



Meeting Report - Technical Consultation

Review of Costing Tools Relevant to the Health MDGs

8-10 January 2008

Saly Portudal, Senegal





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Foreword

One important barrier to achieving the Millennium Development Goals is lack of funding. Health systems in many developing countries fail to reach large proportions of the population that would benefit from cost-effective interventions that are available for the prevention and treatment of conditions related to child and maternal health, malaria, TB, HIV/AIDS, and other diseases and illnesses. Opportunities for mobilization of resources are often missed because many countries are not in a position of making the economic case for the required financial assistance. The appropriate use of costing tools can facilitate this process and help to make the case for additional investment in the health sector. There are many tools available and because these tools sometimes take different approaches to costing and budgeting health sector plans and interventions, there has been uncertainty about tool selection and use at the country level.

To assist countries in the use of costing tools, a number of development partners several international development partners (see Chapter 1 for a list of the partners) initiated and funded a review of 13 costing tools relevant to the health MDGs. As part of the review, ***a Technical Consultation on Costing Tools Relevant to the Health MDGs*** was organized in Senegal on January 8-10, 2008. It provided an opportunity for users of the costing tools to share their experiences and give advice to international development partners on how to empower and support countries to manage the process of costing.

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One of the recommendations of the meeting was to establish a costing tools website hosted by the PMNCH. The website is hosted by PMNCH and I would like to invite you to visit it: https://www.who.int/pmnch/topics/economics/costing_tools/en/index.html

The website contains information about the technical consultation, a technical review of the tools that is being conducted, information about each costing tool included in the review as well as access to the tools, user manuals and technical documentations, as well as contact information for the developers/focal points for each tool. I hope that you will find it useful and welcome your feedback. The website will be updated on a regular basis and we hope that it will promote the use of the costing tools and stimulate further dialogue around costing and budgeting of health programs and interventions.

Another recommendation of the meeting was to develop guidance materials on tool selection, implementation, and presentation of results to policy-makers. Such assistance to countries is extremely important as it can help optimize use of the costing tools and increase the amount of resources available to achieve the health MDGs. PMNCH is committed to working with partners in the development of such guidance materials.

The technical consultation in Senegal also provided an important forum for tool developers to discuss harmonization of the

costing tools. In an important and encouraging development, tool developers have already followed up on the recommendations of the technical consultation. Following the meeting in Senegal, UNFPA, WHO, UNICEF, the World Bank and UNDP held a meeting to plan out a course of action to address a number of priority issues: coordination of the clinical protocols in the various tools, strengthening of the family planning section of the MBB tool to capture the various impacts and document the cost savings from meeting unmet need for family planning (parallel work within the Child Health Epidemiology Reference Group is documenting the health impacts for women and children), improving the implementation of the impact of reducing bottlenecks, increasing the transparency of the tools and documentation, and exploring how to make tools more modular and/or able to share their outputs for more integrated costing exercises. Plans have been initiated for a country application with joint agency participation to take place in the summer of 2008. The results of all of this ongoing work will be documented and disseminated on the costing tools website.

We look forward to building on the momentum generated by the costing tools review and the technical consultation in Senegal by working together to provide sound guidance to countries and harmonize the use of costing and budgeting tools to inform national planning processes and resource mobilization efforts, with a view to achieve the health MDGs.

Dr. Francisco Songane

Director

Partnership for Maternal, Newborn
and Child Health

Geneva, Switzerland

Executive Summary

Despite international commitment to achieving the health Millennium Development Goals (MDGs), health systems in many developing countries still fail to reach large proportions of the population that would benefit from cost-effective interventions, that if applied, could prevent and manage conditions related to child and maternal health, malaria, TB, HIV/AIDS and other diseases and illnesses. One important barrier to achieving the MDG targets is a lack of funding. There are many tools available to help countries determine the costs required to achieving health targets and overcoming constraints in the health system. These tools take different approaches to costing and budgeting health sector plans and activities and because of this diversity, there is much confusion and duplication at the country level as to which tool to use.

To assist countries in the use of costing tools, several international development partners (including NORAD, UNFPA, UNICEF, UNAIDS, UNDP, WHO, World Bank, USAID through the Health Systems 20/20 and BASICS Projects) through the Partnership for Maternal, Newborn and Child Health (PMNCH) are conducting a review of 13 costing tools relevant to the health MDGs. The review is overseen by a Steering Committee. The objective of the review is to assess the technical validity of the tools and application process at the country-level, including user-friendliness and needs for technical assistance.

To assist countries in the use of costing tools relevant to the health MDGs, international development partners¹ organized in collaboration with the Government of Senegal a technical consultation in Senegal on January 8-10, 2008. The objectives of the technical consultation were to

- Obtain feedback from users on their experiences with the tools, criteria that should be considered when selecting costing tools, and how countries can be empowered and supported to manage the process of costing

- Identify possibilities for improvement in the scope and content of the tools and their application, including key features of effective tools and context in which costing is done
- Discuss the development of guidance to assist countries in conducting costing exercises
- To summarize our experience, to hear from the users what they would like to see next, and to discuss the next steps

While there were many opinions that were shared at this technical consultation, there were a few key recommendations that were agreed upon by the participants. The recommendations are geared mostly towards international development partners and tool developers; however, some of the recommendations came from the international partners and tool developers themselves.

Accessibility of Tools

Participants from the countries requested the development of a central location/website or “knowledge center” to support their costing exercises. The “knowledge center” would assist countries in accessing, selecting and using costing tools included in this review, as well as other costing tools that cost health systems, programs and interventions. Information that participants suggested should be available on the website included:

- Access to the costing tools
- Contact information for tool developers/focal points
- Help-desk for technical questions (see below)
- User manuals for each tool
- Technical documentation of each of the tools
- Technical review reports by Bitran and Associates and PATH
- Technical consultation report of meeting in Senegal (this report)
- Guidance in selecting and using appropriate tools (see below)
- Standard data sources and price lists

It was agreed that the Partnership for Maternal, Newborn and Child Health (PMNCH) would host the website and begin bringing the pieces

¹ Partners include: NORAD, UNFPA, UNICEF, UNAIDS, UNDP, WHO, World Bank, MSH, USAID (through Health Systems 20/20 and Basics) and the Partnership for Maternal, Newborn and Child Health.



together so that country users have one central location where they can access the necessary costing tool information.

Guidance on Choosing a Tool

A key area of interest of the users is additional assistance to support the entire process of costing. It was recommended that the international development partners develop guidelines or a roadmap to help countries take the necessary steps to select the right tool for their purposes. The guidelines would help the user specify the questions to be addressed by the costing exercise, such as through a catalogue of questions, describe the different types of costing, and help the user select the appropriate tool based on the type of costing to be done and the costing question that needs to be answered. It was recommended that this information should be available at the “knowledge center” website, so it is in a central location and in a place where all the tools are also available.

Content and Use of Tools

Many users expressed concern that many of the tools themselves were difficult to navigate, understand and use. Users would therefore like to see several actions taken to assist them with understanding the tool and applying it to their situation. For example, it was recommended that the PMNCH could facilitate the establishment of a help-desk (on the “knowledge center” website) to which people could submit questions electronically and receive responses from a technical person within a certain timeframe. Users would also like to see more explicit, step-by-step guides that are specific to each tool.

Users would like to see more consistency between tools² and standardized program com-

ponents within and between the tools. Further, they would like to see an explanation of assumptions and default values, as well as information on how those values were obtained and estimated. Users also voiced recommendations around the costing tool output, which should be more aligned with the format and content requirements of national planning and budgeting processes. Further, they would like to see templates for charts and presentations, to assist in the interpretation and presentation of the results to inform policy and planning processes.

Process of Using Tools

Many participants expressed the need for increased involvement of countries in the costing exercise to build national ownership. This includes involving policy-makers from the planning of the costing exercise, which will facilitate the agreement on the key questions that should be addressed by the costing exercises, and to ensure that the tools are visible to the partners in the government who need to use the results.

It was recommended that international development partners and countries should take a longer-term approach to capacity building to support a sustainable mechanism for conducting costing analyses, including supporting general training in health economics, with costing integrated as a core competency.

Dissemination of Meeting Findings

It was also recommended that a journal article or editorial should be drafted and submitted on behalf of the meeting participants to share findings of the meeting and to advocate for increased and improved use of costing tools to strengthen national policy-making, planning and implementation processes.

² Many participants expressed interest in there being only one tool that can address all the different program-specific areas, so as to avoid confusion in tool selection, and simplify the costing processes. However, other participants suggested that the reason there are different tools is in part because there are different types of costing and different questions that each tool can answer and that it is therefore necessary to have more than one tool available.

Acronyms

ANC	Antenatal care
ARV	Anti-retro viral
BMJ	British Medical Journal
CH	Child health
CHCET	Child Health Cost Estimation Tool
CHOICE	Choosing Interventions that are Cost-Effective
cMYP	Comprehensive Multi-Year Plans
EmOC	Emergency obstetric care
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
HR	Human resources
HSS	Health Systems and Services (WHO)
IEC	Information, education and communication
IHM	Integrated Health Model
iHTP	Integrated Health Technology Package
IPT	Intermittent preventive treatment
IRT	Indoor residual spraying
ITN	Insecticide-treated net
LGA	Local government area
MDG	Millennium Development Goal
MBB	Marginal Budgeting for Bottlenecks
MH	Maternal health
MNH	Maternal and newborn health
MOF	Ministry of Finance
MOH	Ministry of Health
MPS	Making Pregnancy Safer
MRC	Medical Research Council (South Africa)
MSH	Management Sciences for Health
NCD	Non-communicable disease
NCU	National currency unit
NGO	Non-governmental organization
NORAD	Norwegian Agency for Development Cooperation
PCBF	Planning, Costing and Budgeting Framework
PMNCH	Partnership for Maternal, Newborn and Child Health
PMTCT	Prevention of mother to child transmission of HIV
PRSP	Poverty Reduction Strategy Paper
RBM	Roll-Back Malaria
RH	Reproductive health
RNM	Resource Needs Model
SRH	Sexual and reproductive health
STI	Sexually transmitted infections
SWAP	Sector-Wide Approach
TA	Technical assistance
TB	Tuberculosis
TOR	Terms of reference
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNFPA	United Nations Populations Fund
USAID	United States Agency for International Development
USD	US dollar
VCT	Voluntary counseling and treatment
WHO	World Health Organization



1. Background

In September 2000, 189 nations committed in the United Nations Millennium Declaration to the achievement of eight Millennium Development Goals (MDGs) to reduce poverty and hunger, and to tackle ill-health, gender inequality, lack of education, lack of access to clean water and environmental degradation. MDGs that are focused on health include those related to child survival (Goal 4), maternal health (Goal 5) and HIV/AIDS, malaria and TB (Goal 6). In October 2007 the MDG framework was modified by the General Assembly (following the directions of the World Summit 2005 and the recommendations of the Secretary General) to add two new health-related targets: achieve, by 2015, universal access to reproductive health and achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.³ The new targets add important dimensions to the MDGs, including the need to address equity because of universal access considerations, expansion to full range of services, health systems considerations, and the importance of considering specific target populations. Please refer to **Annex 1** for a list of the MDGs and related targets and indicators, including the new targets added in October 2007.

Despite international commitment to achieving the health MDGs, health systems in many developing countries still fail to reach large proportions of the population that would benefit from cost-effective interventions that if applied could prevent and manage conditions relating to child and maternal health, malaria, tuberculosis, HIV/AIDS, etc. One major barrier to achieving these targets is lack of funding. In order to determine how

much additional funding is required to overcome these constraints and to move towards attainment of the MDGs, a number of costing tools have been developed and tested over recent years.⁴ These tools take different approaches to costing and budgeting health sector plans and activities. It has also been noted by countries that the underlying assumptions in these tools are different, both as it relates to the number of clinical services included as well as the resource inputs related to the various interventions. This diversity has led to some confusion, as well as duplication, at country level. Many international development organizations receive questions on a regular basis about the differences between tools, and the identification of the right tool to answer specific questions posed at country or global level.

To assist countries in the use of costing tools, several international development partners (including NORAD, UNFPA, UNICEF, UNAIDS, UNDP, WHO, World Bank, USAID through the Health Systems 20/20 and BASICS Projects) through the Partnership for Maternal, Newborn and Child Health (PMNCH) are conducting a review of costing tools relevant to the health MDGs. The tools included in the review are listed in **Table 1**. The review is overseen by a Steering Committee, comprising members of the institutions participating in, and funding, the review (please refer to **Annex 2** for a list of members). The objective of the review is to assess the technical validity of the tools and application process at the country-level, including user-friendliness, needs for technical assistance, and influence on the policy-making process.

³ United Nations (2007) Report of the Secretary-General on the work of the organization. General Assembly, 62nd Session.

⁴ Some of the tools also estimate the impact of the interventions on health outcomes, but the main focus of this review is on the costing of the interventions.

Table 1: List of Costing Tools Included in the Review

No.	Tool	Developed by	Tool developer / Focal point
1	Marginal Budgeting for Bottlenecks (MBB)	UNICEF/World Bank	Rudolf Knippenberg Susie Villeneuve Netsanet Walegn Agnes Soucat
2	Choosing Interventions that are Cost-Effective (CHOICE)	WHO	Refer to tools 13 and 14
3	Reproductive health (RH) costing tool	UNFPA	Eva Weissman
4	Making Pregnancy Safer (MPS) module of the Integrated Health Technology Package (IHTP)	WHO, South African Medical Research Council (MRC)	Andrei Issakov Peter Heimann Dheepa Rajan Paul Maree Matthews Matthai
5	Spectrum, PMTCT module	Futures Institute	John Stover
6	Goals	Futures Institute	John Stover
7	Planning, Costing and Budgeting Framework (PCBF)	MSH	David Collins
8	CORE Plus	MSH	David Collins
9	Immunization costing and financing tool for comprehensive Multi-Year Plans (cMYP)	WHO	Patrick Lydon
10	Integrated Health Model (IHM)	UNDP	Maha El Adawy
11	Planning & budgeting for TB	WHO	Andrea Pantoja
12	Resource needs model (RNM) HIV/AIDS	Futures Institute	John Stover
13	Malaria cost estimation tool	WHO	Tessa Tan-Torres
14	Child health cost estimation tool (CHCET)	WHO	Karin Stenberg



There are three key components of the review process:

1. A **technical review** has been commissioned from Bitran and Associates (all tools) and PATH (MBB only). The review is descriptive and analytical, and includes individual tool performance and internal validity assessment. Its purpose is to facilitate the selection of the “right tool for the job”, rather than a comparative rating of the tools. The expected outputs of the technical assessment are a summary of each tool, a summary of the questions that are addressed by the tools taken as a group, a description of which tools answer each question, an analysis of technical validity, an assessment of ease of use, and identification of complementarities between the existing tools.
2. A **technical consultation** (described in this report) to bring together users of the tools, tool developers, and the external reviewers to discuss experience with using the tools and identify ways of strengthening the tools and the process of applying them at the country-level.
3. Development of **guidance** materials designed to empower countries to manage the costing tools process, incl. definition of purpose, tool selection, analysis, and presentation of results.

2. Meeting Objectives and Agenda

In line with the review process determined by the Steering Committee, a technical consultation was held in Saly Portudal, Senegal, on January 8-10, 2008.

The objectives of this consultation were as follows:

- Obtain feedback from users on their experiences with the tools, criteria that should be considered when selecting costing tools, and how countries can be empowered and supported to manage the process of costing
- Identify possibilities for improvement in the scope and content of the tools and their application, including key features of effective tools and context in which costing is done
- Discuss the development of guidance to assist countries in conducting costing exercises
- To summarize our experience, to hear from the users what they would like to see next, and to discuss the next steps

The outline of the agenda can be found in **Annex 3**.

3. Participants

Participants in the meeting included users of costing tools from different countries and regions, tool developers/focal points, the external technical reviewers, and steering committee members. The following criteria for selection of users of the tools at country-level were developed by the Steering Committee:

1. Participants should have experience in having used at least one of the tools (or outputs from the tool in the case of policy-makers); preferably more than one tool
2. Preference for government participants vs. staff of international agencies and consultants
3. There should be a balance between technicians/analysts who have carried out data entry and analysis and policy-makers who have used the results of the tool for planning and programming purposes
4. There should preferably be a wide representation in terms of tools used (at least one user per tool being reviewed)

5. There should preferably be a wide geographic representation.

The meeting included a total of 61 participants, consisting of 29 users of the tools at the country-level, 16 tool developers, two external

reviewers, four resource persons and steering committee members (some tool developers are also on the steering committee), two observers, and eight organizers. For a list of the participants, including contact information, please refer to ***Annex 4***.

4. Session 1 - Setting the stage

4.1 Welcome and introduction of participants

The meeting facilitator, James Tashima, Health Systems 20/20, introduced the speakers of the opening session.

Francisco Songane, Director of the Partnership for Maternal, Newborn and Child Health (PMNCH), began his welcome by extending his appreciation to the Government of Senegal for supporting and facilitating the organization of the meeting, the organizing team, the steering committee, and to the participants for attending the meeting. He continued by stating that one of the major barriers to achieving the health MDGs is the lack of funding. Opportunities for mobilization of resources are often missed because many countries are not in a position of making the economic case for the required financial assistance. The appropriate use of costing tools can assist countries and their policy-makers and managers to address these constraints. He also noted that an important outcome of the meeting would be to discuss the development of guidance material to help users with tool selection, implementation, and presentation of results to policy-makers to influence resource planning and allocation, including preparation for negotiations with the development partners.

Antonio Pedro Felipe Junior, WHO Representative in Senegal, reiterated the context in which the meeting was taking place. Pointing to the meeting target of assessing the different tools available, he highlighted the need to keep in mind the final goal of assisting countries in the development and operationalization of strategic plans. He also stated that partners and stakeholders would greatly benefit from the recommendations of the workshop. Finally he reinforced the WHO's commitment to the workshop and its outcomes.

Ian Hopwood, UNICEF Representative in Senegal, concluded the welcome session. He reinforced UNICEF's commitment to the costing tools review and emphasized the important follow-up phase of the workshop. He identified three key issues relating to costing tools. First, it is important to consider capacity building and how partners can follow through and implement results of studies. Second, it is critical to ensure that key results get sent to the right people. Finally, a challenge is to balance the focus of the key questions that the costing study is trying to answer and broader health systems issues.

Participants were asked to introduce themselves to the people at their table and have one person share longest travel and most interesting costing tool related story to the group. Some of the challenges in the application of costing tools that were reflected in the stories were balancing political realities (such as decentralization) and evidence based results, using tools effectively at peripheral and central level, and adapting tools so that they reflect the setting in which they are used.

4.2 Background and Objectives

Sonya Rabeneck, PMNCH, presented background information and outlined the objectives. Work on the technical review was begun in January 2007. The objectives of the meeting can be found in Section 2 above.



Tessa Tan-Torres, WHO and Chair of the Steering Committee, highlighted the broad purposes of the meeting and made the following key points:

- People have looked at costing as a one-off exercise or study, but costing should be considered a core competency in the Ministry of Health, and an integrated part of the planning, programming and monitoring processes
- The focus of meeting is on the experiences of the users of the tools at the country-level and the steering committee is keen to learn if users need assistance and what kind of assistance, and if things are not conducted in the right way, what is wrong with how things are being done
- The steering committee encourages users to provide specific recommendations on how to strengthen the content of tools and the application process

The two presentations generated discussions with the following key messages:

- In addition to hearing from the users, there should be specific tool presentations at the end of the day so that users can learn about the different tools
- One of the objectives should be to explore the development of a tool-kit that can bring together different tools and move away from a tendency to have separate tools dealing with different issues. This will contribute to working towards efficient sector planning.
- The meeting should also provide a capacity building opportunity

4.3 Overview of Costing Tools

Stan Bernstein, UNFPA, introduced the costing tools overview and noted the following points:

- Health related MDGs have two new targets: universal access to reproductive health and HIV/AIDS treatment (see [Annex 1](#) for more details), which demonstrates increased commitment to equity in health
- There is stronger understanding among agencies and the international community that support has to be provided to national decision makers in the costing of the health system and health interventions
- Costing exercises are embedded in ongoing processes and adjustments have to be made in planning over time

- The meeting seeks ways of simplifying tasks that tools are used to address
- National users have more information about what is useful for them, e.g. how do the tools ease their job and how do they complicate their job
- There is a need for more clarity and validity in the process of influencing programming and policy

Kimberly Switlick, Health Systems 20/20 Project supported by USAID, presented some of the key issues and challenges related to costing tools and costing exercises:

- Timing: What is the usefulness of the exercise during the different steps of planning and budgeting process? This depends on the tool and the context.
- How do the outputs of different tools come together? Is there convergence among tools?
- Do the costing tools provide adequate information to assist with necessary budgeting of programs and plans?
- How is the costing exercise linked to the process of planning?
- Vertical vs. horizontal costing: How do you decide which is more appropriate? And how adequately are health systems aspects catered for in costing of vertical programs?
- How do you address overlap or missing areas?
- How do financial management systems affect the use and results of the costing tools? For example, how do you address costs that may not be covered by the tools, such as contracting of services?
- How do tools account for decentralization?
- How do you cost services vs. facilities?

Please refer to [Annex 5](#) for the PowerPoint presentation.

The presentation generated a rich discussion, which was moderated by Stan Bernstein. Below is a summary of the key issues raised:

- It is important to determine the key questions that need to be answered, for example cost effectiveness, resource mobilization, and planning
- Tools need to be adapted to suit the country context and customization needs to happen with local analysts, planners and decision-makers

- How does one ensure sustainability by making costing an ongoing long-term process and not a one-off exercise?
- Data challenges: what are the magnitudes of inputs required to deliver service? Many tools require large amounts of data not readily available.
- Most of the tools in the review are vertical, whereas service provision is moving towards horizontal integration
- How does one get output from costing into planning format which is what needs to be presented to government, so as to better influence allocation discussions, what are the intervening steps and how do we fill the gaps?
- Few tools measure the health impact of selected interventions

To address these issues and challenges, several potential ways forward were suggested. These are summarized in Section 9.6 on Recommendations.

Henrik Axelson, PMNCH, gave an overview presentation of the costing tools included in the review. The objective of the overview was not to provide information on all the nuances of the costing tools, but rather to present key information on the tools that might help countries in the selection of a tool. The presentation highlighted the fact that some tools are program-specific or disease-specific, while others are cross-cutting and cover several programs or interventions. Information about the tools was centered on four questions:

1. What programs does the tool cost or does it cut across programs?
2. Does tool intend to be comprehensive in terms of interventions? In other words, does a tool have the potential to cover the required interventions within a program, disease, or within a health system?

3. Does the tool model/predict health impact/outcomes?

4. What cost categories are included?

Please refer to [Annex 6](#) for the PowerPoint presentation and to [Annex 7](#) for a handout with a brief description of each of the 13 costing tools.

A number of questions were raised in the ensuing discussion:

- How does one determine which tools matches with a user's objectives?
- What is the extent to which outputs of tools are directly usable in country programming and what is the process by which one verifies how useful the results are?
- How does one ascertain current level of coverage?
- Are there standardized methods of tool development?
- Are clinical assumptions in tools based on clinical guidelines from WHO?
- What is meant by "essential package of care" when these packages differ in number of services and clinical assumptions between various tools?
- How can resource inputs and assumptions be harmonized between the tools?
- User friendliness, how easy, how much time does a tool take to be used?
- How do tools account for lack of data?
- Do these tools allow for an uncertainty analysis in terms of validating assumptions and estimates?
- Do tools address where funds for interventions should come from, e.g. public expenditure, out-of-pocket?

To answer tool-specific questions, mini-seminars were organized during the evening of Day 2. These seminars included presentations by the tool developers and Q&A sessions.



5. Session 2 - Experiences of applying costing tools at country-level

5.1 Introduction

A key part of the meeting was the discussion in small working groups, which was designed to maximize interaction and stimulate discussions and feedback about the use of the costing tools. Each group was facilitated by a tool developer or resource person.

James Tashima introduced the first working group session on the experiences of applying costing tools at country-level. The working groups were asked to answer the following questions:

- What was your experience with the tool(s)?
- What worked well and what didn't?
- What would you have done differently?

Tessa Tan-Torres urged participants to consider not only to discuss technical issues associated with the tool that they have used but also to reflect on the process of costing. She suggested the following additional issues in the working groups:

- In what context did you use the tool?
- Why was costing done? Did you start with the tool or the costing question?
- On ownership: Were you able to defend the results of the costing?
- Start with the statement: "there is nothing wrong with what/how we are doing costing" and deconstruct it

5.2 Summary of Group Work Presentations and Discussion

The main themes and points from the group work presentations and discussion in plenary are summarized below. For detailed notes from each working group, please refer to [Annex 8](#).

Purpose and context of using the costing tools

Objectives of costing exercises varied widely, ranging from small-scale, district-level costing to costing of national plans and programs to costing proposals to secure funding from the Ministry of Finance, the Global Fund to

fight AIDS, tuberculosis and malaria (GFATM), Sector-Wide Approaches (SWAPs), and Poverty Reduction Strategy Papers (PRSPs). It was noted that some costing tools were not easily adaptable to national planning and budgeting processes and that this limited the impact of the results.

Also highlighted was the need for a clear understanding of why the costing was to be carried out. In some countries a strategic plan was first developed and then users searched for tools that could be used to cost the plan. However, in other countries, a tool and funding for its application was offered to a country without the country having a clear use for the data produced by the exercise, which in most cases meant that the exercise eventually stalled. In this context, several participants noted the importance of using the tools as a means to raise funds for the implementation of plans, programs and interventions, and that use of costing tools should not be seen as an end in itself.

Ownership

It was felt that stakeholder involvement (from government to local organizations) is critical and helps to ensure that data is used for policy making and programming decisions. The costing process is both a technical and a political process. The participation of political stakeholders is required to ensure institutionalization and sustainability. It is also needed to ensure alignment with national processes. It is important that the country has a say in the selection of possible costing tools - whenever a country had an active role in selecting the costing tool, the application and subsequent use of the results were much more successful. Local ownership determines long-term success and continuity in using costing tools to help guide policy making and programming. Building ownership includes involving policy-makers early on in the process, involving national experts in the validation of tool and results, disseminating the results. It is also critical that capacity building is sustained so that capacity is retained in the country team.

Support and capacity building

It was felt that capacity building needs to be conducted for the entire process - including planning, disseminating results and using them to influence decision making - not just for specific training on how to use the tool software. There are different models of how to build capacity and how to put together a team and who in the team does what, but it was noted that a multi-disciplinary team is needed to do the costing. To support countries, user-friendly and clear user-manuals, as well as technical documentation on assumptions underlying the tools, should be provided.

Use of results

Experiences indicated that results had often been useful to inform and improve policy-and decision-making processes. However, there is not enough focus on assisting countries in how to use the results produced by the costing exercises. Donors tend to fund capacity building on the use of specific tools rather than on how to analyze data and information produced by the tools. The process of using results for decision-making purposes should become an integral part of planning support provided to countries.

Other Issues

Several participants noted that there is a need for greater harmonization among tools. Harmonization of parts of the tools, such as common clinical inputs and assumptions, common costing assumptions, common use of generic or global databases (e.g. commodities and prices from UNICEF, MSH or UNFPA), common health systems costs - all these would allow for effective integration between the different tools. There are overlaps between some tools,

which raises the question of whether or not so many tools are needed when many address similar areas. International organizations need to coordinate among themselves a common set of guidance to countries and provide consolidated support. It was also noted that some tools are difficult to adapt to country-specific characteristics by the users. Therefore it was suggested that the costing process should include a validation step of the tool by MOH to adapt the tool to country specific characteristics from the beginning.

There was also positive feedback about the various tools during the discussion. Tools in general allow for rapid turnaround on questions that need quick responses. The availability of generic tools that can be easily adapted to local contexts was highly appreciated as this would make tool development more effective and less expensive for countries. Use of tools itself is a learning process as users become familiar with interventions, impact and so forth. The fact that a number of tools are Excel based was considered helpful; however, it can also be a hindrance, mainly due to the limitations of Excel (easy to delete, limited space, etc) as well as the fact that some people do not know how to use Excel. Some tools integrate numerous interventions and/or the entire health system, this is useful; a tool that integrates activities linked to those of the health system would be even better.

Issues for further consideration

- Do users and policy makers prefer detailed reports or just summaries?
- In the absence of data availability are decision makers able to accept ranges or do they need a specific number?
- How do we bridge the gap between information needs of technical people and those making decisions?



6. Session 3 - Improving the content and application of the costing tools

6.1 Introduction

James Tashima introduced the second working group session on the experiences of applying costing tools at country-level. The working groups were asked to answer the following questions:

- How can content of the tools be improved?
- How can ease of use be improved?
- What should be the standards and key features for the next generation of tools?

The composition of the groups and the facilitators remained the same as in the Session 2.

6.2 Summary of Group Work Presentations and Discussion

The main themes and points from the group work presentations and discussion in plenary are summarized below. For detailed notes from each working group, please refer to [Annex 9](#).

Several participants emphasized that tools should be flexible enough to adapt to country circumstances. The need for partial or complete customization depends on tool and context. Users should be able to differentiate between administrative (e.g. national vs. district) and between facility levels (e.g. hospital vs. health center). It is also useful if the tools make it possible to disaggregate data by function (e.g. by type of inputs, costs). It should be easy to add interventions and address different health system components. However, adding an intervention may be more difficult when outputs are automated, implying a tradeoff between flexibility and automated outputs.

Additional components of costing tools may be considered: link to an impact assessment and possibility to assess the availability of resources and to assess the financing gap. Tools should be updated (e.g. annually) via a website.

As noted in the previous group work discussion, tools need to be harmonized. All models should use the same clinical assumptions. There should be standard modules for specific program

areas that are covered across different models (e.g. immunization, family planning, emergency obstetric care) and a common approach to costing health system requirements (to avoid double counting of program-specific requirements). Users would also benefit if tools used common base data (such as on population dynamics, clinical assumptions, drug and supply costs). The tools should use the same terminology and ease of understanding would be increased by the development of a glossary. To increase the ease of use it was also mentioned that tools need to be explicit about all the assumptions and formulae used, both in the tool itself and in the user manuals.

The issue of whether or not a single tool should be developed was discussed. Some participants preferred the development of one tool that had different components to allow a user to do any kind of costing. However, others suggested that this might not be a good idea, because there are different objectives of and types of costing, and as such, the tools have different purposes and work at different levels. However, there was consensus that at the very least efforts should be made to decrease, and not increase, the number of tools. It was also felt that if new costing tools are developed, they (and those not included in this review) should be rigorously and independently evaluated.

Tools, manuals and technical documentation should be available in at least all six UN languages (as practical) and not only English (e.g. a French version should be developed for Francophone countries). The linguistic style of user manuals and other documentation should be clear and not contain jargon.

To increase access to tools, PMNCH should take leadership in creating a website to make it easier for countries to get information on available tools, download them, and access technical support. To facilitate tool selection, the website should also include a guide to identifying the question to be answered and the types of costs to be collected (including a list of typical questions and different types of costs) and examples of good reports of use of tools should be available on the

website or on websites of the organizations that have developed the tools.

For technical support, each tool should have a focal point that can be contacted if there are any questions or problems with the tool. International organizations should establish help-desks with quick turn-around on responses to questions. They should also provide estimates of technical assistance needs at different stages of exercise (e.g. start-up, data collection, analysis).

Capacity building would be strengthened through the development of good training manuals and the exploration of distance learning possibilities. There is also a need for capacity development in general health economics and planning, with costing as a core competency.

To further improve the tools, a number of additional enhancements could be considered, including automatic generation of results reports (text and graphs), provision of a template for a PowerPoint presentation, use of wizards (entering data through questions/forms rather than entering figures directly in cells in tables), and a dashboard of key information including graphs to provide a summary with visual information. The importance of involving local research institutions in the development/improvement of costing tools was also noted.

It would also be beneficial to future costing work if standards in terms of documentation of tools (e.g. purpose, description of implementation requirements and assumptions, methodology, algorithms, formulas) would be agreed upon.

7. Session 4 - How to support countries considering to conduct budgeting and costing analyses

James Tashima introduced the group work in this session, which consisted of working groups divided by tables in the plenary meeting room. Participants were asked to discuss what would help them:

- make a good decision about which tool to use,
- effectively apply the tool,

- analyze and interpret data, and
- present it to senior colleagues.

The working group session was followed by a plenary discussion, the main points and recommendations of which are captured in Section 9 below.

8. Session 5 - Moving forward

James Tashima introduced this session by asking the participants to reflect on how they would like to see the costing tools work move forward. He also encouraged everyone to provide advice to the steering committee for the next steps. The main points from the discussions in Sessions 4 and 5 are captured in Section 9 below.



9. Meeting recommendations

Henrik Axelson presented the below meeting recommendations, which had been compiled together with Tessa Tan-Torres and Sonya Rabeneck during the above discussion. The recommendations were then discussed in plenary. The recommendations are divided into six sections: website/knowledge center, tool content and support, process, other recommendations, and recommendations to the steering committee for taking the work forward.

9.1 Establish and maintain website/knowledge center

It was recommended that PMNCH should establish and maintain a website as a knowledge center to support countries in the selection, access, and use of costing tools included in this review, as well as other costing tools that cost health systems, programs and interventions. The following content of the website was suggested:

- All tools related to health MDGs
- Contact information for tool developers/focal points
- User manuals
- Technical documentation
- Guidance in specifying the questions to be addressed by the costing exercise in a country and selecting appropriate tool/parts of tool to answer those questions
- Technical review reports by Bitran and Associates and PATH
- Report of technical consultation in Senegal
- Standard data sources and price lists (need to identify who would compile such lists)

It was noted that the guidance and data source components would take some time to develop. The other components could be made available in the short-term.

9.2 Tool content and support from tool developers

- Establish help-desks to which people can submit a question electronically, and within a certain timeframe, a technical person would be able to respond to the query

- Provide guidance on how to adapt tools to country context
- Simplify data entry forms
- User's manual should use non-technical language
- There should be a step-by-step guide specific to the use of the tool
- Explain assumptions and default values and how they were obtained and estimated
- Identify skills mix and time required to conduct costing
- Provide or develop guide-book for training and explore distance learning
- Provide examples of actual country experiences to document what worked and what didn't and the impact of costing exercises
- Outputs should include template charts and presentations
- Outputs of tools should be aligned with format and content requirements of controllers of process and linked to planning and budgeting processes
- Standardize program components within and between tools where there is methodological consensus; e.g. effective interventions, handling of population dynamics (births and deaths affected by interventions)
- Consider single model that looks at whole health system
- Tools should foster discussion of system bottlenecks and needed remedies (whether or not that is their main focus)

9.3 Process of application at country-level

- Strengthen political ownership by involving policy-makers from the planning of the costing exercise, which will facilitate the agreement on the key questions that should be addressed by the costing analysis, and ensure that the tools are visible to the range of partners in governments who need to use the results
- Encourage coordination of costing through the Ministry of Health
- Involve country experts to validate data/results
- Ensure that costing is based on strategic and operational plans
- Provide or develop guide-book for training and explore distance (including e-based) learning

- Step-by-step guide on overall process of costing (who is doing what in each step) should be made available

assured that the tools on the website are of sound quality and a mechanism to ensure accuracy of input price data

9.4 Other recommendations

- Support sustained, long-term training (not only on specific tools, but general costing principles and methods)
- Support general training in health economics and costing
- Establish coordination mechanism among agencies and countries to streamline technical assistance and capacity building, support strategic planning and costing exercises, harmonize clinical assumptions (based on WHO standard treatment guidelines), and build upon and monitor other coordination mechanisms relevant to costing
- Conduct regular reviews of costing tools and processes and report on progress, based on scientific standards
- Users of tools should be represented on the steering committee
- Provide guidance on how to conduct strategic and operational planning processes
- Flag importance of legal framework for costing
- Meeting information dissemination should include the meeting report and the development of a journal commentary to promote awareness and use of costing tools
- Other recommendations relating to the website included the establishment of a quality control mechanism so that countries can be

9.5 Recommendations to steering committee

- Work with partners through PMNCH to see how best to implement the above recommendations from this meeting
- Replicate this meeting in other countries
- Reach decision on consolidating some of the tools (creating more/fewer tools)
- Provide contacts for general costing issues (not tool-specific)
- Publish new TORs of steering committee for follow-up work and include users of the tools in the steering committee
- Facilitate the establishment of a mechanism to coordinate capacity building activities, for example through the development of a core curriculum
- Consider long-term use of tools and the need for sustained capacity building

9.6 Recommendation on dissemination of meeting findings

It was also recommended that a journal article or editorial should be drafted on behalf of the meeting participants to share findings of the meeting and to advocate for increased and improved use of costing tools to strengthen national policy-

making, planning and implementation processes.

10. Meeting Evaluation

A meeting evaluation survey was distributed to the participants. The results of the evaluation can be found in [Annex 10](#).



Annex 1 - Revised MDG monitoring framework including new targets and indicators

Source: ***Draft report*** of meeting of Interagency and Expert Group (IAEG) on MDG Indicators in November 2007.

All indicators should be disaggregated by sex and urban/rural as far as possible

Goals and Targets (from the Millennium Declaration)	Indicators for monitoring progress
Goal 1: Eradicate extreme poverty and hunger	
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below \$1 (PPP) per day ⁵ 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below \$1 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8 Prevalence of underweight children under-five years of age 1.9 Proportion of population below minimum level of dietary energy consumption
Goal 2: Achieve universal primary education	
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1 Net enrolment ratio in primary education 2.2 Proportion of pupils starting grade 1 who reach last grade of primary 2.3 Literacy rate of 15-24 year-olds, women and men
Goal 3: Promote gender equality and empower women	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education 3.2 Share of women in wage employment in the non-agricultural sector 3.3 Proportion of seats held by women in national parliament
Goal 4: Reduce child mortality	
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1 Under-five mortality rate 4.2 Infant mortality rate Proportion of 1 year-old children immunised against measles

⁵ For monitoring country poverty trends, indicators based on national poverty lines should be used, where available.

Goals and Targets (from the Millennium Declaration)	Indicators for monitoring progress
Goal 5: Improve maternal health	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1 Maternal mortality ratio 5.2 Proportion of births attended by skilled health personnel
Target 5.B: Achieve, by 2015, universal access to reproductive health	5.3 Contraceptive prevalence rate 5.4 Adolescent birth rate 5.5 Antenatal care coverage (at least one visit and at least four visits) 5.6 Unmet need for family planning
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1 HIV prevalence among population aged 15-24 years 6.2 Condom use at last high-risk sex 6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS 6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6 Incidence and death rates associated with malaria 6.7 Proportion of children under 5 sleeping under insecticide-treated bednets 6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs 6.9 Incidence, prevalence and death rates associated with tuberculosis 6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course
Goal 7: Ensure environmental sustainability	
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	7.1 Proportion of land area covered by forest 7.2 CO ₂ emissions, total, per capita and per \$1 GDP (PPP) 7.3 Consumption of ozone-depleting substances 7.4 Proportion of fish stocks within safe biological limits 7.5 Proportion of total water resources used
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	7.6 Proportion of terrestrial and marine areas protected 7.7 Proportion of species threatened with extinction
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums ⁶

The proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of four characteristics: (a) lack of access to improved water supply; (b) lack of access to improved sanitation; (c) overcrowding (3 or more persons per room); and (d) dwellings made of non-durable material.



Goals and Targets (from the Millennium Declaration)	Indicators for monitoring progress
Goal 8: Develop a global partnership for development	
<p>Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system</p> <p>Includes a commitment to good governance, development and poverty reduction – both nationally and internationally</p> <p>Target 8.B: Address the special needs of the least developed countries</p> <p>Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction</p> <p>Target 8.C: Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)</p> <p>Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term</p>	<p><i>Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and small island developing States.</i></p> <p>Official development assistance (ODA)</p> <p>8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income</p> <p>8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)</p> <p>8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied</p> <p>8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes</p> <p>8.5 ODA received in small island developing States as a proportion of their gross national incomes</p> <p>Market access</p> <p>8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty</p> <p>8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries</p> <p>8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product</p> <p>8.9 Proportion of ODA provided to help build trade capacity</p> <p>Debt sustainability</p> <p>8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative)</p> <p>8.11 Debt relief committed under HIPC and MDRI Initiatives</p> <p>8.12 Debt service as a percentage of exports of goods and services</p>
<p>Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries</p>	<p>8.13 Proportion of population with access to affordable essential drugs on a sustainable basis</p>
<p>Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications</p>	<p>8.14 Telephone lines per 100 population</p> <p>8.15 Cellular subscribers per 100 population</p> <p>8.16 Internet users per 100 population</p>

Annex 2 - Steering Committee Members

Tessa Tan-Torres (chair)

WHO

Carlos Avila-Figueroa

UNAIDS

James J. Banda

WHO

Stan Bernstein

UNFPA

David Collins

Management Sciences for Health

Maha El Adawy

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Helga Fogstad

NORAD

Katherine Floyd

WHO

Rudolf Knippenberg

UNICEF

Andrea Pantoja

WHO

Sonya Rabeneck

PMNCH

Agnes Soucat

World Bank

Eva Weissman

UNFPA



Annex 3 - Agenda

Day 1 - Tuesday, January 8, 2008

1. Setting the stage

- 1.1 Welcome
- 1.2 Review of objectives of meeting
- 1.3 Overview of costing tools
- 1.4 Plenary discussion

Session objective: Welcome and introduce participants, set the stage for the technical consultation through review of objectives and overview presentation of the costing tools

2. Experiences of applying costing tools at country-level

- 2.1 Working groups
- 2.2 Plenary discussion

Session objective: obtain feedback from users on their experiences with the tools, criteria that should be considered when selecting costing tools, and how countries can be empowered and supported to manage the process of costing

Day 2 - Wednesday, January 9, 2008

3. Improving the content and application of the costing tools

- 3.1 Working groups
- 3.2 Plenary discussion

Session objective: Identify possibilities for improvement in the scope and content of the tools and their application, including key features of effective tools and context in which costing is done
Evening seminars: Presentations by tool developers of specific tools, followed by Q&A

Day 3 - Thursday, January 10, 2008

4. How to support countries considering to conduct budgeting and costing analyses

- 4.1 Working groups
- 4.2 Plenary discussion

Session objective: Discuss the development of guidance to assist countries in conducting costing.

5. Moving forward

- 5.1 Presentation of draft recommendations
- 5.2 Plenary discussion

Session objective: To summarize our experience, to hear from the users what they would like to see next, and to discuss the next steps

Annex 4 - List of Participants

Name	Title, Institution	Country	Tools	Email	Address
Users of tools at country-level					
Africa					
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Name	Title, Institution	Country	Tools	Email	Address
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Annex 5 - Key issues and challenges related to costing tools and costing exercises - Presentation

Overview of Costing Tools

Henrik Axelsson
PMNCH

Kimberly Switlick
Health Systems 20/20 Project (USAID)

Stan Bernstein, Moderator
UNFPA

Technical Consultation
Review of Costing Tools Relevant to the Health MDGs
January 8-10, 2008
Saly Portudal, Senegal

Objective

- To give a broad overview of the 13 costing tools included in the review to set the stage for upcoming discussions over the next few days

Setting the context: general issues with costing...

- Timing of costing
- Reconciling budgeting with the costing exercise
- Linking to plans
- Vertical vs. horizontal?
- Missing/overlapping health services?
- Missing costs?
- Decentralization?
- How to cost services/facilities that are contracted out?

What other general costing issues? (Not tool specific)

Annex 6 - Overview of Costing Tools - Presentation

Overview of MDG Costing Tools

Henrik Axelsson
PMNCH

Kimberly Switlick
Health Systems 20/20 Project (USAID)

Stan Bernstein, Moderator
UNFPA

Technical Consultation
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PART II: Criteria and important considerations of costing tools

Criteria

- What programs does the tool cost or does it cut across tools?
- Does tool intend to be comprehensive in terms of interventions?
- Does the tool model/predict health impact/outcomes?
- What cost categories are included?

Models of costing tools

1. What programs does the tool cost?

Child health	Immunization	M	R	D	E	Malaria
• CH costing tool (WHO)	• cMYP (WHO)	• RH (UNFPA)	• Spectrum PMTCT module • Goals RNM (All Futures Institute)	• Planning & budgeting for TB (WHO)	• Malaria cost est. tool (WHO)	

Across programmatic areas

- MBB (UNICEF/World Bank)
- PCBF (MSH)
- CORE Plus (MSH)
- IHM (UNDP)
- IHTP (WHO, MRC)

2. Does tool intend to be comprehensive in terms of interventions?

Child health	Immunization	RH/MNH	HIV/AIDS	TB	Malaria
• CH costing tool	• cMYP	• RH • MPS-IHTP	• Spectrum PMTCT module • Goals RNM	• Planning & budgeting for TB	• Malaria cost est. tool

Across programmatic areas

- MBB
- PCBF
- CORE Plus
- IHM
- IHTP

3. Does the tool model/predict health impact / outcomes?

Child health	Immunization	RH/MNH	HIV/AIDS	TB	Malaria
• CH costing tool: NO	• cMYP: NO	• RH: NO • MPS-IHTP: NO	• Spectrum PMTCT module: NO • Goals: NO • RNM: NO	• Planning & budgeting for TB: NO	• Malaria cost est. tool: NO

Across programmatic areas

- MBB: YES
- PCBF: NO
- CORE Plus: NO
- IHM: NO
- IHTP: YES

4. What cost categories are included? (HR, Drugs/supplies, Equipment, Program management, operating costs)

Child health	Immunization	M	R	D	E	Malaria
• CH costing tool: ALL	• cMYP: ALL	• RH: ALL • MPS-IHTP: ALL	• Spectrum PMTCT module: ALL • Goals: ALL • RNM: ALL	• Planning & budgeting for TB: ALL	• Malaria cost est. tool: ALL	

Across programmatic areas

- MBB: ALL
- PCBF: ALL
- CORE Plus: ALL
- IHM: ALL
- IHTP: ALL

What other criteria are important considerations when choosing (or not choosing) to use a specific tool?



Annex 7 - Overview of Costing Tools - Handout

1. Marginal Budgeting for Bottlenecks

UNICEF/World Bank

Aims at estimating the potential impact, resources needs, costs and budgeting implications of country strategies to remove implementation constraints of the health system. It estimates the marginal/incremental resources required for overcoming those constraints, and achieving better results and relates these resources to the country's macro-economic framework. MBB is intended to help formulate medium-term national or provincial expenditure plans and poverty reduction strategies that explicitly link expenditure to health and nutrition MDGs. MBB is meant to facilitate a process of budgeting for government health expenditures that provides a basis for policy dialogue and planning. One of the strengths of the tool is that it helps simulate the potential impact as well as cost and budget implications of alternative health service delivery strategies using different integrated production functions (community/family based, population/outreach based, or clinic based).

- **Purpose:** Planning and forecasting the potential cost and impact of scaling up investments to increase the intake, coverage and quality of high impact health interventions; and preparing results oriented expenditures programs and health budgets.
- **Health MDGs addressed:** 4, 5, 6
- **Scope of interventions:** Maternal, newborn, and child health interventions based on Lancet (2003 and 2005 series); BMJ and Cochrane review. Malaria based on RBM review. AIDS based on UNAIDS costing tool
- **Type of software:** Excel-based
- **User manual available:** Yes
- **Potential users:** Programmers and planners at national, sub-national and district levels
- **Skills required:** Health, economics, epidemiology, statistics, basic knowledge of Excel
- **Type and length of training required:** a five-day training course that can be done two ways: At the regional level, regrouping five to six countries, or at national level with a country application. Both types require a multidisciplinary national team blending

competencies in health, economics including macroeconomics, epidemiology, statistics

- **Costing strategy and methods:** Identify tracer interventions as proxy for a set that face the same health system bottlenecks, identify current coverage of those tracers and the costs and health impact of possible ways to remove the bottlenecks they face. Quantities and prices of additional inputs required to remove systemic constraints; locally collected and validated by expert groups
- **Level of aggregation:** District, sub-national and national
- **Program/system costs included:** Yes
- **Modeling intervention impact or interactions on epidemiology or demography:** Yes
- **Time-frame:** Medium-term
- **Output:** Marginal/Incremental cost per input, per bottlenecks and service delivery modes
- **Automatic generation of reports:** Yes: O-Summary sheet that provides estimated mortality reduction reached due to selected strategies and estimated marginal cost needed to implement these strategies
- **Country applications:** include Angola, Benin, Burundi, Burkina Faso, Cameroon, Comoros, Cote d'Ivoire, Ethiopia, Ghana, Guinea, Guinea Bissau, India, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Sierra Leone, Swaziland, Uganda, Zambia.
- **Website:** not yet available
- **Contacts:**
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Susie Villeneuve: svilleneuve@unicef.org
Netsanet Walelign: nwalelign@unicef.org
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2. Choosing Interventions that are Cost-Effective (CHOICE)

WHO

WHO/ Health Systems and Services (HSS) has developed, in collaboration with others, a range of financial costing tools for child and maternal plus a

health system backbone costing tool. It is intended for medium-to-long term planning and costing and covers both program and patient costs of recommended evidence-based interventions.

Covered by tools 13 (malaria) and 14 (child health)

3. Reproductive Health Costing Tool

UNFPA

Designed to estimate the resource requirements and costs of providing an essential package of reproductive/maternal health interventions at country or state/provincial level. Its main purpose is to help countries to quickly cost and create budgets for existing sector strategies and plans, such as Maternal Road Maps or Reproductive Health Action Plans.

In particular, the model calculates:

- a) The cost of providing/scaling up an essential package of RH interventions (family planning, ANC, delivery care, EmOC, STIs and HIV prevention and treatment)
- b) the cost of activities/health systems improvements required to improve RH/MH in a country/district (training and supervision, equipment, RHCS, referral system, IEC, etc.)

One of the key features of the tool is the incorporation of population dynamics (e.g., the impact family planning has on the demand for maternal and child health services).

- **Purpose:** Costing of Maternal and Reproductive Health
- **Health MDGs addressed:** Mainly 5, but also 4 (newborn health) and 6 (ARV treatment, PMTCT, VCT, some prevention)
- **Scope of interventions:** Maternal and reproductive health, interventions to improve the health system
- **Type of software:** Excel
- **User manual available:** Yes
- **Potential users:** Governments, consultants
- **Skills required:** Good Excel skills, knowledge of reproductive health, some experience with finance or budgeting
- **Type and length of training required:** Depending on background and experience (1-4 days)

- **Costing strategy and methods:** Total cost, unit costs
- **Level of aggregation:** National/state/provincial
- **Program/system costs included:** Yes
- **Time-frame:** 5-10 Years
- **Modeling intervention impact or interactions on epidemiology or demography:** Models impact of increased use of FP on number of pregnancies and children born and on demand for maternal and newborn health services
- **Output:** Cost of RH/MH service package; Cost of necessary health system investments
- **Automatic generation of reports:** Large number of printable tables and graphs
- **Country applications:** Uganda, Zimbabwe, Indonesia, Yemen, Turkey, Georgia, Dominican Republic, Rwanda, Laos
- **Contacts:**
Eva Weissman: Weissman@unfpa.org
Howard Friedman: Friedman@unfpa.org

4. Integrated Healthcare Technology Package (iHTP)

*WHO, Medical Research Council (South Africa)*⁷

iHTP is a resource planning and costing tool developed by WHO/HSS/HDS to provide guidance on the optimal mix of resource inputs (human resources, medical devices, pharmaceuticals and facilities) required for any particular health intervention or their selected set that is specific to the local needs and conditions. iHTP integrates healthcare needs, disease profiles; patient demographics; clinical practice; human resource and technology requirements, availability and constraints; associated capital and recurrent costs; links these to a defined set of health services, and via software simulation, computes the resource requirements necessary to provide these services. The health interventions resource planning and costing calculations are taken from graphical representations of clinical practice guidelines, called "iHTP scenarios". iHTP scenarios depicting WHO clinical practice guidelines for the areas of maternal,

⁷ South African Medical Research Council in the late 1990s-early 2000s was the initial WHO's partner in designing the original iHTP concept and methodology, but is no longer involved in its development and implementation.



newborn, and child health; sexual and reproductive health; malaria; tuberculosis; HIV/AIDS; essential and emergency surgical care, and other key interventions within the typical district health package are either completed or are in the final stages of development. Following the initial iHTP piloting in China, Kyrgyzstan, Mozambique and Namibia, it is currently applied for a variety of broad policy and specific technical purposes in DRC, Mexico, South Africa and Ukraine, as well as is at the initial stages of implementation in a number of other countries in all WHO regions.⁸

- **Purpose:** Planning for the optimal resource mix (HR, devices, drugs, facilities) for a defined set of health interventions; qualifying, quantifying and costing resource requirements; defining the HR skills sets; assessing resource availability and constraints, and resource GAPS analysis; resource sharing between "vertical" programs; modelling of resource requirements and associated costs for scaling up health coverage or health services; changing/improving clinical practice.
- **Health MDGs addressed:** 4, 5, 6
- **Scope of interventions:** Generally, any defined set, package or program (user selects/deselects interventions according to local needs). Covers all MNH interventions included in WHO IMPAC clinical guidelines, as well as most of IMCI, SRH, HIV/AIDS, TB, malaria, and typical district health package interventions. Database contains 11,000 procedures, of which 6,000 are pre-linked to resource requirements.
- **Type of software:** Custom; .Net Framework
- **User manual available:** Yes
- **Potential users:** National planners, decision-makers, managers, clinicians at any level; development, technical assistance and donor agencies
- **Skills required:** Depending on application. Generally, team should include clinical

experts, and those who can provide information on epidemiology and costs. Basic computer skills for all.

- **Type and length of training required:** Training workshop; 3-5 days to become familiar with software; resource kit available for post-training support. Workshops can be at any level as required - intercountry, national, sub-national, institutional.
- **Costing strategy and methods:** Based on standard costs, country specific adjustments, user-directed target coverage scale-up; bottom up, ingredient approach (quantities and prices)
- **Level of aggregation:** Any (individual facility, facility network, district, national)
- **Program/system costs included:** Partially, currently being incorporated
- **Time-frame:** Any as required (short-, medium-, long-term planning)
- **Modeling of intervention impact or interactions on epidemiology or demography:** Yes
- **Output:** cost per input, procedure, intervention, service package, facility, facility network, level of care, resource type, plus a variety of non-cost outputs (resource type/quantity/optimal mix, HR skills mix/competences, technology criticality, technology reusability, resource sharing across programs, etc.)
- **Automatic generation of reports:** Yes
- **Country applications:** Variety of on-going and planned/requested applications in many countries in all WHO regions
- **Website:** www.ihtp.info
- **Contacts:**
Andrei Issakov: issakova@who.int (program information)
Peter Heimann: heimannp@who.int (methodological information)
Dheepa Rajan: rajand@who.int (clinical information)
Paul Maree: paul@wamsys.co.za (software issues)
Matthews Mathai: mathaim@who.int (MPS module)

⁸ The current technical review focused on the Making Pregnancy Safer (MPS) module of iHTP. The services included in the iHTP-MPS module are taken from the WHO recommended interventions menu, which is part of the Integrated Management of Pregnancy and Childbirth clinical guidelines and tools. iHTP-MPS scenarios/algorithms have been developed for each of 22 maternal and 8 newborn interventions, at primary and referral levels. iHTP-MPS implementation is under way in Malawi; with Botswana, Kenya, Tanzania and Uganda having had the initial training, and two more countries from other regions to be selected shortly for testing and training of trainers.

5. Spectrum, PMTCT module

Futures Institutes

Designed to answer a number of "what if" questions, this tool evaluates costs and benefits of intervention programs to reduce transmission of HIV from mother to child. Three different sets of interventions are included in the module: drug treatment (seven options), type of delivery, and type of infant feeding (formula, breastfeeding or mixed). Each treatment option requires data on costs of interventions, as well as user fee costs if these apply. The vertical transmission rate is set as a program default, varying according to treatment, mode of delivery and infant feeding option. Outputs include benefit-cost ratios (total costs savings divided by total costs of the intervention) as well as cost-effectiveness measures such as cost per HIV infection averted, and cost of death averted.

- **Purpose:** To estimate the benefits and costs of different approaches to implementing PMTCT programs
- **Health MDGs addressed:** 6 (HIV/AIDS)
- **Scope of interventions:** PMTCT
- **Type of software:** Custom software, module in Spectrum
- **User manual available?** Yes
- **Potential users:** planners and economists in HIV
- **Skills required:** Knowledge of PMTCT programs
- **Type and length of training required:** One day
- **Costing strategy and methods:** costs by component (drugs, testing, counseling, service delivery)
- **Level of aggregation:** National or provincial/state
- **Program/system costs included?** Yes
- **Time-frame:** short-term
- **Modeling of intervention impact or interactions on epidemiology or demography?** Yes
- **Output:** Infections averted and cost per infection averted
- **Automatic generation of reports?** Tables yes, reports no.
- **Country applications:** Panama, Honduras, Dominican Republic
- **Website:** <http://www.futuresinstitute.org/pages/resources.aspx>
- **Contact:**
John Stover: JStover@FuturesInstitute.org

6. Goals

Futures Institute

This model is intended to support strategic planning at the national level by linking program goals (in the HIV area) and funding. This tool is intended to answer questions related to funding requirements to achieve goals, what goals can be achieved with available resources, the effect of alternate pattern of resource allocation on the achievement of program goals, and training requirements for delivery of projected services. The model was designed to help planners to understand how funding levels and patterns can lead to reductions in incidence and prevalence of HIV and improved coverage of treatment, care and support programs. The tool does not calculate an optimum package.

- **Purpose:** To estimate the financial resources required to achieve program targets for HIV prevention, treatment, care and mitigation
- **Health MDGs addressed:** 6 (HIV/AIDS)
- **Scope of interventions:** All prevention, treatment and mitigation interventions
- **Type of software:** Excel spreadsheet
- **User manual available?** Yes
- **Potential users:** planners developing national HIV/AIDS strategic plans
- **Skills required (e.g. epidemiology, economics, statistics):** Knowledge of program statistics, goals and unit costs and epidemiology
- **Type and length of training required:** Several days
- **Costing strategy and methods:** target population x coverage x unit cost
- **Level of aggregation:** National or provincial/state by intervention
- **Program/system costs included?** Yes
- **Time-frame:** short-term and medium-term
- **Modeling of intervention impact or interactions on epidemiology or demography?** Yes
- **Output:** Prevalence, incidence, infections averted, coverage of ART, OI treatment, palliative care, OI prophylaxis, OVC
- **Automatic generation of reports?** Tables yes, reports no.
- **Country applications:** Ethiopia, Kenya, Uganda, Tanzania, Rwanda, Zambia, Mozambique, South Africa, Namibia, Ghana, Burkina Faso, Honduras, Thailand, Viet Nam, Indonesia, China
- **Website:** <http://www.futuresinstitute.org/pages/resources.aspx>
- **Contact:**
John Stover, JStover@FuturesInstitute.org



7. Planning, Costing and Budgeting Framework

Management Sciences for Health

This is a spreadsheet-based tool developed by MSH with USAID funding for UNAIDS Global Fund training activities in Southern Africa. It provides a generic template for setting out time-bound measurable goals and objectives, estimating the variable resources required for attaining the goals and objectives, and calculating the related costs of activities linked to the goals and objectives. It also includes a section for showing sources and amounts of funding going into the activities. The tool encourages the user to follow a structured and logical process of developing a plan, costing it and then developing a budget. The user has to provide all the input information as the framework has no built-in data values. A manual is available in English.

- **Purpose:** Planning, costing and budgeting major programs such as Global Fund
- **Health MDGs addressed:** All
- **Scope of interventions:** Any
- **Type of software:** Excel
- **User manual available:** Yes
- **Potential users:** Planners and finance managers at national or provincial levels
- **Skills required:** planning, epidemiology, spreadsheet
- **Type and length of training required:** small group – 2 days
- **Costing strategy and methods:** Costs activities and aggregates them to objective levels. Bottom-up, based on unit costs and quantities of activities .
- **Level of aggregation:** Typically national or provincial
- **Program/system costs included:** Yes
- **Time-frame:** Any, but typically multi-annual
- **Modeling intervention impact or interactions on epidemiology or demography:** Yes
- **Output:** Cost by activity, objective, program
- **Automatic generation of reports:** no
- **Country applications:** Southern Africa, Nigeria
- **Website:** <http://erc.msh.org/mainpage.cfm?file=9.33.htm&module=toolkit&language=English>
- **Contact:** David Collins: dcollins@msh.org

8. CORE Plus

Management Sciences for Health

Spreadsheet-based tool developed by MSH with USAID and other funding to help determine projected and actual costs of individual interventions and total costs of integrated services provided by a primary health facility. It is a "bottom-up" costing tool that allows the user to estimate a standard cost for each intervention, broken down by drugs, tests, medical supplies and staff. The standard costs are multiplied by the number of each type of interventions to build the total direct costs for a facility or group of facilities, to which are added indirect costs. It includes a demographic component that allows users to project estimated service utilization and compare it with actual service utilization and compare costs for different numbers of patients and different service delivery models. It also includes a component for comparing revenue with costs and for setting fee levels. The strength of the tool is that it can predict the cost of different interventions, such as child survival, within the context of an integrated PHC system, and the impact of changes in those interventions on the cost of the system as a whole. The tool has been used in many countries, including South Africa, where it was used to estimate the total cost of the primary health care package for the Ministry of Health. CORE Plus has the same costing platform as a previous tool called CORE. CORE Plus is available in English (a French version can also be provided) and is accompanied by a detailed manual.

- **Purpose:** Planning, costing and budgeting for individual interventions and integrated services provided by a primary health facility.
- **Health MDGs addressed:** All, but only at the primary health care facility level.
- **Scope of interventions:** Integrated primary health care services
- **Type of software:** Excel
- **User manual available:** Yes
- **Potential users:** Planners and service and finance managers at any level
- **Skills required:** epidemiology, service delivery standards, spreadsheet
- **Type and length of training required:** small group – 3 days
- **Costing strategy and methods:** Based on standard or actual costs. Bottom-up, based on mix of standard and actual costs.

- **Level of aggregation:** Facility, network of facilities, district, national
- **Program/system costs included:** Yes
- **Time-frame:** Any – e.g. monthly, quarterly, annual
- **Modeling intervention impact or interactions on epidemiology or demography:** Includes a component that predicts utilization of each service based on the catchment population.
- **Output:** Cost by intervention, package of services, facility, resource type.
- **Automatic generation of reports:** no
- **Country applications:** CORE Plus has been used in South Africa, Rwanda and Haiti. CORE has been used in Afghanistan, Bangladesh, Ethiopia, Haiti, Kenya, Madagascar, Mexico, Rwanda, South Africa, Tanzania, Zimbabwe, Senegal, Guatemala, Bolivia, Honduras, Nicaragua and the USA.
- **Website:** <http://erc.msh.org/mainpage.cfm?file=5.11.htm&module=toolkit&language=English>
- **Contact:** David Collins: dcollins@msh.org

9. Costing and financing tool for childhood immunization (cMYP)

WHO

As a companion to the 2005 joint WHO - UNICEF guidelines for preparing a strategic multi-year plan for immunization, the cMYP tool was developed to make projections of future costs, future resources requirements, future financing needs to achieve programme objectives, and analyze the corresponding financing gaps and sustainability. This tool can help countries align with regional and global immunization strategies (ex: GIVS) and is primarily targeted for low-income countries which do not have existing systems in place for this.

- **Purpose:** This tool was designed for strategic planning for immunization to help answer fundamental questions of how much resources are needed to reach program objectives, who will fund the needs and what are the shortfalls, and how to prioritize activities based on available funds. The Tool is used to estimate past and future costs and financing for immunization, and analyze financing gaps and sustainability.

- **Health MDG addressed:** 4 (child health, immunization)
- **Scope of interventions:** National immunization programs
- **Type of software:** Excel-spreadsheet based
- **User manual available:** Yes (English, French and Russian)
- **Potential users:** National planners and immunization program managers will be the principal users. It can be used by researchers, consultants, international donors and other health planners in developing countries.
- **Skills required:** Good excel skills, knowledge of immunization, some experience with costing, financing, planning and budgeting
- **Type and length of training required:** 1 day either hands on or in a training workshop setting with specific computer exercises. 1-4 days self teaching depending on experience
- **Costing strategy and methods:** Standard cost categories with user defined demographics, coverage and scale-up needs. Ingredients approach for main cost drivers that account for 80% of total costs (vaccines, injection supplies, human resources, vehicles, cold chain); rules of thumb and budgeting approach for other cost categories
- **Level of aggregation:** National and sub-national information
- **Program/system costs included:** Yes - both specific and shared health systems costs
- **Time-frame:** Medium-term (annual up to 5 years)
- **Modeling intervention impact or interactions on epidemiology or demography:** No
- **Output:** Total and unit costs (cost per capita, per child...), costs by strategy (routine, fix site delivery, outreach and campaigns), total financing and future funding gaps, composition of funding gaps, financial sustainability indicators
- **Automatic generation of reports:** Automatic generation of tables and charts
- **Country applications:** Yes, in over 48 low income countries and 4 middle income countries
- **Website:** <http://www.who.int/immunization/financing/tools/cmyp/>
- **Contact:** Patrick Lydon, lydonp@who.int



10. Integrated Health Model

UNDP

The primary purpose of the Integrated Health Model is to help country governments estimate the total resources—human, infrastructural, financial—required to meet the health-related Millennium Development Goals (MDGs). It is one of a suite of sector tools used by the MDG Support Team in UNDP to aid countries in MDG-based planning. The Integrated Health Model consolidates and builds on several health costing tools developed by other development partners, including WHO, UNICEF, UNFPA and UNAIDS. The model's key feature is the coherent scale-up of integrated health services anchored in a comprehensive treatment (including costing and identification of constraints) of the health system. It has been used widely across sub-Saharan Africa and is being rolled out in the Asia Pacific.

- **Purpose:** to estimate the total costs of delivering integrated health services at scale to achieve the Millennium Development Goals.
- **Health MDGs addressed:** 4, 5, 6 and 8 (access to essential medicines)
- **Scope of interventions:** health systems strengthening; commodity supply chain system; demand-side interventions; maternal and reproductive health; child health; malaria prevention and treatment; tuberculosis treatment; HIV (enabling environment, prevention, treatment and care & support); independent health programs
- **Type of software:** Microsoft Excel
- **User manual available?** Yes
- **Potential users:** government planners, bi- and multi-lateral development agencies
- **Skills required:** Familiarity with Excel, basic epidemiological parameters, basic math
- **Type and length of training required:** interactive workshop with structured exercises; 1-2 days of training requiring depending on skills of trainees
- **Costing strategy and methods:** Unit cost approach (cost per case x number of cases)
- **Level of aggregation:** Tool can be used at national and sub-national levels. User chooses.
- **Program/system costs included?** Yes
- **Time-frame:** flexible, up to 9-10 years
- **Modeling of intervention impact or interactions on epidemiology or demography?** No

estimates of impacts on health outcomes.

User can elect to allow crude birth rate to be impacted by planned scale up of family planning services. Also, scale up of rapid diagnostic tests impacts number of people treated for malaria.

- **Output:** Total, per capita and average per capita costs for all interventions.
- **Automatic generation of reports?** No. Some charts/graphs for HIV costs are automatically generated.
- **Country applications:** Ecuador, Haiti, Malawi, Mozambique, Nepal, Nigeria, Rwanda, Uganda, Zanzibar
- **Website:** <http://www.undp.org/poverty/tools.htm#nact>
- **Contact:** Maha El Adawy: maha.eladawy@undp.org

11. Planning and budgeting for TB

WHO

Spreadsheet-based tool developed by the WHO Stop TB department with USAID funding. It provides a framework to develop plans and budgets for TB control in line with the Stop TB Strategy and the Global Plan to Stop TB, 2006-2015, i.e. total costs for TB control from the provider perspective. It includes epidemiological, demographic and financial historical data relevant to TB as well as projections of these up to 2015. These are set as default values and can be changed by countries if necessary. Targets for the coming years are set-out at the beginning and are linked with the relevant interventions. Each worksheet represents one intervention of the Stop TB Strategy and within each worksheet there is a ready-made list of likely inputs and activities to consider for planning and budgeting. Besides costing information, it also collects sources of funding for each intervention and calculates funding gaps. It produces summary tables and figures automatically, including summary tables required by the TB Financial Monitoring Project of WHO and The Global Fund. Field-tested in at least one country of AFRO, AMRO, EMRO and SEAR. Used in planning and budgeting workshops for the African and Western Pacific Region and promoted also through the Global Fund Round 7 and 8 workshops. It is distributed through the

website of the Stop TB Department at WHO (http://www.who.int/tb/dots/planning_budgeting_tool/en/index.html), where also guidelines are available.

- **Purpose:** To assist in the planning and cost of activities to control TB in a country, in particular to plan in line with the Stop TB Strategy and targets set out in the Global Plan to Stop TB, 2006-2015.
- **Health MDGs addressed:** 6 (TB)
- **Scope of interventions:** All interventions recommended in the WHO Stop TB Strategy, e.g. quality assured bacteriology, management of MDR-TB, and TB program at all levels, e.g. program, facility, community and outreach.
- **Type of software:** Excel
- **User manual available?:** Yes, tool has an in-built user guide plus accompanying documentation to help the user navigate in it.
- **Potential users:** National TB program managers/coordinators, at national or sub-national level.
- **Skills required:** knowledge on TB epidemiology and on TB control situation and activities at country level, basic skills in Excel
- **Type and length of training required:** 3 days are sufficient to know and be able to use the tool. To complete the tool, work of one to three full time weeks are required.
- **Costing strategy and methods:** Ingredients approach (quantities of resources required multiplies by unit cost of the resource); bottom-up approach.
- **Level of aggregation:** National, but can be used at sub-national level
- **Program/system costs included?:** Yes
- **Time-frame:** Tool is set-up to cover the period 2006-2015. Users can decide which time-frame they need and want to cost.
- **Modeling of intervention impact or interactions on epidemiology or demography?** No. However, the epidemiological projections, included as default values within the tool, are in line with the Global Plan implementation and outcome targets. These targets are expected to have an impact on TB incidence, prevalence and mortality such that MDG plus Stop TB Partnership targets are achieved globally.
- **Output:** total cost of TB control interventions (overall and for each intervention), funding gaps and projection of patients to be treated.

- **Automatic generation of reports?** Yes, summary tables and figures.
- **Country applications:** 38 countries in Africa, 2 in Southeast Asia, 1 in Europe and Central Asia and 3 in the Western Pacific Region have been trained/introduced to the tool through workshops or on an individual request. 10 African countries have completed the tool (which account for 61% of the regional TB burden): DR Congo, Kenya, Gabon, Malawi, Mozambique (almost), Nigeria, South Africa, Tanzania, Uganda (almost) and Zambia. 2 countries have used the tool are sub-national level (South Africa) or have adapted to use it at sub-national level (Indonesia)
- **Website:** http://www.who.int/tb/dots/planning_budgeting_tool/en/index.html
- **Contacts:**
Andrea Pantoja: pantojaa@who.int
Katherine Floyd: floydk@who.int

12. Resource Needs Model, HIV/AIDS

Futures Institute

The Resource Needs Model (RNM) calculates the total resources needed for prevention, care, and orphan support for HIV/AIDS on a national level. The RNM can assist national-level strategic planning efforts by providing a tool and methodology to examine the financial resources needed to implement a variety of prevention interventions, care and treatment programs, and orphan support. Resource Needs Model = An Excel worksheet for calculating the funding required for an expanded response to HIV/AIDS at the national level. It includes 14 prevention programs, six care and treatment programs and orphan support. The program and manual are available in English, Spanish and Russian. This manual was developed for the Inter American Development Bank by Lori Bollinger and John Stover of Futures Group International and Stefano Bertozzi and Juan Pablo Gutierrez of the Instituto Nacional de Salud Publica of Mexico.

- **Purpose:** To estimate the financial resources required to reach target coverage levels for HIV prevention, treatment, care and mitigation
- **Health MDGs addressed:** 6 (HIV/AIDS)
- **Scope of interventions:** All prevention, treatment and mitigation interventions



- **Type of software:** Excel
- **User manual available?** Yes
- **Potential users:** planners developing national HIV/AIDS strategic plans
- **Skills required:** Knowledge of program statistics, goals and unit costs
- **Type and length of training required:** One day
- **Costing strategy and methods:** target population x coverage x unit cost
- **Level of aggregation:** National or provincial/state by intervention
- **Program/system costs included?** Yes
- **Time-frame:** short-term and medium-term
- **Modeling of intervention impact or interactions on epidemiology or demography?** No
- **Output:** Resources needed
- **Automatic generation of reports?** Tables yes, reports no.
- **Country applications:** Ethiopia, Kenya, Uganda, Tanzania, Rwanda, Zambia, Mozambique, South Africa, Namibia, Ghana, Burkina Faso, Honduras, Thailand, Viet Nam, Indonesia, China. Additional RNM applications were made in 2002 for about 80 countries through regional workshops.
- **Website:** <http://www.futuresinstitute.org/pages/resources.aspx>
- **Contact:**
John Stover: JStover@FuturesInstitute.org

13. Malaria costing tool (part of CHOICE)

WHO

Estimates the resource requirements of proven malaria interventions over a period of time. The tool is based on a review of costing studies and an extensive consultation with malaria experts. It provides a simple user interface requiring only basic technical and computer skills. The tool is intended for use by malaria control program staff as well as other individuals working in the field of malaria. In the Tool, the following preventive and curative interventions are covered: Insecticide-treated nets (ITN), Targeted indoor residual spraying (IRS), Source reduction, Intermittent preventive treatment (IPT), Antimalarial case management, Community/Home-based Antimalarial Treatment, Treatment of Complicated Malaria and Refugees and Internally Displaced Persons. The tool estimates

the costs of various resources used by the selected interventions. In addition, some of the crucial health system costs have been covered. The costs are calculated for the national level.

- **Purpose:** determine the financial costs associated with scale-up of malaria interventions in a specified period of time
- **Health MDGs addressed:** 6 (malaria)
- **Scope of interventions:** from preventive to curative; include programme activities in the costing
- **Type of software:** Excel
- **User manual available?** Yes
- **Potential users:** malaria program managers, consultants and academics
- **Skills required:** degrees in epidemiology, economics and statistics are useful but not necessary. Essential is a familiarity with local epidemiology of malaria and programmatic considerations plus ability to use spreadsheets
- **Type and length of training required:** no formal training necessary
- **Costing strategy and methods:** driven by target intervention coverage; ingredients approach (separate quantities and prices at level of inputs for activities and interventions)
- **Level of aggregation:** national
- **Program/system costs included?** Yes
- **Time-frame:** short-term to medium-term
- **Modeling of intervention impact or interactions on epidemiology or demography?** Available as an option but only to adjust need for intervention in case there is interaction among the interventions (e.g. prevention of fevers with ITNs and need for malaria treatment) but not to estimate health outcome
- **Output:** stream of inputs and costs by year, by intervention in USD or National Currency Unit (NCU)
- **Automatic generation of reports?** Yes
- **Country applications:** Zambia, Mozambique, Angola
- **Website:** <http://www.rollbackmalaria.org/consensusdocuments.html>
- **Contact:**
Tessa Tan-Torres: tantorrest@who.int

14. Child health cost estimation tool (part of CHOICE)

WHO

The Child Health Cost Estimation Tool is part of a set of tools developed by WHO to help managers and planners to estimate the financial costs of providing priority public health interventions. The tool allows the user to determine the financial requirements associated with scenarios for scaling up health interventions provided to children aged under five, over a period of time (1-10 years). Inputs and activities included in the tool are based on a review of costing studies and consultations with child health experts. The tool uses a standard WHO methodology for assessing costs, based on an ingredients approach (Quantity x Price) and bottom-up costing. The tool provides a simple user interface requiring only basic technical and computer skills.

- **Purpose:** A strategic tool for medium term planning at the national or sub national level, to provide forecasts of financial resource needs for implementing a child health or child survival strategy. The tool can be used for the following purposes:
 - Estimate the total and incremental cost for the child health program as a whole.
 - Estimate the total and incremental cost of commodities specific to child health interventions.
 - Estimate the total and incremental number of care seeking events; both out-patient and in-patient visits, including referrals and follow-up visits that will need to take place in order to scale up as planned.
 - Estimate the total costs per year for planned programmatic investments for child health - i.e. activities that are carried out at national, province, district or facility level to support intervention delivery for child health. This includes development of guidelines, mass media campaigns, in-service training of health workers, and so on.
- **Health MDGs addressed:** 4
- **Scope of interventions:** priority preventive and curative child health interventions, including those delivered to the newborn until the child is 5 years old.
- **Type of software:** Excel
- **User manual available?** Yes
- **Potential users:** program managers and planners for child health; technical consultants and international organizations.
- **Skills required:** Basic computer skills and familiarity with Excel is required. Experience with strategic planning and familiarity with ingredients based costing is useful but not essential. A requirement is however being able to access and interpret information on local epidemiology, coverage data, and clinical guidelines, and to be able to think strategically about programmatic activities required to implement the program(s) and to scale up interventions as envisioned.
- **Type and length of training required:** No formal training is necessary. Familiarity with the tool using examples and the user guide may take 1-3 days.
- **Costing strategy and methods:** the tool uses a needs-based approach, driven by epidemiology and standard case management guidelines. Costs are calculated using bottom-up methodology, ingredients approach: Price * Quantity. Default data is available in the tool for some assumptions on epidemiology, inputs and activities.
- **Level of aggregation:** national and sub-national level
- **Program/system costs included?** The tool includes modules for estimating costs related to program activities such as advocacy, planning, training and monitoring. Health system costs are not included however since these would be broader than child health
- **Time-frame:** medium 3-5 years (can be used for 1-10 years)
- **Modeling of intervention impact or interactions on epidemiology or demography?** Yes, for (1) interactions on demography: functions take into account the life saving impact of the scaled-up interventions, and for (2) interactions on epidemiology; there are interactions included for some interventions with strong evidence e.g. breastfeeding for diarrhea; HiB for pneumonia. There is no modeling of health impact to estimate health outcomes.
- **Output:** (1) Total and incremental cost for commodities, referral costs and programmatic investments; (2) Total and incremental ("scale up") number of care seeking events; both out-patient and in-patient visits, including referrals and follow-up visits that will need to take place in order to scale up as planned. (3) cost for visits.



- **Automatic generation of reports?** Yes, in tabular and graphic format (not Word reports)
- **Country applications:** Tool was recently developed. Initial pilot testing in Uganda in year 2005. Implementation of selected model components in Cambodia in 2006 as part of costing the national Child Survival Strategy. Revisions in 2007. The tool was subsequently used in Mozambique in February 2008 for costing the national strategic plan for newborn and child health.
- **Website:** http://www.who.int/child_adolescent_health
- **Contacts:**
Karin Stenberg: stenbergk@who.int
Tessa Tan-Torres: tantorrest@who.int

Annex 8 - Detailed Notes from Group Work - Session 2

Group 1

Facilitator: Craig Lissner

Participants: Khadiatou Dieng, Pierre-Antoine Delice, Isseu Toure, Farba Sall, Amadou Hassane Sylla, Emilien Nkusi, Moustapha Sakho

- Why tools were used
 - Because of a need to estimate costs of interventions specific to countries
 - Examples
 - Minimum essential packages for health centers in DRC
 - Strategic plan for child survival in Senegal and Rwanda
- Tools used
 - IHTP and MBB
- How to improve the process of using these tools
 - Have a list of required data available
 - Validation of tools and data by MOH
- Leadership early on of members of the Ministry of health
 - Involvement of experts
 - Problems encountered
- Lack of information and data to inform tools
 - Lack of follow-up
 - Inadequate definition of certain terms of tools in relation to the country context (MBB)
 - Difficulty in the adaptation of some indicators of tools (MBB)
 - Ownership of the tool depends on availability of local expertise
 - Need permanent linkages tool developers and users for the improvement of tools
 - Constant use of results for national plans (MBB)

Group 2

Facilitator: Andrea Pantoja

Participants: Abdoulaye Ka, Malick Faye, Mamadou Diouf, Gasana Guillaume, El Hadj Gueye, Mathias Mossoko, Maha El-Adawy

- Why tools were used?
 - Because of a need to estimate costs of interventions/strategic plan specific to countries
 - Examples:
 - Minimum essential packages for health centers in DR Congo
 - Strategic plan for child health in Senegal and Rwanda
- Tools used
 - IHTP in DR Congo and MBB in Senegal/Rwanda
- How to improve the process of using these tools?
 - Have a list of required data available before starting using the tool
 - Validation of tools and data by MOH, so that adaptation of the tool to country-specific circumstances is realized before costing exercise starts.
 - Leadership early on of members of the Ministry of health to organize/coordinate costing exercise
 - Involvement of local experts in the whole process



- Problems encountered
 - Lack of information and data needed to input tools, which delays the process
 - Lack of follow-up from the national authorities
 - Inadequate use of certain terms in the tool in relation to the country's context (MBB), which confuses users on what input data are required
 - Difficulty to adapt some indicators integrated in the tool (MBB) to the country's context (e.g. age ranges)
- Ownership of the tool depends on availability of local expertise.
- Need permanent contact between tool developers and users for the improvement/adaptation of tools and strengthened local capacity.
- Need constant use of results at national level to inform policy makers.

Group 3

Facilitator: Karin Stenberg

Participants: Ivan Morales, Yuan Jianhua, James Muwonge, Siyabonga Jikwana, Tessa Tan-Torres, Patrick Lydon, Paul Maree, Carlos Avila-Figueroa

- Tools used: RNM, CORE Plus
- Tool developers: IHTP, CHCET; Malaria costing tool; cMYP
- The focus of the discussions in this session was on the process of applying the tools
- Key messages
 - Costing tools as a means not an end
 - Need for resources for entire process including planning, disseminating results and using them to influence decision making not just training on tools
 - Ensuring that the selected tool is capable of linking to the strategic plan
 - Strategic planning and costing is not a linear process, in many cases the strategic plan in its pre-costing state cannot directly be costed without needing further details
 - Implications for a non-linear process are greater resources, time and money - in particular a costing can often not be completed in one week
 - Capacity building
 - There are different models of how to build capacity and how to put together a team and who in the team does what, but a multidisciplinary team is needed to do the costing
 - There is a need for involvement at different levels. The costing process is both a technical and a political process. The participation of political stakeholders is required to ensure institutionalization and sustainability
 - Capacity building should include training on the use of results as well as actual use of tools
- Process of defining objectives and selecting tools
 - User's experiences varied, in some countries first there was a strategic plan developed and then they searched for tools that could be used to assess costs within realistic boundaries for the financial resource envelope
 - Some had tool introduced into country, training workshop on model, recognized usefulness and then went to application and modification
 - Difference between tool being used as a means or as an end
- Process of applying costing tools
 - User's experiences varied, in some countries first there was a strategic plan developed and Continuity is very important but given low priority
 - In most cases donors fund one time applications only
 - Local ownership determines long term success and continuity in using costing tools to help guide policy making and programming

- Application (generic model) vs. adaptation (local context)
 - In some countries the generic model was used; in others the focus was on adaptation
 - Level to use tool: national/district level, etc.
 - Strategic plan and its relation to costing tools, especially regarding content, target (Political/ impact targets in strategic plan vs. intervention/input targets in costing tool), time horizon, concepts (activities, inputs). Moreover, the specificity of strategic plan and format conducive to costing: in some cases there may be a lack of synergy between costing and plan, and in other instances costing were used to help to define strategic plan
 - Required skills (e.g. to use Excel)
 - Support to tool users
 - Data (what type of data is needed - e.g. if the tool asks for unit costs/client seen then the user needs to do additional cost analysis to first get these data inputs), Having the baseline information available
 - Tools are often rigid, should be more flexible
 - Methods do not vary much across the tools. What does vary is the logic of the tools and the application process.
 - Ownership is essential
 - Ownership depends on, validation of tool and results, the complexity of model, involving the right people in the planning and costing process, disseminating the results, retaining the capacity in the country team, and having political buy in
 - Documentation of the process is essential
- Process of using results
 - The experiences were that results had been used to inform decision making
 - However, there is not enough focus on assisting countries in how to use the results produced by the costing. Donors tend to fund capacity building on specific tools rather than supporting capacity built on how to use the tool results. More funds are needed for the latter
 - The process of using results is not a continuous process
 - Process of capacity building
 - There needs to be a change in the focus of capacity building, to put more emphasis on assisting countries in how to use the results produced by the costing
 - Current capacity building focuses on
 - Making tool results available for information and planning
 - Using specific tools (90%)
 - Using cost outputs to inform decision making
 - 90 % of CB is on using specific tools whereas more should be devoted to informing decision making and planning
 - Sustaining capacity in country
 - Having a team with multiple capacities, i.e. a multidisciplinary team
 - Having finances to retain the team

Group 4

Facilitator: Eva Weissman

Participants: Hermes Mauwa, Gordon Hlatywayo, Dan Osei, Henry B. Mwanyika, Kebbo Gibba, Ricardo Barradas, Stan Bernstein, John Stover, James J. Banda, Kerry Kutch

Background:

- 7 users with a total of 12 costing exercises using 7 tools (MBB, IHM, CORE, cMYP, RH, Malaria and self-created tool – Essential Health Package in Malawi)
- About half of the costing exercises were question-driven, about half were carried out because a specific tool was offered to the country. Two countries had experience with costings that



involved more than one tool, e.g. first MBB, then IHM. About 75% of costing exercises were actually tied to the planning process, 25% were not.

- Objectives of costing exercises varied widely, ranging from small-scale, district-level costing to secure sufficient funding in a country in the process of decentralization, to an exercise determining reimbursement rates for a health insurance scheme at hospital level, a costing exercise for a Global Fund application, to a costing of a Programme of Work with a Swap context and an MDG needs assessment costing.
- The way countries obtained the tools they used varied widely. One was found from a brochure lying around, a couple from the internet. Most tools were offered to the countries (or, in some cases, pushed on them) by international agencies.

Main points identified for a successful costing exercise:

- Clear objective for the costing exercise
 - Clear understanding why the costing was to be carried out, in several cases a tool and funding for its application was offered to a country without the country having a clear use for the data produced by the exercise which in most cases meant that the exercise eventually stalled
 - Potential funding was seen as the most effective motivator (application to Global Fund, other donor moneys, funding from central level in decentralized settings)
- Political buy-in/ownership (Ministry of Health and policy-makers)
 - Important that the country has a say in the selection of possible costing tools - whenever a country had an active role in selecting the costing tool, the application and subsequent use of the results were much more successful
 - Support from high-level policy makers essential for success (need to support tool and objective of costing exercise)
- Funding of the costing exercise was considered important...
 - but turned out to be not as important as initially thought.
 - One country carried out a costing exercise with existing staff alone, \$50 to buy the tool (CORE) were raised from a local NGO
 - Another country received large amounts of training and funding for a costing application (MBB) but with no clear objective the exercise did not go anywhere in the end (data was collected but never analyzed)

Group 5

Facilitator: David Collins

Participants: Ulzii-Orsikh Khaltar, Naiyana Praditsitthikorn, Philips Patrobas, Sam Kamba, Brian Lutz, Helga Fogstad, Rudolf Knippenberg, Dheepa Rajan

Key issues

- Lack of systematic approach to costing process
 - Timing (especially related to MOH planning and budgeting cycles)
 - Selection of tools
- Lack of harmonization
 - Among tools
 - Among multilateral organizations
- Lack of knowledge of where and how to access tools
- Usability
 - Ease of customization and use

Integrated Health Model (IHM) - Uganda

- Made some adjustments for country context, particularly at sub-country level
- Total costs appeared high, so ministry of finance lost interest, concerned about adhering to budget ceiling
- Next steps: want to cost the Poverty Reduction Strategy Paper (PRSP), but have not chosen tool
- Challenge: different UN agencies and World Bank do not agree on tool, which can pose problem at the MOH
- Benefit of IHM is that it is part of a suite of sector tools for costing PRSP
- Original intent was costing, not budgeting
- Shortfall in this version of tool is that only MDG areas are covered, not non-communicable diseases (NCDs)
- Easy to customize model; structural changes done by UNDP
- Model easy to use with the data (1.5 hours to use model after customizing it)
- Model covers approximately 90% of the health budget in Uganda

IHM - Mongolia

- Tool chosen for MDG needs assessment across multiple sectors
- Results used for policy makers in re-allocating budgets

Planning and Budgeting for TB - Nigeria

- Introduction of tool in Africa was timely, but not at country-level because strategic plan until 2011 was already in place. The Global Fund to fight AIDS, TB and Malaria (GFATM) encouraged use of tool for proposal, so it was utilized in Nigeria
- Content of tool very good - follows STOP TB strategy
- Cost outputs not aligned with budget framework
- One drawback is that it is a vertical costing tool and doesn't address non TB-related health system components
- Tool is to be adapted at state or Local Government Areas (LGAs)

IHM - Nigeria

- Model already set up for sub-national costing - main issue is capacity
- Cost output framework was useful to MOH in estimating financing gaps and mobilizing additional resources from Ministry of Finance

Resource Needs Model and CHOICE - Thailand

- Heard of tool at Futures Group workshop
- Easy to use and follow, but costs presented only as intervention totals - needed to be able to organize according to government budget
- Used CHOICE for cost-effectiveness analysis and budgeting guidelines to develop national costing tools
- MOH could not find other tools and therefore created their own



Annex 9 - Detailed Notes from Group Work - Session 3

Group 1

Facilitator: Craig Lissner

Participants: Khadiatou Dieng, Pierre-Antoine Delice, Isseu Toure, Farba Sall, Amadou Hassane Sylla, Emilien Nkusi, Moustapha Sakho

1. How can content of the tools be improved?

- Need to increase flexibility of tool - adapt to local context
- Differentiate between levels, e.g. hospital vs. health center
- Should be able to specify when health impact will be achieved
- Improve linguistic style of User Guides (clear, no jargon)
- Language of tools and related User Guides (e.g. must be available in French for Francophone countries)
- Tools must be easy to adapt to local contexts (indicators, EPI, POP)
- Alignment of results with process of programming and budgeting
- Tools need to provide range estimates to reflect uncertainty of results

2. How can ease of use be improved?

- User's manual needed
- Tools should be available in languages other than English
- Develop glossary for each tool
- Develop core group at national level that masters tool
- Inclusive and transparent process (ex. Inclusion of Ministry of Finance)
- User guide including instructions
 - Assumptions, calculating methods, philosophy
- Easy to understand and appropriated language
- Provide guidance on choice of tools by users

3. What should be the standards and key features for the next generation of tools?

- Clear explanation of formulas in tool
- Involvement of African scientists in development of tools for use in African countries
- Avoid overlapping of tools
- One single reference tool for health systems
- Comprehensive/integrated tool which covers all health interventions
 - There needs to be a shift from vertical to horizontal
- Adaptability to reflect local context
- Tool should have a supporting organization such as the government, WHO, UNICEF, UNFPA
- Capacity development in general health economics and in planning are essential, with costing

as a core competency.

- Future tools for costing exercises should be rigorously and independently evaluated
- Timing (tools, processes, documents, follow up on next steps)
- Planning and continuous costing
- Tools need to provide range estimates to reflect uncertainty of results

Group 2

Facilitator: Andrea Pantoja

Participants: Abdoulaye Ka, Malick Faye, Mamadou Diouf, Gasana Guillaume, El Hadj Gueye, Mathias Mossoko, Maha El-Adawy

1. How can content of the tools be improved?

- Need to increase flexibility of tool for a better adaptation to local context. For example in the case of MBB: users should be able to modify the health care levels, e.g. hospital, health center, or modify the age ranges.
- Should be able to specify when health impact will be achieved (MBB).
- Language (terminology) used in tool should be defined, like a lexicon of the vocabulary used in the tool.
- Ease of adaptation of tools to local contexts (indicators, EPI, POP)
- Alignment of results with process of programming and budgeting

2. How can ease of use be improved?

- Tools should be accompanied with a technical guide of the tool, which should describe all assumptions (hypotheses), methods and formulae.
- Orientation guide for the trainers, which should give all necessary information and tips to use the tool so that trainers can pass on to students/users.
- User's manual, which should describe all necessary information and tips to use the tool for user to refer to it constantly.
- Manuals and guides listed above should be available in other languages other than English, e.g. French, Spanish.
- Tools should be available in languages other than English.
- Develop lexicon of vocabulary within each tool.
- Develop core group at national level that masters tool and coordinates the process.
- Inclusive and transparent process (ex. Inclusion of Ministry of Finance).
- Provide guidance on choice of tools by users

3. What should be the standards and key features for the next generation of tools?

- Make explicit all formulas in tool, avoid black-boxes, and explained them in the technical guide.
- Involve African research institutions in development of tools
- Avoid duplication of tools in the same thematic area
- Create one tool of reference for health systems; maybe a comprehensive/integrated tool which covers all health interventions
- Make the tool flexible to adapt to country specifics
- Capacity development in general health economics and in planning, with costing as a key



- competency
- Continuous process of planning and costing at country level.

Group 3

Facilitator: Karin Stenberg

Participants: Ivan Morales, Yuan Jianhua, James Muwonge, Siyabonga Jikwana, Tessa Tan-Torres, Patrick Lydon, Paul Maree, Carlos Avila-Figueroa

1. How can content of the tools be improved? What should be the standards and key features for the next generation of tools?

Group 3 focused on question 3.

2. How can ease of use be improved? What should be the standards and key features for the next generation of tools?

Group 3 focused on question 3.

3. What should be the standards and key features for the next generation of tools?

- There has been some discussion on whether we need one tool that can do everything instead of having numerous tools available. There was some agreement in the team that we should not strive to have one tool only, because different tools have different purposes
The clarity of assumptions in the tools should be improved, and documentation provided on:
 - Clarity on purpose (what the tool does, what it does not do)
 - Assumptions
 - Formulas
 - Algorithms
 - Implementation requirements (e.g. data entry, data analysis)
- Increase the flexibility of tools in terms of their capacity (to include or link to other resources that can be used) to:
 - Add interventions
 - Address different health system components
 - Link to an impact assessment
 - Assess the availability of resources
 - Assess the financing gap
- Outputs should be import-friendly to national programming (strategic plans), and national budgeting templates
- Interfaces and linkages improved within the tool
- Automatic generation of results reports (text and graphs)
- Use of wizards (entering data through questions/forms rather than entering manual figures in cells)
- Making sure that updated data is available, e.g. through a website (e.g. sharing generic data such as on prices)
- Having standards available for the documentation of tools
 - Clarity on purpose: do or not do
 - Description of implementation requirements
 - Assumptions, methodology, algorithms, formulas
- Having standards available for the tools themselves, e.g. definition of variables standardized across tools (naming)

Group 4

Facilitator: Eva Weissman

Participants: Hermes Mauwa, Gordon Hlatywayo, Dan Osei, Henry B. Mwanyika, Kebbo Gibba, Ricardo Barradas, Stan Bernstein, John Stover, James J. Banda, Kerry Kutch

Note from facilitator: It was difficult to fit suggestions into the format below as there was a lot of overlap (especially between 1 and 3). Suggestion to group inputs differently (for instance, actions to be taken by tool developers, agencies, the Partnership or improvements to tools/process)

1. How can content of the tools be improved?

- Harmonization between tools - all models should use the same clinical assumptions, costs etc.
- Provision of standard modules for specific program areas that are covered across different models (immunization, family planning, emergency obstetric care)
- Models should make it possible to disaggregate data in different ways (by type of inputs, costs, etc.)
- Common approach to costing health system requirements (to avoid double counting of program specific requirements)

2. How can ease of use be improved?

- PMNCH should take leadership in creating a website to make it easier for countries to get information on available tools, download them, etc.
- Each tool should have a focal point that can be contacted if there are any questions, problems with the tool
- Easy adaptability to country situation and priorities essential
- Make it possible to easily transfer data between tools – create 'Link-sheets' in each tool
- Provide list of required inputs

3. What should be the standards and key features for the next generation of tools?

- All tools should provide a non-technical description of their methodology (to facilitate presentation of the tool and costing results to policy-makers and funders)
- All tools should use common base data (population, clinical assumptions, drug and supply costs)
- Tools should capture population dynamics (impacts of fertility and mortality)
- Users should be forced to document sources of data and assumptions
- Tools should provide summary tables with simplified format/content
- Suggestion to provide sample reports or at least make accessible reports from previous applications
- Tools should flag unusual values (to limit errors made inputting data)
- Costing tools should facilitate annual monitoring and adjustments, not just be used once (institutionalization)

Tessa's question regarding ranges:

Ranges not acceptable, scenarios, though, very desirable!

Group 5

Facilitator: David Collins

Participants: Ulzii-Orsikh Khaltar, Naiyana Praditsitthikorn, Philips Patrobas, Sam Kamba, Brian Lutz, Helga Fogstad, Dheepa Rajan, Netsanet Walelign



1. How can content of the tools be improved?

- Harmonize and standardize tools
 - Clinical assumptions; should be based on international guidelines where relevant
 - Terminology
 - Economic assumptions, e.g. pricing, inflation
 - Service delivery, issue of built in assumptions vs. user-entered assumptions
- Should be flexible enough to adapt to country circumstances; partial or complete customization depends on tool and context
- Flag unusual values
- Common approach to health system requirements to avoid double counting of items (program or disease-specific tools)
- Provide total costs as well as disaggregated figures (e.g. units, unit cost)
- Provide list of required inputs
- Tool should provide automatic reports: summary and graphs
- Promote standard module for specific program area (e.g. immunization, family planning)
- Include demand functions (ability to apply incentives)
- Include currency option

2. How can ease of use be improved?

Tool selection:

- To help with selection of tools, have a website with:
 - Guide to identifying the question to be answered and the types of costs to be collected (including a list of typical questions and different types of costs)
 - List of tools
 - Guide on choice of tools
 - Examples of good reports of use of tools should be available on web site or on agency sites

Tool content:

- Tools should be available in all UN languages
- Tools should be updated (e.g. annually) via website
- Tools should be easy to navigate
- Ability to modify the tool (data, structure, format)
- Functioning of tool should be transparent
- Methodology should be clear
- Base data and population dynamics
- All tools should be completely transparent
- Costs should group into major budget categories – the costs produced by the tool should be aligned as far as possible with the budget structure of the MOH, at least at the level of the major budget categories.
- Separation of system costs from program costs so that funds can be aligned with each

Support:

- Help-desk
- Technical assistance: provide estimates of TA needs at different stages of exercise (e.g. start-up, reviewing data, analysis)
- Training: develop good training manuals and explore distance learning possibilities

Documentation:

- Documentation should be available
- User's manual should be on website (also tools) and easy to find on the site (clear directions to tools)

- A description of the tool should be provided and access should be provided to examples of report
- Need for guidelines on how to produce plans in ways that can be costed
- Guidelines of how to remove bottlenecks would also be useful
- Force users to document sources of data and assumptions
 - Inputs: sharing of data, websites
 - Documentation of tool, clarity on what tool is doing and is not doing
 - Tools: variable documentation linkage (vertical-horizontal), describe complementarities and differences

Process:

- Get political buy in from senior officials (e.g. MOH and MOF)
- Clearly establish reasons for costing
- Country-driven and as far as possible in co-ordination with MOH planning and budgeting cycles
- Involve all stakeholders
- As far as possible costing results should be available in timely way for most strategic planning
- Guidelines are needed to help a potential user choose from a given set of tools
- Alignment of donor funding plans and MOH routine plans – taking into account that some MOH strategic plans are updated each year (rolling) and others are not updated each year and so get out of date
- Incorporation of tools into routine planning

3. What should be the standards and key features for the next generation of tools?

- Easy to update via website
- Should have fewer tools and every tool should fit better
- Need to see validation of each tool, e.g. clinical assumptions (based on WHO standard treatment guidelines)
- Documentation
 - Clarity on what tool is doing and is not doing
 - Vertical-horizontal linkages; complementarities and differences should be described
 - Guidelines to help with analysis and interpretation of findings
 - Each tool should come with a short explanation of the methodology which can be provided by the user to senior officials to help explain
- Training in analysis of results
- Each tool should have a dashboard of key information including graphs to provide a summary with visual information
- Each tool should come with a template of a power point presentation



Annex 10 - Results of Meeting Evaluation Survey

Number of respondents: 38

No.	Evaluation Topic	Average Score (1=completely disagree; 5=completely agree)
1.	The workshop objectives were clear	3.9
2.	The areas of discussion covered by the workshop were comprehensive	3.9
3.	The structure of the workshop facilitated comprehension of issues	4.2
4.	The structure of the workshop encouraged discussion and exchange	4.4
5.	The presentation overview of MDG costing tools was a useful guide	3.4
6.	Discussions provided for sufficient depth for analyses of ALL tools	2.9
7.	Materials and documents provided during the workshop were sufficient	3.4
8.	Meeting facilitator managed sessions and participants effectively	4.4
9.	Individual facilitator provided enough support during group work session	4.1
10.	Participant constituency was conducive to useful dialogue	4.2
11.	Workshop provided for effective user/developer interaction	4.1
12.	Workshop promoted innovation and solution oriented discussions	4.0
13.	Workshop facilities, logistics and arrangements were good	4.2

Acknowledgements

The costing tools review is a joint undertaking by several partners and benefited greatly from a spirit of collaboration and shared vision. It was overseen by a Steering Committee and coordinated by the Partnership for Maternal, Newborn and Child Health (PMNCH).

Generous funding for the technical review of costing tools and the technical consultation was provided by the Bill and Melinda Gates Foundation (channeled through PMNCH), Norwegian Agency for Development Cooperation (NORAD), UNFPA, UNICEF, and three departments of WHO (African Regional Office [MPS and HSD]; Department of Health System Financing; Department of Immunization, Vaccines and Biologicals).

The Steering Committee has provided tremendous leadership and guidance throughout the process, from the initial design of the technical review to the conception and organization of the technical consultation in Senegal. The Steering Committee will continue to oversee the next steps of the costing tools review, including development of the costing tools website hosted by PMNCH and guidance materials to support country costing processes. The Steering Committee consists of the following members: Tessa Tan-Torres (chair, WHO), Carlos Avila-Figueroa (UNAIDS), James J. Banda (WHO), Stan Bernstein (UNFPA), David Collins (of Management Sciences for Health representing USAID/BASICS), Maha El Adawy (UNDP), Helga Fogstad (NORAD), Katherine Floyd (WHO), Rudolf Knippenberg (UNICEF), Andrea Pantoja (WHO), Sonya Rabeneck (Partnership for Maternal, Newborn and Child Health), Agnes Soucat (World Bank), and Eva Weissman (UNFPA).

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The expertise and experiences of the participants of the technical consultation contributed to rich discussions and important outcomes of the meeting. The users of the costing tools provided the essential perspective of how the tools have been used to inform policy making and planning at the national level and important suggestions of how the costing process and content of the tools can be strengthened. We would like to extend our sincere appreciation for their active, energetic and constructive inputs. James Tashima's critical inputs to the design of the agenda and excellent facilitation ensured an interactive and engaging meeting and we are extremely grateful for his contribution. We would also like to acknowledge the working group facilitators: David Collins (MSH), Craig Lissner (WHO), Andrea Pantoja (WHO), Karin Stenberg (WHO) and Eva

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The tool developers/focal points provided critical inputs to the technical review and the technical consultation, including very useful individual sessions for their tools and development of the tool descriptions contained in this report. In addition to tool developers in the Steering Committee, they also include (in addition to Steering Committee members, tool developers/focal points also include Peter Heimann (WHO), Andrei Issakov (WHO), Brian Lutz (UNFPA), Patrick Lydon (WHO), Paul Maree (WAM Technology, South Africa), Matthews Matthai (WHO), Dheepa Rajan (WHO), Karin Stenberg (WHO), John Stover (Futures Institute), Susie Villeneuve (UNICEF), and Netsanet Walelign (UNICEF). The contributions of the resource persons are gratefully acknowledged. The external technical reviewers, Lorena Prieto (Bitran y Asociados) and Carol Levin (PATH) also provided important contributions to the meeting.

The report was reviewed by the Steering Committee and meeting participants. We thank them for helpful comments and hope that their contributions have been adequately incorporated and reflected in the final report.

The costing tools review has been coordinated by the Partnership for Maternal, Newborn and Child Health (PMNCH) under the leadership of Francisco Songane and Flavia Bustreo. Henrik Axelson is the responsible technical officer. Kadi Toure supported the organization of the meeting on-site in Senegal. Tigist Desta, Tammy Farrell and Dominique Boua provided logistics and administrative support. The costing tools website hosted by PMNCH was developed by Anne-Marie Cavillon and Jacqueline Toupin.

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SENEGAL MEETING PARTICIPANTS



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