Background

Many countries have made considerable progress in using data to inform decision-making processes such as annual health sector reviews, mid-term reviews and evaluations. National authorities have expressed the need to enhance their own analytical capacities to carry out comprehensive assessments of progress and performance. In the context of the MDGs and health systems strengthening, there is increased demand for results that demonstrate the impact of investments. This has led to considerable reporting demands on countries. Strengthening the analytical capacity of countries should contribute to one sound national platform for monitoring progress and performance, from which global reporting will draw. Country annual and other health reviews should also form the basis for all global reporting requirements.

There is substantial global investment in monitoring progress against health goals. WHO, UNICEF, other international organizations and research institutions produce estimates for MDGs and other key health indicators based on available data using a variety of methods to correct for data deficiencies, impute missing values and predict values for future years. The results are made available in peer-reviewed publications and global databases. For some health indicators, such as HIV prevalence and child mortality, tools and methods are sufficiently well explained to enable countries to reproduce or recalculate the estimates made at the global level. In general, however, access to methods, tools and results is piecemeal and country use and ownership is limited.

Several global partners are collaborating to support countries in order to improve data access and analysis, address data gaps and build institutional capacity, based upon the Country Health Systems Surveillance platform (CHeSS). The main goal of CHeSS is to improve the availability, quality and use of the data needed to inform country health sector reviews and planning processes, and to monitor health progress and system performance. Such improvements should be supported in a way that strengthens global monitoring, including reporting of global goals and results of health investments, while minimizing the reporting burden for countries.
Objectives of the workshop

To enhance the analytical capacity of countries to conduct comprehensive health progress and performance reviews in the context of national health plans and related global health goals.

The expected outputs of the workshop included:

- Increased capacity for analysis and synthesis among participants from country institutions;
- Sharing of tools and methods among country participants and facilitators;
- Selected outputs of country analyses that can feed into their health sector reviews.

Participants

A total of thirteen countries participated in the workshop: Mauritius (African Region), Bangladesh, Indonesia, Nepal, Sri Lanka, Thailand (South-East Asian Region), and Cambodia, Fiji, Lao PDR, Malaysia, Mongolia, Philippines and Viet Nam (Western Pacific Region). The country delegations consisted of a mix of people from ministries of health, statistics offices, research organizations and WHO country offices.

The workshop was hosted by the International Health Policy Program, Thailand (IHPP), WHO and ICF Macro. The workshop was attended by 81 participants, including country experts, observers, facilitators, representatives from international organizations and research institutions including, GAVI, the Global Fund, Health Systems Trust (HST), ICF Macro, John Snow International (JSI), Johns Hopkins University, MEASURE Evaluation, Management Science for Health (MSH), the Rockefeller Foundation, USAID/PEPFAR and WHO. A complete list of participants is included in Annex A (page 14).

Structure and Content

The workshop was structured with sessions in plenary and small group discussions. Several sessions were structured through a market place approach in which participants were required to select sessions of interest to attend. Country delegations were requested to divide themselves in such a manner that each session had at least one person from each country, to provide country delegations with exposure to as many tools as possible.

The workshop was organized along a distinct set of analytical outputs to inform the monitoring of progress and the assessment of health systems performance. The tools and concepts were broadly divided into the following categories:

1. Framework and platform for health progress and performance reviews with core indicators
2. Burden of disease, mortality and risk factors: a general epidemiological analysis tool
3. Coverage: Coverage estimation of key indicators
4. Health input and outputs: financing, workforce, medicines, service readiness and quality;
5. Health impacts/effectiveness: estimation from multiple data points for core indicators, e.g. child mortality, maternal mortality, linking coverage to impact
6. Cross-cutting analyses: equity methods and tools to conduct provincial and district analyses and other equity variables; benchmarking and efficiency;
7. Overall performance assessment: benchmarking country performance, bringing results, effectiveness, equity and efficiency
8. Policy analysis: From information to action
9. Institutional capacity
10. Communication and dissemination of data
Table 1: Materials presented during the workshop

- **General epidemiologic context**
  - Mortality and Cause of Death
  - National Burden of Disease toolkit

- **Inputs and outputs**
  - Health financing
  - Service readiness and quality

- **Measuring coverage of interventions with health facility data (looking at quality of data)**
  - Data quality assessment and adjustment tool (DQAA)
  - Routine data quality assessment (RDQA)

- **Estimation of key health impact indicators**
  - Maternal mortality (MMR)
  - Tuberculosis Workbook
  - Child Mortality Estimates (CME)
  - Lives Saved Tool (LiST)

- **Equity analysis**
  - HD Calc - An equity tool

- **Health Progress and Systems Performance Review**
  - A quantitative tool to measure performance: Health Progress and Systems Performance Review (HPSPR)
  - Performance assessment from the Global Fund perspective – A case study

- **Policy analysis**
  - Translating information for decision-making and policy change – A case study

- **Strengthening institutional capacity**

- **Effective communication of data**

The tools were presented according to where they fit in the monitoring and evaluation (M&E) framework and how they structure around the contents of national health sector reviews. Figure 1 presents the tools mapped on to the M&E framework.

Figure 1: Tools and M&E framework

The sessions regularly started with a discussion about current country practices and issues, followed by an introduction to methodological issues and analytical tools based on the country inputs. These were then followed by working sessions for country teams or sub-teams. Within these broad categories, a total of 17 tools, methods and concepts were presented. The list of tools in each category is presented below in Table 1. Some tools have been fully tested and are
available for immediate use; others are in the developmental stage. The agenda for the workshop is included in Annex B (page 22). Additionally a day-by-day guide was distributed indicating where the tool, concept or method fitted within the framework and provided a summary of each these day-by-day (Annex C – page 28). Figure 2 provide a snapshot of the guidance booklet.

Figure 2: Workshop day-by-day guidance booklet preview (full booklet included in Annex C).
A USB key with key information on all the above tools, other relevant documents, presentations and exercises included in the workshop (1370 files) was given to each participant. Providing participants with comprehensive information for each category outlined above, and way more than is ever possible to go through in a five-day workshop, enables them to investigate further certain areas of interest after the workshop and to have the information at hand. Information was organized by daily sessions.

Figure 3 presents a selection of the information included in the USB key. The USB key provided the participants with materials both directly used in sessions as well as additional information and software to access at the participant convenience. A number of the presentations and supplemental materials were updated or added during the workshop sessions. The final complement of tools and resources were made available on the desktop computers in the workshop plenary room. A CHeSS website is under development. Many of the presentations and key documents will be available on this website. Once completed, the website address will be shared with all participants.
Each session included separate subfolders on key documents, exercises and applications, presentations and supporting documents.

Country specific documents such as annual health sector reviews, country data, population projections, statistical abstracts and surveys were included for each of the 13 countries.
Current practices – Country Assessments

As part of the “current practices in countries” session, each country team (13) provided feedback about their perceptions on the strengths and weaknesses in the monitoring and evaluation system of health progress and performance in their country. Results are presented in Annex D. Nearly half the countries (46%) considered and agreed that they had a strong M&E unit in their countries, while nearly a quarter (23%) did not agree, considering their M&E units weak. Nearly one third (31%) did either not know or remained neutral in their answer. Results are presented in Annex D (page 35).

The use of indicators to review health progress and performance indicate that the indicators used tend to focus on the outcomes (coverage of interventions) and impact (burden of disease) domains of the framework.

The main data and the source used routinely is facility-based data (85%) followed by population-based surveys (77%). The use of civil registration data widely used in health sector reviews divided the country teams into those that agreed with their wide use (38%), with those that disagreed (38%), and the remaining not knowing or remaining neutral.

The information provided with respect to the use of specific tools/analysis indicate that still very little is done with respect to data quality or equity analyses. Although benchmarking seems to be more widely used, it is more common for countries to benchmark at sub-national level than to compare themselves with other countries.

One clear output from the assessment of the country practices is the fact that countries are expected to report on too many indicators, a burden which is increased by reporting requirements by international agencies.

Evaluation Results

Participants were requested to evaluate each session in the workshop (17 sessions in total). A pre and post-workshop knowledge and skills self-assessment were also conducted. The results of these evaluations are presented in Annex E (page 38).

In the pre-evaluation, participants were asked to rank their own skills and knowledge of the different subject areas covered in the workshop. The results of the pre-evaluation are shown in Figures 1 and 2 in Annex E. Participants rated themselves as better than average on knowledge of Excel, knowledge of at least one statistical software package, and communicating data effectively. For all the remaining tools and concepts, scores were at 2.7 or below (Annex E Figure 3).

Pre-evaluation results showed that some of the main expectations from the workshop included: 1) improved analysis capacity; 2) learning use of new tools and their applications in-country; 3) learn how to better use available data; 4) learn how to assess performance; 5) share knowledge and network with other participants.

Each workshop session was evaluated for the overall usefulness, the duration, the level of difficulty, the usefulness of the presentation/materials, and the usefulness of the facilitators and exercises. The items were scaled from 1 to 5 with 1 indicating negative feedback and 5 indicating positive feedback. Figures 6-11 in Annex E compare the distribution of each criterion over the various tools/concepts. Most tools and concepts scored high on their usefulness. The responses to duration, level, presentation materials, exercises and facilitators were varied based on a specific tool/concept.
Participants were given a self-assessment of knowledge and skills questionnaire post-evaluation to compare with their pre-evaluation self assessment scores. The results of the post-evaluation self-assessment are shown in Figure 4 in Annex E. Results of the pre- and post- workshop self-assessment were compared (Annex E Figure 5). Although the self-assessment score for skills on Excel remained the same (3.7), participants uniformly gave themselves higher self-assessment scores after the workshop compared to pre-workshop self assessment. All tools, concepts and methods scored 3.1 (LiST) and higher with the exception of the Global Fund performance-based funding model and the TB estimation (Annex E Figures 3 - 5).

**Overall evaluation**

Participants were also asked to evaluate the workshop on the overall usefulness, duration, level and whether the workshop had reached their expectations. Overall, 85% of participants found the workshop useful (47%) or very useful (38%).

The items were scaled from 1 to 5 with 1 indicating a negative opinion and 5 indicating a positive opinion (Figure 4 - below). The overall usefulness of the workshop was rated high with a mean score of 4.2. The appropriateness of the duration of the workshop was rated lower at 3.2. Nearly half the participants (47%) considered the length of the workshop to be okay, while just under a quarter (24%) found it a little too long but over one fifth found too short (22%) (Figure 5 below).

Generally, the level of the workshop was thought to be at the right level (56%), although 23% of participants found too hard and 17% found it too easy. The level of the workshop scored 3.2.

Participants were also asked if the workshop met with their expectations and the mean score was 3.7 (compared to 3.9 at the Cape Town workshop) - that is, participants thought the workshop mostly met their expectations. For a majority of participants, expectations were mostly met at (76%) and completely met (2%), while expectations were only met to some extent (15%) or not met for some (9%).

**Figure 4: Average score for the overall final evaluation**

![Figure 4: Average score for the overall final evaluation](image-url)
Figure 5: Distribution of responses for the final workshop evaluation

**Overall usefulness (n=55)**
- Very useful
- Useful
- Ok
- Not useful
- Not useful at all

**Duration (n=55)**
- A little too short
- Much too short
- Ok
- A little too long
- Much too long

**Level (n=52)**
- A little too easy
- Much too easy
- Ok
- A little too hard
- Much too hard

**Expectations met (n=53)**
- Completely met
- Mostly met
- Met to some extent
- Not met
- Not met at all
**Recommendations and next steps**

Feedback from workshop participants was generally positive. Participants suggested that there be more break-out sessions. Another important issue raised was the need for more interactive practice and hands-on practice with the tools following the presentation of the tool to learn how to use them effectively.

There was generally less concern when compared to previous workshop with respect to the number of tools presented and being able to comprehensively go through them.

Overall, there was a clear understanding of the potential added value of the tools for national health sector reviews.

Participants indicated the need to strengthen country capacities for data assessment and analysis through in-country training and follow-up support. While most of the tools were considered useful, the participants recognized the need to select tools according to country needs. Some of the tools identified as particularly useful included:

- ANACoD and HDCalc (Bangladesh)
- NBD, DQAA, HDCalc, LiST (Cambodia)
- SARA, RDQA, ANACoD, NBD, LiST, HPSPR, HDCalc (Sri Lanka)
- ANACoD, NBD, NHA, HDCalc, MMR, CME, HPSPR, Institutional strengthening (Fiji)
- RDQA (immediate implementation), NBD, ANACoD, CRVS, SARA, LiST, MMR, CME (gradual implementation) (Indonesia)
- NHA, NBD, RDQA, CME, MMR, HPSPR (Lao)
- NHA, NBD, RDQA, CME and MMR (Philippines)
- SARA, LiST, ANACoD, NBD and RDQA (Mauritius)
- ANACoD, RDQA, HDCalc (immediately) and MMR, CME and HPSPR (in the long-term) (Malaysia)
- RDQA, MMR, CME, DQAA, SARA, HDCalc, Institutional strengthening (Mongolia)
- DQAA, RDQA, ANACoD, NBD, LiST and HDCalc (Nepal)
- NBD, MMR, HPSPR, ANACoD (Thailand)
- ANACoD, NBD, RDQA, NHA, LiST, HDCalc, Policy analysis and communication of data (Viet Nam)

Another key recommendation that was made is to include presentation of country experiences into a specific sessions, such was the case for the maternal mortality session which included input from two countries (Sri Lanka and Thailand).

Several participants emphasized the role of the workshop in better understanding the analytical work that occurs beyond their institutions, at national, regional and global levels. A clear and improved role is needed among those involved at national level providing data to the global level in view of improving reporting at all levels and avoiding any misunderstandings around different estimates.

Participants requested a focal person to be able to address specific questions on the tools, methods and concepts that would be re-directed to the appropriate facilitator. The contact point will be: CHeSS2011.data@gmail.com

A CHeSS website including key documents, workshop presentations and other information is now up and running where most information on previous workshops (Nairobi, Kenya 2010 & Cape Town, South Africa 2011) can be found.
Some of the tools and concepts currently under development will be further developed with in-country testing and inputs. A number of the tools have already been translated into different languages but efforts will continue to translate other tools and documentation into other languages, notably French and Spanish.

Overall, the workshop turned out to be a very new and innovative approach for countries as well as for coordination within WHO and with other partner institutions. Very positive feedback was received from countries and firm plans to follow-up were established on the last day. These included:

**BANGLADESH**
- To apply and use the tools with national data
- To plan a training workshop/seminar at national level with the support of technical assistance through a short-term consultant

**CAMBODIA**
- To review data requirements for specific tools using as a basis the work undertaken during the workshop exercises
- To produce better analysis of existing data
- To organize and conduct a country training for central and provincial level data with technical assistance from WHO and others

**FIJI**
- To improve coordination between MoH, BoS, FNU and WHO through:
  - Training, implementation and customization of tools at MoH level;
  - Training, implementation and improved coordination amongst stakeholders, as well as data dissemination through better communication at BoS level;
  - Apply the Systems Thinking concept, training and raising awareness of the important of HIS and to develop HIS curriculum, improved collaboration at FNU level;
  - Provide technical assistance HIS and related activities to stakeholders at WHO Country Office level.
- To incorporate relevant tools in HIS-SP, MoH

**INDONESIA**
- To introduce and adopt particular tools for used by appropriate programs / units in MoH.
- To adopt and develop guidelines and training modules in Bahasa Indonesia for RDQA (DQS) in early 2012 and training the appropriate health officers in central, provinces and districts levels and continue to implemented DQS annually (MoH).
- To obtain some technical support from WHO for introducing, training of adopted tools at country level.
- To develop curriculum of Global Health, and Curriculum of HIS for MPH program in Faculty of Public Health, University of Indonesia.
- To organize extended training on specific tools based on a country specific needs and interests in Academic network.
- To ensure some updates of statistics and information are shared with global, central, provinces and districts levels.
- To strength the capacity of the network between MOH, Universities, institutional related.

**LAO**
- To use CME, MMR and HPSPR for the Lao Social Indicator Survey (LSIS) in August 2011
- To organize a follow-up meeting with DPP/MoH on Tuesday 19 August at 9am.
- To request technical assistance from WHO and others for follow-up

**MAURITIUS**
- To make use of the relevant tools to further improve the health sector strategy (2012 – 2015);
- To follow-up with MoH/WHO Country Office focal point and jointly determine areas where the tools could be used to enhance informed evidence decision-making

MALAYSIA
- To implement the use of specific tools as specified above, one set in the short-term and a further set in the long-term
- To conduct an in-country training to share the information and knowledge
- To ensure a link with the focal person and facilitators to be informed on new developments, activities and any updated information

MONGOLIA
- To develop in-country capacity, capacity at MoH, DoH, HSU in research capacity and use of tools, methods and concepts
- To organize in-country training to improve analytical skills at national and sub-national level

NEPAL
- Conduct a meeting between MoHP and DOHS M&E and Health Statistics Departments;
- To share and discuss contents of workshop with country stakeholders meetings as well as regional forums;
- To organize an orientation workshop for district health managers about some relevant tools to be used

PHILIPPINES
- To organize an in-country team meeting in view of prioritizing the workshop tools to adopt within the country context (to be organized the 2nd week of August) assigning roles and responsibilities, i.e. DoH/NSO (ANACoD), NSO (MMR and CME), TB, NBD and RDQA (NEC/DoH), HDCalc (PIDS), SARA (WHO), HPSPR (HPDPB/WHO)
- To plan for a 3-day output and dissemination Technical Working Group (TWG)

SRI LANKA
- To initiate use at country level and gain expertise based on the information provided at the workshop
- To disseminate and to train others
- To inform stakeholders and interact with partners on the tools
- To form a group of trainers that participate in the Bangkok workshop that could train others at country level
- To contact focal point for each tool for customization, updates, support and feedback
- To organize extended training on specific tools based on a country specific needs and interests
- To ensure that any updates of statistics and information are shared with global level to ensure that all information is taken into account to the workshop focal person

THAILAND
- To investigate and research the tools further
- To evaluate the strengths and weaknesses of each tool in the context of use in Thailand
- To organize a country workshop focusing on a specific set of tools

VIET NAM
- To disseminate tools and information presented at the workshop to colleagues and key stakeholders by reporting through a monthly scientific meeting of institutions and to provide access to all information through the web
- To discuss with colleagues which and how best to apply the knowledge acquired in our regular work

Further to the recommendations put forward by country participants, a number of follow-up actions were suggested by facilitators and partner institutions.

1. The hosting of seminars on the Management Sciences for Health (MSH) and to develop online interactive training through a virtual platform;
2. The information presented in the CHeSS website should feed into the Regional and Global Health Observatories;
3. The aim would be to increase regional and national expertise by transferring skills and tools across regions and countries in order to strengthen capacity widely (i.e. concept of "Train the trainer");
4. The involvement of the WHO Regional Offices and country offices in the process and more facilitators from other organizations, e.g. UNICEF, UNFPA and the World Bank is crucial towards the sustainability of the efforts;
5. The improvement and finalization of existing tools and inclusion of other tools not yet considered is crucial
6. There is need to rely more heavily on country data and request countries prior to the workshop to bring their data in the required format relevant for the tools and exercises so that they can work on their own data and have some real country examples to show upon their return, applying the tools;
7. The selection of tools by participants prior to the workshop could be envisaged for future workshops as there are clearly different needs and interests among country participants.
Annex A: Workshop list of participants

List of Participants

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### Annex B: Workshop final agenda

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<th>Topic</th>
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<tr>
<td>8.00 – 8.30</td>
<td>Registration</td>
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<td></td>
<td><strong>Introduction, objectives and framework</strong></td>
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<td><em>What are the critical elements of a country platform for M&amp;E of the national health strategy?</em></td>
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<tr>
<td>8.30 – 9.00</td>
<td>Opening</td>
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<td>Ties Boerma (WHO), Haishan Fu (UNESCAP) &amp; Phusit Prakongsai (IHPP),</td>
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<tr>
<td>9.00 - 9.45</td>
<td>General introduction and objectives</td>
<td>Presentation</td>
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<tr>
<td>9.45 – 10.15</td>
<td>Comprehensive framework for health progress and performance reviews with indicators</td>
<td>Presentation, Group and plenary discussion</td>
<td>Ties Boerma &amp; Fiona Gore (WHO)</td>
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<tr>
<td>10.15 – 10.30</td>
<td>Participant survey</td>
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<td>10.30 - 11.00</td>
<td><strong>COFFEE BREAK</strong></td>
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<td>11.00 – 12.00</td>
<td>Discussion</td>
<td>Group and plenary discussion</td>
<td>WHO &amp; participants</td>
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<td>12.00 – 12.30</td>
<td>Strengthening institutional capacity: Introduction</td>
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<td>Yadira Almodovar-Diaz &amp; Judith Seltzer (MSH)</td>
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<tr>
<td>12.30 - 14.00</td>
<td><strong>LUNCH</strong></td>
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<td></td>
<td><strong>General epidemiological context</strong></td>
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<td><em>Setting the stage for health progress and performance reviews: what is the overall burden of disease and prevalence of risk factors in the country?</em></td>
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<tr>
<td>14.00 - 14.30</td>
<td>Mortality tool &amp; National Burden of Disease (NBD) and Risk Factors</td>
<td>Presentation</td>
<td>Doris Ma Fat, Carla Abou-Zahr, Fiona Gore, &amp; Mohamed Ali (WHO)</td>
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<tr>
<td>14.30 - 15.00</td>
<td>Mortality tool</td>
<td>Practice with mortality tool</td>
<td>Participants</td>
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<td>15.00 - 15.30</td>
<td><strong>COFFEE BREAK</strong></td>
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<tr>
<td>15.30 - 16.30</td>
<td>Mortality tool (continued)</td>
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<tr>
<td>16.30 - 17.30</td>
<td>NBD</td>
<td>Practice with NBD tool</td>
<td>Participants</td>
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<tr>
<td>18.00 - 20.00</td>
<td><strong>RECEPTION</strong></td>
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<tr>
<td><strong>Tuesday – Day 2</strong></td>
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<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tr>
<td>8.30 - 9.00</td>
<td>Review of previous day</td>
<td>Soumya Alva (ICF Macro)</td>
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<tr>
<td>9.00 - 9.30</td>
<td>Coverage of interventions:</td>
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<td><em>How good is the quality of the facility data (HMIS) and can they be used for coverage trend estimates, with or without the help of survey data?</em></td>
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<td>9.30 - 10.30</td>
<td>Current practices in countries</td>
<td>Group session 1 Participants</td>
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<td>10.30 - 11.00</td>
<td>Routine Data Quality Assessment (RDQA)</td>
<td>Plenary Anzél Schönfeldt (JSI)</td>
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<tr>
<td>11.00 - 12.30</td>
<td>Facility data quality assessment and adjustment (DQAA) and coverage</td>
<td>Plenary Ties Boerma (WHO), Candy Day (HST), Mehran Hosseini (Global Fund) &amp; Deblina Datta (GAVI)</td>
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<td>12.30 - 14.00</td>
<td>LUNCH</td>
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<td>14.00 - 14.30</td>
<td>Current practices in countries</td>
<td>Group session 2 Plenary Participants</td>
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<td>14.30 - 15.30</td>
<td>Service availability and readiness assessments (SARA)</td>
<td>Plenary Kathy O’Neill &amp; (WHO)</td>
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<td>15.30 - 16.00</td>
<td>COFFEE BREAK</td>
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<tr>
<td>16.00 - 17.30</td>
<td>Health expenditure tracking via National Health Accounts (NHA)</td>
<td>Plenary Tessa Edejer (WHO)</td>
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<td>Time</td>
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<tr>
<td>8.30 - 9.00</td>
<td>Review of previous day</td>
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<tr>
<td>9.00 - 9.30</td>
<td>Overview of methods and tools</td>
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<tr>
<td>9.30 - 12.30</td>
<td>□ Child mortality estimation</td>
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<td>□ Tuberculosis estimation</td>
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<td>□ Maternal mortality assessment: sharing experiences (Thailand &amp; Sri Lanka)</td>
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<td>12.30 - 14.00</td>
<td>LUNCH</td>
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<td>14.00 - 15.30</td>
<td>□ Lives saved tool (LiST)</td>
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<td>15.30 - 16.00</td>
<td>COFFEE BREAK</td>
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<tr>
<td>16.00 - 17.30</td>
<td>Practice with LiST tool</td>
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**Estimation of key health impact indicators**

*What is the progress in the main health impact indicators for the MDGs?*

- **9.00 - 9.30** Overview of methods and tools
  - Short introduction for each session (5 min each)
  - All Facilitators
- **9.30 - 12.30**
  - Child mortality estimation
  - Tuberculosis estimation
  - Maternal mortality assessment: sharing experiences (Thailand & Sri Lanka)

- **12.30 - 14.00** LUNCH
- **14.00 - 15.30** Lives saved tool (LiST)
- **15.30 - 16.00** COFFEE BREAK
- **16.00 - 17.30** Practice with LiST tool

**Speakers:**
- Jon Kapp (UNICEF), Fiona Gore & Mohamed Ali (WHO)
- Ana Bierrenbach (WHO)
- Carla Abou-Zahr (WHO)
- William Davis (Johns Hopkins)
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<thead>
<tr>
<th>Time</th>
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<tr>
<td>8.30 - 9.00</td>
<td>Review of previous day session</td>
<td>Soumya Alva (ICF Macro)</td>
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<tr>
<td>9.00 - 9:30</td>
<td>Current practices in countries</td>
<td>Group session 3</td>
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<tr>
<td>9:30 - 10.30</td>
<td>Equity analysis</td>
<td>Presentation &amp; tool</td>
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<tr>
<td></td>
<td>How can we assess levels and progress and system performance towards equity goals?</td>
<td>Candy Day (HST) &amp; Carla Abou-Zahr (WHO)</td>
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<td>10:30 - 11:00</td>
<td>COFFEE BREAK</td>
<td>Practice with tool</td>
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<td>11.00 - 12.30</td>
<td>LUNCH</td>
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<td>12.30 - 13.00</td>
<td>Overall quantitative performance assessment:</td>
<td>Presentations</td>
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<tr>
<td>13:30 - 13.45</td>
<td>Country performance assessment</td>
<td>Carla Abou-Zahr</td>
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<td>14.30 - 15.00</td>
<td>Performance assessment – Case study</td>
<td>Mehran Hosseini (Global Fund)</td>
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<td>15.00 - 16.00</td>
<td>Performance assessment</td>
<td>Mehran Hosseini (Global Fund)</td>
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<td>COFFEE BREAK</td>
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<tr>
<td>16.30 – 17.00</td>
<td>Policy analysis: From information to action</td>
<td>Denis Porignon (WHO)</td>
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<tr>
<td>17.00 – 18.00</td>
<td>Translating information for decision-making and policy change</td>
<td>Denis Porignon (WHO)</td>
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<td>18.00 – 18.30</td>
<td>Country Practices on Communicating data - Competition for the best country example</td>
<td>Interactive poster session by countries</td>
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<td>Participants to vote</td>
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### Friday – Day 5

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<tr>
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<th>Session</th>
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<td>8.30 - 9.00</td>
<td>Review of previous day</td>
<td>Soumya Alva (ICF Macro)</td>
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<tr>
<td>9.00 - 10.00</td>
<td><strong>Institutional capacity</strong></td>
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<td>9.00 - 10.00</td>
<td>Strengthening institutional capacity</td>
<td>Presentation</td>
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<td>Pamela Rao (USAID), Yadira Almodovar-Diaz &amp; Judith Seltzer (MSH)</td>
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<td>10.00 - 10.30</td>
<td>COFFEE BREAK</td>
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<tr>
<td>10.30 - 12.30</td>
<td>Strengthening institutional capacity</td>
<td>Interactive / hands on session</td>
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<td>Yadira Almodovar-Diaz &amp; Judith Seltzer (MSH)</td>
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<tr>
<td>12.30 - 14.00</td>
<td>LUNCH BREAK</td>
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<tr>
<td>14.00 - 15.30</td>
<td><strong>Communication and dissemination of data</strong></td>
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<tr>
<td>14.00 - 15.30</td>
<td>Communicating Effectively</td>
<td>Presentation</td>
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<td>Jason Smith (UNC) &amp; Candy Day (Health Systems Trust)</td>
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<td>15.30 - 16.30</td>
<td>Final workshop evaluation and way forward</td>
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<td>16.30 - 17.00</td>
<td><strong>Closure</strong></td>
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<td>Carla Abou-Zahr (WHO)</td>
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Group sessions

Group session 1: Data quality assessment and adjustment (30 min)
What is done to assess data quality? Who does it?
What is done to generate estimates if district reporting is incomplete?
How is reporting on data quality assessment and adjustment done?

Group session 2: Current practices in monitoring health inputs and outputs (30 min)
What are the key indicators and data sources used to monitor health finances, health workforce and service delivery?

Group session 3: Equity analysis (30 min)
What are good examples of reporting on health inequity in your country used in annual health sector reviews, annual health statistics abstracts or other key reports?

4 Interactive session on communication (exhibit with award)
Can you present the three BEST examples of communicating data in your country? This may be a book, flier, graph, table, map, analysis, a one-liner, a dissemination event, or anything else.

Review of health progress and performance
A stepwise approach

Inputs & processes   Outputs   Outcomes   Impact

- Governance
- Financing
- Infrastructure / ICT
- Health workforce
- Supply chain
- Information

- Intervention access & services readiness
- Intervention quality, safety and efficiency
- Coverage of interventions
- Prevalence risk behaviours & factors
- Improved health outcomes & equity
- Financial risk protection
- Responsiveness

Have finances been disbursed?
Have policies been changed?
Is the process of implementation happening as planned?

Has access to services improved?
Did the quality of services improve?
Has utilization improved?

Did intervention coverage improve?
Have risk behaviours improved?

Have health outcomes and equity improved?
Are services responsive to the needs?
Are people protected against financial risks?

Contextual changes
Non health system determinants
INTRODUCTION, OBJECTIVES AND FRAMEWORK

What are the key elements of a country platform for IM&E of the national health strategy?

AIM OF THE WORKSHOP

The aim of this guidance manual is to introduce participants to the existing tools, concepts and methods available across the GHES framework and how these can be used to improve the analytical capacity of countries to conduct comprehensive health progress and performance reviews in the context of national health plans and related global health goals.

AUDIENCE

Country participants from 13 countries from the South-East Asia, Western Pacific and African region ensuring representation from senior analysts from key institutions that play important roles in preparing the analytical background to the health sector reviews in countries. These include Ministry of Health, Bureau of Statistics, academic institutions and others (as relevant).


INTRODUCTION TO INSTITUTIONAL CAPACITY STRENGTHENING

Introductory session in view of Session 9 on Day 5 which will introduce the role of institutional capacity building and the many components and functions of an institution that must work in unison for optimal performance.
General epidemiological context
Setting the stage for health progress and performance reviews: what is the overall burden of disease and prevalence of risk factors in the country?

- NATIONAL BURDEN OF DISEASE (NBD) TOOLKIT
- ANALYSING MORTALITY LEVELS AND CAUSE OF DEATH DATA (ANACO6)

**NATIONAL BURDEN OF DISEASE (NBD) TOOLKIT**
The NBD toolkit contains a set of spreadsheet templates for carrying out Years Lost due to Disability (YLD), Years of Life Lost (YLL), Disability-Adjusted Life Year (DALY) and Comparative Risk Assessment (CRA) calculations. The NBD summary tables represent WHO's prior estimates of the national burden of disease and are intended to provide a starting point for more in-depth analyses by national NBD study teams which in turn should lead to improvements in the GBD estimates at national regional and global levels. These prior estimates should be interpreted as the best estimates of WHO, based on the evidence available to it by end 2007, rather than the official estimates of Member States.

**ANALYSING MORTALITY LEVELS AND CAUSE-OF-DEATH DATA (ANACO6)**
The objective of the ANAC6 tool is to help build analytical capacity to assess the quality of mortality statistics in order to enhance their value in informing health policies and programmes. Countries routinely invest significant resources into collecting mortality data from a variety of sources, including civil registration systems, health care facilities, ongoing longitudinal demographic and health surveys, and from other data sources such as the census or household surveys. The guidance document to be presented describes some relatively simple approaches to data quality assessment that those collecting data on deaths by age, sex and cause can carry out in order to detect and deal with data quality weaknesses. The checks comprise analyses of the internal validity and coherence of the data as well as comparisons with other, external, sources of mortality data in order to assess consistency and data plausibility.

Coverage of interventions:
How good is the quality of the facility data (HMIS) and can they be used for coverage trend estimates, with or without the help of survey data?

- ROUTINE DATA QUALITY ASSESSMENT (RDQA)
- DATA QUALITY ASSESSMENT AND ADJUSTMENT (DQAA)

**ROUTINE DATA QUALITY ASSESSMENT (RDQA)**
The RDQA tool focuses on (1) verifying the quality of reported data, and (2) assessing the underlying data management and reporting systems for standard program-level output indicators. The RDQA tool allows programs and projects to assess the quality of their data and strengthen their data management and reporting systems.

**DATA QUALITY ASSESSMENT AND ADJUSTMENT (DQAA)**
The primary objective of the Data Quality Assessment and Adjustment (DQAA) tool is to provide a step-wise approach to data quality assessment. The tool aims to contribute to improved quality of data used by countries for reviews of progress and performance for annual health sector reviews, planning, and monitoring and evaluation.

Inputs and outputs
What is the situation and progress regarding resources, money and health workers, and are service access and readiness improving?
Inputs and outputs:
What is the situation and progress regarding resources, money and health workers, and are service access and readiness improving?

- HEALTH EXPENDITURE TRACKING VIA NATIONAL HEALTH ACCOUNTS
- SERVICE AVAILABILITY AND READINESS ASSESSMENTS (SARA)

 HEALTH EXPENDITURE TRACKING VIA NATIONAL HEALTH ACCOUNTS
National health accounts describe financing flows for health in the country. They track health expenditures from the source of the funds to the decision maker who decides on how to allocate the funds to the providers who receive the funds and provide the services. Health expenditures can also be reported in terms of the functions that are funded and also by disease or age or gender. Health expenditures can be linked to health outputs in order to provide some understanding of health system efficiency. They are an integral part of health sector reviews and are needed for budget preparations. At the international level, standardized reporting of health expenditures is according to the classification framework of national health accounts. A Guide to producing national health accounts with special applications for low income and middle income countries is available in http://www.who.int/nha/docs/English_PG.pdf

 SERVICE AVAILABILITY AND READINESS ASSESSMENTS (SARA)
Health facility assessment methodology to assess, map and monitor services availability and readiness at health facility levels (including hospitals, health centres, pharmacies and laboratories). The tool is implemented in countries to help create a baseline database of all public and private health facilities and services across the country or in sentinel districts.

* Human Resources information available on the memory stick (Day 2 Session 3)
Estimation of key health impact indicators
What is the progress in the main health impact indicators for the MDGs?

- **CHILD MORTALITY ESTIMATION (CME)**
- **TUBERCULOSIS ESTIMATION WORKBOOK (TB)**
- **MATERNAL MORTALITY ASSESSMENT**
- **LIVES SAVED TOOL (LST)**

**MATERNAL MORTALITY ASSESSMENT**
This assessment will focus on the estimation of maternal mortality by assessing and adjusting available data from surveys, demographic surveillance sites, health information management systems (HIMS), vital registrations, surveillance and any other available source.

**LIVES SAVED TOOL (LST)**
LST makes projections of the impact of maternal and child health interventions on child mortality. LST uses information about child health, nutrition status, coverage of child and maternal health interventions and the efficacy of these interventions to model changes in child health outcomes.

**CHILD MORTALITY ESTIMATION (CME)**
The objective of the CME database is to present all available global, regional and country level data and estimates of infant and under-five mortality from 1960 until present. Other estimates, where available, include neonatal mortality, post-neonatal mortality, and child mortality. The aim of the CME are manifold: 1) to serve as a global repository of mortality data, 2) to harmonize estimation methods globally to compare mortality levels and trends across countries; and 3) make the same data and methods used by experts world-wide in calculating mortality estimates available to country level professionals 4) to produce a "best estimate" of mortality for a country synthesizing information from different historical and current sources of mortality such as vital registration systems, sample registration systems, demographic surveillance sites and household surveys.

**TUBERCULOSIS ESTIMATION WORKBOOK (TB)**
The objective of the TB workbook is to estimate TB incidence through surveillance data. It accomplishes this by 1) evaluating the quality and reliability of the TB surveillance data; 2) determining to what extent trends in notifications of TB cases reflect trends in TB incidence; and 3) determining absolute TB incidence levels by analyzing the completeness of notification data.
EQUITY ANALYSES
How can we assess levels and progress and system performance towards equity goals?

- EQUITY ANALYSES
- HEALTH DISPARITIES CALCULATOR (HD*Calc)

A monitoring system of health equity like any other health topic includes the following steps:
(a) assessing data availability and collecting/compiling the required data, (b) analyzing, interpreting and presenting the data, (c) formulating a policy response to the results. Here, we highlight challenges specific to the second step - measuring and presenting the magnitude of inequity and explain several considerations that must be taken into account when reporting inequities in health. The aim of the session is participants get familiar with the challenges and practice reporting health inequity.

HEALTH DISPARITIES CALCULATOR (HD*Calc) for EQUITY ANALYSIS
The Health Disparities Calculator (HD*Calc) is a software application which provides a convenient way to visualize the disaggregated data by equity stratifiers as well as to compute several measures of health inequity for monitoring inequities in health.

OVERALL QUANTITATIVE PERFORMANCE ASSESSMENT
How can we benchmark country performance, assess efficiency, and use indices?

- HEALTH PROGRESS AND SYSTEMS PERFORMANCE REVIEW (HPSPR)
- PERFORMANCE ASSESSMENT - CASE STUDY FOR MALARIA

HEALTH PROGRESS AND SYSTEMS PERFORMANCE REVIEW (HPSPR) and BENCHMARKING TOOL
A common goal among health systems of most countries is to optimize individual and population health in an equitable, efficient and effective manner which is acceptable to patients, health care providers, administrators, and policy makers. Improvements in health and financial risk protection against health expenditure are assessed in relation to benchmarks and over time.

PERFORMANCE ASSESSMENT - CASE STUDY FOR MALARIA
The Global fund makes decisions based on performance to ensure that investments are made where impact in alleviating the burden of the three diseases (TB, HIV/AIDS and malaria) can be achieved. In this session, workshop participants will be asked to play the role of the GF Secretariat in reviewing the performance of the Republic of Ficicici in malaria control in order to make a disbursement decision at the periodic review. The case study should enable the participants to have an in-depth understanding of the Global Fund performance-based funding model and its applications.
POLICY ANALYSIS: FROM INFORMATION TO ACTION

What can policy analysis and cost-effectiveness analysis contribute to the reviews and planning?

- POLICY ANALYSIS

This session aims to look at the kind of arguments that can be developed by policy analysts to support health systems performance analysis. It considers how the latter relates to the policy and organizational decisions and in which extent it has contributed to the results. The session will be introduced with a short presentation followed by a guided discussion in plenary session and will be conducted on the basis of practical examples.

- STRENGTHENING INSTITUTIONAL CAPACITY

Using the Results Framework for HSS Monitoring and Evaluation, this session will explore the role of institutional capacity building and the many components and functions of an institution that must work in unison for optimal performance. We will also examine factors that thwart the operationalization of the framework and impede improvements to availability, quality and use of data to inform country health sector reviews, planning processes, and monitoring health progress and system performance.
• COMMUNICATION OF DATA

This session will examine the who, what, when and why of communicating data. It will seek to answer key questions about: Communication Objectives, Audiences, Messages, and Channels as well as implications for assessing data use. The presentation will include Tips and Tricks for communicating data, illustrating some common problems and focusing on common presentation methods such as mapping, graphing, dashboards and other means of making data meaningful.

• WAY FORWARD

Discussion in plenary around the way forward and next steps.

• COMMUNICATION OF DATA
ANNEX D – CURRENT COUNTRY PRACTICES – Country assessments

Figure 1: Presence of a strong national M&E unit/authority which monitors progress and performance of the national health plan

Figure 2: Data/indicators related to the following health system domains and whether these are used extensively to review health progress and performance

a) Input and process indicators
b) Output/outcome indicators

![Output/outcome indicators chart]

- Coverage of interventions
- Prevalence risk behaviours & factors
- Intervention access & services readiness
- Intervention quality

Agree | Disagree | Neutral/don’t know

c) Impact indicators

![Impact indicators chart]

- Burden and trend of diseases
- Social and financial risk protection

Agree | Disagree | Neutral/don’t know

Figure 3: Data is routinely collected from these sources and are extensively used in health sector reviews

![Data collection sources chart]

- Facility-based data (HMIS)
- Population-based surveys (e.g. DHS, disease survey)
- Civil registration

Agree
Figure 4: The following analysis and assessments are core elements of health sector analysis

- Benchmarking within country (comparing various regions)
- Benchmarking with other countries
- Equity analysis
- Data quality assessment

Figure 5: Communication and use of information is routinely undertaken

- Regular country review processes
- Targeted and comprehensive reports
- Global reporting

Figure 6: Causes of heavy reporting burden

- Too many indicators
- International agencies (e.g. GAVI, GF, Stop TB, UNAIDS)
ANNEX E – PRE-WORKSHOP AND POST SELF-ASSESSMENT OF KNOWLEDGE AND SKILLS

Figure 1: Distribution in the pre-workshop self-assessment of knowledge and skills by tool/concept or method

<table>
<thead>
<tr>
<th>Tool/Concept</th>
<th>Pre-workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Globl Fund performance-based funding model</td>
<td></td>
</tr>
<tr>
<td>10 Lives saved tool (LiST)</td>
<td></td>
</tr>
<tr>
<td>04 Facility data quality assessment and adjustment (DQAA) and coverage</td>
<td></td>
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<tr>
<td>05 Service availability and readiness assessments (SARA)</td>
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<tr>
<td>01 WHO mortality data assessment</td>
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<tr>
<td>02 WHO method for national burden of disease (NBD) and risk factors assessment</td>
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<tr>
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<tr>
<td>11 Equity analysis</td>
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<tr>
<td>09 Tuberculosis estimation</td>
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<td>08 Maternal mortality estimation</td>
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<tr>
<td>06 Health expenditure tracking via National Health Accounts (NHA)</td>
<td></td>
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<tr>
<td>14 Strengthening institutional capacity</td>
<td></td>
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<tr>
<td>07 Child mortality estimation</td>
<td></td>
</tr>
<tr>
<td>15 Communication and dissemination of data</td>
<td></td>
</tr>
<tr>
<td>16 Microsoft Excel</td>
<td></td>
</tr>
<tr>
<td>17 At least one statistical software (e.g. SPSS, Stata, R, or SAS)</td>
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Very weak | Weak | Average | Strong | Very strong

Figure 2: Distribution in the post-workshop self-assessment of knowledge and skills by tool/concept or method

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Very weak | Weak | Average | Strong | Very strong
Figure 3: Mean score in the pre-workshop self-assessment of knowledge and skills by tool/concept

![Graph showing mean scores in pre-workshop self-assessment.](image)

Figure 4: Mean score in the post-workshop self-assessment of knowledge and skills by tool/concept

![Graph showing mean scores in post-workshop self-assessment.](image)
Figure 5: Comparison of pre-workshop and post-workshop self assessment
Figure 8: Level of session

Figure 9: Presentation and materials
1. Introduction, objectives and framework
2. Analysing mortality data
3. National burden of disease toolkit
4. Routine Data Quality Assessment (RDQA)
5. Facility data quality assessment and adjustment (DQAA) and coverage
6. Service availability and readiness assessments (SARA)
7. Health expenditure tracking via National Health Accounts (NHA)
8. Child mortality estimation
9. Tuberculosis estimation
10. Maternal mortality assessment
11. Lives saved tool (LiST)
12. Equity analyses
14. Global Fund performance assessment – Case study
15. Policy analysis: From information to action
16. Institutional capacity
17. Communication and dissemination of data

Legend: Not useful, Ok, Useful
Figure 11: Facilitators’ role

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0% 20% 40% 60% 80% 100%