Strengthening monitoring and evaluation practices in the context of scaling-up the IHP+ compact and Country Health Systems Surveillance[1]

UGANDA

[1] This report was based on a mission to Uganda (10-18 November 2010) by Ties Boerma and Fiona Gore. The mission was requested by the Ministry of Health to discuss the M&E component of the new National Health Sector Strategic and Investment Plan (2010/11-2014/15), and is based on a review of documents and consultation with the Bureau of Statistics, Makerere University and other country partners including CDC, USAID, UNAIDS, UNICEF and civil society.

1 Background

The IHP+ common framework for monitoring performance and evaluation of the scale-up for better health, 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. It stresses the importance of working in ways that contribute to strengthening country organizational capacity and health information systems, as well as enabling evidence-informed decision making and improved country performance.

Uganda signed the International Health Partnership+ (IHP+) Global Compact in February 2009, representing a commitment to get better health results by increasing support for national health strategies and plans in a harmonized way, including a strong emphasis on mutual accountability for results. Central to IHP+ is a commitment to get better health results by increasing support for national health strategies and plans in a well-coordinated way. In the context of IHP+ and related initiatives global partners have developed general guidance on the main characteristics of a M&E platform for the national health sector strategic plan, including a sound policy and institutional environment and M&E technical framework. As a first step, a one year joint work plan is proposed aiming to involve all major partners in M&E (Annex A). A strong country monitoring and evaluation (M&E) platform as part of the national health strategy, policies and plans is the foundation for accountability. M&E includes quantitative and qualitative assessment and aims to inform the progress and performance reviews and policy dialogue and influence short term operational plans as well as long term plans. The platform forms the basis for global reporting.

Uganda was one of the earliest countries to develop a SWAp. Partnership structures and instruments are long established but by common consent some are not operating that well. There has been a shift in the health development partner landscape in recent years, arising from increased funding from Global Health Initiatives, as well as a shift by a number of agencies to general budget support and agreements on 'division of labour' between agencies, with the results that some bilaterals have left the health sector.

During the final stages of development of Uganda's Health Sector Strategic Investment Plan (HSSIP 2010/11 - 2014/15), a joint assessment of the National Health Strategy (JANS) was conducted (July 2010), aiming for a strategic discussion on the plan and its components.

M&E is one of the five key areas that is assessed in a JANS. The main conclusions can be summarized as follows:

- The M&E plan needs to be developed and strongly linked to the HSSIP;
- Possible gaps in core sector indicators include equity (e.g. distribution of HR and funds), poverty, functionality of services and staff;
- The HMIS needs sustained support and stronger mechanisms need to be developed to respond to relevant findings of monitoring.

The current visit by WHO was conducted at the request of the Ministry of Health focusing on the development of a monitoring and evaluation plan for the HSSIP (2010/11 - 2014/15). The HSSIP has been developed based on the new National Health Policy (NHP II), and more broadly, on the government's new National Development Plan (NDP). The need to complement HSSIP with a specific M&E plan in order to operationalize the strategic orientation provided for M&E in HSSIP has been recognized for a while. The development of a M&E plan is important for the operations of the sector at various levels, and intends to serve as a reference document and resource mobilization tool for the sector in its relations with health development partners.

The three main objectives of the proposed M&E plan are (Annex B Draft M&E outline):

- To improve the quality of information, in terms of validity, accuracy, timeliness and completeness;
- To ensure that sector performance results are periodically analyzed and disseminated to inform policy formulation and decision-making;
- To ensure a set of indicators, tools and the M&E system are adapted to monitor the quality of service delivery at national, district, health facility and community levels.

The mission led to the development of a joint workplan towards one country-led M&E platform. The workplan can be found in Annex A.

Several global partners including WHO, Global Fund, GAVI and US government, are collaborating to support countries in order to strengthen country analytical capacity to improve annual health sector reviews and general health system performance reviews, all in the context of monitoring and evaluation of the national health plan. A follow-up field mission with global partners is proposed take place in 2011 (see Workplan – Annex A)

2 Demand and use of information

2.1 Country review processes and mechanisms

Uganda's first National Health Policy (NHP) guided the health sector between 1999 and 2009. The government issued the first Health Sector Strategic Plan (HSSP I) covering the period of 2000/01 - 2004/05, followed by the second HSSP (HSSP II) for 2005/06 - 2009/10. Uganda adopted the Sector Wide Approach (SWAp) in the health sector in 2000, signed the Millennium Development Goals (MDGs) and more recently the International Health Partnerships and related Initiatives (IHP+).

The second NHP has been developed, guided by the National Development Program (NDP) for the period of 2009/10 - 2013/14, through a participatory process involving several technical working groups whose members were drawn from the Ministry of Health (MoH), other relevant ministries, health development partners, academia, private sector and civil society. The NHP II focuses on health promotion, disease prevention, early diagnosis and treatment of diseases. It specifically prioritises the effective delivery of the Uganda National Minimum Health Care Package (UNMHCP), more efficient use of available health resources, strengthening public and private partnerships for health and strengthening of health systems. In the period of the NHP II and in line with global agendas, the emphasis will be on achieving universal access to a MHCP as well as equitable and sustainable financing mechanisms. To operationalize this policy, the Health Sector Strategic and Investment Plan (HSSIP 2010/11 - 2014/15) has been developed, detailing priority interventions as identified during the mid-term review (MTR) of the HSSP II.

In addition to the HSSIP, Uganda has several disease- and programme-specific plans, such as the National Expanded Programme on Immunization Multi-Year Plan 2006-2010, National Tuberculosis Strategic Plan 2006/07 - 2010/11, Malaria Control Strategic Plan 2005/06 - 2009/10, and the Roadmap for Accelerating the Reduction of Maternal and Neonatal Mortality and Morbidity 2007-2016, as well as a national AIDS strategy led by the National AIDS Commission. Several other health-related plans exist, such as the Pharmaceutical Sector Strategic Plan, the Procurement and Disposal Plan, and the HRH Policy and Strategic Plan. Based on these disease or programme-specific plans, both the National TB and Leprosy Control Programme (2010/11 – 2014/15), and the Malaria Programme (2008/10) have concise M&E plans.

The HSSIP goal – the Medium Term goal for the health sector – is defined, based on the NDP / NHP II expectations of the health sector, as: "*To accelerate improvement in overall health of the people in Uganda, and reduce the inequalities in its distribution'.*

To achieve this goal, five key objectives have been set out:

I. Scale up **critical interventions** for health, and health related services , with emphasis on vulnerable populations

II. Improve the levels, and equity in **access and demand** to defined services needed for health

III. Accelerate **quality and safety** improvements for health and health services through implementation of identified interventions

IV. Improve on the **efficiency**, and **effectiveness** of resource management for service delivery in the sector

V. Deepen **stewardship** of the health agenda, by the Ministry of Health

The HSSP II did not include a specific M&E plan but defined a monitoring framework that stresses on the SWAp and the use of joint reporting, monitoring and evaluation mechanisms, structures and indicators for all the stakeholders in the sector. It stipulates the continuing use of the same structures used in HSSP I, namely the Memorandum of Understanding, the Joint Review Mission (JRM), National Health Assembly (NHA) and the Health Policy Advisory Committee (HPAC). M&E of the health sector performance was done using quarterly reports, annual health sector performance reports (AHSPR), MTR and end-term evaluation. For AHSPR, the different levels of health services delivery are expected to compile their reports and submit them to the national level by the end of August every year. The MoH is then expected to present and discuss the AHSPR to health sector stakeholders at the Joint Review Mission held in October-November every year. According to the draft HSSIP similar structures and mechanisms will be used for M&E, as was set out in the MoU that was signed between government and partners to guide implementation of HSSP II.

In 2003, the Cabinet of the Government of Uganda approved a coordination framework to make sure that all Government programmes work in a rational and synchronized manner. Under this coordination umbrella, a National Integrated Monitoring and Evaluation Strategy (NIMES) was developed. NIMES is a coordination framework that is intended to improve the monitoring and evaluation of all Government policies and programmes. [2]

At a national level, the most important overarching Government policy framework is that of the National Development Plan (NDP). The data needs of the NDP are specified in the NDP M & E matrix, which outlines the NDP targets and indicators. These are agreed on by the relevant sectors ministries and the Ministry of Finance, Planning and Economic Development.

The most recent MDG report was published in September 2010 and published by the Ministry of Finance, Planning and Economic Development. The Uganda's Bureau of Statistics, compiled statistics from multiple sectors for the eight goals. Uganda has GAVI and Global Fund grants which require frequent reporting. The 2009 annual progress GAVI report is available online.[3] Multiple Global Fund grants (about $426 million awarded in total) require regular reporting on HIV, TB and malaria grants. PEPFAR and other donors also support a large number of projects which also often require detailed reporting.

2.2 Indicators

Twenty-four core indicators were identified for monitoring of the HSSP II, building on lessons learned from the HSSP I national-level indicators. These 24 consist of 3 input, 3 process, 7 output, 10 outcome and 1 impact indicators.[4] The baseline values for 2003/04, the annual targets up to 2009/10, and the data sources are indicated for all but a few indicators. The plan mentioned that the health management information system (HMIS) would be the main tool for collecting information, complemented by surveys commissioned by MoH (including client satisfaction surveys, mapping/population survey to determine geographical access to health services and functional coverage of the Uganda National Minimum Health Care Package - UNMHCP, and sentinel surveillance sites), surveys conducted by other institutions (such as DHS and other national surveys), special studies and support supervision reports.

[2] http://www.nimes.go.ug/index.php?option=com_content&task=view&id=23&Itemid=35
[3] http://www.gavialliance.org/resources/Uganda_apr_2009.pdf
[4] This classification is made for this summary to be comparable with the summary for other countries. The original classification as appeared in the HSSP II is as follows: 3 input, 7 process and 14 output indicators.

The HSSP II mid-term review (MTR) observed that there was no published list of programme and service level indicators as the HSSP II Volume II was never finalized. This led to use of ad hoc indicators for assessing and comparing performance at various levels: some of the available indicators were not used, especially at service delivery and local government level, whilst a number of programmes/projects were collecting data and using indicators that had not been previously agreed upon. Furthermore, there were difficulties in agreeing on indicators that assess performance of the central level institutions. For a number of indicators including some of the 24 core HSSP II indicators, there have been challenges in availability of data on regular basis. For another set of indicators, various sources of data (and methodology) were used which undermined consistency, making it difficult to determine trends of performance over the HSSP II period.

The Joint Assistance Framework (JAF) is a monitoring framework used as a negotiation point between government and donors who channel their funding through budget support. Decisions to release funds are based on observed performance which is assessed annually.

During the mission, the core set of indicators of HSSIP (2010/11-2014/15) - 26 core indicators – were agreed upon (4 input and processes, 5 outputs, 12 outcomes and 5 impact indicators), specified under each of the five objectives of the HSSIP including the extended set of 250 indicators mentioned above (Annex C). Within this new core set, all have baselines (values ranging from 2005 to 2010 depending on the indicator) and all have targets, many of which include annual targets.

3 Supply of data and statistics

3.1 Data sources

Health Management Information Systems (HMIS)

The HMIS in Uganda forms the basis for annual data for many indicators. HMIS has wide coverage and collects much of the data required for the indicators. The HMIS systems covers primarily facility-based and some community-based data. Collection mechanisms are relatively well established and monthly return rates are already high. This is complemented by surveys commissioned by MoH, (i.e. client satisfaction surveys, mapping/population survey to determine geographical access to health services and functional coverage of the Uganda National Minimum Health Care Package - UNMHCP, and sentinel surveillance sites), household surveys conducted by the Bureau of Statistics (such as DHS, annual panel surveys and other national surveys), as well as special studies and support supervision reports. The system covers private-not-for profit (PNFP) services. Data flows are relatively well established and districts have an incentive to report on time. HMIS feeds back quarterly to districts. Districts are also supposed to produce their own quarterly performance assessments. The HMIS is a key data source to monitor programme indicators listed in the HSSIP and to support other reporting requirements.

The completeness, timeliness and accuracy of the figures have been a concern. In addition, there is considerable duplication and fragmentation with most disease programmes running parallel systems to the overall HMIS, run by the MoH Resource Centre. In the absence of a functioning M&E framework and plan/budget, several systems have been operating next to each other, creating not only an additional burden to health workers at service delivery and local government level. These systems include the Performance Measurement and Management Plan (PMMP) of the Uganda AIDS Commission (UAC) and the Local Government Information Communication System (LoGICS) tools of the Ministry of Local Governments (MoLG) (nationwide) and more localised systems such as the Strengthening TB and AIDS Response – Eastern Region (Star E) and Star CE (in Central East Uganda), as

well as other systems supported by international partners. A new HMIS form is in the process of being implemented, with the aim of covering the needs of all programmes. The MOH worked with partners to update HMIS forms so they reflect the HSSIP needs and to reduce parallel data collection systems. Overall, the HMIS is still largely paper based for data collection, but transmission of data is in some case electronic. The new HMIS for districts, the District Health Information System (DHIS-2).

The achievements of the Resource Centre include a conversion form 101/102 (health facility inventory data) into a MS Access Database, as part of the establishment of the Essential Medical Equipment Credit Line (EMECL). The EMECL is a mechanism for pooling resources from Government and Health Development Partners (HDPs), managed at the MoH but with funds which can be accessed by the districts, based on their needs, i.e. the variance between medical equipment standards for each type of facility and available equipment at the facilities (GoU and PNFP). In the first phase, the EMECL is limited to health centres and general hospitals. Districts with the necessary Information and Communications Technology (ICT) equipment (handheld PC for inventories in facilities and Desktop/laptop at the DHO) can use the software for data storage, report generation, data export to the RC at the MoH and use for ordering EME from the EMECL. In addition to medical equipment, the database contains essential data on the status of health infrastructure at the facility. In 2009, a Guide was prepared to assist District Health Offices in collecting and analysing these data, including a step-by-step guide on the use of the handheld computers (Palm) by district staff during supervisory visits. Such achievements provide important information on service readiness and infrastructure at the district level.

Mechanisms for use of data for local and policy decisions and feedback along the hierarchy are weak. In principle, forms from sentinel sites, Village Health Teams (VHTs) and Community-based Organisations are forwarded to the nearest health centre, from where they are sent to the Health Sub-District (HSD), then district and national level. Data compilation and analysis at the district level is done by district biostatisticians, or, where this position in not filled, which is often the case, by HMIS focal persons. Furthermore, there are limitations in the mechanism that incorporates private sub-sector performance into overall sector performance; and there is a lack of coordination of community/Civil Society Organization (CSO) monitoring with the mainstream health sector monitoring.

Population-based surveys

UBOS is charged with the overall coordination of production of information in the country. The data collection sources in UBOS include Censuses, and Surveys. Data the bureau collects belongs to the category of Population-based information system. This includes research-based data and Vital Registration (VR). They are generally in charge of surveys (i.e. MIS, DHS), with the exceptions of the AIDS indicator survey and the AIDS surveillance survey which led by the MoH.

- **HCSP:** A long term Household Census and Survey Programme (HCSP) has been developed to guide users and funding agencies about the sequence of the data collection events.[5] The Bureau plans and undertakes surveys based on the national development framework – that is the Poverty Eradication Action Plan (PEAP) to be replaced by the National Development Plan (NDP). The NDP guides the process of eliminating situations of low incomes, limited human development and powerlessness in the country. The aim of the HCSP is to effectively contribute to the monitoring process. The long term household survey implementation will

[5] See Annex C *"UGANDA BUREAU OF STATISTICS SECTOR STRATEGIC PLAN FOR STATISTICS 2007-2012"*. Available at: http://www.ubos.org/onlinefiles/uploads/ubos/pdf%20documents/PNSD/UBOS%20SSPS.pdf

facilitate the generation of monitoring indicators for different development frameworks, depending on available resources.

- **DHS:** The last recent Demographic and Health Surveys (DHS) was conducted in 2006 and the next one is planned to take place in 2011. Data collection is currently on going and work is actively underway between the main stakeholders, including the Bureau of Statistics and MACRO.
- **Uganda Panel Surveys (UPS):** Panel surveys are lead by UBOS and conducted as part of the Uganda National Household Survey (UNHS) System in close collaboration with the Economic Policy Research Centre (EPRC) at Makerere University. So far, the panel survey has been conducted in 2009 and in 2010. The data collected focuses on basis key outcome indicators (poverty, service delivery, governance, employment) in view of monitoring GoU's development programmes i.e. the PEAP and its successor the NDP. The panel survey covers approximately 3'500 households and additionally covers important information on facilities (see next section on facility assessments). The intention is for structures for the independent analysis of this data to be in place to provide analyses that allow the Government of Uganda, Civil Society and Development Partners to provide key information on trends relating to income, poverty and service delivery. The UPS is also used to cross-check the validity of routine data systems and enables frequent feedback on the success of key government programmes. Overall, the aim of these surveys is to provide continuous data and information on particular households to complement the socio-economic surveys that are ongoing. More specifically, the objectives as stated in the SSPS (2007-2012) are: i) To provide information required for PEAP (and its successor - the NDP), the annual monitoring and, evaluation of other development objectives (MDG, PAF) and monitoring of specific programs such as National Agricultural Advisory Services (NAADS); ii) To provide high quality nationally representative information on income dynamics at the household level and provide annual consumption expenditure estimates to monitor poverty in years between UNHS'; iii) To supply regular data on various sectors to characterize and monitor the performance of the sector(s); and iv) To permit direct linking of the datasets from different surveys.

Facility assessments

The national health facilities' listing was recently updated in 2010, and includes private facilities. The panel survey that runs on an annual basis includes a facility section with key information on infrastructure, basic equipment and amenities, health workers and staffing provides key information on health facilities.

Vital events

A large proportion of births and deaths are still occurring outside facilities and are, therefore, not captured by the civil registration system. Those occurring in facilities are registered. The civil registration used to be led by the Ministry of Justice, but has been handed to the Uganda Registration Services Bureau (URSB)[6] which deals with statistics on birth and death registration. The URSB is an autonomous statutory body and was created to take over the functions of the Registrar General's Office under the Ministry of Justice and Constitutional Affairs back in 2004. The system relies primarily on volunteers despite the existence of a legal framework. The development and strengthening of such a system is hampered not only by the enforcement of the legal framework, but also a lack of adequate infrastructure, and lack of organization and management of the registration process or lack of linkage to the adequate programmes. Efforts from URSB are ongoing and have included the development of

[6] http://www.ursb.go.ug/aboutus.php

guidelines on procedures for registration and is currently is in the process of piloting mobile registration. [7]

Census

Uganda has been carrying out population and housing censuses at intervals of about 10 years since 1948. The latest census was conducted by the Uganda Bureau of Statistics in Sept 2002. This census collected household-based data on population, housing conditions, agriculture, micro and small enterprises as well as community-based data. The Preliminary and Provisional results based on the summaries made by the census field staff were released within two weeks and two months respectively from the end of field enumeration. The Provisional results gave Uganda's Population by administrative area and by sex down to the sub-county level. Findings from the analyses, including results tables are available online. [8] The next census will be carried out in 2012.

Administrative data

Infrastructure, human resources and financial data are key components of the HSSIP. GIS are still in their infancy in Uganda, including in the health sector. So far, it has largely been used by the MoH to illustrate data in recent AHSPRs, and not as a regular monitoring tool. A major challenge is the lack of a national spatial data infrastructure (SDI). A national SDI is the technology, policies, standards, human resources, and related activities necessary to acquire, process, distribute, use, maintain, and preserve spatial data. Plans to develop a **national spatial data infrastructure (SDI) for Uganda** have been recenlty initiated. *info*Dev, a donor-funded agency of the World Bank, Geo-Information Communication (GIC) and ESRI Canada convened a stakeholder discussion in September 2010 to help develop a national strategy for these plans. The intention is for the World Bank to provide technical assistance to the government of Uganda, via the Uganda Bureau of Statistics (UBOS).[9] More recently, and as a follow-up, the Ugandan National Planning Authority (NPA) organized the 2nd Stakeholders Workshop under the theme: "Developing National Spatial Data Infrastructure for Uganda." The workshop was held mid-January 2011 at the Ministry of Finance and Economic Development. The objectives of this workshop were to: i) present the 1st and 2nd interim reports of the infoDev-supported project titled Use of GIS and SDI and their application in monitoring development outcomes; ii) obtain input from the stakeholders regarding the 1st and 2nd interim reports and iii) re-define implementation strategies and the budget plan for the implementation of Uganda's Spatial Data Infrastructure.

Another recent project is the InfoDev project, based on the UNICEF DevINFO software, UgandaInfo, with Uganda Bureau of Statistics. UgandaInfo[10] is a comprehensive database on Uganda's key development indicators which has had four versions — UgandaInfo r1, UgandaInfo r2, UgandaInfo r3 and UgandaInfo r4. UgandaInfo r3 and UgandaInfo r4 are based on DevInfo 5.0 platform. The fourth version has data from previous years up to 2008 where possible, which will enhance trend analysis of indicators of interest to the users. It is an exhaustive database including data on 254 indicators up to six levels of geography. The indicators are grouped by eleven sectors, six themes, seven goals and six institutions. These indicators allow for monitoring of progress towards achieving sectoral, national and international goals and targets. The themes included in this database are Gender, HIV/AIDS, Governance, Food Security, Poverty and Natural Resources. Goals included in the database include the Millennium Development Goals (MDG), The Poverty Eradication Action Plan (PEAP), the World Fit for

[7] http://www.ursb.go.ug/civilreg.php
[8] http://www.ubos.org/index.php?st=pagerelations2&id=16&p=related%20pages%202:2002Census%20Results
[9] http://www.infodev.org/en/Article.578.html
[10] http://www.devinfo.org/Di-wiki/index.php?title=Uganda

Children (WFFC), and the United Nations General Assembly special session on HIV/AIDS (UNGASS). However, as noted in Section 3.3, no information on UgandaInfo was available on the UBOS website.

Data sharing is not yet common practice among generators of spatial data. This has been partially achieved through the Geo-Information Working Group that meets monthly at the UBOS offices. Members submit their data to United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) which uploads the data onto the Uganda Clusters website (http://www.ugandaclusters.ug/geo-im.htm). Presently, the MoH does not participate in these meetings.

An equally challenging issue is the lack of an easily accessible registry of all health providers in the country with a unique identifier number. The 2002 Census provided some crucial information on health workers. First of all, there is a heavy urban/rural imbalance, as well as a heavy bias towards the central region. While only hosting 27% of the population (2002 National Population Census), this central region includes 64% of all nurses and midwifery professionals (degree holders and specialist registered nurses), 71% of all medical doctors, 76% of all dentists and 81% of all pharmacists. The imbalances are even more pronounced at district level: no single medical doctor was recorded during the 2002 census in Kalangala, Nakasongola, and Moroto, while 119 were counted in Jinja, 576 in Wakiso and 1,506 in Kampala.

A lot of time is spent validating and cleaning data obtained from various sources because these data are collected according to standards set by the organization collecting it. A registry would facilitate the proper identification of a facility, especially over time e.g. when new districts are created or the facility gets upgraded from one level to another. In an attempt to overcome these challenges a Human Resources for Health (HRH) observatory[11] was created in order to develop and share HRH information. To present this information, country profiles have been developed and are hosted on the Africa Health Workforce Observatory. The HRH country profile for Uganda published in 2009 is available online.[12] A detailed analysis of the census HRH data undertaken by the MoH in 2005 is available in the country report.

The overall public expenditure on health includes Government of Uganda (GoU) budgetary spending, donor funding and minimum contributions from the Local Governments. According to the Annual Health Sector Performance Report (2006), the MoH receives funding from Poverty Action Fund (PAF) and non PAF allocations to support the roles and responsibilities of the centre. The HRH country profile summarizes health care financing data. This sub-section of the profiles provides information on: how the funds are allocated (to regions, facilities, sectors); how the funds flow; how services are paid for; the levels of health expenditure; and main areas of expenditure. The section further considers access to and use of services: the distribution of health costs and benefits, coverage of services, health service utilization patterns and affecting factors.

The financial section of the AHSR generally tends to be limited. Information presented includes the government's funding, donor funding, total public health expenditure, per capita, government's expenditure on health as % of total government budget, health budget performance and annual budget increase. Monitoring of financial management at the local government levels is carried out by the integrated teams from the MoH, the Area Teams and in specific instances separately by the Accounts Section of the MoH.

[11] http://www.hrh-observatory.afro.who.int/en/home.html
[12] http://www.hrh-observatory.afro.who.int/images/Document_Centre/uganda_country_profile.pdf

The first round of National Health Accounts (NHA) was completed in 2000 for the year 1997/98. The data were obtained by a team of researchers from the Economic Policy Research Centre (EPRC) at Makerere University and the National Health Accounts (NHA) Team of the Ministry of Health (MoH) and the Ministry of Finance, Planning and Economic Development (MoFPED).[13] It described in detail the flow of funds and allocation of funds within the health system. The second round of NHA was completed in 2004 for the years 1998/99-2000/01.[14] This second round went a step further to relate expenditure data to health outputs in order to assess the efficiency of districts, hence adding value to NHA data, allowing health expenditure data for 4 years collected using internationally recognized methodology. These data were useful in informing the debate on financing the HSSP II 2005/06 – 2009/10. The data presented in the second round were obtained through collaborative effort of the NHA Technical Team comprising officials from the MoH, Ministry of Finance, Planning and Economic Development, UBOS, Uganda Religious Medical Bureau and WHO Country office. Makerere University's Economic Policy Research Centre (EPRC) collaborates closely with the Ministry of Finance, and provides another source of financial data for the health sector and on public expenditure in health.

Surveillance

The Integrated Disease Surveillance and Response (IDSR) section is part of the HMIS. It is a systematic data management system that deals with epidemic-prone diseases, diseases targeted for eradication/ elimination and selected diseases of public health importance. The MoH established a system of reporting on epidemic-prone diseases on a weekly basis in Uganda in late 1998. This arrangement allowed tracking and forecasting epidemics in the country, and respond timely when they occur. Districts report to the centre on the number of cases and deaths of suspected epidemic-prone diseases on a weekly basis. The list of reported diseases was expanded from the original five to 12 notifiable diseases (AFP, cholera, neonatal tetanus, meningitis, dysentery, measles, malaria, guinea worm, rabies, plague, typhoid fever and yellow fever).

After the first years of the IDSR implementation (2000-2001), Uganda adapted sub-sections of the IDSR technical guidelines that were urgently required to support IDSR implementation at the lower levels (e.g. the case definitions and action thresholds, supervisory checklist, reporting forms etc..). Uganda subsequently adapted the IDSR generic technical guidelines in the second year of implementation (June 2002). After adaptation, the technical guidelines including data collection and reporting forms (case-based, weekly, monthly or quarterly forms) were printed and distributed to health facilities. A pocket-sized booklet on standard case definitions for priority diseases was also developed. Weekly, monthly or quarterly IDSR feedback bulletins were developed, the most regular one being the weekly IDS bulletin on epidemic-prone diseases. Uganda, notably, publishes a newsletter distributed as a feedback bulletin to districts, and disseminated electronically to partners including WHO/AFRO and HQ.[15]

Uganda was probably one of the first in Africa and the less developed world to produce and publish a weekly epidemiological newsletter and the publication of a summary of the report every Monday on a national daily newspaper (*The New Vision)* to raise public awareness on epidemic preparedness, inform and give feedback to health workers who are instrumental in collecting the surveillance data. However, this no longer seems to be the case.

Demographic surveillance sites

[13] http://www.who.int/nha/docs/en/Uganda_NHA_report_english.pdf
[14] http://www.who.int/nha/country/uga/Uganda%202nd%20NHA%20report.pdf
[15] http://www.afro.who.int/fr/ouganda/ouganda-publications.html &
http://www.afro.who.int/index.php?option=com_docman&task=doc_download&gid=5063

The community based health and demographic surveillance sites (HDSS) have proved to be an essential tool, particularly in resource limited settings, to generate and provide valid population data and create a platform to test and/or measure the impact of interventions in a population. In Uganda, Rakai Health Sciences Program, formally Rakai Project/HDSS in Rakai district and Iganga/Mayuge HDSS provide good examples. The DSS in Iganga /Mayuge was established in August 2004 by Makerere University with seed funding from Sida/SAREC and in collaboration with Karolinska Institutet, Sweden. Starting field operations in March 2005, the HDSS initially concentrated on core health and demographic surveillance focusing on the registration of births, deaths and migrations. In the same year, the site became an active member of an international umbrella organization of HHDSS sites INDEPTH network (www.indepth-network.org). It is located in the eastern part of the country 115km from Kampala the capital city. According to results from the Baseline Census conducted between March-July 2005, the DSS has a population of **62,000** people, about 80% living in rural and 20% peri-urban areas. Data for update rounds is collected 2 times in a year but plans to make 3 visits in a year are underway. The Iganga/Mayuge DSS has been using paper based protocol of data collection but is gradually changing to use of handheld computers (PDAs).[16]

There are, however, other organisations running relatively smaller community based populations cohorts for research and service purposes. These include the Medical Research Council's Kyamulibwa and Masaka centres, the Makerere University Walter-Reed Project site in Kayunga district and some malaria sentinel sites. Some of the sites' stakeholders include the community, district leadership of Iganga and Mayuge, Ministry of health, Population Secretariat, Uganda Bureau of statistics, UNICEF, WHO, Makerere University, international collaborators /partners and other development partners.

The core demographic events covered are Migrations, Births, Deaths and Verbal Autopsy. Other modules collected are Pregnancy, Education and Socio-economic status. The HDSS also serves as a research and training base for graduate students. By the end of 2008, more than 10 under graduate students, 7 on Master's degree program, 5 PhD students from Uganda and abroad, 1 post-doc student from Sweden, as well as academic staff have used the site for research.[17]

3.2 Data quality control mechanisms

At present, there is no regular and transparent system that allows data quality assessment, and forms the basis for adjustments. For instance, there are no data in the annual health sector reviews on underlying data quality including completeness, timeliness and accuracy of reporting, or adjustments made to health facility based coverage estimates based on population-based surveys or other judgments.

The MoH HMIS has been reviewed at the start of each new strategic planning period: 2001, 2004 and now also in 2010. These reviews are done by the Ministry itself. Timeliness and completeness of HMIS reporting (a key process indicator for the implementation of the HSSP I and whose 5-year target was set at 80%) improved during the HSSP I. As reported in the HSSP II (2005/06-2009/10), HMIS reporting improved from a national average of 21% in 2000, 53% in 2001, 63% in 2002 and 79% in the first quarter of 2003.[18] The HSSIP (2010/11-2014/15) reports that timeliness of reporting is currently estimated at 68%. Data analysis and utilization for planning purposes is low and the private sector's contribution to the HMIS is modest. Some nutrition data is being collected within the HMIS however

[16] http://www.indepth-network.org/index.php?option=com_content&task=view&id=774&Itemid=665
[17] http://igangamayuge-hdss.mak.ac.ug/index.php?q=background
[18] http://www.who.int/rpc/evipnet/Health%20Sector%20Strategic%20Plan%20II%202009-2010.pdf

this data is insufficient and systems need strengthening for reporting and action based on that data. The 2007/08 Auditor General's report also observes that there is poor reporting by districts, health sub-districts (HSDs) and health centres (HCs) on their performance to higher levels and when reported, it is not timely.

In addition, a self assessment of the health information system was conducted in 2007, using the HMN assessment tool. The main outcomes of this assessment concluded that HIS resources, data sources, data management, and dissemination and use were found to be in place but limited.[19]

3.3 Analysis, access and dissemination

Data can be analysed at district and lower levels – hence geographic disaggregation can be done e.g. for hard to reach districts or sub-districts.

Statistical reports

- The Bureau of Statistics produces annual statistical bulletin/abstracts and the most recent report is available for 2010 online. [20]
- The Ministry of Health produces annual health statistical abstract and the 2008/2009 is available on the Resource HMIS information portal.[21] The 2010 has been finalized; however, it is not yet available online.

Databases

- Up until recently, there were many databases but there is no single place where data could easily be accessed and analysed. For instance, the HRH and infrastructure databases operated in isolation from the HMIS database. However,:
- The Ministry of Health recently launched their **Knowledge Management Portal**.[22] The KM portal provides access to integrated information, including MoH publications, HR for health information from the HRH Global Resource Center, Uganda-specific health worker statistics Via Human Resources for Health Information System reports, access to scientific and medical journals, user-friendly methods for users to upload documents, reports and other resources. However, at the time of writing this report, access to the site was unavailable.
- UgandaInfo is meant to be national database developed by the UBOS, containing a wide range of development indicators and data, which can be presented in many different formats, including maps, tables and graphs. Unfortunately, no such information was accessible on their website. Although reports and some data (e.g. Census 2002 reports and tables in pdf) can be accessed through the Bureau of Statistics website, it currently has no functioning databases accessible on the web at the time of this report but intends to make available a National Databank: all statistical data being archived and accessible publicly. [23]
- **Health Financing Database:** The AHSR 2006/07 states the creation of health financing database in order to strengthen routine health financing monitoring. The report stated that the database included both public and private health expenditures. Public funding (Government and donor projects) was entered for FY 1997/98 – 2005/06. Comprehensive private financing data was entered for FY 1997/98; 1998/99 – 2000/01; the years that had a National Health Accounts undertaken. The intention was this database to be updated and data analyzed routinely to address

[19] http://rochr.qrc.com/bitstream/123456789/435/1/hmn_uga_his_2007_en.pdf
[20] http://www.ubos.org/onlinefiles/uploads/ubos/pdf%20documents/2010StatAbstract.pdf
[21] http://www.health.go.ug/hmis/index.php/info/statistical_abstracts
[22] http://library.health.go.ug
[23] http://www.ubos.org/index.php?st=page&id=12&p=Statistical%20Activities

pertinent policy issues and strengthen the budget process. However, there is no further mention of this database in the sub-sequent AHSR 2007/08 or in the HSSIP 201/11-2014/15.

- The newly developed **Uganda's Registration Services Bureau (URSB) website portal** was set to be launched at the end of January 2011 and aims to serve as the bureau's centre of information dissemination, including registration statistics that will be available in the public domain.

Synthesis and analysis

- **Annual Health Sector Performance Reports (AHSPR):** compiled for presentation at the annual Joint Review Meetings in October/November 2010, presents a detailed account of progress against the core and programmatic indicators of the sector strategic plan, compares results with results of previous years, and formulates challenges and recommendations by cluster and programme. All partners, including development partners, Civil society, academia, PNFPs, private sector are involved in the process of developing the AHSPR. Analytical work and writing up is undertaken within the technical working groups where all these stakeholders are represented. Data is provided by the Resource Centre, programmes and departments within MoH. Other stakeholders provide specific pieces of information as requested. Performance of districts is compared using a district league table, which scores all districts based on a number of indicators. There are concerns about the process of compiling the AHSPR, with comments on the inadequate time and emphasis for consultation and, late finalisation of the report. The follow-up on the content of the AHSPR reports both at the JRM and NHA and after is also indicated as inadequate. The length of the AHPSPR has gradually increased to xx pages and tables. Even though there is an executive summary, it is difficult to summarize whether or not major progress has been made. There is no use of a dashboard or other techniques to communicate data.

- **District League Tables (DLT):** in spite of the frequently changing number of districts (from 56 to 121) the Resource Centre at the MoH produces district league tables (DLT) using an index based on a core set of indicators every year that rank districts based on their health systems performance. The DLT is a weighted average of a number of managerial and health outputs indicators, including the proportion of received funds that have been spent, timeliness of the HMIS reporting, DPT3 vaccination coverage, and proportion of deliveries to government and PNFP facilities. A number of HSSP II and other district health sector monitoring indicators have been used for the DLTs as applied in the HSSP II. These have been used to compare performance and stimulate improvements. The plan to make these more context related (by grouping districts to make comparison fairer) may help to increase the impact and lessons from this tool. Interpretations of some of the results are also provided. The underlying data problems are not discussed in detail.

- **Mid-Term Review (MTR):** For HSSP I and II, no end-term reports were prepared. However, the Technical Working Groups assessed progress on HSSP II as a starting point for the formulation of the Second National Health Policy (NHP II) and the new Sector Strategic Plan, HSSIP. During the NHP II preparations, attempts were made to keep this assessment limited to what is of policy importance, whilst a more in-depth analysis was undertaken during the preparations of HSSIP. A MTR was undertaken for the HSSP I and published in 2003. The main conclusion from this review was activities were moving in the right direction, but that the next plan (HSSP II) would need to refocus the sector's priorities so as to achieve the maximum health outputs and outcomes that are

possible within existing resource constraints. The Mid Term Review of both HSSP I and II [24] noted that the health sector is still fund limited, effective and efficient use of resources needs considerable improvement and health system constraints limit progress in coverage of quality health services.

- **HMIS Quarterly District Performance Reports:** [25] The Resource Centre which hosts the HMIS at the Ministry of Health has started the process of sharing analysis and selected Key Performance Indicators (KPI) regarding data collected during provision of health services in Government aided Health Facilities for release to the general public via the HMIS Information Portal Beta portal. The HMIS Quarterly National Performance Reports are available online through the portal detailing the timeliness and completeness for inpatient and outpatient report.

4 Institutional capacity

Ministry of Health

MoH has many functions through a number of departments and divisions. There are however a limited number of quantitative professionals with Master levels degrees or higher (epidemiology, demography, statistics, public health). This is combined to a very high turn-over, therefore, resulting in weak institutional capacity. For example, in the Planning Department, the Resource Center, which hosts the HMIS, includes four positions staff, but relies heavily eight interns to undertake data processing. Based on the structure put in place in 1999, there are positions for one biostatistician (filled), one Senior Information Officer (filled), one librarian (filled) and two data entrants (one filled by a staff member and the other by an intern). Furthermore, there are currently two vacant positions i.e. one position as epidemiologist and one position as statistician. Another example comes from the EPI division, part of the National Disease Control Department which includes three medical officers, two nurses, 6 core trained officers and one data manager. The TB division includes seven technical staff one PhD, one BSc, and five MDs. Of the five MDs, 3 of them have MScs in Epi Management or Public Health. The Quality Assurance Department includes the Support Supervision Division, which is where M&E activities are being led from. Both the Planning and Quality Assurance Departments sit within the Ministry's Directorate of Planning, and collaborate closely.

The MoH takes the lead in the Annual Health Sector Performance Reports (AHSR) with collaborative effort from other related ministries, development partners and stakeholders. These include for example UBOS and Makerere University. These reports are on average 200 pages long.

Bureau of Statistics (UBOS)

UBOS is the key institution for data collection and basic analysis, with offices in all districts. The division of Social Statistics has a Population & demography unit which includes the vital registration unit. The number of staff has been going down and currently there only two high level professionals, supported by 2 statisticians (one at MPH level and one at BSc level) in the unit. Support is provided from other parts of the Bureau for large surveys.

Makerere University

Some departments in the University, such as School of Public Health, the Institute of Technology and the Economic Policy Research Centre (EPRC), carry out specific assignments to support the work of the Ministry. The most prominent activity is the National Health Accounts exercise.

[24] Ministry of Health (2008) Mid-Term Review of the HSSP II. Kampala, Ministry of Health.
[25] http://www.health.go.ug/hmis/index.php/

The **School of Public Health**, in addition to its primary mandate of capacity building and research in Public Health, collaborates with the MOH and with district, municipal and city local governments, international agencies and non-governmental organizations (NGOs) in supporting the planning, implementation and evaluation of health programs. For the last several years now, the School has collaborated with the US-CDC and a network of HIV/AIDS care organizations operating in Uganda to run a non-degree two-year Fellowship Program in the Management of HIV/AIDS programs. There are currently over 10 PhD students in the School working on various Public Health topics.[26]

The **Economic Policy Research Centre (EPRC)** delivers research evidence on economic challenges facing Uganda and the African Continent. The activities that the Centre is involved in include close collaboration with the Ministry of Finance and the MoH upon request, including work on public expenditure in health surveys, impact evaluation assessments in health. This occurs on an ad hoc basis as there is no systematic independent involvement system in place. Other close collaborations with the EPRC include WHO Commission on *Macroeconomic and Health* or work with National planning authority.

Another activity, is the work undertaken by the **Institute of Technology** with the Resource Centre at the Ministry of Health and the development of ICT4MPOWER project, such as the development of an Electronic Health Record (EHR) management system which has been piloted in one district. This multi-partner initiative, which include the MoH, Makerere University, Karolinska University and Institute, as well as Ericsson AB in Sweden, is working towards improving the information flow from community to the district and the regional levels of the health care system, through improved empowerment of the rural health care communities for better health outcomes of rural population in Uganda using ICT.

5 Conclusion and recommendations (See Annex A for proposed Workplan)

5.1 Demand and use of information

- There are many positive developments in Uganda regarding the M&E in the context of disease plans, SWAp and IHP+, which are indicative of a greater demand and use of health information for decision making.
- There are well established annual reviews, and use of data such as district league tables for decision-making in reviews.
- 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. CHeSS provides such globally agreed comprehensive framework and platform.
- Analytical (e.g. benchmarking) and communication of information (e.g. a dashboard approach) needs to be strengthened
- The PAF health indicators should be included in the IHP+ accountability and results framework. Fewer core or tracer indicators would be preferable.
- The HIV/AIDS indicators in PAF should be reduced to one or two to maintain an appropriate balance within the health sector.

[26] http://www.who.int/workforcealliance/members_partners/member_list/makerere/en/index.html

5.2 Supply of data and statistics

- **Data sources**
  - Collection mechanisms and data flows are well established and monthly return rates are relatively high. HMIS feeds back quarterly to districts. Districts are also supposed to produce their own quarterly performance assessments.
  - The HMIS in Uganda forms the basis for annual data for many indicators. HMIS has wide coverage and collects much of the data required for the indicators. This is complemented by surveys commissioned by MoH, household surveys conducted by the Bureau of Statistics, as well as special studies and support supervision reports.
  - The HMIS is a key data source to monitor programme indicators listed in the HSSIP and to support other reporting requirements.
  - Strengthening of the data sources to provide data should be part of overall health information systems strengthening efforts.
  - HMIS:
    - There is a need to strengthen the national HMIS with other efforts and increase collaboration with stakeholder in order to increase credibility around HMIS data.
    - Enhance data verification mechanisms (i.e. quality, adjustment, and estimation), including data collection from sample of facilities to inform annual health sector reviews, including facility data, human resources, and financial information.
  - Vital events monitoring:
    - There is a need to harmonize the efforts to develop demographic surveillance sites by convening the major partners - Ministry of Health, Health Metrics Network / WHO, UBOS, US government / CDC - and aim to develop a system run by UBOS, in close collaboration with the MoH (or vice versa). In addition, it is necessary to discuss the possibilities of improving birth and death registration and cause-of-death certification and coding in hospitals

- **Data quality assessment**
  - Although there are recognized weaknesses in the quality of HMIS data, there is increased will to address data quality issues more effectively through, for example, the hiring and training of more records staff and statisticians.
  - There is a need to increase data access and transparency to allow regular assessment of data quality.
  - Improve data quality assessment, transparency (data, methods), in-depth analysis and effective communication of progress and performance, and systematic linkage between disease programme M&E, global reporting and the regular health sector reviews.
  - This should also include the adjustments made to the HMIS based on survey results.
  - Increased institutional capacity and involvement in this process will be essential.

- **Synthesis and analysis**
  - The situational analysis section of the HSSIP provides a comprehensive assessment of the health situation in Uganda, including analysis of national trends in the major indices of health status (IMR, CMR, U5MR, MMR, TFR, prevalence of malnutrition) and progress and underlying constraints in reaching various coverage targets under HSSP II.
  - The joint annual review processes need to be informed by recent high quality data. The HMIS data are important for such review but need to be complemented by regular reviews of a selected number of districts in which a facility assessment, a data quality control, and financial review is done. Such a review should be done about 3-5 months prior to the joint annual review by an independent institution or review team

- **Dissemination and communication**
  - Dissemination of information at national level for policy and priority setting is generally good.
    - Health information is presented as part of the HPAC meetings and products discussed for action. Population based reports (e.g. DHS or Census) are also shared at national level.
    - League Tables have been used to facilitate negotiation and dialogue between the Ministry of Health and Ministry of Finance for increased health sector funding allocation from the general budget.
    - There remain challenges at lower levels, districts and HSD where due to lack of necessary capacities, analysis and use of information is very limited.
  - There is great potential in Uganda to streamline current mechanisms and processes in place, to strengthen these towards a sound M&E plan, and a strong M&E country-led platform.
  - Databases are in different locations and access remains limited or information is outdated. The MoH efforts to bring databases together need to be strengthened and coordinated with all stakeholders into a single country health repository with accessible databanks which would then in turn facilitate M&E activities. The Resource Center, with its newly launched Knowledge Management Portal and with appropriate funding for maintenance and development, is an ideal location for the compilation of all information building it into the National Ugandan Health Observatory.

5.3 Institutional capacity

There is a need to make institutional capacity an integral part of the monitoring and evaluation component of the country compact. Currently, this occurs in a fragmented manner and core partners should work together to develop short and long term plans to strengthen and support Uganda's capacity. Furthermore, currently there is no formal “home” for the leadership of M&E activities. The establishment of a lead division within a department with adequate staffing is of key importance and needs to be agreed on. Furthermore, the creation of a M&E working group/taskforce that cuts across all MoH departments, as well as including external partners/stakeholders is crucial. This is clearly stated as part of the MTR HSSP II (2008) which includes a recommendation for a division within the MoH with clear authority on M&E activities to lead and coordinate. Furthermore, clear institutional roles and responsibilities needs to be established on M&E work to be carried out among key stakeholders, including MoH but also beyond, between specific research institutes at Makerere University and UBOS as part of a the national M&E platform.

Annex A Proposed workplan

Activities

1. Develop comprehensive M&E component of the NHSSIP

- *Situation:* This is the first time a specific M&E plan is developed for the national plan. Several sections have been prepared, including an overall framework and the Supervision, M&E, and Research working group (SMER WG) is leading the process. The main challenge is to simplify while addressing all major issues and create a one country-led M&E system that is strong enough to be the basis for national M&E as well as global reporting.
- *Proposed actions*: (1) propose an outline for the M&E plan (WHO - Nov 2010, attached) (2) drafting of all chapters (SMER WG, WHO support) (Dec-Feb) (3) final review workshop on national M&E plan (Mar-Apr) (involvement major global M&E partners).

2. Strengthen M&E of NHSSIP

- *Situation*: A system of regular reviews for assessing progress and performance is well developed, including extensive use of indicators and targets and annual district league tables. Important areas to strengthen are data quality assessment, transparency (data, methods), in-depth analysis and effective communication of progress and performance, and systematic linkage between disease programme M&E, global reporting and the regular health sector reviews.
- *Proposed actions*: (1) enhance data verification mechanisms, including data collection from a sample of facilities to inform annual reviews (Aug 2011) (2) conduct a workshop on analysis, including data quality assessment and adjustment (DQAA) and estimation (Sep 2011) (3) develop systematic compilation and discussion of qualitative information relevant for M&E of the NHSSIP (Q3 2011).

3. Increase institutional capacity for M&E

- *Situation*: The Ministry of Health conducts the analysis for the health reviews, mostly using HMIS and administrative data. MoH organizational structure and staffing levels need to be strengthened. External involvement has been limited to the Bureau of Statistics in data collection and analysis.
- *Proposed action*: (1) agree on clear organizational structure within MoH with the major M&E work to inform health sector reviews located in a single directorate and department, with adequate staffing (Q1 2011) (2) develop institutional roles and responsibilities for M&E of NHSSIP with MoH, research institutes at Makerere University and Uganda Bureau of Statistics as part of the national M&E platform (Q1 2011, part of M&E plan) (3) focus capacity building for M&E of NHSSIP on the key institutions.

4. Establish country health repository

- *Situation:* databases are in different locations and access is limited. MoH has begun to bring databases together which needs to be strengthened.
- *Proposed action:* (1) establish a comprehensive repository of health data within the MoH with support from UBOS, in publicly accessible data banks, facilitating M&E (Q1-Q4 2011) (2) ensure that partners contribute to the repository, including resources and relevant data

5. Alignment and investment of international partners with one country-led M&E platform

- ***Situation***: Uganda has many reporting requirements, in the context of global initiatives, global partnerships and bilateral aid. A strong national M&E platform should become the basis for all global reporting, in line with the core principles of IHP+ and the Compact.
- *Proposed action*: (1) carry out a joint mission to involve the major external funders of the health plan and the M&E component in Uganda, including the Global Fund, GAVI, and US government and World Bank, aiming to ensure harmonization and full buy in into the M&E platform (Mar 2011) (2) promote increased investment of the global partners into the country led M&E platform

Annex B Draft M&E outline

UGANDA
MONITORING & EVALUATION PLAN
NHSSIP 2010/2011 - 2014/15
Outline

1 Introduction

- Goals of the M&E plan / component of the national health strategy
- Process of development of the M&E plan

2 Current situation

- Review M&E practices in M&E NHSSP II
    - Strengths
    - Challenges
- NHSSIP 2010/11-2014/15
    - Main goals of the NHS
    - Implications for M&E
- M&E requirements outside of health sector strategic plan
    - Disease specific monitoring practices
    - Global reporting requirements
    - National Development Plan
- M&E practices
    - Indicators
    - Data sources
    - Analytical practices including data quality
    - Communication and use
    - Research

3 General framework

- Includes inputs, outputs, outcome and impact indicators
- Specifies indicators, data sources, analysis, communication and use
- M&E plan is integrated with the country health information system that serves information needs at the different levels of the health system

4 Indicators

- HSSIP core indicators (maps the indicators on to the framework)
- Balanced and parsimonious set of core indicators (less than 20)
- Programme and disease-specific indicators are aligned
- Well-defined baselines and targets
- Use of global standards for indicators and metadata
- Specified reporting frequencies

5 Data sources

- Data sources specified for all core indicators
- Critical data gaps and weaknesses identified and an explicit plan developed to address these
- Data collection and management specified for different levels.

- All relevant data and methods publicly available
- Costing of data collection

6 Data analysis

- Specific processes for data quality assessment and adjustment in place and transparent
- Data analysis and synthesis work specified and costed
- Indexes specified
- Prospective evaluation planned and linked to M&E of the national health plan
- Systematic analysis of contextual and qualitative information as basis for policy dialogue and performance review

7 Data dissemination and use

- Regular and transparent system of reviews and use for decision making: annual, mid term, final assessment / evaluation / situation analysis for new plan
- Analytical reports for reviews available and accessible
- Program-specific reviews are linked to the general health sector review
- Global reporting and performance reviews are aligned with country review processes
- Routine feedback to sub-national and key stakeholders
- Appropriate decision support tools and approaches are used

8 Roles and responsibilities

- Key country institutions and stakeholders have clear roles and responsibilities
- Adequate country capacity for all areas of M&E
- Well-established coordination mechanisms for M&E of the NHSSIP
- The M&E system performance is regularly assessed

Annex C – HSSIP 2010/11 – 2014/15 Core Indicators by Domain

INPUT & PROCESS (4)		OUTPUT (5)		OUTCOME (12)		IMPACT (5)	
Health financing Information, Governance		***Service access and readiness***		***Coverage of interventions***		***Health status***	
1	General Government allocated on health as % of total government budget	**5**	% of new TB smear + cases notified compared to expected (TB case detection rate)	**10**	% pregnant women attending 4 ANC sessions	**22**	Maternal Mortality Ratio (per 100,000 live birth)
Workforce		**6**	Per capita OPD utilization rate (m/f)	**11**	% of deliveries in public and PNFP (n° of deliveries/expected deliveries)	**23**	Neonatal mortality rate (per 1000)
2	Annual reduction in absenteeism rate (m/f)	**7**	% of health facilities without any stock outs of six tracer medicines	**12**	% children under one year immunized with 3rd dose pentavalent vaccine	**24**	Infant Mortality Rate (per 1000)
3	% of approved posts filled by trained health workers	**8**	% HCs IV with a functioning theatre (providing EMOC)	**13**	% one year old children immunized against measles	**25**	Under 5 mortality rate (per 1000)
Infrastructure		***Service quality and safety***		**14**	% pregnant women who have completed IPT2	***Financial risk protection***	
4	% of villages/ wards with a functional VHT, by district	9	% clients expressing satisfaction with health services	**15**	% of children exposed to HIV from their mothers accessing HIV testing within 12 months	26	% of households experiencing catastrophic payments
				16	% UFs with fever receiving malaria treatment within 24 hours		
				17	% eligible persons receiving ARV therapy		
				Risk factors and behaviours			
				18	% of households with a pit latrine		
				19	% U5's new visits with height /age above lower line (PR)		
				20	% children under 5 with weight /age above lower line (PR)		
				21	Contraceptive Prevalence Rate		