

OneHealth Tool:

A Tool to Support the Costing, Budgeting, Financing, and National Strategies Development of the Health Sector in Developing Countries, with a Focus on Integrating Planning and Strengthening Health Systems

Annexes

January 2012



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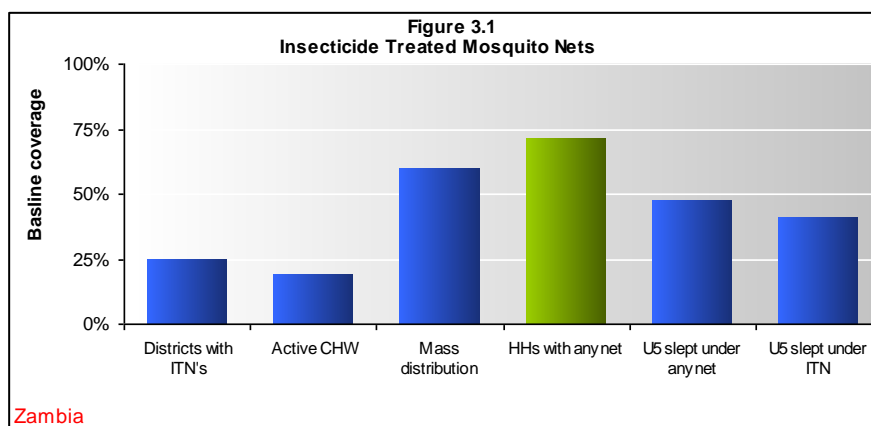
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ANNEX VI. INDICATORS NEED TO BE SELECTED WITH CARE

Below is an example from an MBB application where supply side do not seem to indicate a real constraint for final effective coverage. This graph is included to indicate the importance by which indicators are determined and also to inform a discussion on whether the indicators should be fixed, or the country should be allowed to adjust them.

Box 1. Current bottleneck analysis indicators for ITNs in the MBB tool:

COMMODITIES: % of districts with no LLIN stockouts
HUMAN RESOURCES: No.# of community workers sufficient
ACCESS: % villages with/near sales point for LLINs
INITIAL UTILISATION: % households having 1 or more LLINs
CONTINUITY: % U5s sleeping under any bednet last night
EFFECTIVE COVERAGE: % U5s sleeping under LLIN last night



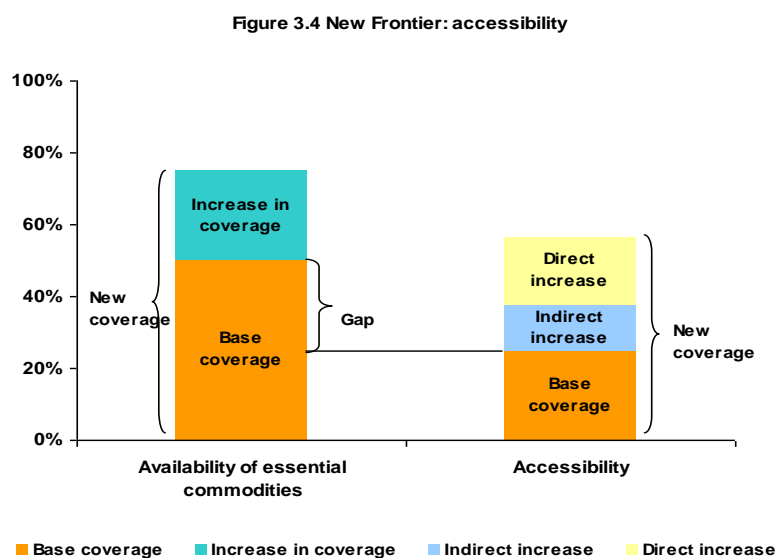
Source of Figure: Zambia National Health Strategic Plan (2006 – 2010), October 2008

ANNEX VII. TAMAHASHI FRAMEWORK & “CASCADING” FUNCTION WITHIN MBB

In addition to direct effects of each strategy on the specific indicator which it aims to address, there are also indirect effects which "cascade" down towards improving effective coverage.

Figure A1 gives an example of how this is currently done in the MBB tool. In the example shown, investments made to improve the availability of essential commodities results in an increase in the value of this particular indicator (here referred to as "increase in coverage", marked with clear blue color in Fig. 1). This increase in availability is assumed to have an indirect effect on the accessibility, which is the next indicator down the chain. There is thus an indirect increase in accessibility, here marked in light blue color). There is also an anticipated direct increase in accessibility, following other concrete investments planned to improve accessibility. The framework will assume that there is a "cascading" effect from investments made in the health system, which eventually effects the "effective coverage" of an intervention. Only this effective coverage affects the health impact, whereas investments made at all levels affect the costs.

Figure A1. Example of how investment in Health System components may have an indirect effect on coverage (example drawn from the MBB tool Technical notes)



Source: Marginal Budgeting for Bottleneck Tool Technical Notes MBB Version 4, 28 November 2007

The MBB example is shown here because the UHM will draw upon this approach.

ANNEX VIII. COMMENTS ON MBB TRACERS AS PROVIDED BY WHO/GMP – 18 DEC 2009

Comments by WHO/GMP department Richard Cibulskis

1. Use of the Tanahashi framework in the model and choice of default indicators for the tracer analysis for ITNs.

In particular, the current tracer for accessibility (% of households with at least one net) which does not correlate with the effective coverage in a manner that is envisioned in the Tanahashi framework.

→ We agree to sign off on the model as is with the emphasis that these issues are discussed during country application and that in the Unified Health Model under development, GMP specific technical guidance on bottleneck analysis for malaria interventions is considered.

2. Focus on under-fives as a tracer intervention whereas the analysis should centre on use of ITNs by all age groups.

→ We agree to sign off on the model as is with the emphasis that the importance of an inclusive strategy focusing on all age groups is emphasized during country application and moreover, that in the unified model under development, GMP specific technical guidance on bottleneck analysis for malaria interventions is considered.

ANNEX IX. ADDITIONAL COMMENTS FOR IAWG

General questions for the IAWG

With the move to disease+delivery channel-specific bottleneck analyses, we are abandoning the previous grouping of interventions in the MBB. The following shows the original MBB sub-packages and the new “sub-packages” in the UHM.

MBB	UHM
1. Community-level 1.1 Family preventive/WASH services 1.2 Family neonatal care 1.3 Infant and Child Feeding 1.4 Community Illness Management 2. Outreach 2.1 Preventive care for adolescents & adults 2.2 Preventive pregnancy care 2.3 HIV/AIDS prevention and care 2.4 Preventive infant & child care 3. Facility-based 3.1 Maternal and neonatal care at primary clinical level 3.2 Management of illnesses at primary clinical level 3.3 Clinical first referral care 3.4 Clinical second referral care	1. Maternal/Newborn and Reproductive Health 2. Child Health 3. Malaria 4. TB 5. HIV/AIDS 6. WASH 7. Vaccination 8. Nutrition For each of these areas, up to four sub-packages depending on applicable delivery channels Example: 2.1 Child Health – Community Level 2.2 Child Health – Outreach 2.3 Child Health – Health Center Level 2.4 Child health - Hospital Level Not every one of the 8 programme areas above is delivered at all levels, so there are less than 8x4=32 “sub-packages.” (For WASH intervention, for instance, there will be no outreach or facility-based delivery, for vaccination there will probably be no significant hospital level delivery, etc.)

This regrouping does not mean that the tracer interventions used in the MBB cannot be applied in the new setup.

The following tables show the MBB sub-packages and the tracer interventions assigned to them in the default setting of the MBB.

1. Community-level	
1.1 Family preventive/WASH services	Insecticide treated materials or indoor residual spraying
1.2 Family neonatal care	Clean delivery and cord care
1.3 Infant and Child Feeding	Breastfeeding for children 0-6 months
1.4 Community Illness Management	Oral Rehydration Therapy
2. Outreach	
2.1 Preventive care for adolescents & adults	Family planning
2.2 Preventive pregnancy care	Antenatal Care
2.3 HIV/AIDS prevention and care	PMTCT
2.4 Preventive infant & child care	Measles immunization
3. Facility-based	
3.1 Maternal and neonatal care at primary clinical level	Normal delivery by skilled attendant
3.2 Management of illnesses at primary clinical level	Antibiotics for U5 pneumonia
3.3 Clinical first referral care	Basic emergency obstetric care (B-EOC) and Basic Essential Obstetric and Neonatal Care (BENOC)
3.4 Clinical second referral care	Comprehensive emergency obstetric care (CEOC) and Comprehensive Essential Obstetric and Neonatal Care (CENOC)

What we need to do is have the programmes define sub-packages by delivery channel for their programmes and then have them identify suitable tracer. It Is likely that many programmes will pick the tracers already identified in MBB , in which case we can ask the programmes to review the indicator lists instead of having them draw them up from scratch.

MBB DEFAULT TRACER INTERVENTIONS FOR DIFFERENT SUB-PACKAGES AND DEFAULT INDICATORS

1. Family oriented community based services	
1.1 Family preventive/WASH services	
Default Tracer:	Insecticide treated materials or indoor residual spraying
<i>Availability of essential commodities</i>	Districts with no stock disruptions of LLINs, or ITNs + insecticide, in past 6 months
<i>Availability of human resources</i>	Number of community health workers meets national per capita standards
<i>Geographical accessibility</i>	Villages with or near an outlet selling or distributing ITNs +insecticide &/or LLINs
<i>Initial utilization</i>	Households having 1 or more ITNs
<i>Timely continuous utilization</i>	% U5 children sleeping under any bednet last night
<i>Effective quality coverage</i>	% under-5 children sleeping under treated net last night
1.2 Family neonatal care	
Default Tracer:	Clean delivery and cord care
<i>Availability of essential commodities</i>	Villages without stock-outs of clean birth kits (blade, cotton and cord tie) in shops or nearby clinics in past 6 months
<i>Availability of human resources</i>	availability of trained birth attendant for all births meets nationally set standards
<i>Geographical accessibility</i>	% of villages with access to number of trained and equipped community health workers or traditional birth attendants, meeting nationally set norms for distance
<i>Initial utilization</i>	% deliveries by trained and equipped traditional birth attendant (TBA)
<i>Timely continuous utilization</i>	% home deliveries following '4 cleans' guidelines, by trained and equipped Community Health Worker or TBA, that meets national per capita standards
<i>Effective quality coverage</i>	% home deliveries following '4 cleans' and temperature care guidelines, by trained and equipped Community Health Worker or TBA that meets national per capita standards
1.3 Infant and child feeding	
Default Tracer:	Breastfeeding for children 0-6 months
<i>Availability of essential commodities</i>	% children ever breastfed
<i>Availability of human resources</i>	Number of community health workers that meets national per capita standards
<i>Geographical accessibility</i>	% villages with access to trained CHW or health/nutrition promoter within acceptable distance (in terms of km or travel time)
<i>Initial utilization</i>	% of children being put on the breast within 1 hour of birth
<i>Timely continuous utilization</i>	% of children 6-9 months breastfed and also receive complementary feeding, both in past 24 hours
<i>Effective quality coverage</i>	% of children under 6 months exclusively breastfed

1.4 Community illness management	
Default Tracer:	Oral Rehydration Therapy
<i>Availability of essential commodities</i>	% villages without interruption of ORS stock in shops or nearby clinics for the last 6 months
<i>Availability of human resources</i>	Number of community health workers that meets national per capita standards
<i>Geographical accessibility</i>	% villages with access to trained CHW or health/nutrition promoter within acceptable distance (in terms of km or travel time)
<i>Initial utilization</i>	% diarrhoea cases offered more fluid
<i>Timely continuous utilization</i>	% diarrhoea cases offered more fluid & same food or more food
<i>Effective quality coverage</i>	% diarrhoea cases offered more fluid , same or more food, and ORS
2.1 Preventive care for adolescents & adults	
Default Tracer:	Family planning
<i>Availability of essential commodities</i>	% of villages without any interruption in stock of contraceptives for the last 6 months
<i>Availability of human resources</i>	Availability of trained auxiliary/assistant nurse/midwives that meets national per capita standards
<i>Geographical accessibility</i>	% population with access to facility based (under 5 Km distance) or out-reached based Family Planning services
<i>Initial utilization</i>	% of eligible couples ever using any Family Planning method
<i>Timely continuous utilization</i>	% of eligible couples currently using any Family Planning method
<i>Effective quality coverage</i>	% eligible couple using any modern FP method
2.2 Preventive pregnancy care	
Default Tracer:	Antenatal Care
<i>Availability of essential commodities</i>	% health centres without stock-out of IFA for the last 6 months.
<i>Availability of human resources</i>	availability of auxiliary nurse/ registered nurses/midwives meets national per capita target
<i>Geographical accessibility</i>	% pregnant women with access to ANC services in a functional health facility within 5km or through outreach services.
<i>Initial utilization</i>	% pregnant women who received at least one ANC during their pregnancy
<i>Timely continuous utilization</i>	% pregnant women who received at least ANC4 during their pregnancy
<i>Effective quality coverage</i>	% pregnant women who received ANC4+ and ANC1 in first trimester during their pregnancy
2.3 HIV/AIDS prevention and care	
Default Tracer:	PMTCT
<i>Availability of essential commodities</i>	% health facilities offering PMTCT, that have no stock outs of HIV tests, ARVs and cotrimoxazole over last 6 months
<i>Availability of human resources</i>	% health facilities with at least 2 trained nurse/midwives offering PMTCT services
<i>Geographical accessibility</i>	% villages that have received PMTCT through outreach ANC services
<i>Initial utilization</i>	% of pregnant women counselled and tested for HIV
<i>Timely continuous utilization</i>	% HIV-infected pregnant women assessed prior to delivery for CD4 cell count on site or by referral

<i>Effective quality coverage</i>	% HIV+ pregnant women receiving a complete course of ARV prophylaxis to reduce MTCT, per national standards
2.4 Preventive infant & child care	
Default Tracer:	Measles immunization
<i>Availability of essential commodities</i>	% PHC without stock-outs of vaccines or injection material for the last 6 months
<i>Availability of human resources</i>	Availability of trained auxiliaries health workers, registered nurse/midwives meets national standards
<i>Geographical accessibility</i>	% villages receiving outreach for EPI plus per national norms; or % of health facilities providing EPI service to a specific catchment population are within national norms for distance or travel time
<i>Initial utilization</i>	Percentage of infants aged 12-23 months who received 1 dose of DPT vaccine
<i>Timely continuous utilization</i>	Percentage of infants aged 12-23 months who received 3 doses of DPT vaccine and measles
<i>Effective quality coverage</i>	Percentage of children fully immunized at 18 months of age
<i>Access to outreach teams</i>	% of outreach visits per village meets national standards
3.1 Maternal and neonatal care at primary clinical level	
Default Tracer:	Normal delivery by skilled attendant
<i>Availability of essential commodities</i>	% health centres without interruption in stock of essential supplies and drugs (foetoscope, BP cuff and artery forceps) for past 6 months
<i>Availability of human resources</i>	Availability of auxiliary-nurse, nurse, midwife or physician meets national targets
<i>Geographical accessibility</i>	% families living within 5 km or travel time (e.g.: less than 1h) from a health facility offering delivery services daily
<i>Initial utilization</i>	% deliveries assisted by auxiliary-nurse, nurse, midwife or physician
<i>Timely continuous utilization</i>	% deliveries that are i) assisted by skilled birth auxiliary-nurse, nurse, midwife or physician, ii) are weighed at birth, and iii) receive all 3 Post Natal Care visits
<i>Effective quality coverage</i>	% of deliveries assisted by a skilled auxiliary-nurse, nurse, midwife or physician that also occur within a health facility meeting national ANC standards
3.2 Management of illnesses at primary clinical level	
Default Tracer:	Antibiotics for U5 pneumonia
<i>Availability of essential commodities</i>	% health facilities without interruption in stock of essential drugs (Cotrimoxazole, SRO, acetylsalicylic acid, anti-malarial drugs)
<i>Availability of human resources</i>	% PHC facilities with registered nurses/health officers that meets national standards
<i>Geographical accessibility</i>	% families living within 5 km from a health facility with registered nurses/health officers that meets national standards
<i>Initial utilization</i>	% children aged 0-59 months with suspected pneumonia taken to an appropriate health provider

<i>Timely continuous utilization</i>	% ARI and fever cases treated with antibiotics by a trained health worker
<i>Effective quality coverage</i>	% ARI and fever cases treated according to national standards, by a skilled health worker trained in IMCI
3.3 Clinical first referral care	
Default Tracer:	Basic emergency obstetric care (B-EOC) and Basic Essential Obstetric and Neonatal Care (BENOC)
<i>Availability of essential commodities</i>	% BEOC facilities without interruption of essential supplies and drugs (oxytocics, magnesium sulfate, antibiotics) for the last 6 months
<i>Availability of human resources</i>	% districts with BEOC facilities equipped and staffed to meet national norms (reference value is 4 workers per 500,000 population)
<i>Geographical accessibility</i>	% population with access to health facilities offering BEOC
<i>Initial utilization</i>	% of total expected births in the population that took place in BEONC facilities (reference value is 15%)
<i>Timely continuous utilization</i>	% of women with pregnancy complications in BEOC facility transferred and treated at EONC facilities (ref 15%)
<i>Effective quality coverage</i>	% complicated pregnancy treated in a BEONC facility meeting national standards
3.4 Clinical second referral care	
Default Tracer:	Comprehensive emergency obstetric care (CEOC) and Comprehensive Essential Obstetric and Neonatal Care (CENOC)
<i>Availability of essential commodities</i>	% CEONC facilities without interruption in stock of essential supplies and drugs (safe blood, oxytocics, magnesium sulfate, antibiotics)
<i>Availability of human resources</i>	% equipped CEONC facilities with available team of medical officers trained in obstetric and anaesthesiology that meets national norms
<i>Geographical accessibility</i>	% facilities equipped for CEOC meeting national standards for i) number of medical staff trained in obstetric and anaesthesiology, ii) within acceptable distance (in terms of nationally set standards for km and or travel time), and iii) required per capita coverage (ref: 1 CEOC/500,000 pop)
<i>Initial utilization</i>	% of Caesarean section deliveries to total births in the population
<i>Timely continuous utilization</i>	% Caesarean sections conducted in CEONC facilities staffed according to national standards
<i>Effective quality coverage</i>	Case Fatality Rate; or % of women with obstetric complications admitted to a CEOC who died

ANNEX X. CONCEPT NOTE FOR ESTIMATING COSTS OF COUNTRY HEALTH INFORMATION SYSTEMS¹

This concept note is an early version for a model for estimating HIS costs for use by national health and statistics constituencies to estimate and forecast financial expenditure to improve existing national health information systems. This paper is designed to invoke discussions to further clarify the costing areas as applicable to fully functional, reliable, and sustainable country health information systems.

Guiding principles:

This document adopts the five principles defined in the “Health Metrics Network Framework and Standards for Country Health Information Systems” 2nd Edition issued by the HMN Secretariat in February 2008.

Health information systems development and strengthening should be characterized by:

1. Country leadership and ownership,
2. Country needs and demands,
3. Existing initiatives and systems (national and international),
4. Broad based consensus and stakeholder involvement, and
5. Gradual and incremental progress towards the achievement of a long-term vision.

Document Assumptions:

1. This document assumes that countries have completed a basic HIS strategy document that articulates prioritized areas of resource investment within the context of their larger health systems. Since cost estimates are directly related to the ongoing and new priorities of country HIS master plans, it is imperative that strategic objectives of countries are identified and agreed upon by the appropriate authorities prior to generating cost estimates.
2. Due to the jurisdictional nature, health systems may either be under the direct administrative oversight of the national ministries, or under the sub-national level (provincial or state) authorities. Hence, the HIS cost estimate model presented here must be appropriately interpreted.
3. From silos to systems: The costing process discussed in the document assumes that the estimates of costs are intended for systems but not for vertical health intervention programs.
4. Human Resources for HIS: It is generally recognized that the workforce involved in HIS are specialized, but not recognized as part of the health workforce. Therefore, this document includes HR as one of the functional domains of HIS.

¹ UHM: Concept note for Estimating Costs of country Health Information Systems. DRAFT HMN Secretariat, April 2010 v3.12

Background

Health information systems (HIS) are increasingly recognized as the central nervous system of the health sector. The growing national and global demand for accountability and transparency has placed a sharper focus on the importance of using high quality and timely information for evidence-based decisionmaking. Health information systems in the majority of low- and lower-middle income countries are weak and fragmented. In order to manage rationally the scarce resources in health, countries and international organizations are providing substantial financial resources for HIV development and strengthening. However, there is a need for a tool that would allow donors and recipients to estimate costs of HIS activities with reasonable accuracy.

Deriving cost projections for HIS strengthening does not exclusively mean estimating costs only for information and communication technology (ICT). While ICT remains an essential element, there are numerous other informatics elements that form the functional health information system backbone at national and sub-national levels. The Health Metrics Network (HMN) Framework (an approach to building modern, interoperable health information systems) provides a structure for defining the country specific needs for HIS strengthening. This rational country-owned HIS strengthening is based on the situational analysis of HIS to derive a vision and translate the vision to a set of strategic objectives to define functional requirements, ultimately aiding to forecast financial needs for HIS implementation.

Basis for Estimating the Costs of National HIS

It is important to recognize the complicity of national health information system architecture at a country or regional level. Whether it is an entirely paper-based system, or a quasi paper and electronic system, the national HIS landscape involve a complex set of sub-systems with various levels of interactions within them.

At the highest level, national HIS can be broadly reduced to 10 functional building blocks (see Table A). These building blocks can be viewed as a set of interlocking bricks that forms the structure of national HIS through which health services are rendered. While the naming conventions of these functional domains may vary within each country, the functional attributes may not substantially differ. For the purposes of developing costing models, it would therefore become necessary to customize the following functional domains to accommodate the variability of country or provincial/state health information systems.

Table A. Functional Building Blocks of National HIS

Functional Domains of Health Information Systems	
1	Community-based Services
2	Diagnostic Services
3	Environmental Monitoring Service
4	Financial Resources
5	Health Commodities
6	Health Facility-based Services
7	Human Resources
8	Information and Knowledge Resources
9	Infrastructure
10	Stewardship Functions

Although the functional domains referred above serve as building blocks, the health data collection, analysis, and reporting by health workforce are directly linked to the operational level of health information systems. The analytics and operations of health information systems are carried out through a set of engines to execute sub-processes to yield expected information of the larger national health information system. The workflow interactions of primary engines (see Table B) together contribute to a national HIS.

Table B. Primary Engines of National HIS

Health Information Systems Primary Engines	
1	Alert and Response System
2	Asset Management System
3	Diagnostics Management System
4	Disease Surveillance System
5	Environmental Monitoring System
6	Financial Management System
7	HR Management System
8	Knowledge Management System
9	Patient Management System
10	Supply Chain Management System

Purpose of OneHealth HIS Module

The HIS Module within OneHealth would provide realistic cost estimates for HIS strengthening based on the desired strategic objectives of the national health strategic planning process.

The module will help address the costing of scale-up of HIS or resolving HIS bottlenecks. This module will be informed and influenced by other health system and disease-specific components in OneHealth. The costing tool is intended to be used by country HIS managers, especially during the development of HIS strategic or investment plans. In this context, it is important to note that HIS costing must cover both capital and recurrent costs, including the training of existing and new human resources. The costs of external technical assistance should also be included. Where possible, selecting the data collection methods to use where alternatives exist (e.g., special surveys as opposed to ongoing vital statistics to measure mortality rates) must be based on cost-effectiveness estimates.

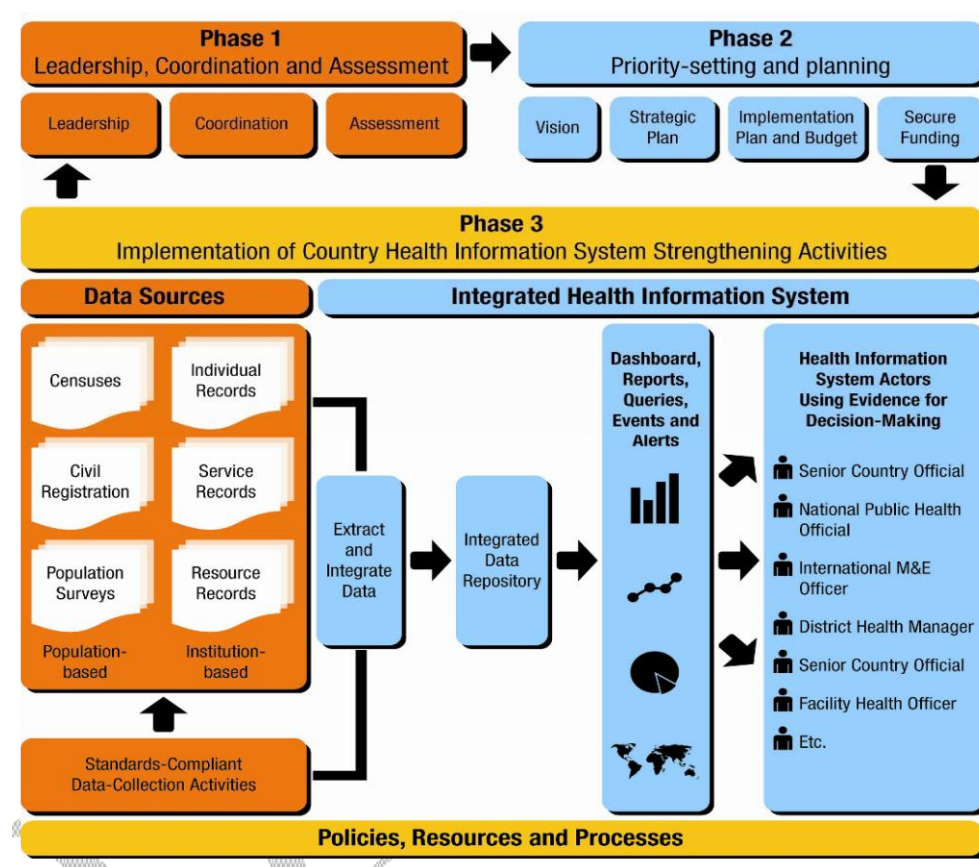
At the granular level, costing estimates are often derived through a thorough understanding and examination of the operations of information systems at the national and sub-national levels. Upon due recognition of the functional building blocks and primary engines of national health information systems, a set of generalized HIS costing categories was identified (see Table C).

Table C. Generalized HIS Costing Categories

Category Type	Description
Strategy Costing	A detailed costing of the array of implementation activities, including the implications of strategy implementation for both development costs and routine service operational costs.
Development and Implementation Costs	Costs of carrying out the development of strategic interventions, generally of a one-time nature and as such could be met from the Government's development budget or from donor support. Depending on the number of strategic objectives, countries may incur costs to enhance the existing HIS or respond to emerging health needs (such as responding to H1N1).
Routine Costs (includes fixed and variable costs)	Costs incurred through routine operations of the HIS (tasks and services carried out on a routine basis). To the extent that the HIS strategy increases the routine costs (such as through additional HIS staff salaries), the increases are estimated in the costing step. While variable costs might include wages and benefits of health workforce, the cost of IT service providers may also vary. The fixed costs include costs incurred to purchasing equipment and services are durable for at least 3 years.

Many donors and partners in global health focus on disease-specific investments for HIS strengthening. Although this trend seems to move away from silos to systems, a model to estimating HIS costs and measuring return on investment (ROI) do not exist to date. HMN has developed tools and model examples to help bridge the assessment and planning processes, and to develop and cost national action plans. Figure D illustrates the HMN Framework that provides a basis for conceptualizing national health information systems. In addition, the Framework document provides a basis for conceptualizing national health information systems. In addition, the Framework document provides a mechanism for countries to develop and prioritize immediate, near-term, and long-term strategic objectives, leading to HIS cost estimates and projections.

Figure D. Roadmap to Applying the HMN Framework and Standards for Country HIS



Conceptual Model for Estimating Costs of National HIS

The conceptual model for estimating costs assumes that national-level HIS assessments have been achieved through a rigorous process of situation analysis, development of vision for national HIS, documented strategic plans, and an operational plan with specific objectives. The proposed conceptual model will then be used to derive cost estimates and projections to implement objectives. Figure E provides the schematic representation of the model based on the previously discussed functional building blocks and HIS primary engines. Figure F provides context of costing of HIS in relation to the overall national strategic planning process for a functional HIS.

Figure E. Conceptual Model of Estimating Costs for HIS

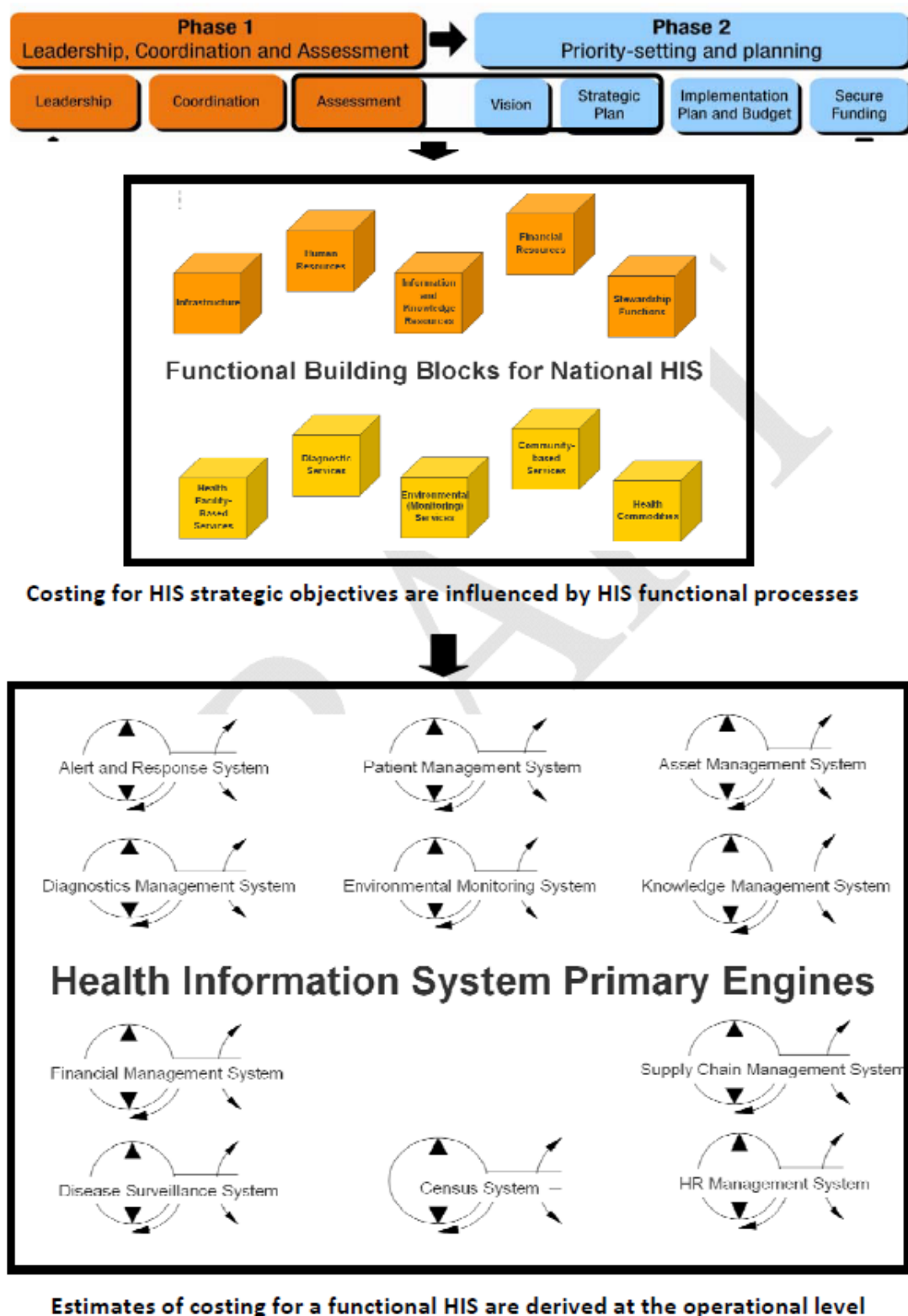
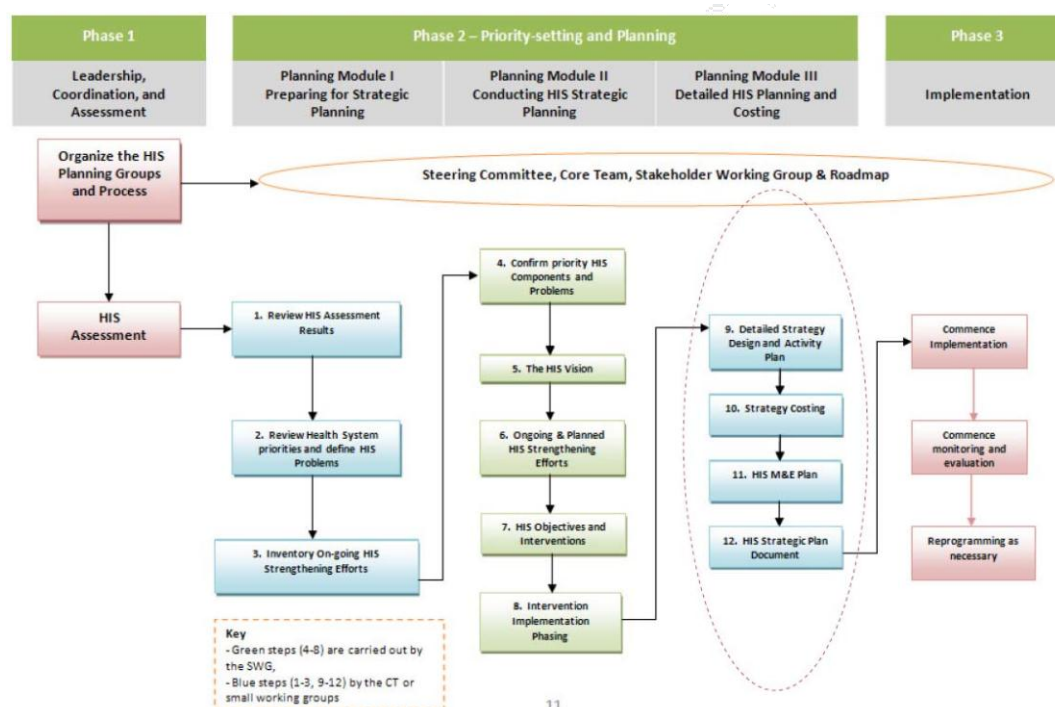


Figure F. Illustration of HIS Costing Activity Cycle



Indicators for HIS Situation Analysis, Activity Mapping, and Costing

The HMN Assessment Tool² provides indicators to document situational awareness of the national HIS and provides opportunity for gap analysis for interventions aimed at strengthening the national HIS. The assessment measures the six HIS components as elaborated in the HMN Framework.³ These include HIS resources, indicators, data sources, data management, information products, and dissemination and use. The HMN Assessment Tool proposes indicators should link to the activities proposed in this module, so that if investments are made accordingly, performance as measured by the snap shot indicators should improve.

An example of set indicators to map activities to derive HIS costs is provided in Table G. In this example, Supply Chain Management is used to represent HIS Primary Engine and numerous corresponding Functional Domains. The cost estimate can only be calculated based on deriving principal indicators that are sensitive enough to measure the total cost of the system based on the answers to the indicator questions.

² WHO/HMN. 2008. Assessing the National Health Information System: An Assessment Tool. Version 4.00

³ WHO/HMN. 2008. Framework and Standards for Country Health Information Systems, 2nd ed.

Table G. An Example of Set of Indicators Mapped to Activities to Derive HIS Costs (HIS Primary Engine (10): Supply Chain Management)

Business Processes	Cost ¹⁰ Type	Archetypical Users	Cost Type
Central stock monitoring	F	Chief health officer	V
Facility stock monitoring	F	Facility health manager	V
National demand forecasting	F	District health manager	V
District demand Forecasting	F	District store manager	V
Stock threshold alerting & notification	F	Provincial health manager	V
Distribution and logistics management	F	Pharmacist	V
Service delivery monitoring	F	Central store manager	V
Service delivery forecasting	F	District store manager	V

Principal Indicators

Sample Indicator Questions* Note: Informatics and Information Systems Subject Matter Experts within each country will have to generate the indicator questions in consultation with stakeholders; <u>The reliability of cost projections depends on the precision of indicator</u>	Relevant Sector Level (National, Sub- national, common across all sectors)	Comments / Business Processes targeted (BPT)	Estimated Cost (USD)
Is there a supply management system?	Common across units	BPT: all	
Number of employees and category types directly associated with supply chain management system	Common across units	BPT: all	
Does your supply management system track stock-out?	Common across units	BPT: Central stock monitoring, Facility stock monitoring, Distribution and logistics management	
Does your supply management system forecast demand?	Common across units	BPT: National demand forecasting, District demand Forecasting	
Does the supply management system have threshold alerts? (progression from reactive to proactive planning)	Common across units	BPT: Stock threshold alerting / notification	
Does the supply management system enable pre-determined protocols? (e.g. FIFO, LIFO)	Common across units	BPT:	

ANNEX XI. CONCEPT PAPER: REVIEW OF EFFORTS TO COST HEALTH INFORMATION SYSTEMS & IDEAS FOR A UHM COSTING MODULE⁴

Date: 18 May 2011

1. Introduction

The goal of the planned HIS costing module within OneHealth is to support the estimation of HIS costs, so as to provide countries with a realistic idea of the financing needed to support desired health and data objectives.

The following should be noted in the development of the HIS module:

1. The module will follow a logical framework structure similar to the other OneHealth system modules, as follows:
 - Baseline data entry: the planner enters appropriate baseline information, including consultant rates, salaries, transportation costs, workshop costs, etc.
 - Situation analysis: a brief summary of the current HIS situation.
 - Target setting: the planner sets targets for projecting future HIS needs.
 - Policy analysis: the planner can examine alternative scenarios for reaching targets.
 - Finalization: the planner can select the policy option scenario and target(s) that he/she would like incorporated for final estimation of activities and budgets.
2. Certain activities in the module will also link to the “Bottleneck Analysis” for disease programmes. Currently the links involve reminders to health planners that they need to address and cost identified bottlenecks when creating health systems plans. If the reminders are not addressed the user is alerted when s/he attempts to update intervention coverages. Examples of where the bottleneck approach may be fruitful are improvements in the HRH information systems or commodity information systems, which will in turn improve accessibility to human resources or commodities.

This document reviews the following existing efforts and tools to cost HIS:

- HMN Assessing the National Health Information System: An Assessment Tool⁵ (report) and the HMN Assessment Tool Score Sheet⁶ (Excel spreadsheet) - which provide guidance on how to assess a country HIS

⁴ This section was taken from the document “Concept Paper: Review of Efforts to Cost Health Information Systems (HIS) & Ideas for a UHM HIS Costing Module” by N Carvalho 18 May 2011.

⁵ www.who.int/healthmetrics/tools/Version_4.00_Assessment_Tool3.pdf

- HMN Guidance for the HIS Strategic Planning Process,⁷ (report) HMN Budgeting Tool for Country Health Information System Strategic Plans⁸ (Excel spreadsheet), and HMN Health Information System Budgeting Tool User Manual⁹ (report) - These tools are used by governments to determine the budgetary implications of implementing various activities outlined in their strategic plan.
- **HMN HIS Tools to Support Countries Applying to Global Fund Round 10**¹⁰ (report and Excel spreadsheet) – a collection of documents to help countries plan to apply for funding from the Global Fund to strengthen their national HIS.

Each of the tools and approaches to costing HIS are reviewed in light of how they or their components might apply to the OneHealth (UHM) structure. Finally, recommendations are made about how to proceed to develop the HIS costing module.

2. Tools/Approaches to Estimate the Cost of HIS

Health Metrics Network (HMN) HIS Assessment Tool and Score Sheet

In 2011, the HMN Framework¹¹ is poised to be the universally accepted standard to guide the collection, reporting and use of health information by all developing countries and global agencies. It outlines the global standards for health statistics, and indicates how they can be integrated into country HIS, while inviting disease-focused initiatives to identify, harmonizing and aligning opportunities.

⁶ www.who.int/healthmetrics/tools/en/

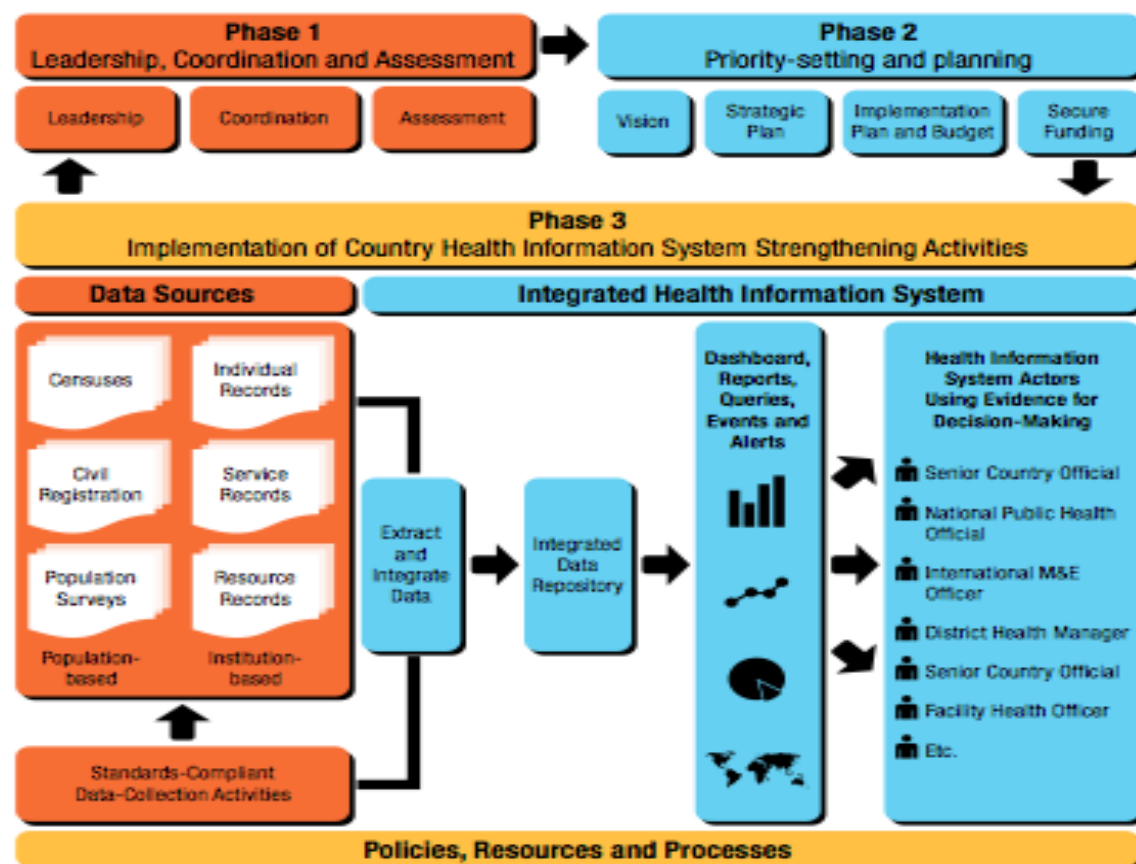
⁷ www.who.int/healthmetrics/tools/HISStrategicPlanningProcessGuidance_2009_March_3.pdf

⁸ HMN Budgeting Tool for Country Health Information System Strategic Plans v.1.00 Sept 2009

⁹ HMN Health Information System Budgeting Tool User Manual v.2.00 Dec 2009

¹⁰ www.who.int/healthmetrics/tools/gfapplication/en/index.html

¹¹ http://www.who.int/healthmetrics/documents/hmn_framework200803.pdf



Source: WHO, HMN, 2008. Framework & Standards for Country Health Information Standards 2nd ed. Figure 12 p 41

In the first phase (Leadership, Coordination and Assessment) of the HMN Framework, the HMN Health Information System Situation Assessment Tool¹² provides a way of assessing the extent to which the country's HIS and subsystems are working and meeting current needs. As already identified in the UHM Concept Note for HIS (April 2010)¹³, the assessment measures the six key components of a strong HIS: resources, indicators, data sources, data management, information products, and dissemination and use.

Section I (Resources) Part B (HIS Institutions, Human Resources and Financing) of the HMN Assessment Tool examines 13 questions and has participants rate the areas as either: highly adequate (3), adequate (2), present but not adequate (1), not adequate at all (0). These areas cover training and capacity building, human resource needs, remuneration for staff and to limit attrition, etc. The 13 areas are listed below:

¹² https://www.who.int/healthmetrics/tools/Version_4.00_Assessment_Tool3.pdf

¹³ Draft HMN Secretariat Apr 2010 DRAFT Unified Health Model (UHM): Concept note for Estimating Costs of Country Health Information Systems v3.12

- I.B.1 The ministry of health has adequate capacity in core health information sciences (epidemiology, demography, statistics, information and ICT)
- I.B.2 The national statistics office has adequate capacity in statistics (demography, statistics, ICT)
- I.B.3 There is a functional central HIS administrative unit in the ministry of health to design, develop and support health-information collection, management, analysis, dissemination and use for planning and management
- I.B.4 There is a functional central HIS administrative unit responsible for population censuses and household surveys that designs, develops and supports health-information collection, management, analysis, dissemination and use for planning and management
- I.B.5 At subnational levels (e.g., regions/provinces and districts) there are designated full-time health information officer positions and they are filled
- I.B.6 HIS capacity-building activities have taken place over the past year for HIS staff of the ministry of health (statistics, software and database maintenance, and/or epidemiology) at national and subnational levels
- I.B.7 Capacity-building activities have taken place over the past year for staff of the national statistics office (statistics, and software and database maintenance) at national and subnational levels
- I.B.8 HIS capacity-building activities have taken place over the past year for health-facility staff (on data collection, self-assessment, analysis and presentation)
- I.B.9 Assistance is available to health and HIS staff at national and subnational levels in designing, managing and supporting databases and software
- I.B.10 Acceptable rate of health-information staff turnover at national level in the ministry of health
- I.B.11 Acceptable rate of health information staff turnover at national level in national statistics office
- I.B.12 There are specific budget-line items within the national budget for various sectors to provide adequately for a functioning HIS for all relevant data sources in the ministry of health
- I.B.13 There are specific budget-line items within the national budget for various sectors to provide adequately for a functioning statistics system for all data sources in the national statistics office

Recommendations for OneHealth

Bottleneck Analysis - Maternal/newborn and reproductive health - Sample December 05 2010

Change tracer intervention

Delivery channel: **Community** Tracer intervention: Breastfeeding promotion

	Community Outreach Clinic Hospital	Baseline coverage (%)	Plausible causes for bottleneck (double-click cell below to enter text)	Strategies to overcome bottlenecks (double-click cell below to enter text)	Expected bottleneck reduction (%)	Total bottleneck reduction (%)	Calculated frontier (%)	Impact on equity
Commodities		0			0	0	0	Pro-poor
Human resources		0			0	0	0	Pro-poor
Access		0			0	0	0	Pro-poor
Utilization		0			0	0	0	Pro-poor
Continuity		0			0	0	0	Pro-poor
Effective coverage		31			0	0	0	Pro-poor

Ok Cancel ☐ Display graph

The OneHealth “Bottleneck Analysis” tab allows the user to complete a bottleneck analysis for specific program areas by delivery channel, in order to identify weaknesses. We could adapt the questions in the HMN Assessment Tool to develop indicators in a “Bottleneck Analysis” tab within OneHealth to estimate baseline coverage for certain categories (i.e., HIS institution, human resources, and financing), so as to determine weaknesses and debate how these weaknesses can be addressed. For example:

1. % staff at MOH with adequate capacity in core health information sciences (epidemiology, demography, statistics, information and ICT)
2. % staff within the national statistics office with adequate capacity in statistics (demography, statistics, ICT)
3. % of functioning central HIS administrative unit in the MOH to design, develop and support health-information collection, management, analysis, dissemination and use for planning and management.

HMN Guidance for the HIS Strategic Planning Process, HMN Budgeting Tool, and User Guide

HMN has developed a budgeting tool¹⁴ to be used during Phase 2 (Priority-setting and Planning - including costing interventions) within the HMN Framework. During this phase, which takes place once the country HIS assessment has been completed, stakeholders are engaged in evidence-based decision-making and planning to develop a strategic plan for HIS strengthening.

¹⁴ HMN, March 2009. Guidance for the Health Information Systems (HIS) Strategic Planning Process: Steps, Tools and Templates for HIS Systems Design and Strategic Planning
www.who.int/healthmetrics/tools/HISStrategicPlanningProcessGuidance_2009_March_3.pdf

A Budgeting Tool and User Guide are described in the third module (Detailed HIS planning and costing, p110 of footnote 4) of Phase 2, and help countries to develop cost estimates for implementing their strategic plans to strengthen their country HIS. The Budgeting Tool is an Excel spreadsheet-based tool to develop a short term (1-5 years) and longer-term (6-10 years) estimate of the cost of implementing a national strategic plan for HIS strengthening. The accompanying user manual provides a step-by-step guide to calibrate the tool, enter data, and interpret and output.

The Budgeting Tool is **first calibrated** using country-specific costs and yearly inflation:

	J	K	L	M	N	O	P	Q	R	S	T	U
1	Activity 8	Activity 9	Activity 10		HIS Function		Type of Expenditure		Frequency	Activity Type		
2	8.1.1	9.1.1	10.1.1		Leadership and Governance		Travel		Development	Supervision		
3	8.1.2	9.1.2	10.1.2		Public Health and Surveillance		National Consultant		Recurrent	STTA		
4	8.1.3	9.1.3	10.1.3		Civil Registration		Distribution Cost			Dissemination		
5	8.1.4	9.1.4	10.1.4		Census and Population Surveys		Workshop Cost			Workshop/Training		
6	8.1.5	9.1.5	10.1.5		Health Workforce		Financial Supplement			Other		
7	8.1.6	9.1.6	10.1.6				Training			Meetings		
8	8.1.7	9.1.7	10.1.7				Education Cost			Course/Fellowship		
9	8.1.8	9.1.8	10.1.8				Housing					
10	8.1.9	9.1.9	10.1.9				International Consultant					
11	8.1.10	9.1.10	10.1.10									
12					Health Information System							
13	8.2.1	9.2.1	10.2.1		HIS Resources							
14	8.2.2	9.2.2	10.2.2		Indicators							
15	8.2.3	9.2.3	10.2.3		Data Sources							
16	8.2.4	9.2.4	10.2.4		Data Management							
17	8.2.5	9.2.5	10.2.5		Information Products							
18	8.2.6	9.2.6	10.2.6		Dissemination and Use							
19	8.2.7	9.2.7	10.2.7									
20	8.2.8	9.2.8	10.2.8									
21	8.2.9	9.2.9	10.2.9									
22	8.2.10	9.2.10	10.2.10									
23	8.3.1	9.3.1	10.3.1									
24	8.3.2	9.3.2	10.3.2									
25	8.3.3	9.3.3	10.3.3									
26	8.3.4	9.3.4	10.3.4									
27	8.3.5	9.3.5	10.3.5									
28	8.3.6	9.3.6	10.3.6									
29	8.3.7	9.3.7	10.3.7									
30	8.3.8	9.3.8	10.3.8									
31	8.3.9	9.3.9	10.3.9									
32	8.3.10	9.3.10	10.3.10									
33	8.4.1	9.4.1	10.4.1									
34	8.4.2	9.4.2	10.4.2									
35	8.4.3	9.4.3	10.4.3									
36	8.4.4	9.4.4	10.4.4									
37	8.4.5	9.4.5	10.4.5									
38	8.4.6	9.4.6	10.4.6									
39	8.4.7	9.4.7	10.4.7									
40	8.4.8	9.4.8	10.4.8									
41	8.4.9	9.4.9	10.4.9									
Cover Summary Details Y1 Details Y2 Details Y3-Y5 Details Y6-Y10 Controls Consultant Perdiem Transportation Avr												

- Using the ‘**CONTROLS**’ worksheet tab, the user manually types in the **Objectives** (up to 10) in the HIS Strategic Plan, then types in the specific **Interventions** (or Strategies) associated with each as well as an anticipated/planned **Output**. This text automatically appears in later worksheets when the user completes the budgeting for each activity. Next the user estimates the country’s annual inflation rate using the **Inflation Rate** box, and the tool automatically enters the inflation rates corresponding to Years 2-10, and automatically takes inflation into account when calculating the estimated costs of implementing the HIS activities for the 10 years. The **Frequency** box allows the user to label each activity as either a ‘development’ or ‘recurrent’ cost, or can be tailored towards country-specific terminology. The user next uses the **Year 6-10 Allocation** box to anticipate spending for these years. The budget is only an estimate of future funding needs, and as such this box asks the user to estimate the percentage of total funding in Years 6-10 that is budgeted for each of the years (the 5 percentages must add up to 100%). The user next enters data into the **Exchange Rate** box for the specific country. Then the user specifies categories to characterize the purpose of each activity in terms of **HIS Component**, **HIS Function**, and **Activity Type** and configures these respective tables (the budget summaries will be broken down by these labels/categories).

The default **HIS Functions** are: Leadership and Governance, Public Health and Surveillance, Civil Registration, Census and Population, and Health Workforce.

The user then uses the ‘CONSULTANT,’ ‘PER DIEM,’ “TRANSPORTATION,” ‘COURSES/FELLOWSHIPS,’ ‘WORKSHOPS/TRAINING,’ and ‘STAFF INCENTIVES’ worksheet tabs to input the appropriate cost estimates.

Finally, the ‘**OTHER COSTS**’ worksheet tab has a variety of additional cost items that the user can use if relevant. For example, expenses for: Communications, Supplies/Capital Assets, Information Technology, and Publications can be determined.

Once the HIS budgeting tool has been calibrated, each individual activity in the HIS strategic plan is entered into the ‘**YEAR DETAIL**’ worksheets (first Years 1-5 individually, then Years 6-10 as a single worksheet). The worksheets are color-coded so that: yellow cells mean free entry; light blue cells are drop-down menus; white cells are automatically calculated (and “protected”); and the other colors are fixed headings or titles.

Once the user has entered all information into the **‘YEAR DETAIL’** worksheets for each activity, the HIS Budgeting Tool automatically populates several tables that summarize the total budget required to implement the plan. In the **‘SUMMARY’** worksheet tab, the Overall Summary table provides a overview of the entire HIS Strategic Plan budget broken down by key categories of interest. The Objectives Summary tables provide additional budget detail for each objective.

Budget Summary

Summary of Development and Recurrent Costs by Priority HIS Component

HIS Function	Type of Costs	
	Development	Recurrent
Leadership and Governance	307,650	117,900
Public Health and Surveillance	89,900	-
Civil Registration	-	-
Census and Population Surveys	-	-
Health Workforce	-	850,000
Total	397,550	967,900

Cost by Activity Type	
Activity Type	Total
Dissemination	-
Other	-
STTA	-
Workshop/Training	1,161,150
Supervision	-
Meetings	204,300
Course/Fellowship	-
	-
	-
Grand Total	1,365,450

Cost by Objective (yearly)										
Objective	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1: Improve data management	1,175,100	190,350	-	-	-	-	-	-	-	-
2: Improve National Vital Registration	-	-	-	-	-	-	-	-	-	-
3: Enhance capacity of HIS	-	-	-	-	-	-	-	-	-	-
4: Improve financial resources	-	-	-	-	-	-	-	-	-	-

2.3 HMN, WHO. Technical Manual for Costing the Health Information System gap¹⁵; Guidance on Recommended Indicators and Illustrative Activities for Strengthening Country Health Information Systems under Global Fund Round 8 Applications¹⁶; Template for Global Fund grant application for the Health Information System¹⁷

These documents describe how to cost the interventions to close the gap in a country's HIS. In terms of Global Fund applications for strengthening HIS, WHO and HMN recommend that countries select indicators that they consider to be most relevant for their specific needs. HMN identifies 9 indicators¹⁸ to strengthen a country's HIS, and each indicator is broken down into key illustrative activities and sub-activities (which are linked to inputs required for implementation) that the country can modify with respect to their needs. The inputs are linked to cost, which then provide costs for all the separate components (sub-activities, illustrative key activities, indicators). Countries can develop additional indicators with activities, sub-activities, and inputs as appropriate.

¹⁵ HMN, WHO. Technical manual for costing the Health Information System gap.

www.who.int/healthmetrics/tools/Technical_Manual_HMN_GF_Template_4-4-08.pdf

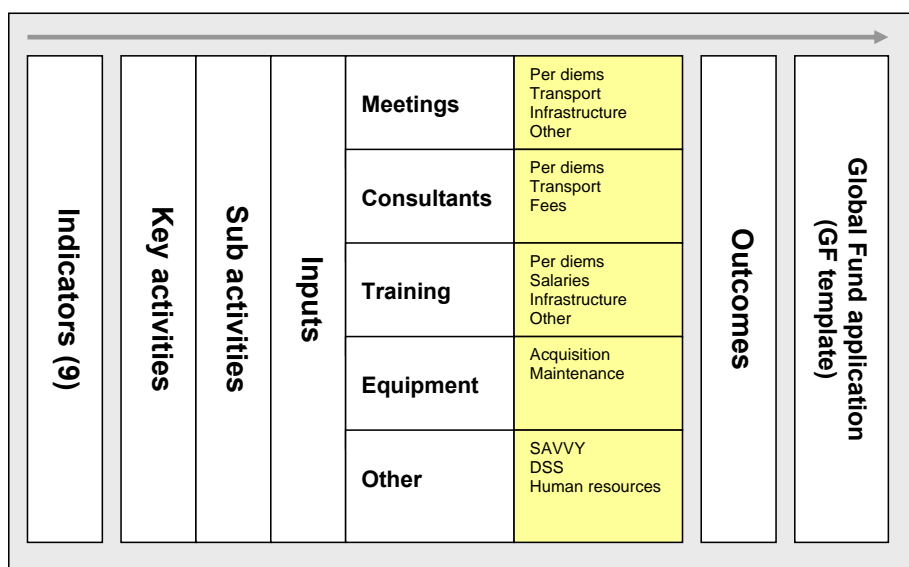
¹⁶ HMN, WHO. Recommended Indicators, Activities, Sub-activities and Inputs to Guide Country, National Health Information Systems Strengthening: Global Fund Round Applications in Relation to Health Systems Strengthening. May 2010.

www.who.int/healthmetrics/tools/gfapplication/en/index.html

¹⁷ HMN 2008. Template for Global Fund grant application for Health Information System Strengthening

www.who.int/healthmetrics/tools/gfapplication/en/index.html

¹⁸ www.who.int/healthmetrics/tools/Guidance_on_Indicators_for_GF_Proposal.pdf



Source: HMN, WHO. Technical manual for costing the Health Information System gap. p 2.

The recommended indicators include:

- Appropriate operational policies and procedures for strengthening and functional HIS are prepared and widely endorsed** – to help countries have better and well-developed institutional, and policy arrangements, to support HIS strengthening interventions. Includes having a medium to long term plan, the identification of a core set of indicators, updating tools for data collection and updating legislation on health statistics.
- % of health managers and health workers with appropriate skills in data management and data use** - assists countries to develop (through in-service and pre-service training) the skills of staff in data management and use. The curriculum for such training must be based upon work carried out under recommended indicator number 1 to develop national standards and procedures for monitoring and evaluation, data use and management.
- Percent of health facilities that report data on key indicators to the national level with 30 days after the end of each quarter - seeks to promote investments in better supervision at the facility, district and provincial levels to support the timely submission of quality data. Focuses attention on the development of an integrated data warehouse which also includes software and the complimentary hardware, and connectivity. Also emphasizes the use of data, and underscores the development of a system for routine data validation.
- Percent of registered private-for-profit facilities reporting according to national guidelines in the past twelve months** - intended to systematically increase the percent of registered private-for profit facilities that report to the public sector. Many countries recognize the increasing role of this sector in providing services, and that the inclusion of such service statistics will improve the completeness of data for decision making at the national and other levels.

5. **Percent of facilities that completed and submitted quarterly reports on stock levels of tracer drugs** - draws attention to one of the frequently cited constraints in the performance of a health system: resource records, one of the six sources of data in the HMN Framework.
6. **A multi-year plan for coordination of household surveys developed and disseminated** - draws attention to the need for countries to define data needs expected to be derived from population-based surveys over an extended period of time. Such a plan will promote better coordination around what is being measured and when, and to minimize unnecessary duplication. Importantly, it will also define the associated costs of these surveys and help countries in the upfront resource mobilization from donors and partners.
7. Percent of population covered by mortality civil registration system
8. **Percent of registered deaths with cause of death certified by a doctor or any medico legal-authority** - Civil registration is the best source of vital statistics, in that it ensures universal and continuous registration of vital events and enables the routine production of statistics including the provision of small area data. It is the only means of establishing and protecting identities, citizenship, and property rights, and therefore all countries should aim for a complete, nationwide civil registration system.
9. **Improved dissemination and use of health information at national and sub-national levels** - draws attention to activities and interventions that promote the institutionalization of routine use of data for decision making, briefings, performance review, health promotion and informing the public. Its intent is to increase and sustain an intrinsic demand for data and information produced by the health information system.

In terms of using the Excel template, the user begins by filling out **general data**, which are needed to run the template.

A1 GENERAL INFORMATION

	A	B	C	D	E	F
1	GENERAL INFORMATION					
2						
3	Country					
4	Start year					
5						
6	Meetings					
7	Cost of room rental for this meeting (per day)					
8	Room for 0 - 10 persons					
9	Room for 11 - 30 persons					
10	Room for more than 30 persons					
11	Cost of consumables (refreshments) (per person & per day)					
12	Cost of lunch per day per person					
13	Cost of stationary etc per person					
14	Other costs per day					
15						
16	Per Diems					
17	National					
18	Per Diem					
19	Day per diem (incl local transport)					
20	Overnight per diem (including hotel)					
21						
22	Air fare					
23	Overnight per diem (including hotel)					
24	- Flight (continental)	<input type="checkbox"/> Most often used				
25	- Flight (intercontinental)	<input type="checkbox"/> Most often used				
26						
27	Consultancy Fees					
28	National					
29	Daily fee A (including per diem)	<input type="checkbox"/> Most often used				
30	Daily fee B (including per diem)	<input type="checkbox"/> Most often used				
31	Daily fee C (including per diem)	<input type="checkbox"/> Most often used				
32	Per diem	<input type="checkbox"/> Add to daily fee?				
33						
34	International					
35	Daily fee A (including per diem)	<input type="checkbox"/> Most often used				
36	Daily fee B (including per diem)	<input type="checkbox"/> Most often used				
37	Daily fee C (including per diem)	<input type="checkbox"/> Most often used				
38	Per diem	<input type="checkbox"/> Add to daily fee?				
39						
40	Printing & distribution					
41	Printing of 50 page B&W document					
42	Printing of 100 page B&W document					
43	Printing of 50 page color document					
44	Printing of 100 page color document					
45	Distribution of 50 page document					
46						

The user can use the check boxes to specify which option is the most often used. This value will then be the default value in the calculations. This default value should then be overwritten when another value is necessary.

Cover Introduction Navigation General info Ind 1 Policies Ind 2

Next, the user completes the worksheet tables for each indicator based on illustrative activities, sub-activities, inputs and costs.

Recommended indicator No. 1: Appropriate policies and procedures for the HIS are prepared and widely endorsed									
Key Illustrative Activities	Sub-activities	Start year	Inputs (follow hyperlink when available)	Start year	COSTING QUESTIONS (to be answered)	COST	2009	2010	2011
1. Develop a strategic plan for strengthening the HIS	A. Prepare for strategic planning workshop and write up this final plan		A working group of 5-7 people meets once / week for 3 months A national or expatriate consultant contracted. Fees for 1-3 months		National consultant (standard fee) 45 days National consultant (standard fee) 45 days	1,248 13,500			
	B. National consensus meetings.		National large workshop for planning (50-60 persons) x 3-5 days.						

A summary table specifies the total costs per year for each indicator, differentiated by the different cost categories. In the “**OUTCOMES**” sheet, each of these tables is included on one sheet by quarter. The Global Fund uses several default **cost components**, but these can also be manipulated and changed per

the country's needs: Human Resources, Technical & Management Assistance, Training, Health Products and Health Equipment, Pharmaceutical Products (Medicines), Procurement and Supply Management Costs (PSM), Infrastructure and Other Equipment, Communication Materials, Monitoring and Evaluation (M&E), Living Support to Clients/Target Population, Planning and Administration, Overheads, and Others.

[illegible]

One additional element of note in the “Recommended Indicators” document is that a table on costing ICT hardware is included.

Items	Number of Unit	Unit Cost (US\$)	Total cost (US\$)
Central data management and analysis			
Basic server units	4	7,500	30,000
UPS for Server	4	3,000	12,000
Laptops		2,000	10,000
Generator	1	20,000	20,000
Renovation of Server rooms	2	8,000	16,000
Wifi routers for LAN	5	200	1,000
Computer workstations (Computers and UPS)			
5 for information unit of MoH	5	2,500	12,500
5 for public health programs	5	2,500	12,500
2 for each District health Office	number of districts	2,500	#VALUE!
1 for each hospitals	24	2,500	60,000
Telecommunication			
Internet installation at district level	13	2,000	26,000
Annual internet subscription	number of districts	1,200	#VALUE!
			#VALUE!

Source: WHO, HMN, 2008. Recommended Indicators, Activities, Sub-activities and Inputs to Guide Country, National HIS Strengthening: Global Fund Round Application
p 25

3. Recommendations

The draft HMN UHM Concept Note for Estimating Costs of Country HIS recommends that HIS costing must cover both **capital** and **recurrent costs**, including the training of existing and new human resources. It also states that the **costs of external technical assistance** should be included. The document recommends using a set of generalized HIS costing categories as follows:

HIS Costing Category Type	Description
Strategy Costing	A detailed costing of the array of implementation activities, including the implications of strategy implementation for both development costs and routine service operational costs.
Development and Implementation Costs	Costs of carrying out the development of strategic interventions, generally of a one-time nature and as such could be met from the Government's development budget or from donor support. Depending on the number of strategic objectives, countries may incur costs to enhance the existing HIS or respond to emerging health needs (such as responding to H1N1).
Routine Costs (includes fixed and variable costs)	Costs incurred through routine operations of the HIS (tasks and services carried out on a routine basis). To the extent that the HIS strategy increases the routine costs (such as through additional HIS staff salaries), the increases are estimated in the costing step. While variable costs might include wages and benefits of health workforce, the cost of IT service providers may also vary. The fixed costs include costs incurred to purchasing equipment and services are durable for at least 3 years.

Source: HMN Secretariat Apr 2010 DRAFT Unified Health Model (UHM): Concept note for Estimating Costs of Country Health Information Systems v3.12 Table 3 p 6.

Of additional note is that the draft HMN UHM Concept Note for Estimating Costs of Country HIS describes the 10 functional building blocks that form the structure of national HIS, from which a cost framework should be based:

Functional Domains of Health Information Systems	
1.	Community-based Services
2.	Diagnostic Services
3.	Environmental Monitoring Service
4.	Financial Resources
5.	Health Commodities
6.	Health Facility-based Services
7.	Human Resources
8.	Information and Knowledge Resources
9.	Infrastructure
10.	Stewardship Functions

Source: HMN Secretariat Apr 2010 DRAFT Unified Health Model (UHM): Concept note for Estimating Costs of Country Health Information Systems v3.12 Table 1 p 5.

Based on the format/set-up of OneHealth (UHM), it is recommended that the following be considered to set up an HIS costing module:

- A spreadsheet-based tool be developed, that provides a generic template for a structured and logical process of costing a country's HIS. This includes following the same framework as in other OneHealth modules:
- Baseline data entry
- Situation analysis
- Target Setting
- Policy Analysis
- Finalization
- Based on the review of existing tools/approaches to cost HIS, it appears that the HMN HIS Budgeting Tool structure is most similar to the OneHealth framework. Thus, it is recommended that the HMN HIS Budgeting Tool be used to guide the development of the OneHealth HIS costing module.
- The '**CONROLS**' worksheet in the HMN HIS Budgeting Tool can be easily adapted for OneHealth's '**Baseline Data**' tab. This would allow the user to calibrate the module for the specific country who's HIS is being calculated. The OneHealth HIS costing module would need to add additional categories to cost routine HIS operations (which are not considered in the HMN HIS Budgeting Tool that only looks at HIS strengthening activities), such as human resources, infrastructure, etc.
- OneHealth might want to consider a way to add in the Global Fund cost categories (Human Resources; Technical & Management Assistance; Training; Health Products and Health Equipment; etc.), so that activities can also be costed with respect to the cost categories recognized by the Global Fund. This would be relatively easy using the HMN HIS Budgeting Tool structure, since it allows for the text labels within **HIS Component**, **HIS Function**, and **Activity Type** to be modified and revised per the country needs.
- OneHealth could use similar worksheets to those in the HMN HIS Budgeting Tool for '**CONSULTANT**,' '**PER DIEM**,' '**TRANSPORTATION**,' '**COURSES/FELLOWSHIPS**,' '**WORKSHOPS/TRAINING**,' and '**STAFF INCENTIVES**' to create similar cost elements with the HIS costing module. However, OneHealth's HIS costing module would specifically need to create either similar worksheets or tables for costs related to HIS staff human resources, retention, and incentives that are considered part of operating costs.
- Use the 9 Global Fund indicators in the OneHealth "**Bottleneck**" tab of the HIS costing module, as a way to identify weaknesses and identify ways to address them, and as a way to set targets and identify priority activities.
- Of importance is that OneHealth's HIS costing module determine an overall process for how the module is to be applied. The HMN HIS Costing Tool and Global Fund costing tool both

cost HIS strengthening through either a formal strategic plan that has already been developed, or indicators that have been assessed with specific activities and sub-activities that fall under them. OneHealth will need to consider how a country might approach costing their HIS, i.e., giving the HIS costing module the flexibility to either:

- Costing HIS strengthening activities within an already existing HIS strategic plan, and adding in ongoing HIS operating activities that are not reflected within an HMN or Global Fund HIS strengthening plan.
- Costing specific components of a country's HIS (i.e., only costing HIS strengthening activities, or activities related to human resource strengthening, etc.)
- Allow the users to brainstorm and determine a set of activities and processes that the country wants to cost related to its HIS.
- Finally, OneHealth's HIS costing module might want to consider a way to include information about available HIS funding in-country, in order to assist the country to conduct a gap analysis of funding for its HIS. NOTE: the assessment of program-specific funding gaps is an issue to be discussed for the entire OneHealth Tool, and as such will be discussed in the Financing Gap expert group, and should also be a topic for discussion at the next IAWG meeting in June 2011.

ANNEX. XII. CONCEPT NOTE ON MODULE FOR HEALTH FINANCING POLICY¹⁹

This document was prepared to inform discussions on a module on Health Financing Policy within OneHealth, in preparation for the meeting of the IAWG-Costing, held 27-29 April 2010. The intended audience is the IAWG-Costing and additional resource persons supporting the development of the OneHealth tool. This note outlines the purpose, scope and proposed structure of a module on Health Financing Policy within OneHealth.

1. Purpose

Health system financing is one of the core 'building blocks' or functions of any health system (WHO, 2008). Sufficient and fair financing ultimately serves to realize the policy norm of universal coverage, which is itself defined as access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access (WHO 2000, 2005).

The role of the Health Financing Policy (HFP) module in OneHealth is to guide the user to undertake an analysis of the current policies in place for health financing in the country. This module does not deal specifically with the financial projections of the resources available for health in the coming year - that is covered in another module (budgeting).

Specifically, for the HFP module there are two overall objectives, to:

1. *Estimate costs* associated with implementing a national health financing strategy
2. *Highlight linkages* between the national health financing context and overall investments and outcomes in the health sector. This will be done by explicit linkages between individual modules in the tool, whereby health system bottlenecks are identified and the impact of their removal is modelled (e.g., an expansion of health insurance will reduce financial access which will improve health seeking behaviour and ultimately improve health outcomes).

The users of this module are most likely the central planning unit of MoH. However, the HFP module will be most useful when applied in context of a sector-wide planning process whereby all partners and programmes come together to discuss the strategic goals and directions for the medium term.

2. Scope

A number of frameworks for assessing health financing systems, have been put forward, e.g. WHO, 2000, Kutzin 2001, 2008, Islam 2007, as well as the OASIS approach (see further below) In general there is broad agreement about the core features or underlying principles that should be present. The analytical framework may be described in relation to the three key health financing functions:²⁰

¹⁹ This section was taken from the document "UHM: Concept Note on Module for Health Financing Policy. K Stenberg, T Edjer, and I Mathauer Draft 27 April 2010.

²⁰ Kutzin 2001, Savedoff/Carrin 2003, Carrin/James 2005.

1. *Resource mobilization* in an equitable way to ensure sufficient and sustainable revenues;
2. *Pooling of funds* to ensure that costs of accessing health care are shared thus ensuring financial accessibility; and
3. *Purchasing* to ensure that funds to buy and provide health care services are used in the most efficient and equitable way.

The ultimate aim of these three functions involves the accomplishment of two related objectives, whereby the performance of a country's health financing system can be judged: (i) to raise sufficient funds, and (ii) to provide financial risk protection to the population. The expected users of OneHealth will be low-income and lower middle-income countries, for which poverty and inequalities will be an important dimension that the national health financing strategy must address. The provision of safety nets may come from e.g., various fee-exemption systems and through health equity funding (such as in Cambodia).

Countries demonstrate considerable heterogeneity in the ways in which these key functions are operationalized. For example many countries use a mixed system whereby part of the population or services are covered by a tax-based system, and another part is covered by a social health insurance system. There have been various efforts trying to assess performance vis-à-vis the different dimensions of financing, and to provide guidance for the way forward.

One of the approaches is the OASIS framework as developed by WHO.²¹ OASIS serves to assess a health financing system and its health financing performance via generic performance indicators, review its strengths and weaknesses, and derive improvement measures to address the weaknesses, with the ultimate aim to increase performance and move towards universal coverage.²²

Following this framework, we propose that the HFP module in OneHealth be organized in such a way that overall performance is measured and monitored by key indicators, and the activities to be costed are organized according to the three key functions of health financing. We recognize that there are several activities, which would affect more than one function (more on this below).

3. Structure

Each module of the Unified Health Model is envisaged to have the following essential structure:

1. a situation analysis/snapshot that sets the scene
2. an analysis of strengths and weaknesses
3. a list of strategies/options with activities that the user can choose from and estimate the cost for
4. links to other modules in the tool

²¹ OASIS stands for **O**rganizational **A**ssessment for **I**mproving and **S**trengthening Health Financing.

²² See Mathauer, Inke and Carrington, Guy (2010): "The role of institutional design and organizational practice to improve health financing performance and universal coverage" (forthcoming), and Mathauer, I, Cavagnero E, Vivas G, Carrington G (2010): "Health financing challenges and institutional options to move towards universal coverage in Nicaragua.", Discussion Paper 2-2010, Department of Health Systems Financing, WHO, Geneva, http://www.who.int/health_financing/documents/cov-dp_e_10_02-insop_nic/en/index.html

5. scenario simulation, indicating what outputs investments would bring over the planning period.

4. Content

Indicators for overall HFP Situation Analysis

The plan is for every module to open with a situation analysis screen. This screen contains core indicators, which are graphically presented and pop up when the user opens the module. The purpose of this screen is to present some of the key indicators that would help to understand the current situation in the country vis-à-vis Health System Governance. The snapshot is a quick view of the type that can be presented to high-level policy makers.

Indicators for the situation analysis should be selected based on (at least) the following criteria:

1. the indicator should illustrate current performance for this area in the tool (they are "tracer indicators")
2. the data should be available for most countries so that values can be loaded from a database with country-specific values and appear automatically.
3. The indicators should link to the activities proposed in this module, so that if investments are made accordingly, performance as measured by the snap shot indicators should improve.

As part of a handbook for monitoring health system strengthening, WHO has recently proposed a set of marker indicators for assessing health system financing (WHO, 2008), including both 'core' and 'optional' indicators. The indicators can be found in Annex XII.

Based on the indicators reviewed, we propose that the initial screen for the HFP module opens with three indicators as per Table 1 below. Two indicators are related to revenue generation and a third indicator relates to pooling. Regarding the dimension of Purchasing, this tends to refer to cost effectiveness and efficient procurement for which there are fewer standardized indicators available at global level.²³ Right now we have not proposed an indicator for this function in the "snapshot" screen. The analysis of purchasing may require more user-defined information and is therefore dealt with in more detail in the HFP module. For example there should ideally be alignment of public funding with the priorities of the health sector. Another indicator that may be of interest is the "% Share of donor funding channelled through budget support".²⁴

Table 1: Proposed indicators for the initial situation analysis screen in the HFP module

Health financing performance indicator:	Corresponding key health financing function	Indicative performance indicator target ("guiding estimate")	Comment
1. Total Health Expenditure per capita. (a); (b)	Revenue generation	Total health expenditure per capita is at least US\$34 (in 2000 prices -	Source: WHO expenditure estimates

²³ Similarly in the HSS handbook there is no core indicator recommended to capture the efficiency of the health financing system. There is one proposed optional indicator: Government expenditure on wages and salaries as % GGHE.

²⁴ This is one of the indicators in the Cambodia Strategic Framework for Health Financing 2008-2015.

		equivalent to \$40 in current prices) (cf. WHO 2001) OR we use: \$54 in 2005 prices as per the High Level Taskforce analysis	
2. General government expenditure on health as a proportion of general government expenditure (GGHE/GGE). (b)	Revenue generation	15% target as per the Abuja declaration	This indicator may also be included in the governance module and/or in the central UHM module
3. Proportion of health expenditure based on prepaid funds (a) (c)	Pooling	At least 85% of total health expenditure is prepaid	What is the source of the 85% estimate?

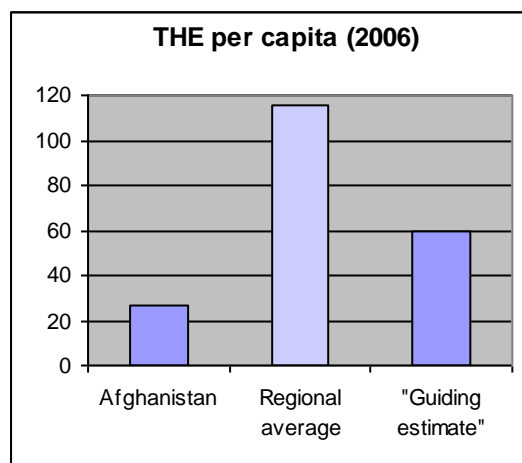
(a) Included in the list of indicators used in Mathauer et al assessment of health system in Nicaragua.

(b) core indicator in the WHO *Handbook on Monitoring HSS* section on financing.

(c) the corresponding indicator included in the WHO *Handbook on Monitoring HSS* is the ratio of household out-of-pocket payments for health to total expenditure on health. The proxy proposed here is 100%- OOPs, which is simply an inverted measure of that.

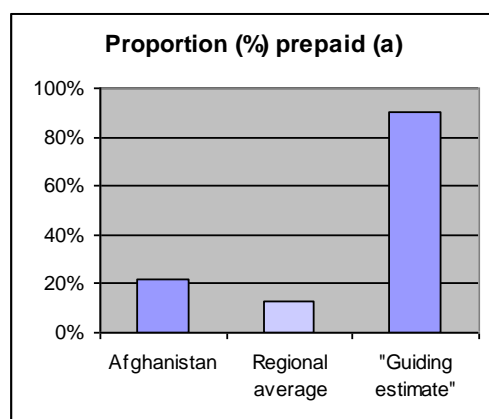
Additional indicators of interest include those listed in Annex XIII from a policy discussion in Nicaragua. However it will be important to ensure that whatever indicators are chosen the data is readily available by country and can be stored in the OneHealth default database.

Figure 1: THE per capita compared with regional average and "guiding estimate"



The country-specific values reported in the "snapshot" are taken from a global data-base and compared with regional averages from the same database.²⁵ Moreover, we propose that the country value is compared with a "guiding estimate", intended to indicate current performance vis-à-vis global norms. This approach is consistent with the approach used in other health systems modules of UHM and provides a comparative measure for performance. Figures 1 and 2 illustrate what the snapshot screens may look like for indicators 1 and 3.

²⁵ The reported WHO regional value is used here for presentation purposes.

Figure 2: Proportion % prepaid compared with regional average and "guiding estimate"

(a) the proxy indicator proposed here is 100% - % share of THE that is OOPs

Strengths and Weaknesses

The section on strengths and weaknesses provides space for the user to undertake a more qualitative analysis of the current health financing context. This section is less structured than other parts of the tool. If there has been a previous analysis of the national policy situation, findings can be reported here. Based on the analysis, appropriate changes in institutional design and organizational practice can be derived that contribute to moving towards universal coverage.

Activities costed in the tool

The structure of the tool should be set up in such a way that activities are proposed that would mitigate certain weaknesses in the health financing system, as identified during the guided "strengths and weaknesses" discussion. OneHealth is not intended for detailed policy analysis and modelling different scenarios with respect to for example, extending health insurance coverage. It is envisioned that the actual policy decisions have been taken already "outside the tool". Accordingly, the HFP module will *not* facilitate the user to e.g., decide on whether to implement community-based health insurance or social health insurance. It can however indicate the financial resources that are associated with a specific health financing policy strategy, which has already been decided upon by the country.

There may be considerable cost incurred with some policy decisions. For example, in order to set up a social health insurance system, investments in capacity building and administration and monitoring will be required. Some of these costs were analysed as part of a costing exercise undertaken in support of the High-Level Task Force for Innovative Financing, (Mathauer et al (2010).).

We propose that the HFP module be organised around a list of generic activities that can be implemented to address various weaknesses in the system. In this concept note we take a first step towards identifying the structure of this generic list. The specific ingredients costed under each activity (such as meetings, staff time, etc) will be mapped out as one of the next steps, in May-June 2010.

The organization of activities may follow one of several structures:

- by health financing function addressed (revenue generation/ pooling /purchasing)

- defined by major type of activity (SHI, CBHI, contracting, etc)

As a first step we propose to start with a mapping exercise whereby the major types of activities (that we know need to be included in the costing template) are mapped to the other dimensions). Annex XIV provides a draft list of activities. These will need to be further mapped to different categories/classifications. Annex XV and XVI illustrate further how specific activities may be considered within a national strategic framework for health financing policy.

Note that certain activities are not included in the HFP module in OneHealth although they are likely to be important for financing. In particular there is a certain overlap with overall indicators for *Governance* module. Firstly, with regards to **indicators**, certain indicators may be of relevance to both modules. For example: the proportion (%) of drugs procured by MoH that are generic. This could fall under the rules of financing policy (effective purchasing) as well as under governance. Similarly at a more aggregate level, the GGHE as a proportion of general government expenditure (GGE) is an indicator common to both areas.

Moreover there are **activities** that appear common in nature for HFP and Governance. For example the introduction of private practice regulations, such as licensing and accreditation of private providers falls under both domains. Likewise, while it may be important to support community participation in local decision making and in monitoring and evaluation of demand-side financing schemes - this activity would fall under Governance more than HFP.

Keeping in mind the proximity of the domains of HFP and Governance, we try to set some boundaries to what should be covered in HFP in order to avoid double-counting of resource inputs or costs.

Linking operational indicators to activities

In order to facilitate the planning and costing process, many of the activities costed should be linked to the current situation based on operational indicators. For example in the area of contracting:

Indicators:

- What proportion (%) of health facilities are currently accredited for contracting?
- What proportion (%) of health facilities should be accredited for contracting?

Activity costed:

- The cost for accreditation + monitoring + administration of funds can be done either as a lump sum / salary cost for a size team and budget related to population of the country/number of facilities, etc. The tool will not be prescriptive, but provide suggestions to stimulate the costing process.

The specific questions and activities will be mapped out from May-June 2010.

Links to other modules in UHM

There will be close linkages between the HFP and the budgeting module in OneHealth. A decision to expand the share of public financing that is linked to performance based indicators at facility or district level will have implications for the administrative costs of financial transfers as well as have implications on the financing scenarios modelled in the Budgeting and Fiscal space modules.

Ideally a move towards greater pre-payment would contribute to greater financial access to health services thereby expanding the coverage frontier. This would be particularly important in an analysis, which takes Equity into account, i.e., when a health plan is done taking into account the difference between income quintiles.

Implementation of an electronic banking system for financial transfers - dependent on ICT infrastructure in the infrastructure module.

Note to the group: more thinking needs to go into how the HFP functions are linked to overall health system performance in the bottleneck analysis.

5. Caveats

- Difficult to specify generic activities for health financing as these are very much dependent on country context.
- Many of the activities that need to be planned for and costed can be summarised in a list of 20 activities (meeting, staff, consultation with interest group, public awareness campaign, capacity development/training, preparing modifications in legal provisions, studies to assess impact/to prepare precise legal modifications required or to assess whatever point, monitoring, expanding enforcement capacities (sometimes, this means: cars, more people), IT improvement etc.). Providing a drop-down list with these items for each health financing activity, whether it is resource mobilization, pooling or purchasing and the specific tasks related thereto (e.g. enrolment, collection, taxation, risk equalization, contracting, accreditation, etc., etc.) - seems cumbersome and repetitive.
- Experience to date indicates that many of the "bottlenecks" relate to the norms and legal policies in the country. Changing a law may not have much cost implications but can significantly impact the financing structure.
- Difficult to model/estimate the quantitative impact of investments (activity costing) on financing performance indicators (the link is not straightforward, and multiple factors come in).

ANNEX XIII. SUMMARY OF HEALTH SYSTEM STRENGTHENING HANDBOOK PROPOSED INDICATORS FOR HEALTH SECTOR FINANCING

Objectives and actions	Possible output indicators	Data sources	Associated outcome indicators
1. Raising sufficient funds for health. In low-income countries this must come from external and internal sources. Increasingly reliable external funds are needed in most countries, but more can be done to raise funds, or raise them more efficiently, domestically.	1. Data on total health expenditures routinely collected and reported.	1. National Health Accounts (NHA)	<p>Core indicator 1a. Total expenditure on health (THE)</p> <p>Core indicator 1b. General government health expenditure as a proportion of general government expenditure (GGHE/GGE)</p> <p>Optional Indicator 1: THE as % GDP</p>
2. Improving financial risk protection and coverage for vulnerable groups. In most countries this requires moving away from direct out-of-pocket payments and towards a form of prepayment with risk pooling that is tax- or insurance-based.	<p>2a. Patient / household out-of-pocket expenditures of accessing or obtaining services collected intermittently.</p> <p>2b. In countries with widespread health insurance: Number (%) of people/households covered by health insurance, by population group and specifically for poor/vulnerable groups.</p>	<p>2a. Household expenditure and utilization surveys.</p> <p>2b. Health insurance enrolment records.</p>	<p>Core indicator 2. The ratio of household out-of-pocket payments for health to total expenditure on health</p> <p>Optional indicator 2: % of households impoverished annually by out-of-pocket payments, by expenditure quintile</p>
3. Improving efficiency of resource utilization.	<p>3a. Information on government expenditures on wages and salaries readily available.</p> <p>3b. Availability of data on government expenditure on priority problems, by level of government.</p>	3. Government expenditure accounts.	Optional indicator 3: Government expenditure on wages and salaries as % GGHE
4. Improving financial transparency and management at operational levels.	4. Number and % of facilities meeting established national financial management criteria.	Audit office.	

Source: Monitoring Health Systems Strengthening: A Handbook of Indicators and Related Measurement Strategies (WHO, draft version April 2010)

ANNEX XIV. HEALTH FINANCING PERFORMANCE INDICATORS USED IN NICARAGUA

Health financing performance indicator	Indicative performance indicator target(s)
1. Level of funding:	The existing resource mobilization potential is exhausted. Total health expenditure per capita is at least US\$34 (in 2000 prices) (cf. WHO 2001) and within the range of the regional average.
2. Level of population coverage:	The total population is covered by a social health protection mechanism, i.e. having access to key health interventions at an affordable cost.
3. Extent of financial risk protection	At least 85% of total health expenditure is based on prepaid funds (e.g., taxes, health insurance contributions), and less than 1% of households experience catastrophic expenditure. (Catastrophic expenditure occurs when households spend more than 40% of their disposable income on health (Xu et al. 2003)).
4. Level of equity in health financing:	Health financing payments (e.g., SHI contributions, taxes, out-of-pocket payments) as a share of household capacity-to-pay (non-subsistence expenditure) are equal across income quintiles.
5. Level of pooling:	Health spending per person is equal across pools (i.e., health financing schemes), adjusted for health risk units.
6. Level of cost-effectiveness and equity in benefit package composition:	The benefit package composition is based on equity and efficiency criteria.
7. Level of efficiency in benefit package delivery:	Remuneration mechanisms minimize incentives for over- /under-provision or cost-shifting. Resource allocation reflects health care needs and health care costs.

Source: Mathauer, I, Cavagnero E, Vivas G, Carrin G (2010): "Health financing challenges and institutional options to move towards universal coverage in Nicaragua.", Discussion Paper 2-2010, Department of Health Systems Financing, WHO, Geneva, http://www.who.int/health_financing/documents/cov-dp_e_10_02-insop_nic/en/index.html

ANNEX XV. AN EXAMPLE OF SET INDICATORS MAPPED TO ACTIVITIES TO DERIVE HIS COSTS

Supply Chain Management Example

Functional Domains: [1,2,4,5,6,7,9] 9 Business Processes	Cost10Type	Archetypical Users	Cost Type
Central stock monitoring	F	Chief health officer	V
Facility stock monitoring	F	Facility health	V
National demand forecasting	F	manager	V
District demand Forecasting	F F	District health	V
Stock threshold alerting & notification	F	manager	V
Distribution and logistics management	F	District store manager	V
Service delivery monitoring	F	Provincial health	V
Service delivery forecasting		manager	V
		Pharmacist	
		Central store manager	
		District store manager	

Principal Indicators			
Sample Indicator Questions* Note: Informatics and Information Systems Subject Matter Experts within each country will have to generate the indicator questions in consultation with stakeholders; The reliability of cost projections depends on the precision of indicator	Relevant Sector Level (National, Sub-national, common across all sectors)	Comments / Business Processes targeted (BPT)	Estimated Cost (USD)
Is there a supply management system?	Common across units	BPT: all	
Number of employees and category types directly associated with supply chain management system	Common across units	BPT: all	
Does your supply management system track stock-out?	Common across units	BPT: Central stock monitoring, Facility stock monitoring, Distribution and logistics management	
Does your supply management system forecast demand?	Common across units	BPT: National demand forecasting, District demand Forecasting	
Does the supply management system have threshold alerts? (progression from reactive to proactive planning)	Common across units	BPT: Stock threshold alerting / notification	
Does the supply management system enable pre-determined protocols? (e.g. FIFO, LIFO)	Common across units	BPT:	

ANNEX XVI. EXAMPLES OF ACTIVITIES TO COST IN THE HEALTH FINANCING MODULE

Activities with main purpose of improving resource mobilization

1. Donor alignment (e.g., one big meeting per year)
2. Capacity building for improved financial management
3. Training staff

Activities with main purpose of improving pooling (risk reduction)

1. Social Health Insurance (SHI)

The user is asked whether to set up SHI, or to expand enrolment, as the costs will be different. Activities/costs include:

- Admin costs for SHI start-up/ expanding enrolment
- Capacity building
- Monitoring
- Payment system/purchase
- Adjust contributions: note that the SimIns has a premium contribution estimated based on average member salaries and % contribution

* The tool should allow for changes in levels of premium and the associated compliance

2. Community-based health insurance (CBHI)

The user is asked whether to set up SHI, or to expand enrolment, as the costs will be different. Activities/costs include:

- Admin costs for CBHI start-up/ expanding enrolment
- Admin cost/savings for combining multiple pools of CBHI²⁶
- Capacity building
- Monitoring
- Payment system/purchase

3. Regulate user fees at public facilities

- Admin cost

4. Ensure compliance with the exemption regulations at all provider levels

- Monitoring

²⁶ A problem at country level may be fragmentation - need to pool the smaller CBHIs into one large common pool. This will save money for admin costs.

5. Strategic information

- Strengthen data collection on out-of-pocket (OOP) expenses

Activities with main purpose of improving purchasing

1. Activities related to contracting

- Any admin related to purchasing services (e.g., implement contractual arrangements with NGOs for provision of defined services as needed) including medium and long-term sustainability plans.

2. Provider performance incentives

- Costs for admin and monitoring

3. Monitoring resource allocation

- Strengthen annual routine monitoring of allocation of increased funding to health priorities

4. BCC/IEC activities on health seeking behaviour

- To ensure that eligible households are aware of pooling advantages and exemption mechanisms.

5. Develop financial incentives for rational care seeking

- Note: we have suggested that demand side incentives can be included either in the disease-programme specific module or here in the overall HFP module

Activities with overall health financing function

1. Ministry staff working on health financing (salary cost)

2. Institutionalisation of NHA

3. Expenditure tracking surveys

4. Implementation of an electronic banking system for financial transfers

5. Support capacity building in health economics research

Moreover, activities can be classified

- by type of policy activity (modification/revision/reform), or
- as referring to changes in institutional design and organizational practice

ANNEX XVII. AREAS FOR CONSIDERATION FOR THE THREE HEALTH FINANCING FUNCTIONS IN THE CAMBODIA HF STRATEGY

Source: Kingdom of Cambodia (2008), *Strategic Framework for Health Financing 2008-2015*

Revenue collection and resource mobilization

- Increase in government's share of total health spending through overall improvements in national taxation and other revenue collections
- Improve financial management, allowing increased availability of government funding at decentralized level and for health service delivery, including linkage with performance of the system
- Sustainable, harmonized and aligned donor funding, especially for HEF ²⁷ and contracting arrangements
- Implementation of existing government policy on Social Health Insurance and enabling policy environment for scaling-up CBHI schemes
- Resource mobilization for under-funded priorities and neglected health problems

Pooling

- Xefficiency in their implementation, combines administrative resources using a common database of beneficiaries, allows for portability between HEF and CBHI as population status and poverty levels change, promotes progressive subsidization and avoids unwanted transfers
- MoH policy on scaling-up HEF at national level, including policy on pooling of government and donor funds to finance service delivery for the poor and vulnerable population
- Implementation of existing government policy on SHI, migration of beneficiaries from HEF to other pre-payment schemes and from informal schemes to social health insurance
- Implementation of Decentralization and Deconcentration in the health sector through strengthened planning and financial management processes at PHD level
- Implementation of provincial and District block grant mechanisms, allowing decentralized pooling of funds

²⁷ Health Equity Funds

Purchasing

- Enhance local governance and community participation in user fee and demand-side financing schemes and in local health planning processes
- MOH policy on quality of health service provision and use of purchasing arrangements as leverage for achievement of quality standards
- Definition and funding of MPA and CPA packages and treatment protocols, as well as continuums of care to support achievement of health sector priorities (e.g. Reproductive, Mother, Newborn and Child health services)
- MOH policy on contracting arrangements and scaling-up at national scale
- MOH policy on HEF and CBHI, and use of those demand-side schemes as leverage for quality health service delivery
- Human resources strategy and staff management policy
- Integration of provider payment mechanisms at facility level (budget, fees, capitation or staff incentives) to avoid duplication and overlaps at HC and RH level, and to allow a coherent funding of health facilities recurrent costs and staff
- Introduce private practice regulations, including licensing and accreditation of private providers, alongside enforcement measures.

ANNEX XVIII. CONCEPT NOTE ON MODULE FOR GOVERNANCE²⁸

This note outlines the purpose, scope and proposed structure of the module on Leadership and Governance within OneHealth.

1. Purpose

Health system governance - one of the core 'building blocks' or functions of any health system (WHO, 2008) - is being increasingly argued to constitute a critical requirement for the attainment of the MDGs. As a part of overall governance, health systems governance is concerned with the 'actions and means adopted by a society to organize itself in the promotion and protection of the health of its population' (Dodson et al, 2002, ref'd in Siddiqi et al, 2009). Health system governance covers the 'stewardship' function of health systems (Murray and Frenk, 2000), and incorporates the set of checks and balances that are needed to provide efficient and equitable health care delivery in the context of increasingly market-driven and pluralistic health systems. Accordingly for the Governance module, there are two overall objectives, to:

- Estimate costs associated with specific activities aimed at strengthening governance within the health sector
- Highlight linkages with other parts of the health system models in OneHealth, in order to emphasize the strategic importance of the Governance-related activities in affecting the overall health outcomes modelled in other parts of the model (*more specific thought needs to go into these linkages*).

In order to underline the core function of supporting overall planning for the health sector we propose that the module be named "**Health System Governance and Leadership**". Users of this module would most likely be the central planning unit of MoH.

2. Scope

A number of overall and health-specific frameworks for assessing governance have been put forward, e.g. World Bank, UNDP, WHO (reviewed in Grindle, 2007 and Siddiqi et al, 2008). There is broad agreement about the core features or underlying principles that should be present, including strategic policy formulation, regulation, voice and accountability. Operationalization of some of these conceptual frameworks has been attempted via qualitative surveys / questionnaires, e.g. the World Bank's Worldwide Governance Indicators (WGI) or Country Policy and Institutional Assessments (CPIA). With specific reference to the health sector, a newly proposed framework by Siddiqi et al builds upon previous efforts, going down to the level of specific questions across three assessment levels and ten overarching principles.

²⁸ This section was taken from the document "Concept note on module for Governance" by D Chisholm, K Stenberg, T Edjer, WHO Draft 15 April 2010.

In the context of a costing exercise undertaken in support of the High-Level Task Force for Innovative Financing, Chisholm et al (2010) distilled these ten principles into a discrete number of intervention domains and costable activities (Figure 1). Certain domains were excluded from that exercise on the grounds that they would be more appropriately covered under a different 'building block' of the health system (e.g. health information systems, human resources for health), each of which are subject to their own cost assessment. That is not to say that these domains do not represent key aspects of governance in health; rather, the purpose is to try and set some boundaries to what are all inter-linked functions and avoid double-counting of resource inputs or costs.

Figure 1. Core activities for Health System Governance and Leadership

Principle	Intervention area	Core activities
Strategic vision	Strategic planning & evaluation	National / sub-national health planning & leadership Monitoring & evaluation of health system performance(*) Performance incentives
Ethics	Strategic planning & evaluation	
Responsiveness (of institutions)	Strategic planning & evaluation;	
	Stakeholder collaboration	Consensus building via stakeholder consultations
Participation & consensus orientation	Stakeholder collaboration	
Rule of law	Regulation & oversight	Audit (operations, performance) Licensing (facilities, drugs) Contracting (with service providers) Self-regulation (professions) Accreditation (facilities, providers)
Transparency	Regulation & oversight	
Accountability	Regulation & oversight	
Equity and inclusiveness	<i>Excluded</i>	Covered above or by HIS; social protection > FIN
Effectiveness and efficiency	<i>Excluded</i>	Outcomes not well defined; HR aspects covered elsewhere
Intelligence and information	<i>Excluded</i>	Covered by HIS strengthening

(*) including civil society monitoring such as watchdog organizations, and citizen voice interventions such as patient surveys.

Based on the literature and the costing done for the Taskforce, we accordingly propose to organize governance-related activities and costs around the following three overarching areas: a) strategic planning and evaluation, b) stakeholder collaboration and c) regulation and oversight.

3. Structure

Each module of the Unified Health Model is envisaged to have the following essential structure:

1. a situation analysis/snapshot that sets the scene
2. an analysis of strengths and weaknesses
3. a list of strategies/options with activities that the user can choose from and estimate the cost for
4. links to other modules in the tool
5. scenario simulation, indicating what investments would bring over the planning period.

In the specific case of governance, certain activities would appear to fall more appropriately within the remit of other 'building blocks' of the health system, for example leadership training or professional registration / licensing could fall under 'human resources for health', financial audit could fall under 'health financing' and - as shown above - health management information systems could be addressed under 'health information systems'. However, the reality on the ground is that many of the institutions undertaking these activities or functions are para-statal, i.e. deliberately separated from core government in order to maintain some degree of independence. This would suggest that it would be more appropriate to put the costs and activities collectively in a module for leadership and governance.

This is a point that would require further consideration and discussion by the group.

4. Content

Indicators for Situation Analysis

The plan is for every module to open with a situation analysis screen. This screen contains core indicators which are graphically presented and pop up when the user opens the module. The purpose of this screen is to present some of the key indicators that would help to understand the current situation in the country vis-a-vis Health System Governance. The snapshot is a quick view of the type that can be presented to high-level policy makers.

Indicators for the situation analysis should be selected based on (at least) the following criteria:

1. the indicator should illustrate current performance for this area in the tool (they are "tracer indicators")
2. the data should be available for most countries so that values can be loaded from a database with country-specific values and appear automatically.
3. The indicators should link to the activities proposed in this module, so that if investments are made accordingly, performance as measured by the snap shot indicators should improve.

As part of a handbook for monitoring health system strengthening, WHO has in fact recently proposed a set of marker indicators for assessing health system governance (WHO, 2008), including 10 'rules-based' measures that capture the availability or otherwise of certain policies (e.g. an essential drug list), and 6 'outcome-based' measures that encompass their actual implementation or enforcement (e.g. absence of essential drugs). The indicators can be found in Annex XVIII. A composite governance Policy Index can

also be constructed, comprising the ten rules-based indicators. While these indicators may be useful for providing a snapshot, it should be noted they are mostly YES/NO type questions and therefore may not be able to adequately differentiate performance in the various areas.

Another composite index that is already available at the country level is the World Bank's Country Policy and Institutional Assessment (CPIA; World Bank, 2007), which seeks to assess the quality of a country's policy and institutional framework with reference to a number of broad areas of performance (economic management, structural policies, policies for social inclusion / equity, public sector management and institutions); item 9 deals with the criterion of human resource development, which is operationalized with reference to the health and education sectors, including a sub-item that concerns the ability of the health sector to provide protection against the financial burden of ill-health, equitable access to essential services and appropriate regulation and oversight. A full description of CPIA domain 9 is provided in Annex XIX. Countries are scored in the range 1-6, where 6 equates to optimal performance. The main downside of the CPIA index is that it is a rating that is imposed on countries by an outside / donor institution, and this might limit its acceptability in countries.

A recent review of governance in health service delivery has also identified a number of performance issues and indicators, which are grouped under the following categories: budget and resource management; individual providers; health facilities; informal payments; and corruption perceptions (Lewis and Pettersson, 2009; see Annex XX for a summary of the indicators).

As a first step in determining a final list of items for the snapshot situational analysis, we can map out the indicators in these various documents in order to identify joint indicators and their potential data sources. *(Such a mapping undertaken at end of April 2010)*

Activities costed in the tool

We propose that the activities costed be organised around the core activities listed in Figure 1. The specific ingredients costed under each activity (such as meetings, staff time, etc) will be mapped out as one of the next steps for the development of the Governance module.

Linking situation analysis indicators to activities

Within each area of activity, there will be indicators for situation analysis which should ideally link to the activities proposed. For example in the area of Licensing and accreditation of facilities, there may be initial indicators used to guide the users thinking about how to set targets for this activity. The targets are then linked to the activities costed. E.g. ,:

Indicators:

- What proportion (%) of health facilities are currently accredited?
- What proportion (%) of health facilities should be accredited?

Activity costed:

- The accreditation cost can be done either as a lump sum / salary cost for a size team and budget related to population of the country/number of facilities, etc. The tool will not be prescriptive, but provide suggestions to stimulate the costing process.

Similarly, for the area of Monitoring & evaluation of health system performance, this may include guiding questions such as whether the country has undertaken a Public Expenditure review, or a Public Expenditure Tracking Survey.

The specific questions and activities will be mapped out from May-June 2010.

Links to other modules in UHM

In general many of the activities can be linked to specific components of the health system. For example:

- regulation of medicines - linked to drugs
- accreditation and licensing of health facilities to ensure they meet national standards - linked to infrastructure module (refers to both public and private providers)
- accreditation and licensing of health workers - linked to HRH module (refers to both public and private practitioners)
- a strong HMIS is required for the performance audit/ annual performance report

Note to the group: more thinking needs to go into how the governance functions are linked to overall health system performance in the bottleneck analysis.

5. Caveats

Attempting to put a price on health system governance is fraught with difficulty. Some of the key reasons for this are due to:

- Lack of **clarity about what is “good enough” governance** – while various tools have articulated what is “good governance” the relationship between good governance and health outcomes is unclear. In particular, how good does governance have to be for health system goals (such as improved health, and health system responsiveness) to be achieved?
- The **context-specificity** of the concept of governance – and in particular the need to link the notion of good governance to local values, customs and norms.
- The **intersectoral nature** of many interventions to promote governance – measures to strengthen government budget processes, or audit, or democratic processes can be implemented on a sector-specific basis but may be more cost-effective and have greater lasting impact if implemented across sectors.
- The **lack of empirical evidence**, such as previous quantitative assessments or in-depth case-studies of the process of developing leadership and governance in countries and the costs associated with these measures.

ANNEX XIX. SUMMARY OF HSS HANDBOOK PROPOSED INDICATORS FOR HEALTH SECTOR GOVERNANCE

Indicators	Data collection method	Scoring
Policy Index		Sum of the scores of 10 indicators. Max. score: 10
1. Existence of an up-to-date national health strategy linked to national needs and priorities	Review of national health policies in respective domains (essential medicines and pharmaceutical, TB, malaria, HIV/AIDS, maternal health, child health/immunization, etc).	If adequate policy does not exist or cannot be assessed : 0
2. Existence and year of last update of a published national medicines policy		If adequate policy is available: 1
3. Existence of policies on medicines procurement that specify the most cost-effective medicines in the right quantities; open, competitive bidding of suppliers of quality products		
4. Tuberculosis: existence of a national strategic plan for tuberculosis that reflects the six principal components of the Stop-TB strategy as outlined in the Global Plan to Stop TB 2006–2015		
5. Malaria: existence of a national malaria strategy or policy that includes drug efficacy monitoring, vector control and insecticide resistance monitoring		
6. HIV/AIDS: completion of the UNGASS National Composite Policy Index questionnaire for HIV/AIDS		
7. Maternal health: existence of a comprehensive reproductive health policy consistent with the ICPD action plan		
8. Child health: existence of an updated comprehensive, multiyear plan for childhood immunization		
9. Existence of key health sector documents that are disseminated regularly (such as budget documents, annual performance reviews and health indicators)		
10. Existence of mechanisms, such as surveys, for obtaining opportune client input on appropriate, timely and effective access to health services		

Source: *Monitoring Health Systems Strengthening: A Handbook of Indicators and Related Measurement Strategies* (WHO, draft version April 2010)

ANNEX XX. COUNTRY POLICY AND INSTITUTIONAL ASSESSMENT (CPIA): DOMAIN 9: BUILDING HUMAN RESOURCES

The breadth and quality of a country's human capital is a key determinant of its economic growth and social development, including global attainment of the Millennium Development Goals (MDGs), over half of which relate to Human Development (HD) outcomes. This criterion assesses the national policies and public and private sector service delivery that affect access to and quality of: (a) health and nutrition services, including population and reproductive health, (b) education, ECD, training and literacy programs, and (c) prevention and treatment of HIV/AIDS, tuberculosis, and malaria¹². ECD refers to Early Child Development programs, including both formal and nonformal programs (which may combine education, health and nutrition interventions) aimed at children aged 0-6.

Each of these three major areas of human development should be rated separately on the scale from 1-6 outlined in the attached Box. Within each HD domain, the quality of both policies and program design and implementation should be assessed. In most cases, government performance will be stronger in some program areas than in others (i.e., basic health services vs. nutrition, primary education vs. tertiary, or HIV/AIDS vs. malaria). The rating for "health" or "education" should reflect a judgment about the relative importance of each underlying policy/program area for the country's overall development. To determine the overall rating, the three broad areas – health, education, and HIV/AIDS, TB and malaria -- should receive equal weight.

1. a. Policies, programs and implementation are nonexistent or grossly inadequate to assure equitable access to a minimum package of basic health services, protect against the financial burdens of illness, or prevent malnutrition.
- b. Policies, spending, and effectiveness are nonexistent or grossly inadequate to assure literacy, universal access to basic education, equitable access to ECD services, and adequate post-basic education and training; teacher and student learning standards are nonexistent or grossly inadequate.
- c. Policies, programs and implementation for prevention and treatment of HIV/AIDS, tuberculosis, and malaria are nonexistent or grossly inadequate.
2. a. Policies and funding permit only limited access to essential health services and protection against the financial burdens of illness; national health strategy lacks many important elements; oversight and regulation are largely ineffective; programs to prevent malnutrition are limited; public resources generally do not achieve intended goals.
- b. Policies, spending and effectiveness are inadequate to achieve universal basic education, literacy, or equitable ECD access; teacher and student learning standards are low; policies for post-basic education and training are inappropriate and/or poorly implemented.

c. Policies for prevention and treatment of HIV/AIDS, tuberculosis, and malaria exist, but funding and implementation are limited; limited standards and epidemiological information exist; public resources generally do not achieve intended goals.

3. a. Policies and programs provide for some essential preventive and curative interventions, but financial protection for the poor against the burdens of illness is limited; national health strategy lacks key elements and government stewardship and regulation are only partly appropriate; programs to prevent and treat malnutrition exist but implementation is weak; public resources achieve some intended objectives.

b. Policies, spending and effectiveness are adequate to achieve progress towards universal basic education, literacy, and equitable ECD access; standards for teacher preparation, student learning, and oversight of private/NGO providers exist, but lack key elements or implementation is weak; policies for post-basic education and training exist but are inadequate in some areas or ineffectively implemented.

c. Policies for prevention and treatment of HIV/AIDS, tuberculosis, and malaria are in place but are not effectively implemented; tracking of program coverage is inadequate; public resources achieve some intended objectives.

4. a. Health or social insurance policies provide basic protection against the financial burdens of illness; public expenditure on health allows access to an appropriate package of preventive and some curative services; national public health policy and government regulation and oversight are appropriate; programs exist to prevent under- and micronutrient malnutrition, as well as severe malnutrition, and are adequately implemented; public resources often achieve intended objectives.

b. Policies, spending and effectiveness are generally appropriate for sustained progress towards universal basic education, literacy, and more equitable access to reasonable quality ECD services, although there may be gaps or inconsistencies; standards for teacher preparation, student learning, and oversight of private/NGO providers are largely appropriate, although implementation may be incomplete; policies in place for post-basic education and training are appropriate for sustained progress on quality, equity of access, and the efficiency of resource use.

c. Policies for prevention and treatment of HIV/AIDS, tuberculosis, and malaria are in place, but coverage is limited; systems to track program coverage are being put in place; public resources often achieve intended objectives.

5. a. Appropriate health or social insurance policies exist; preventive and curative health services have good coverage; national public health strategy and government oversight at central and decentralized levels is appropriate; policies and resources to prevent and treat all forms of malnutrition are in place; public resources generally achieve intended objectives.

b. Policies, spending and effectiveness are appropriate for achieving universal basic education of reasonable quality, universal literacy, and equitable access to reasonable quality ECD services; standards for teacher preparation, student learning, and oversight of private/NGO providers are appropriate;

system performance and student learning outcomes are tracked, and increasingly used to guide policy; policies for post-basic education and training services are appropriate, and quality, equity of access, and efficiency of resource use are good.

c. Policies for prevention and treatment of HIV/AIDS, tuberculosis, and malaria are in place and programs achieve reasonable coverage; systems to track disease prevalence and program coverage are in place and are showing annual improvements in service delivery; government oversight is appropriate; public resources generally achieve intended objectives.

6. a. Health or social insurance policies exist and have wide coverage; access to appropriate preventive and curative health services is universal and services are client-focused and good quality; national health strategy is consistent with best practice and regulation is effective; policies and resources allow prevention and treatment of all forms of malnutrition; public resources are used cost-effectively.

b. Strategic national education policies, high standards, and effective use of public and private resources support a good quality, universal basic education system, good quality, equitable ECD services, and diversified, good quality post-basic education and training systems adequate to support economic development and life-long learning; government oversight of private/NGO providers is effective; school performance and student learning outcomes are systematically tracked, with feedback to schools and parents; performance data and evaluation guide policy; at all levels of education, equity of access is protected and efficiency of resource use is high.

c. Policies for prevention, treatment, care and support of HIV/AIDS, tuberculosis, and malaria reflect strong government commitment and client-focused programs reach all who need them; national authority is able to track disease prevalence, resources, and program implementation; quality and timeliness of services is steadily improving; interventions focus on the poor; public resources are used cost-effectively.

ANNEX XXI. PERFORMANCE ISSUES AND INDICATORS FOR HEALTH CARE DELIVERY

AREA	ISSUE	KEY INDICATORS
BUDGET & RESOURCE MANAGEMENT	Budget processes	PEFA indicators track budget credibility, comprehensiveness, transparency, execution, recording, reporting, and external audits and scrutiny.
	Budget leakages	Discrepancy between public budgeted health funds and the amounts received by health providers.
	Payroll irregularities	Discrepancy between payroll roster and health workers on site
	In-kind supply leakages	Differences in price paid for similar medical supplies/equipment across health facilities.
INDIVIDUAL PROVIDERS	Job purchasing	Type of procurement used for drugs and supplies.
	Physician credentials	Existence and enforcement of licensing requirements and of continuing education programs.
	Health worker absenteeism	Fraction of physicians or nurses contracted for service but not on site during the period(s) of observation.
	Health worker performance	Direct observation of adherence to treatment protocols, medical knowledge test scores, and patient satisfaction ratings.
HEALTH FACILITIES	Facility performance	Average length of stay, bed occupancy, infection and mortality rates, Apgar scores, and patient satisfaction ratings
INFORMAL PAYMENTS	Under-the-table payments to individuals	Frequency of illegal charges for publicly provided health services.
CORRUPTION PERCEPTIONS	Perceptions of corruption	Fraction of households, citizens or public officials reporting corruption in health. Relative ranking of health sector on corruption indices
	Institutional quality	The Country and Policy Institutional Assessments (CPIA) for health.

ANNEX XXII. DRAFT NOTES FROM IAWG-COSTING MEETING (27-30 JUNE 2011), WHO/HQ

Specific action points for Futures Institute are highlighted in yellow color

Specific action points for others are highlighted in green color

Agenda in Annex XXII

Day 1: Introductory session for the Country Reference Group

Participants

CRG members

André Zida, CRG Burkina Faso

Mme Elisabete Lima, CRG Cap Vert

Mr Sidi Yeya Cissé, CRG Mali

Mohamed Mahmoud Ould Khatry, CRG Mauretania

Futures Institute

Bill Winfrey, Futures Inst

Bob McKinnon, Futures Inst

IAWG agency representatives²⁹

Tessa Tan Torres, WHO

Karin Stenberg, WHO

Howard Friedman, UNFPA

*Susie Villeneuve, UNICEF

*Eleanor Gouws, UNAIDS

Additional participants

Thierry Lambrechts, WHO/CAH (child health)

Chizuru Nishida, WHO/NHD (Nutrition)

George Pariyo, Global Health Workforce Alliance (GHWA)

Dr Hirotugu Aiga, Global Health Workforce Alliance (GHWA)

Muhammad Afzala, Global Health Workforce Alliance (GHWA)

Dheepa Rajan WHO/HDS

Marjorie Opuni-Akuamoa, UNAIDS

Lisa Leenhouts-Martin, GAVI

Maria Patyna, GAVI

²⁹ Participants marked with an asterisk (*) are not regular members of IAWG-Costing but filled in for absent colleagues.

Bill Winfrey presented an overview of the model. Time was not sufficient to go through all modules in detail, but a good overview was given of:

- Overall setup of a projection, country selection etc,
- Type of results/outputs produced
- Health systems planning: Human resources and infrastructure
- Intervention/programme specific costing
- Financial space/fiscal space

Participants were supported to download the software and work with it on their computers at the same time as Bill went through it on the projection screen.

A few specific comments and recommendations were made as follows:

Setup of the model (recommendations for Futures Institute):

- "UHM Core": model needs a better labelling of this item in the setup screen so that the user understands its purpose. Suggest to rename to "Core model (including health programmes)".
- The Currency cell in configuration screen should more clearly indicate that it is the FEX to the US\$ currency, and also explain to the user how this will be used in the tool
- Include a flag to show when a user has entered a comment in one of the tables.
- It was noted that there will be a screen developed where the user can see which sections in the tool have been filled in and which ones have not yet been filled in

Intervention-specific scale up

- Futures Institute to add this part to the user guide, showing how the user has to go through each intervention coverage editor to set a scale-up curve as linear, S-shaped etc. Explain clearly the difference between setting the scale-up pattern in the overall coverage screen vs. setting it for each individual intervention.

Diarrhoea management ORS

- The model uses a classification by severity, e.g., No dehydration / Some dehydration: → the tables need to be made more clear, improving the clarity of headings, explain better what the proportions refer to. IAWG to work with Futures and programme experts on this.

Results outputs

- It was clarified that the model estimates both total costs and incremental costs.
- There was a discussion on input sheets vs. output sheets in the model. Given that the intended lead user of each module could be different, and follows its own planning logic, right now every module has its own input and output framework as shown in the ribbon menu. It was suggested that there could also be added value of one common input sheet which gathers

all the assumptions, where information can be aggregated. It was agreed that this should be further discussed by IAWG.

- The tool should produce graphs similar to MBB that show both costs and impact. Futures Institute will look into this.

OFFICIAL IAWG MEETING, with CRG participation 28 - 29 June 2011

TUESDAY 28 JUNE

Additional participants in individual sessions on the morning of 28 June included:

Kaia Engesveen, WHO/NHD
Gulin Gedik, WHO/HRH
Carmen Casanovas, WHO/NHD
Chizuru Nishida, WHO/NHD
Guy Hutton, WHO
Christopher Fitzpatrick, WHO/STB

Section I: Opening and Meeting Objectives

OneHealth timeline and overview of key progress to date

Bill presented an overview of tool progress to date.

The following specific comments relate to specific modules:

LOGISTICS

- Given certain challenges in the interface between the Llamasoft developed Logistics module and the general OneHealth software, there may be a need to develop an alternative costing framework within OneHealth that users can use if they don't want to go through the Llamasoft approach. IAWG needs to discuss further and consider for V2 or V3.
- There was a discussion regarding how to deal with public private expenditure on commodities, how is this taken into account in logistics module and should this be used to also estimate OOPs. This needs to be considered in the working group on Private sector.

BUDGETING

- Standard formats to be added for GFATM, GAVI and a classic MTEF format
- Get the latter from UNICEF (Susie will follow up with Tom to ask for a classic MTEF format)
- Download GFATM, GAVI formats (Tessa send link to Futures Inst)
- Futures Inst to programme in standard formats.

RESULTS OUTPUTS

- The recommendation was reiterated to have a function whereby a 4-page summary report is automatically outputted in the results section,
- ➔ Susie to share an example of a recent MBB report from the most recent version of MBB

Section II: Setting the scene: the need for better planning tools

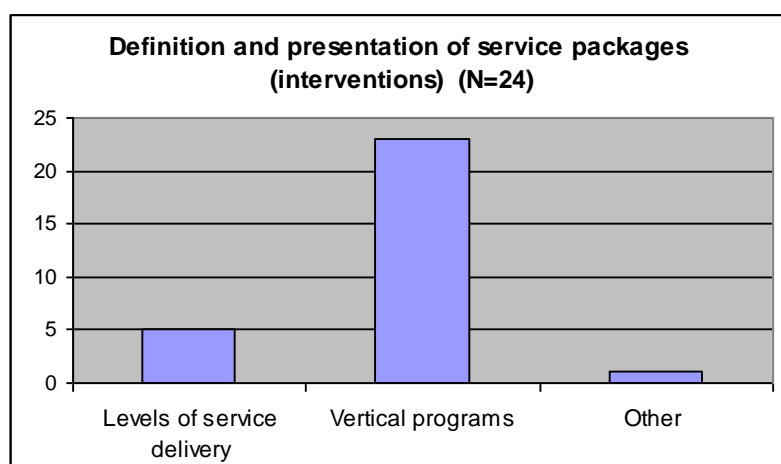
Review of existing national strategic health plans

Karin gave an overview of an ongoing WHO review of national strategic health plans.

- The purpose of the review was to assess the key concerns and strategies that countries bring forward in their NSHPs for health systems planning, to ensure that OneHealth includes mechanisms for the user to plan for, and to cost, associated activities.
- The review examines the ways in which costs are presented in the NSHPs, the methods used for costing as well as the scope and comprehensiveness of cost estimates provided.

It was agreed that the review helps to show the added value of the OneHealth tool. It also provides a basis for justifying various options and strategies that are programmed into the software. As an example, Figure 1 below illustrates the findings of the review to date in that out of 24 national health plans from low-income countries, 23 of these defined the intervention packages for costing and their targets using a programmatic approach, whereas 5 countries did a planning by levels and 1 country used a life cycle approach (some country plans mention multiple approaches). This provides a strong rationale for maintaining the option within OneHealth to either do the service delivery (intervention package) planning by levels or by vertical programmes. It should be noted that the tool allows for the outputs to be organized by various different approaches, and cost outputs can be presented both by levels and by programmes.

Figure 1. Definition and presentation of service packages (interventions) in national health plans



Section III: Review on progress to date for selected models

Tool modularity and envisioned implementation process (refresher) - Tessa

Studies show that vertical programme plans are often out of sync with the national strategic health plan. With OneHealth a synchronization of vertical plans with the national plans is strengthened. The recommendation by WHO will most likely be that for each of the Health System building blocks there is a strategic plan which probably has a longer time frame than the national strategic plan, since their planning horizon will be longer. To accommodate for this, the OneHealth allows for the time frame of the health systems modules to be longer than the overall national strategic plan.

- ➔ Action point: Tessa to put together a note on the OneHealth implementation process and how this will assist integration of planning and costing processes (cycle synchronization, integrated planning, and costing as part of the planning process). Note to be distributed to IAWG for review and feedback.

An overview of the Human Resources for Health (HRH) module

Bill Winfrey gave a quick overview of the HRH module in OneHealth. The module has been functional for some time. The general feedback received to date is that the module is working well, but that the policy section should be modified to facilitate analysis of different policy options.

A few specific issues were discussed, for example the addition of a variable for the Percentage (%) time spent by staff on administration, management or supervision. This variable will be used as input into the "check" whereby the population scale-up need is translated into FTE equivalents.

It was noted that it will be difficult to get assumptions on % time spent on admin. However it does not matter if only a general assumption is used since this variable does not affect the costs, it is just a check in the model to facilitate policy discussion.

- ➔ Action point: Futures Institute to add % variable.

Regarding the use of incentives and using a % coverage measure, it was underlined that incentives are usually applied to the entire workforce or potentially to geographically defined population. This should be explained in the user guide.

- ➔ Action point: Futures Institute to add to user guide.

Bill presented two new features proposed for the HRH module.

- Reworked proposal for policy screens
- A bottom up FTE feature ("check" whereby minutes are translated into FTEs).

The group agreed that the bottom up FTE is a useful feature for policy discussions in country, and that the reworked proposal for policy screens looks more clear.

Summary of recommendations for HRH:

From GHWA the suggestion is to roll out the HRH module as is, and to learn further from country applications. The desk review later in the afternoon also indicated that the module in its current shape is considered very good from a country planning perspective, and is ready to be used at country level.

Programme Disease Control Planning

Bill Winfrey gave a quick overview of how programme planning can be done in OneHealth, using the example of Nutrition. It was suggested that more detail should be provided to users on the bottleneck analysis. This will be added to the technical notes. It was noted that individual programmes with questions on how to use the bottleneck analysis can receive more information from IAWG agencies, particularly UNICEF.

Section IV: Findings from a Country Desk Review

The afternoon was reserved for a presentation by André Zida, Burkina Faso CRG, on how he has undertaken a desk review of the OneHealth.

The purpose of the desk review was to test the operational status of the tool for national health planning, to ensure that the software runs correctly, and to assess the appropriateness of the current structure and content of the tool to assist the planning and costing process. The presentation went through some of the modules in detail:

Human Resources module: comments

For the review, a list of 50 staff types was selected out of the national list of about 100 categories. 50 categories is satisfactory. The problem with using MBB in the past was that staff categories is too aggregate to do detailed HRH planning

The model gives satisfactory results. A strong advantage of the HRH module is the detailed output tables. The policy option screen however is not clear and a review of this is welcome.

Small fixes to note for Futures Institute regarding the software:

1. Change name of default category "Other specialists" to "Other specialist doctors"
2. Change names of the tabs for baseline staff to "*Admin* national", "*Admin* regional" et "*Admin* district"
3. Add to manual: an explanation on how to handle urban/rural HRH planning. Right now the only option is to for example give an incentive to rural employees as a % of total staff
4. Add to manual: explain the function "copy all" that allows for copying and pasting an entire table into Excel (this is not HRH specific but a general note).

More complex modifications

1. Include an output table that compares the number of drivers with the number of vehicles.
2. Explore adding an option of Autosave every 5 minutes (general comment, not HRH specific)

Infrastructure module: comments

Overall a very good impression. Some minor comments as follows:

Small fixes to note for Futures Institute regarding the software:

1. It may be that not all, but only a % of facilities have electricity/water costs. Here the recommendation by IAWG is that the improvement of equipment for electricity/water costs would fall under small rehabilitation costs.
2. Move the table for how to define the facility types i.e., the number of beds/hospital to a more visible place in the input sheets for defining the facility types (now it is in the end column of one of the input tables)
3. Recommendation was strengthened to add a second category of buildings not for service delivery, but including maternity waiting homes etc. It was noted that this is already on the to-do list.
4. Increase the max number of facility types to 20.

Software problems:

- ➔ Data was entered on HRH management costs and Infrastructure mgt costs and the data disappeared. Futures Institute to look into the bug causing this.

Zida agreed to work further on the review and to complete the section on service delivery and programme costing, and also to look at an option of planning by levels.

Budgeting

Overall, the name of this section in the menu should be changed to "budget mapping".

The only concern raised here was when the user would like to output a budget classification that makes use of levels of budget categories.

- ➔ Futures Institute will look at options for this and include this in the user guide.

Overall comments from presentation on the Desk review

- Existing tools such as MBB do not cover planning and costing for Governance, HIS etc, Thus in Mauritania additional costing tools were developed to address these elements.
- The added value of MBB is that it clearly links investments to outcomes. This can be strengthened in OneHealth in terms of presentation.

The group noted that additional desk reviews are planned. A consultant in Ghana has been contacted to do a desk review for Ghana and DRC will be explored as a third option.

Section V: New and Ongoing Developments in OneHealth

TUESDAY 28 JUNE

Additional participants in individual sessions on 29 June included:

Ramesh Krishnamurty, WHO/IER
Dele Abegunde, WHO/EMP
Inke Mathauer, WHO/HSF

Health Information Systems (HIS)

A presentation was given by Ramesh Krishnamurty, WHO/IER, member of the Expert advisory group on the HIS component for the OneHealth Tool. The following points were made:

- eHealth is a broad concept that includes health information systems.
- Multiple actors: Ministry of Health, Ministry of telecommunications, etc.
- Example presented from India, where Costing for ICT and eHealth happens at both district and state level.
- OneHealth should allow for costing HIS at many different levels. The user should be able to aggregate costs from e.g., 10 districts into one total cost estimate. This is an issue that is common across modules in the tool. The IAWG-Costing will discuss what outputs should be aggregated when multiple projections are combined.
- Paper system vs. electronic system: the former would have a higher dependence on HR and in general be more costly to maintain.
- The need to minimize double counting of the resources needed for HIS with resources costed in other OneHealth modules. The model could allow for e.g., supply chain management systems in both HIS and Logistics modules, with a pop-up message warning the user not to double count. In the end the structure depends on who the budget holder would be for each activity.
- The reality on the ground is that donors drive investments for vertical systems e.g., related to HIS for HIV, malaria, etc.
- There is a complex set of sub-systems for HIS, with various levels of interactions between them. There are 11 HIS functions or subsystems, e.g., laboratory system, census system, disease surveillance system.
- HIS within countries are at different levels of maturity and countries would plan for different strategies.

The group discussed the potential issue of double counting as each individual programme plans for M&E and ICT and at the same time there are overall HIS functions.

The tool can show added value to donors by showing the cost savings that would be made from investing in the overall system rather than funding specific activities such as DHS surveys etc.

Roughly 40 countries have developed an HIS plan and out of these 3-4 have costed their plans.

In Burkina, the HIS costing is done by assessing the needs at district level and then aggregating the costs.

Overall conclusion: the general OneHealth approach is in line with HIS proposed framework for costing.

Action points:

➔ Ramesh to share budget structures from countries that have costed HIS plans.

Non-Communicable diseases

Presentation by Dele Abegunde, WHO/EMP

A model has been developed by WHO to estimate a "global price tag for the individual treatment of NCDs from population-based, risk management approach for 42 low- and middle-income countries that contributes 90% of the total burden of NCDs in these income groups. The estimates are for interventions targeting a set of cardiovascular diseases and cancers which have been judged to be best-buys based on evidence. In addition, the estimates are extended for additional set of diseases and referred cases from the first level of care (best buys). These are referred to as good buys and expanded set to also include chronic obstructive airway disease, expanded CVD risks, and cancers. Estimation takes the ingredient approach, estimating from the resources needed for evidence based management and the number of individuals with feasible access to care based on plausible coverage (utilization) rates.

The model is also being designed to inform countries to build local NCD scenarios based on the default scenarios.

A few questions/comments:

- For NCDs the model will to a great extent rely on the use of default values.
- Challenges in identifying current utilization rates. However it was argued that countries should have data on which to base this.
- It was noted that NCD costs will be high compared to costs for communicable diseases within OneHealth.
- Many countries will rely on treatment of NCD conditions in the private sector.
- The need to model in referral and then follow-up at facility level; treatment algorithms that include several different levels of care. Within OneHealth this could be solved by separating screening/intensive treatment and / follow-up as separate sub-interventions.

Conclusion: an additional OneHealth programme module will be developed for NCDs. The NCD approach is in line with the general framework used for programme planning.

Next steps: Dele to share model with IAWG and Futures Institute, once available.

Governance and Health Financing

The objective of this session was to discuss the current conceptual framework for the proposed modules on Governance and Health Financing. Specific feedback is sought on setting the boundaries for what activities should be included for financing and governance.

Karin Stenberg, WHO gave a quick overview of the framework set out in the concept notes. The concept note for Financing Activities currently proposes to organize activities according to three health financing functions: resource mobilization; pooling of resources; and effective purchasing. Karin also demonstrated examples of financing activities that are included in existing national strategic health plans health plans.

Inke Mathauer, WHO/HSF, presented an alternative classification with categories of activities for Health financing

1. Information provision/awareness raising
2. Data collection/analysis/research
3. Monitoring (compliance, impact)
4. Inspection, enforcement
5. Planning, conceptual work
6. Consultation, consensus building (including preparation of legal provision)
7. Training

The need to have a section on "programme admin costs" was emphasized, i.e., non-activity based costs for:

1. Long term staff
2. Operational resources

Examples of activities for e.g., SHI could include:

1. Harmoniser le base de financier
2. Harmoniser le taux de contributions
3. Reviser system légale

It was emphasized that the role of OneHealth is to support a situation analysis and the selection of effective strategies to address specific problems. It also models links between programmes and modules so that the user can see for example a change in the financing policy (more pre-payment, less out of pocket and financial barriers) to result in higher coverage rates and thus better health outcomes.

There was a general discussion on where to cover broad issues such as organizational health reforms, decentralization, etc. Some actions can be modeled in OneHealth, for example an increase of admin personnel at lower planning levels. However the overall process cannot be modeled in the software as this is not its purpose.

Summary of recommendations and action points:

- The question of whether financing and governance should be combined or two separate modules remains on the table.
- For the moment however it was agreed that the overall framework for Financing activities could remain organized around the three health financing functions: resource mobilization; pooling of resources; and effective purchasing.

- Health financing module should also include situation analysis indicators, preferably organized by the three functions.
- Susie will send a list of incentives (financial and non-financial) to Futures Institute colleagues, based on MBB review.
- IAWG to review country health financing plans
- IAWG to identify standard methods for costing specific financing activities
- Background materials (concept note) for Health Financing to be further developed.

Section VI: Overarching issues

Data inputs: the use of Defaults

1. Inputs

The group discussed pros and cons of using default values.

- The challenge is not being able to explain to policy makers where the data comes from. Therefore any default data available needs to be well documented.
- There can also be a guidance note to users on how to critically review default data.

It was agreed that having the following data pre-loaded is helpful	Not pre-loaded
<ul style="list-style-type: none"> • Demographic • Epi • Coverage • Intervention detail • Commodity prices • Logistics data • Indicator by levels (bottleneck analysis indicators) • Names of generic HR categories • Names of generic facility types • IMF GDP projections 	<ul style="list-style-type: none"> • Salaries • Country-specific costs like maintenance costs, operational costs for facilities

It was noted however that the quality of some of the current defaults need to be checked by IAWG, including location of warehouses; and the volume and weight data for commodities.

Specific action points:

- IAWG should discuss on Thursday to hire expert to fill data on defaults for remaining interventions, using e.g., defaults already available from ihtp and MBB.
- Tessa to follow up with MSH regarding drug price updates, and explore with WTO regarding database on tax markup.

- The tool should include default indicators for bottleneck analysis these can be picked up for 30 or so countries that have used MBB to identify indicators. Susie to facilitate access to these.

2. Outputs

There was also a discussion on tool outputs. One request was to add as an output the total drug quantities, by year, by type of drug. Futures Institute to act on this recommendation.

Another request was to communicate more clearly to the user the link between inputs and results.

3. Collection data prior to tool application

Bill presented two options for data gathering

- Develop 1-2 page descriptions of data needed for individual modules
- When appropriate, Futures Institute will continue to create the ability to upload data to the OneHealth Tool. Current examples include the upload of commodity quantities to the Logistics module

4. User specific comments and references to sources for data

The tool has a function already whereby comments can be entered for each table. The user can specify comments in free text, for specific line items as needed. The total list of comments can be printed by selecting the menu for Summary Outputs -> Comments summary.

5. Recommendation for flagging: there should be an alert when the default is replaced by another valued and/or the default has been reviewed. Futures Institute to act on this recommendation.

Modular projections

Bob gave a presentation on the proposed process for breaking the OneHealth into modules and then combining them again.

Process envisioned: there is a master holder of the file. Copies of the tool are then handed out to various experts to fill in the different modules.

The suggestion is that users are given different access profiles. This way the tool is partially locked for modular users i.e., it would be made read-only to selected users, so that they can only edit inputs in "their" module.

- Action point: Futures Institute to implement and test this function.

Using OneHealth for annual health sector reviews:

There was a brief discussion on the development of a component for routine monitoring of implementation of the national health plan. CRG participants underlined that this would be of great added value.

This would entail adding a function to OneHealth, which goes beyond its primary intended purpose and therefore first the IAWG should look at the feasibility and proof of concept. A suggestion is to do a review

of existing tools used by countries for annual monitoring and see how aspects could be incorporated into OneHealth.

- Action point: IAWG to review of existing tools (WHO lead).

Cross-cutting areas: Equity, Gender and the Private sector

Equity and Gender

Susie gave an overview of recent work on Equity analysis using MBB: the approach is to run three scenarios in MBB where each scenario corresponds to a specific population group within the country. Investment strategies are specified to each group.

Implications for OneHealth: 3 projections can be run side by side and then aggregated into one summary of total costs. The 3 projections can be viewed side by side in OneHealth to compare strategies planned for each sub-population.

UNICEF has done additional analytical work on reviews to identify effective strategies by quintile.

There is a Gender & Equity Mednet expert group which has yet to start up. The recommendation is for UNICEF to share with the group additional useful reference documents on approaches and solutions specific to reducing inequity.

UNFPA is using the UNDP Gender Marker system.

Follow-up:

- Howard to contact UN women to reengage them in IAWG discussions.
- Susie/Tom to share one key reference document on approaches and solutions specific to reducing inequity.
- Futures to include in the user guide a section on how 3 projections can be run side by side to do an analysis similar to MBB equity analysis.

Private sector

A general issue is where in the tool to deal with the private sector, i.e., in the planning /target setting phase or in the section where the financing is discussed.

When a user says e.g., 20% of drugs should be delivered in private sector, in the current version of OneHealth this means that 20% of the commodity quantities and costs are not included in the total output budget.

Follow-up:

- The IAWG (WHO to take lead) should revisit the treatment of Private sector in OneHealth to document it explicitly and make a consistency check. In particular the area of Governance should be examined as well re: accreditation, licensing, etc.

Country application of OneHealth: expressions of interest and next steps

Feedback from the CRG participants may be summarized as follows:

- Mauritania: look forward to inclusion of more health system elements in the tool such as HIS, Governance and financing activities. Mauritania has used MBB twice, once for MNCH strategy and once for a PNDS, however capacity on its use in the country remains limited. For OneHealth the lesson learnt is to build local capacity. After the country Pact is signed off, each region will need to develop its regional operational plan. This will be done after October 2011.
- Mali is in the process of developing a national health plan. They can already start training on the existing elements of OneHealth and thus get an idea of the workings of the tool and the approximate costs. Mr Cissé will bring back the news of the OneHealth to the deciding Ministry back home.
- Cap Vert: planning for PNDS will start very soon, next month. Dr Lima will bring back the news of the OneHealth to the deciding Ministry back home.
- Burkina: has costed a PNDS using MBB. Now the country will develop a 3-year plan. Mr Zida will bring back the news of the OneHealth to the deciding Ministry back home.

ANNEX XXIII. FINAL AGENDA FOR THE IAWG-COSTING MEETING HOSTED BY WHO, GENEVA 28-30 JUNE 2011*

- Note: an additional informal meeting was held on 27 June as an introductory day for CRG and other interested stakeholders (IAWG members encouraged to attend as additional resource persons);
30 June was an internal meeting for UN-IAWG members only.

Agenda

(Final - 24 June 2011)

MONDAY 27 JUNE: INTRODUCTORY DAY FOR COUNTRY REFERENCE GROUP (CRG) PARTICIPANTS AND OTHER INTERESTED STAKEHOLDERS

Objective of introductory day:

- To provide a detailed overview of the OneHealth tool, going through module by module in order to demonstrate specific characteristics of each section as well as the broader planning framework.

Time	Topic	Presenter/Discussion Leader
Monday, June 27th Briefing for CRG members and other interested stakeholders		Room: UNAIDS - Video Conference Room, UNAIDS building (WHO D building)
09:00-10:15	Welcome, Objectives and overview of the coming 3 days meeting	Karin
	Participant introductions	All
	History of OneHealth and plans for the future: Role of the CRG and process of engagement with countries	Howard
10:15-10:30	Coffee break	
10:30 -12:00	Overview of OneHealth tool: - Overall framework - Presentation of individual modules	Futures Institute (Bill, Bob)
12:00-13:30	Lunch	
13:30-15:00	Model presentation (continued)	Futures Institute (Bill, Bob)
15:00-15:15	Coffee break	
15:15-17:00	Model presentation (continued)	Futures Institute (Bill, Bob)

TUESDAY-WEDNESDAY 28 -29 JUNE: TECHNICAL MEETING OF IAWG-COSTING (WITH CRG PARTICIPATION)

Meeting Objectives:

- To assess the current progress on the development of the OneHealth Tool and assess release dates.
- To discuss findings from the country Desk Review.
- To identify areas of refinement of OneHealth through technical discussions and input from the Country Reference Group.

Time	Topic	Presenter/Discussion Leader
Tuesday, June 28th - Day 1 of Full IAWG technical Meeting		Room: M605 (WHO M building)
I: Opening and Meeting Objectives		
08:45 – 09:10	Welcome, meeting objectives	Tessa, WHO
09:10 - 10:15	Agenda of the meeting	
	OneHealth timeline and overview of key progress to date:	Howard, UNFPA (chair)
	- Tool development ³⁰ (45 mins)	
	o Progress to date, remaining tasks to be carried out by early July and post-mid July:	Futures Institute
	- Tool testing, incl: desk review (5 mins)	
	- Advocacy and Communication (10 mins)	
10:15 - 10:30	Coffee break	
10:30 - 11:00	Findings from an analysis of national strategic health plans: lessons learnt and implications for OneHealth	Karin, WHO
III: Review on progress to date for selected models		
11:00 - 11:15	Tool modularity and envisioned implementation process (refresher)	Tessa, WHO
11:15 - 11:45	Modules for health system investment planning: Human Resources for Health	Futures Institute demonstration of HRH module
11:45 - 13:00	Modules for disease programme planning: progress on intervention/programme costing and impact modules - two examples presented for (1) TB ; and (2) Nutrition	Q&As, discussion Futures Institute demonstration
13:00 - 14:00	Lunch	Q&As, discussion
IV: Findings of Country Desk Review		

³⁰ Futures to provide an overview of modules that are left to be built as well as current timelines, staffing plans for the project, financing needs and gaps.
The detailed tool demonstration module by module will be covered on 27th June.

14:00 - 15:30	Findings from Country Desk Review: Burkina Faso 30 min presentation + Q&As, Discussion	UNFPA chair Andre Zida, Burkina Faso to present *UNDP and other members to participate by telephone
15:30 - 15:45	Coffee break	
15:45-17:00	Desk review and CRG feedback: implications for CORE aspects of the module 1. Parameter setting, situation analysis, selection of planning process 2. Outputs and results presentation	UNFPA chair
17:00-18:15	Desk review and CRG feedback: implications for Health Systems modules - HRH, Logistics and Infrastructure	WHO - chair
19:00 - 21:00	Group Dinner in Geneva city centre	

Wednesday, June 29 - Day 2 Full IAWG Meeting	Room: M205 (WHO M building)
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V: New and Ongoing Developments in OneHealth

08:45 - 10:00	Health Information Systems	HIS expert group
10:00-10:15	Coffee break	
10:15 - 11:15	Progress on costing model for NCDs: update by WHO	Dele Abegunde, WHO/EMP
11:15 - 12:15	Financing Health Policy and Governance: next steps for model development • Overview of activities (including findings from NSHP review) • Discussion	Karin, WHO Inke Mathauer, WHO/HSF
12:15 - 12:45	Combining module-specific projections into an aggregate projection	Futures Institute (Bob)
12:45 – 13:30	Lunch	

VI: Overarching issues

13:30 - 14:30	Data inputs: <i>Improving access to and quality of data for modeling costs</i> a. Extent of data entry required b. Availability of defaults (source of data) c. Pre-application Data scoping form (Futures) Software specifics: d. Flagging essential data requirements within the	Howard, UNFPA Futures Institute (Bill)
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	tool	
	e. Use of reference/comments cells to indicate data source/assumptions	
	f. Use of default data within the tool, indicating defaults vs: user-inputted data, color coding the user interface:	
14:30 - 15:00	User Interface: feedback from CRG and discussion on next steps	Howard
15:00 - 15:15	Coffee break	
15:15 - 16:00	Using OneHealth for annual health sector reviews: Development of a component for regular M&E of national health plan implementation (brainstorming session)	Tessa (chair)
16:00 - 16:45	Cross-cutting areas: request for inputs from CRG <ul style="list-style-type: none"> • Equity • Gender • Private sector 	General discussion with CRG requested to give inputs
16:45 - 17:15	Summary of recommendations made in meeting	UNICEF (chair)
17:15 - 17:45	Country application: expressions of interest and next steps	UNICEF (chair)
17:45 - 18:00	Closure	WHO

THURSDAY 30 JUNE: TECHNICAL MEETING OF IAWG-COSTING

NOTE: Closed Meeting for UN-IAWG members only

Meeting Objectives for 30th July

- To assess progress on the development of the OneHealth Tool and discuss release dates.
- To plan for communication, training and rollout of OneHealth.
- To improve IAWG UN agency coordination mechanisms for technical support to countries and joint collaboration on strategic planning, costing, and financing for health.

Thu, June 29	Day 3: Closed Meeting for IAWG members only	
VII: Planning for communication, training and rollout of OneHealth		
09:30-10:00	Action points from the last IAWG meeting: outstanding issues	Karin
10:00 - 10:30	Contracts, financing	Tessa
10:30-10:45	Coffee Break	
10:45-11:15	Legal issues for model release; Logos, etc	UNFPA (Howard) All agencies to report back on legal requirements
11:15-12:00	Materials needed for rollout/ Country application <ul style="list-style-type: none">- User guide- Technical notes- Case studies- Languages in which materials are available	Susie, UNICEF (chair)
12:30-13:00	Communication materials and events	UNFPA (Howard)
13:00 - 14:00	Lunch	
14:00-15:30	Terms of Reference and Membership of IAWG	All IAWG to discuss *UNDP and other members to participate by telephone
15:30 - 16:30	Overall process for OneHealth rollout: agreement on process and timeline IAWG support to countries for early implementation (2011): logistics and planning <ul style="list-style-type: none">- Number of countries to support in 2011- OneHealth vs. other existing tools- Identifying and training consultants and "master trainers"- Long term planning for technical support to tool development & application- Collaboration with programme-specific planners for roll-out of specific modules (e.g.: GHWA for HRH module, STB for TB module, etc)- Identifying focal points and timeline for rollout	All IAWG to discuss * UNDP and other members to participate by telephone
16:30	Closure	

ANNEX XXIV. PRIVATE SECTOR³¹

Most models take the viewpoint that the costs being estimated are all owned by the public health system. The reality is some regions of developing countries have a significant amount of services being provided by the private sector. As such, it is important that the model can reflect the fact that there is a private sector, which is responsible for some service provision.

From the point of view of costing, we are generally interested in the services, costs and planning of the MoH. As such, the model should seek to estimate only the public component.

Data availability is often a challenge when costing the public sector. Since the private sector costs will be less transparent this provides more reason to avoid trying to cost the private sector elements.

With respect to the private sector, the following must be considered:

- Costs incurred (service delivery in the private sector and other considerations); and
- Financing sources (funding by households/other private sources)

There are two proposals for handling private sector health service delivery:

1. **Adjustments of population in need:** The user is **asked to** focus the model only on the public sector right from the START.
2. for each intervention define the "national population in need"
3. The reduced population in need is multiplied by appropriate % and coverages to obtain "population receiving service by the public sector"
4. **Adjustments of the output costs and cases:** the model initially produces total estimates. Towards the END of the process, a public/private split is introduced to reflect the percent of the costs/services that are expected to be performed by the public sector. This percent would be a function of time for each type of intervention/service.

Suggestions and comments

- Option 2 allows the user to have more flexibility in how they apply the output than option 1
- Option 2 is likely be more transparent to the user as they can intuitively understand national estimates and then allocations of the output, rather than option 1, which requires initial population in need adjustments for all interventions.
- However, Option 1 may be more useful for some interventions where costs for private sector service delivery can be incurred by the public sector – such as cash transfers for institutional delivery whether occurring in private or public sector (e.g., India).

³¹ This section was transcribed from the ppt: "UHM: Private Sector" WHO, UNFPA Nov 2009.

- Coverage data from DHS etc., is national level incl. private

Other areas where the private sector needs to be considered include:

- Cash transfers for seeking care at private providers
- Contracting
- Pre-service training of health workers – the % of staff taking up service in private sector
- Accreditation (governance)
- Public Private partnerships – programme cost activities (e.g., as in TB tool)
- - E.g., PPM for TB (meetings, staff, training, workplace TB programmes)
- - Need for consistent approach across disease program modules in OneHealth?

Also to consider:

- The UHM should allow for changing policies over time. For example, user fee abolition will result in increased use of public facilities (cost shifting to the public sector), whereas overall increase in intervention coverage with impact on health outcomes will be less.
- Improving the quality of care in the private sector will have effect on health outcomes
- Increasing access to private sector care (e.g., through cash incentives) will have effect on health outcomes