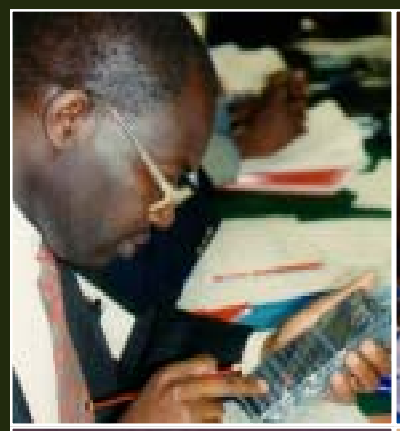

National Health Accounts

Trainer Manual

PHRplus

USAID

National Health Accounts Trainer Manual

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June 2004

Dear future National Health Accounts trainer,

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 NHA trainers. 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.

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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.

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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.

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I

Introduction to the National Health Accounts Trainer 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.

Using the Manual

Target audiences

The manual assists trainers to impart comprehensive theoretical knowledge as well as practical classroom experience regarding NHA to workshop participants. It contains training material for both trainers and trainees.

Trainers

An NHA trainer ideally has had both formal training in the NHA methodology and practical experience in doing the NHA analysis at least once.

Trainees

Participants are expected to be primarily potential NHA team members and/or researchers who will need the extensive theoretical and practical information contained in this manual. In addition, the manual can be adapted to deliver an overview of NHA to policymakers, Ministry of Health (MOH) staff, and other audiences who would benefit from understanding NHA even though they would not perform the analysis.

Objective of the training

By the end of these training workshops, the trainer will have prepared participants who are potential NHA team members and/or researchers to participate in an NHA team. Senior decision makers will possess sufficient knowledge about NHA to use the findings presented by NHA teams in health policymaking.

Training approach

The manual presents guidelines on how to introduce the concepts and methodology of NHA in an easily comprehensible manner. At the same time, the manual allows the trainer considerable flexibility to modify the materials to accommodate the level of technicality to the target audience and to incorporate country- or region-specific issues into the content of an individual training program. The manual suggests an interactive approach that simulates real-life scenarios and methodological challenges that facilitate understanding of NHA.

The manual's content is intended to help the trainer with both technical information and teaching methodology. Readings and lectures introduce technical material; exercises, discussion questions, and case studies developed from real-life NHA experiences present issues to generate group discussion and consider technical content from different points of view. This interactive, "hands-on" learning reinforces participants' understanding of NHA by asking them to practice their new knowledge and anticipate challenges they will face in conducting NHA.

Content

The technical content and exercises are presented in nine units:

1. Conceptual Overview of NHA
2. Planning the NHA Process
3. Defining Expenditures and Boundaries
4. Understanding Classifications and the NHA Framework
5. Collecting Data
6. Organizing Data for Filling in the Tables
7. Susmania Case Studies: Applying the Methodology
8. Interpreting the Results and Policy Implications
9. Institutionalizing NHA

In addition to presenting and practicing the methodology, the content allows the trainer to help country teams move immediately to NHA implementation by assisting them to build consensus on developing a workplan; clarifying the NHA team and steering committee organogram; defining a set of boundaries, classifications, and framework; and, finally, developing a data collection plan.

The units are ordered to follow the chronology of the NHA process. As will be seen in the sample workshop agendas given later in this orientation section, the units need not be taught in that order

but rather according to the needs and skills of workshop participants. For example, while policy implications are the topic of Unit 8 because they involve the results of the NHA process, a trainer may find it appropriate to discuss policy implications early in the training if the participants are unaware of this ultimate use of NHA findings.

Organization of the manual

It is recommended that the trainer first review the technical material and guidelines in each topical unit. The guidelines suggest how each topic should be introduced to participants. The units also contain discussion and exercise questions intended to help participants to better grasp the technical concepts. The trainer can customize the curriculum to the audience.

The accompanying PowerPoint slides and notes for each unit are intended to help the trainers during the delivery of their presentations. The trainer can modify the presentations.

The trainer should give each workshop participant a Participant's Manual with exercises and case studies designed to reinforce the concepts introduced in the presentations and provide participants a flavor of the real-life methodological scenarios that they are likely to encounter when implementing NHA.

A CD-ROM containing NHA resources and all the PowerPoint presentations is part of this manual.

Units 1-9 contain references to the aforementioned *Guide to producing National Health Accounts with special application for low-income and middle-income countries (PG)*, The references, which cite PG page numbers and section numbers, serve to document the information p[resented in this training manual. In addition, trainers can use these parts of the PG as supplemental reading and teaching material.

Teaching each unit

The manual recommends that the trainer begin each unit with an interactive lecture aided by the PowerPoint slides, followed by the trainees doing the exercise(s), followed by a review of the exercise answers and group discussion.

I Materials needed for NHA training

Participant Manual:

- Binders
- PowerPoint handouts (two per page)
- Handouts copies
- Designed labels for cover of binder, binder spine, and CD
- Dividers with pockets (number of needed dividers = number of days of training-1)
- Copy of agenda
- Copy of participant list
- CDs

Additional participant materials:

- Calculators
- Pencils
- Pens
- Note pads for participants

General training materials:

- Markers and flip charts and flip chart stands for documenting discussions and exercises
- Overhead projector for the case studies
- LCD projector for PowerPoint presentations
- Photocopied transparency of the initial tables for the case studies
- Name tags
- Masking tape
- Hole puncher
- Stapler
- Participant certificates
- Post-it notes
- Extra packets of paper (copy machine, computer internet rentals)

Timeframe for the workshop

Past workshops show that five to seven days is an optimal timeframe for teaching all the units in this manual. The exact timeframe depends on the participants' prior knowledge of the NHA methodology, their learning styles, and the size of the class.

Two sample training agendas are included: one for a regional workshop, attended by participants from multiple countries, and the other for an in-country workshop, where most participants will be potential members of that country's NHA team and/or national researchers.

The trainer should note that the sample agendas do not teach the units in the order they are arranged in Module 1, i.e., according to the chronology of the NHA process. As an example of the flexibility of the NHA curriculum, they are arranged according to the needs, interests, and prior level of knowledge of the participants.

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)?

I Sample Agendas

Sample Agenda for Regional NHA Workshop

This sample agenda is for five days. This timeline might need to be extended if the trainer does additional presentations, for example, on NHA subanalyses.

Day-1

9:00 – 9:30 am	Introduction and pre-test
	Objectives of training: Review of agenda
9:30 – 10:30 am	Conceptual overview of NHA *(Unit 1)* ◆ Definition ◆ Policy purpose ◆ Outline of tables
10:30 – 11:00 am	Tea and coffee break
11:00 am – 12:30 pm	Policy use of NHA *(Unit 8)* ◆ Policy "impact" of NHA around the world ◆ Interpreting NHA results ◆ Designing NHA to address policy uses *Group exercises*
12:30 – 1:30 pm	Lunch break
1:30 – 2:30 pm	Continuation of policy exercises (report back and discussion) *(Unit 8)*
2:30 – 3:00 pm	Tea and coffee break
3:00 – 5:00 pm	Status of NHA in the region and principal regional policy issues (Workshop participants should provide these presentations)

Day-2

9:00 – 10:30 am	Concepts of expenditures *(Unit 3)* ◆ What constitutes "expenditure"? ◆ What are the boundaries of health expenditures? ◆ Criteria for determining boundaries ◆ Space boundaries ◆ Functional boundaries ◆ Time boundaries ◆ Functional definitions of health *Includes group exercises*
10:30 – 11:00 am	Tea and coffee break
11:00 – 11:30 pm	Continuation of expenditure boundary exercises (report back and discussion) *(Unit 3)*
11:30 – 12:30 pm	Classifications: ICHA and the flexibility of NHA
12:30 – 1:30 pm	Lunch break
1:30 – 3:00 pm	Classifying financing sources and financing agents *(Unit 4)* ◆ Financing sources ◆ Financing agents ◆ Setting up the financing sources to financing agents table *Includes exercises (can also classify health care entities in countries new to NHA)*
3:00 – 3:30 pm	Tea and coffee break
3:30 – 5:00 pm	Classifications: Providers and functions; reading the tables *(Unit 4)* ◆ Providers ◆ Functions ◆ Setting up and reading the principal and additional NHA tables *Includes exercises (can also classify health care entities in countries new to NHA)*

Day-3

9:00 – 10:30 am	Continuation of classification exercises for Providers and Functions *(Unit 4)*
10:30 – 11:00 am	Tea and coffee break
11:00 – 12:30 pm	Planning the NHA process *(Unit 2)* ◆ Building the foundation for NHA ◆ Setting up the team ◆ Organizing the core team and steering committee ◆ Develop the workplan *Includes exercises: countries should draw up a tentative workplan and team organizational chart.*
12:30 – 1:30 pm	Lunch break
1:30 – 3:00 pm	Continuation of exercises for planning the NHA process *(Unit2)*
3:00 – 3:30 pm	Tea and coffee break
3:30 – 5:00 pm	Collecting data *(Unit 5)* ◆ Sources (advantages and disadvantages) ◆ Primary and secondary sources ◆ Elements to be included in some surveys ◆ Making a data plan

Day-4

9:00 – 10:30 am	Organizing data for filling in the NHA tables *(Unit 6)* ◆ General approach to filling in the tables ◆ Steps to filling in the FS x HF table ◆ Steps to filling in the HF x HP table ◆ Resolving data conflicts ◆ Avoiding double-counting
10:30 – 11:00 am	Tea and coffee break
11:00 – 12:00 pm	Continuation of discussion on filling in the tables *(Unit 6)*
12:00 – 1:00 pm	Lunch break
1:00 – 3:00 pm	Setting the context for Susmania *(Unit 7)* ◆ Susmania case study I: Filling in the FS x HF table
3:00 – 3:30 pm	Tea and coffee break
3:30 – 5:00 pm	Susmania case study II: Interpreting the data for the HF x HP table *(Unit 7)*

Day-5

9:00 –10:30 pm	Filling in the HF x Func and HP x Func tables *(Unit 7)*
10:30 – 11:00 pm	Tea and coffee break
11:00 – 1:00 pm	Susmania case study III: Filling in the HF x Func and HP x Func tables *(Unit 7)*
1:00 – 2:00 pm	Lunch break
2:00 – 3:30 pm	Institutionalization *(Unit 9)* ◆ Necessary steps for institutionalization ◆ Systemizing the procedures for data collection ◆ Issues that countries in the region are facing in institutionalizing NHA
3:30 – 4:00 pm	Post-test
4:00 – 4:30 pm	Evaluation of training
4:30 – 5:00 pm	End of training

I Sample Agenda for an In-country NHA Training

This sample agenda is for five days. This timeline might need to be extended if the trainer does additional presentations, for example, on NHA subanalyses.

Day-1

9:00 – 9:30 am	Introduction and pre-test
9:30 – 10:30 am	Conceptual overview of NHA *(Unit 1)* ◆ Definitions and purpose ◆ Outline the tables
10:30 – 11:00 am	Tea and coffee break
11:00 – 12:00 pm	Policy use of NHA *(Unit 8)* ◆ Policy "impact" of NHA around the world ◆ Interpreting NHA results *Includes group exercises*
12:00 – 1:00 pm	Lunch break
1:00 – 2:00 pm	Continuation of policy exercises (report back and discussion) *(Unit 8)*
2:00 – 2:30 pm	Tea and coffee break
2:30 – 5:00 pm	Policy design of country's NHA (Presentations provided by country participants) ◆ Findings from the launch conference of stakeholders (*should take place before training)* ◆ How the country's NHA will be designed to accommodate those policy priorities ◆ Role of the steering committee: Keeping them informed

Day-2

9:00 – 10:30 am	Concepts of expenditures *(Unit 3)* ◆ What constitutes "expenditure"? ◆ What are the boundaries of health expenditures? ◆ Criteria for determining boundaries ◆ Space boundaries ◆ Functional boundaries ◆ Time boundaries ◆ Functional definitions of health *Includes group exercises*
10:30 – 11:00 am	Tea and coffee break
11:00 – 11:30 pm	Continuation of expenditure boundary exercises (report back and discussion) *(Unit 3)*
11:30 – 12:30 pm	Classifications: ICHA and the flexibility of NHA *(Unit 4)*
12:30 – 1:30 pm	Lunch break
1:30 – 3:00 pm	Classifying financing sources and financing agents *(Unit 4)* ◆ Financing sources ◆ Financing agents ◆ Setting up the financing sources to financing agents table *Includes exercises: Classify entities in the country according to financing sources and financing agents*
3:00 – 3:30 pm	Tea and coffee break
3:30 – 5:00 pm	Continuation of classification group exercise: Identifying and coding the country's financing sources and financing agents *(Unit 4)*

Day-3

9:00 – 10:00 am	Classifications: Providers and functions, reading the tables *(Unit 4)* ◆ Providers ◆ Functions ◆ Setting up and reading the principal and additional NHA tables *Includes exercises: Classify the providers and functions*
10:00 – 10:30 am	Tea and coffee break
10:30 – 12:00 pm	Continuation of classifying the providers and functions *(Unit 4)*
12:00 – 1:00 pm	Lunch break
1:00 – 2:30 pm	Planning the NHA process *(Unit 2)* ◆ Building the foundation for NHA ◆ Setting up the team ◆ Organizing the core team and steering committee ◆ Developing the workplan *Includes exercises: Drawing up a tentative workplan and team organogram*
2:30 – 3:00 pm	Tea and coffee break
3:00 – 5:00 pm	Continuation of exercises for planning the NHA process *(Unit 2)*

Day-4

9:00 – 10:00 am	Collecting data *(Unit 5)* ◆ Sources (advantages and disadvantages) ◆ Primary and secondary sources ◆ Elements to be included in some surveys ◆ Developing a data plan
10:00 – 10:30 pm	Tea and coffee break
10:30 – 12:30 pm	Developing the country's data plan
12:30 – 1:30 pm	Lunch break
1:30 – 3:00 pm	Organizing the data for filling in the NHA tables *(Unit 6)* ◆ General approach to filling in the tables ◆ Steps to filling in the FS x HF table ◆ Steps to filling in the FA x HP table ◆ Resolving data conflicts ◆ Avoiding double-counting
3:00 – 3:30 pm	Tea and coffee break
3:30 – 5:00 pm	Susmania case study: Setting the context for Susmania and filling in the FS x FA table *(Unit 7)*

Day-5

9:00 – 10:30 am	Susmania case study: Interpreting the data for the HF x HP table *(Unit 7)*
10:30 – 11:00 am	Tea and coffee break
11:00 –12:30 pm	Susmania case study: Filling in the HF x Func and HP x Func tables *(Unit 7)*
12:30 – 1:30 pm	Lunch
1:30 – 3:00 pm	Susmania case study: Filling in the FA x Func and HP x Func tables *(Unit 7)*
3:30 – 4:30 pm	Tea and coffee break
3:30 – 4:30 pm	Institutionalization *(Unit 9)* ◆ Necessary steps for institutionalization ◆ Systemizing the procedures for data collection ◆ What is country doing for institutionalization?
4:30 – 5:00 pm	Post-test
5:00 – 5:15 pm	Evaluation of training

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

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

I

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

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

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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
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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

I

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

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).

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.

I Evaluation of NHA Training

Please provide your comments or suggestions to improve the course on these sheets.

Session Topics	Which sessions and exercises did you find MOST useful? Why?	Which sessions need improvement? What are your suggestions?
Conceptual overview of NHA		
Defining expenditures and boundaries		
Expenditures and boundaries exercises		
Policy use of NHA		
Interpretation of NHA data exercise		
Classifications – ICHA and the flexibility afforded by NHA		
Classifying financing sources and financing agents		
Identify and classify financing sources and financing agents		
Classifying providers and functions		
Classifying financing providers and functions		

Session Topics	Which sessions and exercises did you find MOST useful? Why?	Which sessions need improvement? What are your suggestions?
Setting up and reading the tables		
Planning the NHA process		
Developing a draft workplan and team organogram exercise		
Collection of data		
Developing a draft dataplan exercise		
Organizing the data for filling in the tables		
Susmania case study I– Filling in the FS x FA table		
Susmania case study II– Filling in the FA x P table		
Susmania case study III– Filling in the FA x F and the P x Func tables		
Institutionalization of NHA		

1

Unit 1

Conceptual Overview of National Health Accounts

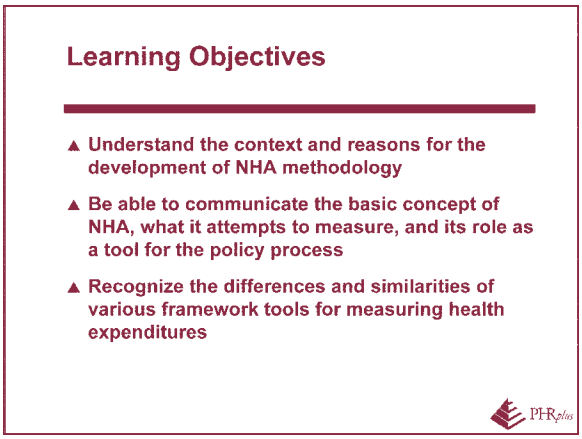
Time

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



Note to Trainers

Open this first workshop session with an informal warm-up exercise that will help introduce the participants to each other and establish a congenial learning atmosphere.

Present the technical content of the session, using the slide presentation.

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

I. Setting the Context for NHA

A. The Need for Better Health Care Financing Information

So that participants understand the need for better health care financing information, it is useful to discuss the relevance that accurate, complete, and timely financial data have to the ultimate goal of providing high quality health care. The trainer may begin by asking participants why such information is helpful to policymakers in their efforts to maximize the effectiveness of their health sectors. In the course of this discussion, the trainer should make sure the following points are examined.

Note to Trainers
Begin by asking participants why health care financing is important, then discuss issue being sure to include the points in the text and showing slide 3 from Unit 1.

Health care financing is a critical issue for many middle- and low-income nations. Many of these countries are being asked by their populations to provide more and better health care even though national health care budgets are constant or even declining. The connection between financing and health care therefore is clear – **financial resources are a means to an end**, the end here being the maintenance and improvement of a population's health status. Mobilizing funds and allocating them efficiently and effectively is key to meeting health care needs and thus to the success of any health system.

However, resource mobilization and correct allocation – to priority health programs, specific populations groups, and other targets – demand financial data that allow the accurate estimation of financing needs and allocations. Many developing countries lack these data. As a result, **policymakers are under-informed about the financial status of their health sectors, and may make misguided policy decisions** that continue or exacerbate resource constraints and misallocations. As the World Health Report 2000 (World Health Organization 2000) states, "**...information on health sector financing is necessary for strengthening policies to improve health systems functioning.**"

NHA Provides Comprehensing 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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More over, the health care financing data traditionally obtained by policymakers in middle- and low-income countries have been limited to the government's contribution to the health sector. **Countries have often failed to accurately measure other key nongovernmental sources of health care funding.** For example, they

have largely ignored the private sector contribution, even though it may be the largest source of health system funding.

Discussion 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?

Note to Trainers
Show slide 3 ask question and guide discussion.

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.

B. Importance of *Standardized* Methodology for Making International Comparisons and Drawing Lessons

The trainer should continue to set the context for NHA by explaining how difficult it was in the past to collect internationally comparable data from countries. The presentation should cover the following points:

Note to Trainers
Set the context for NHA by conveying how difficult it was in the past to collect comparable and meaningful data.

Traditionally, estimates of country health expenditures by international organizations and publications have been inconsistent (PG: pg 5-6, 1.22-1.25). This is largely because the institutions relied on estimates derived from various methodologies of data collection and reporting. This lack of standardization in what, when, and how data were collected contributed to poor quality data and irregular reporting of information not just inter organizations, but also the countries themselves. The size of the private sector's role in financing health care, particularly the extent of household expenditures was under-estimated or not even available. Public spending also may have been underestimated as countries captured only data from traditional health institutions, such as the

Note to Trainers
Display slide 5 that compares expenditure estimates between the WHO and World Bank.)

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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ministries of health, and not necessarily other relevant entities such as the ministries of education, which often fund medical training and teaching hospitals, and social health insurance units, which in some countries are outside the MOH. Lack of regular updates also was a problem. Countries could not compare their health expenditure pattern with any other country so it was difficult to judge the reasonableness of their health expenditures. International institutions often used out-of-date data, some as much as 20 years old, to estimate current spending patterns.

Discussion 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.

Note to Trainers

Show slide 5 from Unit 1. Ask Question 2 and guide the discussion.

II. Concept and Definition of NHA

The presentation begins with the definition of NHA. NHA is an internationally accepted methodology used to determine a nation's total health expenditure patterns, including public, private, and donor spending. The trainer should reiterate that NHA collects

expenditure information, for the reasons identified above.

It is also important to explain that NHA is essentially a standard set of tables that organizes, tabulates, and presents health expenditure information in a simple format. It has been designed to be straightforward and **easily understood by policymakers, including those without a background in economics.**

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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Note to Trainers

Discuss, showing slides 6 and 7 from Unit 1.

Explain that NHA is essentially a standard set of tables that organizes, tabulates, and presents health expenditure information in a simple format.

The utility of NHA is evidenced in the questions its data can answer (PG: pg 3,1.08-1.12). These questions include:

- Who finances health care?
- How much do these financing sources spend?
- Where do the health funds go (to what providers and for what services)?
- Who benefits from this health expenditure distribution pattern?

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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Another NHA feature that the trainer should be sure to communicate is that NHA tables track the **flow of health funds** through the health sector. That is to say, NHA tracks each health dollar and the path each takes from a specific source (e.g., household), to its specific intermediary (e.g., insurance company), to its specific end use (e.g., pharmacy). NHA reveals the financial transactions, and it details who is giving funds to whom; for example, households transfer 85 percent of their health funds directly to private tertiary care providers.

III. The Purpose of NHA

The single most important reason for doing NHA is to contribute to the health policy process; NHA end users are policymakers.

The trainer should emphasize that NHA tables are not merely descriptive statements that accountants and finance experts produce as an exercise but are tools designed to be used to improve the capacity of planners to manage the health sector. The comprehensive

health expenditure information presented in the tables can lead to better-informed health policy decisions and help to avoid potentially adverse policy choices. For example, the tables allow for examination of resource allocation, decisions about maintaining or modifying the allocations. When combined with data on health status, NHA can measure the cost-effectiveness of those allocation decisions (PG: pg 4, 1.15). Indeed, NHA may find that a country is allocating too much to curative care and not enough to preventive care. NHA also can monitor the implementation of new policies. For example, it may be found that following decentralization of the health sector, household spending increased more than government spending. (Policy uses of NHA will be explored in greater detail in Unit 8.)

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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Note to Trainers

Discuss, showing slide 8 from Unit 1.

Emphasize that NHA tables are tools designed to be used to improve the capacity of planners to manage the health sector.

The trainer should point out that, while NHA contributes to the policy process, it is **not the only tool** to do so. Rather, when making policies, decision makers must consider NHA data in conjunction with nonfinancial data, such as disease prevalence rates and provider utilization data.

Although NHA is designed primarily for policymakers, **NHA information also benefits donor organizations** in their funding allocation decisions and **international researchers and economists** in their efforts to study expenditure trends and best practices.

Though there have been other health accounting tools, such as public expenditure reviews, NHA is particularly useful as a policy tool. Why? NHA offers an **international standardization of health expenditure information**. This allows policymakers to compare the health expenditures of their country with those of other countries, especially countries of similar socioeconomic backgrounds. Lessons learned in one country may be relevant to another. For example, one country may spend less on health care but obtain better health outcomes than other countries. The reasons for this should be investigated and reported so that all health systems will perform well.

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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Note to Trainers

Discuss, showing slide 13 from Unit 1.

Guide the discussion.

Finally, **NHA is inclusive of all the players involved in health care financing**, including public, private, and donor sectors. Thus, policymakers are better informed about the entire health sector and not just the

government portion.

IV. Basic Framework of NHA

The trainer should first state that, at its broadest level, NHA provides information for the following indicator: **health spending as percent of gross domestic product (GDP).**

Discussion 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.

The trainer should then introduce the **first four of a possible nine tables** that should be used to produce all NHA reports. The tables show four types of health care actors, or "dimensions," that will be seen repeatedly in an NHA estimation.

The first table shows the funds transferred from Financing Sources to Financing Agents (PG: pg. 60).

- **Financing Sources (FS)** are entities that provide health funds (PG: pg. 42). They answer the question, "Where does the money come from?" Examples are ministries of finance, households, and donors.
- **Financing Agents (HF)** receive funds from financing sources and use the funds to pay for/purchase health care (PG: pg. 36, 4.03). Financing agents are important because they have

programmatic responsibilities, i.e., they control how the funds are used. This category answers the question, "Who manages and organizes the funds?" Examples are ministries of health and insurance companies.

The second table shows funds transferred from Financing Agents to Providers (PG: pg. 57).

- **Providers (HP)** are the end-users of health care funds, i.e., the entities that deliver the health service (PG: pg. 38, 4.10). They represent the answer to the question, "Where does the money go?" Examples are private and public hospitals, clinics, health care stations and pharmacies.

Note to Trainers

Introduce the first four of a possible nine tables that should be used to produce all NHA reports.

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

The third table shows the funds transferred from Financing Agents to Functions (PG: pg.59). A fourth table could show the funds transferred from Providers to Functions(PG: pg.58).

- **Functions (Func)** refer to the provider services for which health funds pay (PG: pg.23, 3.15-3.20). Information at this level answers the question, "What type of service was actually produced?" Examples are preventive, curative, and long-term nursing care, administration of care facilities, and medical goods such as pharmaceuticals.

Before concluding this section, the trainer should review the four types of health care dimensions. The definitions will be reiterated during later presentations; this is useful and helps participants to better remember how NHA labels the various players in the health sector.

V. Development of the NHA Methodology

The trainer will find that it is easier to present the historical development of NHA now that the class has been introduced to NHA's concept, purpose, and tables. Briefly, the history is as follows:

The methodology was developed after expanding upon the method of estimating health expenditures that was used by the OECD. This new method of financial analysis was designed to collect health expenditure data in the more disaggregated fashion demanded by a pluralistic health system of financing and delivery, where providers may receive payment from more than one source

and where payments may be made to numerous types of providers. NHA offered a more extensive breakdown of both public and private sources of spending, including household expenditures. Its analysis integrates expenditures from these many sectors to create a single picture of the nation's health economy.

Comparative, internationally consistent collection of data for NHA began in earnest in the mid-1990s.

VI. System of Health Accounts: How NHA Compares

The System of Health Accounts (SHA) refers to the OECD classification scheme for tracking health expenditures. SHA is considered the "parent" of NHA; more correctly, **NHA is an extension of SHA** (PG: pg. 6 box 1.1).

- SHA measures health expenditures and was originally intended for OECD countries, or nations whose health sectors are not pluralistic in nature.
- SHA covers three dimensions of health care: Financing Agents, Providers, and Functions.

NHA is essentially a "SHA for developing countries." NHA uses SHA's classification of expenditures, but disaggregates expenditures further to accommodate the pluralistic health sectors of developing countries. Specifically, NHA has an extra layer of health dimensions, namely "financing sources." All NHA classifications fit within the SHA scheme. This is clearly shown in the Guide to producing NHA and will be communicated to participants through the course of this training.

Note to Trainers

Discuss, showing slide 19 from Unit 1.

Guide the discussion.

References

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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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World Health Organization, 2000. *The World Health Report 2000; Health Systems: Improving Performance,* Chapters 4, 5. Geneva, Switzerland: WHO. (On NHA Resources CD)

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"

Note to Trainers

Discuss, showing slide 20 from Unit 1.

Guide the discussion.

Unit 1 - Slide Presentation

1

PHRplus

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.

Note to Trainers

Show slide presentation. With each slide discuss bulleted points with participants. Use background information, examples, etc. in Speaker's Notes to expand discussion.

2

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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Speaker's Notes

Bullet 1: This may be intuitive for health economists and financial experts; however, MDs and MPHs may have less focus on the financial aspect of health care. These points should be stressed, particularly if participants are predominantly of medical backgrounds.

Bullet 3: World Bank also uses NHA for many of its programs, in addition to the Public Expenditure Review. Many donors now use financial information on health resources in their decision-making process for allocating donor funds.

4

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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Note to Trainers

Ask Question 1.

Speaker's Notes

Bullet 2: For example, budgeted information is not usually collected for households, traditional healers, some private providers, etc.

Bullet 4: For exampleAfghanistan's MOH budget is being designed after reviewing the NHA findings of other countries (with similar socioeconomic status).

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?

NOTE TO TRAINERS

Ask Question 2 and guide discussion.

5

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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SPEAKER'S NOTES

The trainer can illustrate to the class how, multiple and conflicting expenditure estimates can be made if a standardized methodology is not used.

Question 2: "What types of issues can you see arising from using inaccurate and non-standardized reporting of expenditure information?" In the discussion, participants should mention the following points:

Often donors use the internationally published estimates in their own decision-making processes regarding how much to allocate to which country and which sector. Inaccurate estimates may lead to misguided decisions regarding donor funding allocation decisions.

Estimates collected using different methodologies hinder cross-country comparisons of expenditures. As a result, policymakers are unable to compare their country's spending patterns with those of other countries; useful lessons learned in one country that spends less on health but has better health outcomes may not be shared with other countries. In addition to limiting policymakers, the inability to do cross-country comparison has adverse implications for international researchers and their efforts to offer countries sound technical assistance to improve health system performance.

6

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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7

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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8

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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Speaker's Notes

Bullet 1. The policy purpose will be stressed throughout the course of this training. At this point, the trainer should communicate to the NHA team participants that "the policy impact" is what they will be striving towards as they capture health expenditures.

9

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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Speaker's Notes

For example, in Tanzania, which had traditionally done only Public Expenditure Reviews, NHA showed that the government did not control the health sector to the extent previously thought. Most spending came from donors and was channeled directly to providers. The government found it was simply funding whatever the donors weren't. This is contrary to the government leading the health sector. It almost seemed that donors were determining the health care agenda.

Conclusion: NHA shows the relative importance of various actors in the health system.

10

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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Speaker's Notes

The Middle East and North Africa NHA conference in April 2002, reviewed all NHA findings in the region. Iran's findings were of particular interest as it estimated a lower level of health expenditure than other countries yet demonstrated better health outcomes. Policymaker participants from Jordan, Egypt and elsewhere asked the Iranian delegates why this was the case. Iran attributed this to a very strong government primary care system (the government doesn't pay for tertiary care). In short: countries learned from one another.

11

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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Speaker's Notes

"Understood by policymakers": keep in mind that this does not include only those from the MOH, but also MOE, MOD, insurance companies etc.

12

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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Speaker's Notes

"Country-derived" – as opposed to donor-derived. (This was done in the past by organizations including WHO and WB – Slide 5 (reproduced on pages 1.5 and 1.13) showed their donor-derived estimates, which were sometimes based on extrapolation of data from the 1970s.)

13

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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Speaker's Notes

Many differences emerge from comparison of NHA with "guesstimates."

Again, NHA includes HHs and the private sector. This is why the Jordan total health expenditure (THE) as percentage of GDP increases significantly to 9.1 percent from 5.2 percent (WHO estimated). Same for Lebanon.

14

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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Speaker's Notes

At its broadest level, NHA estimates Total Health Expenditure as % of GDP

Though it is recommended to do the first four tables, typically countries have done the first two tables.

Each table in essence tells you the "flow of funds" and the actual "amount" of funds

15

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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Speaker's Notes

Financing Agents are – in most people's minds – the most important and most powerful group of actors in the health sector.

16

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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Speaker's Notes

Functions are not differentiated by level of services, e.g., primary, secondary, and tertiary but rather, by type of service, e.g., preventive vs curative.

17

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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Speaker's Notes

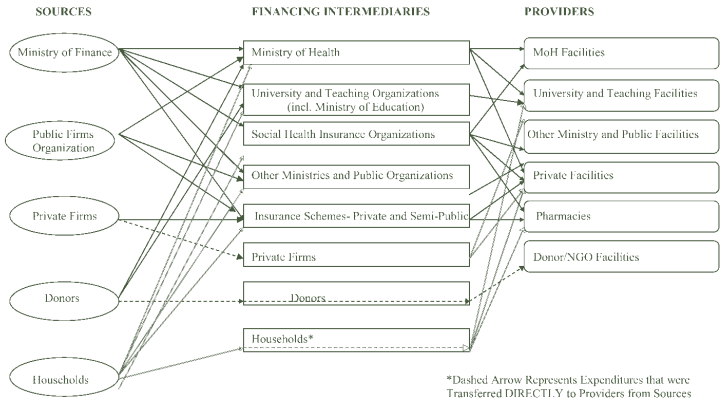
Trainer should mention that workshop will go into detail later on how to read an individual table and between tables, and that a good overview of the methodology is the NHA primer. Regarding this slide, point out that row and column headings are usually each designated by a "code" (which will be discussed later); and that a table is read from column headings to rows, e.g., central government gives "amount A" to MOH.

NHA accounts for every $ tracked through the health care system. The row totals of the first table are maintained as the column totals of second table.

The total health expenditure for the entire country is always the same in each table.

18

The Tables Show the FLOW of Funds



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Speaker's Notes

Trainer should not go into the details of the graph. It is simply an example of how the funds may actually flow in a country. NHA basically organizes these flows into its easy-to-understand table format.

20

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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Speaker's Notes

Take-home message for this slide: NHA is not different from SHA. It is an "off-shoot" and actually can be formatted or cross-walked to the SHA approach.

21

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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Speaker's Notes

"Aid" is italized because NHA is not the *only* source of information contributing to policy formulation.

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

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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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

Note to Trainers

The teaching of this topical unit should be carefully tailored to the needs of the participants. In an in-country training, where a NHA team and workplan may already have been assembled, there may be no need to review the planning process in detail. Alternatively, participants may not feel comfortable to design a workplan without the presence of key decision makers and the NHA team leaders . It is very important that the trainer, prior to the delivery of the Unit, assess the stage of planning of the participants as well as their interest and ability to make planning decisions.

Two assumptions underlie the suggested NHA planning process described here: 1) the government intends to use NHA data primarily for health care policy purposes, and 2) the government hopes to "institutionalize" NHA, i.e., conduct NHA studies on a regular basis such as annual health statistics (institutionalization is discussed in detail in Unit 9).

I. Principal Steps to Planning the NHA Process

Experience from around the world has shown that **there are five core steps** in planning a country's NHA activity:

- Building 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

Note to Trainers
Show slide 3 from Unit 2.

The trainer should emphasize that, while NHA planners should include all these steps in the planning process, they are starting points from which to develop a detailed NHA plan in a particular country. That is, while all countries need to build demand for NHA, assign entities to implement NHA, employ persons with appropriate skills to conduct NHA, and develop a plan to guide the work, different countries will approach the tasks according to factors such as their budget, political context, and ultimately their "general way of doing things." For example, some countries have preferred to contract out the NHA process to local universities; while this approach has produced solid health accounts, it minimizes government ownership of the NHA process and may jeopardize later institutionalization efforts. The trainer will need to be flexible and open to facilitating different approaches that may be selected by participants.

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

II. Building Demand for NHA

Note to Trainers
Show slide 4 from Unit 2 and discuss bullet.

In preparing a country to do NHA, understanding and demand for NHA must be built within the government and among other major health care stakeholders. There are many ways to do this: 1) **identify a "NHA advocate(s)"** in the government, 2) expose high-level policymakers to NHA at conferences, workshops, and meetings, and 3) link NHA data to national issues and debates.

Building the Demand for NHA

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

An NHA advocate is **the primary champion for "marketing" NHA** and its usefulness. This person should be well connected to decision makers as well as knowledgeable about the structure and politics of the entire health sector, public and private. NHA efforts, including the use of NHA in policy and the implementation of repeated NHA rounds, cannot be sustained without a senior-level "champion" in the government.

Note to Trainers
Show slide 5 from Unit 2.

III. Setting Up the NHA Team

A country's NHA team does the work of generating the NHA tables and raising awareness about NHA findings. The size of the team depends on the NHA budget and available personnel. Individual countries have committed varied numbers of people to the NHA team. Most have begun with four or five team members, though often one or two members do the majority of the work (PG: pg. 13, 2.08-2.10). The trainer should emphasize that, regardless of the number of members, the team will be required to perform specific tasks that demand certain types of skills. These **skills and tasks can be divided into two categories: "team leader" and "technical-level."**

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

Team leader tasks include advocacy of NHA and management of the rest of the team; they should be carried out by a person (or persons) who is an experienced and respected government official of mid-senior rank. Technical-level tasks are those of collecting, tabulating, and analyzing data; they demand skills typical of mid-ranking government officials. Trainers should review the lists in detail because workshop participants' understanding of the tasks and skills will enable them to prepare a feasible workplan for their own country.

Tasks and Responsibilities of NHA Team Leader(s)

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

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)

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

Note to Trainers

Show slides 6, 7 and 8 from Unit 2, and guide the discussion.

Skills and Knowledge of NHA Team Leader(s)

- 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

Note to Trainers

Show slides 9 from Unit 2. Guide the discussion.

Tasks and Responsibilities of Technical-level NHA Team Member(s)

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

Note to Trainers
Show slides 10, 11 and 12 from Unit 2.
Guide the discussion.

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

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 (see page 2.34)

Note to Trainers
Show slides 13 from Unit 2.
Guide the discussion.

Skills and Knowledge of Technical-level NHA Team Member(s)

- ☐ 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

Discussion Question 1

Who is the NHA advocate in your country?

Possible Answer

There is no a "correct" or "incorrect" 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

There is no a "correct" or "incorrect" answer.

Note to Trainers

The trainer can facilitate a brainstormoing discussion to identify as many issues as possible without entering into a debate. This list of issues will be useful to the team later when they are interpreting the NHA findings and looking for policy applications.

Discussion Question 3

Who are the "team leader" and "technical-level" team members in your country's NHA team?*

Possible 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.

Note to Trainers

Show slides 14 and 15 from Unit 2, and guide the discussion.

Developing an organogram may be useful to illustrate the roles and responsibilities of NHA team members. There is more discussion of the organogram below, in Subsection V, Organizing the Steering Committee, and an example in the slide presentation.

IV. Finding a "Home" for NHA

Where the NHA team will be "housed" is another important decision in determining which government entity will steer the NHA process and use (PG: pg. 12, 2.05). The trainer should emphasize that, when determining a location for NHA, the country teams **will need to consider how the data will be used in the proposed Ministry or other agency, and whether the data will significantly contribute to health policy from this location.**

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

PHRplus

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

PHRplus

Most countries choose to house NHA in the MOH. Because the MOH generally has stewardship over the health sector, it is more likely to use the NHA data than other agencies. A few countries have chosen to house the NHA in the Ministry of Finance or central statistical bureau. For example, Iran put NHA in its Statistical Bureau because it considered this institution "apolitical," increasing the chance that, this way, NHA findings would more likely be viewed as unbiased and objective.

Note to Trainers

Show slides 17, 18 and 19 from Unit 2.

Guide the discussion.

Ultimately, the location of NHA is the responsibility of each country and should be based upon where that government feels the findings will be able to maximally benefit health policy.

V. Organizing the Steering Committee and its Relationship to the NHA Team

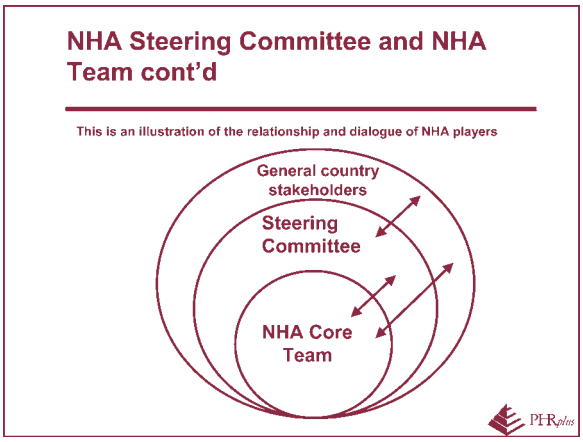
Open and effective communication between the NHA technical team and decision makers is vital for a successful NHA exercise (PG: pg. 13, 2.11). Decision makers need to convey their policy concerns to the NHA team so the team can investigate the issues; in turn, the NHA team must share its findings with the policymakers, so they can interpret the results and policy implications. A model that has proved effective in many countries is creation of **a steering committee**

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

PHRplus



(SC) that comprises senior policymakers from the ministries of health and finance as well as representatives from public and private entities that provide or finance health care. (Alternatively, an existing high-level health policy body, health taskforce, parliamentary committee for health, health council, interagency group on health, or national association can implement SC-type tasks.) The SC lends credibility, status, and policy influence to NHA.

The **main tasks** of the SC are to:

- Communicate policy concerns to the NHA team
- Give feedback to the NHA team on results and findings
- Facilitate difficulties the team encounters while collecting data
- Assist in interpreting the NHA results and drawing policy implications

The SC is **assembled by the NHA advocate** team leader or other person who has significant connections to key health care decision makers. The trainer should communicate that this is a serious undertaking because the SC is crucial to a country's ownership of NHA and development of a solid set of accounts. Assembling the SC involves a significant amount of NHA "marketing." The NHA advocate/team leader, with the support of the NHA team, **will need to design a communications strategy that may include individualized presentations for each potential SC member** in order to show the value of NHA to their work and interests. In other words, the NHA advocate team leaderwill need to show "what NHA can do for each stakeholder" in order to gain stakeholder buy-in.

Once the potential members of the steering committee are identified, **it is useful for the NHA team to determine what relationship they foresee having or desire to have with the SC**. The relationship between the team and the SC should be outlined at the beginning to clarify expectations and avoid confusion. The NHA team and the SC should also establish a meeting schedule and determine lines of communication. Some countries have found it useful to **illustrate this in an organogram.** (Two examples are provided in the slide presentation.) A clear arrangement for meetings and communications between the SC and the NHA team must be established and later enforced.

Note to Trainers

The purpose of this question is to prompt participants to identify the major health care stakeholders in their countries by visualizing the breadth of the health sector. The trainer should remind participants to include as many major private sector health care entities as possible. This question also asks participants to view the NHA exercise quite unlike other research studies, which might be carried out by one or two individuals in the MOH; in contrast, NHA is an intensive effort to involve all major health sector players.

Discussion Question 4

Which agencies, institutions, associations, and other organizations should be represented on the NHA steering committee in your country?

Possible Answer

Discussion 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.

VI. Developing the Workplan

The final step in preparing for an NHA activity is to develop a workplan. Ideally, this is done with the participation of all NHA team members and prior to the in-country NHA training. However, this does not always happen, so the trainer may need to incorporate the step into the training workshop curriculum.

Note to Trainers
Show slides 19, 20, 21, 22, and 23 from Unit 2 and guide the discussion.

For the workplan to be a useful document, it is recommended that it include (at a minimum) the **following four elements**:

1. Tasks that constitute the NHA activity

   The initial workplan helps to get the work started. While the plan should try to anticipate as many tasks as possible, it probably will be updated and revised as the work evolves. Principal tasks that many countries have encountered are listed below. The trainer should go over the list with participants before they draft a workplan for their own NHA activity.

2. Strategies and actions needed to accomplish these tasks

   Team members should discuss and write down how each task will be implemented and how much time each will take. Doing this will give the team an idea of the number of person days needed to complete a set of NHA.

3. Assignment of tasks to the team member ultimately responsible so each task will be done promptly and correctly

   This is perhaps the most crucial part of a workplan. In some countries, tasks went undone and momentum for completing NHA dissipated because team members were unclear about their responsibilities. Making assignments compels team members to understand their responsibilities and to assess the feasibility of their involvement in the NHA activity in light of their overall workloads.

4. Timeline for task completion

   Identifying a due date for every NHA task also is a key component of the workplan. The trainer should remind teams to consider potential time conflicts between NHA due dates and other major national or governmental events, such as annual budget reviews or general elections, when they are determining these dates.

Note to Trainers
Refer to Participants' Manual for the sample of the table that can be used to develop a country work plan.

Table 2.1 lists the principal tasks that NHA countries have implemented when conducting their NHA. The trainer should go over the list with workshop participants before they draft their own NHA workplan(s).

Table 2.1 Principal Tasks of the NHA Process*	
Tasks	**Comments, Description, and Purpose of Task**
1. Hold conference to launch steering committee.	The conference invites all major stakeholders and decision makers. Its purpose is to further their understanding of NHA, to request their input in the design and country-specific purpose of NHA, and to secure their support for the policy objectives of NHA. The conference also can be used to gain stakeholder agreement (particularly from the private sector) to supply data to the data collection process.
2. Hold NHA team training workshop on the methodology.	The training workshop is a venue at which several actions can be taken in addition to learning the methodology itself. ☐ Agree on classifications and boundaries (geographic, functional, and time) ☐ Develop NHA framework and approach (which tables will the country fill?) ☐ Identify primary and secondary data sources ☐ Develop a detailed data plan ☐ Refine NHA workplan
3. Develop survey instruments.	Some countries have found it useful to view the instruments of other nations. Examples are presented in the Participants Manual. An individual country's instruments are usually developed by the NHA team, although some countries have also solicited input from the SC members.
4. Determine list of institutions from which to collect data.	In some cases where the number of institutions is very large (ex. private doctor offices), a sample may need to be defined
5. Determine whether additional data collectors (enumerators) beyond the NHA team, are necessary.	A national household survey might be useful or necessary to get data on household health care utilization and expenditures. The survey would be done by the countrty's survey bureauunit. The NHA team could discuss with relevant authorities the need for a stand-alone survey or for NHA-relevant questions to be added to an existing, broader household survey.
6. Draw up clear procedures for data collection and entry.	There should be very little room for the data collectors to "interpret" how a question should be asked or how an answer should be coded. A workshop for data collectors is usually conducted for this purpose.

Cont'd on page 34

* List presupposes existence of NHA team and prior accomplishment of certain tasks.

Table 2.1 Principal Tasks of the NHA Process* Cont'd	
Tasks	**Comments, Description, and Purpose of Task**
7. Collect data and /or monitor the data collection process.	This is usually the responsibility of the NHA team. It may take the form of debriefing meetings with "senior data collectors" and/or physically traveling to urban and rural areas where data are being collected. This is especially important when household surveys are being conducted.
8. Enter and edit the data.	This should be done in a uniform and consistent manner.
9. Clean the data.	The trainer should advise participants that this takes a considerable amount of time (about a month), especially in the cases where a household survey is done.
10. Develop data analysis plan and begin to fill in the tables.	The data analysis plan outlines the steps that will be taken to fill in the NHA tables and which team member is responsible for expenditure estimates from each data source. A detailed, organized approach simplifies the otherwise complicated task of filling in the NHA tables. Examples of approaches will be presented during the course of the training.
11. Identify errors, conflicts, and missing data and reconcile these issues.	The trainer should communicate that much time and energy will be spent at this stage, especially the first round of NHA.
12. Draft the report.	The NHA team generally writes up the methodology and results. The senior-level person, with input from major policymakers, usually writes up any policy implications included in the report.
13. Disseminate draft NHA report for steering committee approval.	In many countries, this has entailed holding a dissemination meeting with the steering committee. Further input on the policy implications can be drawn from such a meeting.
14. Finalize report and produce policy briefs, and deliver dissemination presentations to target audiences.	Crucial to the successful policy use of NHA is a clear strategy on how to disseminate the results to the individuals who influence and make health policy but who do not necessarily have a background in health economics. To this end, many countries have found it useful to produce short summaries of the findings, policy briefs, specialized presentations, news conferences, and so forth.
15. Keep steering committee informed throughout all the steps of the process.	This may be done in the form of email or faxed updates done on a quarterly or monthly basis. Alternatively, small steering committee meetings can also be scheduled at different phases of the NHA implementation process. The updates regularly remind the steering committee of the NHA work and its value. The updates also serve to maintain a sense of ownership of the activity by all the principal health care stakeholders.

* List presupposes existence of NHA team and prior accomplishment of certain tasks.

Discussion 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

VII. Application of this Unit

Depending on the participants' familiarity with the NHA planning process, the trainer may choose to set aside some time (2-3 hours) to facilitate the development of country organograms and NHA workplans. If more than one country is in attendance at the workshop, it may be useful to separate the participants into country groups to work on the organogram and workplan. Because this task is demanding and requires much thought, it is recommended that it be facilitated, with at least one facilitator per country group. An example of a country workplan is included in the handouts sheets provided by the trainer. Copies will also be found in the Participants Manual.

References

No specific readings

Unit 2 - Slide Presentation

1

PHR*plus*

Unit 2:
Planning the NHA Process

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.

Note to Trainers

Show slide presentation. With each slide discuss bulleted points with participants. Use background information, examples, etc. in Speaker's Notes to expand discussion.

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

PHR*plus*

3

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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Speaker's Notes

This is a suggestion of steps that are needed. Different countries may approach an NHA differently. For example, some will prefer to contract out the NHA study to a university or other organization, but this may jeopardize efforts to institutionalize NHA within the government.

4

Building the Demand for NHA

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

PHRplus

Note to Trainers

Trainer shows slide presentation refers to notes and discusses bullets and asks Question 1.

Speaker's Notes

Bullet 1. NHA advocate will be the primary champion for spreading the word about NHA and its usefulness to the government.

5

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

PHRplus

Speaker's Notes

The core NHA team in many countries begins with 4-5 people. However, in practice, 1-2 people do the entire study. These two core members must have the "team leader" skills and "technical" skills detailed below.

6

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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7

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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8

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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9

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

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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

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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

PHRplus

12

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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13

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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14

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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15

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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16

NHA Steering Committee and NHA Team

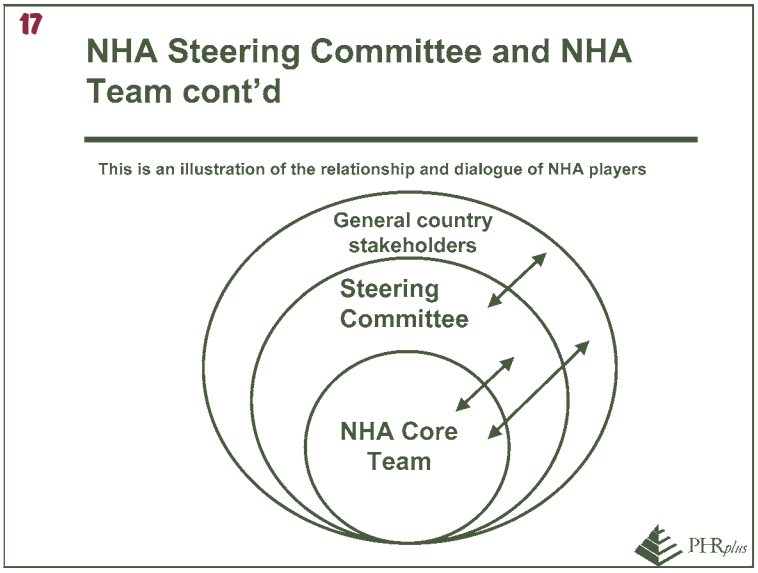
- Tasks of steering committee
  - Communicate policy concerns to NHA team
  - Give feedback to NHA team on results and findings
  - Facilitate any difficulties NHA team might encounter
  - Assist in interpreting the NHA results and drawing policy implications
- Identify steering committee members (Who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

An organogram helps to visualize the roles of the various players

PHRplus

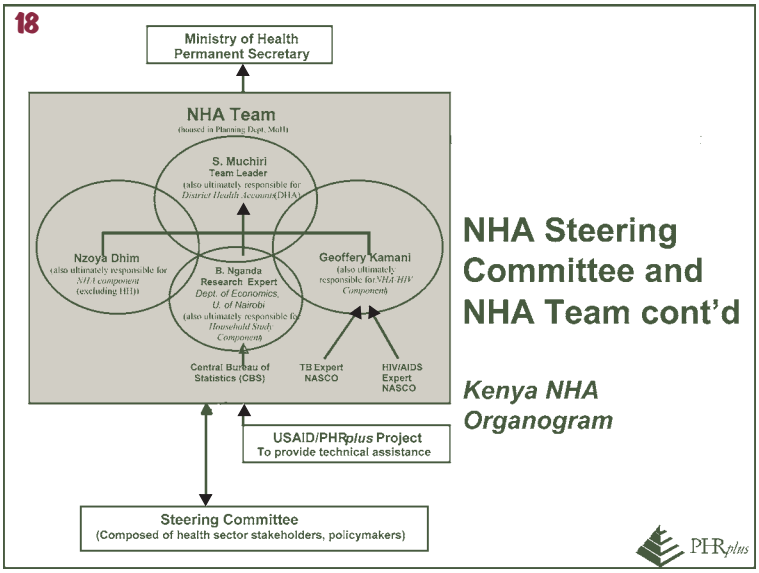
Speaker's Notes

These should be column headings of the workplan.



Speaker's Notes

The arrows indicate two-way dialogue between the major players.



Speaker's Notes

In Kenya, the NHA core team chose to lead the process- while receiving continuous feedback from Steering Group committee. PHR's role was to support the core team, which consisted of four people. Three of them were in the Ministry- namely the team leader (deputy director of planning); Nzoya, who was in charge of NHA work outside the HH and HIV/subanalysis; and Geoggery Kamani, who was responsible for coordinating the HIV/AIDS initiative. A professor from U of Nairobi, Nganda, would lead the household study in coordination with Central Bureau of Statistics. All the circles overlap- indicating some overlap of responsibilities.

19

Develop the Workplan

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

PHRplus

Speaker's Notes

These should be column headings of the workplan.

20

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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Speaker's Notes

Keep in mind that countries may add or omit tasks that are listed in this presentation.

21

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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22

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

PHRplus

Speaker's Notes

Ideally the NHA should be able to be completed in a year to a year-and-a-half.

23

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

Speaker's Notes

Bullets 1-4. If doing a regional health accounts (RHA) as well, list both regional and central level people?

Bullet 5. If doing an RHA as well, make sure to draw the relationship of central level to regional level, i.e., What is the central level's involvement? This is affected by which method the region chooses to follow (bottom-up approach, top-down, etc). Obviously, if top-down approach, then more dialogue is needed between central and regional levels.

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.

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

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

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

PI Rplus

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

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

PI Rplus

Exercises

- Discussion and application questions

Note to Trainers

Now that the trainer has laid the groundwork by explaining the fundamentals and use of NHA as well as how to plan the activity, it is almost time to start working with numbers. First, however, the trainer needs to explain **what kind of numbers — which expenditures — are calculated for the NHA.** The concept of health care and health improvement can be so broad that including in NHA everything that conceivably contributes to health would make using the methodology unaffordable, unmanageable, and untimely. This unit looks at direct health expenditures, health-related expenditures, and other expenditures that, while contributing to health, do so in a more tangential way. The unit's discussions are intended to enable participants to judge which numbers are appropriate for inclusion in their NHA

I. Defining Crucial Terms: "Expenditure," "Health Care Expenditure," and "Health Care"

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)

Some expenditures are more directly associated with health care than others. In order to keep the task of health accounting manageable and to not waste effort on less relevant expenditures, NHA focuses on "direct health care expenditures."

Why do we need to define health care expenditures? The trainer should communicate that a clear definition is crucial for the following reasons:

Note to Trainers
Show slide 4 discuss incorporating information from Speaker's Notes.

- **To minimize variations** in what is included as health care expenditures so that policymakers use accurate and consistent information. For example, if expenditures on programs to stop smoking are included one year but not the following year, then total expenditures may appear to have decreased whereas the discrepancy was actually due to inconsistency in what was included in health care expenditures. Lack of clear, documented (written) definitions makes it difficult to maintain consistency in NHA data and jeopardizes NHA's credibility and reliability.
- **To facilitate cross-country comparisons** for example, one country categorized all curative care as "inpatient care" whereas curative care can be delivered on an outpatient basis or during a day-long stay at an inpatient facility. The inaccurate definition of curative care resulted in an overestimation of the total cost of inpatient care, which was misleading for both national health policy and for comparisons to other countries. For this reason, a country NHA team must ensure that the definitions they use are clear and compatible with universal standard definitions. This enables countries to develop benchmarks to assess their own performance and to draw lessons from the experiences of their neighbors that are socioeconomically similar.

What are direct health care expenditures? – although the Producers Guide (WHO, World Bank, USAID 2003) does not use the term "direct," it is good to use the word for teaching purposes, particularly when distinguishing direct health care spending from health care-related spending. The trainer can explain the health expenditure concept by defining each part of the phrase separately.

Note to Trainers
Show slides 5, 6, 7 discuss incorporating information from Speaker's Notes.

- **Expenditure:** An expenditure measures in monetary terms the value of consumed goods and services, that is, an expenditure is **what was *spent* on a particular good or service.** Note that it emphasizes the **retrospective** (in contrast to "budget," which is prospective.)

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?

- **Health care:** Health care, as proposed by the OECD SHA manual, refers to activities performed either by institutions or individuals pursuing, through the application of medical, paramedical, and nursing knowledge and technology, the goals of (PG: pg. 20, 3.03):

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

  - Promoting health and preventing disease
  - Curing illness and reducing premature mortality
  - Providing nursing care to chronically ill persons
  - Providing nursing care to persons with health-related impairment, disability, and handicaps
  - Assisting patients to die with dignity
  - Providing and administering public health
  - Providing and administering health programs, health insurance, and other funding arrangements.

The above definition is restricted to activities based on "medical" terminology. The NHA definition of health care includes all of the activities listed above plus goods and services purchased from informal and possibly illegal health care providers, even those not medically qualified.

- NHA uses a **functional definition** of health care that includes all "**activities whose primary purpose is health improvement**" (WHO, World Bank, USAID 2003) for the nation during a defined period of time regardless of the type of institution/entity providing or paying for the health activity. In other words, NHA looks at **what is done rather than at who does it or where it is done.**

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*?

Note to Trainers
Show slide 7 discuss incorporating information from Speaker's Notes.

- Putting these two concepts together, the term "direct health care expenditure" refers to "all expenditures for activities whose primary purpose is to restore, improve, and maintain health for the nation and for individuals during a defined period of time" (PG: pg. 20 3.02).

Thus, NHA teams need to first determine whether or not the **primary purpose** of an activity is for health. Based on this distinction, expenditures will be included or excluded from the NHA tables.

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

Certain expenditures traditionally not included in health estimates may be included in NHA. For example, expenditures on provision of health by "non-health" entities – such as spending on teaching hospitals by ministries of education, traditionally excluded from total health expenditure estimates – are included in NHA. Conversely, not all activities conducted by a MOH necessarily fit within the NHA health expenditure definition. For example, hospitals may provide social counseling or the MOH may provide occupational retraining; while these activities are conducive to better health, their primary purpose is not health improvement. Thus they would be considered non-health expenditures and excluded from NHA.

Note to Trainers
Show slide 8 discuss incorporating information from Speaker's Notes.

The trainer should also point out that NHA **does not distinguish between effective and ineffective health activities.** It is the purpose of the activity, not the outcome, that is important.

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.

II. Defining the Boundaries

The trainer now must further refine the health care expenditure definition. To keep NHA manageable, expenditure "boundaries" must be established. An expenditure boundary limits what can be deemed a health expenditure. Certain expenditures may meet the functional definition of health care but exceed space and time boundaries, making the expenditure less relevant to the NHA process.

Space Boundary

The space boundaries in the NHA context rest on the premise that "**national health expenditure is not limited to the activity that takes place within the national borders**" (PG: pg. 22, 3.12). Therefore, expenditures incurred on health care by its citizens and residents who may be temporarily abroad are counted. Spending by foreign nationals on health care in the country doing NHA is generally excluded. Note, however, that in the

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

case of Jordan, it was in the country's policy interest to develop "medical tourism" as part of the health sector portfolio. Therefore, spending by foreign nationals was included within the country's NHA boundary for health care expense.

Another context where defining space boundary is relevant is donor assistance to developing countries. If the primary purpose of an international organization is to provide health and health-related goods and services for the residents of the recipient country, then the direct expenditures (both cash and in-kind) associated with those goods and services should be included. Administrative and overhead expenses associated with donor programs should be excluded.

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

3

Time Boundary

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

For what time period should expenditures be tracked? Care must be taken to clearly specify this boundary as either a calendar or a fiscal year (PG: pg. 20, 3.13-3.14). Such care is needed because some entities (such as government) may report spending on the basis of a fiscal year while another (perhaps in the private sector) reports by calendar year. Another element of the time boundary is the distinction between when the activity takes place and when the payment for that activity takes place. NHA uses the **accrual method** of accounting, which means that the **value of goods and services should be accounted for in the same year in which they are sold and provided and not when they are paid for**. For example, if a hospital stay occurs in the last week of one fiscal year and the payment is made in the following week (start of the new fiscal year), the cost and revenue associated with that hospital stay will be accounted for in the books of the first year (when the services were delivered) and not when the disbursement was made (in the new fiscal year).

Using these guidelines the trainer should identify more examples of expenditures that are ambiguous in nature and discuss whether they should or should not be included and why.

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

III. Criteria for Inclusion as a Health Expenditure

Not all expenditures that meet the previous criteria (primary purpose is health, space and time boundaries) are included in NHA. There are a few more criteria that help make NHA easier and more useful to understand.

- **The 2 percent threshold:** The most critical guiding rule on whether to include certain expenditures is "how big are those expenditures?" The general rule is to include them if they are more than 2 percent of the country's total health (care) expenditures (THE). If they are less than 2 percent, it may not be worth expending the time and effort to precisely measure these expenditures. Such small amounts would be of little policy relevance.

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

- **Policy relevance:** There is an exception to the 2 percent rule. Because the purpose of NHA is to inform policy decisions, NHA should include all health expenditures that are relevant to countries' current health policy development efforts. Policymakers should be informed about even small (less than 2 percent) amounts of expenditure when that information has bearing on the design of policy, the choice between policy options, and the evaluation of policy decisions taken. The team can use the policy issues identified in Unit 2 (Discussion Question 2) to judge policy relevance.

Other criteria to keep in mind when including health expenditures:

- **Transparency:** There should be clear documentation of the sources of expenditure data, the classifications and definitions used, and any adjustments or calculations. Typically, this requires preparation of a written manual for NHA estimates in each country. (Throughout the training workshop, the trainer should reiterate the need for country teams to document in writing all methodological assumptions and decisions that they use in conducting NHA, e.g. undocumented rumors of bribes paid in the health sector would be excluded.)

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

Note to Trainers

Other examples of non-market production and uncompensated activities:

Non-profit organizations such as missionary hospitals providing health care that is free to the patient.

Subsidies and grants provided by donors or other philanthropic organizations to reduce the burden of user fees on patients.

- **Compatibility with existing international standards and practices:** The health expenditure measures should be compatible with international standard classifications and definitions, such as those of the System of National Accounts and government finance statistics. Departures from these standards to accommodate country-specific issues should be clearly documented.
- **Measurement feasibility:** Due to limited time and resources to conduct NHA, countries may not be able to include some expenditures or not collect the highest quality data on some expenditures. For example, a NHA report that includes a survey of household health expenditures could take more than two years to complete and thousands of dollars. Thus, a country should **weigh the time and quality trade-off** when planning NHA exercises. To minimize the time and financial cost of an NHA exercise, the team has three options:
  - Accept a rough estimate instead of more exact data and clearly document it as such
  - Exclude the rough estimates
  - Carry out the required data collection with the time and resources available. If better data become available at a later date, the NHA for the given year can be revised, or a better estimate can be used in a later NHA round.

Note to Trainers
Show slide 13 discuss incorporating information from Speaker's Notes.

IV. Issues When Measuring Health Expenditures

There also are expenditures about which the health accountant has to exercise caution and discretion when deciding whether to include and how to treat them.

Note to Trainers
Show slide 14 discuss incorporating information from Speaker's Notes.

Use the Final Market Price in the Private-for-profit Sector

When deciding how much was actually spent on a particular private for-profit product or service, the **accountant should use the total revenue earned for the product or service at the point of final consumption** (PG: pg. 172, 12.13). These market prices include all the intermediate costs and value added in each stage of production, such as the cost of labor (salaries, etc.), capital goods, overhead, and maintenance. For example, for

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

drugs sold in the private for-profit sector, this is the sales revenue of retail pharmacies, not the revenue of drug manufacturers or distributors. If a private hospital has a gross revenue of $100 million, the full $100 million should be included in the NHA estimate, but not the revenue of the companies that supply the hospital with materials, food, equipment, etc.

What to do when there is no Market Price (PG: pg. 173, 12.15-12.18

Many health activities take place outside the market economy there is no exchange of money when health goods and services are delivered to the final consumer. But that does not mean they have no value. Do we include these activities? How do we monetize* them?

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

- **Free Health Goods and Services**

  Health goods and services produced by entities such as governments and not-for-profit organizations (e.g. missionary hospital) are delivered at zero or subsidized cost to users. Some private and parastatal employers provide health services to their employers for free. If a patient receives free health care at a government, NGO or employer clinic, it does not mean that there are not financial costs incurred in delivering that service. The NHA accountant must collect data from the entity on how much it spent to deliver the health goods or services.

- **Donated Goods**

  Another example is in-kind donor assistance such as vaccines or medical equipment. In the case of donated goods, the market price of the same or similar item would be used to estimate the value of the donated good.

- **Barter Exchanges**

  In many developing countries, a health care provider may be paid by a barter exchange (a chicken or grain). This is especially common with traditional healers. The NHA

* Monetize means to estimate a monetary value

accountant can monetize these activities by finding out the market price of the chicken or whatever item is most commonly used for barter payment. Another way to monetize is to use the price paid to traditional healers by their patients that pay in money. If this practice is not common then it may not meet the "2% Rule" and can be excluded.

Note to Trainers
Show slides 15 and 16 discuss incorporating information from Speaker's Notes.

- **Uncompensated Care**

  Uncompensated health care activities refer to the care and nursing provided by family members to a sick individual (PG: pg. 175, 12.22). Often these inputs are quite significant, for example, home-based care for the elderly or people living with HIV/AIDS. However, trying to capture these expenses is very time consuming; doing so could force NHA completion into an unreasonably long timeframe. In addition the services are very difficult to monetize. Thus, uncompensated care expenses are usually **not included in total health expenditures** captured by the NHA framework.

Capital Expenditures

Two aspects of capital formation should be incorporated in the estimation of health care expenditures: gross fixed capital formation and consumption (PG: pg. 175, 12.19-12.21). "Capital" refers to goods that have a useful life of more than one year, for example buildings, equipment, and vehicles. There are two ways to capture capital expenditures. The first way is to include the full cost of the capital good in the year that it was paid for. For example if the government purchases a sonogram machine and builds an expansion of a hospital in 2002 the full amount of this expenditure would be included in the 2002 NHA. Most developing country governments account for capital expenditures this way. The second way is to "depreciate" the capital good. This means calculating the value of using up the capital good each year. Using the simplest depreciation method as an example, for a sonogram machine that costs $100,000 and has a useful life of

Capital Expenditures

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

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.

five years, the depreciation expense would be $20,000 each year (1/5 of the purchase price). The NHA accountant would include the $20,000 depreciation expense in the NHA. Most private companies use depreciation to account for capital expenditure. Unit 4 explains how capital expenditures are classified and reported in the NHA table. Note that we do not need to worry about capital expenditures in the private for-proffit sector, because the cost of these items is reflected in the prices they charge to their patients.

Note to Trainers

Trainer shows slides 17 and 18 refers to notes and discusses bullets.

V. Health Care-Related Expenditures

In addition to "direct" health care expenditures, a country may choose to include expenses on health care-related activities that are important to national policy interests (PG: pg. 21, 3.07-3.11 and Table 3.1). Health care-related expenditures refer to activities that may overlap with other disciplines, such as education, overall "social" expenditures, research, and development. Health-related activities 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

Table 3.1. Health Care-Related Activities

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	Nutritional 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 education and in-service training for paramedical workers	Secondary school education received by future physicians or health workers
Research	Medical research; health services research to improve program performance	Basic scientific research in biology and chemistry

Source: PG: pg. 21, Table 3.1.
Note: One boundary area of concern is domestic research on drugs and pharmaceuticals. Health accountants should determine if this item is of interest to policymakers. If so, it could be included.

functions.[1] An example of a health-related activity is the surveillance of drinking water quality if its primary purpose is to eliminate water-borne disease. Other examples are included in Table 3.1. Still other activities, such as the construction of large urban water supply systems intended primarily to improve urban access to water, are neither direct health nor health-related expenditures, as their purpose is not primarily to improve health.

Health Care-RELATED Activities

- Should be distinguished from DIRECT health care activities (that have been described up until 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

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

A theoretical argument can be made that many things are related to health: food, housing, employment, national security, etc. However, if all such items are included, the NHA report will be less precise and therefore less useful as a policy tool – and too big a task to complete. As with other aspects of NHA – timeframe, amount of expenditure, uncompensated care, etc. – NHA teams must set boundaries for inclusion of health-related activities.

Discussion Question 4

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

Answer

Now that participants have mastered the concepts of health care expenditures, they are ready to learn and apply the classification codes prescribed in the International Classification of Health Accounts (ICHA).

[1] The inclusion of health-related expenses in the NHA tables is presented separately from the direct health expenses. Unit 4 (Understanding Classifications and the NHA Framework) elaborates on how this distinction between direct and health-related expenses should be handled.

VI. Application of this Unit

After delivering the slide presentation, the trainer should set aside approximately 30 minutes to discuss some of the boundary application questions below that relate to a fictitious country. These questions prompt participants to consider more closely whether or not the activities described should be included in NHA estimates. Illustrative answers, recommended by the Guide to producing NHA also are given. However, rather than focusing on whether the participants' answers match those suggested, the trainer should pay close attention to the participants' responses and justifications. Ultimately, country NHA teams will need to note and record similar types of justifications when they determine the health care expenditure boundaries for their own countries.

Note to Trainers

Divide the class into groups of five people maximum. Each group should elect a rapporteur. Each group should be given one or two questions to discuss among themselves. After approximately 20 minutes the plenary group should reconvene and, after another few minutes for the groups to read each others' questions, the rapporteurs should present their group's answers and justifications.

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.

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Unit 3 - Slide Presentation

1

PHRplus

Unit 3:
Defining Expenditures and Boundaries for NHA

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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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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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Speaker's Notes

Before reading the slide, the trainer should point out that, "Deciding what to measure and what not to measure in estimating health expenditure is a critical step in doing NHA."

To figure out what to measure and what not to measure, national analysts should consider both the conditions in their own country as well as their contribution to and benefit from international comparisons.

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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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Speaker's Notes

Bullet 1. Without a clear definition, it becomes easy to find holes in a NHA study, which reduces its credibility and reliability.

Write down all assumptions; take notes of what exactly you are measuring – this will be reiterated throughout this training.

Bullet 2. For example, because of a lack of a clear definition, some countries treated all curative care as inpatient care. This assumption is clearly misleading. Curative care can be outpatient or a day-long stay at an inpatient facility. Clearly, this assumption caused an overestimation of the countries' total cost of inpatient care.

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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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Speaker's Notes

Bullet 2. Emphasizes the "past tense" of spend.

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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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Speaker's Notes

NHA does not distinguish between effective and ineffective health activities. The purpose – not the outcome – of the activity is important.

What about (ask class): health care in prisons provided and paid for by Ministry of Justice (yes)? disposal of used syringes and gloves at a health clinic (yes: environmental health)? etc.

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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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Speaker's Notes

Bullet 2. Therefore, "non-health" entities are included: For example, prior to the adoption of NHA, spending by the MOE on teaching hospitals was excluded from total health expenditure estimates. Now it is included. Similarly, not all activities conducted by the MOH necessarily fit within the health expenditure definition. For example, the MOH may contribute to funding orphanages. Since the primary purpose of the orphanage is not to improve health – rather it is to provide a home for orphans – NHA excludes this (non-health) expenditure. Also, the MOH may fund old-age retirement homes – again this falls outside the definition of health care.

Bullet 3. To decide if something is a health care activity, ask yourself the question, "What is the primary purpose.?"

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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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Speaker's Notes

In later slides, the trainer will discuss what can be done with activities that are "health-related," i.e., indirectly improve health care (e.g., sanitation services). Generally, these activities are excluded; however, if the country's policy context values these activities as part of its health care sector, they may be considered as "health care-related."

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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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Speaker's Notes

A boundary or a "limit to what a health expenditure can include."

Sub-bullet 1. Kenya did want to track this because many citizens go overseas for HIV/AIDS treatment.

Sub-bullet 2. In some countries, e.g. Jordan, medical tourism is an important industry. For policy reasons, the government wanted to track expenditures by foreign nationals in Jordan. Though these expenditures are outside the space boundary of health expenditures, expenditures on medical tourism can be captured an addendum item external to the basic NHA. This would respond to policy needs while maintaining international comparability.

Sub-bullet 4. Excludes donor assistance, e.g., embassy staff who report on program activities to the donating country.

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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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Speaker's Notes

For what time period should expenditures be tracked?

For in-country training, trainer can ask, what time period is being considered in that country?

Accrual vs. cash: If payment for a service is made the year after the service was delivered, the expenditure should be captured in the fiscal year when the service was actually delivered.

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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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Speaker's Notes

Bullet 1. The 2% threshold has been recommended by international experts: If an expenditure is estimated to be less than 2% of THE, it is not worth expending extra time and effort to capture it. Such small amounts of expenditures are of less policy relevance. For example, in one African country where PHR did technical assistance, the NHA team struggled for some time about how to capture and whether they should capture the costs for "ventilation masks" used in hospitals. In the end, the team was asked whether it really was worth it to track this expenditure and whether it was policy relevant.

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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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Speaker's Notes

Bullet 2. International compatibility: departures from these standards to accommodate country-specific issues should be clearly documented.

Bullet 3: Trainer may want to stress that to have an extremely sound methodological NHA report may take two years. The data could be outdated or no longer policy-relevant by the time the study is complete. Keep this time and quality tradeoff in mind.

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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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Speaker's Notes

Market production: easy because market producers must cover all their intermediate expenses including labor inputs (i.e., salaries), capital goods used, and maintenance.

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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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Speaker's Notes

Non-market refers to those entities producing health care at a subsidized or zero cost.

For example, when donors give in-kind assistance such as vaccinations or equipment, the market price of these goods in the recipient country would be used to estimate the total cost.

What if HH user fee goes back to MOF; it is not included in cost of services, because the value of the service produced is represented by the production cost of government providers.

Payment to a traditional healer is sometimes in the form of a barter exchange (chicken, grain, etc). The health accountant must decide how to monetize this form of payment.

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Capital Expenditures

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

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Speaker's Notes

Sub-bullet 2. Again, balance the time factor. If you want to capture this activity, it will be difficult to complete NHA in a reasonable time period.

FYI: Mexico is trying to capture this.

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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.

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Speaker's Notes

Sub-bullet 2. Consumption of capital refers to estimating the value of the use of capital assets. The value of fixed capital is partially used during the year of its purchase; however, that item, say, a dialysis machine, does have a lifespan of use. So, ideally, the monetary value should be distributed over the lifespan of the product. Therefore, the NHA team should ideally estimate the depreciation charged on the product. But this may not be practical in most developing countries.

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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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Speaker's Notes

Trainer could mention that conceptually many things are related to health, including food, housing, employment, and national security. But if you include **everything** related to health, NHA would cease to be a useful policy tool – and will be a limitless task.

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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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Speaker's Notes

Trainer will need to specify that what is core health and what is health-related will ultimately be decided upon by the country. The definitions and distinctions must be thoroughly documented.

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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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Speaker's Notes

In-country and regional trainings: the trainer may want to break the class into groups of 5 people (maximum) to discuss one of the questions (approx. 20 minutes). Time should be allotted for the group's elected spokesperson to read and justify the answers. Before each report-back presentation, leave some time for the other groups to read the questions they did not tackle. The report-back presentations and class discussion should take approximately 30 minutes.

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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

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

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.

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

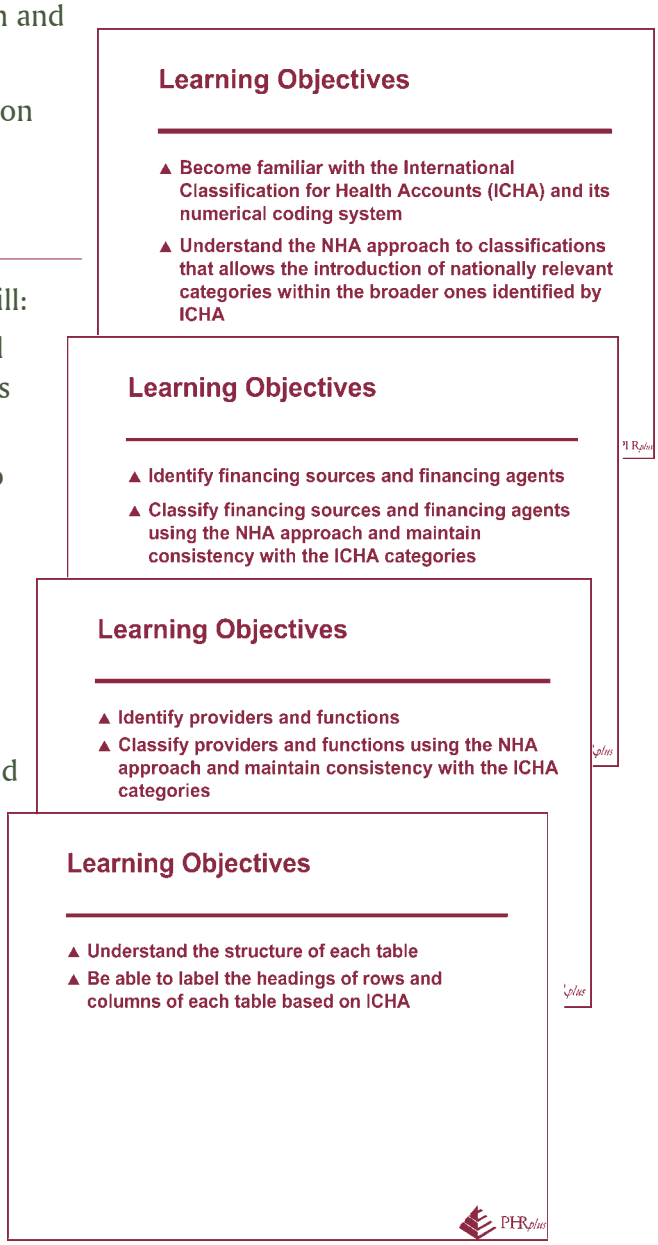
At the end of this unit, participants will:

- 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

Note to Trainers

This unit returns to material that was introduced in Units 1 and 2. The trainer should begin each section of the unit by asking participants to briefly describe what they remember about individual topics – the System of Health Accounts provenance of NHA, major NHA classifications – before leading the participants through this unit's more detailed presentation and exercises on each topic.

The slide presentation accompanying this unit is divided into four sections: 4a) Understanding Classifications and Tables, 4b) Classifying Financing Sources and Financing Agents, 4c) Classifying Providers and Functions, and 4d) Setting up and Reading the Tables.



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
- Classifications for Functions
- Setting up the tables

Exercises

- Identify and classify financing sources, financing agents, providers, and functions.

I. The International Classification for Health Accounts

The trainer can begin this unit by reminding participants that the "parent" of NHA is the Organization for Economic Cooperation and Development (OECD) International Classification for Health Accounts (PG: pg. 5, 1.22; pg. 6, Box 1.1).

Each NHA table categorizes health care entities in accordance with ICHA. This classification scheme describes the principal dimensions of a health care system (namely, financing sources, financing agents, providers, and functions) in terms of categories whose contents have common characteristics. For example, sources of health financing may be broken down into the following categories: "public funds," "private funds," and "rest of the world funds." With these categories, ICHA offers a common vocabulary by which countries can describe the financiers, purchasers, and users of health care and the health services themselves. Using a globally accepted standard allows countries to conduct international comparisons of their health systems' performance.

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

Note to Trainers

Direct the participants to the list of ICHA names for subcategories and their respective codes. A more thorough listing of ICHA classifications is found in A System of Health Accounts (OECD 2000).

Training timeline: It is recommended that the slide presentation of this unit be delivered in two 45-minute sessions, the first session focusing on financing sources and financing agents (subsections III and IV), and the second on providers and functions (V and VI).

Each classification and category of ICHA (and NHA) has a code. A letter code is used for the four main classifications used by NHA:

- Financing sources of health expenditures are denoted by the code *FS*[2]
- Financing agents are denoted by the code *HF*
- Health providers are denoted by the code *HP*
- Health care functions are denoted by the code *HC*

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"

ICHA subdivides these broad categories into more specific entities such as "public funds," which are designated by a numerical code. Therefore, in the row or column heading of each NHA table, the subcategory is listed first by:

- The letter code for the principal ICHA categories, e.g., "FS" for Financing Sources
- Followed by a numerical code, e.g., "FS.1"
- And finally, the ICHA name for the subcategory, e.g., "FS.1 Public Funds"

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"

Note to Trainers

Stress that the team must make every attempt to retain at least the first two levels (two-digit code) of an ICHA category before adding subcategories.

II. The NHA Approach to Classifications: Flexibility to Meet Country Needs

As explained in Unit 1, ICHA was developed for the SHA that has been promoted for OECD countries. NHA is an extension of SHA that targets the needs of low- and middle-income countries: The NHA methodology starts with SHA classifications but allows further disaggregation of categories to accommodate the pluralistic nature of developing countries' health care systems. NHA thus stipulates the following

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

Note to Trainers

Show slides 8 through 12 from presentation 4(a), refer to notes and discuss bullets.

Note to Trainers

Throughout this section, trainer needs to reinforce the strong link between the NHA approach and that of System of Health Accounts and its international classification scheme.

[2] This category was not initially included in the ICHA scheme, but is an additional classification developed for use in NHA exercises.

criteria when designing a country's health sector classification structure (PG: pg. 5, 1.19):

- Respect, to the extent possible, the existing international standards and conventions while being flexible to meet the specific policy needs required for national analysis. It is possible to introduce nationally relevant categories, but they should fit within the broader ICHA categories. For example, take a country that wishes to compare spending in its public and private hospitals:

  ICHA provides only a general classification for hospitals, namely "H.P.1.1 General hospitals." This reflects ICHA's original design for OECD countries, most of which have only public providers and thus no policy need to distinguish between public and private hospitals. However, the classification is too broad for policymaking in many middle- and low-income countries, which have more pluralistic health systems.

- When adding subcategories, the first two characters of the code should match ICHA categories. The numbers that follow can designate the more disaggregated, nationally relevant classification. For example, to accommodate the "public" and "private" distinction for hospitals, NHA can add subcategories:

  HP.1.1.1 = "GOVERNMENT general hospitals"

  HP.1.1.2 = "NONGOVERNMENT general hospitals"

- The trainer can also point out, that it is possible to eliminate ICHA categories that are not relevant in a particular country.
- Each category should be mutually exclusive and exhaustive. This ensures that each expenditure transaction can be placed in one and only one category.
- The classification scheme should be FEASIBLE. In other words, the classification should be clear and the data be available to be collected.

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

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

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

Inasmuch as these criteria are complementary, they may also conflict with one another. The NHA team must resolve the conflict in a way that best preserves the policy relevance of NHA.

III. Identification and Classifications for Financing Sources

As introduced in Unit 1, financing sources are the ultimate financiers of the health system and answer the question "where does the money come from?" Table 4.1 illustrates typical categories and subcategories for financing sources. In the following four tables the unshaded rows are ICHA classifications. The shaded rows illustrate possible new subcategories that respond to the country's priorities.

Note to Trainers
Before showing slide 3 from presentation 4(b), discuss the bullet notes. Then proceed to show the slide and continue with the presentation.

Note to Trainers
Have participants refer to table of ICHA Classifications from Unit 4.

Table 4.1: Classification of NHA Financing Sources

Code	Description
FS.1	Public funds
FS.1.1	Territorial government revenue
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.2.2	Household funds
FS.2.3	Non-profit institutions serving individual grants
FS.2.4	Other private funds
FS.3	Rest of the World funds

Financing sources are divided into three broad categories: public, private, and rest of the world. **Some categories and subcategories generally elicit questions from participants**; the trainer should be ready to explain the following:

Under "FS.1 Public Funds" (PG: pg, 42, 4.22-4.23; pg 260, B.05-B.08)

- **Territorial government funds:** captures all funds generated as general revenue from the territorial government. This generally refers to Ministry of finance contributions to health care. Territorial government revenue includes taxes that are earmarked for health care but collected as value-added taxes (e.g., national lotteries that fund specific health programs), and/or income, and property taxes. Note that this classification does not include payroll taxes collected by the government for social security, which is generally categorized under "Employer funds."

Under "FS.2 Private Funds:" (PG: pg, 43, 4.24; pg 261, B.10-B.18)

- **Employer funds:** refers to a private employer's contributions to the "private" insurance program of an employee or to "social security schemes" (usually mandatory).
- **Parastatal employer funds:** describes semi-public or state-owned companies such as a national airline. If a country chooses to distinguish parastatal expenditures, it may do so by adding this subcategory. The parastatal company's degree of autonomy from the government determines its placement in either the private or public funds category.

"Rest of the world funds: FS.3" includes health funds contributed by international or bilateral donor partners (PG: pg, 43, 4.25; pg 261, B.19).

IV. Identification and Classifications for Financing Agents

Note to Trainers
Before showing slide 5 from presentation 4(b), discuss the bullet notes. Then show the slide and continue with the presentation.

Table 4.2 contains categories and subcategories in a sample NHA classification for financing agents, those entities that have programmatic control over how the funds are spent (PG: pg, 36, 4.03-4.09).

Note to Trainers
Have participants refer to laminated table of ICHA Classifications from Unit 4.

Table 4.2: Classification of NHA 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 employee insurance programmes
HF.2.5.1	Parastatal companies
HF.B	Nonpublic sector
HF.2.1.2	Private employer insurance programmes
HF.2.2	Private insurance enterprises (other than social insurance)
HF.2.3	Private households' out-of-pocket payment
HF.2.4	Non-profit institutions serving households (other than social insurance)
HF.2.5.2	Private nonparastatal firms and corporations (other than health insurance)
HF.3	Rest of the world

Note to Trainers
Remind participants that, as with the NHA Financing Sources table, the unshaded rows are categories found in ICHA. Shaded rows list possible new subcategories that reflect additional country priorities. Note that specific ministries, such as health, can be added as subcategories.

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.

The trainer should give further explanations of some of these subcategories (PG: pg. 37, 4.06; footnote #6):

- **Social security funds:** are general social insurance programs funded by compulsory contributions from the formal sector for large sections of the community. Social security funds can include nonhealth services, such as pensions, that should be excluded from the health expenditure estimate.
- **Private social insurance:** are programs that are mandated for a select group of people. This category includes insurance programs set up by the government for its employees only (e.g., civil servants health insurance that may exist outside of the general social security schemes). It may also include *mutuelles* (mutual health organizations), which are member owned and controlled but may also receive contributions from the government.
- **Private insurance enterprises (other than social insurance):** refers to both for-profit and non-profit insurance companies that are voluntary for the beneficiary and do not receive government contributions.
- **Private firms and corporations (other than health insurance):** includes corporations that administer their own health care program for employees but whose principal purpose is the production of market goods or services, not provision of health care. This category could also include parastatal companies that provide health care to employees.

Note to Trainers

Before presenting this section, ask participants to describe their understanding of 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?

Note to Trainers

If this is an in-country training, show slide 9 and have participants do exercises on slides 6 and 8 of presentation 4(b).

If this is a regional training, have participants do their own country classifications as homework and check them the next day.

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

Note to Trainers
You should allot one hour for this exercise.

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 to Trainers
If a question arise in reference to Providers and Functions, tell the participants to **wait.** These two items will be addressed later.

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

PHRplus

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.

PHRplus

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

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?

PHRplus

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)

Note to Trainers

Begin this exercise by asking the class to draw a flowchart of the country's health care system, or simply list all the major health entities. Afterwards, the class should go through each relevant entity on the list and identify it as a source or financing agent (providers and functions will be done later).

It is useful to do this on flipcharts.

These two questions generally take the class about 2 hours, because the concepts of FS and HF are complex, and there needs to be clear understanding of the structure of the health system by the participants.

Participants can list them in the blank tables supplied for this exercise.

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)

V. Identification and Classifications for Providers

"Providers" are entities that provide or deliver health care and health-related services. They are the answer to the question "who" provides health care services or "where" are services provided (PG: pg. 38, 4.10-4.19).

The ICHA categories for providers include a number of entities of limited relevance for many countries. For example, some countries have no nursing and residential care facilities. On the other hand, other countries have types of providers for which ICHA has not established categories. ICHA does not subdivide the provider classification by type of ownership, a disaggregation that may be useful to many countries' policy contexts. For example, owners of outpatient community centers may be non-profit organizations, governments, or others. To address this, a national NHA team may delete irrelevant ICHA categories and add needed subcategories.

Note to Trainers
Show slide 3 from presentation 4(c) for initial text and discuss with participants.

Table 4.3 shows a list of the ICHA provider categories.

The trainer may also want to explain some of these categories:

- **Offices of physicians.** Refers to health practitioners who hold a doctor of medicine or corresponding degree, and who are primarily engaged in the independent practice of general or specialized medicine. These categories refer to primarily "private" practices of physicians.
- **Offices of dentists.** Like "offices of physicians," refers primarily to private independent dental practices.
- **Offices of other health practitioners. May** include independent practices of other health practitioners such as chiropractors and optometrists. A subcategory may be included to designate "traditional medicine" providers.
- **Dispensing chemists.** Pharmacies (public and private).
- **Provision and administration of public health programs.** Includes both government and private administration and provision of public health programs.
- **General health administration and insurance.** Refers to establishments primarily engaged in the regulation of activities of agencies that provide health care and health insurance (e.g., agencies that regulate licensing of providers, safety in the workplace, etc.).

Table 4.3: Classification of NHA Providers	
Code	**Description**
HP.1	**Hospitals**
HP.1.1	General hospitals
HP.1.2	Mental health and substance abuse hospitals
HP.1.3	Specialty (other than mental health and substance abuse) hospitals
HP.1.4	Hospitals of non-allopathic systems of medicine (such as Chinese, Ayurveda, etc.)
HP.2	**Nursing and residential care facilities**
HP.2.1	Nursing care facilities
HP.2.2	Residential mental retardation, mental health and substance abuse facilities
HP.2.3	Community care facilities for the elderly
HP.2.9	All other residential care facilities
HP.3	**Providers of ambulatory health care**
HP.3.1	Offices of physicians
HP.3.2	Offices of dentists
HP.3.3	Offices of other health practitioners
HP.3.4	Outpatient care centres
HP.3.4.1	Family planning centres
HP.3.4.2	Outpatient mental health and substance abuse centres
HP.3.4.3	Free-standing ambulatory surgery centres
HP.3.4.4	Dialysis care centres
HP.3.4.5	All other outpatient multi-specialty and cooperative service centres
HP.3.4.9	All other outpatient community and other integrated care centers
HP.3.5	Medical and diagnostic laboratories
HP.3.6	Providers of home health care services
HP.3.9	Other providers of ambulatory health care services
HP.3.9.1	Ambulance services
HP.3.9.2	Blood and organ banks
HP.3.9.3	Alternative or traditional practitioners
HP.3.9.9	All other ambulatory health care services
HP.4	**Retail sale and other providers of medical goods**
HP.4.1	Dispensing chemists
HP.4.2	Retail sale and other suppliers of optical glasses and other vision products
HP.4.3	Retail sale and other suppliers of hearing aids
HP.4.4	Retail sale and other suppliers of medical appliances (other than optical glasses and hearing aids)
HP.4.9	**All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods**
HP.5	**Provision and administration of public health programmes**
HP.6	**General health administration and insurance**
HP.6.1	Government administration of health
HP.6.2	Social security funds
HP.6.3	Other social insurance
HP.6.4	Other (private) insurance
HP.6.9	All other providers of health administration
HP.7	**All other industries (rest of the economy)**
HP.7.1	Establishments as providers of occupational health care services
HP.7.2	Private households as providers of home care
HP.7.3	All other industries as secondary producers of health care
HP.8	**Institutions providing health-related services**
HP.8.1	Research institutions
HP.8.2	Education and training institutions
HP.8.3	Other institutions providing health-related services
HP.9	**Rest of the world**
HP.nsk	**Provider not specified by kind**

VI. Classifications for Functions

"Functions" describes "what" types of services are delivered, in contrast to "providers," that refers to "who" or "what" deliver care. Table 4.4 lists ICHA and NHA categories and subcategories in the functions classification (PG: pg. 23, 3-15-3.20).

Example

The need for classification for providers is keenly manifested in the case of curative care and primary care. In the absence of a classification system or clear-cut definitions, inpatient care is often considered to be curative care and outpatient care is equated with primary care. This assumption is incorrect: not all inpatient is curative and not all outpatient care is only primary. Classifying different types of care and where it is provided will avoid such false assumptions in the future.

The trainer should elaborate on some of the functional classifications:

- **Day cases of curative care:** include services such as ambulatory surgery, dialysis, and oncological care, none of which should require an overnight stay (otherwise would be classified as inpatient care).
- **Outpatient curative care:** includes outpatient health care services delivered by physicians in the ambulatory health care facilities or areas of a facility – i.e., a hospital may have an outpatient/ambulatory care department.
- **Basic medical and diagnostic services:** include routine examinations, medical assessments, prescription of pharmaceuticals, routine counseling of patients, dietary regime, injections, and vaccination (if not covered under public health preventive care programs).
- **Health-related functions:** Only capital formation (e.g., construction and equipping of provider facilities) will be included in the "total health expenditure" estimate. HCR1.-5 should be only added to the "General health expenditure" (more inclusive of health-*related* items) estimate and not the "total health" estimate.

Table 4.4: Classification of NHA Functions	
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.1.3.3	All other specialized medical services
HC.1.3.4	All other outpatient curative care
HC.1.4	Services of curative home care
HC.2	**Services of rehabilitative care**
HC.2.1	Inpatient rehabilitative care
HC.2.2	Day cases of rehabilitative care
HC.2.3	Outpatient rehabilitative care
HC.2.4	Services of rehabilitative home care
HC.3	**Services of long-term nursing care**
HC.3.1	Inpatient long-term nursing care
HC.3.2	Day cases of long-term nursing care
HC.3.3	Long-term nursing care: home 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.4.9	All other miscellaneous ancillary services
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.5.2	Therapeutic appliances and other medical durables
HC.5.2.1	Glasses and other vision products
HC.5.2.2	Orthopaedic appliances and other prosthetics
HC.5.2.3	Hearing aids
HC.5.2.4	Medico-technical devices, including wheelchairs
HC.5.2.9	All other miscellaneous medical goods
HC.6	**Prevention and public health services**
HC.6.1	Maternal and child health; family planning and counseling
HC.6.2	School health services
HC.6.3	Prevention of communicable diseases
HC.6.4	Prevention of noncommunicable diseases
HC.6.5	Occupational health care
HC.6.9	All other miscellaneous public health services
HC.7	**Health administration and health insurance**
HP.7.1	General government administration of health
HC.7.1.1	General government administration of health (except social security)
HC.7.1.2	Administration, operation and support of social security funds
HP.7.2	Health administration and health insurance: private
HC.7.2.1	Health administration and health insurance: social insurance
HC.7.2.2	Health administration and health insurance: other private
HC.nsk	**HC expenditure not specified by kind**
HCR.1-5	**Health related functions**
HC.R.1	Capital formation for health care provider institutions
HC.R.2	Education and training of health personnel
HC.R.3	Research and development in health
HC.R.4	"Food, hygiene and drinking water control"
HC.R.5	Environmental health
HC.R.nsk	**HC.R expenditure not specified by kind**

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.

Note to Trainers
Ask participants to look at the list of Functions in the ICHA handout.

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)

Note to Trainers
Show slide presentation and discuss.

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)

VII. Nonclassifiable Items

An exhaustive classification scheme includes a category for every type of expenditure, although in practice there may not exist sufficient data to fill all categories. The ICHA scheme accounts for this by including an additional category, "not specified by kind" or n.s.k. However, use of the category must be kept to a minimum, as overuse compromises the validity of the estimates. As NHA is conducted repeatedly, data quality can be improved and the n.s.k. category can be phased out of the classification process (PG: pg. 42, 4-19).

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	

VIII. Application of this Unit: Working with the NHA Tables

Define/Explain Total Health Expenditure Estimates

NHA has three possible health expenditure estimates that a country may want to measure (PG: pg. 24, 3.22-3.25).

Total Current Expenditure on Health (TCEH) – refers to only to direct health expenditures. Excludes all health care-related expenditures. 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) – includes all direct health expenditures as well as one health care-related function, namely, capital formation. Whenever we mention THE, this is the definition we are referring to in particular.

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.

The Four Basic Tables

A set of nine tables are used to illustrate the flows of funds between the principal health care categories (financing sources, financing agents, providers, functions, etc.). It is recommended that countries work through at least the first four tables:

Table 1 shows the transfer of health funds from financing sources to financing agents

Table 2 shows the transfer of health funds from financing agents to providers

Table 3 shows the transfer of health funds from financing agents to functions

Table 4 shows the transfer of health funds from providers to functions

Reading NHA Tables

The trainer should use two of the tables to illustrate how to read an NHA table. Essentially, the trainer should make the following points:

Flows within a table:

- Funds flow downward from the "originators" (column headings) to the "recipients/users" (row headings).
- The total amount spent by each "originator" is shown at the bottom of each column.
- The total amount received by each "recipient/user" is included at the end of each row.

Flows between tables:

- The flow of funds through all the major categories of health care entities can be traced between the tables following these rules:
  - The **row** headings of one table become the **column** headings or originators of the next table.
  - Therefore, the **row** totals of the first table becomes the **column** totals of the second table.
  - The total expenditure on health (THE) is the number contained in the cell at the bottom right corner of each table and is the same in every table. (This is different from the national health expenditure total that includes health-related functions.)

Note to Trainers
Show slide 14 from presentation 4(d) and discuss.

Additional Tables

In addition to the four principal health care dimensions discussed above (i.e., financing sources, financing agents, providers, and functions), NHA suggests additional categories, such as:

- **Beneficiary groups** refers to the groupings of people who receive health care goods and services. These groupings can be made according to socioeconomic status (SES), location of residence (R) (e.g., urban/rural), age (A), and gender (G). Classification by such beneficiary groups allows for a significant analysis of resource allocation, equity, and distributional issues in health spending (PG: pg. 51, 5.06).
- **Health problems, diseases, interventions (D)** refers to the classification of health expenditures according to specific measures of health and disease, or policy issues, such as interventions addressing HIV/AIDS, malaria, or reproductive health (PG: pg. 63, Table 5.8).
- **Inputs (I)** includes specific types of inputs used to provide services, such as labor, drugs and pharmaceuticals, and medical equipment.

These additional classifications can be used to organize health expenditure information in a way that responds to important health policy priorities. For example, policymakers might want to allocate resources more equitably among geographical areas; in such a case, the beneficiary group breakdown by urban and rural areas might be useful. This expenditure information, when combined with other data such as health outcome information, can provide better indications as to whether current expenditures and services translate into adequate health gains.

Five additional tables are proposed using these new categories:

- The distribution of total current expenditure on health (TCEH) across population age and gender groups (HF x A/G) (PG: pg. 54, 5.26; PG: pg. 60, Table 5.6)
- The distribution of health expenditures across region (HF x R) (PG: pg. 55, 5.31; pg. 64, Table 5.9)
- The distribution of current expenditure on health by financing agents to the population classified by per capita household expenditure quintile (HF x SES) (PG: pg. 55, 5.27; PG: pg. 62, Table 5.7)
- Allocating different types of inputs by financing agents (HF x I): classification of inputs are for those goods that are used to produce health care and health-related services (PG: pg. 63, Table 5.8)

- The distribution of current expenditure on health by financing agents to the population classified by disease group (HF x GBD)

The trainer should point out that all additional tables illustrate flows of funds from "financing agents" to a "beneficiary group." The trainer may ask the class why financing agents are common in all these tables. The primary reason goes back to the definition of financing agents – which are entities that have "control" over how resources are allocated. So, from a policy perspective, financing agents are crucial in monitoring how resources are spent across various beneficiary groups.

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

PHRplus

Unit 4 (a): Understanding Classifications and 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 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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3

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

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Speaker's Notes

ICHA is a "nomenclature system" of sorts for health expenditures. It gives countries a common language to describe the financiers, purchasers, and users of health care and the services themselves.

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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Speaker's Notes

Trainer should emphasize the importance and link to SHA.

5

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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Speaker's Notes

Before discussing slide, trainer should explain that ICHA labels each health care actor by a code. This code begins with a letter designation for the **broad** category followed by a number designation for the more specific category.

6

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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7

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

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Note to Trainers

The ICHA listing and definitions of categories is published in the "System of Health Accounts" guide published by OECD (2000).

Speaker's Notes

Trainer should remind participants that ICHA was designed primarily for monolithic health sector structures of OECD countries (where government paid for everything) and not for the pluralistic health sectors of developing countries (which have numerous and unique actors).

NHA allows for a classification of the various actors in pluralistic health systems by further disaggregating ICHA categories.

NHA customizes ICHA to fit the unique features of a particular country.

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

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Speaker's Notes

If a country does not agree wholeheartedly with the ICHA descriptive name, it may make up its own name but place the original ICHA name in brackets. Be consistent.

Take-home message: An NHA team can add its own country-relevant categories, but for international comparison purposes, it should document how to "cross-walk" from national approach to ICHA system.

- Letter and first two numbers (at least) of the code should match ICHA classifications to allow for international comparisons.
- Terms that are *italicized* are "potential" new ICHA category and not mentioned in SHA.

For example: ICHA does not divide providers based on public or private ownership, because everything is public in OECD countries, but this distinction is important in many countries, so add new categories.

Countries also can eliminate ICHA categories or subcategories that are not relevant to them.

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

10

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

Speaker's Notes

Point 3. Feasible: So that the classification is CLEAR and the data is AVAILABLE to be collected (time vs. quality of a report tradeoff).

1

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

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

- ▲ 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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Note to Trainers

BEFORE showing this slide, ask the class if they remember the definition of "financing source."

3

Financing Sources

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

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Speaker's Notes

When classifying an entity as a FS or HF, don't assume that the entity will always be the same actor. For example, a MOH may be both a financing agent and a financing source. Remember to look at the source of the entity's funds and to whom it gives the funds. The nature of the funds is what determines FS, HF, HP, HC, not the nature of the institution.

4

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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Note to Trainers

Show slide and discuss definitions one by one incorporating information in Speaker's Notes.

Pause and ask for questions or clarifications of each category.

Review of this slide should take at least 20 minutes.

Speaker's Notes

The trainer should first go over the major categories of sources. The codes with one number are the major categories of financing sources: i.e., public funds, private funds, rest of the world funds. The shaded lines are extensions to or expansions of ICHA (from SHA). In the case of FS, this is a completely new health care dimension (not included in ICHA); therefore, the entire table is shaded.

Under "Public Funds: FS.1"

Territorial Government Funds: captures all funds generated as general revenue from the central government. This generally refers to Ministry of Finance contributions to health care. Central government revenue includes taxes that are earmarked for health care but collected as value-added taxes (e.g. national lotteries that fund specific health programs), and/or income, sales, property taxes. Note, this classification does not include payroll taxes collected by the government for social security, which is generally categorized under "Employer funds."

Regional Government Revenue: refers to those local governments that generate their own funds from regional taxes, etc.

Other Public Funds: includes funds generated as interest on trust funds or other assets held by government health entities.

Under "Private Funds: FS.2"

Employer Funds: refers to a private employer contribution to the "private" insurance program of an employee or to "social security schemes" (usually a mandatory payment); e.g. Abt Associates Inc.

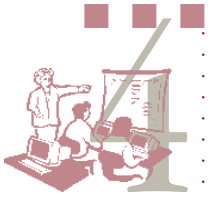
Parastatal: describes semi-public or state-owned companies such as a national airline. If a country chooses to distinguish parastatal expenditures, it may do so by adding a subclassification. The parastatal company's degree of autonomy from the government determines its placement in either the private or public funds category. In Kenya, the government felt that parastatals fit more appropriately in the "public" funds entity.

Household Funds: these include social security, private insurance contributions, and direct payments to providers to cover co-insurance amounts not covered by insurance schemes. This would also include the market value of traditional healers.

Non-profit Institutions Serving Individuals: national non-profit institutions (e.g. in Iran Ayatollah Khomeni Foundation) .

Other Private Funds: includes interest payments, or profits generated by insurance companies, etc. that go towards health care. It also captures net flows of private sector loans used by providers or insurers to cover current expenses.

Rest of World Funds: FS.3 includes health funds contributed by international or bilateral donor partners.



Note to Trainers

Before discussing this slide, ask the class for the definition of HF.

5

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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Speaker's Notes

Reiterate that HF is a very important layer, because it controls how resources are used. For example, the MOF gives money to the MOH, but the MOF has no say in how the funds are used. Rather the MOH does. Therefore, MOH is the HF.

6

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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Note to Trainers

Be sure to review information in Speaker's Notes before presenting slide. Show slide and take your time going through each classification

Speaker's Notes

Again, the trainer should begin by going over the broad categories of HF (with one-number codes). Reiterate that the nature of the health funding (where it is obtained and where it goes) is what determines an entity's classification as S, HF, HP, or HC, not the nature of the institution itself. Note also that HF includes institutions as well as some "programs" e.g., insurance programs.

Within General Govt. categories: "Public" comprises all institutional units of central, state, and social security funds. Included are non-market, non-profit institutions that are controlled and mainly financed by govt. units.

Individual ministries, such as the Ministry of Health, can be added as subcategories under "central government."

State governments: refer to those that receive funds from another institution (e.g., MOF) and allocate funds to providers. (When it was a source of funds, this refers to the generation of health funds through taxes; however, as a HF, state govt. means that it receives funds from, say, MOF, and then allocates them). Remind participants that it is "OK" to be classified as both a Source in one instance and a HF in another.

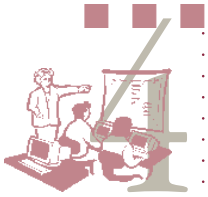
Social Security Funds: general social insurance programs funded by compulsory contributions from the formal sector for large sections of the community. Social security funds can include non-health services such as pensions, which should be excluded from the health expenditure estimate. Only the portion dedicated to health should be captured for NHA.

Private Sector: comprises all residential institutional units that don't belong to the govt.

Private Employer Insurance Programs: are programs that are mandated for a select groups of people. Such a program is "private" in the sense that the government doesn't really control it but "social" in that it is "mandated" for small groups of people. For example, mutuelles may be included; they are member-owned and controlled but may also receive contributions from the government. Also included within this category are insurance programs set up by the government for its employees only (e.g., civil servants health insurance that may exist outside of the general social security schemes). Other examples are Abt Associates, a private company, that mandates its employees to have some form of health insurance coverage (even if the company contributes itself).

Private Insurance Enterprises (other than social insurance): refers to both for-profit and not-for-profit insurance companies that are voluntary for the beneficiary and do not receive government contributions. They are optional.

Private Non-parastatal Firms and Corporations (other than health insurance): includes all corporations whose principal purpose is not health care. Rather, the principal activity is the production of other market goods or services. For example, a company such as Coca-Cola may administer its own health services to its employees. This category could also include parastatal companies that may provide health care to employees.



7

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

Note to Trainers

Trainer need upfront instructions for country specific adaptation of exercise.

8

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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Speaker's Notes

For regional training:

1) Identify the health care entities listed on the next slides as financing sources and/or financing agents.

2) Determine how you would classify them in accordance with the broad ICHA categories.

Again note: some entities may be a financing source as well as a HF, e.g. MOH or Regional Governments. It 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.

The trainer should make sure that when new sub-categories are created, remember to number each category consecutively e.g. MOH. HF. 1.1.1.1 and MOJ HF.1.1.1.2.

Answers :

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 govt. 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)

Cont. page 4.126

SPEAKER'S NOTES CONT. FROM PAGE 4.125

For regional training:

1) Identify the health care entities listed on the next slides as financing sources and/or financing agents.

2) Determine how you would classify them in accordance with the broad ICHA categories.

Again note: some entities may be a financing source as well as a HF, e.g. MOH or Regional Governments. It 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.

The trainer should make sure that when new sub-categories are created, remember to number each category consecutively e.g. MOH. HF. 1.1.1.1 and MOJ HF.1.1.1.2.

Answers:

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 (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 Finance (Source S.1.1 – Central govt. revenue)Ministry of Health (Financing Agent HF.1.1.1.1 – Central govt. revenue – MOH or can be [rarely] a financing source FS.1.1.1 – MOH)

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

Ministry of Justice (Financing Agent HF.1.1.1.3 – Central govt. 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 financing 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 – Private 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 MOH personnel (Function HC.7.1.1 – General govt. administration of health)

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.

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)

* HF2.5.1 Parastatal companies should be aggregated under HF.A. Public Sector in order to generate the public sector or government activities if the country considers parastatals to be a major policy tool of the government.

9

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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Speaker's Notes

Optional slide- if doing an in-country NHA or SNHA.

1

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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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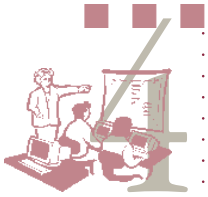

Note to Trainers

Before discussing this slide,ask the class for the definition of "Provider".

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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Speaker's Notes

The trainer should begin by asking the class for the definition of providers.

4

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

Highlighted Rows are additional sub-classifications not included in ICHA

Classifications of PROVIDERS

NOTE TO TRAINERS

Begin by outlining the major categories first and review select categories that usually need more explanation.

SPEAKER'S NOTES

Hospital: they should provide at least inpatient (Inpatient: specialized accommodation services) services and can do outpatient as a secondary activity. It should be primarily engaged in medical diagnostic and treatment services to inpatients. Note that in some countries in order to classify as a hospital it has to have a minimum number of beds. For international purposes, we are concerned that inpatient care be the primary purpose of a facility.

Specialty Hospitals: e.g., orthopedic, traditional medicine, TB, burn

Providers of Ambulatory Care: includes establishment primarily engaged in providing services to outpatients. Does not require inpatient services.

Offices of Physicians: refers to health practitioners who hold a doctor of medicine or corresponding degree, and who are primarily engaged in the independent practice of general or specialized medicine. These categories refer to primarily "private" practices of physicians.

Offices of Dentists: like "offices of physicians," refers primarily to private independent dental practices.

Offices of Other Health Practitioners: may include independent practices of other health practitioners such as chiropractors and optometrists. A subcategory may be included to designate "traditional medicine" providers.

Outpatient Care Centers: establishments that provide outpatient services to a team of medical, paramedical, and other support. This might bring together several specialties or essential primary care.

Free Standing Ambulatory Surgery Centers: establishments that provide surgical services on an outpatient basis, e.g., Orthoscopic, cataract surgery.

All other outpatient multispecialty cooperative service centers: centers or clinics of health practitioners with different degrees with more than one specialty practicing within the same establishment. Includes general outpatient community centers and clinics or multispecialty polyclinics.

All other outpatient community and care centers: not only care provided by multispecialty teams.

Question for the class: Where would you place a village clinic staffed by one person? NHA does not offer a straightforward answer. Could be created under 3.4.5 or 3.4.9.

Dispensing Chemists: Pharmacies (public and private)

Provision and administration of public health programs: includes both government and private administration and provision of public health programs.

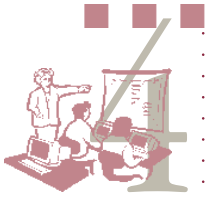
General health administration and insurance: refers to establishments primarily engaged in the regulation of activities of agencies that provide health care and health insurance (e.g., agencies that regulate licensing of providers, safety in the workplace, etc.)

All other institutions (rest of the economy): includes providers of occupational health care services, private households that provide their own "home care," and all other secondary producers of health care.

Health-related service provider: remember the definition of health-related! These providers are research institutions, education and training institutions, etc.

NOTE TO TRAINERS

Prepare and guide step-by-step discussion and answer questions.



Note to Trainers

Begin by asking the class what their definition of a function is.

5

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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Speaker's Notes

Note this is broken down by type of services, not level of care (primary, secondary, tertiary)

6

Classifications of FUNCTIONS

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

NOTE TO TRAINERS

Trainer should be well prepared to discuss each function and answer questions.

SPEAKER'S NOTES

Inpatient: must be formally admitted overnight

Day cases of curative care: include services such as ambulatory surgery, dialysis, and oncological care, none of which should require no overnight stay (otherwise would be classified as inpatient care).

Outpatient curative care: includes outpatient health care services delivered by physicians in the ambulatory health care facilities or areas of a facility – i.e., a hospital may have an outpatient/ambulatory care department.

*These two descriptions are also confusing to international experts. Most countries use HC1.3 Outpatient Curative Care as their main category for outpatient services.

Basic medical and diagnostic services: include routine examinations, medical assessments, prescription of pharmaceuticals, routine counseling of patients, dietary regime, injections, and vaccination (if not covered under public health preventive care programs).

Prevention and public health services: includes vaccine campaigns. Doesn't include prevention counseling given during regular doctors visits because it's very difficult to tease out.

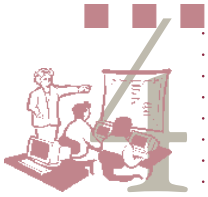
Health Related Functions: Only the capital formation (e.g., construction and equipping of provider facilities) will be included in the "total health expenditure" estimate. HCR2-5 should be only added to the "General health expenditure" (more inclusive of Health-related items) estimate and not the "total health" estimate.

Within HCR "capital formation for health care producing institutions" (e.g., building a new hospital wing) should be classified under HCR.1; but capital formation for a "health related" function, e.g., building a new nurses training center should be reported under HCR.2 education and training of heath personnel.

HCR4 Food, hygiene and drinking water control includes expenditures incurred for water systems whose primary function is to prevent water borne diseases.

NOTE TO TRAINERS

Begin by going through the broad category. Leave HCR until the end.



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

8

Exercise
Sort and Classify into Provider or Function

- Administration of National Insurance Program (NIP)
- Ambulance Transport
- CATSCAN machine
- Dental Care
- Elderly Nursing Care
- Family Planning Clinics
- Health Prevention and Education Program
- Hearing Aids
- Inpatient Care
- Lab test
- Medical University Hospital
- Midwife
- Private Clinics
- Private Pharmacies
- Salaries of MOH personnel
- Salaries of doctors
- Traditional Healer
- Women Health Clinic

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Note to Trainers

TWhen doing regional trainings allot two hours for this exercise.

Speaker's Notes

For country training, the exercise question should be:

1) What are the main health-care entities in your country and how would you sort them into providers and functions? It is helpful for the trainer to begin this exercise by asking the class to draw a flowchart of the country's health care system and to list all the major health entities. Afterwards, the class should go through each relevant entity on the list and identify it as a provider or function.

2) How would you classify your country's providers and functions (accommodating national and international needs)?

It is useful to do this on flip charts. For these two questions, it generally takes the class about 2 hours because the concepts of providers and functions have solid, and there needs to be a clear communication of the structure of the health system by the participants. In this case, the entities will either be providers or functions. There should not be any overlap.

For regional training:

The same questions are asked but for the fictional country of Susmania (please see the Module 1, Unit 4)

1) Identify the health care entities listed on the next slides as providers or functions.

2) Determine how you would classify them in accordance with the broad ICHA categories.

Again note: some entities may be a financing source as well as a FA. e.g. MOH or Regional Governments- 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).

The trainer should make sure that as new sub-categories are created, remember to number each category consecutively, e.g., MOH. HF. 1.1.1.1 and MOJ HF.1.1.1.2.

Cont. on page 4.132

SPEAKER'S NOTES CONT. FROM PAGE 4.131

Answers :

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 govt. 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 (FS.3 – Rest of 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 Finance (Source S.1.1 – Central govt. revenue)

9

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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Speaker's Notes

Primary care services: HC 1.3 Outpatient curative care

Secondary/Tertiary Care services: HC 1.1 Inpatient curative care

Training: H.CR 2 Education and training of health personnel

Research: researchers (HCR 3 Research and development in health)

Information, Education, and Communication: HC 6.9 All other miscellaneous public health services

Administration: Health administration and health insurance – private (HC.7.2)

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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Speaker's Notes

Optional slide

1

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

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

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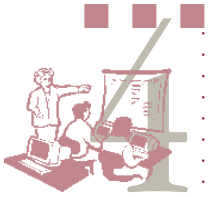

3

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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4

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						

6

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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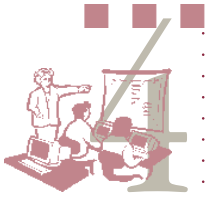

Note to Trainers

Make sure participants look at the list of Functions in the ICHA handout.

7

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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Speaker's Notes

NHA has three possible health expenditure estimates that a country may want to measure:

TCEH – refers only to direct health expenditures. Excludes all health care-related expenditures. This includes spending for personal health care, plus spending for collective health services and for the operation of the system's financing agents.

THE – includes all true health expenditures as well as one health care-related function, namely, capital formation. Whenever we mention THE, this is the definition we are referring to in particular.

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.

Note to Trainers

Point out that this is what a Financing Sources to Financing Agent table should look like.

8

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						

Speaker's Notes

Within a table, read down and across

Funds flow downward from the "originators" column headings to the "recipients/users" row headings.

The total amount spent by each "originator" is shown at the bottom of each column.

The total amount received by each "recipient/user" is included at the end of each row.

Mention direct transfer (e.g., households are listed as a HF to serve as a placeholder that illustrates a direct transfer of funds from the financing source to the provider)

New categories not part of ICHA are shown in red shading.

9

Financing Agents to Providers

	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 and total exp. measures
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	
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 & insr										
HP.7 All other industries										
HP.8 Institutions providing health related services										
HP.9 rest of the world										

Speaker's Notes

You've seen what a FS to HF table looks like. This is a HF x HP table.

The codes should go on the top and the descriptor should be an ICHA descriptor. However, if the country wants to use its own descriptor, it should put the ICHA descriptor in brackets.

The trainer should show what types of "TOTAL" estimates are feasible with each table and which column/ row headings will or will not be necessary for a particular total.

The trainer should tell the class the following about the HF x HP table:

The category HP.8 is added to ICHA to allow this table to be developed for different expenditure aggregates. If Table 2 is developed for H0 or H1, as shown in OECD 2000, it will include only health care providing institutions and HP 8 will not be needed. If Table 2 is prepared for H2, it should include expenditure on institutions providing health care-related services and activities, for example, research and training institutions, and these should be included under HP 8.

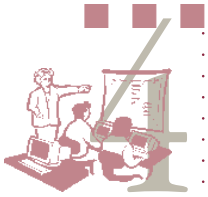
10

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 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	
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										

Speaker's Notes

Trainer should reiterate the different total estimates.



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					

Speaker's Notes

The row headings of one table become the column headings of the next table. It follows that the row totals of the first table become the column totals of the second table.

The national Total Expenditure on Health is the number contained in the cell at the bottom right corner of each table. It is the same in every table.

13

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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Speaker's Notes

These tables are usually done if the funds flow will inform a policy priority and if the data are available.

The trainer should emphasize that all of the tables show the relation of funds flowing from FINANCING AGENTS to a particular beneficiary group. Trainer can ask the class, why do you suppose that it is always from HF? The reason being, again- HFs constitute the most powerful layer of the health system and have the most control over distribution of resources. They are usually the most relevant for policy purposes. For example, a table on financing sources to different gender groups would not be relevant to policy because the MOF doesn't allocate funds to maintain equity in gender groups; rather, the MOH would have this responsibility.

All these tables do require extra data collection efforts on the part of the NHA team. And specific issues may arise when trying to do each one.

Table HF x inputs, is generally an easier table to compile because many governments track expenditures by these line items: salaries, maintenance, capital investment, etc.

14

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 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	
Region 1										
Region II										
Region III										
Region IV										
Region V										

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Speaker's Notes

This table is increasingly popular among countries, particularly those that are very decentralized or that look at equity issues.

15

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										
Material 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
Family Planning Clinic
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)

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)

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

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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)

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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)

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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)

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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)

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	

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

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

Note to Trainers

Now that we have laid the groundwork, we are ready to examine the crux of NHA – collecting the appropriate data, then analyzing the data. Production of NHA requires extensive data collection from various players in the health sector: ministries, donors, households, providers, and industry groups such as private insurers, employers, and pharmaceutical companies.

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
- Draft a data collection plan

I. The Data Collection Process

The trainer should begin this topic by reminding participants that the **NHA team should use country-identified definitions of health spending as they assemble data.** To this end, some initial questions should be kept in mind when organizing the collection process. These questions help determine which are the "right" types of data for NHA:

Organizing the Data Collection Process

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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- **What are the definitions and boundaries of health expenditures as identified by the country team?** These should be determined before planning the data collection steps.
- **What are the policy issues being addressed by NHA?** These policy issues dictate the types of spending data that are required: for example, type of disease, socioeconomic groups, demographic groups, ownership of services.
- **What level of detail is desired? How disaggregated should the data be?** For example, should information be tailored for use at the regional level or national level?

Note to Trainers

Show slides 3 and 4 discuss incorporating information from Speaker's Notes.

Creating a Data Plan

With these questions in mind, the trainer introduces the concept of developing a **data plan.** This data plan answers the who, what, when, and where of the data collection strategy (PG: pg. 68, 6.06-6.14):

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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- **Who** will be responsible for collecting which type of data?
- **What** types of information are 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? This is where the steering committee can help out. The SC should assist in identifying secondary data sources but also facilitate access to those data.
- **Why a** data plan is recommended:
  - It ensures the timeliness of activity completion.
  - It distributes data collection tasks among the team members.
  - This facilitates simultaneous data collection from different sources, which contributes to timeliness.
  - It also makes the data collection process easier to manage as each team member or group of team members has the responsibility of collecting data from only one or two sources.
  - Dividing the data collection process makes identifying breakdowns in the data collection process easier to identify.

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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Slides 7 and 8 contain a country data collection plan that the trainer should present as an illustrative format for a data plan. It is done in the form of a table. The trainer should use it to present the data plan. Generally, two tables are done, one for collecting primary data and another for secondary data collection. It is recommended that all secondary data sources be identified first; information not available from secondary sources will need to be collected through specialized surveys. Countries should not assume that every NHA activity will need to collect primary data through a survey – **almost 80 percent of NHA data already exists in various forms in a country; the trick is identifying these secondary data sources and obtaining access to them**. At the end of the presentation, the participants will be tasked with developing their own country data plans.

Note to Trainers

Show slides 7 and 8 discuss incorporating information from Speaker's Notes.

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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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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II. Tips for Getting Accurate and Relevant Data

The following tips should be posted in the offices of the NHA team and regularly checked throughout the data collection activity (PG: pg. 71, 6.19-6.32; pg.74, 6.40-6.60).

- Remember your purpose: to fill in the NHA tables.
- Don't get sidetracked by interesting data sources or by the need to repair weaknesses in the data set; this wastes time and energy.
- Before doing a survey, check first to see if data is available elsewhere.
- This may require the assistance of the NHA steering committee. For example, results from an older household survey could be extrapolated to the current time period; or the World Bank's Health Sector Note on your country.
- Remember to be "critical" even when using available data. Don't assume that official data is correct. Investigate the "methodology" section for each study and understand the data collection procedures for the various institutional accounting records.
- Try to obtain an estimate for the same account category from at least two sources, i.e., triangulate the data.

  Triangulation involves cross-checking the same estimate from two sources to verify the reasonableness and validity of the estimates. It may also involve doing a calculation to confirm that the estimate is within a reasonable range. For example, the MOH asserts that household expenditures at private physician offices (ICHA HP.3.1) are $30 million. Cross-check this figure with a calculation. Determine average amount of money spent per private physician (expenditures $/ number of private physicians) and assess if this figure is reasonable or not. Or look at the $30 million out-of-pocket expenditures on private physicians with respect to the GDP; does the figure make sense? (PG: pg. 106, 8.50)

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

Each form of data in the NHA activity must be evaluated using the following questions to determine if the data will be used or not, and what notes, caveats, or adjustments are needed if the data are used:

- Is the data valid? Was the methodology sound?

- What are the classifications used in the data source? What are the definitions and boundaries? For example, if data from the Association of Physicians reveal that they earned $100 million, can you assume this was all from households? No – some was earned through contracts with large employers.
- Was the data collected using cash or accrual estimates?
- Assess whether data can be extrapolated nationally. Is it a large enough sample size?

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?

III. Strengths and Weaknesses of Data Sources

Depending on the sources of data, various methods of collection are appropriate. Sources of data vary by country; however, some of the common sources, and their strengths and weaknesses are listed below.

Table 5.1: Sources of Data: Government Records

Origin	Strengths	Weakness
☐ Budget expenditures (executed budgets) ☐ Economic census data ☐ Tax reports ☐ Import and export records ☐ Program or institutional policies and regulation (e.g., govt. insurance program)	☐ Easily available ☐ Reliable and accurate ☐ Comprehensive coverage ☐ Available on a regular basis ☐ Consistently reported	☐ Official/unofficial barriers raised because of confidentiality ☐ May be disaggregated by regulation or expenditures and may differ from the provider or function categories for health accounts ☐ Discrepancies between audited and unaudited records ☐ Tend to have a time lag (because of bureaucratic process of auditing) or antiquated manual accounting systems

Source: PG: pg. 77, Table 6.1

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.

When discussing government records, the trainer should distinguish between records on anticipated spending (the budget), unaudited executed budget (what has been spent but is not yet audited), audited executed budget (what has been spent and officially recognized).

The examples of government records, included in the participants packet, are organized in ways that may or may not be easily mapped to NHA classification categories. For example, government line items may be organized as "recurrent vs. capital costs," or by "departments" or "programs," or by a mixture of all three. The trainer should ask participants how their countries present government records. When considering their usefulness for NHA purposes, the teams will need to know the government definition and boundaries for each line item, and if the government tracks its spending on a cash or accrual basis. This information will permit NHA team members to map government line item codes to NHA classifications. All or any adjustments made to data to conform to the ICHA categories should be carefully documented.

Note to Trainers

Show slides 14, 15, and 16 and guide participants through the tables, incorporating information from Speaker's Notes.

Table 5.2: Sources of Data: Other Public Records		
Origin	**Strengths**	**Weakness**
☐ Special reports (taskforce) ☐ Academic studies ☐ NGO reports and studies ☐ Government report on donor funds and in-kind donations	☐ Very rich in details, but the focus is only on specific issues ☐ Good for triangulation ☐ Limited availability (only at the end of the fiscal year)	☐ Limited geographic, demographic, or subject scope ☐ Variable analytic rigor ☐ Expenditure categories may not match the needs of the health accounts ☐ Not done consistently from year to year

Source: PG: pg. 77, Table 6.1

Insurer records are generally difficult to obtain in their raw form and usually some sort of survey is warranted.

Table 5.3: Sources of Data: Insurer Records		
Origin	**Strengths**	**Weakness**
☐ 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	☐ Restricted to health care and related expenditures ☐ Limited availability (only at the end of the fiscal year)	☐ May not have the functional detail health accounts is looking for ☐ Likely to exclude patient payments in terms of co-payments and deductibles ☐ No central information system and difficult to pursue every insurance provider in a country ☐ Unwillingness to share at least some proprietary information, such as revenues

Source: PG: pg. 77, Table 6.1

Examples of provider records in the handouts sheets provided by the trainer. Copies will also be found in the Participants Manual.

Table 5.4: Sources of Data: Provider Records		
Origin	**Strengths**	**Weakness**
☐ Providers ☐ Regulatory or financial agencies ☐ Industry associations ☐ Existing provider survey ☐ Existing household survey	☐ Most specific and comprehensive in the coverage of relevant health expenditures ☐ Records contain little spending that falls outside the boundary of health	☐ Accuracy is questionable as providers may be reluctant to share true financial information ☐ The scope of older surveys may not exactly fit current data needs ☐ Large informal sector (traditional healers) makes it difficult to capture expenditure data

Source: PG: pg. 78, Table 6.1

Examples of household surveys are available in the handouts sheets provided by the trainer. Copies will also be found in the Participants Manual.

Table 5.5: Sources of Data: Household Surveys

Origin	Strengths	Weakness
☐ DHS ☐ LSMS ☐ Labor surveys ☐ Household expenditure surveys ☐ Censuses	☐ Directly linked to social, economic, demographic, and other characteristics of patients ☐ Can be specifically designed to capture the exact information health accountants are looking for ☐ Most accurate information on out-of-pocket expenditures that is also useful for conducting equity analysis	☐ Conducting surveys is expensive and time-consuming and so surveys may be infrequent; therefore data might be old and have to be extrapolated to the current year. Extrapolated data is less accurate ☐ Possibility of sampling and non-sampling errors in reporting can present challenges to the analysis and accuracy ☐ Records relate only to personal medical services and cannot be used to estimate expenditure on collective and public health services ☐ Routine generic household surveys (e.g. Demographic and Health Survey, household income and welfare surveys) are held regularly but do not necessarily include all the relevant questions for health

Source: PG: pg. 78, Table 6.1

Note to Trainers

Show slides 17 and 18 discuss incorporating information from Speaker's Notes.

Table 5.6: Sources of Data: Donor Country Reports

Origin	Strengths	Weakness
☐ 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 good background on country and the sector (e.g., World Bank health sector report) ☐ Lists the key players in the sector	☐ Sometimes too generic ☐ Difference in disbursements reported by donors and expenditures reported by ministries ☐ Difficulty in monetizing in-kind donations (drugs, vaccines, etc.) ☐ When donors make donations directly to the an NGO or a local entity, the financing data are likely to be missed

Source: WHO, World Bank, USAID 2003

IV. Overcoming Data Limitations

A health accountant is likely to encounter three types of problems in the attempt to gather information:

- Data sources conflict
- Data sources are limited
- Data sources do not exist

Suggestions on how to overcome each of these issues are listed below.

Data sources conflict: It is valuable to have multiple sources, even when they provide different numbers. To determine which number is correct, you should:

- Compare the methodology used by each source; which one is the most thorough and rigorous?
- Find out exactly what is in included in each number. For example, the MOH estimate for capital expenditures may be much higher than the MOF's; you may discover that the MOH number included donor funding.
- Check if all the data sources use the same time period, cash or accrual basis, and exchange rate.
- Ask experts or steering committee members for guidance.
- If two expenditure estimates differ by less than 2 percent of the total health care expenditure, then it is generally not worth it to resolve the differences; choose the more conservative estimate.

Data sources are limited: Having for example, only one source of data is better than having no data at all, but **rigorous validity and accuracy checks have to be conducted to ensure that the data are valid**. To do this, the NHA team has to develop alternative ways of estimating the same values. Aberrations may be detected by looking at the historical information.

Data sources do not exist: In such a case, primary data collection is the only solution. This often happens when estimating out-of-pocket expenditures, which require household surveys. Surveys can be categorized into two types based on their scope.

- *Major surveys*, such as household or provider surveys, have large sample sizes, are complex and resource intensive, and should be conducted by professional statisticians and survey specialists. A country's department of statistics is best suited for such work. The bibliography at the end of the unit contains publications on how to conduct household

surveys. But the role of the NHA team is to advocate for the survey to be done and then oversee its implementation by a professional survey entity.

- *Minor surveys* of small sample size, such as insurance companies, large employers, hospitals, and government entities, can be conducted by the NHA team. Members may require training on research methods (see bibliography).

V. Primary Data Collection: Key Elements of Survey Questionnaires

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

Time permitting, the trainer may want to explain key elements of select survey questionnaires. Examples of each type of survey are provided as handouts by the trainer. Copies will also be found in the Participants' Manual. Some general guidelines for designing the survey questionnaires are listed below:

- *Reduce sample frame bias*: Sample frame bias occurs when the **sample is not truly representative of the universe** (population); in such a case, generalizing sample results to the total population is misrepresentative. This problem can be minimized by ensuring that the sample is representative of the universe, which means that each member of the universe has an equal chance to be selected. The key characteristics and their proportion in the universe population must be identified in order to design a representative sampling approach (sample frame) (PG: pg. 74, 6.38-6.39; pg. 103, 8.30-8.31).
- *Reduce sampling error*: When results based on a sample (a few representative units chosen from a universe) are used to generalize for the entire universe (including all the unobserved units), there is a **potential for misstating the fundings**. For example, the sample is different than the observation would be for the universe, e.g. in the sample of hospitals 10% of revenue is from outpatient services, but the true percentage may be much higher or lower for the national level. It can be minimized but can never be completely eliminated. To provide estimates on the sampling error, information on the sample size and the homogeneity of the population is necessary (PG: pg. 73, 6.35; pg. 100, 8.17-8.21).

- *Reduce non-sampling error*: This error occurs when the survey questions do **not ask for what is wanted or do not get what is asked for**. Careful design of the survey questionnaire and field-testing it before rolling it out helps avoid this problem (PG: pg. 73, 6.36-6.37; pg. 101, 8.22-8.29).
- *Increase sample size*: Increasing the sample size is one way **to minimize sampling error**. However it increases the cost of the survey and therefore should be considered only after all other options have been exhausted and only after sample frame bias and non-sampling errors have been minimized.

For general insurance companies, get revenue and claims expenditure data only for their health products. **Health insurer survey questionnaires** should include the following elements:

- Specify if the insurer is private for-profit, state-owned, private not-for-profit.
- Try to get breakdown between number of "Group/Company" and "Individual/Family" subscribers.
- Get a breakdown of premiums revenue and benefits claims expenditures (usually on provider level, difficult to get functional).
- Ask whether revenues are reported on a cash or accrual basis.
- Ask if the insurer receives resources from the government in cash or kind, and the purpose of the resources (for example, is it a subsidy for people who cannot afford to pay the full premium?)
- Ask if the insurer receives loans or grants from donors.
- Ask what portion of premiums of combined life/health policies goes to life coverage and to health coverage.

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)

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

Employer survey questionnaires should include the following elements:

- Ownership status (parastatal, private, etc.)
- Principal activity of company

- 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
- Number of employees covered by health insurance and whether dependents are included

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

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

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?

- What health services are covered?
- Total amount firm paid for health benefits during reporting period (applies to both self-insured companies and companies that buy health insurance
- Whether employees contribute to health insurance; if so, how much?
- Whether any other government or organization contributes to health care benefits provided by firm
- Whether firm reimbursed employees for medical expenses they incurred; if so, how much? (For example, how much does firm reimburse to private and public facilities?)
- Does firm provide on-site services and what are they; if so, does any other NGO make contributions to these services?

Private employers are sometimes difficult to sample because of a lack of any established sampling frame. The universe or actual number of firms may not be known, especially in countries where there may be a high turnover of small firms. Despite this situation, it may not adversely affect the NHA activity if firm expenditures are anticipated to be only a small proportion of total health spending.

Donor survey questionnaires should include the following elements:

- What projects are being funded by donors 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

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

Private provider questionnaires could include the following elements:

- Total funds received from various entities (e.g., patients, government, employers, and insurance companies)
- What types of functions? (i.e., what type of provider: outpatient center, hospital, laboratory, retail pharmacy, etc.)
- If possible, have all service providers indicate how much of their revenues are spent on drugs, if any.

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.

Traditional healer questionnaires could include the following elements:

- How do patients acknowledge traditional healer services? Through cash, payment in kind, or "gifts"?
- Determine market value of non-monetary "gifts"/payments.
- Why did patients come to traditional healers (opinion of traditional healer)? For health reasons, well-being, etc.? (Remember health expenditure boundaries!)
- Recall period should be short (one month or less), unless traditional healer keeps records.
- Can HIV/AIDS be captured on this survey? Will be difficult.

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

VI. Application of this Unit

Once the presentation is delivered, the trainer should divide the class into country teams and ask the most senior member of each team to lead the group in determining the team's data collection plan. Agreements on each task should be written on a flip chart; participants can also write them on handout sheets provided by the trainer. Copies will also be found in the Participants Manual

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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:
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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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3

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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Speaker's Notes

Bullet 1: For example, if water and sanitation is not included in the definition of health, then there is no point in collecting information of these expenditures.

Bullet 2: It's important to keep in mind the policy issues that will be addressed with specific information derived from NHA. For example, in Morocco, MCH is a key policy issue because mothers and children are a target population for the MOH. Therefore, the NHA exercise produced information on expenditures in MCH.

Bullet 3: In a country where decentralization is an important policy issue, the information may need to be sufficiently disaggregated to produce national and regional results.

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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Speaker's Notes

In many countries, as much as 80 percent of data can be found "off-the-shelf;" that is, it already exists in the form of secondary sources. Existing reports and other national statistical projects can be excellent sources of data or be used to identify other sources of information.

The data plan answers the who, what, when, and where of the data collection strategy.

Who: In dividing tasks it is critical to have clear definitions so that information collected by two different individuals is parallel, that is, it corresponds to a common definition.

What: Should be defined by the boundaries of "what is health." Always return to the health, space, and time boundaries. In some cases, institutions may have different fiscal years, e.g. NHA may be for a calendar year such as 2000 but the government fiscal year may be Oct 1999 to September 2000. In this case, you need to collect information for 2 fiscal years, disaggregated by month in order to calculate expenditures in the calendar year being used for the NHA estimation. Also there is the question of collecting information with the necessary level of detail. Recall that you need not only general information on how much is spent on health, but you will also need the elements to distribute this information across the tables FS to FA to P to F, etc.

When: Important to have a clear time limit. Data collection can become an infinite exercise. Don't get lost in the data collection. Keep your eyes on the prize: Why are you collecting the information?

Where: The steering committee can be of help in identifying data sources because it represents various institutions and therefore knows how those institutions operate and the type of information they have. The steering committee can also open doors, establish contacts with key people in their respective institutions that can provide information.

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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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Speaker's Notes

Many countries have found it easier when one or two members have to manage only one or two data sources each.

Must be flexible and should be seen as on iterative process where, for example, you may have had one plan to collect the information at the outset, but as you start the process you find that you need to revise your approach.

7

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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Speaker's Notes

This example is taken from the Kenya NHA activity. As most data already are available in the form of secondary sources, it is good to first collect and review all the possible "available" data before identifying what primary sources are needed.

Usually you can create the data plan during the first in-country training workshop.

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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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Speaker's Notes

Example of triangulation of data: HH survey estimates of purchases of medicines at pharmacies can be checked against industry estimates of sales.

Again: maintain your focus. You are not collecting information for the sake of collecting information. You have a clear objective: keep it in mind.

A very important point: whenever possible use secondary data.

Triangulating the information is very important. For example, information of insurance premiums can sometimes be obtained from the employer, the insurer and the individual through a household survey. Use all available data sources to verify the validity of the information.

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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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Speaker's Notes

If doing a RHA: see whether the data set is large enough for a regional estimate.

Keep in mind the goal of using NHA estimates in policymaking. Methodological "flaws" are often used to invalidate controversial information. Therefore, it is essential to get consensus on the methodology. The steering committee can be very useful here. For example, in Kenya the flawed methodology was given as a decision not to finalize or officialize the report. Morocco spent much time getting a broad consensus and today is one of the countries where the data has been most used by diverse actors throughout the health sector including the private sector, such as pharmaceutical companies.

The last two questions are particularly relevant to NGO and private providers and private firms. Why it is difficult to define the appropriate sample. We will return to this issue.

11

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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Speaker's Notes

The trainer should point out to participants that the team needs to distinguish between anticipated spending (budget), executed spending (what targeting), and audited spending. Audited accounts are the most reliable but take a while to come out (typically 1-2 years after the end of the fiscal year). Therefore, it is recommended that the team use provisional (unaudited) figures on executed budgets. Usually the audited budget turns out to be close to the unaudited one. If not, the team can check previous years to see if consistent pattern exists between provisional numbers and final numbers.

Often when you are collecting information from government institutions you will not find it disaggregated to the level you need to fill out the tables. In this case, you need to collect not only data on expenditures but also on indicators that will allow you to make estimates on how to distribute funds according to the NHA methodology.

For a country training: the trainer should ask the NHA team participants to comment on what types of sources are available in country and what their strengths and weaknesses are. All records identified should be written on a flip chart. This will help in the following session when the team is asked to draw up a data plan.

For a regional training: it would useful for the trainer to pass out some examples of "government records" from around the world.

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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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Note to Trainers

This slide is primarily for regional trainings. Could be presented as participants review country examples of govt. records.

For a country training, this slide could be replaced with one on the general characteristics of a govt. record of expenditure from that particular country.

Speaker's Notes

Types of expenditure organization:

Recurrent – e.g., salaries, training, drugs

Capital – e.g., buildings, equipment, land

Department – e.g., HIV/AIDS, TB unit, Department of Planning, Department of Health Statistics

Programs – e.g., Malaria control, infectious diseases, maternal and child health

As you are collecting information from the govt., make sure that you understand what the different line items mean, what goes into them. For example, the line item for administration – what does it include? Central level administration? Regional level? Provider? If it includes provider administration this amount needs to be taken out and allocated to providers.

Important to understand government classifications. This is an important contributor and often the government accounting system is also used by other important public institutions such as social security.

For example, in Guatemala, human resources is a separate line item in the budget. This line item needs to be allocated between administration, prevention programs, and providers in order to fill the NHA tables.

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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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Speaker's Notes

If doing a country training: the trainer should ask the NHA team participants to comment on what types of sources are available (for "other public records") in country and what their strengths and weaknesses are. All records identified should be written on a flip chart. This will help in the following session when the team is asked to draw up a data plan.

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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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Speaker's Notes

Insurer records usually include premiums paid by households and companies to insurer + insurer's medical + admin costs. These records are generally difficult to obtain in their raw form; usually a survey is warranted where the director of the insurance company/program is asked to respond to some expenditure questions. This may include public insurance (social security) for which the information would usually be publicly available and uses the public accounting system.

For private insurance, secondary records are usually difficult to obtain and this requires primary data collection. In collecting data from insurance, remember to distinguish between payments for premiums and co-payments. Co-payments are payments for provision of service. Premiums are transfers to financing agents.

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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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Note to Trainers

Point out that there is an example of provider records in the participants' packets.

Speaker's Notes

Private Providers: # of potential sources of info- tax authorities or licensing bodies.

Weakness Number 2: In Egypt, it was difficult to estimate the true size of private providers (offices of physicians) because it was difficult to sample.

It is difficult to obtain secondary data for providers. A few countries, like Mexico, tabulate it as part of their statistical systems but that is somewhat rare. In some countries, tax records are public, e.g., like in the U.S. for-profit firms. Often obtaining data from providers requires primary data collection. Even that is hard because of difficulties in defining the sampling framework. This will be addressed later.

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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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Note to Trainers

Point out example of household health care surveys in participants' packets.

Speaker's Notes

Trainer may choose to distribute some examples of household surveys specially designed to collect expenditure info for NHA.

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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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Note to Trainers

Point out example of insurance survey in participants' packets.

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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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Note to Trainers

Point out example of employer survey included in participants' packets.

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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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Speaker's Notes

Trainer could go over some country examples of this questionnaire (note the ones provided in this training manual ask employers only about their insurance policies)

Employers (private) difficult to capture. See if govt. has any routine official surveys and perhaps "piggy-back." If not, will have to do new survey.

Sometimes difficult to sample because of lack of any established sampling frame (don't know the universe) (especially if have high turnover of small firms – no need to worry if small expenditure estimate).

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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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Note to Trainers

Point out example of donor survey in participants' packets.

Speaker's Notes

Trainer could note that an example of this questionnaire will be handed out during the exercise on filling in FA to Provider table.

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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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Note to Trainers

Distribute an example of a provider survey.

Speaker's Notes

Most difficult to get providers to fill out.

Send out to the facility manager.

For functions: can break down into terms easily recorded by providers but needs to be cross-walked to NHA functions. (Try not to confuse level of care with functions.)

For public providers: their records are usually divided by departments, line items are similar to government. So you will need to cross-walk to functions.

For private providers: their records are based on how the hospital bills its patients and the revenues it receives: e.g., via hotel costs, operating theater costs, meals, nurses. If someone pays the doctor fee for services, hospitals records might not track it (this is a transaction between patient and doctor, not the hospital).

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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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Note to Trainers

Point out an example of a traditional healer survey in participants' packets.

Speaker's Notes

Remember that a health expenditure is made with the "intent" to improve one's health

Price index= is developed to monetize payments.

Can corroborate with HH survey.

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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

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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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

I. General Approach to Filling in the Tables

As this is one of the more complex units, the trainer may choose to present the first half of the PowerPoint presentation (up to the FS x HF and HF x HP tables), then implement the two related case study exercises Unit 7 - Susmania Case Study I and Susmania Case Study II, and then return to the last half of the Unit 6 presentation (how to fill in the HF x Func and HP x Func tables).

Now that the data have been collected, the NHA team uses the data to fill in or "populate" the tables. This task may seem daunting given the many dimensions of health accounts and the large amount of data that presumably has been collected. However, careful planning, systematic procedures, and data validation measures enable the team to produce quality NHA tables.

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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Before outlining the steps to filling in the tables, the trainer should go over several items to keep in mind throughout the iterative process of NHA:

- Relevance and reliability of the data plays a critical role in determining what numbers to use to fill in the tables.
- The beauty of the NHA table structure is that, like double-entry bookkeeping, there are at least two views of every entry in the accounts (originators and users); this helps in validating the data and avoiding mathematical errors.

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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- Know whether data sources use a **cash or accrual basis.**
- Make sure the expenditures took place in the **time period** for which they are reported.
- **Promptly document every decision** made regarding which data estimate was used and why. This allows for a quality control check and facilitates the process in future health accounts cycles.
- Information for each cell of a table may be compiled from a number of data sources or repeated in a more than one data source, in which case care should be taken **not to double-count**.

- Stay within the definition of health.
- The **first approximation of the tables is *tentative*** and will undergo several iterations until the tables are finally filled in and the data verified.

II. How to Fill in the Tables

From a menu of nine tables, countries can attempt to do any number of tables and in any order. Their choice of tables should be driven by policy concern and data availability. The most common tables that countries attempt first are the FS x HF table and the HF x HP table. The FS x HF table depicts flows from financing sources to financing agents, and the HF x HP table depicts flows from financing agents to providers.

FS x HF Table

Start with the FS x HF table (PG: pg. 140, 10.01-10.11; pg. 156, 11.01-11.12). There are many ways to fill in the table, and the choice of approach rests with the country doing the NHA activity. However, the following steps have proven successful in many countries.

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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1. **Begin in the "middle" of the basic NHA tables with financing agents.** HFs are the easiest category for which to capture expenditures, and from this point it is easier to go forward (to providers and functions) to estimate uses and backwards to estimate financing sources. Why are HFs the easiest category? The first reason is that, because HFs have programmatic control of funds, they are readily discernible as paying for health care services and goods. The second reason is that there are relatively few HFs (in comparison to, say, the number of providers). Finally, data retrieved from HFs is generally the soundest data available; this makes HFs the strongest dimension of the NHA tables.

2. **List and classify all the potential HFs** in the first column (vertical axis) of the table.
3. **Sort through the types of expenditure transactions related to HFs.**
   - Funds that are used to operate a provider or health program are captured as funds allocated by HFs to providers or functions. For example:
     - MOH operating its own clinic
     - MOH payment to a non-MOH provider for delivering care to a MOH-insured patient
     - MOH spending for public health
   - Funds transferred to an organization/individual that is the actual payer of health services are captured as the funds received by HFs from financing sources. For example:
     - Ministry of Finance transfer of funds to MOH
   - It is also important to identify and exclude HF spending *not* used for health care. For example:
     - MOH spending on retirement homes
4. Make first approximation of HF expenditure
   - Start with central government units such as the MOH, which are the easiest to identify.
   - Identify the various financing sources for each HF.
   - Use a T-Account for each HF *health fund* (see Table 6.1). A T-Account is a tool that national income accountants frequently use. For purposes of NHA, all that is needed for the T-Account is to identify money attributed to

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

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

Note to Trainers
Show slide 7 and remind participants what a FS x HF Table looks like.

Note to Trainers
Show slide 9 and discuss the table.

Table 6.1: The T-Account

MOH Health Expenditures		Health Revenue	
Program	15,000 Cr	Ministry of Finance	12,000 Cr
Capital	5,000 Cr	USAID	5,000 Cr
		Other Revenue	5,000 Cr

health and identify the source of that money (PG: pg. 146, 10.27-10.29). Expenditures are listed on the left side of the account and HF revenues (derived from financing sources) are on the right side of the account. The cardinal rule of T-Accounts is that the sum of entries on the left must equal the sum on the right; i.e., total revenues must equal total expenses or retained revenues.

Now the team can start to enter data into the FS x HF table.

HF x HP Table

Once the first approximation of the FS x HF is done, the team should work on the HF x HP table (PG: pg. 170, 12.01-12.10).

- The column headings of the HF x HP table list the financing agents of health care.
- The row headings list providers (producers) of health care.

Note to Trainers
Show slide 12 as a sample of a HF x HP table before it is populated.

This step can be complicated because entities that produce and finance health care may overlap. For example, the MOH may be both a financing agent and a provider.

1. Break down HF spending by provider type. It is not necessary to put in numbers at this stage, just **identify the providers**.
   - Breakdowns by provider can usually be found for the major FA's such as the MOH. For example:
     - MOH expense records might reveal that it gives funds to its hospitals, clinics, etc. List these providers in the first column of the table. If these records are not available, try to obtain survey information.
     - If household spending estimates are not available, it may be useful to see what services have been rendered by providers to households.

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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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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- If there is no direct information on breakdown of HF expenditures, use other estimation methods. For example:
  - Interview an expert. Often a statement like, "Our health insurance policies only cover physician services and a small amount of drugs" can be of tremendous value.

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

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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2. Classify the providers with ICHA codes.
3. Create additional provider rows as new providers are discovered.
4. Enter expenditure estimates in the table. Begin by taking the *row* totals from the FS x HF table and place them as "trial sum" column totals in the HF x HP table.
5. From the HF records, enter the initial disaggregated estimates on the corresponding provider line.
   - If it is not possible to break the expenditure down, the NHA team can place the expenditure estimate in the "n.s.k" category (not specified by kind). But this should be the last resort as increasing the size of this category reduces the policy usefulness of the NHA study.
6. Evaluate data sources from providers and note how much and how the providers earn their revenue. This step verifies whether the HF estimates (from step 5) are accurate. The trainer should stress that it is very unlikely that the two HF and provider estimates will match exactly.

The following questions about how user fees should be captured usually generate a lot of discussion and debate among participants. The trainer should be well prepared to facilitate such debates. The table provided at the end of the Tables section of the PowerPoint presentation may help in the trainer's explanation.

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).

Note to Trainers

The questions shown on slides 16, 17, and 18, about how user fees should be captured, usually generate a lot of discussion and debate among participants. Be well prepared to facilitate such debates.

The table on slide 19 may help in the trainer's explanation of user fees.

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.

In order to evaluate health care policy and make changes if needed, policymakers must understand what types of care are provided; how and where the care is provided; and the overall equity of health care spending and its distribution among different age, income, and geographical groups. These issues are addressed with the help of the next set of tables, which show how expenditures are used. Unlike the earlier two tables, these need not reflect all health spending. They have a specific analytic dimension (or function) that highlights selected aspects or elements of the health sector, such as the proportion of total health spending that is incurred on HIV/AIDS and related diseases, or on a specific segment of the population.

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

Whether the scope of these functional tables is broad or focused, the technique used to fill them in is the same – use of the ICHA and principle of completeness to the extent possible.

The most frequently attempted tables are HF x Func and HP x Func. Both tables measure the amount spent on different health functions (goods and services). The HF x Func table estimates who pays for these functions, whereas the HP x Func table measures where these functions are provided and by whom they are provided.

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

Completing both these tables is recommended. However, if time, resources, or lack of data permit a country to do only one table, the country's choice is driven by:

- *Policy relevance:* If where the services are provided and who provides them is more relevant than who pays, then the country should choose to do a HP x Func table. Otherwise, they should opt to do the HF x Func table.
- *Data availability:* The nature of the country's accounting and payment systems also influence the choice of the table to some extent. Public sector budgets do not always allocate expenditures by functions; this makes it difficult to develop the HF x Func table.

Operationally, of course, it is not possible to fill in one table without at least partially filling in the other. Therefore, experts recommend that NHA teams start by setting up a combination table – HF x HP x Func. This helps to piece together all the available information. Filling in this table can be challenging, however; the following steps help to clarify the process:

- To the extent possible, break down each HF's payments by function – primary care, curative care, public health programs, dental care, pharmaceuticals, other ancillary services, etc. HFs that have no existing functional breakdown can be disaggregated by provider type; this information is then entered into the HF x HP table.
- Group all the identified functions under the appropriate providers in the columns, as seen in the example in Table 6.2. (The provider list is already enumerated in the HF x HP table.) This gives the skeleton of the combination table. Functional breakdown of "single-function" providers is easy. For example, the amount spent at pharmacies can be attributed to "HC 5.1. Pharmaceutical and other non-durables." Functional breakdown of "multifunction" providers can be more challenging, because expenditures on each function are not easily disaggregated. An example of this would be disaggregating care delivered at hospitals into inpatient or outpatient care; doing so requires checking hospital records.

Table 6.2: Example of a Combination Table (HF x Function x Provider)

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. group insurance	HF.2.3 House-holds		
HP.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. MOD hospitals								
HC.1.1 Inpatient curative								
HC.1.3 Outpatient curative								
HC.4 Ancillary services								
HC.R.1 Capital formation								
HP.1.1.1.Regional general hospitals								
HC.1.1								
HC.1.3								
Total HF spending								
Check against HF x HP								

To prepare the combination table, start identifying the data sources:

- Social insurance system where it exists
- Households
- Donors
- Other cost studies
- Government program budgets
- Private sector data

Construct the combination table by combining and reconciling the results of the preceding three steps. If the table is fully completed, it can be easily disaggregated into HF x Func and HP x Func tables. If it is partially completed, extract the components that are most complete and formulate either the HF x Func or the HP x Func table. If a marginal amount of additional extra effort will complete the entire combination table, then the team should try to do so.

III. Resolving Data Conflicts

We all need to remember the **2 percent of Total Health Expenditure** rule (PG: pg. 157, Box 11.1). This cardinal rule states that, if two expenditure estimates differ by less than 2 percent of THE, then it is generally not worth the energy and time to resolve the difference. The team should choose one of the estimates and document its choice. However, if the difference is greater than 2 percent of THE, the team should make an effort to reconcile the two numbers. There are several suggestions for reconciling data conflicts.

- **The difference may be easily explainable**. For example, the absence of data from an HF may have contributed to its numbers being underestimated originally. Another reason may be that one data source is simply more reliable than the other.
- For large, otherwise 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? Do both measure either cash or accrual expenditures?
- More intuitively, simply **step back and check if the numbers seem reasonable**. For example, is the magnitude between spending on traditional healers and spending on "mainstream" providers plausible?

- With numerous sources of data triangulating the information, i.e., the same pieces of information being captured from more than one data source, **be careful not to double-count expenditures** by putting the same expenditure amount in more than one cell of a table. For example:
  - A household survey may capture expenditures made to certain providers. A separate employer survey may reveal that employers reimburse their workers for some of these expenses. The NHA team should not count this amount as both household and employer expenditures.
  - Firms may make payments, on behalf of their employees, to insurance companies, which make direct payments to providers. The NHA team must be careful to not double-count these transactions (firm payment to insurance companies and insurance company payment to provider).

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.

IV. Application of This Unit

The Susmania case study will provide participants practical experience in filling out the tables. Please refer to Unit 7 for the case study exercise.

Unit 6 - Slide Presentation

1

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Unit 6:
Organizing the Data for Filling in the Tables

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 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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3

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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Speaker's Notes

Filling in the tables = populating the tables.

These bulleted points should be remembered throughout the entire process.

Bullet 3. There is a constant need to look for two sources of data for a particular cell: Are a firm's payroll tax payments for social insurance consistent with receipts recorded by the social insurance organization? Do donor and government records agree on how much donor money went through the MOH? Figures from two different data sources seldom agree. But if they are close, then use the source more likely to be accurate (remember to document the choice of data source!!!).

4

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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Speaker's Notes

Bullet 4. Remember to promptly document every decision made in choosing which data estimate to use and why. This allows for a quality control check and facilitates the process in future health accounts cycles.

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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Speaker's Notes

Now that all the data are collected, we begin to populate a table. This can be an overwhelming task if not carefully done in a planned and methodical way.

6

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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Speaker's Notes

Funds often pass through multiple layers as they flow from source to eventual HF. The task of the NHA team is to trace the funds back to their original source (e.g., MOF).

7

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					

Speaker's Notes

This slide is to remind the participants what a FS x HF Table looks like. It also shows the completion of Step 3 (list and classify all of the potential FAs). This could be a first approximation of a table and classifications. Please note that row and column headings may change or may increase in number.

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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Speaker's Notes

For purposes of NHA, all that is needed for the T-account is to identify money attributed to health and identify the source of that money. Expenditures are listed on the left side of the account and HF revenues (derived from sources) are on the right side of the account. The cardinal rule of T-accounts is that the sum of entries on left side must be equal to the right side; i.e. every unit of revenue must be accounted for by some expense or retention.

10

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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Speaker's Notes

Even is something looks wrong, it may not be necessarily wrong. But nevertheless, reassess the calculation to make sure.

11

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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Speaker's Notes

MOH as a HF pays private provider to deliver health care to an MOH-insured patient.

MOH as provider delivers care at its own hospital, clinic, etc.

12

HF x HP Table

	Financing Agent									
	HF A Public Sector					HF B Non Public Sector				
	HF 1.1 Territorial government									
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	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 3 Rest of the world	Row totals 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										

Speaker's Notes

This is a first approximation of a FAxP table, before it is populated. The classifications and headings may change as more expenditure information becomes available.

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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Speaker's Notes

Bullet 1. You find out from the MOH budget sheet that it gives funds to its hospitals, clinics, etc. List these providers in the first column of the HF x HP table.

Bullet 2. If difficult to figure out HH, can go to provider hospital and see what service was received by HH.

Bullet 3. Think creatively, if the obvious sources of data are not available. Interview experts in the field, consult industry and professional association reports.

14

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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Speaker's Notes

If it is not possible to break down the expenditure, put in the category "n.s.k" (not specified by kind) in the provider axis. This should be the last resort, because putting spending in this category reduces the policy usefulness of health accounts.

15

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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Speaker's Notes

Why are HHs considered to be HF for user fees in this case? Because HHs determine what services those funds will be used for.

Avoid double-counting!

The trainer can keep this exercise optional.

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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Speaker's Notes

If this exercise is confusing to participants, the trainer could illustrate the concept as a diagram on a flip chart. Producers' Guide discusses this issue in chapter 10.1.5.

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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Speaker's Notes

In this case, add the user fees to whatever the MOH has given to the hospital.

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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

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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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Note to Trainers

The trainer may want to begin by asking the class for the definition of "function."

Speaker's Notes

It is difficult to get data for this "actor," primarily because many institutions don't report in terms of "functions." The MOH may simply say all of its funds go toward hospital x and break it down by recurrent vs capital expenditures. Also, while outpatient and inpatient curative services are delivered in hospitals, data are difficult to disaggregate based on the hospital records unless there is a distinct outpatient clinic with its own line items.

Few countries that did the first round of NHA were able to get to the functional level of detail. Only 4-5 countries started the table, and only one (Morocco) completed it. The other 3-4 countries did a pie chart that showed the amounts, but not where they came from.

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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Speaker's Notes

Which table to complete should be a local decision based on policy relevance.

22

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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Speaker's Notes

Choice of table also depends on what types of data can be obtained.

Where social insurance predominates the program reimburses for each service consumed (It does not simply fund the operating budgets of different providers.) For example, if a patient goes in for ultrasound, the bill received by insurance company is for the service itself. Therefore, it is easy to track functional distribution and their relationship with HF.

As shown in some of the government records handed out, some governments only capture spending by inputs such as drugs or salaries. Therefore, it may be difficult to get a HF x Func breakdown.

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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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Speaker's Notes

In the first round of NHA, many countries that attempted to do a functional breakdown just left it as a combination table.

Start with this combo table that has three dimensions; eventually, you split them.

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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Speaker's Notes

Previous slide shows where to put a number that doesn't disaggregate further than provider.

For example, MOH (HF) can be broken down by inpatient and outpatient care functions (services).

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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Speaker's Notes

Now to the second step of placing the functions under appropriate providers.

To continue the earlier example, the inpatient function under MOH will be placed under MOH hospital (provider).

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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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Speaker's Notes

Allocate provider general and administrative expenses in proportion to inpatient and outpatient expenditures.

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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 Ancilliary 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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Speaker's Notes

The combination table helps because it is possible to enter both types of payments to providers or for a particular service at a provider. Everything is in one place and easy to organize, or see where you have gaps.

Place all the totals from the previously done HF x HP table in the shaded cells. As you populate this table, you should start to see whether the table has the same totals as the previous HF x HP table.

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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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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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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Speaker's Notes

If the discrepancy is for less than the 2 percent threshold, it is perhaps not worth spending excessive time on resolving it. Evaluate if it can be resolved with minimal effort. If not, ignore it and focus on discrepancies that are more than the 2 percent threshold.

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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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Speaker's Notes

Double-counting refers to the repetition of the same expenditure amount in more than one cell of a table.

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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:	In-country training:
Case study I: 1 - 2 hours	Case study I: 90 minutes
Case study II: 90 minutes	Case study II: 90 minutes
Case study III: 3.5 hours	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

Learning Objective

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

Learning Objective

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

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

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

Note to Trainers

Before starting the case study, the trainer should thoroughly familiarize him/herself with the case study and how to work through the exercises. Then, when introducing the case study to participants, the trainer should explain that the exercises are demanding, and thus demand participants' utmost attention and alertness.

Exercises

- Case study and three exercises

The case study has three accompanying exercises that deal with various aspects of interpreting data from surveys and using the estimates to fill in an NHA table. Working through the exercises is challenging but rewarding for participants as the intense level of effort working with real-life NHA issues allows them to derive maximum benefit from the classroom experience. In fact, participants often comment that the sessions spent working out the case studies are the point at which "all the concepts [previously learned] became clear," and they developed a sense of what to expect when implementing their own country NHA initiatives.

- Time:

  Depending on the participants' capacity to manipulate numbers, implementing the case studies will take from one to one-and-a-half days to complete. Breaks should not be taken while working on a single exercise, because doing so disrupts the flow of understanding and learning.

- Supplies:
  - Participants will need calculators or some sort of spreadsheet software, such as MS Excel, and will need to refer to their exercise book for the questions and blank tables.
  - The trainer should arrange for an LCD projector and an overhead projector to use in teaching the case studies.
  - As the NHA tables are filled, the trainer may want to use overhead transparencies to write out the calculations that are taking place.

- Technique:
  - For a workshop of 10-12 participants, the trainer can implement the case study in a plenary session. For trainings of more than 12 participants, it is recommended that the class be split in two and a second trainer or facilitator work with the second group. If participants number more than 25 and participatory break-out sessions are planned, the break-out groups should not exceed 12-15 members, with one trainer per group.

The unit begins with a description of the socioeconomic context of Susmania, a fictional country upon which all the exercises are based. Participants have a written description of Susmania in their exercise book

Note to Trainers

Arrange for an LCD projector and an overhead projector to use in teaching the case studies. Provide for participants to have calculators or some sort of spreadsheet software. Make plenty of copies of the handouts; participants will need to refer to them for the questions and to fill in the tables.

I. Overview of the Country

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 that comprises a prime minister and several ministries (PG: pg. 121, 9.54; pg. 123, 9.74-9.80).

The Susmanian currency is called the Cruton (Cr).

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)

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.

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

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 retail pharmacies.

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

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.

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

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 fund NGOs that help to deliver care: Médicine sans Frontière (MSF), Red Crescent, Project Hope. and others.

Policy motivation for NHA

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

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

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

Before starting the exercise, the trainer should explain to participants that their participation in discussion – evidence that they understand NHA concepts and apply them correctly – is more important than getting the right answers.

Note to Trainers
Trainer should show appreciation even for wrong answers. A supportive trainer will make everyone feel comfortable and confident in participating.

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. The trainer/facilitator will need to walk them through each question and answer. The trainer should first ask the participants to read and reflect upon the question (allow two minutes per individual question) and then ask participants if they have any questions about what they are asked to do. The participants should then individually note their responses in their handouts (allow about four minutes per question). It is suggested that the trainer then ask for a volunteer from the group to voice his/her answer.

It is likely that some participants will grasp the concepts very quickly and dominate the response periods. The trainer should make sure that all participants have an opportunity to ask their questions and present their answers. After all participants who wish to respond have done so, the trainer should go over the answer (and accompanying calculations if necessary).

Note to Trainers
It is helpful to write the answer on either a flip chart or an overhead transparency. It is also recommended to prepare transparencies containing blank tables for those exercises requiring participants to fill in an NHA table.

The following pages have the questions and answers for the first case study. The trainer should use the answers below when going over the case studies since only very brief explanations are provided in the notes section of the PowerPoint presentation.

Table 7.1: 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

Note to Trainers

Show slide 8 from presentation 7a,and discuss the table.

Starting point

Financing Agents	Financing Sources: FS.1 Public Funds — FS.1.1.* Central government revenue		FS.2 Private Funds — FS.2.* Employer Funds	FS.2.2 Household Funds		FS.3 Rest of the World Funds	Total
HF.* 1.1.1 MOH							32 096
HF.* 1.1.2 MOE							329
HF.* 1.1.3 MOD							635
HF.* 1.2 Regional government							21 015
HF.* 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							

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 (Table 7.1) and have already placed these numbers in the appropriate row total cells of your table (PG: pg. 159, 11.19-11.33, Tables 11.5-11.9).

Note to Trainers

Show slide 9 from presentation 7a and explain how to fill in the 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?

Note to Trainers

The key is to look at the row totals and the number of sources of funds for the targeted financing agent because this tells you how many cells will be filled out for the row of the HF. For example, if a HF has two financial sources, then its row will have number estimates in only two cells (i.e., the ones designated within the columns referring to the two sources).

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

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

	Financing Sources							
	FS.1 Public Funds				FS.2 Private Funds		FS.3 Rest of World Funds	
Financing Agents	FS.1.1.1 Central govt. Revenue				FS.2.1 Employer Funds	FS.2.2 Household Funds		Total
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH						
HF.1.1.1 MOH	28,466						1,538	30,004
HF.1.1.2 MOE	329							329
HF.1.1.3 MOD	635							635
HF.1.1.2 Regional government		986						71,015
HF.1.2 NIA		1,106						53,837
HF.2.1.1 Government employee insurance programmes								552
HF.2.1.2 Private employer insurance programmes								2,132
HF.2.2 Private insurance enterprises (other than social insurance)								3,280
HF.2.3 Private households out of pocket payment								52,292
HF.2.4 NGOs								50,734
HF.2.5.2 Private firms								2,882
HF.2.5.1 Parastatal companies (Azaso)								3,024
HF.3 Rest of the world								1,905
Total Sum								386
Estimated Total								

  - 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.**

Note to Trainers

Emphasize that not all the column and row headings in the worksheet are final. As participants analyze each type of fund transfer, they will notice that certain entities may have double roles or completely different roles than anticipated (e.g., some may be both a FS and a HF and not just one or the other). These cases, call for flexibility; they may need to change, subtract, or add new columns or rows to the table.

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

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?

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.

Note to Trainers

Tell the participants that when institutions report their spending amounts to the NHA team, they do so *without* considering whether they acted as a financing source, financing agent, etc., for each expenditure transaction. Rather, institutions simply report a total amount expended as an institution, and it is up to the NHA team to glean each expenditure transaction and determine whether, in each case, the institution acted as a financing source, financing agent, etc. if an institution acted as more than one health care dimension (i.e., financing source and financing agent), then the team must estimate a total expenditure amount for each dimension. (They will need a total spending estimate for the institution when it served as a source, and another total estimate for the institution when it served as a financing agent.)

Note to Trainers

Ask the participants if they can see why this amount has been double-counted. A class member should explain the reason to the rest of the group. The answer has to do with the fact that institutions and other stakeholders report their expenditure amounts without considering whether they have necessarily been reimbursed. So two institutions may record having expended an amount even though one may have reimbursed the other.

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?

Q3

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.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 VOH	28,465					1,538	30,004
HF.1.1.2 VOE	328						328
HF.1.1.3 VOC	635						635
HF.1.2 Regional government	986	8,257					9,243
HF.1.2 NA	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							92,092
HF.2.4 NGOs							90,734
HF.2.5.2 Private firms							2,888
HF.2.5.1 Parastatal companies (Azaip)							3,024
HF.3 Rest of the world							1,905
Trial Sum							599
Estimated Total							

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?

Note to Trainers

Create another column if using transparencies.

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.**

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

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.

	Financing Sources						
	FS.1 Public Funds				FS.2 Private Funds		FS.3 Rest of the World Funds	
Financing Agents	FS.1.1.1 Central gov: Revenue		FS.1.1.2 Regional Government Revenue	FS.1.2 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds		Total
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH						
HF 1.1.1 MOH	28 486						1 538	30 024
HF 1.1.2 MOE	329							329
HF 1.1.3 MOD	635							635
HF 1.1.2 Regional government		586	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								553
HF 2.1.2 Private employer insurance programmes								2 130
HF 2.2 Private insurance enterprises (other than social insurance)								3 760
HF 2.3 Private households' out of pocket payment								87 057
HF 2.4 NGOs								90 734
HF 2.5.2 Private firms								2 888
HF 2.5.1 Parastatal companies (Aids)								3 024
HF 3 Rest of the world								1 925
Trial Sum								599
Estimated Total								

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.

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**

PI Rwm

- 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."

7

Note to Trainers

Trainer may want to state that an "estimation technique" will need to be used. He/she should ask the class for suggested techniques.

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

Note to Trainers

Explain the use of a temporary measure so that participants understand why this is done.

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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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	26,466						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		958	8,267					9,243
HF.1.2 NIA		1,108		688	44,374	14,497		60,667
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								80,732
HF.2.4 NGOs								2,980
HF.2.5.2 Private firms								3,324
HF.2.5.1 Parastatal companies (Azasi)								1,900
HF.3 Rest of the world								599
Total Sum								
Estimated Total								

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?

Note to Trainers

This question requires another estimation technique that can be used when you obtain two conflicting estimates while filling in the tables. Go over the technique rather than let the class tackle this question on their own.

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?

PHRplus

Answer

Financing Agents	Financing Sources							Total
	FS.1 Public Funds				FS.2 Private 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.3 Rest of the World 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		386	8,257					9,243
HF 1.2 NIA		1,108		669	44,374	14,781 (14,000)h		60,937
HF 2.1.1 Government employee insurance programmes					422	141		563
HF 2.1.2 Private employer insurance programmes					x	2,130-x (2,200)h		2,130
HF 2.2 Private insurance enterprises (other than social insurance)						3,280 (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 (Ajab)								1,905
HF 3 Rest of the world								599
Total Sum								
Estimated Total								

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.

Answer

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.

Exercise

9. NGOs

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

Financing Agents	Financing Sources							Total
	FS.1 Public Funds			FS.2 Private 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.2.3 Non profit Institutions / FS.3 Rest of the World 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		386	8,257					9,243
HF 1.2 NIA		1,108		669	44,374	14,781 (14,000)h		60,937
HF 2.1.1 Government employee insurance programmes					422	141		563
HF 2.1.2 Private employer insurance programmes					x	2,130-x (2,200) h		2,130
HF 2.2 Private insurance enterprises (other than social insurance)						3,280 (3,450)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 (Ajab)								1,905
HF 3 Rest of the world								599
Total Sum								
Estimated Total								

Note to Trainers

Show slide 22, refer to table, and explain the latest additions.

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)

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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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.

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?

PHRplus

Answer

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.

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 Revenues		FS.1.1.2 Regional Government Revenues	FS.1.2 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Households Funds	FS.2.3 Non-profit Institutions		
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1 MOH	28,485							1,538	30,024
HF.1.1.2 MOE	329								329
HF.1.1.3 MOD	533								533
HF.1.2 Regional government		989	8,267						9,256
HF.1.2 NA		1,168		696	44,374	14,791 (14,000 in)	666		60,697
HF.2.1.1 Government employee insurance programmes					422	141			563
HF.2.1.2 Private employer insurance programmes					710	1,420 (2,200 in)			2,130
HF.2.2 Private insurance enterprises (other than social insurance)						3,280 (3,450 in)			3,280
HF.2.3 Private households' out-of-pocket payment									82,992 - 60,734
HF.2.4 NGOs							1,215	1,653	2,868
HF.2.5.1 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
The Sum	29,436	2,052	8,267	696	50,435	?	1,215	3,790	
Estimated Total								5,180	

Note to Trainers

Place 599 in the Rest of World x External organization cell. Mention that different countries may classify a parastatal differently: some may place it as a public entity and others may place it as a private entity. This depends on the country context and perception of parastatals.

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.

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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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.

Financing Agents	Financing Sources: FS.1 Public Funds: FS.1.1.1 Central Government Revenue	FS.1.1.2 Regional Government Revenues	FS.1.2 Other Public Funds	FS.2 Private Funds: FS.2.1 Employer Funds	FS.2.1 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	29,466						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		992	8,257					9,243
HF 1.2 NA		1,106	566	44,374	14,751			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)					3,280			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 (Aziza)				1,905				1,905
HF 3 Rest of the world							599	599
Trial Sum	29,430	2,092	8,257	50,435	106,045	1,235	3,790	201,859
Estimated Total							8,180	

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.

Note to Trainers

Ask the participants to cite some of the factors that may make one survey estimate more reliable than another; e.g., higher response rate, better sample size, more pertinent questions that fall within the boundary of a health care expenditure definition, etc.

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?

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)?

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.**

Exercise

14. Next Step

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

PHRplus

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.2.1 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	28,465							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		* 106		566	44,374	14,791			60,837
HF 2.1.1 Government employee insurance programmes					422	* 41			563
HF 2.1.2 Private employer insurance programmes					710	1,420			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						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 (Azay)					* 595				* 595
HF 3 Rest of the world								596	596
Trial Sum	29,430	2,692	8,257	566	50,435	106,045	1,235	3,796	201,850
Estimated Total								8,188	

Note to Trainers

After the completion of this case study, the participants should take a well-deserved break!

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

In order to balance the intensity of each exercise and to maintain the attention spans of the participants, this next exercise is not as time consuming or detail-oriented as the first one. This second exercise does *not* ask participants to fill in the HF x HP table per se; rather, it asks participants to examine the results from specific survey questionnaires and to determine which results *would* be used in the HF x HP table and why. The purpose is to be able to sort through the various responses that an NHA team will obtain on its questionnaires and determine which ones are relevant to the HF x HP table.

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

	HF-A Public Sector						HF-B Non Public Sector					
	HF-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 VP SHI	HF.3 Rest of the world	Row Totals and Total Exp. Measures
HP.1 Hospitals												
HP2 Nursing and Res. dental 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												

Note to Trainers

Based on the information from the various surveys provided in the handouts, have the participants answer the following questions.

For the classification questions, the answers provided below are *suggested* classification codes. If the class has already developed their modified version of classification codes based on their country contexts, then the trainer should allow for answers that are in line with these modified classification systems. Again, trainer "hints" are provided in the following description of the answers. The notes section in the PowerPoint presentations does not have these hints and just provides the core answers.

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

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?

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 =

Note to Trainers

Question 1b requires participants to examine closely other pieces of information provided in the survey that may give an indication of how to break down the estimates between group and individual policyholders.

Filename: Exhibits 7b.1 - 7b.4
Adapted from NHA Producer's Guide (PG: pg. 130-131, Exhibit 9.1)

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
800,000	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

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."

Note to Trainers

Participants should determine to which expenditure transactions the two estimates refer. Does one show the transfer of funds between a "financing source and a financing agent" and the other the transfer of funds between a "financing agent and a provider"? The purpose of such a question is for participants to recognize that, through different types of expenditure transactions, one type of stakeholder (e.g., Employer) can be classified as more than one NHA dimension e.g., financing source, financing agent, or provider.

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?

Note to Trainers

Remember that participants will need to search the questionnaire once again for more information on the types of health services the company directly provides.

Filename: Exhibits 7b.1 - 7b.4
Adapted from NHA Producer's Guide (PG: pg.132, Exhibit 9.2)

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 therap
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 X X X	Inpatient Outpatient Drugs 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 (X) X X	Inpatient Outpatient Drugs 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

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).

Note to Trainers

To answer question 3a, the NHA team will need to examine all the listed expenditure types and determine where the money is coming from and where it is going. Only those funds that are transferred to a *provider* will be used in the HF x HP table.

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?

Filename: Exhibits 7b.1 - 7b.4
Adapted from NHA Producer's Guide (PG: pg. 135, Exhibit 9.3)

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

Note to Trainers

Tell the participants that the purpose of question 4a is for them to be able to distinguish between the various expenditure transactions that may be found on a survey and fit them into the NHA format.

Note to Trainers

Tell the participants that the purpose of question 4b is for them to be able to understand the value of utilization data in making expenditure estimates.

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

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?

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

Note to Trainers

Using the combination table/worksheet (handout), read the questions of the Susmania Case Study III and fill in the appropriate expenditure estimates in the table shell. An example of the combination table was given in Unit 6 (Table 6.2).

This is another intense case study exercise (but not as time consuming as the first one) that asks participants to sort through various data and determine how to use them to fill in the functional tables. Again, the trainer should ask participants to fill out a "starting point" combination table followed by a blank HF x Func table that are available as handouts sheets provided by the trainer. Copies will also be found in the Participants Manual.

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* (PG: Chapter 13).

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

Table 7.3: 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

Table 7.4: 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

* 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.

Exercise 1

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

Answer

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	MOH general hospitals								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.2	MOD hospitals								
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.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 FA x P									

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 FA x P		7,839	8,569	41	20,802	109	308	37,668	

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 "Check 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 you (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?

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

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."

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	MOH general hospitals							9,387	9,387
	HC.1.1 Inpatient Curative							7,125	
	HC.1.2 Outpatient Curative							1,545	
	HCR.1 Capital formation							717	
HP.1.1.2	MOD hospitals								8,569
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HP.1.1.3	Regional general hospitals				14,062	109	201		16,712
	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	8,565	41	20,802	109	305	37,668	

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.

Note to Trainers

Remind participants that they are looking at PROVIDER records and must remember how NHA classifies general administration at the provider level.

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,

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**

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.**
Place 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?

Note to Trainers

The key is to look at the row totals and the *number of sources* of funds for the targeted provider because this tells you how many cells will be filled out in the provider row.

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

PHRplus

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.

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
HF.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	
HF.1.1.1.2	MOD hospitals								8,569
	HC								
	HC								
	HC								
	HC								
	HC								
	HC								
HF.1.1.1.3	Regional general hospitals				14,062	109	291		19,712
	HC.1.1 Inpatient Curative				9,422	60			
	HC.1.3 Outpatient Curative				4,640	49	291		
	Total FA spending	2,540	0	0	20,802	109	398	9,387	37,668
	Check against HAP	7,839	8,568	41	20,802	109	398	37,668	

Exercise 4

For regional government hospitals

Table 7.5: Breakdown of Inpatient and Outpatient Care at Regional Hospitals

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

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

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

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?

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	6,387
	HC.1.1 Inpatient Curative	1,794			5,951			7,125	
	HC.1.3 Outpatient Curative	629			809		107	1,545	
	HC.H.1 Capital Formation	117						117	
HP.1.1.1.2	MOD hospitals								8,368
	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	37,688	37,668

Answer

Estimation technique:

- The remaining unallocated balance for inpatient curative is 12419 - (0 + 9,422 + 60) = 2937.

Note to Trainers

This is an estimation technique. NHA recommends dividing the inpatient and outpatient expenditures using the same ratio as that of the remaining "unallocated" balance for inpatient and outpatient.

- 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**).

Note to Trainers

Remind participants to document these calculations carefully so they can retrace their steps/methods of estimation.

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.

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

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

Note to Trainers

Refer back to what is classified as its own functional category and what is supposed to be "rolled-in" to another functional category.

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

Note to Trainers

Show slide 17 from presentation 7(c) and explain the tables

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 .

Question 5

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	2,549			6,740		107	9,387	9,387
	HC.1.1 Inpatient Curative	1,194			5,937			7,125	
	HC.1.3 Outpatient Curative	628			809		107	1,545	
	HCR.1 Capital Formation	717						717	
HP.1.1.1.2	MOD hospitals		8,569					8,569	8,569
	HC.1.1 Inpatient Curative		3,946					3,946	
	HC.1.3 Outpatient Curative		1,289					1,289	
	HC4 Ancillary Services		981					981	
	HCR.1 Capital Formation		2,353					2,353	
HP.1.1.1.3	Regional general hospitals	5,299		41	14,092	109	207	19,748	19,748
	HC.1.1 Inpatient curative	2,914		23	9,422	80		12,439	
	HC.1.3 Outpatient curative	2,385		18	4,640	49	207	7,299	
Total FA according		7,848	8,569	41	20,832	109	314	37,668	37,668
Check against FA x P		7,848	8,569	41	20,832	109	314	37,668	

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.

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

Table 7.7: 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

Table 7.8: 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

Note to Trainers

Refer to slides 21 and 22 of presentation 7c to explain these tables.

Financing Agents by Function 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 Government Employee Insurance Programme	HF.2.3 Private Household out-of-pocket	
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%

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

References

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

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Unit 7 - Slide Presentation

1

PHR*plus*

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:
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2

Learning Objective

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

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Speaker's Notes

The trainer should mention that the Susmania Case Study has been adapted from the Appia Case Study in the NHA Producers' Guide.

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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Speaker's Notes

NIA responsible for admin National Health insurance

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

6

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 Sources						
	FS.1 Public Funds			FS.2 Private Funds		FS.3 Rest of the World Funds	
Financing Agents	FS.1.1.1 Central government revenue			FS.2.1 Employer Funds	FS.2.2 Household Funds		Total
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							

Speaker's Notes

Mention Direct Transfers.

Mention the "National Categories" addition under the ICHA term of "Central Govt."

Refer to the FS x HF exercise handout 'starting point' table. Tell the class that the HF totals in this slide have already been entered into this shell by the NHA team.

Pass out the answer sheets as they complete the questions or fill out the answers on transparencies and pass out the answers as a set at the end of the exercise.

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

11

FS x HF Table for Susmania

Financing Agents	Financing Sources								Total
	FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
	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									62,092-90,734
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									598
Trial Sum									
Estimated Total									

Speaker's Notes

1a) For the MOE and MOD cells:

Since you know that MOE and MOD get their funds from only one source, you can repeat their row totals in the Central Govt. x MOE and the Central Govt. x MOD cells.

- Place 329 for MOE in the Central Govt. x MOE cell.

  Place 635 for MOD in the Central Govt. x MOD cell

For the MOH cells:

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

Since you also know that MOH gets its funds from only two sources, 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).

2 a) Since the MOH in this case is a source of funds, you need to create a second column within Central Govt. 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).

Place the 986 amount for grants in the MOH x Regional Govt. Cell.

Place the 1,106 amount for grants in the MOH x NIA cell

2b) 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 HF. However, because the MOH also started to act as a source, the row total for MOH as a HF has to be reduced. You will need to subtract this expenses as a source (986+1106=2092) from the 32096 amount. Therefore, the new MOH HF total is 32096-2092 = 30004.

2c) With the new total for MOH as a HF, the previously estimated amount (estimated by subtracting MOH row total – row amount) for MOF x MOH will have to be adjusted. Use the new MOH row total and subtract the row amount; therefore, 30004- 1538= 28466.

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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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Speaker's Notes

MOH as a source or HF (depending on who has programmatic control)

3a) MOH – The MOH actually controls where the money is used. The regional govt hospital is merely a conduit or tasked to do a very specific job of the MOH.

3b) Ask the class if they can see why this amount has been double-counted. A class member should explain why to the rest of the group. subtract 11772 from the original, regional total (21015 Cr - 11772)= 9243.

3c) Restate that regional governments receive their funds only from two sources: their regional taxes & the MOH grants (see question 2). The class should now figure out where the remaining amount should be placed to complete the regional government row. Create a 'financing source' column for the remaining amount (amount generated by local taxes): 9243-(986)=8257.

13

Q3

FS x HF Table for Susmania

	Financing Sources						
	FS.1 Public Funds		FS.2 Private Funds			FS.3 Rest of the World Funds	
Financing Agents	FS.1.1.1 Central government revenue	FS.1.1.2 Regional Government Revenue	FS.2.1 Employer Funds	FS.2.2 Household 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						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							

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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Speaker's Notes

4a) Create another "other" category within public sources columns (FS 1.2 other public funds). The interest income is included because it is used for health benefits of beneficiaries (i.e., it is a health expenditure).

4b) 60837-(1106+566)=59,165/4 = 14,791-employee contributions/households.

Therefore, employer funds will be: 14791x3=44,374.

15

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 NIA		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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Speaker's Notes

5) GEIP multiply 0.25x563= 141= Employee contribution; and 0.75x563=422= Employer contribution

The government can be the private employer in this case.

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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Speaker's Notes

Note that the employer: employee contribution ratio of 3:1 is only for public sector. Such a ratio for private sector is unknown, so for now we distribute Cr 2130 between employers and employee/HH as 'x' and '2130 – x'

6) Place 2130-x in the HH x Private Employer Insurance cell

Place the 'x' in the Employer x Private Employer Insurance cell. This is a temporary measure.

7) Place 3280 in HH x Private Individual Insurance cell.

18

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 NIA		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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Speaker's Notes

8) Technique for dealing with two conflicting estimates: For now, place the HH estimates in same cell as previous insurance estimates and come back later to reconcile the differences.

20 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		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 (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								

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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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Speaker's Notes

9a) enter 1653 in the FS.3 Rest Of World x HF2.4 NGOs cell.

9b) enter 1235 in the FS.2.3 Non-profit institutions serving individuals x HF2.4 NGOs cell.

22 FS x HF Table for Susmania

Financing Agents	Financing Sources							Total
	FS.1 Public Funds			FS.2 Private 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.2.3 Non profit Institutions	FS.3 Rest of the World 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		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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Speaker's Notes

10) For employers, 2130/3=710, for employees 2130-710=1420. Because at this stage we do not know whether this survey is more accurate than the HH survey, both the HH survey and firms estimates are in the same cell

24

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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Note to Trainers

The NHA table that goes with exercise 11 is the same table that goes with exercise 12

Speaker's Notes

11a) 1905 Cr is placed in the Employers (FS.2.1) x Parastatals (HF.2.5.1) cell. Some countries may prefer to place parastatals as a source separately under public funds.

11 b) 3024 is placed in the Employer Funds (FS.2.1) x Private Firms (HF.2.5.2) cell.

11c) 599 is placed in (FS.3) Rest of World x Rest of the World (HF.3) cell.

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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Speaker's Notes

Reconciliation process= do a "trial sum" row and a "estimated total" row.

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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.2.3 Non-profit Institutions		
	FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1 MOH	28,486							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		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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Speaker's Notes

13a) Keep the NIA estimate of 14791 (FS.2.2 HH x HF.1.2 NIA cell) and 3280 (FS.2.2 HH x HF.2.2 Private Individual Insurance cell)

13b) Keep the 710 (FS2.1 Employer x HF.2.1.2 PEIP) and 1420 (FS.2.2 HH x HF.2.1.2 PEIP)

28

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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Speaker's Notes

13c) This is simple data entry. Enter 86413 in the FS.2.2 HH x HF.2.3 HH cell.

13d) Keep the 3790 estimate because food and sanitation expenses are health care related expenditures and not direct health expenditures.

29

Exercise

14. Next Step

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

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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.2.1 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 NIA		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

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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 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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Speaker's Notes

The trainer should ask the class to refer to the Susmania questionnaire handouts. Again, these handouts are adapted from those printed in the NHA Producers' Guide.

3

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

	HF.A Public Sector						HF.B Non Public Sector					
	HF1.1: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												

Speaker's Notes

Reminder of what a HF x HP table looks like and what types of NHA data you will need to enter after interpreting the data from the surveys.

*NPISH = Non-Profit Institutions Serving Households.

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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Speaker's Notes

The Trainer will hand out sample surveys that illustrate aggregate spending for a particular health care entity, e.g., for firms. In the following exercises participants will be asked to interpret the raw numbers from the surveys and explain how they relate to the HF x HP table.

It would be useful for the trainer to write the answers on the flip chart as they are discussed.

(Note: in the survey handouts, the crosses=circles)

1a) HP. 1.1.2 Private general hospitals; HP.1.1.2.1 private for-profit general hospitals, HP.1.1.2.2 private not-for-profit general hospitals

HP.3.4.5 All other outpatient multispecialty and cooperative service centers; HP 3.4.5.1 Private for-profit health centers, HP 3.4.5.2 private not-for-profit health centers

1b) The distribution of members enrolled in group policies and private policies is 32% and 68%

We use this ratio to distribute the private hospital and clinic disbursements

Private for-profit hospital: 39.36 = 0.32x123 for group and 83.64 for individual

Other private for-profit health centers: 69.12 for group; 146.88 for individual

Private non-profit hospitals: 140 for group and 297 for individual

Other private non-profit health centers: 326.4 for group and 69.3 for individual

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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Speaker's Notes

2a) 3024, because this expenditure is the amount the firm spent on on-site health services. So the firm is a HF.

2b) For this question the class will need to examine the survey to see what types of health services a company provides in its on-site facilities. We learn that the company provides outpatient care on-site. Therefore, the classification is HP 3.4 OR HP.3.4.5 All other outpatient multi specialty and cooperative service centers.

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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Speaker's Notes

3a) To answer this question, the class will need to examine all of the listed expenditure types and determine where the money is coming from and where it is going. Only amounts given to a provider will be placed in the HF x HP table. Answer: General hospital (599)

3b) HP.1.1.2.1 NGO hospital, this is assuming that HP1.1.2 refers to private general hospitals (HP1.1.1. would be public hospitals)

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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Speaker's Notes

4a) This is a good exercise to do in order to distinguish between different expenditure transactions that may fit into the NHA format, i.e., all transactions except payment to NIA and private medical insurance payments.

4b) The purpose of this question is to see the value of utilization data in making estimates about expenditures when:

For Clinics: private 3: public 2

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

1

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

USAID

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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 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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Speaker's Notes

Mention that the HF x HP table was not done in the previous Susmania case study exercises.

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

Speaker's Notes

This case study presents an abbreviated version of the possible table for Susmania as it does not include traditional healers, employer clinics, pharmacies, and donor hospitals.

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**

PHRplus

Speaker's Notes

Remember that you are looking at provider records for total amounts (includes contributions from all relevant FAs).

2a) 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 under provider). So the 717 Cr goes to the Column Total x MOH Hospital Capital formation cell. The trainer should mention that at this stage it is not known where the hospital is receiving its funds, so the estimates need to be placed at the row totals cell.

2b)Therefore, GA expenses are 3676-717= 2959; but how do you classify GA expenses? In NHA, GA expenses don't have a separate category. Administrative expenses of a provider are not allocated to Function HC.7 (Health admin and health insurance), which only includes expenses related to MOH at the central and provincial level (not provider!). Rather, the 2959 is included as part of the cost of services provided.

The 2959 GA estimate has to be allocated to inpatient and outpatient expenditures:

You learn that inpatient spending is 82.2% 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= 2432+4693= 7125.

Outpatient spending is 17.8% of total spending (inpatient +outpatient only) at MOH hospitals (1018/5711); therefore the GA amount that is added to outpatient spending is 0.178 x2959= 527. So total Outpatient= 527 + 1018 = 1545.

Remember to classify and add lines for inpatient and outpatient categories. Inpatient is HC 1.1 and therefore the 7125 amount needs to be placed in the "total x MOH Hospital Inpatient cell." Outpatient is HC 1.3 and therefore the 1545 number should be placed in the "total x MOH Hospital outpatient cell."

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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	

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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

PHRplus

Speaker's Notes

3a) Place 107 in HH x MOH Outpatient cell.

3b) 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. Place this number in the NIA x MOH Outpatient cell.

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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

PHRplus

Speaker's Notes

3c. To figure out MOH share: Take row totals and subtract HH and NIA contributions.

Therefore, the total amount contributed by MOH = 9,387- (107+6740) = 2540.

The MOH contribution to inpatient curative = 7125- (0+5931)= 1194 (in MOH x MOH inpatient cell).

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.

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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**	

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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

PHRplus

Speaker's Notes

4a) Total amount: 19,712 Cr should be placed in the "total x Regional govt. hospital total."

Inpatient amount: 12,419 Cr should be placed in the "total x Regional govt. inpatient total."

Outpatient amount: 7293 Cr should be placed in the "total x Outpatient regional govt. total"

4b) The remaining unallocated balance for Inpatient Curative is 12,419- (0+9,422+60)= 2937

The remaining unallocated balance for Outpatient Curative is 7,293- (201+4640+49)= 2403

The remaining unallocated total balance for Regional hospitals is 19,712- (201+14,062+ 109)= 5340

Therefore, unallocated inpatient expenditures is 2937/ 5340= 55% of total for regional hospitals.

The unallocated outpatient expenditure is 2403/5340= 45% of total for regional hospitals.

Estimation technique: 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: 0.55x 41 = 23 and Regional Gov. Outpatient is 0.45x41= 18

(23 Cr should be in Regional Govt. x Regional Hospital Inpatient) and (18 Cr should be placed in Regional Govt. x Regional Hospital Outpatient cell)

MOH Inpatient Curative is: 0.55x 5299= 2914 and MOH outpatient is 0.45x 5299= 2,385

(2914 Cr should be in MOH x MOH Hospital Inpatient cell; 2385 Cr should be placed MOH x MOH hospital Inpatient)

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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

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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

PHRplus

Speaker's Notes

5a) Items to be split in 3:1 ratio between HC1.1 Inpatient Curative care & HC 1.3 Outpatient Curative care:

Salaries (.75x1963=1,472-Inpatient; 491-Outpatient), Drugs (.75x1227=920-Inpatient; 307-Outpatient) (reason: hospitals may have one pharmacy that provides drugs to both outpatient and inpatient), General administrative costs (.75x573=430-Inpatient; 143-Outpatient), Maintenance (.75x900=675-Inpatient; 225-Outpatient), Janitorial Services (.75x491=368-Inpatient; 123-Outpatient)

HC1.1 Inpatient Curative Only:

Meals (41),

Laundry (assuming 100% of laundry is for inpatients) (40)

HC4 Ancilliary Services to Medical Care

Laboratory & x-rays (981)

HCR1 Capital Formation for Health Care Provider Institutions

Construction (717)

Medical Equipment (1,636)

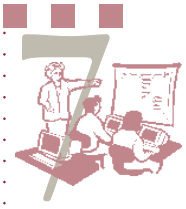
So the total amount that the MOD gives to its hospitals for

Inpatient (HC 1.1)= 1472 + 920 + 430 + 675 + 368 + 41 + 40 = 3946

Outpatient (HC 1.3) = 491 + 307 + 143 + 225 + 123 = 1289

Ancillary Services (HC 4) = 981

Capital Formation (HCR 1) = 717 + 1636 = 2353



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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							
		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					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	

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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.

PHRplus

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Question 6
Providers by Function table

Function	Provider			
	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	Total
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

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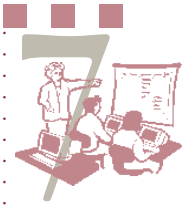
Exercise cont'd

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

PHRplus



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Financing Agents by Function 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 Government Employee Insurance Programme	HF.2.3 Private Household out-of-pocket	
HC1.1 Inpatient Curative	4108	3,546	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

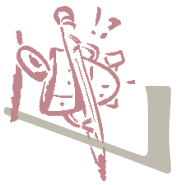
d. After re-examining the donor expenditure amount (8180 Cr), you learn that the estimate includes food and sanitation expenditures. Which estimate should you take (8180 Cr or the trial sum estimate)?

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
800,000	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 — Public facilities _____ Private facilities _____
   - (No)

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 — How much? _____
   - No

   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 — How much? _____
   - (No)

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

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

	AGGREGATION
Donor Name:	
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

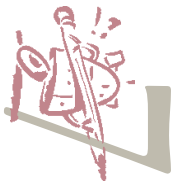
b. What expenditure estimates would you use? Enter them into the table.

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

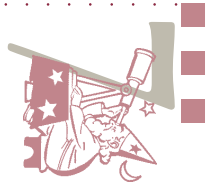
Next steps: SEE IF ROW AND COLUMN TOTALS ADD UP to the same number.

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

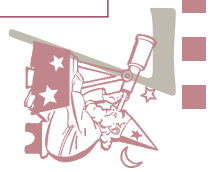
Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue				FS.2.1 Employer Funds	FS.2.2 Household Funds			
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
HF.1.1.1.1	MOH	**28466**							**1538**	32096
HF.1.1.1.2	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								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 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

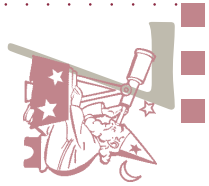
Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue	FS.2.1 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds			
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
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

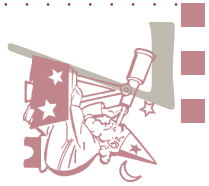
Financing Agents		Financing Sources								Total
		FS.1 Public Funds				FS.2 Private Funds			FS.3 Rest of World Funds	
		FS.1.1.1 Central government Revenue		FS.1.1.2 Central government Revenue	FS.2.1 Other Public Funds	FS.2.1 Employer Funds	FS.2.2 Household Funds			
		FS.1.1.1.1 MOF	FS.1.1.1.2 MOH							
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

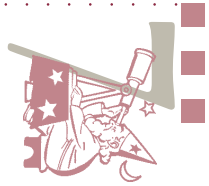
Function	Provider			Total
	HF.1.1.1.1 MOH General Hospitals	HF.1.1.1.2 MOD Hospitals	HF.1.1.1.3 Regional Govt. General Hospitals	
HC1.1 Inpatient Curative	7,125	3,946	12,419	23,490
HC1.3 Outpatient Curative	1,545	1,289	7,293	10,127
HC4 Ancilliary Services		981		981
HCR 1 Capital Formation	717	2,353		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

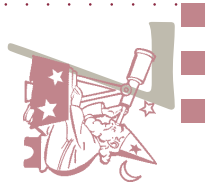
Question 1 Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table

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**	



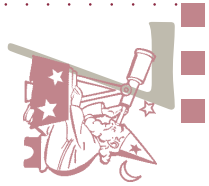
Question 2 Worksheet for Susmania Case Study III: Filling in the HF x HP and HF x Func Table									
Provider and Function		Financing Agent						Total	Check against HF x HP
		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 Ministry of Defense	HF.1.1.2 Regional Govt.	HF.1.2 NIA	HF.2.1.1 Govt. Employee Insurance 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

Learning Objectives

- ▲ Understand the policy utility of NHA
- ▲ Understand how to interpret and present the NHA results to answer "so what" questions
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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

Note to Trainers

In the past few units, most of the NHA work has been the task of the NHA technical team, with oversight from team leaders and input from the steering committee. Now that the technical members have produced the NHA tables, it is time for the focus of activity to shift to the team leaders.

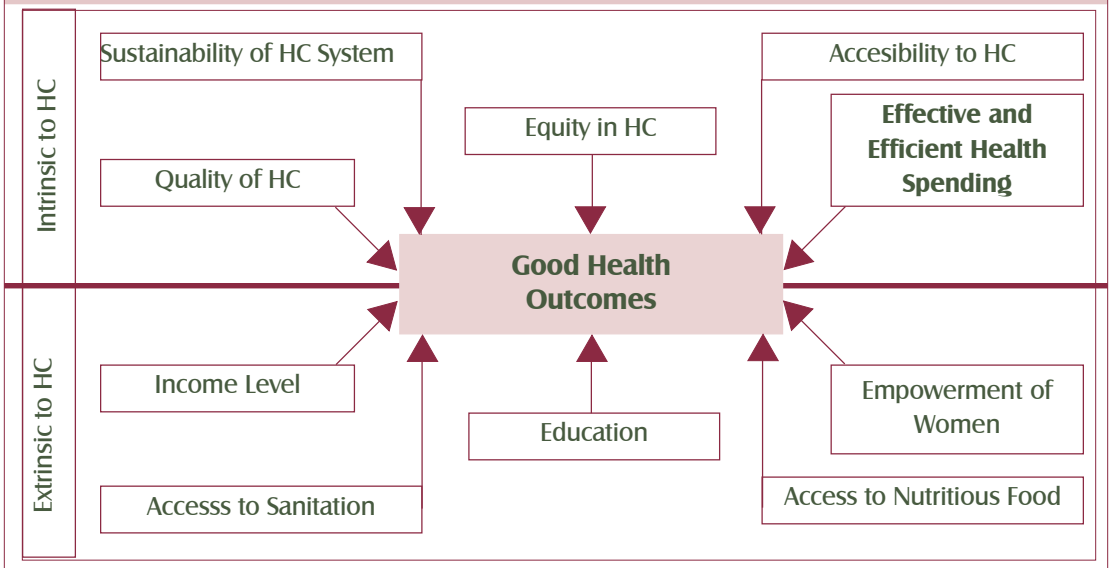
Trainer should review with participants the roles and responsibilities of technical members and team leaders, enumerated in Unit 2. The team leaders now help the technical members to interpret the NHA findings in conjunction with other data, and to present and disseminate the findings in a way that is comprehensible and relevant to policymakers, thereby increasing the NHA data's utility in the policymaking process.

I. Enhancing the Policy Value of NHA: Combining NHA Findings with Other Data

A population's health outcomes depend on many factors, of which health spending is only one. Figure 8.1 highlights factors intrinsic and extrinsic to the health care system that influence health outcomes.

It is important to understand that health spending is one component contributing to the success of a health care system; and health care spending information is important to figuring out what "effective" and "efficient' levels of spending are.

Figure 8.1: Extrinsic and Intrinsic Factors that Determine Health Care Outcomes



Note: HC=health care

Note to Trainers
Show slide 4 and explain the chart.

The point is that NHA or health spending information, when combined with other data (noted above) can give a policymaker a much stronger sense of what needs to be done in order to foster "good health outcomes." This point is a useful one to make in introducing NHA to non-health economists. Often MOH staff have a medical background and a certain resistance to the introduction of health economics. It is a good approach to place economic data as one piece of information that can be added to more traditional health indicators to create a complete picture of the health sector.

The NHA estimation of financing flows and expenditures is a solid indicator of the "financial health" of a health sector. However, NHA results are more valuable, i.e., policy-relevant, when viewed in conjunction with other, non-financial types of data such as the following:

1. **Socioeconomic indicators:** The country doing NHA should compare its health spending numbers to other countries of

similar socioeconomic status; overall GDP or GDP per capita can be used as a point of reference. Access to care by income groups can be used to measure equity. Wherever possible, purchasing power parity (PPP) and constant currency should be used, particularly for conducting trend analysis.

2. **Health service production data:** Measures such as the rate of immunization and volume of patients are used for calculating efficiency of the resources used.
3. **Health outcome data:** Health statistics, disease burden, etc. also are used to measure equity and efficiency.
4. **Other demographic data:** Indicators such as population growth rates and fertility rates are used to forecast and budget for health spending in the future and this can be used as a strategic policy-planning tool.

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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Note to Trainers

The general point is that, in determining what the NHA estimates actually imply for health sector policy, it is useful to analyze non-NHA data such as socioeconomic indicators, production data, health outcome data, etc.

That said, it is important not to lose sight of the fact that information on the flow of financial resources —e.g., the percent of GDP spent on health— is in itself valuable.

Case Study Example: Enhancing NHA in Jordan

NHA shows that Jordan spends 9.1 percent of its GDP on health care (Al-Madani, Ali, Lubna Al-Shatwieen, Dwayne Banks, et al. 2000). This statistic alone is not very informative, nor does it send any policy message, because it does not tell policymakers the significance of the statistic. This NHA finding needs to be compared with other data.

International comparative data: Jordan's rate is the second highest among eight countries in the Middle East region (De and Shehata 2001).

Socioeconomic data: This level of expenditure may not be sustainable given weak economic growth (~ 2 percent per year since 1998) and high population growth rate (3.8 percent.).

Health data: Jordan's percent of GDP going to health care may be too high compared with health outcome measures such as infant mortality rate, maternal mortality rate.

Two obvious policy implications can be drawn from this finding:

1. Jordan should increase efficiency of its health resources to produce, at the same cost, more services to support the needs of its growing population, or
2. Contain costs throughout the health sector.

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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II. How NHA Informs Policy: Examples

Figure 8.2 illustrates how NHA links to health policy decisions.

Figure 8.2: 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	**Financing Sources**	How are resources mobilized? • Who pays? • Who finances? • Under what scheme?
Pooling arrangements Cost recovery Regulation of payers	**Financing Agents**	How are resources managed? • What is the financing structure? • What pooling arrangements? • What payment/purchasing arrangements?
Financial incentives Subsidies Resource allocation Provider regulation	**Inputs Providers Functions**	Who provides what services? • Under what financing arrangements? • With what inputs?
Targeting Redistributive policies	**Important Distributions e.g.** Age/ Gender; Location; Socio-Econ. Status	Who benefits? • Who receives what? • How are resources distributed?

Note to Trainers

Show slide 7 and summarize few ways in which NHA results can be made more salient.

NHA facilitates the policy process at all stages: dialogue, design, and implementation, and monitoring and evaluation. Following are examples of how different countries have used the NHA tool in regard to policy.

Policy Dialogue

Egypt

Egypt is an example of a country where the findings from NHA combined with other data were used by the Minister of Health and Population and international agencies (World Bank, U.S.Agency for International Development, and European Economic Commission [EEC]) to initiate a policy dialogue that led to the design and ongoing implementation of an initiative to restructure how primary health care is organized and financed.

The NHA results showed that Egypt spent nearly 4 percent of GDP on health care with household out-of-pocket expenditures

amounting to 50 percent of total expenditures and the Ministry of Health and Population (MOHP) accounting for less than 20 percent of total expenditures. While the sum spent on primary care should be adequate to provide a set of basic services to all, most of these resources were not organized or allocated in efficient ways. The burden of these expenditures was very inequitably distributed, with the poor paying the largest share of household income. This form of financing also resulted in lower levels of access to care by the poor and those living in rural areas.

Policy Impact of NHA: Egypt

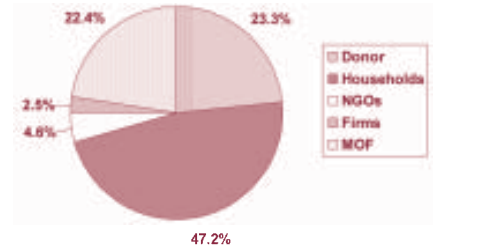
- 1994/95 NHA results showed that
  - THE is 4% of GDP
  - Out-of-pocket expenditures = 50% of THE.
  - MOH contribution low at <20 % of THE
  - Assessing results with socioeconomic data revealed burden of these expenditures somewhat inequitable.
  - Therefore, lower levels of access by the poor rural households
- Reform agenda was designed and is being implemented – basic benefits package for all Egyptians

The findings provided the Minister of Health and Population with the information needed to convince the People's Assembly, the public, and those working within the MOHP of the need to significantly restructure the way primary health care was organized and financed in Egypt. These findings also provided valuable information to the World Bank, USAID, and EEC to inform their own discussions with the government as well as among themselves.

Tanzania

Findings of the draft NHA report revealed that donor contributions to the health sector are rather large and considerable portions of the donor expenditures are not recorded properly in government budgets. This implies poor coordination of donor resources and little control of the government over management of health sector funds. The NHA results were used internally within the government and shown to some donors, to garner support for Sector Wide Approaches and donor basket funding to decrease off-budget spending.

Policy Impact of NHA: Tanzania

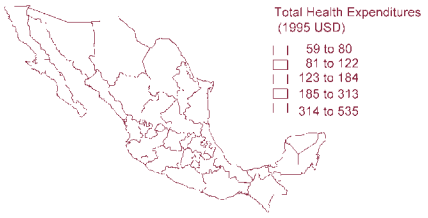


Policy Impact: Used to garner support for SWAPs and donor basket funding to decrease off-budget spending

Mexico

NHA revealed that health spending varies considerably across Mexico, with spending in wealthier states six times that of poor states. When NHA results were further assessed in conjunction with household income data, disparities became apparent, particularly in private expenditures. Analysis revealed that in the lowest income decile (constituting 17 percent of the population) health expenditures consume more than 50 percent of the household's

Policy Impact of NHA: Mexico



Policy Impact: Used to channel allocation of public transfers to states according to need

disposable income. This has a catastrophic effect on standard of living.

Another key finding was that public health expenditures are not distributed according to need as measured by the burden of disease. As a result, the MOH began a policy dialogue to channel and monitor allocation of public transfer to states according to need as measured by income levels and/or burden of disease. The data also informs debate on insurance for the poor.

Policy Design and Implementation

Egypt

Informing discussions to restructure primary health care in Egypt: The Egyptian Ministry of Health and Population (MOHP) and collaborating international agencies (World Bank, USAID, and European Commission [EC]) used findings from NHA as well as non-financial data to initiate a policy dialogue that led to the design and ongoing implementation of a primary heath care restructuring initiative. NHA results contributed to the promotion of this initiative by showing that Egypt spent nearly 4 percent of its gross domestic product (GDP) on health care, with household out-of-pocket expenditures amounting to half of total expenditures and the MOHP accounting for less than 20 percent of the total. While the sum spent on primary care should be adequate to provide a set of basic services to all, most of these resources were not organized or allocated efficiently. The burden of expenditures was inequitably distributed, with the poor paying the largest share of their income for care. This form of financing also resulted in lower levels of access by the poor and those living in rural areas.

Such findings provided the then Egyptian Minister of Health and Population with the needed information to convince the People's Assembly, the public, and those working within the MOHP, of the need to significantly restructure the way primary health care was organized and financed in Egypt. In addition, NHA provided valuable information to the World Bank, USAID, and EC to inform their own discussion with the government. Consequently, the Minister of Health and the international donors, through a series of discussions, were able to arrive at a mutually acceptable reform agenda as well as receive financial support.

Lebanon

The 1998 NHA results in Lebanon highlighted excessive expenditures on health care – almost 12.5 percent of the GDP, far higher than other upper-middle income countries with similar socioeconomic characteristics. An investigation into the reasons for the high expenditures revealed that a high percentage of health services were provided by the private sector but paid for by the government on a fee-for-service basis.

This contributed to high utilization rates and therefore high costs. As a result, the Lebanese government is now taking steps toward provider payment reforms. The reform will introduce a system of capitated payments and a schedule of fees, as well as identify medical procedures that can be conducted on an outpatient or day basis rather than the current, more costly inpatient basis.

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

South Africa

In South Africa, the first round of NHA, which estimated 1992/1993 expenditures, occurred soon after the end of apartheid and was a response to the African National Congress-led government's commitment to allocate resources more equitably, in particular to address the needs of traditionally marginalized populations. This new policy environment called for a more evidenced-based approach to policy formulation; NHA was identified as a potentially useful tool to provide policy-relevant information regarding the health care system's status in meeting equity objectives. Principal findings of NHA showed that the geographical distribution of health care resources was not equitable. Less money was invested in public health care in the poorer magisterial districts than in the wealthier ones. Average public health expenditure per person was 3.6 times more in the richest districts than in the poorest districts. Also, the poorer districts (which are areas with the greatest health problems) had the worst geographical access to health workers, hospitals, and clinics. Specifically, the richest magisterial districts employed 4.5 times more doctors and 2.4 times more registered nurses than did the poorest areas (Table 8.1).

Policy Impact of NHA: South Africa

Province	Total Health Expend per capita	General doctors	Specialist doctors	Registered nurses
E. Transvaal	138.60	6.48	0.48	67.63
N. Transvaal	164.07			
North-West	178.91			
N. Cape	221.15			
E.Cape	225.98			
KwaZulu-Natal	235.88			
Orange Free State	265.49			
Gauteng	381.66			
W. Cape	491.13	30.83	23.71	200.46

Policy Impact: Moratorium on private hospital building without certificate-of-need, increase government regulation of private sector (equity), and shift resources to primary care

Table 8.1: South Africa: Distribution of Health Care Providers by Income Quintiles

Quintiles of Magisterial Districts Sorted by Income per Capita	General Doctors	Registered Nurses
Q1 (lowest income)	5.1	78.7
Q2	9.4	90.9
Q3	15.8	128.4
Q4	13.5	128.2
Q5 (highest income)	23.3a	189.9

Source: McIntyre et al., 1995

In addition to contributing to increased awareness at the senior policy level regarding the disparities in resource allocation, NHA findings served as an impetus for designing new policies to geographically redistribute South Africa's health resources in a more equitable manner. For example, a government moratorium was placed on the building of new private hospitals, because these hospitals were usually built in the richest neighborhoods, where residents already had the greatest access to health care. The study further prompted the government to take a more active role in coordinating and regulating where both public and private health resources are used. The equity issues highlighted by the study also contributed to the government committing to shift public health funds to primary health care services and infrastructure, particularly in poor and rural regions of the country. Finally, discussions were initiated and a proposal submitted regarding the introduction of a national social health insurance scheme. NHA contributed significantly to the development of government policies aimed at improving equity by providing relevant information on the extent to which each income-level group absorbed country health care resources.

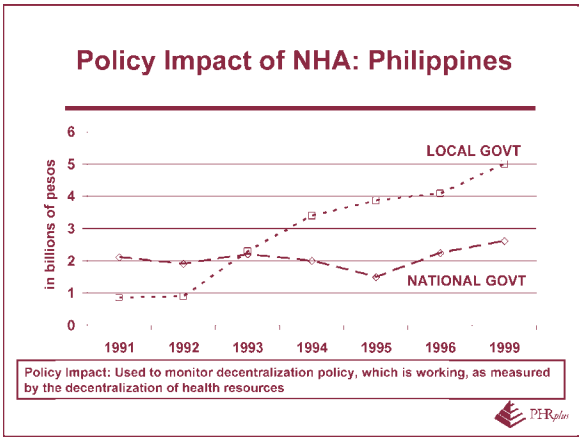
Monitoring and Evaluation

Trend comparisons over time can be made in countries where NHA is carried out routinely. Such comparisons help to evaluate the effectiveness of the implemented strategies. Consistent production of NHA allows decision makers to understand how health resources are used over time and how the allocation patterns have changed, and to evaluate whether or not prior policies/reforms are redressing the problems or keeping up with changing demographics. This longitudinal benefit of repeated rounds of NHA gives decision makers a unique opportunity to assess the past performance and more effectively align the future reforms to the changing demographics.

As previously discussed, another way that NHA results can be used as an evaluative tool is to compare of one country's health system data with others. When one country's health expenditure patterns are atypical of its peers (countries with similar health outcomes and socioeconomic background), it raises a red flag to the policymakers.

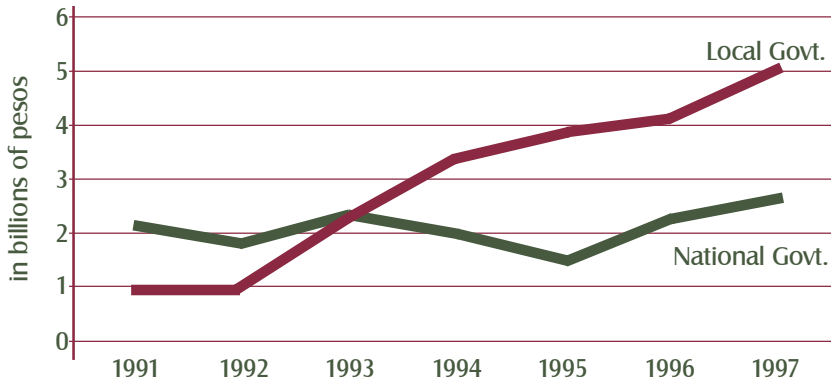
Philippines

When conducted on a periodic basis (trend data), NHA can provide significant insight into the impact of health care policy. NHA studies conducted on an annual basis from 1991-1997 in the Philippines, coupled with other non-health and non-financial health data indicators, were used to evaluate the growth of expenditures on health by local governments. One indicator was used to track the policy of devolution of health services that took place starting in 1993 as part of a broader government decentralization policy. NHA also was used to assess the allocative efficiency[1] of the changes in government health spending. NHA's comprehensive accounting for all health expenditures provided the government with pre- and post-decentralization data on both local and central government expenditures (Figure 8.3). The data allowed policymakers to determine whether their decentralization strategies led to increased local government expenditure on health and the provision of more "public good" types of health services.



[1] Allocative efficiency: contribution of health spending to the reduction in the burden of disease.

Figure 8.3: Philippines: Trendline of the Changing Pattern of National and Local Government Expenditures (at constant 1991 prices)

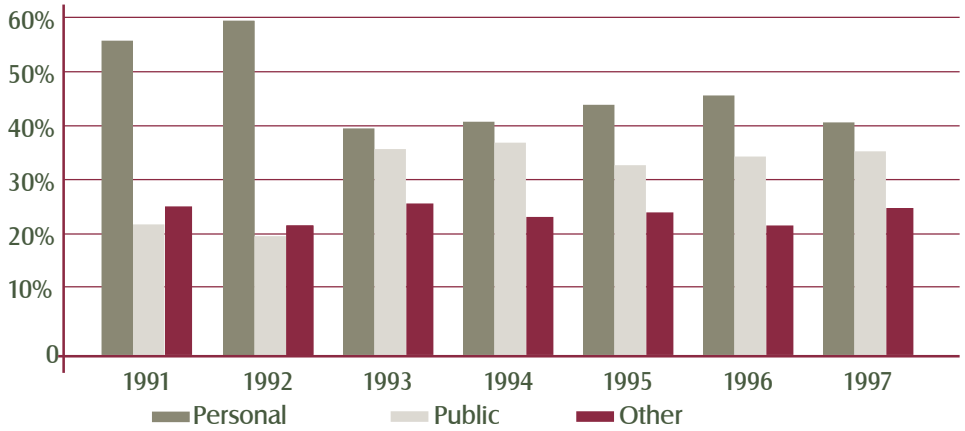


National and local Government Expenditures on Public Health Care (at constant 1991 prices).

Prior to the reforms, both central and regional funding was very low, and, in the case of the central government, was actually decreasing significantly. Yet NHA showed that, with decentralization, local governments used their increased budget allocations from the central government to sizably increase their financial contribution to health care (see histogram in Figure 8.4). These results suggest that local governments are committed to health.

In terms of where the funds were being used, NHA found that over the six-year period, government health expenditures for personal health care (those benefits that accrue only to individuals) decreased from 55 to 40 percent. Public health care (services such as immunizations, which benefit the community in addition to the

Figure 8.4: Percent Share of Government Health Expenditures



Source : Schwartz et al., 2000

individual), actually increased from 25 to 35 percent of government health spending. Again, this increase was largely due to increased funding from local governments, which allocated more than half of their resources to public health care in 1997. Thus, NHA and, in particular, its implementation on an annual basis (trend data), helped monitor and evaluate the impact of decentralization on health care.

III. Dissemination Strategy

As this manual has explained repeatedly, the process of NHA is not intended to be solely an exercise for government accountants, with findings known by a few ministry personnel. Rather, the time and resources needed to implement NHA are worthwhile to a country only if NHA findings are interpreted in conjunction with other socioeconomic and health outcome statistics, presented in a way that is relevant to policymaking and comprehensible to policymakers, and then used in the process of policymaking. This necessitates a NHA steering committee and team with members who understand the policy arena, know – and have access to – fellow policymakers, are able to craft the message in a useful way, and are willing to spend time to present NHA findings to others. In brief:

- Leaders of the NHA team must have a "big picture" in mind: They should be well connected in the government and cognizant of major health sector issues.
- Steering committee members should use their perspective and experience in policy decisions to assist the NHA team leaders to add value to the interpretation of NHA data.
- The policy issues identified early on as relevant to the NHA process should be reviewed in light of the data produced. However, the interpreters of the data should also keep an open mind to new and surprising discoveries that relate to other issues.
- A dissemination strategy should be created by the NHA team to demonstrate the findings and illustrate their value.

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

IV. Application of This Unit: Interpreting the Data for Policy Purposes

This application subsection presents answers to the questions posed in Unit 8 of the handouts.

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

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

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 8.4: 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
Mutual Funds	Ministry of Housing and Cooperatives
MOH	Ministry of Health

Public health financing is fragmented among eight ministries and other bodies (Table 8.4). This results in extensive duplication of administrative functions.

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
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
Mutual 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
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

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

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%

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.

References

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Unit 8 - Slide Presentation

1

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Unit 8:
Interpreting Results and Policy Implications

USAID

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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

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Speaker's Notes

NHA results need to be

Made relevant

Presented to the right people

In a format that they can absorb

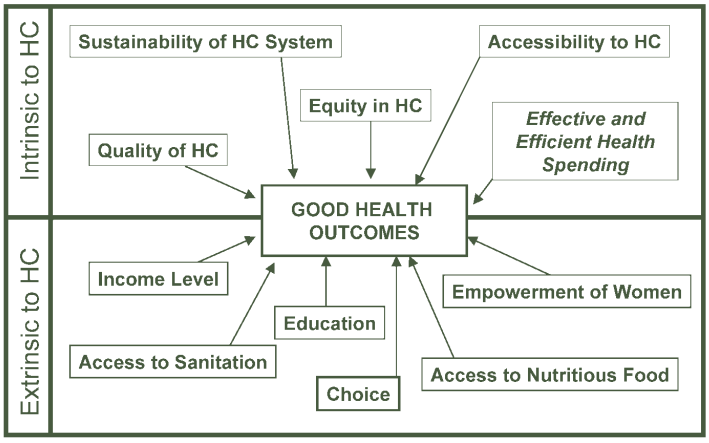
At the right time.

A 20X20 matrix buried in a 100-page report sitting on the shelf of a mid-level policymaker will not be useful.

Many countries fail at this stage because of incomplete interpretation, because a pertinent point was missed, etc. The interpretation and presentation of NHA data is the subject of this section.

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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6

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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Speaker's Notes

This information in itself is not as meaningful as the answer to, "So what if Jordan spends so much on health care?" On comparing this level of expenditure with health outcomes in Jordan, or with other countries in its socioeconomic category, the answer to the "so what" question becomes apparent – this level of expenditure may be unsustainable for Jordan given its current slow economic growth and rapid population growth. The findings have two policy implications for the health sector: 1) Increase efficiency 2) Cost containment in the health sector

In South Africa, Di Mcyntyre says that collecting other types of non-financial data (e.g., number of facilities, beds, staff, and utilization in various districts) was critical to maximizing the policy use of NHA. This information helped South Africa make conclusions about hospital "efficiency." In particular, it showed that 81% of public expenditures were spent on hospitals and that there was generally a low bed occupancy rate, particularly in academic and tertiary hospitals. South Africa also looked at average expenditure per day patient hospital category and occupancy rate and estimated how much money could be saved by increasing occupancy rates.

The general point is that in determining what the NHA estimates actually imply for health sector policy, it is useful to analyze non-NHA data such as socioeconomic indicators, production data, health outcome data, etc.

That said, it is important not to lose sight that information on the flow of financial resources is in itself valuable, e.g., the percent of GDP spent on health.

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	Financing Sources	How are resources mobilized? • Who pays? • Who finances? • Under what scheme?
Pooling arrangements Cost recovery Regulation of payers	Financing Agents	How are resources managed? • What is the financing structure? • What pooling arrangements? • What payment/purchasing arrangements?
Financial incentives Subsidies Resource allocation Provider regulation	Inputs Providers Functions	Who provides what services? • Under what financing arrangements? • With what inputs?
Targeting Redistributive policies	Important Distributions e.g. Age/Gender Location Socio-Econ. Status	Who benefits? • Who receives what? • How are resources distributed?

Source: WHO/NHA Unit/Patricia Hernandez and Jean Pierre Poullier

Speaker's Notes

The figure summarizes a few ways in which NHA results can be made more salient. Clearly it does not comprehensively cover all aspects of policy analysis of NHA results. The table above, which you may have seen already provides an overview of the content areas that NHA results can inform. It may be useful as a check list of analysis topics.

Following are process-related remarks about interpretation and presentation of NHA data.

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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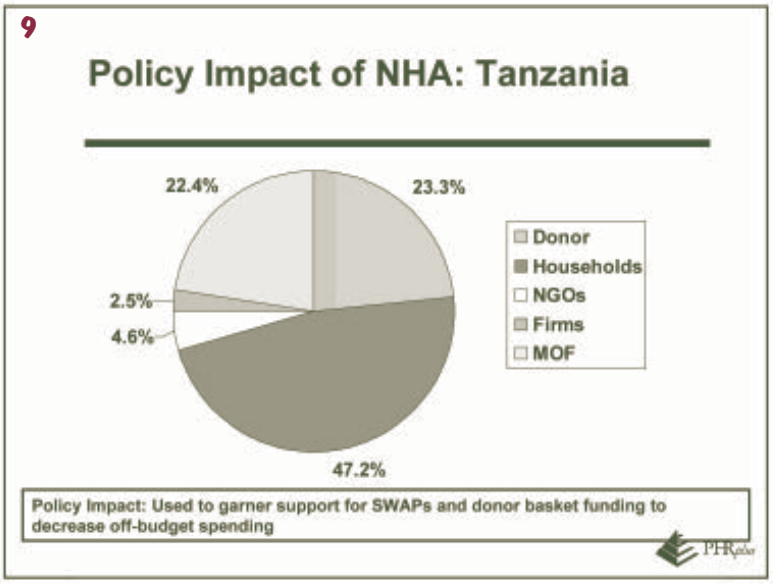
Speaker's Notes

This is an example of how the NHA results stirred up policy dialogue and finally resulted in designing and implementation of basic benefits package.



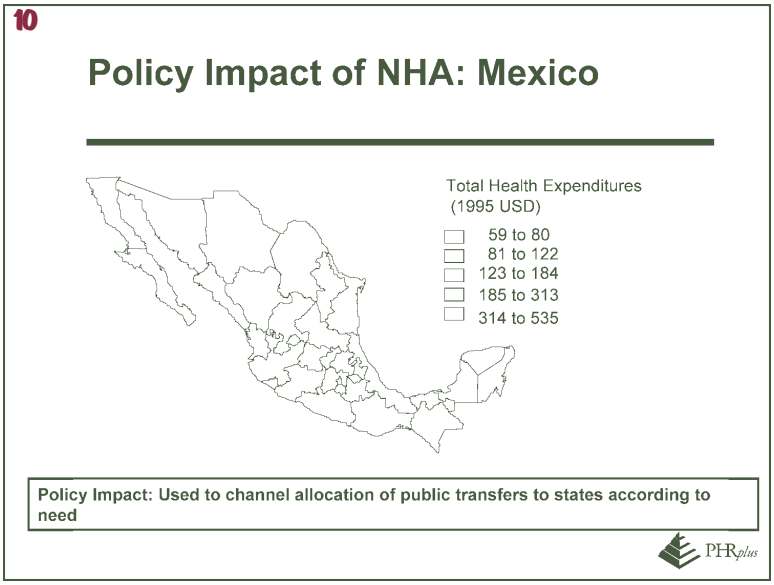
Speaker's Notes

Finding of draft NHA

- Large portion of health expenditures are off-budget, (particularly donor expenditures). Interpreted as poor coordination of donor resources and low control over how health sector is managed.

Policy impact

- Used internally within the government and shown to some donors, to garner support for SWAPs and donor basket funding to decrease off-budget spending.



Speaker's Notes

Mexico did a RHA.

Findings from NHA

- Health spending varies considerably across Mexico, with spending in wealthier states six times that of poor states.
- Disparities are apparent particularly in private expenditures (analysis of catastrophic expenditures: in the lowest income decile, health expenditures are catastrophic, i.e., they consume > 50% of disposable income— for 17% of households in that decile).
- Public health expenditures are not distributed according to need as measured by the burden of disease (epidemiological transition takes into account <5 mortality and adult mortality).

Policy impact

- Channel and monitor allocation of public transfer to states according to need.
- Informs debate on insurance for the poor.

11

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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Speaker's Notes

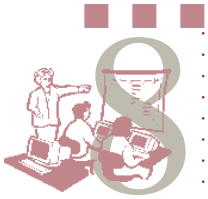
As you can see, Lebanon and Jordan already spend more than OECD countries on health care. They have rapidly growing populations, as well as aging and increasingly urban populations, that will therefore raise the need for more services and more costly curative services. All this will have to be done despite an economic growth rate that is predicted to be poor. So are their health sectors sustainable? They should do more to allocate present resources effectively and efficiently.

Findings of NHA

A probe into the reasons why the expenditures were so high revealed that the "fee for service" policy, where the government in absence of any public health providers, allowed for individuals to seek care in the private sector and get reimbursed for it. This contributed to high utilization rates and therefore high costs.

Policy impact

As a result of this findings, provider payment reform is underway. Under this reform they will introduce a system of capitated payments and a schedule of fees, as well as identify medical procedures that can be conducted on an outpatient or day basis which are currently being conducted as inpatient.



12

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			
W. Cape	491.13	30.63	23.71	200.46

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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Speaker's Notes

South Africa did a RHA, which showed utility of capturing data by districts.

Findings of first NHA

Average public health expenditure/person was 3.6 times higher in richest districts compared to poorest districts.

Poorer districts had the worst access to care, e.g., richest districts employed 4.5 as many doctors and 2.4 times as many registered nurses than the poorest districts (figures in table are per 100,000 population).

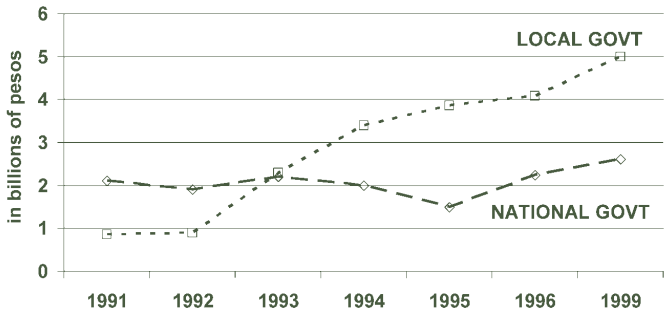
Policy impact

Moratorium on private hospital construction (which tended to be done in richest districts); now certificate-of-need mandatory before building any hospital.

Increased government regulation over private sector to meet objective of equity.

13

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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Speaker's Notes

Example of using NHA findings for monitoring and evaluation

Share of local government in total public health spending has increased steadily since implementation of the decentralization policy in the early 1990s.

Policy impact

Financial decentralization is working as planned.

14

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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Speaker's Notes

Once the technical team presents the results, the "big picture-oriented" team leaders and SC interpret the results – ask and answer the "so what" question. Their interpretations are communicated to the legislative body, which passes the appropriate policy measures to correct the imbalances identified by the NHA results.

15

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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16

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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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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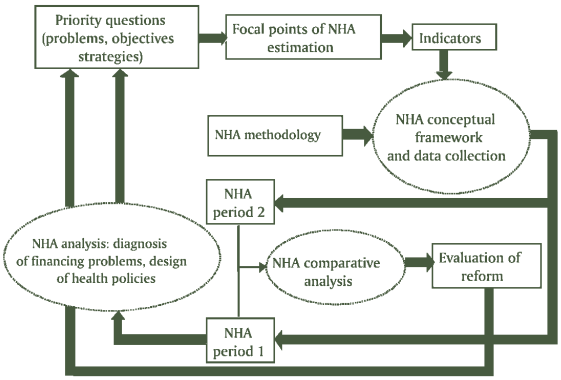
Speaker's Notes

In LAC countries, the people who collected the data and filled it in have been different from those who have actually written reports and interpreted findings for policy purposes. Many LAC countries have, in essence, a NHA team and an "interpretation and dissemination" team.

18

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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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

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Answer

Unit 8 - Answers

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Answer

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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
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

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	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

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)
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%

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

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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Note to Trainers

Now that participants have learned about the concept, purpose, and methodology of NHA, it is time to discuss the importance of institutionalizing NHA.

To begin this unit, reiterate that, as this manual has stated many times, NHA's major objective is to provide empirical evidence to inform the policy process. A country does not gain full benefit if it implements the NHA activity only once. Implementing NHA on a regular basis allows for monitoring and evaluating the impact of the policy interventions, for doing trend analysis of a single health system, and for comparing one health system to others.

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

I. The Concept and Major Components of Institutionalization

What is Institutionalization?

- The process of conducting NHA studies on a regular basis that is fully supported by the government, both financially and politically

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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Institutionalization is the process of conducting NHA studies on a regular basis, with full financial and political support of the government. Institutionalization has three major components:

1. **Recurrence:** This refers to the repetition of the NHA exercise by a country, preferably on an annual basis. **Recurrence of NHA studies is crucial to generating *trend* data** and allowing policymakers to monitor the financial status of their health systems over time. The Philippines used seven years of NHA estimates to thoroughly analyze the impact of the country's decentralization efforts,[1] and the country continues to use NHA as a monitoring tool. Recurrence is usually the first component associated with institutionalization, but it is not the only one.

2. **Policy use:** To maximize broad senior support for producing an NHA study, **NHA results must be integrated into the health policy process**, not collect dust in an academic or government institution. Policy use is an important aspect of institutionalization, and it should not be confused with repetition. Many countries feel that they have institutionalized NHA because they have conducted it repeatedly. For example, FUNSALUD (*Fundación Mexicana de la Salud*) an NGO in Mexico conducted NHA over at least a five-year period in the early to mid-1990s; however, because it was conducted outside of government, it lacked MOH ownership or involvement, and estimates failed to penetrate or be used in the national health policy process.

3. **Government ownership:** Ultimately it is government interest in this tool that triggers long-term demand for NHA in the health policy process. This buy-in from top policymakers must manifest itself in ongoing personnel and financial

[1] For more information on the Philippines' use of NHA, see PHRplus, 2002.

resources for the NHA activity. (An important indicator of government ownership is a budget line-item to fund the NHA activity and its staff.) It can take a number of years – and a number of NHA estimates – for **NHA to become a regular part of government activities, as is, for example, the national census**.

II. Challenges to NHA Institutionalization

To date, few countries have institutionalized NHA in the sense that they have adopted all three major components of institutionalization. This is due in part to the fact that introduction of health accounts in developing countries has been relatively recent. The experience of a number of countries demonstrates several issues that may hinder the institutionalization process:

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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- **Lack of a supportive policy environment:** While policymakers may recognize the importance of data-driven decisions, their recognition may not translate into commitment to pay for and use NHA information as a planning tool. This can be attributed to limited financial resources for personnel and surveys to support the NHA process a concern that NHA findings may not support the political agenda or a lack of understanding of the potential value of using financial data in the health sector policy process. There has been lack of support in several countries where decision makers had strong medical backgrounds and limited budgets.
- **Weak accounting systems and lack of reporting standards:** In many developing countries, creation of health information systems is still at an early stage. Lack of such systems and standards means that data needed to conduct NHA do not already exist; this in turn means that NHA teams will need to invest significant resources and time in primary data collection and in validating data from available secondary sources. The tools and procedures taught in this NHA training, and the Producers Guide, help address these weaknesses and reduce the time and cost of doing NHA.

- **Lack of requirements to share or report needed NHA data (particularly from the private sector):** A feature that helps to convince policymakers of the value of NHA is the framework's ability to estimate spending in the private sector; however, this feature may be difficult to implement. Private for-profit entities may be reluctant to share information with the government for fear of it being used for tax purposes. To overcome such reluctance, some countries have designed presentations on NHA that specifically address its potential value to the private sector.
- **Perceived high costs associated with NHA:** This happens frequently in countries with weak information systems. As NHA is done regularly and as accounting systems are put in place, the cost will decrease.

III. Overcoming the Challenges: Key Steps Toward Institutionalization

Although countries have approached the institutionalization process in different ways, there are some common features of their strategies:

1. **Create demand for NHA on the part of policymakers:** Political will and financial commitment of senior decision makers are crucial to the successful implementation and institutionalization of the NHA. Simply producing annual NHA estimates is not sufficient to guarantee such support and eventual use of "evidence-based" decisions – **policymakers must see a clear benefit to NHA. In order to do this, NHA needs to be marketed or "pitched" to senior officials. This requires the NHA team to develop a dissemination strategy** to illustrate and communicate the value of NHA estimates. Countries have done so in a number of ways:

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

- ◆ Convene dissemination and discussion meetings for public and private health care stakeholders; for example, create a steering committee or other entity in which these meetings take place.
- ◆ Encourage the NHA advocate to market NHA.
- ◆ Tailor NHA presentations to each group of policymakers. In the late 1990s, the South Africa NHA team developed

presentations that showed how NHA could address each group's needs. These presentations answered questions such as, "How can NHA clarify their (target decision maker group) questions and decisions?" and "How is it pertinent to the issues these stakeholders deal with daily?"

- Identify the right people to talk to policymakers about NHA. For Kenya's 2001/02 estimation, the NHA team chose a peer-to-peer dissemination strategy. Senior MOH officials communicated the value of NHA to other senior ministry officials.
- Develop publications for specific policymaker groups. Bangladesh and other countries have produced short briefing materials that highlight NHA findings and the policy relevance of such findings. Examples of briefs are in the Participants Manual.

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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- Communicate NHA findings in a *timely* manner. Some countries have taken four years to finalize their NHA reports; as a result, the findings are outdated when released and therefore are less useful in gaining policymaker buy-in for NHA.
- Inform policymakers at the outset of the NHA study (i.e., through a steering committee) and give them periodic updates of the implementation process. Some countries have found it useful to deliver summary presentations of preliminary findings as soon as the data is cleaned and partially analyzed.

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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- Design the NHA study based on the country's policy environment. NHA team members should ask policymakers for their input on the key issues. By involving policymakers in the NHA process, countries strengthen the sense of government ownership and appreciation for NHA.

2. **House NHA:** The NHA team, in consultation with policymakers and the steering committee, should identify a permanent home for the NHA team, **fitted with all needed personnel and budgetary resources**. Generally, the NHA team is housed in the ministry of health, and sometimes at the central bureau of statistics or the ministry of finance. The location is determined by the country context and consideration should be given to ensure that the location does not affect the way the data are used by policymakers. For example, if NHA is housed in an independent research institution or a university, it becomes difficult for NHA findings to be truly owned by the government and, therefore, used by the government.

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

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

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"

3. **Establish standards for data collection and analysis:** To facilitate the collection of consistent and comparable data on a longitudinal basis, countries need to systemize procedures and protocols for financial data collection. NHA teams must keep this in mind even when undertaking the first round of NHA. Teams should advocate a long-term approach to data collection. For example, because it is difficult and expensive to carry out regular surveys on household health spending, some countries add a set of

health care financing questions to already institutionalized surveys such as the Welfare and Income Survey and the Demographic and Health Survey. Establishing standards for data collection requires documenting the methodological steps used in each round of NHA. The team should note what issues presented problems, names of persons contacted for information, and other miscellaneous information. This documentation can be extremely useful in contributing to the country "NHA protocol" book for future NHA team members, especially in countries with high rates of government personnel turnover. Lack of clear written documentation coupled with high turnover of personnel adversely affects the NHA process in many countries, as new NHA teams lack training and are often at a loss on how to continue the NHA effort.

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.

4. **Institute data reporting requirement:** Failure to get comprehensive data jeopardizes NHA's objective of being a *comprehensive* financial assessment of the health sector. Private sector reluctance to share financial data is common, due to fear that the data will be used for tax purposes. Many countries have tried to overcome this challenge through:

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

- Campaigns to recruit the private sector to voluntarily participate in the NHA process. Again, this means communicating "what's in it for them" and will also contribute to strengthening country ownership of NHA.
- Letters from the MoH or Steering Committee instructing or requesting data be provided.
- Legislation regarding reporting requirements is highly recommended for long-term NHA activities.
- Legislating financial data reporting requirements has been one of the most difficult areas to implement overall, but particularly with respect to the private sector, and few countries have actually done so.

- 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.

Even with legislative or regulatory reporting requirements in place, communicating the value of NHA to all stakeholders is still important to promote timeliness and cooperation.

IV. Example: Kenya's Approach to the Institutionalization Process

The trainer should review the following example of one country's (Kenya's) strategy to address the four steps of institutionalization (Table 9.1). The slide presentation also describes the example of Kenya's institutionalization framework.

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.

V. Application of This Unit

The trainer should ask participants to review the issues and challenges they identified for their countries and listed in their handouts. The trainer can then ask participants to share their issues and challenges with the workshop group, listing each on a flip chart according to the four steps to institutionalization, and facilitate a "brainstorming" session in which participants devise strategies to overcome these challenges. The trainer should also note each strategy on the flip charts, next to the challenge it is supposed to address.

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.

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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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4

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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Speaker's Notes

Need to have all 3 aspects to be fully institutionalized.

Recurrence: NHA must be conducted repeatedly in order to generate trend data and not just have a single point estimate. Trend data provide better information for policy formulation, for greater monitoring and evaluating of health strategies, etc. Philippines used 7 years of data to fully analyze the impact of decentralization (see Global NHA brochure).

Policy: NHA should not be produced year after year only to be shelved in technicians' offices; it needs to be used by policymakers to be fully institutionalized. Mexico conducted NHA 5 years in a row; however, this was done outside the MOH by an NGO called FUNSALUD. Because there was no MOH ownership or involvement, those NHA studies did not inform policy.

Ownership: It can take a number of years and a number of estimates to be a regular part of a government's activities. Crucial to ownership is getting a line item in the MOH budget. This must occur for NHA to be institutionalized. To date, only three countries have included NHA in their government budget without external aid: Morocco, South Africa, and Iran.

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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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Speaker's Notes

Lack of supportive policy environment: Overall a commitment by policymakers to use information as a planning tool is weak, despite general recognition on the prime ministerial level of the importance of data-driven decisions. So PMs haven't really committed long-term in many countries. Nevertheless, with declining health resources, there is an increased interest to efficiently allocate health resources and thus use NHA data as a planning tool.

Weak accounting systems and reporting standards: Although PMs recognize the importance of data-driven decisions, this need has not always been translated into actual investment (particularly financial) in developing data tracking and reporting standards.

Perceived high costs: As NHA is done regularly and as systems are put in place, the cost will decrease and the data will still be very valuable to policy process.

6

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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Speaker's Notes

Creating a supportive environment

The trainer should reiterate that NHA is not a simple academic or statistical study to put on a shelf once completed. It must be marketed to policymakers in order to fulfill its purpose of affecting health policy.

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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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Speaker's Notes

Dissemination team; was done in LAC. Most members of the dissemination team were well-connected with the policy process.

Policy briefs: focus on one or two major findings and their policy implications. Bangladesh produced a series of briefs. The major finding was that two-thirds of HH expenditures were spent on drugs. This led PM to question why this was the case. Was it because 1) not enough drugs in public sector, 2) over-prescription, 3) self-prescription, 4) prescription by non-licensed individual. NHA focused PM on this issue.

Give example of South Africa where for any particular group of policymakers, the NHA presentations were tailored to meet their job needs; i.e., what NHA can do for their jobs. How is it pertinent to the issues they deal with daily? In Kenya they felt it was useful for peers to present to other peers. Also, the way the data is presented is important. Rather than saying 75% of health expenditure is being funded by HH, it would more effective to say '3 out of every 4' health care shillings are contributed by the HH and not the government.

PHR*plus* is trying to influence this process through the encouragement of policymaker conferences in the various NHA networks.

The trainer may want to share examples of policy briefs with the class.

8

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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Speaker's Notes

Do not take 4 years to finalize the NHA report! By then, the findings may be outdated. Reiterate the need to balance the "quality" of the report against its timeliness.

NHA should be shaped by policy environment to a feasible extent: e.g., some PMs have asked to do disease-specific analyses for 5 diseases. This would greatly benefit their work but would take too long to complete.

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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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Speaker's Notes

If NHA is housed in an independent research institution or universities, it's difficult for NHA findings to be truly owned by the government and therefore used by the government. E.g., in Mexico (where NHA was conducted by FUNSALUD) and Zambia (University of Zambia), the report was not circulated as a government document because it was not produced by the government. Consequently there was no support or interest.

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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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Speaker's Notes

Zambia – not having an NHA advocate has made it difficult to gain any government support.

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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)*

17

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

Speaker's Notes

Example: In Zimbabwe, they have managed to get the private sector to volunteer to support NHA and provide data. A two-day meeting was held with private sector entities to show what they would get out of NHA.

In Kenya, the private insurance sector was very interested in doing NHA because of the data they could get on Kenyan nationals going overseas for treatment. They wanted to know why they were going overseas and how much they were spending. The government wanted to design a package of health services so that their citizens would utilize the services available in the country.

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Exercise

- Attempt to draft your country's institutionalization framework
  - Please refer to your student exercise and handout book

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.