



**HEALTH
POLICY
PROJECT**

Costing and Budgeting Tools at the Decentralized Level: State of the Art

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Improving Financial Access to Health Services for the Poor
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USAID
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Costing and Tools: Demystification

- **Costing**

- Price x quantity
- Adding: coverage or target
 - Proportion of the population to be served

- **Tools**

- Software/computer-based program
 - Pulls together $P \times Q \times \text{Coverage/Target}$
 - Microsoft Excel or customized software

... to produce costing/budgeting information

Importance of Cost Information

- Costs versus funding (available budget)
- Adequacy between costs and capitation rates
- Sustainability and coverage

MNCH Costing in Nigeria

- USAID-funded health policy projects:
 - Cost of maternal, newborn, and child health (MNCH) in Nigeria
 - GAP Tool for family planning
 - National Health Insurance Scheme (NHIS) costing
- Jigawa State: MNCH costing
- Possible others

Overview

- **Today**
 - No precise listing of all tools available
 - Introduction to computer-based programs peer reviewed tools:
 - Focus on MNCH and integrated (health systems) tools
 - Rapid review of “vertical program” tools

Costing and Budgeting Tools

- Originally designed for national costing and budgeting
- Adaptable for use by states and local government administrations (LGAs): reflecting population size
- Common product: costing health services and/or programs
- Different: purposes and outputs

The Partnership for Maternal, Newborn, and Child Health: Website

The Partnership for Maternal, Newborn & Child Health

improving maternal, newborn and child health through active partnership

Home

Who we are

What we do

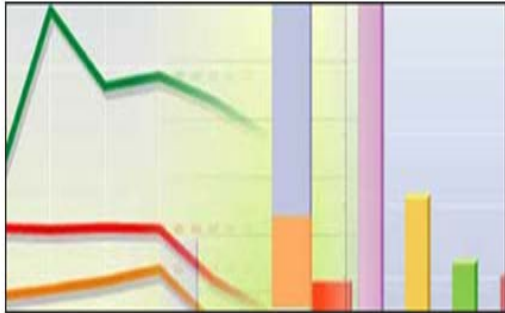
Resources

Calendar

News

Costing tools

Introduction



- In collaboration with NORAD, UNFPA, UNICEF, UNAIDS, UNDP, WHO, World Bank, USAID (through the Health Systems 20/20 and BASICS Projects)
- Review of 13 costing tools with the following information:
 - Tool description
 - Links to the tool
 - Links to user manuals and technical documentation
 - Contact information for developers/focal points

http://www.who.int/pmnch/topics/economics/costing_tools

PMNCH Tool Description

- Purpose of the tool
- Millennium Development Goals (MDGs) addressed:
 - # 4 (Child Health), # 5 (Maternal Health), # 6 (HIV/AIDS, Malaria, and Other Diseases)
- Health systems levels
- Scope of interventions (and if addressing program and system costs)
- Costing strategy and methods
- Types of outputs and reports generated (tables and/or graphics)
- Type of software: spreadsheet and custom software

Tools in the PMNCH Website

Name of Tool	Purpose	Scope of Intervention	Modeling impact	Level of Aggregation
Core Revenue Analysis Tool	Planning, costing and budgeting individual interventions and integrated services	Integrated PHC services	Predicts utilization of services	Facility, Network of facilities, district, national
Integrated Healthcare Technology Package	Planning for the optimal resource mix and costing resource requirements	Any defined set, package or program	Cost per input, procedure ... etc as well as non cost outputs	Facility, Network of facilities, district, national
Integrated Health Model	Estimation of total resources - human, infrastructure and financial - for integrated health services to reach MDGs	HSS, CMS, and programs	No estimates of impacts on health outcomes	National and Sub National Level

Tools in the PMNCH Website

Name of Tool	Purpose	Scope of Intervention	Modeling impact	Level of Aggregation
Reproductive Health Costing Tool	Estimating resource requirements and costs of providing an essential package of reproductive/maternal health interventions	Maternal and RH, HSS	Population dynamics (e.g., the impact family planning has on the demand for maternal and child health services)	State, provincial and national
One Health (Spectrum)	Single framework for planning, costing, impact analysis, budgeting and financing for all major diseases and health systems	Health systems	Yes	National and sub national
Marginal Budgeting for Bottlenecks	Forecasting cost and impact of investments needed to increase high impact interventions AND preparing health budgets	MNCH, malaria and HIV/AIDS	Yes	District, sub national and national

Tools in the PMNCH Website

Name of Tool	Purpose	Scope of Intervention	Modeling impact or interaction	Level of Aggregation
Spectrum Suite (Goals and Resource Needs Model)	Estimation of financial resources to achieve program targets	Prevention (inc. PMTCT), Care and Treatment, Mitigation	Prevalence, Incidence, Infections and deaths averted	State, provincial and national
Malaria Costing Tool	Estimate financial costs associated with scale up of malaria interventions	Preventive & curative	None	National
Planning and Budgeting for TB	To assist in the planning and cost of activities to control TB in a country	All TB interventions	None	National (sub national)
Child Health Cost Estimation Tool	Strategic tool for medium term planning of financial resources	Preventive & curative child health interventions	Life saving impact	National and Sub National Levels
Costing and Financing Tool for Childhood Immunization	Strategic tool for planning immunization services	Immunization	None	National and Sub National Levels

Example of Outputs: Goals Tool— crop to smaller group of items

GHANA 2011 baseline - Spectrum

Home Modules Health Services Health Systems Tools

Set Active Manager DemProj AIM Goals (HIV) RNM Group Favorites

Projection Demography HIV/TB Display

Configure Epidemiology Behavior Behavioral interventions Interventions Vaccines Unit costs Results

Welcome Resources required Summary table Total cost by intervention

Total cost by intervention

	2011	2012	2013	2014	2015
GHANA 2011 baseline					
General population					
Community mobilization	6,606,931	9,620,392	12,765,398	16,043,890	19,458,304
Mass media	5,421,074	8,060,329	10,815,128	13,687,162	16,678,546
VCT	21,430,166	23,920,976	26,505,942	29,187,180	31,967,212
Condoms	28,180,694	30,245,142	32,294,234	34,328,256	36,348,044
AIDS education	2,707,968	2,879,844	3,056,101	3,236,745	3,423,249
Out-of-school youth	1,819,755	2,616,544	3,433,945	4,272,504	5,134,873
Workplace programs	4,116,627	6,084,248	8,137,942	10,278,967	12,508,909

Example of Outputs: CORE Plus— Nigeria NHIS/NPHCDA application

	Scenario A = actual services and actual costs	Scenario B = actual services and normative costs	Scenario C = needed services and normative costs	Scenario D = projected services and normative costs	Scenario E = projected services and minimum number of staff
Basic Statistics					
Catchment population	16,750	16,750	16,750	16,750	16,750
Community Health Catchment Population (if applicable)	16,750	16,750	16,750	16,750	16,750
Total types of services in full package	39	39	39	39	39
Costs: Total and Per Capita					
Total cost of all services	1,296,000	1,587,704	2,289,261	1,986,279	1,924,905
Total Cost at Primary (Ambulatory)	1,174,194	1,435,620	2,045,048	1,765,067	1,717,106
Total Cost at Secondary (Hospitalization)	30,133	45,455	153,248	139,615	126,532
Total Cost at Community	91,673	106,629	90,965	81,597	81,267
Cost per service	47	58	59	61	56
Cost per capita	77.37	94.79	136.67	118.58	114.92

Example of Applications: CORE Plus

Cost by intervention, package of services, facility, resource type

Reports and Publications:

Collins, D., and D. Donaldson. ["Modelling the Cost of Primary Health Care Services in the Eastern Cape."](#) The EQUITY Project. Boston: Management Sciences for Health, Mar. 2000.

Collins, D., and E. Lewis. ["A Cost Analysis of Primary Health Care Services in Benoni."](#) The EQUITY Project. Boston: Management Sciences for Health, May 2003.

Fritsche, G., T. McMennamin. ["Cost and Revenue Analysis in Six Rwandan Health Centers: 2005 costs and revenues."](#) Rwanda HIV Performance-Based Financing Project. Boston: Management Sciences for Health, Dec 2007.

- Source: <http://erc.msh.org/toolkit/Tool.cfm?lang=1&TID=113>

Challenges and Limitations

- Many tool outputs
 - Need to be migrated to national planning and budgeting processes
- Multi-disciplinary expertise needed for defining
 - Unit and shared costs
 - Coverage and target issues
 - Clinical and program inputs
 - Assumptions

Challenges and Limitations

- Planning and time are necessary for costing and budgeting activities
 - Planning the activity
 - Contacting local authorities and stakeholders
 - Contacting and working with the sites
 - Collecting data and data entry
 - Controlling quality
 - Fostering decisionmaking
 - Mapping costing into budgeting process (national, state, and LGA levels)

Best Tools

■ Depends on needs

- MDGs/vertical program/services/facility/broader systems
- Scope of interventions
- Health impacts and outcomes: Quite a number of tools (MBB, Goals,...etc.)
- OneHealth will become the UN system (incl. World Bank) Health Systems tool

■ General recommendations

- Integrating numerous interventions
- Creating linkages to health systems
- Generating reports and/or graphs
- Microsoft Excel format
 - Customized software trade off: impacts and outputs

Specific Recommendations

- Taking stock: tools available and costing studies conducted in Nigeria
- Discuss specific states' costing studies:
 - Benefits and limitations
 - Applicability to other states
- Make determination of the most practical tool(s) to apply to the most states

PMNCH Interactive Costing Tool Guide

عربي 中文 English Français Русский Español



Invest, Deliver, Advance

Send Feedback?

Start Over

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Welcome to the Costing Tool Guide

First Name: Email:
Last Name: Organization:

The goal of this Costing Tool Guide is to help you select an appropriate costing and resource planning tool for estimating the costs of specific health actions that may inform your planning, programming and budgeting processes. The Guide is based on a [technical assessment](#) of costing tools related to the health Millennium Development Goals (MDGs), which was conducted as part of a broader [review](#) of costing tools that included consultations with users and developers of tools.

The Guide will lead you through a series of questions to help you narrow down the choice of available costing and resource planning tools. Some tools focus on one particular MDG while others are more cross-cutting. The Guide will help you understand what tools are available and provide resources for you to get more detailed information and guidance related to the tools.

Below you will find video tutorials that walk you through different scenarios of how to decide which tool is most appropriate for a particular situation. The videos will show you how to use the Guide and why you might decide to select a particular costing and resource planning tool over other options.



District Officer Tutorial



Country Director Tutorial

- Created by Health Systems 20/20— Abt Associates Inc.
- Helps understand available tools
- Helps select particular costing and resource planning tool (via video)

Relevance for Nigeria

Costing and budgeting tools

- Are readily available and have been used extensively
- Can be adapted for state and LGA levels
- Are mostly designed in an Excel spreadsheet format
- Use the ingredients/bottom-up approach

Websites and Addresses

Partnership for Maternal, Newborn, and
Child Health

[http://www.who.int/pmnch/topics/economics/
costing_tools/](http://www.who.int/pmnch/topics/economics/costing_tools/)

Interactive Costing Tool Guide

<http://apps.who.int/pmnch/topics/costingtool/>



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Thank You!

www.healthpolicyproject.com

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