Strengthening of the M&E component of the national health plan

SIERRA LEONE

Brief situation analysis and roadmap

---

1 This report is based on a mission to Sierra Leone by WHO (Estifanos Biru Shargie, Global Fund, Omar Sam, WHO AFRO IST Ouagadougou, and Ties Boerma, WHO Geneva) 2-4 February 2011. GAVI and World Bank were unable to send representatives, but were supportive of the mission. At the country level, John Bimba, UNICEF, joined the mission in several meetings. This work is related to strengthening the monitoring and review component of IHP+. The mission included consultations with Ministry of Health and in-country institutions and partners, and a desk review. The mission is grateful to the Teniin Gakuruh, WHO country office, for facilitating the visit.
1 Background

The scale-up for better health is unprecedented in both potential resources and the number of initiatives involved. This requires a monitoring and evaluation effort that reinforces both country and global needs to demonstrate results, secure future funding, and enhance the evidence base for intervention. The IHP+ common framework for monitoring progress and performance aims to ensure that the demand for accountability and results from single donors and joint initiatives is translated into well-coordinated efforts to monitor performance and evaluate progress in countries, in line with the principles of the Paris Declaration on Aid Effectiveness.

The global framework needs to be made operational at the country level. WHO, Global Fund, GAVI, World Bank and partners are working together to improve the availability, quality and use of the data needed to inform country health sector reviews and planning processes, and to monitor health-system performance. The goal is to work together - global partners and countries - towards a country led accountability platform that meets the criteria provided in guidance for the M&E component of the national health plan/strategy.

This brief report describes the situation in Sierra Leone regarding demand and use of health data, the current status of supply of data and statistics, and the institutional capacity for work on health statistics in conjunction with the strengthening of a comprehensive national M&E component of the national health plan. It concludes with a set of recommendations for the development of such a plan and review and situation analysis to inform the development of the new health policy framework and strategy.

The Ministry of Health and Sanitation (MoHS) of Sierra Leone requested WHO to put together a joint mission with Global Fund, GAVI, World Bank and other partners:

1. Discussed with MoHS the current status of M&E activities and the areas of greatest need, in the context of strengthening of the national health plan
2. To develop a one year joint workplan to strengthen M&E according to the priorities developed during the mission and in line with the overall efforts to develop one strong country M&E platform
3. Complete a brief situation analysis of the health information systems in Sierra Leone, focusing on the M&E platform to support the national health sector strategic plan and global reporting.

2 Demand and use of information

Country review processes and mechanisms

The current National Health Sector Strategic Plan 2010-2015 (NHSSP) aims to contribute to the achievement of the goals of the PRSP II, the Ouagadougou declaration and the MDG goals. This

---

is the first health sector strategic plan in Sierra Leone. The first annual operational plan (2011) has been developed. Sierra Leone is expected to sign the IHP+ compact in 2011.

In addition to NHSSP, Sierra Leone has several disease- and programme-specific policies and plans, such as the Human Resources for Health Policy 2006, Immunization Vision and Strategies 2007-2012, National Malaria Strategic Plan 2011-2015, Strategic Plan on HIV/AIDS 2011-2015, National Tuberculosis and Leprosy Control Strategic Plan 2007-2011 and Health Information Systems Strategic Plan (HISSP) 2007-2016.

There are 13 districts (19 local councils), further divided into chiefdoms. Much efforts have been aiming at strengthening district M&E, especially through the health management information system (HMIS). The district size, on average 400,000-450,000 people is very useful for regular monitoring as the denominators (e.g. number of infants for immunization, or number of deliveries) are fairly large and allow computation of coverage figures from the health service data on number of events. This however requires adequate population projections.

The free health care initiative for mother and child health services was introduced on 27 April 2010 by the His Excellency the President. This policy change has had major implications for the demand for better data on, for instance, the distribution and use of medicines and commodities, or the ability to demonstrate results. Furthermore, performance based funding is being introduced (World Bank) in several areas, which also implies a higher demand for quality information.

Better accountability has also been demanded by the president. There is a performance-based "contract" between the president’s office and the line ministries which are required to report on progress. In fact, the president receives and discusses quarterly updates of progress on the flagship initiatives. For health sector, this includes increasing immunization coverage, an effective pool of human resources for health information system and the availability of tracer drugs (exceeding 95%).

Civil society plays an informal but significant role in the monitoring process of the free health care initiative. There are volunteers who monitor the drug supply and implementation of the initiative in all districts. One of the leading NGO coalitions is the Health for All Alliance.

**Monitoring and evaluation (M&E) component**

The M&E chapter of NHSSP 2010-15 calls for "an inclusive and participatory monitoring framework using joint reporting, monitoring and evaluation mechanisms". These will include quarterly reports, supportive supervision, annual health sector performance reports (AHSPR), a mid-term review and an end-term evaluation. The AHSPR will be developed through a jointly agreed process that will be validated through a joint review mission in April each year and launched in May/June during the Health Review Summit each year. The mid-term review is planned for the second half of 2012, and the end-term evaluation in 2015.

The coordination mechanisms to steer the implementation of the NHSSP is not specified in the plan. At present, there is no proactive well established committee and, likewise, there is no functioning committee to guide the M&E work. Meetings are held between Ministry of Health,
Statistics Sierra Leone, international partners on an ad hoc basis, for instance when a health survey is planned.

There are however two relevant documents under development that address these issues. A draft position paper specifies the joint working arrangements for the compact. This specifies a Health Sector Coordinating Committee (HSCC), chaired by the Minister of Health, and seven health sector working groups, including one on health information, M&E and supportive supervision. In addition, a Health Implementing Partners Coordinating Committee (HIPCC) functions as the overall multi-sectoral committee that oversees implementation of the NHSSP through fostering partnerships and sharing of activities being implemented at beneficiary level. The HIPCC is responsible for monitoring the partnership arrangements in the health sector. This includes ensuring that data (programme and financial) for outcome evaluations are systematically collected from all partners. The HIPCC will also be a conduit for fostering and facilitating collation of key performance indicators and evaluation information from all partners.

In addition, a draft M&E plan for the NHSSP is being developed. It specifies three goals: (1) allowing regular performance measurement of results and service quality to facilitate accountability, (b) assisting in focusing attention to achievement of outcomes that are relevant to achieve the goal of the health sector and (c) systematically gauging how well the health sector is progressing towards assisting in attaining health related millennium development goal (MDG) indicator targets. The consultation process will be initiated in the first quarter of 2011.

**Indicators**

The NHSSP outlines 19 indicators for health sector performance monitoring and evaluation, consisting of 3 inputs, 3 outputs, 9 outcome and 4 impact, and include 9 MDG indicators. The 2008 baseline and 2015 targets are set. Among the three major diseases (HIV, TB & malaria), TB lacks an output or outcome indicator in the list of the 19 indicators outlined in NHSSP. Data sources are not specifically indicated for each indicator, however, it is mentioned in the NHSSP that HMIS will be the major tool for collecting information, complemented by surveys commissioned by the MoHS including service availability mapping and sentinel surveillance sites, surveys conducted by other institutions (such as DHS), special studies and support supervision reports.

The draft M&E plan further proposes 56 indicators for the six pillars of the NHSSP which can be monitored on a regular basis. In addition, three input, three process and 16 output/coverage indicators are proposed as the Key Performance Indicators which are considered relevant for decision making to support health system functions at central, district and health facility levels. These will be reported at least once a quarter at district level. The key performance indicators will also be reported at each Annual Review at national level. There are currently no specifics on equity, including gender.

There are many indicators related to Global reporting. The MDG indicators are covered in the M&E component of the NHSSP. The Global Fund grants however have many more indicators. For instance, there are about 25 indicators in the malaria grants.
Disease specific monitoring

All disease programmes have strategic and M&E plans, with mostly between 10 and 30 indicators. The disease programmes have not yet been involved in the development of the national M&E plan, but there is considerable willingness to work together, strengthen a common reporting system and work together under the umbrella of one overall plan with linked disease specific M&E plans:

- **HIV/AIDS**: the main plan is based on the Global Fund proposal and has about 15 indicators, collected from health facilities as it focuses on the services delivered through. This is part and parcel of the National AIDS secretariat M&E plan. A new five year M&E plan is being developed for 2011-15, in line with the Strategic Plan on HIV/AIDS 2011-2015. Additional reporting is required for WHO and UNICEF. UNGASS reporting is mostly led by UNAIDS. There are five staff for M&E in NACP. There is an adequate sentinel surveillance system for HIV/AIDS through antenatal clinics, supplemented by surveys with HIV testing.

- **Malaria**: there is an M&E plan with the malaria strategic plan 2011-15. There are about 25 core indicators. Limited number of core indicators that are obtained from surveys. To assess the impact of the free health care initiative a service coverage and utilization survey was conducted in 2010 and new one will be conducted in 2011. In 2012 and 2014, there will be malaria indicator surveys, funded by Global Fund Round 10. Data on stockouts and RDT use is obtained from the HMIS. Quarterly reporting to Global Fund and also to WHO/RBM. Programme reviews are done annually, but there are also plans to report and review quarterly with RBM partnership.

- **TB**: there is a strategic plan with an M&E component for 2007-11, now being updated in the strategic plan 2011-15. There is a set of standard WHO indicators that are used for monitoring progress, and additional indicators on access and supervision, role of private sector, community volunteers etc. The 15 or so indicators are submitted to the Global Fund on a quarterly basis. All data are obtained from the TB district officers and reported on a quarterly basis in a quarterly review meeting. There is also an annual report and review meeting (done in February) - the most recent is the 2009 report. Web based reporting to WHO is done on an annual basis.

- **EPI**: very few indicators, district-level targets for coverage. Parallel reporting is a problem, the EPI has now reduced the emphasis by their own reporting (there were major quality problems) and rely more on the HMIS with aggressive follow up to ensure data quality. There is monthly reporting to UNICEF, and an annual progress report for GAVI.

- **Reproductive and child health**: there is a strategic plan for RCH with its own indicators. The focus on strengthening an integrated monitoring systems - the development is supported by DFID’s Options project. The reporting fully relies on the HMIS in DPI and on regular facility assessments of 65 basic emergency obstetric care facilities.

- **Surveillance**: Integrated Disease Surveillance and Response is located in the directorate of Disease Prevention and Control. A new strategic plan is under development. Indicators are focusing on timeliness and completeness of reporting. There are weekly district data, communicated by telephone, on the 21 epidemic prone diseases, and there is a weekly bulletin. The monthly disease report is sent to the DHIS and are considered more complete. Reporting to WHO occurs on weekly and monthly basis. There are two polio/AFP surveillance officers. A plan to fulfill the requirements of the International Health Regulations is under development.
3 Supply of data and statistics

This section briefly reviews the data sources, quality control mechanisms, data compilation and access, analytical work and communication of data.

Data sources

Census
The last census was conducted in 2004. There were data quality issues and numbers had to be adjusted. Projections have been published by the statistical office and provide denominators for district analyses by the health sector. The next census is scheduled for 2014.

HMIS
The HMIS is the responsibility of the Directorate of Policy, Planning and Information (DPPI) in the Ministry of Health. As indicated in the NHSSP 2010-15, the HMIS is the major tool for collecting information for regular monitoring of the NHSSP. HMN and the University of Oslo have supported the development and implementation of District Health Information System (DHIS 2.0). This system aims at compilation of the facility data at the district level. Data are used at the district level for the assessment of progress and performance. In several districts, the system functions well. The district data are transferred to the national level by email and compiled by DPI.

The forms used to collect data at the facility level are currently being revised. There is considerable pressure from the disease programmes and also on the logistics side (see below) to add data to the collection system. The rationalization of data collection focusing on a minimum set of indicators will be critical, if only to avoid an overload for the health workers in the clinics. There will be six forms with an average of 40 data items each.

Hospitals are not yet an integral part of DHIS. There are still major issues to be addressed concerning hospital information, including a strong management information system (World Bank involved) and the introduction of data collection on discharges, including diagnosis. Open MRS has been used to develop electronic health records for ARV therapy monitoring and there is discussion about extending this approach.

HMIS produces district league tables based on six key indicators (fully immunized, deliveries, 2 or more ANC visits, second dose of IPTp, timely completion of forms and exclusive breastfeeding). These are produced on a quarterly basis for districts. Some districts are producing the tables by chiefdoms.

Administrative data systems
The lack of systematic monitoring of health system input data has been identified as a major weakness of the health information system. With the introduction of free health care the demand for adequate monitoring of especially medicines and commodities has become even greater.

The Ministry of finance reports provide information on the government allocation of funds to the MOHS and local councils. However, 60% of funds in the health sector come from other sources. Since the inception of the decentralization system in the health sector, district financial
reports have been routinely submitted to the Local Councils. In order to improve the completeness of this information held at the central level, these reports should be submitted to the Directorate of Planning and Information on a monthly basis.

The first National Health Accounts (NHA) exercise was conducted in 2007 and the second is planned for 2011. There is a system of monitoring transfers to the local councils for the health sector, operated by the Ministry of Finance. The other source of information is the Public expenditure tracking surveys which are conducted on an annual basis, by the Ministry of Finance. A second NHA is planned, analysing 2007-2010.

There is great demand for a logistics management information system (LMIS). There are two purposes. The first is to ensure a continuous supply of essential drugs, minimizing stock outs. The second is to reduce loss of medicines to a minimum, especially in the context of the free health care initiative. At present, there is considerable confusion. There is no good monitoring system in place and several alternatives have been proposed. UNICEF has supported the development of logbooks that can be used for reporting. The books contains 389 medicines and commodities. Compliance with this paper based system is less than 1% of facilities. While it would ensure full accountability for all drugs, the task for health workers in the periphery is daunting. UNFPA has introduced a piece of software ("Channel") for the management of contraceptives. The system is simple and currently expanded for other drugs. Its coverage is also limited. A major challenge is that it is not interoperable with the DHIS 2.0. Lastly, the MoHS has been exploring the opportunity to build a LMIS component into DHIS 2.0. This will however take considerable time.

The health workforce is monitored through the payroll, with major shortcomings, but efforts are under way to improve the HR information system. An integrated human resources information (IHRIS), developed by the Capacity Building project, will be set up.

Population-based surveys
Statistics Sierra Leone (SSL) is responsible for conducting the decennial census (most recently in 2004) as well as large, nationally representative household surveys. The main health surveys are focusing on maternal and child health. The first DHS was conducted in 2008 and the next is scheduled for 2013. The MICS is conducted in between DHS surveys, was conducted in 2005, and the 4th MICS has just been completed. A district health services survey was conducted in 2009 and included both households and facilities. The large discrepancies in the estimates generated by the DHS and MICS is a source of concern, as some of this may be due to variation in the quality of the surveys.

Health data are also collected in economic and other surveys:
- National Public Services Survey: conducted in 2005, 2007 and 2008. Includes data on self reported access to health clinics (time needed to reach a facility) and satisfaction with health clinics, as well as registration of birth and death coverage.
- In 2007, a CWIQ (Core Welfare Indicators Questionnaire) survey was conducted, supported by the World Bank.
- In 2009/10 the second Integrated Household Survey (Living Standards Measurement Survey measuring incomes and expenditures including those for health), six years after the first in 2003-2004.
There are (too) many surveys. For instance, nine national surveys collected child anthropometric data between 2005 and 2010.

**Health facility assessments**

A five district assessment (5 districts, 25 facilities) was conducted in 2009/10 as part of the strengthening district health services baseline survey, funded by the Africa Development Bank. In addition, the geo-coordinates of all government & nongovernmental health facilities were compiled by Statistics Sierra Leone. A facility assessment is planned to be conducted every two years on a sample of facilities. In addition, there will be a census of facilities, with a very limited data collection from all facilities (about 10 items). A national health facility survey is planned for 2011 on the functioning of maternal, child and reproductive health services and the plan is to conduct a survey every two years.

**Vital events**

The Central Vital Statistics Office is a unit of the MoHS. The Chief Medical Officer is also the Chief Registrar of Birth and Death. District Registrars are employees of local councils (local government) but are supervised by staff of the MoHS. Almost all of the 149 Chiefdoms have a Community Health Officer (an employee of MoHS) who should register births and deaths. One assessment concluded that the deaths reported to the Vital Statistics Office may represent less than 1% or 2% of all deaths. However, the coverage according to the 2008 National Public Services Survey is much higher: 48.2% of births and 24.7% of deaths are registered. A recent evaluation of birth registration supported by UNICEF however showed that the quality of birth registration is problematic with poor completion of the forms. At present, strengthening the civil registration / vital statistics system is not priority of the MoHS. There are no cause of death statistics from the hospitals available.

**Data quality control mechanisms**

There are no specified data quality control mechanisms in place. The development of DHIS 2.0 is a first step towards more systematic assessment of the quality of reported data. For instance, the reporting completeness for facilities by districts is now part of the semi annual health bulletin. No steps however have been taken to use the assessment of the quality of reporting for an adjustment of the statistics.

**Access, analysis and dissemination**

Since there are very few formal reports, the only way of accessing statistics nationally is through the quarterly health bulletin. This document is also put on the Ministry of Health website.

There is a plan for an integrated data warehouse which will have DHIS at its core, but also provide easy access and allow analyses for administrative, survey and other data. Currently, the

---


DHIS contains some “semi-permanent” data on for instance, infrastructure, but the full data warehouse has not been put in place. In addition, there is no public access to current data.

There is limited analytical capacity in all institutions that could play a role in monitoring and reviews, as indicated by all interviewed.

**Reporting**

Currently, the main outputs are survey reports (done by SSL) and a quarterly annual health information bulletin (done by DPI, MoHS). The latter summarizes facility and district health statistics for eight selected indicators. A draft annual review report was produced, and will be finalized in the first quarter of 2011. There is also no annual health statistical abstract or health fact book. The latter is in the plans, and would focus on providing data by district on resources (facilities, health workforce etc.).

The NHSSP aims for the following regular reports using HMIS and other sources of data to assess progress against agreed indicators and targets:
- *Quarterly reports*: these will be produced by the different levels and used both for self-assessment and by supervisors to determine progress or lack of it.
- *Supportive supervision*: will be institutionalized as part of the M&E framework
- *Annual performance reports (AHSPR)*: will be institutionalized and include all levels and all health services nationwide. Review reports will be submitted to the national level for compilation of the AHSPR by the end of March each year. AHSPR will be NHSSP performance report for use by all stakeholders. The AHSPR will be developed through a jointly agreed process that will be validated through a Joint Review Mission to be held in April each year and launched in May/June in the Health Review Summit each year.
- *Mid-term Review and End-term Evaluation*

**4 Institutional capacity and resources**

**Institutions**

*National Bureau of Statistics*

The Sierra Leone Statistical office (SSL) is a parastatal which has had increasing support from the government. SSL has developed a National Strategy for the Development of Statistics (NSDS) 2008-2012 which presents the main goals and activities for that period. The NSDS budget for the 5 year period was $11.7 million but there have been problems in generating the funds. The capacity of SSL is considered good, although attrition remains a problem. SSL seconds statisticians to line ministries, with financial support of the World Bank. For the MoHS there is currently a vacancy.

SSL has a national structure with 12 district offices which allow it to effectively implement household surveys. SSL does virtually all health surveys, including DHS, MICS but also CWIQ and household budget surveys. SSL has also developed a master list of public health facilities, with GPS coordinates. Currently, data collection for health facility assessment has been concluded, but the availability of capacities to analyse the data is doubtful.
**Ministry of Health and Sanitation**

The Directorate of Policy, Planning and Information (DPI) is the main unit for the health information system. There are six senior staff and the DHIS is run by 3 staff at the central level. There is a request to increase DPI staffing by six professionals, as well as the creation of district M&E officers posts (13). A major weakness identified by DPI staff is the analytical capacity and the ability to produce reports in time.

To assure reliable M&E, the World bank supported RCH programme, global Fund and UN country team will support strengthening of the human resources needed for the health information system. This will include in service training, data management staff at the district level and recruitment of additional health information specialists by MoHS and SSL.

**Research and private institutions**

There are no experienced research institutions in Sierra Leone. UNICEF has invested in developing the capacity of a private firm in the area of monitoring and evaluation. There is however a need for special studies to complement the M&E information, to inform annual reviews and also to contribute to the larger review (e.g. final review) or evaluation.

NB: The University of Sierra Leone, specifically the School of Public Health, was not visited due to time constraints, but comments made by partners allude to low capacities.

**Donor support for M&E**

The National health plan has included a 5 year budget with about $1 per year per capita, which is in line with international estimates. This would require about $5 million per year for health information.

- The World Bank Reproductive and Child Health project phase 2 runs from 2011 to 2013, out of its total budget of $20 million, includes $3.5 million for supervision, monitoring and evaluation. It will focus on capacity building, strengthening the DHIS and introduction of a hospital information system. It will also support independent data quality audits, as basis for performance based funding, including surveys of a sample of health facilities to review patient registers, and assess the reliability of reported statistics and record keeping practices. In addition, the project will support the DHS 2013 and a health facility survey in 2011.
- Global Fund: for the three disease program M&E activities, more than US$ 4.2 million has been budgeted through currently active grants—US$1.7 million through Round 7 malaria grant (phase 2); US$ 1.9 million through Round 9 HIV grant; and US$ 0.6 million through Round 7 TB grant (phase 2). The budget supports M&E plan development, training (on MESST), supportive supervision, data compilation, analysis and reporting. In addition, the malaria grant will support two malaria indicator surveys (MIS) during the life of the grant. The Global Fund strongly encourages the development of comprehensive National M&E Plan for Health as well as analytical capacity building.
- DFID: strongly committed to strengthening the M&E system, the OPTIONS project is active in working on strengthening human resource information system, focusing on the payroll.
- UNICEF, WHO and UNFPA: also committed to strengthening the M&E system, and willing to put in resources.
The WHO country office appears to be driving the push towards a common national M&E frame but there is only one active staff who is responsible for support in all the HSS building blocks. There is thus the risk of the WCO to be overwhelmed due to the great demands.

GAVI: global level support for one integrated M&E system in Sierra Leone

**Summary of financial resources by partners for support to M&E in Sierra Leone**

<table>
<thead>
<tr>
<th>Funding source</th>
<th>Time frame</th>
<th>Budget amount</th>
<th>Spent</th>
<th>available</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB RCH project (phase II)</td>
<td>2011-2013</td>
<td>3.5 m</td>
<td>??</td>
<td>??</td>
</tr>
<tr>
<td>GF: R9 HIV grant</td>
<td>??</td>
<td>1.9 m</td>
<td>??</td>
<td>??</td>
</tr>
<tr>
<td>GF: R7 Malaria</td>
<td>??</td>
<td>1.7 m</td>
<td>??</td>
<td>??</td>
</tr>
<tr>
<td>GF: R7 TB</td>
<td>??</td>
<td>0.6 m</td>
<td>??</td>
<td>??</td>
</tr>
<tr>
<td>WHO</td>
<td>??</td>
<td>??</td>
<td>--</td>
<td>??</td>
</tr>
<tr>
<td>GAVI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNICEF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNFPA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Conclusion and recommendations

#### Demand and use of information

- There are several positive developments in Sierra Leone regarding the M&E in terms of demand for data for assessment of progress and performance, in the context of the overall national health plan and disease-specific plans, and a great awareness and willingness to work together and harmonize.
- Many of the components of a good progress and performance review are present, but there is a need to structure the components into a common and comprehensive framework that covers indicators, data sources, analysis and synthesis including data quality and communication and use of the data.
- There is considerable willingness among the disease programmes and among the partners to work together on one M&E platform and implement the national M&E plan.
- International partners are demanding much higher levels of accountability than in the past, and performance based funding adds further impetus to this.

#### Supply of data and statistics

- Data sources: there are multiple data gaps in the availability and quality of health statistics which must be addressed to be able to implement a sound progress and performance monitoring system.
  - HMIS: The Ministry of Health (DPI) has initiated a district health information system (DHIS) which is functioning well in several districts and, with considerable further investments, can become a reliable source of data on a selected number of tracer indicators for the health sector. There are however major issues with quality of data that need to be addressed. There are also issues with the comprehensiveness of the relatively young system, e.g. medicines and hospital services.
  - Surveys: Statistics Sierra Leone has increasingly stronger survey implementation capacity and a general health survey plan for 2010-2015 is being implemented.
  - Vital events monitoring: birth and death registration are incomplete and often inaccurate, and no vital statistics are produced from registration data.
  - Service availability and readiness assessments: there are various project related efforts, but there is no regular system.
  - Administrative records: there are major gaps in the monitoring of expenditure, human resources and medicines and commodities. Efforts are made in each of the three fields to improve the data and integrate this with the DHIS.

- Data quality assessment
  - There is a need to further development a systematic approach to data quality assessment, by the MoHS and subnational levels but also involving external institutions and global partners.
  - Increased institutional capacity and involvement in this process will be essential.

- Synthesis and analysis and reporting
  - There are no reports except the Health Bulletin which is a good step in the right direction. The first publication was made in 2010 and a system is yet to be put in place for regular publications.
  - There is very limited experience with reconciliation of data from different sources.
**Institutional capacity**

In general, capacity for health information was flagged as the priority challenge towards the development of a strong M&E platform and system. Institutional capacity is currently weak, especially in the areas of data quality assessment, analysis and synthesis, and report writing. There is no clear leadership of the M&E component of the national health plan and the link between the disease programmes and the overall M&E of the national health plan is only beginning to develop. There should be clarity in terms of roles and responsibilities for all components of the inputs of the M&E system, from inputs to impact. This should include Ministry of Health, Statistics Sierra Leone, and other institutions. Analytical capacity and clear reporting and coordination mechanisms are urgently needed.

**General recommendations**

1. **Finalize the concept paper and a consolidated M&E plan including the policy and institutional mechanisms and the technical framework**
   - Share the current drafts of both papers with all disease programmes and partners for review and inputs, as well as regional and global offices part of this review
   - Finalize both documents by the end of Q1 2011.

The following areas will be taken into account:

**Policy & institutional environment**
- Establish clear leadership and coordination mechanisms for the M&E component of the national health plan
- Ensure that the plan includes all disease programmes and specifies how the M&E plans in disease programmes are linked to the overall plan, so that they are presented as a series of sub-plans
- Specify the involvement of civil society, other sectors and in-country partners in the review process
- Ensure strong and systematic involvement of statistical office and other institutions outside of MoHS

**M&E technical plan**
- Present an overall technical framework that organizes the indicators and specific M&E questions in a logical manner: an overall framework for the selection of indicators, data sources, analytical requirements and data communication and use
- Specify the data collection requirements for the whole plan period
- Strengthen the data quality and transparency component
- Specify the role and contents of an annual health statistical report, as well as the annual health sector review analytical report

2. **Collaborate to develop the first analytical progress report for the annual health sector review 2011**
o Build capacity to strengthen the analytical component of the review, including data quality assessment. This should include external TA to be synchronized with skills transfer to develop local expertise.

o Development of a systematic and effective way to present the findings of the analysis, including a dashboard

o Organize a workshop with all relevant actors with international technical assistance, that looks at all the data, aims at producing the report and includes a capacity building component.

3. **Address data gaps**

   o Improve administrative data sources
     
     o Financing: the regular financial tracking system of public funding flows needs to be strengthened, as it is one of the major sources for annual monitoring and the three yearly NHA. The next NHA will need to be conducted in 2011, and pay attention to specific programmes (HIV, TB, malaria, RCH) as feasible.

     o Human resources: efforts to introduce an information system based on IRIS are important, as the payroll is not an adequate basis. The new labour force survey will form an important independent source of information on HRH.

     o Infrastructure: the GPS database of public facilities developed by SSL needs to be widely disseminated, linked to the DHIS, and made easily available, with a system for updating and including private facilities.

     o Logistics management information system (LMIS): there is a need to convene the main partners (MoHSS, DFID, UNICEF, UNFPA, WHO, World Bank) to agree upon a common workplan to strengthen the LMIS in Sierra Leone. The current proposals - a very extensive paper based log book system, Channel software or the development of a new system as part of the DHIS 2.0 - do not appear to be sustainable solutions, or able to solve the issue in the short run. The best way forward is to develop a system that is interoperable with DHIS 2.0 (so that in the future it is possible to link morbidity and medicine supplies), uses modern technology to facilitate the process and builds upon extensive experience with LMIS in other countries, keeping in mind specifics for Sierra Leone. The number of tracer indicators in DHIS itself should be kept to a minimum.

     o Service availability and readiness assessments: include systematic annual data collection from health facilities to verify and complement the information that goes into the annual reviews, using the Service Availability and Readiness Assessment tool developed by WHO and MEASURE; invest in further development and maintenance of the Master facility list

     o Develop an integrated survey plan for 2011-2015 as part of the national M&E plan, linked to the data requirements. It is important to ensure that the disease specific surveys are well integrated.

     o Explore ways to improve vital event reporting, with a focus on maternal deaths, using IT, even though it is understandably not a priority. It is advisable to reconsider the institutional set up for the civil registration and vital statistics system. For instance, the registration process may well be placed with Ministry of Internal or Home Affairs, while the analysis and computation vital statistics is often located within the statistical office.

4. **Strengthening institutional capacity**
The process of reviews of progress and performance should be led by country institutions in collaboration with international partners, and critically review and analyse all data available for the last decade.

- Ministry of Health: need to strengthen staffing in DPI including two analysts, one which may be a statistician seconded by SSL, and additional staff to run the DHIS.
- Statistical office: strengthening of the support to the Ministry of Health with secondment to the Ministry of Health but also an additional statistician responsible for health statistics within SSL.
- University: involvement in the review processes may be beneficial for future years.
- Local Technical Partners: the HR capacity of the WHO country office needs to be strengthened to provide the appropriate support.

5 Reporting harmonization

In the context of the IHP+ Compact it is expected that all donor funds for M&E are put together in a synergistic manner to support the one country M&E platform and the national M&E plan.
Roadmap

Short term (until mid 2011)
- Finalize the consolidated M&E plan and related concept paper by the end of Q1 2011, prior to the signing of the Compact, including consultations with partners and disease programmes through email and two meetings - action: MoH/DPI (lead), programmes - in-country and global partners (provide inputs)
- Complete an analytical report for the annual health sector review to be conducted in June 2011, with following steps:
  o Conduct a facility survey to assess service availability and readiness in end of March - early April, using the WHO SARA instrument, with country adaptation - action - and complete the analysis and report of the EMOC survey in 5 districts and additional facility data collected for all facilities in the country; action: MoH/DPI in collaboration with SSL and UN partners, technical assistance WHO AFRO and HQ
  o Organize analytical workshop to bring together all data (DHIS, administrative data, household surveys, and facility assessment) to conduct analysis, prepare draft report and build analytical capacity; action MoH/DPI, in collaboration with SSL and disease programs and university, technical assistance WHO and Global Fund (first week May)
  o Finalize report for review (first week June)
- Address the urgent need for a well-functioning logistics information system, focusing on medicines and commodities, that meets the management needs as well as monitors use. This process should be led by MoHS, with close involvement of UN agencies and donors:
  o Agree on small set of tracer indicators in DHIS new forms (DPI)
  o Verification of medicine reporting through regular facility assessment (as proposed above)
  o Development of drug management system, adapting well-proven systems to the Sierra Leone situation (WHO and UNICEF should propose proven systems. The Global Fund may share experiences of other countries).
- Strengthen DPI and district level human resource capacity in response to planning and monitoring requirements of the sector
- Strengthen HR capacities of the HSS team at the WCO to complement the only currently available HSS focal person.

Mid term (within one year)
- Development of national health observatory consistent with the Africa Health Observatory and CHIP initiatives:
  o Conduct systematic qualitative analysis of all policy and other information on health system through wiki media: action: MoH/DPI, with technical assistance from WHO AFRO and WHO HSS.
  o Further develop the national DHIS data warehouse, with data from other sources, to feed into the national observatory.

Longer term (within 2 years)
- Work with the MoH, DPI and disease programmes, SSL and other institutions to further strengthen the analytical and report writing capacity.