

Strengthening of the monitoring and review component of the national health strategy¹

NEPAL

Brief situation analysis and roadmap for 2011/12

¹ This report is based on a joint mission to Nepal by Ties Boerma, WHO Geneva, Jyotsna Chikersal, WHO-SEARO, Peter Hansen, GAVI, Daniel Low-Beer, Global Fund, 18-20 April 2011. This work is related to strengthening the monitoring and review component according to the IHP+ principles. The mission included consultations with Ministry of Health and Population and in-country institutions and partners, and a desk review.

Executive summary

The need for strengthening accountability through a common monitoring and review platform has been expressed by the Ministry of Health and Population and development partners. This brief report describes the situation in Nepal 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 monitoring and review component of the NHSP-2. It concludes with a set of recommendations and a roadmap/workplan for 2011-2012.

Nepal's health information system generates a considerable volume of reliable data for monitoring of progress and performance in the context of the NHSP and specific disease programmes. The consistency between the different data sources and the good reporting rates has resulted in considerable confidence in the data.

The national review mechanisms through a national review and a joint annual review use the monitoring data to assess progress and performance in relation to the goals of the national plan, including equity. Progress in many health indicators has been very positive during the last decade.

The brief situation analysis has resulted in six priority areas for action in the coming year(s). An outline for a one year workplan is provided as well. The priority areas build upon the analyses and plans in NHSP-2 and the Health Sector Information System Strategy (HSISS), with a focus on strengthening the national monitoring, review and evaluation platform through joint support by the partners. The one platform should also be the basis for global reporting to for instance GAVI and Global Fund as well as other development partners.

1. Develop a comprehensive monitoring, evaluation and review plan for NHSP-2, including policy and institutional environment and technical framework
 - *Drafting by MoHP with assistance from WHO and development partners (Jun - Aug)*
 - *National workshop to discuss draft and finalize comprehensive plan (by Sep)*
2. Strengthen the analytical monitoring report for reviews, focusing on the end 2010/11 review
 - *Multi-institutional team to analytical capacity strengthening workshop, Bangkok (July)*
 - *Analytical workshop for health sector review (Oct)*
3. Strengthening data availability and quality for reviews, through better alignment of current investment and addressing data gaps
 - *Finalize instruments for design, record review and service readiness assessment (Aug)*
 - *Conduct facility assessment (Sep) and prepare report prior to analysis workshop (Oct)*
4. Develop a national health information centre (NHIC) and district health information bank (DHIB), as outlined in the national strategy
 - *Detailed plan, capacity development and technical support (Sep)*
 - *Implementation (Oct - mid 2012)*
5. Strengthen institutional capacity through greater involvement of country research and public institutions and organization, in close collaboration with the Ministry of Health and Population, Central Bureau of Statistics, National Health Research Council, Tribhuvan

University and BP Koirala Institute of Health Sciences faculties (Population, Epidemiology, Community Medicine)

- *National M&E plan specifies the role of the institutions (Sep)*
 - *Key institutions are involved in the implementation of the roadmap*
6. Alignment and investment of development partners with one country-led monitoring, evaluation and review platform
- *Clear commitment and actions of partners, including Global Fund, GAVI and others, to align with the strengthening of the platform*

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 (M&E) 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.

The Ministry of Health and Population (MOHP) and international partners signed the Nepal Health Development Partnership agreement or 'compact' in February 2009 made more explicit agreements about effective ways of working and how to monitor progress. A Joint Financing Agreement in support of the Nepal Health Sector Programme-2 for 2010-2015 (NHSP-2) was signed by a group of pooling and non-pooling partners in August 2010. Nepal is also a priority countries for the Health System Funding Platform of GAVI, Global Fund and World Bank.

The need for strengthening accountability through a common monitoring and review platform has been expressed by the MOHP and partners.² This brief report describes the situation in Nepal 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 monitoring and review component of the NHSP-2. It concludes with a set of recommendations and a roadmap/workplan for the coming year.

2 Demand and use of information

Country strategic plan

The new five year health plan, National Health Sector Programme (NHSP)-2 2010 - 2015, was based on a comprehensive analysis of evidence of progress, which was used to define the new strategic directions. About 70% of the government health budget goes to the Essential Health

² The Ministry of Health and Population (MoHP) requested WHO to put together a joint mission with Global Fund, GAVI, World Bank and other partners:

1. To discuss with MoHP the current status of monitoring and review activities and the areas of greatest need, in the context of strengthening of the national health plan
2. To develop a one year joint roadmap and workplan to strengthen monitoring 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 Nepal, focusing on the M&E platform to support the national health sector strategic plan and global reporting

Care Service package which largely contains proven cost-effective interventions. In addition to NHSP-2, Nepal has several disease- and programme-specific policies and plans for safe motherhood and newborn health, HIV/AIDS, TB control etc. The NHSP-II results frame work and SM, NB, HIV and TB control indicators for 2010-2015 are related to achieving the MDG goals and therefore follow the same plan and policy.

The NHSP-2 Implementation Plan includes a four page chapter on monitoring and evaluation (and research) that analyzes the current situation and highlights specific areas that need strengthening.³ It also includes a set of core indicators and targets (see below). The plan indicates a specific M&E plan will be developed for NHSP-2 which is still to be done. Such a plan should include a comprehensive monitoring, evaluation and review framework that specifies the details of the measurement of progress and performance, data quality control, analysis and synthesis, and technical outputs. It should also include the institutional and policy environment with the roles and responsibilities of the different actors.

NHSP-2 sets out seven directions for M&E development, including more baseline data and improved 'means for tracking progress'; more disaggregation of data; greater use of data at lower levels, greater central analytic capacity. The coordination mechanism to steer the implementation of the M&E of NHSP-2 is not specified. The Health Sector Information System Strategy (HSISS) document produced in 2006 does include a proposal for a coordination mechanism but this has not yet become fully operational. The HSIS has not been operational and its objectives of HSIS need to be clearer among higher level officials in the DoHS, MoHP and key EDPs, which should result in greater leadership and commitment.

Monitoring component

The reviews occupy a central place in tracking progress and performance of NHSP-2. Nepal has held twice yearly Joint Reviews since 2005. Previously, the January review was primarily about overall reviews of progress and the June/ July one was seen as the planning Joint Annual Review (JAR). These events include MOHP, other ministries, external development partners (EDPs) and NGOs. In addition, for the last 14 years MOHP has held an annual health performance review each November. This is a more internal MOHP event than the JAR, held in the Nepalese language. It mainly focuses on reporting of activities by individual MOHP divisions, regional and district directors. There is discussion to combine the reviews into one JAR, complemented by quarterly Joint Consultative Meetings between MOHP and EDPs which cover specific strategic themes.

At the subnational level, monthly review meetings are held in the districts. The five regions of Nepal hold review meetings with the districts every trimester. In these meetings health information reported by the districts is one of the subjects. The regional team does not have a health information officer but plans for the recruitment of one staff have been made (with funding from DFID). The regional meetings provide a basis for the annual reviews in November.⁴

³ MOHP. NHSP-2 Implementation Plan 2010-2015. April 7 2010.

⁴ The regional team has a post for information officer, but it is often not filled. Options will provide a M&E person as TA to each regional office, to build the capacity of the region to support regional and district information systems.

NHSP-2 clearly signals the importance of JARs, not only as a way to monitor progress and performance and reduce monitoring transaction costs but also as the place to assess EDP performance on their aid commitments. The Joint Funding Agreement (JFA) document stresses the importance of the JAR as the single joint review mechanism for all partners, not just JFA signatories. It sets out agreements on the objective, core background reports to be prepared and range of constituencies to participate in the meeting.

A comprehensive monitoring report, that synthesizes the available health information in an analytical manner focused on the progress and performance during the past fiscal year, is lacking. A brief report on progress on the agreed results framework indicators of the NHSP-2 was produced for the most recent JAR in 2011.⁵ There were however only 2010 data for 10 of the 57 indicators for the of the results framework, mostly coverage indicators. The main source was HMIS.

HMIS does not generate the disaggregated data as specified in the results framework indicators. There are efforts to expand the HMIS data collection to generate more disaggregated data to monitor the RF indicators of the NHSP-IP 2. This however needs to be carefully weighed against the risks of increasing the workload of health workers and affecting the quality of data. Most equity indicators are better monitored through periodic surveys.

There is no strong coordination mechanism for the health information system. The HSISS, developed in 2006 but mostly not implemented has a number of key recommendations for the development of a comprehensive and integrated information system for whole health sector. These included the development of a National Health Information Centre (NHIC) at MoHP and the establishment of National Health Information Policy Committee (NHIPC).

Indicators

In the NHSP-2, there are 11 impact and 46 input, process, output and outcome indicators, with specific indicators for equity of access. Impact indicators focus only on health impact and do not include financial protection. Indicator baselines and targets are mostly provided. Equity by wealth quintile and caste/ethnicity feature very prominently in the indicator set. In addition, the NHSP-2 contains a set of indicators as part of the Governance and Accountability Action Plan (GAAP) which focus on governance and institutional capacity to track capacity building activities in a range of areas including HRH, M&E, financial management and procurement. These indicators are more qualitative in nature.

The MDG indicators are well-covered in the M&E component of the NHSP-2. The majority of indicators are focused on MDG 4 and MDG 5. Very few are focused on MDG 6 and none relate to non-communicable diseases and other conditions such as injuries. There are also many indicators related to global reporting. As a general principle, the core indicators should be generated from HMIS/HSIS and a limited number of additional indicators should be obtained from vertical systems. Currently done, too much is generated outside of the country's system.

⁵ MOHP. Monitoring the progress in the health indicators after implementation of Nepal health sector programme implementation plan II 2010-2015. A report prepared for the Annual review (JAR). Kathmandu. January 2011.

The Global Fund grants however have many more indicators and frequent reporting, the reporting system is not well-linked to the overall reporting system and does not make full use of the data generated by for instance the HMIS.

- All disease programmes have strategic and M&E plans. The link between the programme specific monitoring systems and NHSP-2 is not immediately clear. In some case they draw from the same data sources (HMIS, surveys), in others there are separate systems.
- National safe motherhood and newborn health plan long term plan - 2006-2017: includes 34 indicators with 2012 and 2017 targets, relying mostly on household surveys and the HMIS. A good example of integration with the country system is the newborn health pilot programme monitoring which has formed a subcommittee on M&E led by HMIS chief.
- TB control plan 2010-2015: has about 50 indicators in a separate reporting system. The system functions well. Regular processes for data quality assessment and review are in place. There are a few indicators in the HMIS. The consistency of data between the TB reporting system and HMIS is only moderately good (plus or minus 20-30%).
- HIV/AIDS strategic plan 2007-2011: there are 36 indicators in the M&E plan, covering UNGASS and health sector indicators. The HIV/AIDS programme focuses on specific districts. The service delivery by NGO and public sector report to the National Centre for AIDS and STD, both electronic and on paper. It also gets data from the PMTCT sites. There is also a USAID supported reporting system (with FHI). Surveys of target populations (IBBS) are conducted every two years. The last round was in 2009 for female sex workers, injecting drug users and men who have sex with men. There are also surveys among migrants. In 2010 there was another IBBA conducted by Save the Children. This project has also begun to address some of the data quality issues. HMIS also collects some HIV/STD data, mostly related to testing. It does not include the disease pattern for STI.
- Nutrition: there is no specific strategic plan. Nutrition is now becoming a multi-sectoral issue. HMIS only provides data on underweight children, but these data are not representative. Community data are needed.
- Child health: there is no separate plan for child health; it is integrated in the overall plan. The immunization and other child health intervention related data are generated through the HMIS. The tracking of the number and proportion of target population reached with vaccination is well functioning; it is fully integrated into HMIS and reported data correspond well to coverage estimates produced independently through household surveys.
- Malaria: is developing a M&E plan. This is one of the requirements related to Global Fund funding. Every year revisions are made (the same is the case for HIV/AIDS and TB). This is partly due to changing global requirements, partly due to new interventions. Impact and outcome indicators are included in the results matrix for the JAR. A parallel reporting system is only needed while new interventions are tested. Once the interventions are established, then the monitoring should be incorporated into M&E regular system.
- NCD: the NCD do not appear in the NHSP-2. The data are lacking on population prevalence of the major conditions (diabetes) or risk factors. There are some diseases included in the HMIS. Blindness and deafness are not included, even though eye care services have now expanded to 63 districts. A NCD risk factor survey (STEPS) was conducted in a few districts. There are virtually no data on mental health.
- Injuries and violence: the data are reported to the Ministry of Home Affairs.

Overall, there is a need for greater integration of the data systems, but the greater data requirements for the specific programmes are an obstacle.

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. A new Health Sector Information System National System Strategy (HSISS), focusing on the administrative and facility data, developed in 2006, piloting was completed in February 2011 in 3 districts. Initial reports indicate that cost and complexity are higher than anticipated. An evaluation will be conducted soon (the tender has been posted).

NHSP-2 states that the HMIS, is 'without compare' in the region, but that data production is not well coordinated, as there are multiple routine systems. Altogether there are eight administrative and facility-based (routine) data systems. The main surveys, DHS and LSMS, are critical to verify the facility-based coverage statistics and to gather information on health impact measures and equity.

Data sources

Census

Population projections from the 2001 census are available for districts and broken down by age and sex. The HMIS makes extensive use of the denominators in the estimation of district coverage on an annual basis. The 2011 census is ongoing and includes questions that allow estimation of maternal mortality.

Nepal has a population of about 27.4 million (projection for 2008/09) with three zones (mountain, hills, flat lands), five regions (Eastern, Central, Western, Mid Western and Far Western) and 75 districts. This implies on average 15 districts per region with a district population of 365,000. The district size is very well suited 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.

HMIS (Health Management Information System) - facility reports

The HMIS is the responsibility of the Management Division of the Department of Health Services (DOHS). It has a staff of 10, including two statisticians. There are three vacancies. DOHS has implemented the HMIS in entire country since 1994 with continuous financial and technical support from UNFPA and some other EDPs. Data on utilization of child health services, family health, disease control, and curative care are entered into the computer at the district level and compiled by the M&E division of DOHS on a monthly basis. Health facility data are compiled at the district level and sent to the central level on a monthly basis. It disaggregates patient data by age and gender. Data entry is in MS Access, send in XML format by email and then put together

in SQL server. Stata is occasionally used for the analysis. There is a willingness to put the data in excel on the web, but this has not yet been done.

The completeness of reporting is good for public facilities. For instance, for 2008/09 it was 100% completeness for districts, 79% for hospitals, 97% for PHC facilities, and 90% for EPI clinics. Reporting for NGOs and private health institutions however was 67% and 66% respectively. HMIS revisions also aim to better track the contributions from private and community (including NGO) health institutions. This is probably most relevant for a minority of districts, especially urban. It appears that no adjustments are made to the reported coverage data to account for underreporting or deal with unlikely outliers.

The system has generated credible statistics for many years (as indicated by the consistency with population based survey results), which are reported in a summary report (Glimpse of Annual Report) and a full report with all the district specific data (Annual Report). The most recent report available is for 2008/2009. The publication of the 2009/10 report is somewhat delayed, although the data have been used in the reviews since November 2010. The delays in the publication of the annual reports are recurrent. It is challenging to produce them in time, given the short time lag between data becoming available and the reviews.

There are several parallel reporting systems (e.g. TB, HIV/AIDS) which often operate on quarterly or semester basis. These are considered necessary by the programmes because they collect data on a larger numbers of indicators.

Efforts to strengthen the HMIS by expanding its data collection, including the private sector, and development of district data banks, also included the development of a list of core indicators (83), includes 425 data elements, with disaggregation data by age, sex and caste/ethnicity. Pilots in three districts are being conducted and are showing the complexity of collecting such data from health facilities. The emphasis on more disaggregated data implies a much larger work load for health workers in health facilities and the reporting system as a whole. This may have negative implications for service delivery and possibly also data quality.

Administrative data systems

The administrative reporting systems are also considered part of the HMIS. There are several separate systems, which are not well integrated with the HMIS. Examples of these information systems include:

- The Financial management information system (FMIS) aims to collect information on budgets and expenditures by programme. The MOHP Health Economics and Financing Unit (HEFU) is responsible for regular updating of the National Health Accounts and Public Expenditure reviews. NHSP-2 indicates that strengthening of the unit will be required.
- The health workforce is monitored through the Human resource information system (HuRIS) which aims to keep comprehensive databases at the district level which are then put together at the central level. Evaluations have indicated that the current system needs strengthening.
- Other administrative information systems include the Health infrastructure information system (HIIS) (infrastructure and equipment databases kept at district level), logistics management information system (LMIS) (medicines, contraceptives, vaccines), Planning

and management of assess in health care system (PLAMAHS), Ayurvedic reporting system (AyRS) (monthly reporting by all such facilities), Training information management system (TIMS).

The Health Sector Information System National System Strategy (HSISS) aims to address the integration of the multiple reporting systems.

Disease surveillance

The early warning and response system (EWARS) is based on 39 sentinel sites (hospitals). This includes influenza, malaria, leishmaniasis, Japanese encephalitis and acute diarrhoeal disease/cholera. The reporting system is separate from the HMIS, coordinated by the Epidemiology and Disease Control Unit.

There are also 18 priority disease for which *weekly* reporting is mandatory, as opposed to the monthly reporting. This integrated disease surveillance and response system (IDSR) is now piloted in five districts. This includes also the six diseases with mandatory reporting within 24 hours (IHR).

There is also a reporting system for vaccine preventable diseases (VPD surveillance). This was established in 1990 for polio surveillance. There are now over 490 sites: measles, AFP/polio, neonatal tetanus and Japanese encephalitis. The data are reported weekly. In addition, there are 80 active surveillance sites. The data are provided to HMIS. The sustainability of VPD surveillance is questionable, especially if IDSR is expanding.

There are multiple systems. The epidemiological inputs, the surveillance, appear to be exceeding the response capacity at district, regional and national levels.

Population-based surveys

Nepal conducts a DHS (1996, 2001, 2006, 2011 **ongoing**) and a living standards survey (NLSS, 1995/6, 2003/4, 2010) with a substantial health section once every five years. These surveys are used to generate information on health status indicators and also to validate the coverage and other statistics generated by the HMIS. There are also other surveys such as an interim coverage survey (last one conducted in 2008, supported by USAID), MICS (two provinces 24 districts in 2010, a full MICS planned for 2013) and maternal mortality and morbidity survey (conducted in 2009).

There is a need for better coordination of the contents and timing of the surveys. A general health survey plan is lacking.

The DHS is conducted under the aegis of Population Division of MoHP and field work and data entry is contracted to New ERA, a local NGO. There do not appear to be many programme-specific national surveys separate from the multi-topic surveys listed above, but subnational surveys are common. The Central Bureau of Statistics is responsible for the MICS and NLSS.

For HIV/AIDS there are regular special population surveys, including female sex workers, IDU and MSM, as well as migrants and their spouses. These surveys are called Integrated Biological Behavioural Assessment (IBBA).

Facility assessments

HMIS is developing a complete master list of health facilities, with GPS coordinates. There is a health facility mapping in 27 districts completed in 2009, entered in CSPro, supported by WHO. HMIS is now able to map services using Google Earth in these districts and link these to geographic and other characteristics. The listing includes public and private facilities. The questionnaire is based on the standard WHO service availability mapping which also provides basic information on the services offered and the service readiness of the facility. There are plans for a spatial analysis. Work in another 15 districts is ongoing with GTZ support, and another 15 with WHO support. The funding for 18 districts is still pending. A master list of facilities, regularly updated by districts, is essential for planning and monitoring and forms a necessary basis for monitoring service delivery and data quality through sample facility assessments.

Following the introduction of the Nepal's free health care policy three facility assessments were conducted every year on a sample of about 150 health facilities, located in a select number of districts (13). The assessments focus on a set of specific issues related to the reforms and aim to measure short term changes. The first three surveys were conducted in 2009, including a record review, health worker interviews and client exit interviews. This was repeated every trimester in 2010, supported by RTI and Care. In NHSP-2, Options will carry out a facility assessment annually. The instruments capture only limited information on service delivery indicators. It is not clear if there is a need for such frequent surveys which may lead to an overload of information at the national level. The use of the data appears quite limited in the national reviews.

A national Service Provision Assessment (SPA), which also includes exit interviews and patient provider interaction, will be conducted in 2011, supported by USAID. The SPA goes into greater detail than all other facility assessment instruments and includes a quality of care component.

Annual social audits will be made mandatory at each health institution. Health Facility Management Committees will assume responsibility for auditing their institutions' performance. Twenty-five percent of district facilities are expected to have conducted social audits before the end of NHSP-2.

There is also a web-based maternal and perinatal death review system which is now functioning in 16 district hospitals. It started in 2006, supported by WHO. There is a national advisory committee which should meet annually, and the implementation hospitals meet as well. It appears to function pretty well. UNICEF and Nepal Health Sector Support Programme (Options) want to support expansion.

Vital events

The birth and death registration is the responsibility of the Ministry of Local Government and conducted through the village development councils and municipalities. It is mandatory by law but coverage is low.

Policy and contextual data

There is a need for policy research and special studies to support routine monitoring and evaluation and inform the development of policies and programmes based on evidence. This includes contextual data on the social determinants of health, governance and policy information. There are two rather different initiatives that should be brought together to develop one system that could be housed in a country research institutions for continuous maintenance and production of a report to inform the annual reviews. The first is the WHO supported work on a systematic documentation of all information on health systems, using an extensive taxonomy and managed in a Wikimedia based website with restricted access. The second is the UN supported initiative on learning that focuses on systematic archiving of all relevant documents in the health sector and beyond (MLI).

Data quality control mechanisms

The main pillars of the HMIS data quality control are the district and regional meetings, with inputs from the central level where possible. There is also a verification exercise for about 30% of health facilities each year. This is usually done three months before the end of the fiscal year. The reviews are semi-independent: they are done by staff not involved in the compilation and reporting. This is mainly used to provide feedback to the districts and facilities and take corrective action. There is no published report about the data quality assessment. Given the lack of documentation, it is not clear how well this is functioning in practice.

The HMIS data analysis always includes a presentation of denominators and completeness of reporting, but no adjustments are made for underreporting or outliers. There is no systematic comparative analysis of HMIS and population survey statistics, but it is generally noted that there is good consistency between the two at the national level, which provides confidence in the HMIS as the principal tool for annual monitoring of progress. It would be beneficial to have a more systematic approach towards data quality assessment and adjustments using well-established analytical techniques. A mismatch assessment study is planned to identify problems and take corrective actions.

Access, analysis and dissemination

The HMIS data are currently not available on the web, except in the reports. Since the reports are extensive and include district level data on almost all key data elements, it is relatively easy for HMIS to make the data publicly accessible in Excel or other downloadable format. There is willingness to do so.

HSISS includes plan for an integrated data warehouse: the National Health Information Centre to be located at MOHP. In addition, there will be a district health information bank in which all relevant data for the district are kept and made easily accessible. It also aimed for the establishment of District Health Information Management Committee.

An example of further analysis of the HMIS data is presented in performance evaluation reports.⁶ For 2007/08, a rather complex index was computed from 21 indicators, mostly from HMIS data, and districts were ranked, compared within ecological zones, and compared with past performance. The advantage of an index based on a large number of indicators is that many aspects of performance are captured in a single indicator. The disadvantage is that it becomes more difficult to interpret, especially if the indicators included present a very different array of activities. It would be good to develop the analysis further and perhaps simplify it.

There are relatively few formal reports circulating or available on the web. The main documents are the survey reports and the annual report (with a summary report) of the HMIS. This report is very detailed and informative, with district data. The most recent report is on the web (for 2008/09).

There is limited analytical capacity in all institutions that could play a role in monitoring and reviews. NHSP-2 flags the need for greater central analytic capacity for monitoring and evaluation.

4 Institutional capacity and resources

Institutions

Central Bureau of Statistics

CBS is currently under the National Planning Commission which is in the prime minister's office. There are plans to raise the status of CBS to ministerial level. There are three divisions including social statistics. The latter has four units responsible for census, surveys, data processing and GIS, and health and education statistics. There are 33 branches in the country, including five regional and 28 district offices. The social statistics division has 6 qualified statisticians, including three at the Master's level, and there are problems with retaining staff. Analytical capacity is weak. CBS needs support in analysing the information collected in census 2011 to generate MMR.

The vital statistics system based on civil registration is not functioning. No data are received from the Ministry of Local Government.

The links between Ministry of Health and CBS and MoLD are weak both at the central and district level. CBS assist MOHP with the design of DHS and other surveys, but overall there is no formal coordination. The MICS survey conducted by CBS was not mentioned as a source of data by MOHP and EDPs.

Ministry of Health and Population

The capacity within MOHP is concentrated in the HMIS section of Management Division in DoHS and the Division of Public Health Administration, Monitoring and Evaluation in MoHP's role is not well articulated. The HMIS does a remarkable job with a relatively small number of staff, although the time lag between receiving data, followed by cleaning and verifying, and

⁶ MOHP. Performance evaluation of districts (fiscal year 2063/64). Public Health Administration, Monitoring and Evaluation Division. 2065.

publication is too long and indicative of the need to expand the number of staff. There are two statisticians who are responsible for the analysis and reports. Additional staff or linkages with country institutions are essential.

Research and private institutions

There are several institutions and organizations but none were visited during this mission. These include New Era (implemented the DHS field work and data entry), National Health Research Council (part of the MOHP), Central Department of Population of Tribhuvan University, and Department of Community Medicine of Institute of Medicine. At present, there are no institutions that play a prominent role in monitoring and reviews.

Donor support for M&E

A range of international partners are active in Nepal. There is good collaboration among the partners and little competition. The goal of jointly supporting a strong country led accountability platform was well received. Examples of support include:

- Health sector support programme: supported by DFID, technical support by Options is involved in monitoring the free health care through facility surveys, a health systems performance assessment in 2010, financial analyses and various research-related projects, including several background analyses and summaries for the Joint Annual Review.
- Options during SSMP period supported target population projection (denominators for generating indicators) to monitor health programmes. Additionally Options supported development of GIS based AMNH atlas.
- A maternal and Mortality and Morbidity Study 2008/09 was conducted in eight selected districts of Nepal by DoHS with funding support from USAID and technical support from Options.
- World Bank and WHO support specific activities in monitoring and evaluation of the NHSP and specific programmes. The World Bank also supports the NLSS survey and WHO supports facility mapping (SAM) and projects of HMIS.
- GAVI is a signatory of the Joint Funding Agreement, continues to support the immunization programme and supports the common country led M&E platform through the joint health systems funding platform
- Global Fund is supporting M&E component as part of grants for TB, malaria and HIV/AIDS (all three programmes are developing specific M&E plans in the context of GF funding), and, like GAVI, is committed to greater support for a common country led M&E platform through the joint health systems funding platform
- USAID is investing in many data collection activities such as DHS, interim surveys, facility assessment (SPA), census, social accountability reviews, IBBA surveys, surveillance (EWARS, avian influenza)
- UNICEF has supported a MICS in two regions with district specific estimates and intends to support a countrywide MICS in 2013.
- UNFPA has supported the HMIS since 1994 until recently.

5 Conclusion and roadmap

Nepal's health information system generates a considerable volume of reliable data for monitoring of progress and performance in the context of the NHSP and specific disease programmes. The consistency between the different data sources and the good reporting rates has resulted in considerable confidence in the data.

The national review mechanisms through a national review and a joint annual review use the monitoring data to assess progress and performance in relation to the goals of the national plan, including equity. Progress in many health indicators has been very positive during the last decade.

The brief situation analysis has resulted in six priority areas for action in the coming year. An outline for a one year workplan is provided as well. The priority areas build upon the analyses and plans in NHSP-2 and the Health Sector Information System Strategy (HSISS), with a focus on strengthening the national monitoring, evaluation and review platform through joint support by the partners. The one platform should also be the basis for global reporting to for instance GAVI and Global Fund as well as other development partners.

1 M&E and review plan for NHSP-2

There are well established national and regional accountability (monitoring, review, action) processes that involve major stakeholders in Nepal. Health information is considered a priority area in the national health planning and implementation cycles. Many of the components of a good progress and performance review system are present, but there is a need for a comprehensive and specific M&E plan, as stated in the NHSP-2. This will need to include the policy and institutional environment that is required to conduct monitoring and review processes. WHO and partners have developed general guidance for the contents of such plans. The National Health Information Policy Committee, described in HSISS, should be re-established, chaired by the Secretary of MOHP with participation of relevant other sectors, key country institutions and development partners. As envisaged in HSISS a National Health Information Centre should also be established under the Secretary of MoHP.

Action: Develop a comprehensive M&E plan for NHSP-2

This plan should include:

- Technical framework that guides the data collection, information flow/management, explicit ways to ensure data quality, analysis and review and dissemination schedules focusing on priority issues of progress and performance of NHSP-2
- Specifics on the policy and institutional environment such as coordination mechanisms and the different roles and responsibilities in one national M&E platform This could be done by creating a semi-autonomous NHIC with additional capacity in MoHP under Secretary of Health and Population, including the programmes and partners, along the lines of the Nepal health sector information strategy (HSIS). It also specifies the role of MoHP and country institutions in preparation of analytical monitoring reports to inform the annual health sector review. This includes a prominent role for an active National Health Information Policy Committee.
- Integration of the monitoring and review processes of disease programmes, aiming to increase efficiency and quality. The process of annual review should be well defined, including data and analysis inputs, reports required, and deadlines for release of conclusions.

- Costing of all major activities.

The plan should be developed during May-September 2011 led by MOHP, with involvement of major stakeholders, technical support if needed and include a review meeting. Development partners should use the costed plan as the basis for their investments in M&E strengthening actions in Nepal. Where appropriate, elements of the costed plan should be reflected in the Annual Work Plan and Budgets as part of the JFA.

2 Analytical monitoring report for reviews

The monitoring reports that are intended to inform the NHSP-2 review and decision-making processes need to be well-prepared, be based on sound analysis, and focused. The data collection systems in Nepal generate a lot of information and a critical analysis and synthesis is needed to inform the decision makers and programme implementers at the review meetings in the most efficient manner. This also requires effective communication of the results in a report which is prepared in advance of the reviews. The MOHP indicates that current capacity in analysis and synthesis of information and report writing is limited and needs strengthening.

Action: Support MoHP and other institutions in preparation of analytical monitoring report to inform the annual health sector review, starting with the second review of NHSP-2

- Responsibility for the preparation of the monitoring report lies with MOHP, but in collaboration with country institutions that have analytical capacity
- Partners will support the development of the report, initially through an analysis workshop
- The report will not only include analysis of targets and trends, but also reconciliation of data from different sources, consider equity and subnational performance, use summary measures, and look at input-output/outcome analysis. It will also focus on a systematic assessment of progress towards the NHSP-2 goals, using a framework.
- Investigate joint approaches to summarise the performance of the health sector, and provide ratings as the basis of future funding. This would improve alignment of decisions.

An analysis and report writing workshop should be held at least 6 weeks prior to the review, involving MOHP, country institutions with technical support from EDPs.

3 Strengthening data availability and quality for reviews

The health information system in Nepal has many strengths and the potential to continuously supply key information for decision making at all levels. The development of a coherent and comprehensive M&E plan of NHSP-2, as outlined above, will be critical. The HSISS has proposed a number of critical changes several years ago, and it is important to draw the lessons learned from the pilot districts. Some of the goals may have been too ambitious, especially for the HMIS and more pragmatic solutions may need to be found for the collection of equity data (minimizing the burden of data collection for service providers), integration of data sources, and inclusion of the private sector (so that statistics are not biased). Given the high frequency of household surveys and specialized reviews in Nepal, it is feasible to track a number of equity indicators on a regular basis through surveys.

There are multiple systems of facility assessment. It is time to reconsider the facility assessments and develop a more focused system of facility assessments to inform the national reviews. Much more use could be made from the survey and facility data through better analyses and more effective communication of results.

Action: develop a coherent and comprehensive data collection and analysis plan to monitor NHSP-2 and disease programmes and strengthen specific data sources

- Facility assessment: there are multiple systems. Greater coordination will be needed to reduce costs and provide data for the reviews. This could take the form of one annual facility assessment 3-4 months prior to the main review. This should include (1) a record review using the rapid data quality assessment (RDQA) to ensure confidence in the data generated by HMIS, 2) use of the Data Quality Assessment and Adjustment tool to systematically assess data and record any adjustments made, and (3) a service readiness assessment that focuses on health worker training and presence, drug availability, diagnostic capacity, specific service readiness, etc., in line with main goals of NHSP-2.
- Surveys: a health survey plan as part of the national M&E plan. The plans for a MICS and a mid-type of coverage survey in 2013 need to be aligned.
- HMIS revision: review the results of the pilot test, and revise the system while minimizing the workload for health workers and district staff; the recruitment of regional health information officers is essential to ascertain the quality and use of HMIS data. Looking at ways to reduce parallel data collection in different systems is also essential, while keeping in mind that one mega system is not the solution to all problems.
- Vital events monitoring: need for high level discussion on whether Nepal is committed to improvement of birth and death registration, and explore ways in which modern information communication technology (ICT) can help overcome some of the persistent obstacles.
- Systematic documentation of qualitative information to inform reviews: this should become a continuous activity, led by a designated research institution in close collaboration with MOHP, with an annual analytical report prepared to inform the reviews.
 - Institutionalising NHA and public expenditure review: there is a need to strengthen financial and economic analysis. As indicated in NHSP-2 strengthening of the Health Economics and Financing Unit of the Ministry will be needed.

This implies design of the specifics of data collection and quality ascertainment as part of the M&E plan for the NHSP-2 and implementation of specific components during the coming year, as prioritized by the coordinating committee.

4 District and national data banks /centre

At present, the national annual statistical report is the main easily-accessible source of information generated by the HMIS for the districts. There is no national, regional or district repository. Such a repository could easily be expanded into a "observatory" or health information centre where all the health data and analyses are shared. The need to link administrative data bases with the health facility and survey data should be addressed in the data repository. The HSISS plans for district data banks and a national health information centre should be executed.

Action: explore the different options for a national health information centre with district data and proceed to set up a centre in MOHP

- Develop a detailed and costed plan for a national health information centre - this could be included in the national M&E plan; the centre could be part of the HMIS unit in DOHS, or located in the M&E division

- Evaluate / assess the entire process of HSIS pilot in three districts, identify problems and recommend solutions for scale up country wide.

5 Institutional capacity

The HMIS section needs to be strengthened. The effort for smooth HSIS piloting could have been better. Internal assessment of piloting done at various occasions identified problems and recommended actions to solve them, however, no actions were taken to solve the identified problems. The problem of HSIS data entry and analysis software in the pilot districts and centre were never solved. The assessment, among other things, recommended deleting tools and data elements were never acted upon. Important M&E related HR positions remained vacant (e.g., IT person at central level and statistical officers at the regional health directorates). There are multiple parallel systems to meet the needs of specific programmes but often creating confusion. There is considerable pressure from multiple health and disease programmes to collect more information through the HMIS. The bottom line is to operate a system that minimizes the data collection burden on health workers and data compilation and quality control workload for district staff, while serving the needs of the major programmes. The analytical capacity in the M&E division of MOHP needs to be strengthened, either directly or through defined roles and contributions of country institutions such as CBS, NGOs, academia, or institutions within MOHP.

Action: *identify key institutions responsible for monitoring and increase institutional capacity with a focus on analytical capacity*

- The participation of a team from Nepal in a multi-country analysis workshop in July 2011 is one step.
- The process of strengthening the analytical monitoring report is a second step.
- The identification of country institutions should be done as part of the M&E plan for NHSP. This will allow focusing of capacity strengthening efforts during the remainder of 2011-12, which should also involve regional health information officers.

6 Alignment and investment of development partners with one country-led monitoring, evaluation and review platform

Development partners in the health sector are collaborating well in support of strengthening the health information and accountability mechanisms in Nepal. The alignment of development partners with one country led monitoring, evaluation and review platform should lead to further reduction of transaction costs by minimizing unnecessary duplication of activities and enhance the availability and quality of information available for review and action. This is particularly necessary for global initiatives and partnerships, such as the Global Fund, GAVI and PEPFAR. A better integration of the DoHS annual reviews, which are conducted in Nepali with the districts and regions, and the joint annual review is desirable, as this helps strengthen linkages between plans, budgets, implementation and achievements each year. EDPs need to be well represented where appropriate (e.g. in the NHIPC at the central level and DHIC at the district level).

Action: *development partners should align their investments in M&E with the costed M&E plan that will be developed and use the common M&E platform as the basis for reviewing progress in Nepal. They should base their funding decisions on these results.*