of the reporting period. If health insurance is included as a part of other insurance, please include those subscribers in your figure.

Number of subscribers under:	
Group/Company	Individual/Family
300,000	1,700,000

4. In the table provided below, indicate your organization s total expenditures for the reporting period. If possible use incurred figures rather than cash figures.

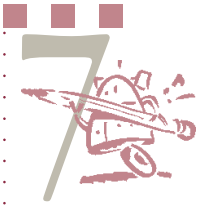
Type of expense	Amount (in crutons)		
	Total	Group/Company	Individual/Family
Benefits:			
GOE hospitals	0		
Other government facilities	0		
Private-for-profit hospitals	123		
Other private-for-profit health centers	216		
Private non-profit hospitals	437	UNKNOWN	UNKNOWN
Other private non-profit health centers	1,020		
Reimbursement made directly to policyholder	2,640		
Other	0		
Total benefits	4,436		
Additions to reserves (health business only)	0		
Administrative expenses (health business)	564		
Surplus or retained earnings (health business)	410		

Reporting basis:
(Accrual)
Cash

5. Do the revenue figures above include the health portion of premiums for combined life/health policies?
(Not Applicable)
Yes
No

Please enter total benefits paid under such combined policies in the reporting year:

Life	Health



Question 2

Review Exhibit 7b.2, the Employer Survey

a. Which of the two expenditure estimates provided in this survey should be placed in the HF x HP table?

Answer

b. How would you classify it? What ICHA codes would you use?

Answer

Exhibit 7b.2
Susmania National Health Accounts: Employer Survey

Form ID No.___/___

1. General information

Firm Name:	AGGREGATION
Name of Person Interviewed:	
Date of interview:	
Reporting period - Calendar Year 1999 or:	

Firm ownership (Circle one.)
1 = State-owned/Para-statal
(2 = Private Sector, for-profit)

Principal activity (Circle one.)
1 = Agricultural
2 = Mining or petroleum extraction
3 = Industrial
4 = Wholesale or retail trade
5 = Finance, insurance, or real estate
6 = Services
7 = Other

How many full- and part-time employees on the last day of the reporting period? _____

2. Did your firm provide medical insurance in the reporting period? Yes / No (Skip to question 3.)

a. Number of employees covered by insurance: _____

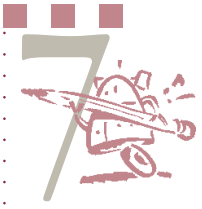
b. Does the insurance cover dependents? Yes / No

c. How much did your firm pay in premiums? 2,070 (survey error 5%)

d. Do your employees contribute to private health insurance? No / (Yes) How much? 2/3 per
Is this included in item 2c? (Yes) / No

e. Which types of health care services are covered? (Circle all that apply.)

X	In-patient curative care
X	Day cases of curative care
X	Out-patient curative care
X	Basic medical and diagnostic services
X	Medical mental health and substance abuse therapy
X	Ambulatory surgical procedures
X	Out-patient dental care
X	All other specialized medical services
X	All other out-patient curative care
X	Services of curative home care
X	In-patient rehabilitative care
X	Day cases of rehabilitative care
X	Outpatient rehabilitative care
X	Services of rehabilitative home care
X	In-patient long-term nursing care



X	Day cases of long-term nursing care	
X	Long-term nursing care: home care	
X	Clinical laboratory	
X	Diagnostic imaging	
X	Patient transport and emergency rescue	
X	All other miscellaneous ancillary services	
X	Prescribed medicines	
X	Over-the-counter medicines	
X	Other medical non-durables	
X	Glasses and other vision products	
X	Orthopedic appliances and other prosthetics	
X	Hearing aids	
X	Medico-technical devices, including wheelchairs	
X	All other miscellaneous medical goods	

3. During the reporting period, did your firm reimburse employees for medical expenses they incurred? — Yes / No (Skip to question 4.)

   a. How much did your firm provide to employees in direct reimbursements? NONE

   b. Which types of health care services does your firm reimburse? (Circle all that apply.)

X	Inpatient
X	Outpatient
X	Drugs
X	Other

   c. Does your firm keep records on the amount spent to reimburse for services purchased at private and public health care facilities? Yes / (No)
   Public facilities _____
   Private facilities _____

4. During the reporting period, did your firm provide on-site health services for employees? Yes / No (Skip to question 5.)

   a. How much did your firm spend to provide on-site health services? 3,024 (survery error 5%)

   b. Does the government or any other non-governmental organization make contributions which support your health facilities? If so, how much? Yes / No — How much? _____

   c. How many health care facilities does your company provide? Where are they located in the country? _____

   d. What types of health services are available in these facilities? (Circle all that apply.)

X	Inpatient
(X)	Outpatient
X	Drugs
X	Other

   e. Do employees pay for services and/or medication offered in these facilities? Yes / (No) — How much? _____

5. Does the government or any other organization make a contribution to health care benefits provided by your firm? Yes / (No) — How much? _____

Question 3

Review Exhibit 7b.3, the External Aid Questionnaire

a. Which of the expenditures shown in the survey would be placed in the HF x HP table?

Answer

b. How would you classify it?

Answer

Exhibit 7b.3
Susmania National Health Accounts:
Government of Susmania/Ministry of Health Survey of External Aid Contributions to Health

Instructions: The Ministry of Health is conducting a study to estimate the total amount of health financing in Susmania and how health funds flow from sources to users. In the space below, please indicate the projects that your organization supports, the amount you contributed in 1999, and the name(s) of the institutions that benefited from your contributions. We are particularly interested in knowing who used your contributions, so please be specific. For example, if contributions were made to the GOE please indicate whether the beneficiary institution was the MOH, MOE, etc. If District Health Teams were the beneficiaries, please list which ones. Similarly, please list the NGOs that received support. Thank you.

The information provided will be treated with strict confidentiality.

1. General information

Donor Name:	AGGREGATION
Respondent Name:	
Date:	
Phone Number:	
Reporting period - Calendar Year 1999 or:	

2. Project funding during the current reporting period (only show funds actually disbursed)

Project Title	Amount Contributed (Use most convenient currency)	Beneficiary Institution(s)
1. Bilateral family planning program with Ministry of Health	1,538	Ministry of Health
2. Project Hope screening program	1,653	Susmania Red Crescent
3. Project Hope pilot test of smoking cessation campaign	300	Coastal Region Health Department
4. Medecins sans Frontieres local hospital	599	Given Directly
5. Total	4,090	

(Add another sheet for more projects)

3. Please indicate the amount that your organization spent in the current reporting period to support your activities (i.e. administration, program support) in Susmania as well as the amount spent on technical assistance not included in the amounts above. (Please identify currency unit.)

NONE

Question 4

Review Exhibit 7b.4, the Special Tabulation of the Household Survey.

a. Which of the categories of expenditures can be placed in the HF x HP table?

Answer

b. You've learned from patient admission records that households visit private clinics as opposed to public clinics in a ratio of 3:2 and that they visit private hospitals vs public hospitals in a ratio of 2:3.

Answer

Exhibit 7b.4

Susmania National Health Accounts: Special Tabulation of Household Survey

Category of Expenditure	Amount
Payments to NIA	11,626
Payments to private medical insurance	4,400
Co-payments at hospitals	13,643
Co-payments at polyclinics	11,965
Purchase of prescription drugs	41,042
Payments to other health practitioners	19,763
Total	102,439

Prepared by Susmania Statistical Committee 28/05/2000

NOTE: Estimates have a 5% margin or error at the 95% confidence level.

7c. Susmania Case Study III – Filling in the HF x Func and HP x Func Tables

Using the combination table/worksheet table provided by the trainer. read the following questions and fill the appropriate expenditure estimates in the table shell.

In order to create the two tables (HF x Func and HP x Func tables) the NHA team finds it easier to begin the process by attempting a HF x HP x Func combination table. The first step, which has been done for you, is to organize the general row and column headings (see worksheet). Assume you have already completed the HF x HP table and therefore you have the totals for HFs and Providers*.

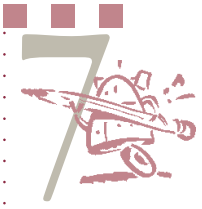
Totals for Financing Agents (as taken from the HF x HP table)		
HF.1.1.1.1	MOH	7,839
HF.1.1.1.3	MOD	8,569
	Regional Government	41
HF.1.1.2	NIA	20,802
HF.1.2	Government Group Insurance	109
	Households	308
	Total	37,668

Totals for Providers (as taken from the HF x HP table)		
HP.1.1.1.1	MOH General Hospitals	9,387
HP.1.1.1.2	MOD Hospitals	8,569
HF.1.1.2	Regional General Hospitals	19,712
HP.1.1.1.3	Total	37,668

You receive the data below and know that these numbers should be placed in the table – to your surprise, you learn that this has already been done for ou (by the NHA fairy!)

Regional General Hospitals	Households	NIA	Govt. Employee Insurance Program
Inpatient	0	9,422	60
Outpatient	201	4,640	49
Total	201	14,062	109

* Please note that this case study is an abbreviated version of the complete table for Susmania, as it does not include traditional healers, employer clinics, pharmacies, and donor hospitals.



Question 1

Place the above totals in the appropriate cells on your combination table shell.

Answer

Question 2

MOH general hospital records state the following totals (for all MOH hospitals combined):

- General administrative expenses (3,676 Cr). You learn that the GA estimate includes capital formation of 717 Cr.
- TOTAL inpatient expenditures were 4,693 Cr.
- Outpatient expenditures were 1,018Cr.

How will you allocate these estimates in the appropriate cells of the table?

a. Where does the capital formation estimate go?

Answer

b. How do you handle GA estimate?

Answer

c. Finally, input inpatient and outpatient estimates.

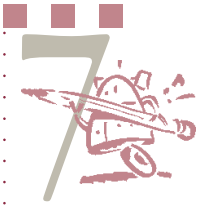
Answer

Question 3

In terms of Financing Agents that contribute to MOH hospitals,

a. You learn from the household survey that Households pay 107 Cr at MOH hospitals and the full amount goes to co-payments for outpatient care. Where do you place this estimate in your table?

Answer



b. You learn that NIA has reimbursed the MOH for services incurred by NIA's beneficiaries. NIA's total payment to MOH is 6,740 cr and 88 percent of this amount goes to Inpatient Curative and remainder to Outpatient Curative. Place NIA's contribution to MOH hospitals in the appropriate cells of the table.

Answer

c. You learn that the only other contributor to MOH facilities is the MOH itself.
What is the MOH share of expenditures going to its hospitals? And what is the subsequent functional breakdown? You learn that MOH contributes the full capital formation costs for its facilities.
Now check to see that the rows add up for MOH hospitals.

Answer

Question 4

For regional government hospitals

a. From the regional hospitals you discover that their TOTAL expenditures are 19712 Cr. This is broken down functionally into 12419 Cr for inpatient and 7293 Cr for outpatient. Place these estimates in the appropriate cells.

Answer

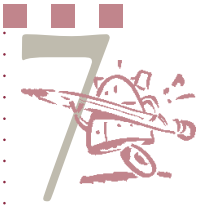
b. You learn that regional governments spend 41 Cr total at their own hospitals. The MOH pays 5,299 Cr total for regional hospitals. But the functional breakdown for these two HFs is not known.

You also know that these are the only two remaining HFs (that have not been previously accounted for) that contribute to regional hospitals.

What do you do? How do you account for regional government and MOH functional spending at regional hospitals?

Answer

Estimation technique:



Question 5

You receive the following breakdown of expenditures at MOD general hospitals. It doesn't exactly match ICHA classifications.

- A cost study conducted by ChrisJay Univ. Estimated that the relative sizes of inpatient and outpatient share is 3:1.
- You learn the MOD is the only contributor of expenditures at its hospitals.

Break Down of MOD General Hospital Expenditures		
7.01.01	Salaries	1963
7.01.02	Drugs	1227
7.01.03	Laboratory and X-rays	981
7.01.04	General Administrative Costs	573
7.01.05	Meals	41
7.01.06	Laundry	40
7.01.07	Maintenance	900
7.01.08	Construction	717
7.01.09	Janitorial Services	491
7.01.10	Medical Equipment	1636
	Total Expenditures	8,569

a. How would you classify these expenditures as ICHA functional categories?

Answer

b. What expenditure estimates would you use? Enter them into the table.

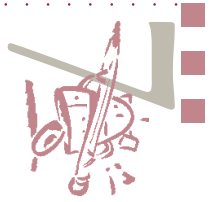
Answer

Question 6

Now that you have the completed the combined table, your next task is to separate the expenditures into 1) HF x Func table and the 2) HP x Func table (for purposes of this exercise, the NHA fairy has completed this table for you). Use the new handout to complete the HF x Func table. health care provider institutions

Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table

Provider and Function		Financing Agent						Total	Check against HF x HP
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance Program	HF.2.3 Household		
HP.1.1.1.1	MOH general hospitals								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.2	MOD hospitals								
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals				14062	109	201		
	HC.1.1 Inpatient curative				9422	60			
	HC.1.3 Outpatient curative				4640	49	201		
Total HF spending		0	0	0	14062	109	201	0	
Check against HF x HP									



Worksheet for Susmania Case Study III: Filling in the HF x Func Table								
Function		Financing Agent						Total
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance Program	HF.2.3 Household	
	HC							
	HC							
	HC							
	HCR							
Total HF spending					4640	49	201	
Check against HF x HP		7839	8569	41	20802	109	308	37668

Unit 7 - Answers

7a. Susmania Case Study I - Filling in the FS x HF Table

Question 1

You begin to fill in the FS x HF table by disaggregating the funds that HFs receive by the funds' original source: i.e., government, private, and rest of the world. You start by analyzing government HFs. After thorough research and investigation, you learn that:

- The MOE and MOD get their funds only from the MOF.
- The MOH gets its funds from only two sources: MOF and donors. Donors gave 1,538 Cr to the MOH.
  Which cells can you fill in for the MOE, MOD, and MOH based on the above information?

Answer

- For the MOE and MOD cells:

  Because you know that MOE and MOD get their funds from only ONE source, you can repeat their row totals in the Central Gov x MOE and the Central Gov x MOD cells.

  - Place 329 for MOE in the Central Gov x MOE cell
  - Place 635 for MOD in the Central Gov x MOD cell

- For the MOH cells:

  Because you know that donors gave 1538 Cr to the MOH, you can place this amount in the Rest of World x MOH cell.

  Because you also know that MOH gets its funds from ONLY TWO SOURCES, by logic it follows that the remaining funds [MOH total (32096) – amount given by donors (1538) = 30558] received by the MOH should be placed in the **Central Govt x MOH cell (30558)**

Question 2

An MOH is usually a financing agent, but in some instances it can be a financing source: In Susmania, the team learns that the MOH gives grants to the regional government (986 Cr) and to NIA (1,106 Cr).

a. Where do you account for the grant funds?

Answer

Because the MOH in this case is a SOURCE of funds, you need to create a second column within Central Government Revenue. This second column will be "S.1.1.2 MOH" and the first column will be S.1.1.1 MOF (make sure that the numbers from the first question are placed in this column).

- Now you can place the 986 amount for grants in the MOH x Regional Govt. Cell and
- You can place the **1,106** amount for grants in the **MOH x NIA cell.**

b. Based on this information, how do you reduce the HF TOTAL figure for the MOH?

Answer

Remember, in the original list of total expenditures for each stakeholder, the MOH reported that it expended 32096 Cr. This amount was automatically allotted to the row total cell for MOH as a financing agent. However, when the MOH also started to act as a "financing source," the row total for MOH as a HF had to be reduced. You will need to subtract MOH expenses as a source (986 + 1106 = 2092) from the 32096 amount. Therefore, the **new MOH financing agent total** is 32096 - 2092 = **30004**.

c. Fill in the remaining POSSIBLE cells for MOH as a financing agent.

Answer

With the new total for MOH as a financing agent, the previously estimated amount (estimated by subtracting MOH row total – rest of the world amount) **for MOF x MOH** will have to be adjusted. Now use the new MOH row total and subtract the ROW amount; therefore, 30004-1538 = **28466**

Question 3

Your team finds that the MOH reimburses (11,772 Cr) to the regional governments for its hospital services provided to unemployed people (on behalf of the MOH). Note that regional governments get their health funds from regional taxes and from the MOH.

a. Which is the financing agent in this case: The MOH or the regional government?

Answer

The MOH is the financing agent, because it controls where the money is spent and asks the regional government hospital to serve as a conduit or a pass-through on behalf of the MOH.

b. This amount (11,772 Cr) has been double-counted: Once with the MOH and once with the regional governments. How do you eliminate the double-counting from regional governments?

Answer

Subtract the 1172 from the original regional government row total of 21015. Therefore, the new **total x regional government cell** will be 21015-11772 = **9243.**

c. Where do you place the remaining amount for the regional government (i.e., not allocated to grants or reimbursements)?

Answer

Refer to the information provided in the question, i.e., that regional governments receive their funds from only two sources: local taxes and the MOH. Because the participants have already examined the MOH, they know that the remaining amount of local taxes will be 9243 - 986 = 8257. Such local taxes will be reflected in the regional government as a financing source and so a new column will need to be created and the amount will need to be placed in a "regional government x regional government" cell.

Question 4

Moving on to NIA (National Insurance Agency)

a. Where would you put "interest income" (566 Cr), which is used to help pay the benefits and administrative expenses provided by the NIA?

Answer

Create another "other" category within the private sources columns. The interest income is included because it is used towards the health benefits of beneficiaries (i.e., it is a health expenditure). Place the **566** amount in the **other x NIA cell.**

b. In a large fire two years ago, NIA lost all its records on employer and employee contributions. So there is no accurate record of what proportion is received from employers and employees. However, you learn that the norm in the country is a ratio of 3:1, employers to employees. Allocate the remaining amount between employers and employees (excluding the interest income and the MOH grant). Note: this is an ESTIMATE.

Answer

NHA experts suggest using the norm ratio of 3:1 to divide up the remaining amount [60837 - (1106 + 566) = 59165] between employers and employees.

- Therefore, Employees (or households) contribute roughly 59165/4= **14791.** This amount should be placed in the **Households x NIA cell**
- Employer funds will be: 14791 x3= **44374** and this amount placed in the **Employer x NIA cell.**

Question 5

Government Employer Insurance Program (GEIP) is an insurance program for government employees ONLY; it receives funds from the government and employees.

- GEIP is unable to distinguish between employer (note: government can be the private employer) and employee contributions. The rules governing the fund state that one-quarter of funds be collected from employees and theremainder from the employer. How would you distribute its total of 563Cr?

Answer

Use the same estimation technique as before.

- The employee contribution is 563 x 0.25 = **141** in the **household x GGI cell** x 0.75 = **422** in the **Private Employer x GGI cell.** Note: Because the government is catering only to its employees, it is referred to as a "private employer."

Question 6

Private Employer Insurance Program (PEIP)

- The PEIP company is also unable to distinguish between employer and employee contributions. How would you TEMPORARILY allocate its total of 2,130 Cr?

Answer

The temporary approach is to keep a placeholder in the appropriate cells and determine the right numbers later, after more data have been collected.

- Place an "x" in the Employer x Private Group Insurance cell
- Place a "2130 - x" in the Household x Private Group Insurance cell

Question 7

What source finances Private Individual Insurance (PII) (3280 Cr) and where would you place this amount?

Answer

Households are the financing source of PII. Place 3280 in households x individual insurance cell.

Question 8

Your team now finds that the household survey figure for insurance spending varies significantly from the estimates reported by the insurance companies that were just entered in previous questions.

Household Survey reports:

- 14,000 Cr to NIA
- 2,200 Cr to Private Group Insurance
- 3,450 to Private Individual Insurance

So what should you do with these conflicting estimates?

Answers

Simply place the household survey estimates in the same cells as the previous insurance estimates. You will need to do some on-the-side investigation to figure out which estimates are more accurate. This will be dealt with later.

- Place (**14000**) in the **HH x NIA cell** next to the previous estimate.
- Place (**2200**) in the **HH x PGI cell** next to the previous estimate.
- Place (**3450**) in the **HH x Private Individual Insurance cell** next to the previous estimate.

Question 9

NGOs:

a. Receive 1,653 Cr from donors.
b. Receive 1,235 Cr from local philanthropy.

Answers

Enter these estimates in the table:

a. This is simple data entry: place **1653** in the **Rest of World x NGO** cell.

b. Where should local philanthropy be placed? Create a new column under Pvt. Funds FS 2.3 non-profit institutions serving individuals. Place **1235** under FS 2.3 x HF 2.4 NGO.

Question 10

Resolving the distribution ratio of private insurance between households and employers (x):

A survey of employers provides a second estimate of premiums paid to private insurance and also provides the employer/employee split of those premiums (one-third employer/two-third household)

Answer

Again, because we have two estimates and don't know which estimate is more accurate (this one or the previous household estimate), place the firm estimates in the same cells:

- In the Employers x Private Insurance cell, place 2130/2 = 710
- In the Households x Private Insurance cell, place 2130 - 710 = 1420

Question 11

Simple data entry:

Where do you enter these amounts?

a. AZap reported getting its entire (1905 Cr) funds from its own profits.
b. Firms spend 3024 Cr in their own facilities.
c. MSF (donor) funds its own facilities at an expense of 599 Cr.

Answers

a. Place **1905** in the **Employers x Parastatal Cell**.

b. Place 3024 in the Employer x Private firms cell.

c. Place 599 in the Rest of World x External organization cell.

Question 12

Starting the reconciliation process:

a. Do a trial sum of the columns.

Answer

- Place 29430 in the MOF x Trial Sum total cell.
- Place 2092 in the MOH x Trial Sum total cell.
- Place 8257 in the Regional Government Revenue x Trial Sum total cell.
- Place 566 in the Other Public funds x Trial Sum total cell.

- ☐ Place 50435 in the Employer funds x Trial Sum total cell.
- ☐ Place a "?" in the Household funds x Trial Sum total cell – remember, you still do not know which of the two household estimates is correct.
- ☐ Place 1235 in the Non-profit institutions x Trial Sum total cell.
- ☐ Place 3790 in the Rest of the World x Trial Sum total cell.

b. After doing the trial sum you learn that another estimate for the total amount financed by donors (as sources) is 8180 Cr. Place this in the "estimated total" row.

Answer

- ☐ Place 8180 in the Rest of the World x "estimated total" cell.

Question 13

To reconcile amounts:

a. You learn that the NIA report is more reliable than the household survey estimate because it has rigid accounting systems. Which estimate should you keep?

Answer

Therefore, keep the NIA estimate of **14791** in the **HH x NIA cell,** and **3280** in the **HH x Private Individual Insurance cell.**

b. You also learn that the insurance firm surveys have a higher response rate than the household survey and therefore is more reliable. What estimate should you keep?

Answer

Keep the Insurance firm survey estimate of **710** in the **Employer x PEIP cell** and the **1420 amount** in the **HH x PEIP cell.**

c. The NHA team finishes analysis of Susmania's HH Survey!! This causes great joy and the team proclaims that HH out-of-pocket contributions were 86,413 Cr – How Convenient! Enter this amount in the appropriate place.

Answer

This is simple data entry. Enter **86413** in the **HH x HH cell**.

d. After re-examining the donor expenditure amount (8180 Cr), you learn that the estimate includes food and sanitation expenditures. Which estimate should you take (8180 Cr or the trial sum estimate)?

Answer

Remember that food and sanitation expenses are "health care-related" expenses and do not fall within your strict definition of direct health care expenses. Therefore, keep the **3790 (trial sum)** estimate.

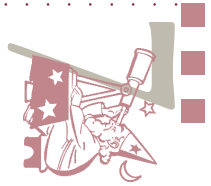
Question 14

Next steps: SEE IF ROW AND COLUMN TOTALS ADD UP to the same number.

Answer

Remember to add up the household funds column to replace the "?" with the **106045** number in the **HH x Trial Sum total cell.**

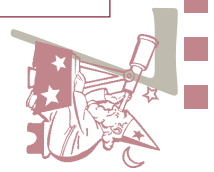
Worksheet for Susmania Case Study I: Filling in the FS x HF Table										
Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue				FS.2.1 Employer Funds	FS.2.2 Household Funds			
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	**28466**							**1538**	32096
HF.1.1.1.2	MOE	**329**								329
HF.1.1.1.3	MOD	**635**								635
HF.1.1.2	Regional government		**986**							21015
HF.1.2	NIA		**1106**							60837
HF.2.1.1	Government employee insurance programme									563
HF.2.1.2	Private employer insurance programme									2130
HF.2.2	Private insurance enterprises (other than social-insurance)									3280
HF.2.3	Private household out-of-pocket payment									82092 -90734
HF.2.4	NGOs									2888
HF.2.5.1	Parastatal companies (AZap)									1905
HF.2.5.2	Private firms									3024
HF.3	Rest of World									599
	Trial Sum									
	Estimated Total									



Worksheet for Susmania Case Study I: Filling in the FS x HF Table										
Financing Agents		Financing Sources								
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	Total
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue		FS.2.1 Employer Funds	FS.2.2 Household Funds			
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	28466							1538	32096
HF.1.1.1.2	MOE	329								329
HF.1.1.1.3	MOD	635								635
HF.1.1.2	Regional government		986	**8257**						**9243**
HF.1.2	NIA		1106							60837
HF.2.1.1	Government employee insurance programme									563
HF.2.1.2	Private employer insurance programme									2130
HF.2.2	Private insurance enterprises (other than social-insurance)									3280
HF.2.3	Private household out-of-pocket payment									82092 -90734
HF.2.4	NGOs									2888
HF.2.5.1	Parastatal companies (AZap)									1905
HF.2.5.2	Private firms									3024
HF.3	Rest of World									599
	Trial Sum									
	Estimated Total									

Worksheet for Susmania Case Study I: Filling in the FS x HF Table

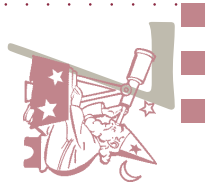
Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue	FS.2.1 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds			
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	28466							1538	32096
HF.1.1.1.2	MOE	329								329
HF.1.1.1.3	MOD	635								635
HF.1.1.2	Regional government		986	8257						9243
HF.1.2	NIA		1106		**566**	**44374**	**14791**			60837
HF.2.1.1	Government employee insurance programme									563
HF.2.1.2	Private employer insurance programme									2130
HF.2.2	Private insurance enterprises (other than social-insurance)									3280
HF.2.3	Private household out-of-pocket payment									82092 -90734
HF.2.4	NGOs									2888
HF.2.5.1	Parastatal companies (AZap)									1905
HF.2.5.2	Private firms									3024
HF.3	Rest of World									599
	Trial Sum									
	Estimated Total									



Worksheet for Susmania Case Study I: Filling in the FS x HF Table									
Financing Agents		Financing Sources							Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue	FS.2.1 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds			
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	28466							1538	32096
HF.1.1.1.2	MOE	329								329
HF.1.1.1.3	MOD	635								635
HF.1.1.2	Regional government		986	8257						9243
HF.1.2	NIA		1106		566	44374	14791			60837
HF.2.1.1	Government employee insurance programme					**422**	**141**			563
HF.2.1.2	Private employer insurance programme					**X**	**2130-X**			2130
HF.2.2	Private insurance enterprises (other than social-insurance)						**3280**			3280
HF.2.3	Private household out-of-pocket payment									82092 -90734
HF.2.4	NGOs									2888
HF.2.5.1	Parastatal companies (AZap)									1905
HF.2.5.2	Private firms									3024
HF.3	Rest of World									599
	Trial Sum									
	Estimated Total									

Worksheet for Susmania Case Study I: Filling in the FS x HF Table

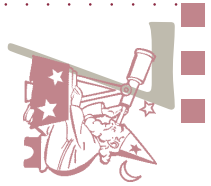
Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue	FS.2.1 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds			
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	28466							1538	32096
HF.1.1.1.2	MOE	329								329
HF.1.1.1.3	MOD	635								635
HF.1.1.2	Regional government		986	8257						9243
HF.1.2	NIA		1106		566	44374	**14791 (14000)h**			60837
HF.2.1.1	Government employee insurance programme					422	141			563
HF.2.1.2	Private employer insurance programme					X	**2130- (2200)h**			2130
HF.2.2	Private insurance enterprises (other than social-insurance)						**3280 (3450)h**			3280
HF.2.3	Private household out-of-pocket payment									82092 -90734
HF.2.4	NGOs									2888
HF.2.5.1	Parastatal companies (AZap)									1905
HF.2.5.2	Private firms									3024
HF.3	Rest of World									599
	Trial Sum									
	Estimated Total									



Worksheet for Susmania Case Study I: Filling in the FS x HF Table									
Financing Agents		Financing Sources							Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue	FS.2.1 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds	FS.2.3 Non-Profit Institutions		
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	28466							1538	32096
HF.1.1.1.2	MOE	329								329
HF.1.1.1.3	MOD	635								635
HF.1.1.2	Regional government		986	8257						9243
HF.1.2	NIA		1106		566	44374	14791 (14000)h			60837
HF.2.1.1	Government employee insurance programme					422	141			563
HF.2.1.2	Private employer insurance programme					X	2130–X (2200)h			2130
HF.2.2	Private insurance enterprises (other than social-insurance)						3280 (3450)h			3280
HF.2.3	Private household out-of-pocket payment									82092 -90734
HF.2.4	NGOs							**1235**	**1653**	2888
HF.2.5.1	Parastatal companies (AZap)									1905
HF.2.5.2	Private firms									3024
HF.3	Rest of World									599
	Trial Sum									
	Estimated Total									

Worksheet for Susmania Case Study I: Filling in the FS x HF Table

Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue	FS.2.1 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds	FS.2.3 Non-Profit Institutions		
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	28466							1538	32096
HF.1.1.1.2	MOE	329								329
HF.1.1.1.3	MOD	635								635
HF.1.1.2	Regional government		986	8257						9243
HF.1.2	NIA		1106		566	44374	14791 (14000)h			60837
HF.2.1.1	Government employee insurance programme					422	141			563
HF.2.1.2	Private employer insurance programme					**710**	**1420 (2200)h**			2130
HF.2.2	Private insurance enterprises (other than social-insurance)						3280 (3450)h			3280
HF.2.3	Private household out-of-pocket payment									82092 -90734
HF.2.4	NGOs							1235	1653	2888
HF.2.5.1	Parastatal companies (AZap)					**1905**				1905
HF.2.5.2	Private firms					**3024**				3024
HF.3	Rest of World								**599**	599
	Trial Sum	**29430**	**2092**	**8257**	**566**	**50435**	**?**	**1801**	**3790**	
	Estimated Total								**8180**	



Worksheet for Susmania Case Study I: Filling in the FS x HF Table

Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue	FS.2.1 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds	FS.2.3 Non-Profit Institutions		
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	28466							1538	32096
HF.1.1.1.2	MOE	329								329
HF.1.1.1.3	MOD	635								635
HF.1.1.2	Regional government		986	8257						9243
HF.1.2	NIA		1106		566	44374	**14791**			60837
HF.2.1.1	Government employee insurance programme					422	141			563
HF.2.1.2	Private employer insurance programme					**710**	**1420**			2130
HF.2.2	Private insurance enterprises (other than social-insurance)						**3280**			3280
HF.2.3	Private household out-of-pocket payment						**86413**			86413
HF.2.4	NGOs							1235	1653	2888
HF.2.5.1	Parastatal companies (AZap)					1905				1905
HF.2.5.2	Private firms					3024				3024
HF.3	Rest of World								599	599
	Trial Sum	29430	2092	8257	566	50435	**106045**	1235	**3790**	**201850**
	Estimated Total								8180	

7b. Susmania Case Study II – Interpreting Survey Data for Filling in the HF x HP Table

Question 1

Review Exhibit 7b.1, the Health Insurance Questionnaire.

a. Classify the "bold-type" terms into ICHA codes.

Answer

HP.1.1.2.1 Private for-profit general hospitals

HP 3.4.5.1 Private for-profit health centers

HP.1.1.2.2 Private non-profit general hospitals

HP 3.4.5.2 Private non-profit health centers

b. As you can see from the table in exhibit 7b.1, the insurance firms were not able to disaggregate benefits between "group" and "individual" policyholders. How would you separate the amounts?

Answer

The questionnaire did provide information on the number of members enrolled in group vs. private policies. The distribution of members enrolled in group policies and private policies is 32 percent and 68 percent. Use this ratio to distribute the private hospital and clinic disbursements.

Table 7.2: Estimation of Provider Payments for Group and Individual Policies

HP1.1.2.1 Private-for-profit hospitals	123	.32 x 123 = 39.36	.68 x 123 = 83.64
HP3.4.5.1 Other private-for-profit health centers	216	.32 x 216 = 69.12	.68 x 216 = 146.88
HP1.1.2.2 Private non-profit hospitals	437	.32 x 437 = 140	.68 x 437 = 297
HP3.4.5.2 Other private non-profit health	1,020	.32 x 1020 =	.68 x 1020 =

Question 2

Review Exhibit 7b.2, the Employer Survey

a. Which of the two expenditure estimates provided in this survey should be placed in the HF x HP table?

Answer

The 3024 Cr amount is most relevant, because this is what the firm spent on on-site health services. The firm in this case would be the financing agent and its facilities would be the providers; hence it would be used for a HF x HP table.

b. How would you classify it? What ICHA codes would you use?

Answer

To answer this question, the NHA team will need to examine the survey questions to see if information was requested on **what types of health services** the company provides in its on-site facilities. We learn that the company provides outpatient care at these facilities.

- ☐ Therefore, the classification is "HP 3.4 Outpatient Care Centers" OR "HP.3.4.5. All other outpatient multispecialty and cooperative service centers."

Question 3

Review Exhibit 7b.3, the External Aid Questionnaire

a. Which of the expenditures shown in the survey would be placed in the HF x HP table?

Answer

The only amount used in the HF x HP table is: General hospital (599)

b. How would you classify it?

Answer

The answer is "HP.1.1.2.1 NGO Hospital." This assumes that HP1.1.2 refers to private general hospitals (HP1.1.1. refers to public hospitals).

Question 4

Review Exhibit 7b.4, the Special Tabulation of the Household Survey.

a. Which of the categories of expenditures can be placed in the HF x HP table?

Answer

- Co-payments at hospitals (13643 Cr)
- Co-payments at polyclinics (11965 Cr)
- Purchase of prescription drugs (41042 Cr). You can use this amount to assume the full costs borne by pharmacists [providers].
- Payments to other health practitioners (19763 Cr)

b. You've learned from patient admission records that households visit private clinics as opposed to public clinics in a ratio of 3:2 and that they visit private hospitals vs public hospitals in a ratio of 2:3.

Answer

For Clinics: PRIVATE 3: PUBLIC 2

- For Clinics:
- 11965 (co-payments at polyclinic) / 5 = 2393
- In order to get private expenditures: 2393 x 3 = 7179
- In order to get public expenditures: 2393 x 2 = 4786

For Hospitals: PRIVATE 2: PUBLIC 3.

- 13643 (co-payments made at hospitals) / 5 = 2728.6;
- In order to get private expenditures: 2728.6 x 2 = 5457.20
- In order to get public expenditures: 2728.6 x 3 = 8185.80

7c. Susmania Case Study III – Filling in the HF x Func and HP x Func Tables

Exercise 1

Place the above totals in the appropriate cells on your combination table shell.

Answer

The row totals (specifically the "check against HF x HP" cell) of the combination tables should include the above estimates for providers. The column totals (specifically the "check against HF x HP" cell) should include the above estimates for financing agents. Therefore:

- 9387 should be placed in the "Check against HF x HP" x MOH General Hospitals cell.
- 8569 should be placed in the "Check against HF x HP" x MOD Hospitals cell.
- 19712 should be placed in the "Chec against HF x HP" x Regional General Hospitals cell.
- 37668 should be placed in the "Check against HF x HP" x "Total HF spending" cell.
- 7839 should be placed in the MOH x "Check against HF x HP" cell.
- 8569 should be placed in the MOD x "Check against HF x HP" cell.
- 41 should be placed in the Regional Government x "Check against HF x HP" cell.
- 20802 should be placed in the NIA x "Check against HF x HP" cell.
- 109 should be placed in the Government Group Insurance x "Check against HF x HP" cell.
- 308 should be placed in the Households x "Check against HF x HP" cell.
- 37668 should be placed in the Total x "Check against HF x HP" cell.

You receive the data below and know that these numbers should be placed in the table – to your surprise, you learn that this has already been done for ou (by the NHA fairy!)

Regional General Hospitals	Households	NIA	Govt. Employee Insurance Program
Inpatient	0	9,422	60
Outpatient	201	4,640	49
Total	201	14,062	109

Exercise 2

MOH general hospital records state the following totals (for all MOH hospitals combined):

- General administrative expenses (3,676 Cr). You learn that the GA estimate includes capital formation of 717 Cr.
- TOTAL inpatient expenditures were 4,693 Cr.
- Outpatient expenditures were 1,018Cr.

How will you allocate these estimates in the appropriate cells of the table?

a. Where does the capital formation estimate go?

Answer

The 717 Cr estimate refers to capital formation: Is this a provider or a function category? Answer: function.

- Therefore, first classify it as: HCR.1 Capital Formation (list this in the functional row heading under the relevant provider).
- Because we do not know specifically which financing agent contributed to the hospital capital formation (cannot simply assume the MOH at this stage), the 717 estimate is placed in the "Column TOTAL x MOH Hospital Capital Formation cell."

b. How do you handle GA estimate?

Answer

The GA expenses are 3676 - 717 = 2959. But how do you classify GA expenses? In NHA, GA expenses DO NOT have their own separate category. Administrative expenses of a provider are NOT allocated to Function HC.7 (Health administrative and health insurance), which includes only expenses related to the MOH at the central and provincial level (not provider!). Rather, the 2959 is included as part of the cost of services provided. Therefore, the **2959 GA estimate has to be allocated to inpatient and outpatient expenditures.** This will be resolved in the next question.

c. Finally, input inpatient and outpatient estimates.

Answer

First **classify** and add functional rows for inpatient **(HC 1.1)** and outpatient **(HC 1.3)** categories.

You learn that inpatient spending is 82.2 percent of total spending (inpatient + outpatient only [4693 +1018 = 5711]) at MOH hospitals (4693/5711). *Therefore, the GA amount that is added to the* inpatient spending is 0.822x 2959 = 2432. So **total Inpatient becomes 2432 + 4693 = 7125.**

You determine that outpatient spending accounts for 17.8 percent of total spending (inpatient +outpatient only) at MOH hospitals (1018/5711). Therefore the GA amount that is added to outpatient spending is 0.178 x 2959 = 527. T**otal Outpatient = 527 + 1018 = 1545.**

Therefore, the 7125 amount needs to be placed in the "total column x MOH Hospital Inpatient cell."

The 1545 number should be placed in the "total x MOH Hospital Outpatient cell."

Exercise 3

In terms of Financing Agents that contribute to MOH hospitals,

a. You learn from the household survey that Households pay 107 Cr at MOH hospitals and the full amount goes to co-payments for outpatient care. Where do you place this estimate in your table?

Answer

Place 107 **in** HH x MOH Outpatient cell.

b. You learn that NIA has reimbursed the MOH for services incurred by NIA's beneficiaries. NIA's total payment to MOH is 6,740 cr and 88 percent of this amount goes to Inpatient Curative and remainder to Outpatient Curative. Place NIA's contribution to MOH hospitals in the appropriate cells of the table.

Answer

NIA's reimbursement for Inpatient curative is 0.88 x 6740 = **5931.** Place this number in the **NIA x MOH Inpatient cell.**

NIA's reimbursement for Outpatient curative is 0.12 x 6740 = **809.** **P**lace this number in the **NIA x MOH Outpatient cell.**

c. You learn that the only other contributor to MOH facilities is the MOH itself.
What is the MOH share of expenditures going to its hospitals?

Answer

To figure out the MOH share:

- Take row totals and subtract HH and NIA contributions.
- Therefore, the total amount contributed by MOH = 9,387-(107 + 6740) = **2540**, which should be placed in the **MOH x MOH General Hospital.**

- And what is the subsequent functional breakdown? You learn that MOH contributes the full capital formation costs for its facilities.

Answer

- For the MOH contribution to inpatient curative = 7125 - (0 + 5931) = **1194** (in **MOH x MOH Inpatient cell**).
- For the MOH contribution to outpatient curative = 1545 - (107 + 809) = **629** (in the **MOH x MOH Outpatient cell**).
- Place the 717 amount in the MOH x MOH HCR 1 Capital Formation cell.
- Now check to see that the rows add up for MOH hospitals.

Exercise 4

For regional government hospitals

a. From the regional hospitals you discover that their TOTAL expenditures are 19712 Cr. This is broken down functionally into 12419 Cr for inpatient and 7293 Cr for outpatient. Place these estimates in the appropriate cells.

Answer

This is simple data entry:

- The total amount: 19712 Cr should be placed in the "Total x Regional govt. hospital total"
- The inpatient amount: 12419 Cr should be placed in the "Total x Regional govt. inpatient total"
- The outpatient amount: 7293 Cr should be placed in the "Total x Outpatient regional govt. total"

b. You learn that regional governments spend 41 Cr total at their own hospitals. The MOH pays 5,299 Cr total for regional hospitals. But the functional breakdown for these two HFs is not known.
You also know that these are the only two remaining HFs (that have not been previously accounted for) that contribute to regional hospitals.
What do you do? How do you account for regional government and MOH functional spending at regional hospitals?

Answer

Estimation technique:

- The remaining unallocated balance for inpatient curative is 12419 - (0 + 9,422 + 60) = 2937.
- The remaining unallocated balance for outpatient curative is 7293 - (201 + 4640 + 49) = 2403.
- The remaining unallocated TOTAL balance for regional hospitals is 19712 - (201 + 14062 + 109) = 5340.
- Therefore, unallocated inpatient expenditures is 2937 / 5340 = 55 percent of total for regional hospitals.
- So unallocated outpatient expenditure is 2403 / 5340 = 45 percent of total for regional hospitals.
- With no information on the breakdown of Region, Govt. and MOH spending you should use the same 55/45 split that is unallocated.

  Therefore, Regional govt. inpatient curative is: 0.55 x 41 = 23 and regional gov. outpatient is 0.45 x 41 = 18 (**23 Cr** should be **in regional govt. x regional hospital inpatient**;) (**18 Cr** should be placed in **regional govt. x regional hospital outpatient cell**).

  MOH govt. inpatient curative is: 0.55 x 5299 = 2914 and MOH outpatient is 0.45 x 5299 = 2385 (**2914 Cr** should be in **MOH x MOH hospital inpatient cell**; **2385 Cr** should be placed **MOH x MOH hospital inpatient**).

Exercise 5

You receive the following breakdown of expenditures at MOD general hospitals. It doesn't exactly match ICHA classifications.

- A cost study conducted by ChrisJay Univ. Estimated that the relative sizes of inpatient and outpatient share is 3:1.
- You learn the MOD is the only contributor of expenditures at its hospitals.

Table 7.6: Break Down of MOD General Hospital Expenditures

7.01.01	Salaries	1963
7.01.02	Drugs	1227
7.01.03	Laboratory and X-rays	981
7.01.04	General Administrative Costs	573
7.01.05	Meals	41
7.01.06	Laundry	40
7.01.07	Maintenance	900
7.01.08	Construction	717
7.01.09	Janitorial Services	491
7.01.10	Medical Equipment	1636
	Total Expenditures	8,569

a. How would you classify these expenditures as ICHA functional categories?

Answer

The line items estimates can be rolled into four NHA functional classifications that will require their own rows and classifications in the table: 1) HC1.1 Inpatient curative care, 2) HC 1.3 Outpatient curative care, 3) HC4 Ancillary services to medical care, 4) HCR.1 Capital formation for health care provider institutions .

Items to be **split** in 3:1 ratio between HC1.1 Inpatient curative care and HC 1.3 Outpatient curative care are:

- Salaries (.75 x 1963 = 1,472 - Inpatient; 491- Outpatient)
- Drugs (.75 x 1227 = 920 - Inpatient; 307 - Outpatient)
  Rationale: hospitals may have one pharmacy that provides drugs for both outpatient and inpatient drugs
- General administrative costs (.75 x 573 = 430-Inpatient; 143 - Outpatient
- Maintenance (.75 x 900 = 675-Inpatient; 225 - Outpatient),
- Janitorial Services (.75 x 491 = 368-Inpatient; 123 - Outpatient)

Items to be included under HC1.1 Inpatient curative only:

- Meals (41)
- Laundry (assuming 100% percent of laundry is for inpatients) (40)

Items to be included under HC4. Ancillary services to medical care

- Laboratory and X-rays (981)

Items to be included under HCR1 Capital Formation for health care provider institutions

- Construction (717)
- Medical Equipment (1,636)

b. What expenditure estimates would you use? Enter them into the table.

Answer

The total amount that the MOD gives its hospitals for:

- Inpatient (HC 1.1) = 1472 + 920 +430 + 675 + 368 +41 + 40 = 3946 (MOD x MOD Inpatient cell)
- Outpatient (HC 1.3) = 491 + 307 + 143 + 225 + 123 = 1289 (MOD x MOD outpatient cell)
- Ancillary Services (HC 4) = 981 (MOD x MOD Ancillary Services cell)
- Capital Formation (HCR 1) = 717 + 1636 = 2353 (MOD x MOD Capital Formation cell)

Next Steps

- SEE IF ROW AND COLUMN TOTALS ADD UP.
- Do the totals that you've just calculated match the totals that were obtained from the HF x HP table?

If they don't match, go back and see if there was a mistake with the HF x HP table or with your present table. There will be a lot of going back and forth to recheck estimates in a real NHA endeavor.

Exercise 6

Now that you have the completed the combined table, your next task is to separate the expenditures into 1) HF x Func table and the 2) HP x Func table (for purposes of this exercise, the NHA fairy has completed this table for you). Use the new handout to complete the HF x Func table.

Provider by Function Table

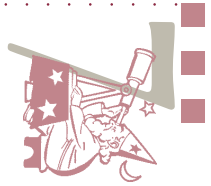
Function	Provider			Total
	HF.1.1.1.1 MOH General Hospitals	HF.1.1.1.2 MOD Hospitals	HF.1.1.1.3 Regional Govt. General Hospitals	
HC1.1 Inpatient Curative	7,125	3,946	12,419	23,490
HC1.3 Outpatient Curative	1,545	1,289	7,293	10,127
HC4 Ancilliary Services		981		981
HCR 1 Capital Formation	717	2,353		3,070
Total Provider Spending	9,387	8,569	19,712	37,668
Check against FAxP	9,387	8,569	19,712	37,668

Financing Agents by Functions

Function	Financing Agent						Total
	HF.1.1.1.1 MOH	HF.1.1.1.3 MOD	HF.1.1.2 Reg. Govt	HF.1.2 NIA	HF.2.1.1 GGI	HF.2.3 Households	
HC1.1 Inpatient Curative	4,108	3,946	23	15,353	60		23,490
HC1.3 Outpatient Curative	3,014	1,289	18	5,449	49	308	10,127
HC4 Ancilliary Services		981					981
HCR 1 Capital Formation	717	2,353					3,070
Total FA Spending	7,839	8,569	41	20,802	109	308	37,668
Check against FAxP	7,839	8,569	41	20,802	109	308	37,668

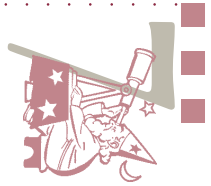
Question 1 Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table

Provider and Function		Financing Agent						Total	Check against HF x HP
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance Program	HF.2.3 Household		
HP.1.1.1.1	MOH general hospitals								**9387**
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.2	MOD hospitals								**8569**
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals				14062	109	201		**19712**
	HC.1.1 Inpatient curative				9422	60			
	HC.1.3 Outpatient curative				4640	49	201		
Total HF spending		0	0	0	14062	109	201	0	**37668**
Check against HF x HP		**7839**	**8569**	**41**	**20802**	**109**	**308**	**37668**	



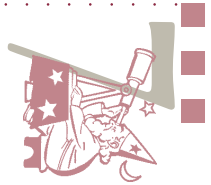
Question 2 Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table									
Provider and Function		Financing Agent						Total	Check against HF x HP
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance Program	HF.2.3 Household		
HP.1.1.1.1	MOH general hospitals							9387	**9387**
	HC.1.1 Inpatient curative							7125	
	HC.1.3 Outpatient curative							1545	
	HC.R.1 Capital formation							717	
HP.1.1.1.2	MOD hospitals								**8569**
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals				14062	109	201		**19712**
	HC.1.1 Inpatient curative				9422	60			
	HC.1.3 Outpatient curative				4640	49	201		
Total HF spending		**0**	**0**	**0**	**14062**	**109**	**201**	**9387**	**37668**
Check against HF x HP		**7839**	**8569**	**41**	**20802**	**109**	**308**	**37668**	

Question 3 Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table									
Provider and Function		Financing Agent						Total	Check against HF x HP
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance Program	HF.2.3 Household		
HP.1.1.1.1	MOH general hospitals	**2540**			**6740**		**107**	9387	**9387**
	HC.1.1 Inpatient curative	**1194**			**5931**			7125	
	HC.1.3 Outpatient curative	**629**			**809**		**107**	1545	
	HC.R.1 Capital formation	**717**						717	
HP.1.1.1.2	MOD hospitals								**8569**
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals				14062	109	201		**19712**
	HC.1.1 Inpatient curative				9422	60			
	HC.1.3 Outpatient curative				4640	49	201		
Total HF spending		**2540**	0	0	**20802**	109	**308**	**9387**	**37668**
Check against HF x HP		**7839**	**8569**	**41**	**20802**	**109**	**308**	**37668**	



Question 4 Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table									
Provider and Function		Financing Agent						Total	Check against HF x HP
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance Program	HF.2.3 Household		
HP.1.1.1.1	MOH general hospitals	2540			6740		107	9387	**9387**
	HC.1.1 Inpatient curative	1194			5931			7125	
	HC.1.3 Outpatient curative	629			809		107	1545	
	HC.R.1 Capital formation	717						717	
HP.1.1.1.2	MOD hospitals								**8569**
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.1.3	Regional general hospitals	**5299**		**41**	14062	109	201	**19712**	**19712**
	HC.1.1 Inpatient curative	**2914**		**23**	9422	60		**12419**	
	HC.1.3 Outpatient curative	**2385**		**18**	4640	49	201	**7239**	
Total HF spending		**7839**	0	41	20802	109	308	**29099**	**37668**
Check against HF x HP		**7839**	**8569**	**41**	**20802**	**109**	**308**	**37668**	

Question 5 Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table									
Provider and Function		Financing Agent						Total	Check against HF x HP
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance Program	HF.2.3 Household		
HP.1.1.1.1	MOH general hospitals	2540			6740		107	9387	**9387**
	HC.1.1 Inpatient curative	1194			5931			7125	
	HC.1.3 Outpatient curative	629			809		107	1545	
	HC.R.1 Capital formation	717						717	
HP.1.1.1.2	MOD hospitals		**8569**					**8569**	**8569**
	HC.1.1 Inpatient curativeC		**3946**					**3946**	
	HC.1.3 Outpatient curative		**1289**					**1289**	
	HC.4 Ancilliary services		**981**					**981**	
	HC.R.1 Capital formation		**2353**					**2353**	
HP.1.1.1.3	Regional general hospitals	5299		41	14062	109	201	19712	**19712**
	HC.1.1 Inpatient curative	2914		23	9422	60		12419	
	HC.1.3 Outpatient curative	2385		18	4640	49	201	7239	
Total HF spending		7839	0	41	20802	109	308	29099	**37668**
Check against HF x HP		**7839**	**8569**	**41**	**20802**	**109**	**308**	**37668**	



Question 6 Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table									
Provider and Function		Financing Agent						Total	Check against HF x HP
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance Program	HF.2.3 Household		
	HC.1.1 Inpatient curativeC	**4108**	3946	**23**	**15353**	**60**		**3946**	**23490**
	HC.1.3 Outpatient curative	**3014**	1289	**18**	**5449**	**49**	**309**	**1289**	**10127**
	HC.4 Ancilliary services		981					**981**	**981**
	HC.R.1 Capital formation	**717**	2353					**2353**	**3070**
Total HF spending		7839	0	41	20802	109	308	29099	**37668**
Check against HF x HP		**7839**	**8569**	**41**	**20802**	**109**	**308**	**37668**	

8

Unit 8
Interpreting the Results and Policy Implications

Time

Regional training: 2.5 hours

In-country training: 90 minutes

Learning Objectives

At the end of this unit, participants will:

- Understand the policy utility of NHA
- Understand how to interpret and present the NHA results to answer "so what" questions
- Draw policy implications from the results
- Become familiar with other country experiences

Content

- Utilizing NHA findings in conjunction with other data
- Understanding how NHA informs the policy process – examples from around the world
- Disseminating NHA results

Exercises

- Exercises

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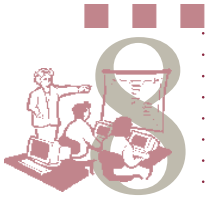

Unit 8 - Slide Presentation

1

PHR*plus*

Unit 8:
Interpreting Results and Policy Implications

The PHR*plus* Project is funded by U.S. Agency for International Development and implemented by:
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2

Learning Objectives

- Understand the policy utility of NHA
- Understand how to interpret and present the NHA results to answer "so what" questions
- Draw policy implications from the results
- Become familiar with other country experiences

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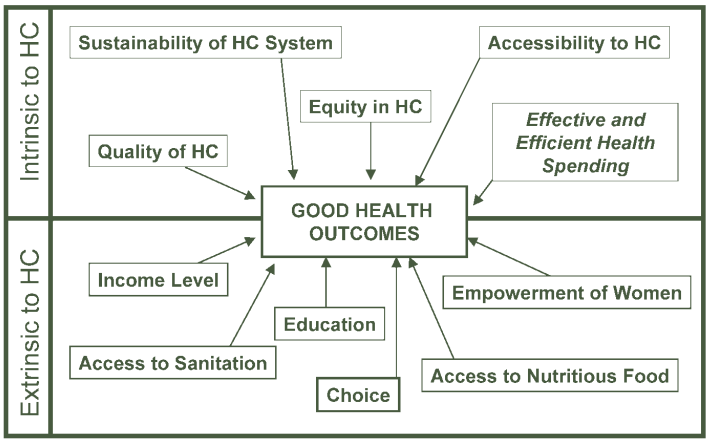
3

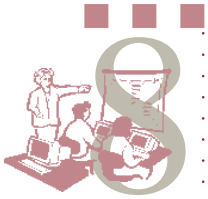
Now that you have filled in the tables, what does the data mean?

- The process for interpreting at this stage is very important. Why?
  - NHA is useful in that it can point to potential problems, but this depends on how the data is INTERPRETED and PRESENTED

4

Health Spending Is Only One Component Contributing to a Population's Health Outcomes





5

How to Interpret NHA Data Using Other Types of Data

- **Socioeconomic indicators**
  - Compare the health spending numbers to other countries of similar socioeconomic status
  - Use overall GDP or GDP per capita as a point of reference
  - Look at access to care by income groups to measure equity
  - Wherever possible use PPP and constant currency – particularly for conducting trend analysis
- **Health service production data**
  - Rate of immunization, number of health care providers, volume of patients, etc. are used for calculating efficiency of the resources used
- **Health outcome data**
  - Health statistics, disease burden, etc. are also used to measure equity and efficiency
- **Other demographic data**
  - Indicators such as population growth rates, fertility rates, etc. are used to forecast and budget for health spending in the future

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Interpreting NHA Data

- **The most valuable contribution of NHA is in looking beyond the findings themselves – in the "so what" questions the findings can answer**
  - **e.g., Jordan spends 9.1% of its GDP on health care**
    - **"So what" if Jordan spends so much on health care?**
- **Interpreting NHA data within the OVERALL CONTEXT of a country's particular circumstances and characteristics furthers its relevance**

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7

How NHA Links to Health Policy Decisions

Health policy decision areas	Flow of resources in health financing	Some key policy questions
Resource mobilization/ financing strategies Pooling arrangements Cost recovery Regulation of payers Financial incentives Subsidies Resource allocation Provider regulation Targeting Redistributive policies	Financing Sources ↓ Financing Agents ↓ Inputs Providers Functions ↓ Important Distributions e.g. Age/Gender Location Socio-Econ. Status	How are resources mobilized? • Who pays? • Who finances? • Under what scheme? How are resources managed? • What is the financing structure? • What pooling arrangements? • What payment/purchasing arrangements? Who provides what services? • Under what financing arrangements? • With what inputs? Who benefits? • Who receives what? • How are resources distributed?

Source: WHO/NHA Unit/Patricia Hernandez and Jean Pierre Poullier

8

Policy Impact of NHA: Egypt

- 1994/95 NHA results showed that
  - THE is 4% of GDP
  - Out-of-pocket expenditures = 50% of THE.
  - MOH contribution low at <20 % of THE
  - Assessing results with socioeconomic data revealed burden of these expenditures somewhat inequitable.
  - Therefore, lower levels of access by the poor rural households
- Reform agenda was designed and is being implemented – basic benefits package for all Egyptians

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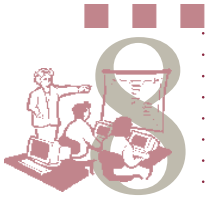

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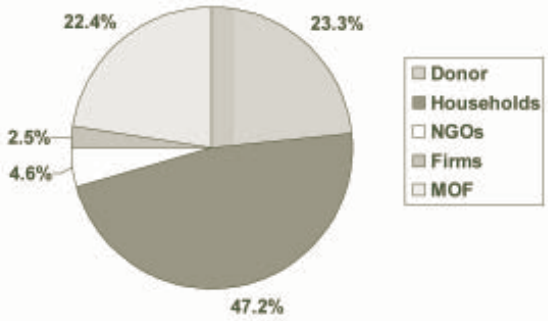
Policy Impact of NHA: Tanzania



Policy Impact: Used to garner support for SWAPs and donor basket funding to decrease off-budget spending

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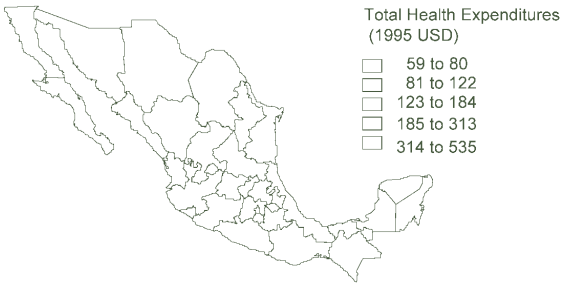
Policy Impact of NHA: Mexico



Policy Impact: Used to channel allocation of public transfers to states according to need

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Policy Impact of NHA: Lebanon

	% of GDP spent on Health Care	Annual Growth Rate (% of GNP)	Annual Growth Rate %	Disease Burden
Lebanon	12.3	1.0	2.7%	↑ Chronic Health Conditions
Jordan	9.1	0.8	3.8%	
OECD	8.3	--	--	--

- Projected MENA economic growth rate for next 10 yrs is only 0.9% , populations are expected to double in the next 10-20 years, changing demographics (increase in elderly pop.) will result in costly curative services
- High health care costs in Lebanon are unsustainable given the circumstances. Lebanese government is now in the process of introducing provider payment reforms – capitated payments and schedule of fees

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Policy Impact of NHA: South Africa

Province	Total Health Expend per capita	General doctors	Specialist doctors	Registered nurses
E. Transvaal	136.60	6.48	0.48	67.63
N. Transvaal	164.07			
North-West	178.91			
N. Cape	221.15			
E.Cape	226.98			
KwaZulu-Natal	236.88			
Orange Free State	266.49			
Gauteng	381.66	30.63	23.71	200.46
W. Cape	491.13			

Policy Impact: Moratorium on private hospital building without certificate-of-need, increase government regulation of private sector (equity), and shift resources to primary care

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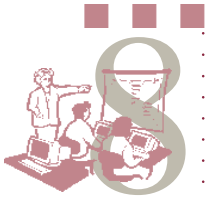

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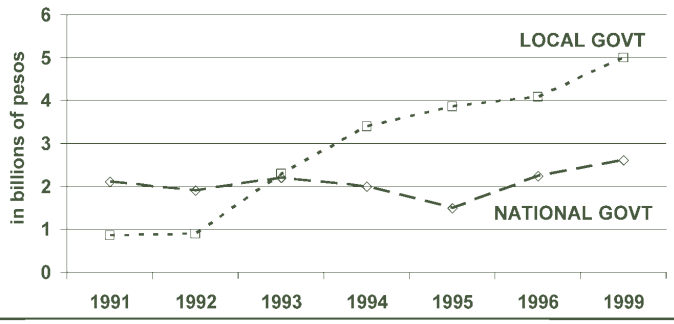
Policy Impact of NHA: Philippines



Policy Impact: Used to monitor decentralization policy, which is working, as measured by the decentralization of health resources

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Three-steps to Realize the Full Value of NHA

1. Production of NHA results
   - ▲ Responsibility: NHA technical team
2. Interpretation of results and drawing policy implications
   - ▲ Responsibility: NHA team leaders & steering committee
3. Implementation of policy
   - ▲ Responsibility: legislative body of the country

The NHA findings are meaningful only in terms of the interpretation of their results

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How does NHA Inform Policy Decisions?

- NHA results facilitate discussions and policy dialogue.
  - Identify problems
  - Acts as a catalyst for discussion
  - Serves as advocacy instrument to stimulate action
- Dialogue facilitates policy design and implementation.
  - The rhetoric must translate to specific policy action
- NHA results are ideal for conducting trend analysis – monitoring and evaluation
  - Conduct trend comparisons over time to evaluate if implemented strategies have their desired effects
  - Unique opportunity to assess past performance and realign policies to be more effective
  - Enable comparisons to other countries in similar socioeconomic categories

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Interpreting NHA Data for Policy Purposes

- Recommendations on process
  - Useful to have a "senior data interpreter" at this stage, someone who understands the data, is well-connected to policymakers, and knows of the major issues of concern to the government
  - The NHA steering committee can be particularly helpful at this stage

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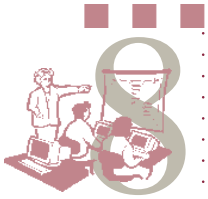

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Interpreting NHA Data for Policy Purposes cont'd

- Additional recommendations on process
  - May wish to start the data review by keeping in mind some of the policy issues that are of concern to the government
  - BUT be open also to "new" discoveries or surprising findings that may suggest other issues that need further investigation

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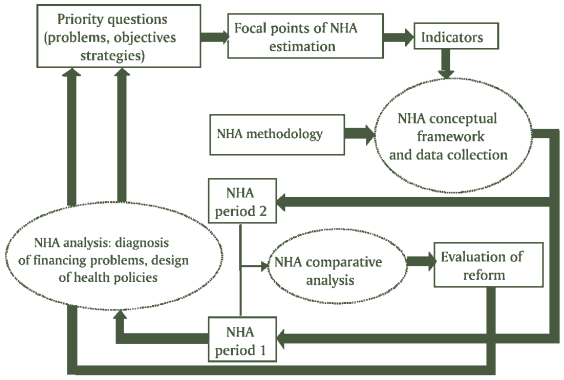
Putting the Policy Question First



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Interpreting NHA Data for Policy cont'd

- Additional Recommendations on process
  - Highlight clearly the link between the NHA findings and other findings. Helps in appreciating the value of NHA and therefore facilitates its institutionalization

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Take-Home Message

- NHA results are only as good as their interpretation
- Data interpretations are enriched when done in the context of other socioeconomic and health sector characteristics

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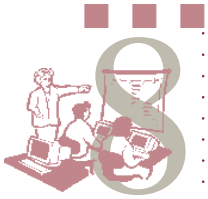

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Exercise

- Review the data presented in the handouts and write down:
  - What policy issues and concerns are raised by the data below concerning Susmania's health sector
  - What should be further investigated (through other types of studies, etc.)
- You have 10 minutes to write down your answers. Be prepared to share your observations with the class

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Unit 8 - Exercises

Question 1

What policy issues and concerns are raised by the data below concerning Susmania's health sector?

Table 8.2: Health Expenditure as a % of Gross Domestic Product

Year	Percent
1989	2.60
1990	2.60
1991	3.00
1992	3.20
1994	8.00
1997	14.96

Table 8.3: Percentage of Population Covered by Various Financing Agencies

Financing Agency	Percent of Population Covered
National Social Security Fund (NSSF)	32.43%
Civil Servants Insurance Fund (CSC)	5.40
Army	8.78
Family Social Insurance (ISF)	2.11
General Security and State Security	0.46
Private Insurance	8.00 (complete coverage) 4.60 (gap insurance)
MOH	42.70

Table 8.4: Financing Agents and Their Supervisory Ministry

Financing Agency	Supervising Ministry
National Social Security Fund (NSSF)	Ministry of Labor
Civil Servants Insurance Fund (CSC)	Presidency of the Council of Ministers
Army	Ministry of National Defense
Family Social Insurance (ISF)	Ministry of Interior
General Security and State Security	Ministry of Interior
Private Insurance	Ministry of Economy and Commerce
Mututal Funds	Ministry of Housing and Cooperatives
MOH	Ministry of Health

Table 8.5: Sources to Financing Agents FY 1997 (millions of Cr)				
Financing Agency	MOF	Firms	Households	Total
MOH	164			164
Civil Servants Insurance Fund (CSC)	27			27
National Social Security Fund (NSSF)	36	95		131
Army	54			54
Family Social Insurance (ISF)	45			45
General Security	4			4
State Security	1			1
Mututal Funds	10	8		18
Private Insurance	0	157		157
Households	0	0	785	785
Total	341	260	785	1386

Table 8.6: Financing Agents to Providers FY 1997 (millions of Cr)											
	MOH	CSC	NSSF	Army	ISF	General Security	State Security	Mututal Funds	Private Insur-ance	House-holds	Total
MOH	23										23.0
Army				16							16.0
Private OP Facilitites	8	13	66	13	14	2	0.5	6		600	722.5
Private Hospitals	128	14	65	25	31	2	0.5	12	157	185	619.5
Others	5										5.0
Total	164	27	131	54	45	4	1	18	157	785	1386.0

Table 8.7: MOH Expenditures on Selected Health Services (Cr)		
Service	Expenditure	Number of Beneficiaries
Dialysis	13,615,918	10,220
Open-heart Surgery	18,832,314	14,000
Drugs for Chronic Diseases	25,300,000	61,840
Total	57,648,232	86,060

Table 8.8: Health Indicators for Susmania				
Country	Life Expectancy at Birth (WHO 2000)	Infant Mortality Rate (per 1000 live births) (UNICEF 2000)	Total Fertility Rate in 1999 (WHO 2000)	Maternal Mortality Rate (per 100,000 live births) (WHO 2000)
Djibouti	45 (M), 45 (F)	111	5.2	740*
Egypt	64.2 (M), 65.8 (F)	51	3.2	170
Iran	66.8 (M), 67.9 (F)	29	2.7	37
Jordan	66.3 (M), 67.5 (F)	30	4.47	41**
Susmania	58 (M), 58 (F)	80	4.3	100
Morocco	65 (M), 66.8 (F)	57	2.9	230
Tunisia	67.0 (M), 67.9 (F)	25	2.5	70
Yemen	57.3 (M), 58.0 (F)	87	7.4	350***
OECD Countries+	73.2 (M), 79.6 (F)	12	2.5	8.5

Source: UNDP 2000

*Latest available data from 1989-90

**Jordan officially reports an MMR of 132 as of 1997 (NHA Exec Summary)

§Yemen officially reports an MMR of 1200 and a TFR of 7.6 (Yemen NHA Report)

+1996 estimate 6 out of the 29 OECD countries did not report MMR estimates

Table 8.9: Distribution of Employed Population by Gender		
Category	Number	Percent
Males	962,726	79%
Females	260,047	21%
Total Population	1,222,773	100%

Answer

Unit 8 - Answers

Question 1

What policy issues and concerns are raised by the data below concerning Susmania's health sector?

Answer

As Table 8.2 shows, Susmania by 1997 is spending an appreciable percentage of GDP on health care (15 percent, compared to the 1997 OECD average of 8 percent), yet health indicators are poor. (See Table 8.8 below.)

Table 8.2: Health Expenditure as a % of Gross Domestic Product

Year	Percent
1989	2.60
1990	2.60
1991	3.00
1992	3.20
1994	8.00
1997	14.96

Why was there a large increase from 1994 to 1997 – almost a doubling in three years? This suggests that the policy changes that occurred during that time should be examined. Did the government assume more responsibility for curative care? Did an epidemic occur? Or was there a fluctuation in total GDP? Before making any assumptions, the NHA team should request absolute total GDP numbers (not just percentages) to check for a significant fluctuation.

The entire population has health care coverage (Table 8.3), yet household spending on health is high and health indicators show poor health status. The MOH covers 43 percent of the population, yet it accounts for only a small portion of the total health expenditures.

Table 8.3: Percentage of Population Covered by Various Financing Agencies

Financing Agency	Percent of Population Covered
National Social Security Fund (NSSF)	32.43%
Civil Servants Insurance Fund (CSC)	5.40
Army	8.78
Family Social Insurance (ISF)	2.11
General Security and State Security	0.46
Private Insurance	8.00 (complete coverage) 4.60 (gap insurance)
MOH	42.70

Public health financing is fragmented among eight ministries and other bodies (Table 8.4). This results in extensive duplication of administrative functions.

Table 8.4: Financing Agents and Their Supervisory Ministry

Financing Agency	Supervising Ministry
National Social Security Fund (NSSF)	Ministry of Labor
Civil Servants Insurance Fund (CSC)	Presidency of the Council of Ministers
Army	Ministry of National Defense
Family Social Insurance (ISF)	Ministry of Interior
General Security and State Security	Ministry of Interior
Private Insurance	Ministry of Economy and Commerce
Mututal Funds	Ministry of Housing and Cooperatives
MOH	Ministry of Health

Out-of-pocket expenditures are high (approximately 50 percent of total health care expenditures in Susmania) despite everyone being covered (Table 8.5). Why?

Table 8.5: Sources to Financing Agents FY 1997 (millions of Cr)

Financing Agency	MOF	Firms	Households	Total
MOH	164			164
Civil Servants Insurance Fund (CSC)	27			27
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Mututal Funds	10	8		18
Private Insurance	0	157		157
Households	0	0	785	785
Total	341	260	785	1386

Virtually all health funds – including the bulk of MOH spending! – are spent in private facilities (Table 8.6). No cost-sharing with households at MOH facilities.

Table 8.6: Financing Agents to Providers FY 1997 (millions of Cr)

	MOH	CSC	NSSF	Army	ISF	General Security	State Security	Mutual Funds	Private Insur-ance	House-holds	Total
MOH	23										23.0
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Others	5										5.0
Total	164	27	131	54	45	4	1	18	157	785	1386.0

As shown on Table 8.7, 57,648,232 crutons – one-third of the MOH expenditure total of 164 million crutons – go toward specialized services expenditures. The total MOH coverage for these select services is only 2 percent of total population.

Table 8.7: MOH Expenditures on Selected Health Services (Cr)

Service	Expenditure	Number of Beneficiaries
Dialysis	13,615,918	10,220
Open-heart Surgery	18,832,314	14,000
Drugs for Chronic Diseases	25,300,000	61,840
Total	57,648,232	86,060

Women are not very active in the formal employment sector and therefore have less access to health insurance coverage.

Total population of Susmania is 4 million.

Table 8.8: Health Indicators for Susmania

Country	Life Expectancy at Birth (WHO 2000)	Infant Mortality Rate (per 1000 live births) (UNICEF 2000)	Total Fertility Rate in 1999 (WHO 2000)	Maternal Mortality Rate (per 100,000 live births) (WHO 2000)
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Females	260,047	21%
Total Population	1,222,773	100%

9

Unit 9
Institutionalizing NHA

Time

Regional training: 90 minutes

In-country training: 60 minutes

Learning Objectives

At the end of this unit, participants will:

- Understand the full concept of institutionalization
- Be aware of some of the issues and challenges of institutionalization and how some countries have dealt with them
- Draft a framework for institutionalizing NHA in their own country

Content

- The concept and major elements of institutionalization
- Challenges to NHA sustainability
- Overcoming the challenges: Key steps towards institutionalization
- Example: Kenya's approach to institutionalization

Exercises

- Application questions

References

De, Susna, Tania Dmytraczenko, Derick Brinkerhoff, and Marie Tien. 2003. *Has Improved Availability of Health Expenditure Data Contributed to Evidence-Based Policymaking?* Technical Report 022. Bethesda, MD: Partners for Health Reform*plus*, Abt Associates Inc. (May).

PHR*plus*. 2002. *Using NHA to Inform the Policy Process*. NHA Global Policy Brochure. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc.

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Unit 9 - Slide Presentation

1

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Unit 9:
Institutionalizing NHA

The PHR*plus* Project is funded by U.S. Agency for International Development and implemented by:
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2

Learning Objectives

- Understand the full concept of institutionalization
- Be aware of some of the issues and challenges of institutionalization and how some countries have dealt with them
- Draft a framework for institutionalizing NHA in their own country

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3

What is Institutionalization?

- The process of conducting NHA studies on a regular basis that is fully supported by the government, both financially and politically

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Three Features of Institutionalization

1. Recurrence – trend data important
2. Policy use – needs to be used for health policy, not merely as a research exercise
3. Government ownership – should be adopted as a regular government activity, like the census

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Challenges to Institutionalization

- Few countries have institutionalized NHA
  - Why?
    - Lack of supportive policy environment
    - Weak accounting systems
    - Lack of reporting standards
    - Lack of requirements to share or report needed NHA data (particular issue in the private sector)
    - Perceived high costs associated with NHA

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Key Steps: Create Demand by Policymakers

- No decision maker will invest time and money to sustain NHA unless they see a clear benefit to it
- Producing NHA estimates alone is not sufficient to guarantee "evidence-based" decisions

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Key Steps: Create demand by policymakers cont'd

- To be used, NHA info must be channeled to the appropriate audience; i.e., should reach those with power to influence decisions
  - Can be done by delivering NHA in a format easily digested by policymakers
    e.g., short summaries, brief presentations highlighting the policy relevance of findings, perhaps have "NHA dissemination team"

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Key Steps: Create demand by policymakers cont'd

- Communication of findings must be TIMELY
  - Inform policymakers (form the steering committee) from the onset of the study of NHA's purpose (*i.e., to meet their needs*)
  - Offer periodic updates to SC
  - Deliver summary presentations as soon as data are cleaned and partially analyzed; don't wait too long after the completion of the study to present findings
- NHA should be shaped by policy environment (to a feasible extent)

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Key Steps: Finding a Home for NHA cont'd

- Does not matter where it is housed as long as the location does not adversely affect the way the data may be used by policymakers
  - Traditionally housed in MOH, sometimes at central statistical bureau, MOF, or the central bank
  - Location decided by country context
  - Consider how NHA findings will be disseminated and used

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Key Steps: Finding a Home for NHA cont'd

- Location should encourage inter-institutional coordination
  - E.g., sometimes there is a lack of coordination between administrators of the HH survey (Bureau of Stats) and primary users of health data (MOH)
  - Useful to be located in a visible organization with leadership support to boost awareness and recognition of its importance

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Key Steps: Finding a Home for NHA cont'd

- If housed in policy-relevant institution, can get "NHA Advocate"
  - Particularly important during NHA's inception and sustainability
- Major issue to "recurrence" and "ownership" of NHA is getting a LINE ITEM IN THE GOVERNMENT'S BUDGET
  - Can be facilitated by the "Advocate"

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Key Steps: Establish Standards for Data Collection and Analysis

- Need consistency of data from year-to-year to ensure comparability
  - Systemizing procedures and protocols
    - Need health information systems
  - Document methodological steps taken in each round, to demonstrate how specific problems were addressed, etc.

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Key Steps: Institute data reporting requirements

- Important for public and private sectors; a "must" for long-term NHA activities
  - Difficult to do, particularly for the private sector
  - Generally, NHA quality may be poor due to a lack of data because of the LACK of REQUIREMENTS to share or report data

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Summary of Key Steps for Institutionalization

- Create demand for NHA by policymakers
- House NHA
- Establish standards for data collection and analysis
- Institute data requirements

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Example: What Kenya NHA is Doing for Institutionalization

- Create demand for NHA by policymakers
  - *Had launch conference of key policymakers and stakeholders, formed steering committee (SC).*
    - *Their policy concerns will shape NHA*
    - *NHA team will regularly provide updates to SC*
- House NHA
  - *Decided to be housed in MOH; has stewardship over health sector. Have "policy advocates"*
  - *Dept. of Planning has coordinated a multidisciplinary team – from CBS, NASCOP, U of Nairobi etc*

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What Kenya NHA is Doing for Institutionalization cont'd

- Establish standards for data collection and analysis
  - *All processes will be designed with an aim towards institutionalization*
    - *Therefore, developed link with U of Nairobi. If there is high turnover in govt., the govt. can rely on U of Nairobi trained individuals to serve as future technical resources/ trainers for MOH team*
      - *The U of Nairobi has implemented a NHA module in their basic economics course*
    - *Everything will be DOCUMENTED. Every process, every decision made, every assumption made!*
    - *Involve Steering Committee as part of the process for data collection*
    - *Household survey questions to be included as a module in the Welfare & Income Report (in the future)*

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What Kenya NHA is Doing for Institutionalization cont'd

- Institute data requirements
  - Instead of requirements, key representatives of private sector entities will collect data from their own institutions. Thus, the private sector will help coordinate the NHA data collection process

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Exercise

- Attempt to draft your country's institutionalization framework
  - Please refer to your student exercise and handout book

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Unit 9 - Exercises

Question 1

Draft your country's institutionalization framework for NHA:

a) What are the issues and challenges to institutionalization in your country? List them in the "strategy" column in the table in Unit 9 of your handout, according to the "step to institutionalization" that you believe the challenge will affect the most.

b) Based on class discussion and what you have learned regarding other country strategies towards institutionalization, what are the strategies that you feel are most feasible in your country as it strives to achieve each of the four steps to institutionalization? List the strategies in the table.

Developing an Institutionalization Framework	
Steps to Institutionalization	**Strategyto Reaching Each Institutionalization Step**
1. Create demand for NHA by policymakers	Issues and challenges:
	Strategies selected:
2. House NHA	Issues and challenges:
	Strategies selected:
3. Establish standards for data collection and analysis	Issues and challenges:
	Strategies selected:
4. Institute data reporting requirements	Issues and challenges:
	Strategies selected:

Unit 9 - Answers

Question 1

Draft your country's institutionalization framework for NHA:

a) What are the issues and challenges to institutionalization in your country? List them in the "strategy" column in the table in Unit 9 of your handout, according to the "step to institutionalization" that you believe the challenge will affect the most.

b) Based on class discussion and what you have learned regarding other country strategies towards institutionalization, what are the strategies that you feel are most feasible in your country as it strives to achieve each of the four steps to institutionalization? List the strategies in the table.

Table 9.1. Case Study: Kenya's Institutionalization Framework

Steps to Institutionalization	Kenya's Strategy
1. Create demand for NHA by policymakers	Held launch conference for key policymakers and stakeholders at which steering committee (SC) was formed. ☐ Their policy concerns will shape NHA ☐ NHA team will regularly provide updates to SC
2. House NHA	Decided to house NHA in MOH, which has stewardship over health sector. Appointed "policy advocates."MOH Department of Planning has coordinated a multi-disciplinary team from the Central Bureau of Statistics, National AIDS Counsel, University of Nairobi, etc.
3. Establish standards for data collection and analysis	All processes designed with an aim towards institutionalization ☐ Developed link with University of Nairobi. If there is high turnover in government, the university can train new NHA team members for MOH. ☐ The University of Nairobi has implemented a NHA module in their basic economics course. ☐ NHA exercise will be *documented*: every process, every decision, every assumption! ☐ Involve SC as part of the process for data collection. ☐ Household survey questions to be included as a module in future Welfare and Income Reports.
4. Institute data reporting requirements	Instead of requirements, key representatives of private sector entities are invited to collect data from their own institutions. Thus, the private sector will help coordinate the NHA data collection process.