

# Measuring total health expenditure - Using indicators of National Accounts / Health Satellite Accounts

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#### Overview

- Health Satellite Accounts (HSA) in the System of National Accounts (SNA)
  - The 1993 SNA
  - The 2008 SNA

The 2011 System of Healt Accounts

The 2005 Handbook of HSA of PAHO

The 2011 PAHO-ECLAC-ICP measure

### Satellite Accounts: definition (1/8)

- They are "around" the framework of the national accounts
- They are a set of tables that describe in detail the structure and behaviour of certain areas of specific socioeconomic fields (eg. health, education, tourism, unpaid work, etc.)
- They can use concepts, classifications, complementary (and sometimes alternative) accounting frameworks, and, ad hoc aggregates (GDP+)
- They help to make visible "the invisible"
- They can expand the coverage (the boundaries) and analysis (unpaid voluntary work)
- They include monetary and physical items (non-monetary)

### 2012 /// Año Internacional de las Cooperativas

#### Social and solidarity economy

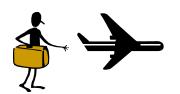
#### Satellite Accounts: areas (2/8)



Unpaid work



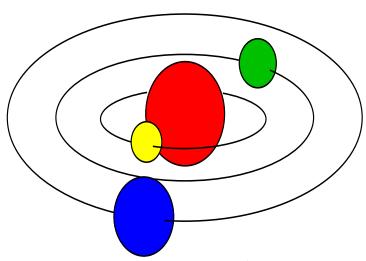
Health



**Tourism** 



**Environment** 









Education



Culture

# Health Satellite Accounts in the SNA (3/8)

 SNA (1993 and 2008) proposes two types of satellite accounts: Visibility!!

1993 SNA	2008 SNA
Functional satellite account	Internal satellite account
Satellite accounts based on alternatives concepts	External satellite account
	5

# Two types of satellite accounts: cand where is health? (4/8)

- The Health Satellite Account (HSA) is located within the internal satellite account, but suggests to extend the boundaries to include:
  - Occupational health care
  - Household provision of health care (unpaid voluntary work)
- In the event that the HSA decides to include the occupational health care and the unpaid voluntary work, the HSA would be classified as External Satellite Account

#### 1993 SNA and HSA (5/8)

- 1993 SNA does not include a specific framework to the HSA
- But, take the health as an example as various aspects:
  - Alternative treatment of ancillary activities
  - Inclusion as human capital
  - Reclassification of transaccions (health education services)
  - Detailed analysis of supply and uses and transfers
  - Inclusion of unpaid voluntary work

### 2008 SNA and HSA (6/8)

- Section F of Chapter 29 presents 4 examples of satellite accounts, including health:
  - Tourism
  - Environmental accounts
  - Health
  - Unpaid household activity
- The objective is to provide a sense of satellite accounts
- "The health satellite account is still in a preliminary version but under active revision" (2008 SNA, 29.87)

### 2008 SNA and HSA (7/8)

- The "System of Health Accounts" (SHA-OECD, 2000) is cited as an example of HSA (2008 SNA, 29.128)
- The 2008 SNA describes the 4 categories of SHA information
  - Functional
  - Providers units
  - Expenditure
  - Funding

### 2008 SNA and HSA (8/8)

- 2008 SNA says: "The manual is currently in the process of being updated as a joint effort by the OECD, Eurostat and WHO, with a revised version expected about the end of 2010" (2008 SNA, 29.128)
- The 2008 SNA recognizes that the 2000 SHA is not yet a satellite account (2008, SNA 29.139)
- 6 additional steps and 4 additional accounts are required in order to translate the economic framework of the SHA into a health satellite account (see later)

2011 SHA

#### The 2011 SHA (1/9)

- The OECD, EUROSTAT and OMS published in 2011 the 2.0 version of SHA, the 2011 SHA
- Some steps has been undertaken but there has been no progress towards the additional accounts required by 2008 SNA

### The 2011 SHA: main aggregates of health expenditure (2/9)

#### · Current expenditure health

- Final consumption expenditure of resident units of health care goods and services

#### Gross capital formation

- Total value of the assets that providers of health services have acquired during the accounting period (less the value of the disposals of assets of the same type) and that are used repeatedly or for more than one year in the provision of health services

### The 2011 SHA: Health expenditure boundaries (3/9)

- · Includes:
  - Occupational health care / ancillary activity
  - Household provision of health care / unpaid voluntary work
- Excludes (although are measured as memorandum items):
  - Education and training of health personnel
  - R&D in health
  - Food, hygiene and drinking water control
  - Environmental health
  - Administration and provision of social services in kind to assist living with disease and impairment
  - Administration and provision of health-related cash-benefits

The *2011 SHA:*Current expenditure on health and the 2008 SNA (4/9)

2008 SNA code	Description
P.31	Individual consumption expenditure on health
P.32	Collective consumption expenditure on health
P.3	Final consumption expenditure on health (=P.31+P.32)
D.31-D.21	Government subsidies to health care providers (net) in order to lower prices of output
P.31*	Occupational health care (intermediate consumption within establishments) minus an estimated share of occupational health in health providers' and other medical industries net administration
P.31*	"Remunerated" unpaid household production in the form of transfer payments (social benefits in cash) for home care of sick, disabled and elderly persons provided by family members
P.3*	Adjusted total final consumption expenditure on health $(=P.3 + D.31 - D.21 + P.31*)$

CURRENT EXPENDITURE ON HEALTH (=P.3\*)

# 2008 SNA: converting the SHA to HSA (5/9)

Steps	Response
Determining a comprehensive listing of goods and services considered specific to the production of health care services	No
Determining the boundary line of production to define total expenditure on health	Yes
Determining the activities for which capital formation will be recorded	Yes
Identifying specific transactions	Yes
Providing a detailed analysis of transfers as an integral part of health accounting	Yes
Identifying ultimate users and ultimate bearers of health expenses	Yes

# 2008 SNA: converting the SHA to HSA (6/9)

Additional accounts	Response
Production account and health care value added by the health care industry	No (treated as an addendum)
Intermediate inputs to the production of health care industries by type of input	No (treated as an addendum)
Gross capital stock or the health care industry	No
Input - output table of health care industries	No (treated as an addendum)

### SHA 2011: Others developments

- Greater conceptual asimilation with the SNA
- Correspondences
  - Financing Schemes (ICHA-HF) and institutional sectors of the SNA
  - Health care providers (ICHA-HP) and ISIC
  - Health care functions (HC)
    - · and CPC
    - and COFOG and COICOP

### Challenges for using 2011 SHA (8/9)

- The 2011 SHA is not a satellite account
  - The SHA "it does not qualify as a full SNA satellite account" (2011 SHA, Chapter. 3, page 35)
  - "It is not intended that the assembly of the additional set of SNA-type tables should be an integral and essential part of the data compilation under the revised SHA methodology" (2011 SHA, Annex B, page 415)
- The 2011 SHA allows us to compile health accounts not based on the SNA: risks of duplications
- The adjusted line "Government subsidies to health care providers (net) in order to lower prices of output" is not specified in the expenditures tables (15.1-15.7)

### Challenges for using 2011 SHA (9/9)

- The social benefits in cash -"Remunerated" unpaid household production in the form of transfer payments (social benefits in cash) for home care of sick, disabled and elderly persons provided by family members-:
  - Many times finance the purchase of de medicines and not the unpaid work
  - This can duplicate the expenditure: in the case of reimbursement of payments of households and in the case of payments of the government to the providers (are recorded as government final consumption expenditure and household actual consumption, Social benefits in kind -D.631-)

### The Handbook of Health Satellite Account of PAHO (1/2)

- ECLAC has been working with PAHO on HSA, based on a handbook published in 2005 by PAHO: "Manual de Cuenta Satélite de Salud" (2005) (only in Spanish)
- Advantages: consistent measurement with national accounts
- Disadvantages: the difficulty by policy makers to interpret and to analyze the results
  - the language and the concepts are very close to the national accounts
  - "strange language" to the policy makers

### Healt expenditure boundaries in SHA-WHO and in HSA-PAHO (2/2)

	2000 SHA	2011 SHA	HSA
Occupational health care	X	X	X (extension)
Household provision of health care / unpaid voluntary work	X	×	X (extension)
Education and training of health personnel	-	X (memo item)	×
R&D in health	-	X (memo item)	X
Food, hygiene and drinking water control	_	X (memo item)	X (extension)

### 2011 PAHO-ECLAC-International Comparison Program measurement:

### Household actual consumption on health products breakdown by coverage type (1/5)

Direct household spending	Voluntary	/ insurances	ces Government social security			social	ent-related nsurances nemes	Government social assistance			NPI			
Payments by	Co- payments by household	Payments by Insurance Financial Corporations	payments by	Payments by social security in cash	Social security benefits and reimbursements in kind	' '	Payments by social insurances (in cash or in kind)		assistance	Social assistance benefits and reimbursement s in kind	Co- payments by household	assistance	Social assistance benefits and reimbursement s in kind	Household actual consumption on health products
1	2	3 D72	4	5 D621	6 D6311 / D6312	7	8 D622 / D623	9	10 D624	11 D6313 / D632	12	13 D624	14 D6313 / D632	15=1++14

1106211 Medical services

Characteristic products

1106221 Dental services

1106231 Paramedical services

1106311 Hospital services

1106111 Pharmaceutical products

1106121 Other medical products

Therapeutical appliances and 1106131 equipment

Connected products

Medical and orthopaedic items

Optical items

### 2011 PAHO-ECLAC-ICP measurement: ROWS - Health products (2/5)

- 1106211. Medical services
- 1106221. Dental services
- 1106231. Paramedical services
- 1106311. Hospital services
- 1106111. Pharmaceutical products
- 1106121. Other medical products
- 1106131. Therapeutical appliances and equipment

# 2011 PAHO-ECLAC-ICP measurement: COLUMNS - Household actual consumption on health products breakdown by coverage type (3/5)

- 1. Direct household spendig (household without coverage)
- 2. Voluntary insurances
  - 2.a. Co-payments by households
  - 2.b Payments by insurance financial corporations
- 3. Government social security
  - 3.a Co-payments by households
  - 3.b Payments by social security in cash
  - 3.c Social security benefits and reimbursement in kind
- 4. Employment-related social insurance schemes
  - 4.a Co-payments by households
  - 4.b Payments by social insurances (in cash or in kind)
- 5. Government social assistance
  - 5.a Co-payments by households
  - 5.b Payments by social assistance in cash
  - 5.c Social assistance benefits and reimbursement in kind
- 6. NPISHs social assistance
  - 6.a Co-payments by households
  - 6.b Payments by social assistance in cash
  - 6.c Social assistance benefits and reimbursement in kind

#### 2011 PAHO-ECLAC-ICP measurement: Household actual consumption on health products breakdown by final expenditure (4/5)

				Но	usehold fir	nal consumptio	on expenditur	e						final consumpt ent social tran	ion expenditure = nsfers in kind	NPISHs final consumption expenditure = NPISHs social transfers in kind	
Payments by households	Co- payments voluntary insurances	payments governmen t social	social insurances	payments governmen	NPISHs social	Out-of- pocket- spending by households	Payments by insurance financial corporations	by social security in	insurances	Payments by social		Household final consumption expenditure		Social assistance benefits and t reinbursemen ts in kind	Social securities and social assistance benefits and reinbursements in kind	Social assistance benefits and reinbursements in kind	Household actual consumption on health products
1	2	3	4	5	6	7= 1++6	8	9	10	11	12	13 = 7++12	14	15	16=14+15	17	18=13+16+17
							D72	D621	D622 / D623	D624	D624		D6311 / D6312	D6313 / D632		D6313 / D632	

1106211 Medical services

Characteristic products

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1106121 Other medical products

Connected products

Therapeutical appliances and

1106131 equipment

Medical and orthopaedic items

Optical items

## 2011 PAHO-ECLAC-ICP measurement: COLUMNS - Household actual consumption on health products breakdown by final expenditure (5/5)

- Household final consumption expenditure
  - Out-of-pocket spendig by households
    - 1. Direct household spendig (household without coverage)
    - 2. Co-payments voluntary insurances
    - 3. Co-payments government social security
    - 4. Co-payments employment-related social insurance schemes
    - 5. Co-pauments government social assistance
    - 6. Co-payments NPISHs social assistance
  - Payments by insurance financial corporations
  - Payments by social security in cash
  - Payments by social insurance (in cash or in kind)
  - Payments by social assistance in cash (government)
  - Payments by social assistance in cash (NPISHs)
- Government final consumption expenditure
  - Social security benefits and reimbursement in kind
  - Social assistance benefits and reimbursement in kind
- · NPISHs final consumption expenditure

### Thank you