

PROFILES OF

Health Facility Assessment Methods

MEASURE Evaluation
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(IHFAN)



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The International Health Facility Assessment Network (IHFAN)

This synopsis of health facility assessment methods was prepared on behalf of the international Health Facility Assessment Network (IHFAN). The goal of the Network is to increase utilization of facility-based information for decision making about investments in health systems and services. Towards this goal, IHFAN plans to pursue four main objectives:

1. Improve communication, coordination, and collaboration around HFA tools, indicators, data availability and quality (global level);
2. Improve the knowledge of types of HFA, approaches to data collection and their application for management decisions (global/national levels);
3. Establish and promote best practices around the design, implementation, and dissemination of HFA, including tools, methodologies, and guidance in developing HFAs (global/national levels);
4. Expand the use of HFA data for program management and health policies (national level).

Rationale

In the past, most indicators of the status of a country's health system have been stated in terms of resources per population (e.g., physicians per 1,000 population; hospital beds per 1,000 population, etc.) or in terms of population-level outcome measures (e.g., mortality rates, service coverage rates). Such population-level indicators are useful and necessary, but they are not sufficient. Health systems are comprised of a network of health facilities, i.e. formal service delivery points. Indicators that focus on the individual facilities (or service delivery points) are also needed to show how inputs to a health system are reflected in the type, quantity, and quality of services actually available to a population. Such indicators capture information essential for needs assessments and planning investments in a health system, as well as for assessing the impact of health services on health outcomes.

Health professionals concerned with global health monitoring continue to advocate for global norms and standards that can serve as the basis for standardized measures of health systems and health programs, because such information is essential for sustaining increased investments in global health.¹ Systematic assessment of health facility performance based on accepted standards and norms may also help to improve service quality, because it conveys an expectation of adherence to standards ("what gets measured, gets done").

The expectation of adherence to standards can be further supported by identifying the essential components of health systems and services, and ensuring that their presence, and where relevant, their quality, is systematically measured and monitored. Experience has shown that an infusion of appropriate inputs can produce a rapid improvement in services, but sustaining these achievements is not so easy. Identifying appropriate indicators of the level and quality of service provision, and then periodically measuring these indicators, can highlight the importance of sustaining positive change. In many countries an accreditation/certification system is used for this purpose. Until such a system is

¹ Murray, C., Lopez, A., Wibulpolprasert, S. "Monitoring global health: time for new solutions." *British Medical Journal*. Volume 329, pp 1096-1100, November, 2004.

universally adopted, however, relying on information routinely or periodically collected from an appropriate sample of facilities is the most logical way to ensure the availability of key information.

Why we invest in health systems and facility-based services

When health outcome is measured in terms of reduced mortality, wide-spread public health and preventive measures implemented at the household and community level are found to have the largest impact on the health of a population. In the United States, for example, it has been estimated that the contribution of the health care system to reducing mortality is a relatively modest 11% when compared with the contributions attributed to lifestyle (43%), human biology (27%), and environment (19%).² Such a broad aggregation, however, can mask some important details. We know, for example, that access to health services in a country is not always uniform, nor is the need for health services uniformly spread across various subgroups of the population.

All societies have sub-groups (e.g., the poor, women of reproductive age, and children less than five years) who are at higher-than-normal risk for serious illness or death if they do not receive the level and quality of services that can be provided in the formal health sector, by formally trained personnel. Indeed, the success of the formal health sector in reducing mortality is much greater when specific subgroups at risk, such as children with pneumonia or women with complications of pregnancy, are taken into account. Even when community-based services are the priority, it is important to have referral sites for those who require more complex levels of treatment than would be feasible at the community level. Furthermore, even the best preventive measures require the support of a functioning system if they are to be provided effectively (e.g., child immunization, antenatal care, family planning).

Why we need facility-based as well as population-based information for monitoring health

Data obtained from health facility assessments are useful and important in their own right, and play an equally vital role when combined with population-level data. Facility-based information tells us what is actually happening at the level of service delivery (input, process, costs, output, quality). Such information is needed for monitoring (and improving) facility-level performance and service quality. These same performance and quality factors can affect health-seeking behavior (e.g., utilization of services) and can also mediate the impact of service utilization on population-level outcome measures.

Population-based measures, such as service coverage, provide useful proxy indicators for improvements in health (e.g., a community with 90% of the children fully immunized is expected to have lower child mortality rates). Such measures, however, are not appropriate for tracking the successful treatment of illnesses within the system. The size of the sick population benefiting from quality health services, while not insignificant in number, is a small proportion of the total population.

² Dever, G. 1976. An Epidemiological Model for Health Policy Analysis, Social Indicators Research. Vol. 2, page 465.

Also, there is a lag time between service implementation and a change in health outcomes measurable at the population level, and this means that population-based measures cannot be used to demonstrate the more immediate effects of service change.

Good indicators of whether investments in the formal health sector are resulting in the changes expected to improve health outcomes can be constructed from information that describes whether the anticipated health services are present and are being provided at the level of quality and quantity desired. This information can be obtained only from the facilities where the population is accessing health services.

In summary, data from both sources—facilities and populations—are needed to provide a full assessment of the functioning of a health system and its impact on population health. It is therefore important to address the current gap in the availability of health facility data.

Questions answered by facility-based information

- What is the actual infrastructure, capacity to provide services, and quality of services being provided at the sites where the population receives health services?
- What are the quantities of services being provided?
- Can changes over time be monitored to measure sustained improvements or deterioration in the provision of health services?

Current sources of facility-based information

No single source of facility-based information can meet all needs. Thus, it is important to know what sources of information are currently available, and the advantages and disadvantages of each, when deciding which is best suited to meet a given information need.

Internally generated data from routine health information systems and quality assurance activities (supervision reports, project reports):

Advantages: When current information is collected as part of a routine report, it can be a useful self-evaluation measure for those service managers and providers involved in generating information at all levels of the system. Internally generated data can increase ownership of findings, can be generated for all facilities and services, and may identify both individual facility problems and points of excellence. Because this information is routinely collected (often monthly or quarterly), it provides information on an ongoing basis for time and seasonal trend analyses.

Disadvantages: Accuracy, timeliness, and definitions used in reporting may be inconsistent. Information reporting systems are often fragmented, leading to the use of inconsistent definitions for like-types of information. Data may be biased if there are results-based expectations of reward or fears of discipline. Internally generated data requires well-functioning health information system management to implement and maintain routine health information systems, and the amount of data that can be routinely collected needs to be weighed against the staff time required to generate the information.

Externally generated information (survey or census using interview and/or observation for data collection):

Advantages: Objectivity and uniform definitions and methods in external data collection improve accuracy and comparability of information across facilities and geographic regions. It can provide validation of information collected through routine reporting, can collect large amounts of information in detail, useable to collecting indicators, such as clients perception of quality not possible with routine information systems, and, if periodicity is not too frequent, can be implemented where health systems are weak.

Disadvantages: A major disadvantage of externally generated information is that ownership by service providers and at the facility level may be lacking. In addition, externally generated information collected through sampling does not provide specific facility information and often does not provide statistically valid district-level data that may be useful for managers. Externally generated information is often collected at best annually or as infrequently as every 4-5 years, due to cost and time constraints. This does not provide current (monthly or quarterly) data for decision making, which impacts the ability to make timely changes based on data.

Limitations of internally and externally generated facility-based information

Some problems, such as why service providers do not adhere to standards when all elements to do this are present, or why people do not use services when all indicators show the services are of good quality, require in-depth understanding. These questions are best answered using qualitative methods with small selected samples. These can be targeted using facility-based process information to identify locations where there are variations in health systems/adherence to standards. Facility-based data provide information on systems and resources but do not provide a population-based context for service use or outcomes related to quality.

The following pages profile eight main instruments of health facility assessment and specify their management utility. These are:

- Service Provision Assessment (SPA);
- Facility Audit of Service Quality (FASQ);
- Health Facility Census (HFC);
- Service Availability Mapping (SAM);
- Health Facility based survey of Human Resource for Health Services (HRHS);
- Rapid Health Facility Assessment in Child Health (Rapid HFA)
- ACQUIRE Evaluation of LAPM Services (ELMS); and
- Population Council HFA (PCHFA).

These instruments are the main national and program level type facility based information assessment tools with a specific methodology available in the field. Other small-scale, issue-based, tools developed by individual programs, utilize materials from these main instruments. A brief summary of these instruments follow.

Service Provision Assessment (SPA): SPA was developed by MEASURE/DHS and provides objective and quantifiable information on the status of health services, as measured through resources, systems, and some observed practices. The recommended frequency of implementation is once every three to five years. SPA has been conducted in six developing countries: Caribbean, Egypt, Ghana, Guyana, Kenya, and Zambia. SPA is developed for national level monitoring of the health systems.

The Facility Audit of Service Quality (FASQ): FASQ is a relatively low cost approach developed, by MEASURE Evaluation, for district level monitoring or service availability and quality. It provides information on the type of services; status and functionality of infrastructure, equipment and quality of care. The recommended frequency of implementation is annual. FASQ has been conducted in Bangladesh, Bolivia, Kenya, and Tanzania.

Health Facility Census (HFC): Developed by the Japanese International Cooperation Agency (JICA), the Health Facility Census assesses the status of physical assets in the health sector and yield information useable for policy, planning and management of health systems development. Designed as national level assessment of the functionality of health systems' assets, HFC is extensive,

extremely robust, and high-cost. Although HFC is recommended once every five years, the actual implementation plan has to be based on national objective and judgment, and available resources. HFC has been conducted in Malawi and Zambia.

WHO Service Availability Mapping (SAM): SAM is designed to support decision making by providing national and district planners with the skills and tools to routinely map service and resource availability. Designed as a district owned systems, SAM can be implemented as stand alone system or integrated into the routine health information system as a supervisory tool. As a monitoring tool, SAM is recommended every six months to one year. The frequency of implementation may be adjusted to suit program needs when utilized as a periodic evaluation tool.

Prevention SAM: PSAM is an offshoot of SAM and is developed to respond to government and donor agencies needs to collect strategic HIV/AIDS information. PSAM quantifies, estimates and maps HIV/AIDS prevention efforts occurring in both facilities and communities. SAM and/or PSAM have been conducted in Kenya, Rwanda, Uganda, and Zambia. SAM and PSAM were developed by the WHO; PSAM was the result of collaboration with MEASURE Evaluation.

Health Facility-based Survey of Human Resource for Health in HIV/AIDS, TB, Malaria and MCH Services (HSHRS): HSHRS is designed to provide situation analysis of the health workforce in health facilities. Data yielded by this approach are key for assessing health workforce stock, profiles, and flows, and for making projections for health workforce requirements for meeting PEPFAR and the Millennium Development Goals in specific countries. The data has been utilized for human resource for health (HRH) planning in Nigeria, Cote D'Ivoire and Zambia. Survey frequency can be customized to fit the project life cycle but is adjustable to intervals useful for monitoring interventions, that is one to two years.

The Rapid Health Facility Assessment (R-HFA): R-HFA was developed in by the Child Survival Technical Support *plus* (CSTS+) project in collaboration with MEASURE Evaluation and a panel of experts from US private-voluntary organizations (PVO), USAID, and other cooperating agencies. The R-SPA is a relatively rapid instrument for measuring a small set of key indicators to give a “balanced scorecard” for maternal, newborn, and child health (MNCH) services at the primary health care level (including an optional module for use with CHWs for community outreach services). It identifies key bottlenecks to quality service delivery. The survey was originally designed for assessing quality of child health activities within the Child Survival and Health Grants Program (CSHGP), but application within the Malaria Booster Initiative experience has shown, it is quite suitable for use by District Health Medical Teams (DHMTs). The recommended frequency is 3-5 years but a subset of the indicators may be incorporated into the supervisory check and be used for routine monitoring of child health services at the facility level.

ACQUIRE's Evaluation of Long Acting and Permanent Methods Services Suite: ACQUIRE's Evaluation of Long Acting and Permanent Methods Services (ELMS) Suite is an adaptation of MEASURE's Facility Audit of Service Quality (FASQ). ELMS assesses the presence or absence of basic resources in facilities providing LAPM services, including staffing, referral facilities, infection prevention, availability of clinical and service delivery guidelines, job aids, communications materials,

physical facilities, drugs, and basic equipment. The survey also assesses provider competence and knowledge of services/methods being provided, including qualification, training and adherence to standards. Clients' satisfaction with services is assessed using exit polls. This approach is recommended in program evaluation and can be repeated every 3-4 years following a baseline.

Population Council Health Facility Assessment (PCHFA): PCHFA builds on the Situation Analysis methodology and provides a descriptive picture of the range of reproductive health services offered at health facilities and the resources used in service provision. Program managers and policy makers can use the data generated for diagnosis or needs assessment, and for monitoring and evaluation. The PCHFA methodology can also be used to test hypotheses when piloting interventions to improve service quality.

The Health Facility Assessment methodology is a tool for program managers to benchmark the functioning and performance of health facilities that offer reproductive health services. Indicators can be derived to track and monitor trends and for evaluation purposes. The principal use is for identifying specific service areas that require strengthening and can be addressed by a program manager. Examples of the various types of questions that the HFA can answer within the context of integrated services include:

- What is the model of integration?
- Which combination of services can be feasibly provided within existing systems?
- Does integration increase service utilization; does integration affect service quality and if so, how?
- Are integrated services cost-effective, and are integrated services sustainable?

The methodology is rooted in a theoretical basis and incorporates both provider and client perspectives. Where relevant, the methodology is flexible enough to include qualitative tools such as FGDs with clients and client-flow analyses.

This *Profile of Health Facility Assessment Methods* is provided to readers as a progressive document. New profiles will be added and existing ones revised to reflect advancement in the field. We hope that readers find the description useful in better understanding the instruments, reports based on them, and the goodness of fit between specific methods and program needs. We encourage users to let us know what improvements they will like to see in subsequent revisions.

SERVICE PROVISION ASSESSMENT

Summary

The purpose of the Service Provision Assessment is to provide information on quality of health services, as measured through resources, systems, and some observed practices.

Key areas of information SPA provides

- Availability of infrastructure and resources for providing a given service;
- Facility-level systems to support quality services and maintenance of infrastructure and sources;
- Information on staff qualifications, training, and supervision collected through provider interviews;
- Adherence to standards in practice, collected through observation of client-provider interactions, and client interviews;
- Current SPA modules include: family planning, child health (outpatient services), maternal health, STI services, TB services, and an extensive module for HIV/AIDS services.

Uses

SPA presents a picture of the services and service quality that exist on any given day. It validates reported information, documenting what is reported as usually present and functioning, and the actual situation the day of the survey. Quality of services is evaluated using process indicators. SPA uses uniform definitions for elements of services being assessed, allowing data for different programs to be compiled, and allowing comparison between implementing organizations, facility types, and regions.

Limitations

SPA does not provide “gold standard” quality indicators (e.g., there is no validation of the accuracy of provider assessments and information shared). SPA also does not provide information on why services are bad or good, or why services are used or not used, except as these may relate to infrastructure, resources, and systems.

Most relevant program contexts

SPA is best used as a tool for measuring services at the regional or national level. It does not replace detailed program assessments or reports, but it does provide objective and quantifiable information on the status of health services. This allows those interested in health system development and improvement to monitor changes over time and if repeated periodically (every 3-5 years) will provide information on whether changes are sustained or not. By identifying elements deemed important, and indicating that these elements will be measured, this supports the understanding among service providers and managers of standards that are expected to be maintained, even after the intense phases of program interventions have been discontinued.

When to consider applying SPA

If you are investing in the health system or in the development of health services, and if you expect to see regional changes, then the SPA provides objective information on these elements. If multiple agencies or programs are implementing activities, with an objective for national- or regional-level changes, the SPA provides information to allow uniform measurement of changes among the various programs and implementers.

Methodology

Implementation mechanism

A SPA is most often implemented by nurses identified by the Ministry of Health (MOH) or by advertisement. A local implementing partner is identified (usually the national statistical or census office) who knows how to manage a national level survey, and an official collaboration is developed between the MOH and the implementing partner, so that the MOH provides technical oversight for the survey. A technical working group (TWG) is identified in-country for adaptation of the methodology and data collection instruments according to national needs.

Sampling methodology

Government and non-government facilities are identified and their presence validated by using existing government or NGO coordination lists. Private facilities and government non-public (military and police) have also been included for HIV/AIDS SPA surveys. Facilities are stratified by facility type, region, district, and managing authority. The sample is systematically drawn, with the final number of facilities determined so that analysis can be provided at the national level by facility type and managing authority, and at the regional level by all types of facilities (weighted for proportional representation). Over-sampling to provide program-specific information is frequently done.

Main data collection tools

- Facility resources audit questionnaire;
- Provider interview;
- Client-provider observation checklists;
- Client exit interview.

Notes on data collection

Data collectors must be familiar with the health services and have some technical qualification. Nurses are usually selected. The nurses work in teams of three. In personnel resource-poor countries, with additional training, a person with a social science background can replace one nurse on a team. Data collection for most facilities takes one full day, with two days allocated for complex hospitals. For an average country with 10 regions, the SPA survey normally uses around 15 teams of three nurses, who complete data collection over a two-month period.

Frequency

Every 3-5 years, depending on the intensity of program initiatives and the degree to which changes are expected over time.

Database structure and analysis tools

Data are entered and analyzed using CSPRO. Datasets are available in SPSS format.

Data analysis plans

There is a core analysis plan for tables that provide indicator information. Additional tables are provided as requested by local stakeholders.

Database update/maintenance

Data are public domain after national dissemination, with confidentiality protected by removing GPS and identifiers for large facilities (where there may be only one of the facility type in a region or district). The local implementer maintains a dataset, and another set will be posted on the ORC Macro Web site. GPS links can be requested.

Capacity-building

Local implementers are trained in survey management and in data processing. A template is provided for both the report and a report writing workshop held to ensure local participation and input. In many countries, the concept of measuring health services is relatively new, so the survey is providing education to health systems personnel on how services can be measured, and the value of systematic validation of reports and health information system statistics.

Reporting and accessing results

Types of datasets

Datasets include observations and exit interviews, provider interviews, and facility resource audit information, all of which can be linked. Facilities can be identified by region, facility type, and managing authority. Individual facilities cannot be identified. GPS information is available on special request. HIV/AIDS SPA survey datasets also available.

Access to datasets

To request access to a SPA dataset, send a message to Bridgette.j.james@orcmacro.com. Some datasets will be posted on the MEASURE DHS Web site.

Types of publications based on results

- Preliminary report, main report, key findings;
- Trend analyses when several surveys have been completed.

Access to publications

Visit the MEASURE DHS Web site, <http://www.measuredhs.com/>.

Data usage

Action to ensure use of results

Data user workshops are now planned to promote utilization of information for interventions. Data users will include provincial level program personnel and agencies working with the programs assessed. The objective will be to review SPA methods and findings in the context of country strategies and programs, with each program developing an action plan or tool for disseminating a key message.

Examples of use of results

Results are used by program developers in Ghana and Kenya to plan strategies for change. Kenya is using the data for their annual strategic planning exercise.

Support for data use

Technical assistance is provided for data user workshops for the development of visual materials to promote change based on data, and for interpreting findings in relation to national programs.

General information

Supporting organization (technical assistance) contact

Alfredo Fort
Macro International Inc.
11785 Beltsville Drive, Calverton, MD 20705
Alfredo.Fort@macrointernational.com

Countries in which SPA-type surveys have been conducted

| | | |
|--------------------------|-----------|------------------------------------|
| Guatemala MCH SPA | 1997 | Main report and data set available |
| Bangladesh MCH SPA | 1999/2000 | Main report and data set available |
| Kenya MCH SPA | 1999 | Main report and data set available |
| Kenya MCH & HIV/AIDS SPA | 2004 | Main report and data set available |
| Tanzania | 2006 | Main report and data set available |
| Rwanda MCH SPA | 2001 | Main report and data set available |
| Ghana MCH SPA | 2002 | Main report and data set available |
| Egypt MCH SPA | 2002 | Main report and data set available |
| Egypt MCH SPA | 2004 | Main report and data set available |
| Guyana HIV/AIDS SPA | 2004 | Main report and data set available |
| Zambia HIV/AIDS SPA | 2005 | Main report and data set available |

| | | |
|------------------------------|-----------|--|
| Caribbean HIV/AIDS SPA | 2005/2006 | These were not DHS, but Measure Evaluation surveys – we do not have them to distribute – check with MEASURE Evaluation. |
| Future plans | | |
| Rwanda MCH and HIV/AIDS SPA | 2007 | Field work completed; Data entry completed, preliminary report in December 2007/January 2008. Data processing person going to Rwanda Nov 16 to finalize file and prepare tabulations. |
| Uganda MCH and HIV/AIDS SPA | 2007 | Field work completed; data entry finishing – Preliminary report in December 2007/ February 2008. Data processing person going to Uganda in December 2007 to finalize file and prepare tabulations. |
| Sierra Leone Facility Survey | 2007-2008 | A non-MEASURE, non-USAID funded survey (DfID/WB) utilizing trimmed-down versions of SPA modules. DHS to provide limited TA. |

FACILITY AUDIT OF SERVICE QUALITY

Summary

The purpose of the Facility Audit of Service Quality (FASQ) is to facilitate local (e.g., project level or district level) and low-cost monitoring of availability and quality of facility-based reproductive and child health services at all government and private facilities, including private clinics.

Key areas of information FASQ provides

- Range of services offered, staffing and staff qualifications, operating hours, community linkages, selected administrative and quality control procedures;
- Facility infrastructure—electricity, water, telephone, lighting, vehicles, privacy/capacity, emergency transportation, laboratory;
- Readiness to provide quality care in six areas: family planning; STI management; antenatal care; maternal/delivery care and post abortion care; child health/welfare; and HIV prevention, treatment, and care;
- Digital maps of facilities and services available.

Uses of FASQ

- Low-tech application, minimal or no technical assistance needed for fieldwork, can be implemented by local staff;
- Quick and low cost, feasible to repeat at intervals useful for monitoring applications (1-2 years);
- Measures standardized “short list” of service reproductive and child health (R/CH) quality indicators: family planning, STI, antenatal care, maternity/delivery care, post abortion care, child health care, HIV/AIDS treatment, and facility-based care and support;
- Produces integrated service profile covering all health facilities operating in district (government and private sector);
- Identifies, locates and interviews every eligible facility, no need for sampling;
- Obtains data for digital mapping to show service availability, gaps in coverage, inequities in access;
- Often adapted to focus on a particular type of service or facility;
- Builds on QIQ concept and draws heavily on DHS Service Provision Assessment and Population Council's Situation Analysis.

Limitations of FASQ

- Trade-off for rapid assessment and low cost is the loss of some detail and in-depth information that would be available, for example, from a SPA or SAM. FASQ can supplement, but not replace, the more expensive in-depth methods;
- No information is collected via the FASQ audit on the actual process of delivery of care; only selected pharmaceuticals and equipment are inventoried, and infection control and staffing details are minimal;

- Additional modules can be added to assess quality of actual service delivery and patient satisfaction; however, adding these modules removes the quick, low-cost and low-tech features.

Most relevant program contexts

- District-level monitoring and evaluation;
- An M&E plan for efforts aimed at improving access and quality of reproductive and child health care;
- Programs operating in a context of information and resource constraints;
- Context where measurement of both government and private sector (nonprofit and for-profit) characteristics is needed.

When this method should be considered

When projects or local officials (e.g., project M&E units, District Health Officers) need a rapid and low-cost way to monitor a set of basic indicators of service availability and quality on an annual or bi-annual schedule. It is designed specifically to be useful in the context of decentralization and project-level M&E.

Methodology

Implementation mechanism

FASQ can be implemented by district health staff or local project staff. Protocol provides guidelines for adapting instruments to local conditions using a local stakeholder steering committee. The indicators measured in a FASQ audit are organized around a generic “short list,” and the instrument is readily adapted to fit the indicator list.

Sampling methodology

FASQ requires that all health care facilities operating in a district be identified, located, and interviewed, thus producing a “census” of all facilities (government and private sector). No sampling is needed.

Data collection tools

Facility audit questionnaire in nine sections: General information (infrastructure, staff, drugs, supply and equipment inventories); family planning; STI management; ANC; maternity/delivery; post-abortion care; child health/welfare; HIV prevention; treatment and care; and GPS for location of facilities.

Note on data collection

Audit interview and inventories are typically completed by a single interviewer in less than 1.5 hours per facility.

Frequency

Feasible to repeat at intervals useful for monitoring applications (1-2 years).

Database structure and analysis tools

Not applicable.

Data analysis plans

Details of indicator construction and a recommended tabulation plan are part of the FASQ protocol.

Database update/maintenance

Not applicable.

Access to results

Types of datasets

Datasets are created in any format chosen by an analyst, e.g., EpilInfo, stata, SAS, SPSS, etc.

Access to datasets

FASQ-based information is district- or program-specific; it is not intended for public use and is available only with special permission.

Types of publications based on results

Technical reports, M&E reports, wall charts, chart books.

Access to publications

By special request to MEASURE Evaluation.

Homepage/access on internet

Not available.

Data usage

Action to ensure use of results

Stakeholder involvement in adapting protocol and choosing indicators, dissemination workshop, user-friendly reporting of results.

Examples of use of results

See above

Support for data use

Not available.

General information

Supporting organization (technical assistance) contact

MEASURE Evaluation
Attn. Bates Buckner
206 West Franklin St.
Chapel Hill, NC 27516
Tel 919-966-6834
E-mail: bates_buckner@unc.edu

Note on cost consideration

FASQ can be implemented at a relatively low cost.

Funding sources

Various international donors.

Countries where FASQ-type surveys have been implemented

| | |
|------------|------------------------|
| Kenya | 2001/2002 (field test) |
| Botswana | 2002 |
| Bangladesh | 2004 |
| Tanzania | 2005 |
| Ecuador | 2005 |

Publicly accessible datasets

None.

In-country contact person

None.

Future plans

The FASQ protocol is available upon request from the contact person named above.

List of key data variables/key indicators to be reported

FASQ measures a set of up to 105 standard indicators of service readiness and quality. Specifics vary by country and local choice. A list of generic versions of the indicators is available upon request.

HEALTH FACILITY CENSUS

Summary

The purpose of the Health Facility Census (HFC) is to provide evidence for policy, planning, and management of health system development with particular focus on the area of physical assets within the health sector.

Key areas of information HFC provides

- Availability and condition of physical infrastructure (health facilities building, utility, communication, and transportation);
- Location of health service delivery points (health facilities and outreach points);
- Availability and condition of equipment;
- Availability of health services;
- Head counts of health workers.

Benefits of HFC

The HFC is designed to assist health system planners/managers to plan improvement of health service delivery systems by identifying health facilities which do not meet the criteria to provide key health services, types, and levels of capital investment required. The HFC covers all public and semi-public health facilities (thus called “census”) and collects detailed information on availability and condition of physical assets. The HFC could serve as a baseline assessment for monitoring and evaluation of investment into the health sector. Linkage with routine health information systems in a country is encouraged for update and maintenance of the data. The HFC includes participatory capital investment planning modules for planners at national as well as district levels. Typical outputs include an atlas of health facilities, a health facility database, a medical equipment database, and a capital investment cost-estimate program.

Limitations of HFC

The HFC provides limited dimensions of quality of health services: availability and condition of physical assets, availability of human resources, and physical access. It does not typically collect information on quality of care practices, patient satisfaction, and details of available human resources such as education background and training experiences. The HFC is not intended to be repeated annually.

Most relevant program contexts

The HFC is originally envisaged as part of National Health Strategic Planning efforts (sector-wide approach) in Malawi and Zambia. The information is used mainly in mid- and long-term planning.

When HFC should be considered

The HFC should be considered at the preparation phase of a national strategic planning cycle, especially when basket funding is being introduced and cost estimation for capital investment is required.

A country or a region that does not have reliable information on available health resources, their conditions, and locations should consider HFC.

Methodology

Implementation mechanism

The HFC is implemented by the Ministry of Health in collaboration with the national statistical office. The Ministry of Health establishes a steering committee (SC) and a technical committee (TC). The SC sets strategic directions and periodically reviews progress. The TC is responsible for field implementation, including the development of a set of data collection tools based on models. The data collection is carried out by sub-national health offices after training by the TC.

Sampling methodology

The HFC intends to cover all public and semi-public health service providers. Major private providers are also included. In Malawi, information on outreach sites is also collected.

Main data collection tools

- Health service modules;
- GPS/location;
- Building assessment module;
- Utility module (Water, electricity, communication, and transportation);
- Medical equipment module;
- Human resource data form.

Notes on data collection

For a typical primary level health facility, the data collection by two data collectors takes one day. For secondary level hospitals (district hospital with 50 bed-capacity), it takes two to three days. For tertiary level facilities, the data collection could take up to six days depending on the complexity of infrastructure and equipment.

Key indicators

HFC measures a set of up to 105 standard indicators of service readiness and quality. Specifics vary by country and local choice. A list of generic versions of the indicators is available upon request.

Database structure and analysis tools

HFC uses a Microsoft Access database on health facilities with a customized interface and analysis and reporting functions. It also uses an Access-based health capital investment cost estimate program in Malawi.

Data analysis plans

The HFC analyzes data on physical accessibility by combining HFC data and population census.

Access to results

Types of datasets

- Health facility database;
- Cost-estimation program;
- Medical equipment database;
- Health human resource head count.

Access to datasets

The Ministry of Health controls access to the datasets. There are no fees.

Types of publications based on data

- Atlas of health facilities;
- Report on status of health facilities;
- Report on distribution of and physical access to health services;
- Capital investment plan.

Access to publications

Public domain through the Ministry of Health.

Homepage/access on Internet

In planning.

Data usage

Action to ensure use of results

- Data feedback workshop, including a data review with data collectors and districts immediately after data collection;
- Data dissemination workshop;
- Participatory capital investment planning module.

Examples of use of results

Malawi District Capital Investment Plan 2004 - 2010.

Support for data use

Technical assistance is provided for the development of a user-interface for analysis and reporting.

General information

Supporting organization (technical assistance)

Japan International Cooperation Agency
Human Development Department, 8th Floor
Shinjuku Mayad's Tower
2-1-1 Yoyogi, Shibuya-ku
Tokyo 151-8558, Japan

Note on cost consideration

Cost of field work tends to run high due to extensive transportation requirement, especially in rural areas.

Funding sources

Japan International Cooperation Agency.

List of completed countries

| | |
|--------|------|
| Malawi | 2002 |
| Zambia | 2005 |

Future plans

Malawi (2007).

WHO Service Availability Mapping (SAM)

Summary

Purpose of this method

To support decision making by providing national and district planners with the skills and tools required to map and monitor service and resource availability on a regular basis. SAM aims to provide an overview of what is available and where; it can be used to monitor scale up and assess equitable and appropriate distribution of services and resources.

Key areas of information it provides

- Availability and location of physical infrastructure (health care facilities, beds, basic medical equipment);
- Location of health service delivery points (public and private);
- Availability and location of health services (maternal and child health, HIV/AIDS, TB, malaria);
- Availability and location of health workers.

Uses of SAM

SAM is a district owned facility monitoring system. It quantifies, estimates, and maps services and resources determined to be priorities by its users. SAM can be used at the district level to monitor services over time; it can be implemented into routine supervisory visits by district medical officers and their teams.

Realizing that there is an immediate need for information on basic infrastructure and service availability there is an intermediate step — the district census. This step is particularly useful for developing a complete listing of private and public health care facilities within a district. This listing is then used by interviewers to complete the facility census.

Key outputs of SAM process include a database of all public and private health facilities, their resources and services. Another core output is increased capacity* at the national and district levels to use personal digital assistants (PDAs), global positioning systems (GPS), Pendragon**, and Health-Mapper.

* In practice, SAM has used PDAs and GPS units to collect information. However the tools are available in a paper format which can also be used. Technical support on the use of the hardware and software can be solicited from WHO Regional Offices, or their contracted partners.

** Pendragon is the software used to develop PDA-based questionnaires.

Limitations of SAM

The facility census is a rapid assessment, focused on determining the availability of key programmes and resources. It is therefore not as detailed as other facility censuses and surveys.

SAM also does not attempt to measure the quality of services, or resources. Essentially, it “flags” problem areas where more in-depth surveys or research may be required.

Most relevant program context

SAM is a district owned facility monitoring system that can be used to guide decision making at the district level. It is not disease specific, and focuses on a number of core health interventions. It is therefore a tool that can be adapted to, and implemented in, many settings.

If a country has a particularly weak HMIS, the district census tool can be used to address the need for district based information. The facility census can be used as an alternative to routine reporting. In particular, you may consider carrying out SAM of both the districts and health care facilities if you need timely information on the health care facilities that exist in the public and private sector and if it is important to monitor what core resources and interventions exist at the sub-national level. This may be the case during times of rapid scale up, where it is expected that service delivery will change quickly over a short period of time.

Methodology

Implementation mechanism

The first phase of SAM includes a national level stakeholder workshop, questionnaire adaptation, training on PDA and GPS use (if these tools are to be used), field work, training on HealthMapper and Pendragon use (only if PDAs are to be used), and national dissemination. This initial phase focuses on demonstrating feasibility and utility for a country. If there is interest for national roll-out, a second phase is implemented that mirrors the first phase, but focuses on building capacity at the district level. During this phase training is provided by the nationals that participated in the first phase. Technical assistance can be solicited from WHO regional offices.

An important step during the first phase of SAM is the adaptation of the core questionnaires and the identification of health priorities. Priorities are identified through a national level stakeholder meeting where the MOH, bilaterals, national institutions and organizations, and other interested parties come together to identify core indicators. These are then added as required into the core questionnaires and applied in all districts or similar administrative level. A separate facility questionnaire is then used in all of the public and private health facilities.

Questionnaires have been applied using PDAs; these facilitate data collection and reduce time required for data entry. If countries wish to use these tools, then teams are trained on PDA and GPS use as well as in the use of WHO’s public health mapping system, HealthMapper. This software is used as the basis of analysis and is used to map the indicators of interest.

Field work is then carried out and followed by a second training that aims to introduce HealthMapper. This software program is provided free of charge by WHO and persons are trained in its use in order to produce maps for inclusion in the final report. Once a report is produced, a dissemination workshop is held to present results.

Sampling methodology

The questionnaires for both the district and facilities are applied in all districts, and all public and private facilities. If resources are limited, the option exists to apply the facility census in a sub-set of districts.

Main data collection tools

- Personal Digital Assistants (PDAs) for both the district and facility questionnaires;
- Geographical Positioning Systems (GPS).

Note on data collection

In general teams are made up of two individuals and a driver. These persons are responsible for collecting the district level questionnaire. Once data collection at the district level is finished, teams can be brought together and redistributed. If only a sub-set of districts will apply the facility census, then teams can be redistributed among these. Under such circumstances time for data collection can range from 2 to 8 weeks for the entire country. The period for data collection greatly depends on the size of the area to be covered, and can be affected by poor or inaccessible roads.

The district questionnaire takes approximately 45 minutes to complete; the facility questionnaire can be completed between 45 minutes and 2 hours, depending on the size of the facility being visited.

Frequency

SAM can be used as a monitoring tool; it should therefore be implemented on a regular basis. This means that it could be implemented every 6 months or every year; it can be integrated into routine supervisory visits.

Database structure and analysis tools

The PDAs, once synchronized with a computer, automatically generate an Access database that can then be used as desired. This database can be imported into the HealthMapper software, allowing for the visual representation of core data. It can also be imported into a number of statistical programs, allowing for more in-depth analysis.

If paper based questionnaires are used, then time should be allocated for the manual entry (and double entry) of data. These should then be placed into an Access database to allow import into the HealthMapper software.

Data analysis plans

Data analysis is based on WHO's HealthMapper. Because an Access database is recommended, analysis can also be carried out using a variety of statistical packages such as STATA.

Database update/maintenance

After the initial implementation, a database resides in country that can be updated as required. Generally, this would occur on a regular basis, linked to each update at the district level.

Capacity building

The SAM process includes training on the use of PDAs, GPS and related software. The idea is that a core set of individuals are trained well, and then used to train colleagues in other districts.

Reporting and access to results

Types of datasets

District and health facility databases. These are complemented by the HealthMapper country database which includes core geographical and population information which can be used in conjunction with SAM data.

Access to datasets

Data are country owned. If the country agrees, these are made public through WHO's Global Atlas (<http://www.who.int/globalatlas/>). In some cases individuals and institutions may access the entire dataset after a data agreement has been signed between themselves and the country. All data is free of charge.

Types of publications based on results

Summary country reports are available on the SAM webpage: <http://www.who.int/healthinfo/systems/serviceavailabilitymapping/en/>

Access to publications

Country reports can be provided by Ministries of Health.

Homepage/access on internet

<http://www.who.int/healthinfo/systems/serviceavailabilitymapping/en/>

Data usage

Action to ensure use of results

Efforts have been made to assess the utility of census data and the international, national, and district level. Based on an assessment of audience needs, efforts are made to assure that data use and

dissemination are discussed and planned from the beginning of the process. This implies a stronger effort to assure data that are collected are relevant and presented in a manner that facilitates decision making at the national and district levels.

Examples of use of results

Results have been used to report to Parliament on scale up of programs. Results can also be used to monitor scale up as well as report on district and national level indicators.

General information

Supporting organization (technical assistance)

WHO regional offices may be able to provide technical and financial support for SAM in a number of countries. Partner organizations such as MEASURE Evaluation and Satelife also provide support.

Contact person(s)

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Note on cost consideration

Average in-country costs for the initial phase of SAM are approximately 160,000 USD. This includes implementation of the district questionnaire in all districts as well as implementation of the facility questionnaire in up to 3 districts. The range is from 63,000 to 313,000 USD.

| Components | COSTS, IN USD | | |
|--|---------------------|---------------------|--------------------|
| | Average | Max. | Min. |
| Stakeholder workshop | \$11,733.00 | \$20,566.00 | \$2,900.00 |
| Data collection training (use of PDAs and GPS) | \$49,950.00 | \$120,112.00 | \$11,101.00 |
| Data collection | \$61,907.00 | \$118,577.00 | \$36,900.00 |
| HealthMapper and Pendragon training | \$7,632.00 | \$14,550.00 | \$1,481.00 |
| Publication and dissemination | \$23,534.00 | \$39,073.00 | \$10,556.00 |
| Supplies | \$3,585.00 | | |
| Communications | \$500.00 | | |
| Total | \$158,841.00 | \$312,878.00 | \$62,938.00 |

Supplies assume an average of 10 PDAs, GPS and related equipment per country.

Funding sources for the initial work in this project were provided by

USG, Canadian CIDA, UNAIDS, MEASURE Evaluation

List of completed countries

| | |
|--------------|-----------|
| Kenya | 2004 |
| Zambia | 2004 |
| Uganda | 2004 |
| Ghana | 2004 |
| Ethiopia | 2005 |
| Rwanda | 2004/2005 |
| Burkina Faso | 2005 |
| Tanzania | 2005/2006 |
| Albania | 2005/2006 |
| Viet Nam | 2006 |

PREVENTION SERVICE AVAILABILITY MAPPING

Summary

The purpose of Prevention Service Availability Mapping (PSAM) is to support decision making by providing national and district planners with the skills and tools required to map and monitor HIV-prevention interventions and resource availability on a regular basis. PSAM aims to provide an overview of what is available and where; it can be used to monitor scale-up and assess equitable and appropriate distribution of services and resources.

Key areas of information that PSAM provides

- Availability and location of HIV-prevention interventions in health care facilities, schools, workplaces, and the community;
- Availability of HIV-prevention materials (posters, billboards, condoms, brochures), in health care facilities, schools, workplaces, and the community;
- Availability and location of health workers trained in HIV-prevention;
- Availability and location of teachers and school-based peer educators trained in HIV-prevention;
- Availability of community and workplace-based HIV-prevention peer educators.

Benefits

PSAM quantifies, estimates, and maps HIV-prevention efforts occurring in health-care facilities, schools, workplaces, and communities. It builds upon existing methodologies, namely Service Availability Mapping (SAM) and Priorities for Local AIDS Control Efforts (PLACE).

Key outputs of the PSAM process include a database of all public and private health facilities and their resources and services, including those services that are specific to HIV/AIDS prevention. Separate databases for schools, workplaces, and communities are also created.

PSAM is a work in progress. It has been field tested in Mwanza Province, Tanzania. Future plans include additional field testing in Ghana, where PLACE has been implemented in a number of districts. This field test will give us a good idea about PSAM's ability to identify locations within communities where people go to meet sexual partners.

Main data collection tools

- Personal Digital Assistants (PDAs) for both the district and facility questionnaires;
- Geographical Positioning Systems (GPS).

Database structure and analysis tools

The PDAs, once synchronized with a computer, automatically generate and an Access database that can then be used as desired. This database can be imported into the HealthMapper software, allowing for the visual representation of core data. It can also be imported into a number of statistical programs, allowing for more in-depth analysis.

Data analysis plans

Data analysis is based on WHO's HealthMapper. Because the PDAs generate an Access database, analysis can also be carried out using a variety of statistical packages, such as STATA.

General information

Supporting organization (technical assistance)

WHO provides technical and financial support for SAM and PSAM in a number of countries. Partner organizations such as MEASURE Evaluation and Satellife also provide support.

Contact

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| SAM DISTRICT QUESTIONNAIRE | | |
|---|---|---------------------------|
| Topic Area | Variable | Variable Type |
| Background | District name | Text |
| Background | District population | Numeric |
| Background | Interviewer name | Text |
| Background | Respondent name | Text |
| Background | Respondent job title | Text |
| Background | Respondent contact information (telephone, fax, email, other) | Multiple-numeric and text |
| Health care facilities | Health care facilities in the district (public, private not for profit, and private for profit) | Numeric |
| Human resources | Medical doctors in the district | Numeric |
| Human resources | Certified/registered midwives in the district | Numeric |
| Human resources | Certified/registered nurses in the district | Numeric |
| Human resources | Clinical officers/assistant medical officers in the district | Numeric |
| Human resources | Nursing assistants/nursing aides in the district | Numeric |
| Human resources | Laboratory technicians/technologists in the district | Numeric |
| Human resources | Pharmacists and dispensers in the district | Numeric |
| Human resources | HMIS personnel/records assistants in the district | Numeric |
| Human resources | Health service managers in the district | Numeric |
| Human resources | Certified/registered HIV counselors in the district | Numeric |
| Human resources | Community health workers in the district | Numeric |
| Human resources | Social workers in the district | Numeric |
| Human resources | Indoor residual spraying teams in the district (for malaria control) | Y/N |
| Infrastructure | Beds (in-patient, delivery and maternity) | Numeric |
| Infrastructure | Oxygen facilities in the district | Y/N |
| Infrastructure | X-ray facilities in the district | Y/N |
| Communications and technology resources | Basic landline connections in the district | Y/N |
| | Short wave radios in the district | Y/N |
| | Cellular networks in the district | Y/N |
| | Cellular phones for district health teams | Y/N |
| | Computers for district health teams | Y/N |
| | Internet connections for district health teams | Y/N |

| Topic Area | Variable | Variable Type |
|---|---|---|
| Blood transfusion services | Availability of service in the district | Y/N |
| | Interruption in blood supply in the district | Y/N |
| | Testing and screening of blood supply | Y/N |
| | Blood collection from donors | Y/N |
| | Main donor type (voluntary, paid, relatives, or friends) | Y/N |
| Laboratory services | Blood count, availability in the district | Y/N |
| | Blood sugar levels, availability in the district | Y/N |
| | Hemoglobin, availability in the district | Y/N |
| | Liver enzymes, availability in the district | Y/N |
| | CD4 cell counts, availability in the district | Y/N |
| Injection and sterilization practices (most common type used) | Needles and syringes used in the district (disposable, re-usable, auto-destruct) | Y/N |
| | Sterilization in the district (autoclave, sterilizers, pressure pots, boiling pot, other) | Y/N |
| Donor assistance to the district | Global fund presence | Y/N |
| | Other bilateral presence | Y/N |
| | Multilateral presence | Y/N |
| | NGOs | Y/N |
| | NGOs (HIV specific) | Y/N |
| Patient payment for public health services or drugs | TB treatment | Y/N |
| | Pain relief drugs (HIV specific) | Y/N |
| | Drugs for opportunistic infections | Y/N |
| | ARVs | Y/N |
| | Oral Rehydration Salts (ORS) | Y/N |
| | Delivery kits | Y/N |
| | Oral contraceptive pills | Y/N |
| Social marketing programs (presence of) | Condom | Y/N |
| | HIV antibody testing | Y/N |
| | Insecticide-treated bed nets (ITNs) | Y/N |
| | ITN outlets | List of ITN outlets |
| Training | Integrated management of childhood illness | Estimated coverage (none, < 50%, >50%, all) |
| | Safe motherhood/life-saving skills | Estimated coverage (none, < 50%, >50%, all) |
| | Adolescent sexual and reproductive health | Estimated coverage (none, < 50%, >50%, all) |
| | HIV/AIDS opportunistic infection treatment | Estimated coverage (none, < 50%, >50%, all) |

| Topic Area | Variable | Variable Type |
|------------------|--|---|
| Training | HIV counseling | Estimated coverage (none, < 50%, >50%, all) |
| | HIV counseling and testing | Estimated coverage (none, < 50%, >50%, all) |
| | HIV antibody testing using rapid tests | Estimated coverage (none, < 50%, >50%, all) |
| | Prevention of mother-to-child transmission (PMTCT) | Estimated coverage (none, < 50%, >50%, all) |
| | Infection control/universal precautions | Estimated coverage (none, < 50%, >50%, all) |
| | STI diagnosis and treatment | Estimated coverage (none, < 50%, >50%, all) |
| | Family planning | Estimated coverage (none, < 50%, >50%, all) |
| | Diagnosis and treatment of malaria | Estimated coverage (none, < 50%, >50%, all) |
| | Health services management | Estimated coverage (none, < 50%, >50%, all) |
| | HMIS | Estimated coverage (none, < 50%, >50%, all) |
| Other | Drug stock out in the district | Estimated coverage (none, < 50%, >50%, all) |
| | Facilities providing presumptive intermittent preventive therapy for malaria in the district | Estimated coverage (none, < 50%, >50%, all) |
| | Facilities providing ART in the district | Estimated coverage (none, < 50%, >50%, all) |
| | Facilities providing HIV prevention education in the district | Estimated coverage (none, < 50%, >50%, all) |
| | Facilities providing HIV antibody testing in the district | Estimated coverage (none, < 50%, >50%, all) |
| | Facilities with access to improved water supply in the district | Estimated coverage (none, < 50%, >50%, all) |
| | Indoor residual spraying for malaria control in the district | Estimated coverage (none, < 50%, >50%, all) |
| | Immunization campaigns in the district | Estimated coverage (none, < 50%, >50%, all) |
| | Indoor residual spraying for malaria control in last month | Y/N |
| Facility listing | Facilities providing PMTCT, HIV counseling and testing, ART, TB diagnosis (laboratory), TB diagnosis (clinical), TB treatment, Cesarean section, Emergency blood transfusions, outreach, STI diagnosis and treatment, malaria diagnosis (microscopy) | List of all health facilities in the district with indications of whether or not they provide the selected services |

| SAM FACILITY QUESTIONNAIRE | | |
|--|---|---------------------------|
| Topic Area | Variable | Variable Type |
| Background | District name | Text |
| | Facility name | Text |
| | Ownership (public, private, for- and not-for-profit) | Text |
| | Type (third, second, or first level hospital; hospital affiliated health center, health center, health post/dispensary) | Text |
| | Interviewer name | Text |
| | Respondent name | Text |
| | Respondent job title | Text |
| | Respondent contact information (telephone, fax, email, other) | Multiple-numeric and text |
| | Facility geographic coordinates | Numeric |
| General characteristics | Out-patients, previous month | Numeric |
| | In-patients, previous month | Numeric |
| Infrastructure | Beds (in-patient, delivery and maternity) | Numeric |
| | Main source of water (piped, open well, bore-hole, surface, rain, tanker truck) | Text |
| Communications and technology resources (available and functional) | Landline telephone | Y/N |
| | Cellular telephones | Y/N |
| | Short wave radio | Y/N |
| | Computers | Y/N |
| | Internet connections | Y/N |
| Guidelines (available and accessible) | Management of malaria | Y/N |
| | Integrated management of childhood illness (IMCI) | Y/N |
| | Treatment and care of opportunistic infections | Y/N |
| | HIV antibody testing and counseling | Y/N |
| | Prevention of mother-to-child transmission | Y/N |
| | Management of TB/HIV co-infection | Y/N |
| | Integrated management of adult illness (IMAI) | Y/N |
| | STI diagnosis and treatment | Y/N |
| | Family planning | Y/N |

| Topic Area | Variable | Variable Type |
|--|---|----------------------------------|
| General purpose equipment (available and functional) | X-ray machine | Hospitals only, Y/N |
| | Oxygen systems/cylinders | Hospitals only, Y/N |
| | Autoclave for sterilization | Hospitals only, Y/N |
| | Infusion kits | Hospitals only, Y/N |
| | Operating theater | Hospitals only, Y/N |
| | Anesthetic machine | Hospitals only, Y/N |
| | Hemocytometer | Hospitals only, Y/N |
| | Cytoflowmeter | Hospitals only, Y/N |
| | Ambulance | Hospitals only, Y/N |
| | Latex gloves | All facilities, Y/N |
| | Refrigerator | All facilities, Y/N |
| | Blood pressure machine | All other health facilities, Y/N |
| | Stethoscopes | All other health facilities, Y/N |
| | Microscopes | All other health facilities, Y/N |
| | Adult weighing scale | All other health facilities, Y/N |
| Weighing equipment, under five | All other health facilities, Y/N | |
| Thermometers | All other health facilities, Y/N | |
| Injection and sterilization practices (most commonly used) | Needles and syringes used in the district (disposable, re-usable, auto-destruct) | Y/N |
| | Sterilization in the district (autoclave, sterilizers, pressure pots, boiling pot, other) | Y/N |
| | Environmental disinfectant | Y/N |
| Human resources (work full time, are present today) | Medical doctors | Numeric |
| | Clinical officers/assistant medical officers | Numeric |
| | Certified/registered midwives in district | Numeric |
| | Certified/registered nurses in district | Numeric |
| | Nursing assistants/nursing aides in district | Numeric |
| | Laboratory technicians/technologists | Numeric |
| | Pharmacists and dispensers | Numeric |
| | HMIS personnel/records assistants in the district | Numeric |
| | Health service managers | Numeric |
| | Certified/registered HIV counselors | Numeric |
| | Community health workers | Numeric |
| | Social workers | Numeric |

| Topic Area | Variable | Variable Type |
|--|--|---|
| Training | Integrated management of childhood illness | Numeric |
| | Safe motherhood/life-saving skills | Numeric |
| | Adolescent sexual and reproductive health | Numeric |
| | HIV/AIDS opportunistic infection treatment | Numeric |
| | HIV counseling | Numeric |
| | HIV counseling and testing | Numeric |
| | HIV antibody testing using rapid tests | Numeric |
| | Prevention of mother-to-child transmission (PMTCT) | Numeric |
| | Family planning | Numeric |
| | STI diagnosis and treatment | Numeric |
| | Infection control/universal precautions | Numeric |
| | Diagnosis and treatment of malaria | Numeric |
| | HMIS | Numeric |
| | Health services management | Numeric |
| | Drug and supplies management | Numeric |
| Drugs and commodities (availability of) | Injectable antibiotics | Y/N |
| | Oral antibiotics | Y/N |
| | Oral contraceptive pill | Y/N |
| | Condoms | Y/N |
| | Iron | Y/N |
| | Vit A capsules | Y/N |
| | Measles vaccine | Y/N |
| | First line anti-malarial | Y/N |
| | Second line anti-malarial | Y/N |
| | Artemisin combination therapy | Y/N |
| | Antihypertensive drugs | Y/N |
| | Magnesium sulphate | Y/N |
| | Ergometrine | Y/N |
| | Oral rehydration salts (ORS) | Y/N |
| Brochures, posters or other materials on safer sex practices | Y/N | |
| Facility-based laboratory services | HIV antibody test | Test done on-site (same day), test done off site, service not available (no referral) |
| | Haemoglobin | Test done on-site (same day), test done off site, service not available (no referral) |

| Topic Area | Variable | Variable Type |
|---|--|---|
| Facility-based laboratory services | Blood count | Test done on-site (same day), test done off site, service not available (no referral) |
| | Blood glucose levels | Test done on-site (same day), test done off site, service not available (no referral) |
| | Giemsa stain for malaria | Test done on-site (same day), test done off site, service not available (no referral) |
| | RPR or VDRL for syphilis | Test done on-site (same day), test done off site, service not available (no referral) |
| Interventions | HIV antibody testing and counseling (available) | Y/N |
| | Clients, HIV antibody testing and counseling | Numeric |
| | Received results, HIV antibody testing | Numeric |
| | Antenatal services (available) | Y/N |
| | Clients, antenatal services | Numeric |
| | HIV counseling, pregnant women | Y/N |
| | HIV testing, pregnant women | Y/N |
| | Nevirapine or AZT, PMTCT | Y/N |
| | Clients, PMTCT | Numeric |
| | Clients, postpartum family planning | Numeric |
| | ARV therapy (available) | Y/N |
| | Enrollment, ARV therapy program | Numeric, total, and disaggregated by gender (male-female) and age (under 15, 15 and up) |
| | Clients picked up drugs (HIV specific) | Numeric |
| | STI diagnosis and treatment (available) | Y/N |
| | Clients, STI diagnosis and treatment | Numeric |
| | Receipt of PEPFAR funding | Y/N |
| | Working relationships with NGOs or CBOs (HIV specific) | Y/N |
| | HIV prevention outreach | Y/N |
| | Smear microscopy for TB diagnosis (available) | Y/N |
| | Register (TB specific) | Y/N |
| TB treatment (available) | Y/N | |
| DOTS | Y/N | |
| Child immunization services (available) | Y/N | |
| Children immunized | Numeric | |



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HEALTH FACILITY BASED SURVEY OF HUMAN RESOURCES FOR HEALTH IN HIV/AIDS, TB, MALARIA, AND MCH SERVICES (HRHS)¹

Summary

The HRHS has been conducted in five countries, including Nigeria, Cote d'Ivoire, Kenya, Ethiopia, and Zambia. The questionnaire was pilot tested and standardized, however the version profiled was adapted for the Nigerian context. The tool provides the relevant agencies, policy makers, program managers, and planners valuable information for planning the scaling up of HIV/AIDS, TB, malaria and child health services nationally. The tool is designed for use at national level and can be adapted for use at the sub-national level. It allows measurement of key variables of global interest.

Key areas of information provided by HRHS

The HRH HFQ provides the following key information:

- a. Facility location and type of services provided
- b. Availability and distribution of HRH for key health staff categories
- c. Changes in (increase/attrition) HRH stock
 - HRH requirement for reaching specified goals e.g. PEPFAR goals and the Millennium Development Goals (MDGs) and gaps

Benefits of HRHS

The health facility-based HRH survey is designed to provide information on the HRH status in health facilities. The data yielded is useful for HRH planning, consensus building around investment in HRH, provision of linkages in HRH with other health systems components', planning, scaling up of services, and monitoring and evaluating HRH plans. The questionnaire is targeted to the public health sector, but has been successfully adapted and applied to the private sector context. It provides detailed description of the workforce stock, profiles, and distribution.

¹ Source: Chankova, Slavian and Ha nguyen et al., September 2006. *A Situation Assessment of Human Resources in the Public Health Sector in Nigeria*. Bethesda, MD: The Partners for Health Reformplus Project, ABT Associates Inc. see also <http://www.abtassociates.com/reports>

Limitations of HRHS

- Only focuses on health workforce, it is not an integrated methodology;
- The tool reviewed here collects data only from the public sector. As mentioned, adaptations of the instrument have been used to examine HRH in the private sector with good results. Since the survey is not a census of health workers in the selected facilities, data on the attributes of the workforce (e.g. perceptions, expectations, activities) may not be representative of the national situation.

Most relevant program contexts

- Basis for national strategic planning to determine human resource availability;
- Situation analysis for program refinements and scale-up;
- Periodic assessment and HR status and service quality;
- Program monitoring and evaluation.

When HRHS should be considered

- HRH planning at the national or local levels, including baseline assessment and mid- and end-line evaluation;
- Subset of indicators can be used for monitoring and supervision.

Methodology

Implementation

The assessment is based on (1) desk review of documents and data on HRH and relevant program areas, including TB, HIV/AIDS, family planning, and maternal and child health care; (2) a nationally representative data collection, sampling all levels of care, but focusing principally on either the public or private health sector or both; (3) Data analysis; and (4) Reporting results and modeling estimated staff requirements for reaching the health-related MDGs and PEPFAR targets.

Sampling

The survey can be implemented as a census or sample survey. When a sample is used, a two-stage stratified sampling is recommended for selecting the health facilities. Under this design, the country is first divided into geopolitical zones and a determined number of sample units (e.g. states or enumeration areas) selected within each zone. The health facilities in the selected units are then listed, and a predetermined sample size is then selected from the three levels of care (primary, secondary and tertiary levels) using probability proportional to size. This sample plan is demonstrated in the survey conducted in Nigeria (Chankova and Nguyen et al. 2006).

Main data collection tools

- Facility audit tool;

- A modeling procedure to assess staff requirements for a given initiative e.g. PEPFAR/MDG goals (for details, see Chankova and Nguyen et al. 2006).

Note on data collection

Data collectors must be trained and familiar with the area in which health facilities are to be assessed. Good supervision is required during field work, and it is preferable that the supervisors are familiar with health facility operations and staffing qualifications. The number of days required for data collection is determined based on sample size, accessibility of facilities, and local conditions. Data collection may also require more time in larger, more complex, facilities.

Frequency

Survey frequency can be customized to fit the project life cycle but is adjustable to intervals useful for monitoring applications (1-2 years).

Database structure and analysis tools

Based on the analyst's experience, data analysis can be done using EPinfo, SPSS or STATA software packages.

Data analysis plans

Contact tool developers (see contact address below)

Database update/maintenance

Contact tool developers (see contact address below)

Access to results

Types of datasets

Human resource stock, profiles, distribution, and flow database

Access to datasets

Possible by special request, see contact address below

Types of publications based on results

Technical reports

Access to publications

Available through ABT Associates

Homepage/access on internet

<http://www.abtassoc.com>

<http://www.phrplus.com/> (publications)

Data usage

Action to ensure use of results

Dissemination of findings in country. For details on other actions, contact data developers at the address below.

Examples of use of results

In Cote d'Ivoire, the HRHS was completed for both public and private health sectors. The results gave policy makers a clear picture of the human resource situation in the country. The Ministry of Health in Cote d'Ivoire has recently used the results of the HRHS to draft a new National HRH Policy. In addition, MOH is using the results to piloting an incentive scheme for health workers to work in hard-to-fill posts in the rural areas.

Support for data use

Not known

General information

Supporting organization (technical assistance) contact

Gilbert Kombe, MD, MPH
Slavea Chankova
Amy Holdaway
ABT Associates Inc.
4800 Montgomery Lane, Suite 600
Bethesda, MD 20814
301.913.0500

Note on cost consideration

Depends on the sample size. National data collection may range from \$100,000- \$250, 000.

Funding source

USAID

Countries where HRH HFQ has been implemented

The following list is based on published reports. A full list can be obtained from the contact address provided on the following page:

| | |
|---------------|------|
| Cote D'Ivoire | 2005 |
| Nigeria | 2005 |
| Zambia | 2005 |
| Ethiopia | 2006 |
| Kenya | 2006 |

Publicly accessible datasets

None

In-country contact person

Each country report has a designated contact person. E.g. in Nigeria the contact person is:

Kayode Ogungbemi, PhD.
National Action Committee on AIDS
Abuja, Nigeria

List of key data variables/ key indicators to be reported²

- Total number of health workers by category;
- Estimated number of full time equivalent workers needed to deliver a specific service e.g. HIV/AIDS;
- Mean number of health workers by category;
- Estimated number of new graduates entering the workforce (public sector);
- Number of public sector health workers per 100,000 population;
- Staff attrition rates.

² List is based on the Nigerian survey report, see Chankova & Nguyen, 2006.

ACQUIRE's Evaluation of LAPM Services (ELMS) Suite

Summary

ACQUIRE's Evaluation of Long Acting and Permanent Methods Services (ELMS) Suite is an adaptation of MEASURE's Facility Audit of Service Quality (FASQ). ELMS includes general Family Planning (FP) information, with a focus on Long Acting and Permanent Methods (LAPM). Under this approach, emphasis is placed on the collection of 'actionable' data that is responsive to the needs of key stakeholders for Family Planning/Long Acting & Permanent Methods (FP/LAPM) services.

Key areas of information provided by ELMS

ELMS consists of four primary components:

- a. Provision of quality FP/LAPM services; including staffing, referral, community outreach, infection prevention, clinical and service delivery guidelines, job aids, communications materials, physical facilities, and equipment and medicine inventory.
- b. Provider knowledge of services/methods being provided, level of training in FP/LAPM, and provider demographics.
- c. Adherence to standards collected through Client-Provider Interaction observation of counseling, consultation and physical examination; FP/LAPM procedures and infection prevention
- d. Data on client knowledge and use of FP/LAPM services(s), interaction with provider, partner involvement, satisfaction with services, and client demographics obtained through exit interviews.

Benefits of ELMS

The survey is designed to:

- Assess baseline availability of essential FP/LAPM services before program implementation;
- Inform project implementation: monitoring tools, implementation plans, performance management plans, country strategies, and project deliverables;
- Show the extent to which FP/LAPM programs have achieved expected results at endline;
- Gain stakeholder buy-in especially in combination with performance needs assessment;
- Gauge the needs of facilities and providers;
- Assess the capacity of health facilities;
- Basis for quality improvement processes.

Limitations of ELMS

- Time intensive on account of triangulation through multiple methods/respondents;
- General and thus not specific to different levels of health facilities;
- Requires skilled clinical staff to conduct observations.

Most relevant program contexts

- FP/LAPM program implementation at national, regional, district or across administrative-levels of health facilities;
- Assist the MOH/partners and program implementers to plan and evaluate interventions.

When to use ELMS

- Development of FP/LAPM programs;
- Data for program revision/implementation is required;
- Triangulation of data from providers and clients is planned through interviews, surveys and client-provider interaction.

Methodology

Implementation

- Requires trained team of data collectors;
- Requires observers with clinical experience.

Sampling

- Developed in consultation with MEASURE Evaluation.
- Dual frame sampling - census of larger facilities and sample of smaller facilities with large programs. A list of facilities is usually obtained through national Ministry of Health or other published/online source. Verification of this list prior to sampling is strongly recommended to counter non-responses on account of misclassification of facilities and/or their current status.
- Quota sampling of providers and clients. Select all providers/clients at health facilities with four or fewer FP/RH providers/clients on day of interview. For larger facilities, use list of FP/RH providers to randomly select three to five providers. Client selection at larger facilities uses average daily client flow to sample every nth client such that three to five clients are sampled for larger facilities.

Data collection tools

- a. Facility Audit: To assess quality provision of FP/LAPM services; staffing, referral, community outreach, infection prevention, clinical and service delivery guidelines, job aids, communications materials, physical facilities, and equipment and medicine inventory.
- b. Provider Interview: To assess FP/LAPM service provision, knowledge of services/methods, training in FP/LAPM, and provider demographics.
- c. Client-Provider Interaction Observation Checklist: Interactions include counseling, consultation and physical examination; FP/LAPM procedures and infection prevention
- d. Client Exit Interview: To assess knowledge and use of FP/LAPM services(s), interaction with provider, partner involvement, satisfaction with services, and client demographics.

Note on data collection

Multidisciplinary teams of data collectors implement this suite. Human resources for data collection consist of teams of three — one researcher with a clinical background and two from a social/behavioral background. This team composition facilitates completion of all data collection at a facility in one day. The work of this team is supervised through rotating or designated supervisors for quality control of data collection. The facility survey allows identification of FP/LAPM services offered thus facilitating the use of appropriate sections of the data collection instruments.

Frequency

Surveys can be repeated — before and after intervention or at 3-4 year intervals.

Database structure and analysis tools

Not applicable

Data analysis plans

General analysis plan is being developed as part of the protocol for ELMS. This general plan will address key FP/LAPM social and demographic indicators collected through ELMS that are illustrative of selected FP/LAPM country programs.

Database update/maintenance

Not applicable

Access to results:

Types of datasets

Datasets are created in SPSS. These databases can be exported into other compatible formats such as EPI INFO, STATA, SAS, etc.

Access to datasets

Based on dual frame sampling design chosen, information collected through ELMS is reported by type of facility and not geographical regions. Due to confidentiality agreements, datasets are not in the public domain.

Types of publications based on results

Baseline reports and wall charts.

Access to publications

Baseline reports are available upon request.

Homepage/access on internet

<http://www.acquireproject.org/>

Data usage

Action to ensure use of results

Key country-level stakeholders were involved in adaptation and development of tools, training for and supervision of data collection, review of reports and facilitated dissemination of results through presentations and published reports.

Examples of use of results

Used for Performance Needs Assessment and focusing attention on training of facility-based personnel on counseling, IUD insertion and infection prevention. See 'Uses of ELMS' (above) also.

Support for data use

Not available

General information

Supporting organization (technical assistance) contact

ACQUIRE (Access, Quality and Use in Reproductive Health)
c/o EngenderHealth
Attn: Hannah Searing or Nalin Johri
440 Ninth Avenue
New York, NY 10001
Tel. 212-561-8000
Email: hsearing@engenderhealth.org and/or njohri@engenderhealth.org

Note on cost consideration

Use of ELMS requires commitment of resources and program from baseline to endline.

Funding source

USAID

Countries where ELMS has been implemented

| | |
|------------|---------|
| Azerbaijan | 2005 |
| Bangladesh | 2004 |
| Bolivia | 2005 |
| Tanzania | 2004-05 |

Publicly accessible datasets

None

In-country contact person

| <u>Azerbaijan</u> | <u>Bangladesh</u> | <u>Bolivia</u> | <u>Tanzania</u> |
|---|--|---|--|
| Nabat Mursagulava | Mahboob E Alam | Rosemary Duran | Nasoor Kikumbih |
| M&E Advisor | Sr. Pgm Officer M&E | Senior Associate | M&E Specialist |
| ACQUIRE | ACQUIRE | ACQUIRE | ACQUIRE |
| 10 Hasan Abdullayev St., Apt. 12 BAKU, AZ1001 + 994-12-492-95-16 | Concord Royal Court (5 th Flr) House # 40, Road #16 (New) Dhanmondi R/A DHAKA 1209 + 880-2-811-9234 | Calle Fernando Guachalla No. 342 Edificio VICTOR, Piso 4 LA PAZ + 591-2-2440896 | Plot 4 Ali Hassani Mwinyi Rd DAR ES SALAAM + 255-22-2772365 |

Future plans

ELMS is being revised prior to implementation in Bangladesh, Bolivia and Tanzania in late 2007 and Azerbaijan in late 2008. Post this revision, general FP/LAPM data collection tools, a list of core indicators, protocol for implementation, and plan for analysis will be available in June 2008.

List of key data variables/key indicators to be reported

Indicators of health service availability for FP/LAPM and provider knowledge and practice are available. Indicators pertaining to health service consultation, practices and FP/LAPM use are available from clients.

Population Council Health Facility Assessment (HFA)

Summary

Purpose of this method

This assessment approach builds on the Situation Analysis methodology and provides a descriptive picture of the range of reproductive health services offered at health facilities and the resources used in their production. Program managers and policy makers can use the data generated for diagnosis or needs assessment, and for monitoring and evaluation. The HFA methodology can also be used to test hypotheses when piloting interventions to improve service quality.

Key areas of information it provides

Information is available on: the availability of services, level of integration of services, infrastructure, equipment, supplies and commodities, MIS and logistics systems; provider attitudes, training and behavior; client experiences, costs and service fees, and community perceptions of services and providers.

Uses

The Health Facility Assessment methodology is a tool for program managers to benchmark the functioning and performance of health facilities that offer reproductive health services. Indicators can be derived to track and monitor trends and for evaluation purposes. The principal use is for identifying specific service areas that require strengthening and can be addressed by a program manager. Examples of the various types of questions that the HFA can answer within the context of integrated services include: what is the model of integration; which combination of services can be feasibly provided within existing systems; does integration increase service utilization; does integration affect service quality and if so, how; are integrated services cost-effective; and are integrated services sustainable.

The HFA can be used to cover all facilities as in a census or be used in a sample of facilities. The HFA can be used to assess facilities from primary to tertiary levels, derive indicators at provider, facility or administrative levels, and cover different sectors—public, private, and quasi-public. The methodology is rooted in a theoretical basis and incorporates both provider and client perspectives. Where relevant, the methodology is flexible enough to include qualitative tools such as FGDs with clients and client-flow analyses.

Limitation

First, although the Health Facility Assessment generates good information on providers' screening and information giving abilities, it provides limited information on providers' clinical competence per se. Second, while the assessment can provide a descriptive picture of the existing situation, it cannot always pinpoint the causes for it. Third, it cannot measure impact on client behaviors after receiving services because the measurements are restricted to facilities. The last limitation can be addressed by designing separate studies to follow-up cohorts of clients recruited at facilities, thus enabling an examination of service quality on subsequent client behavior.

Most relevant Program contexts

The Health Facility Assessment is a tool that managers can use in any reproductive health program. It can be used in any specific service—family planning, ANC, PNC or more broadly to cover all aspects of reproductive health service delivery. It can be used to assess stand-alone service delivery programs as well as those that have been integrated.

When to consider applying Health Facility Assessment tool

- The primary use of the tool is to diagnose system problems and assess needs or areas for system strengthening.
- When used as a tool to evaluate pilot interventions, the Health Facility Assessment tool can be applied at the beginning of an intervention or pilot phase to provide a baseline benchmark and subsequently at a second point in time sufficiently later to ensure full implementation of new service activities so as to be able to measure change, or lack thereof. The same tool can be applied to measure district or regional level variations or variations across facilities.
- When used as a monitoring and evaluation tool, the Health Facility Assessment can be used at any point in time. HFA are particularly useful when information on the status and quality of reproductive health services is needed, such as before the design of a health system strategy. A stripped-down or modified version of the tool can be used for ongoing monitoring.

Methodology

Implementation mechanism

The Health Facility Assessment can be implemented by existing government agencies such as the evaluation unit of the Ministry of Health (MOH), or the national statistics office in conjunction with the MOH, or academic institutions that regularly conduct evaluations for the MOH. Non-governmental organizations can conduct HFAs through their monitoring and evaluation department, if they have one, or through academic institutions and consulting firms with experience in health surveys. Prior to the fielding of the assessment, principal stakeholders meet to discuss the objectives, the key areas of interest and anticipated indicators. Data collection tools are also developed in a participatory manner with inputs solicited from policy makers, program managers, medical personnel, and statisticians. Service providers can be trained to collect data.

Sampling methodology

In pilot interventions, typically the facilities are limited in number and hence a census is recommended; further, censuses provide greater information on facilities that may be outliers. A sample survey is an useful approach when national or large regional estimates are being derived or when the number of facilities of each type are numerous (tertiary level and referral facilities are fewer in number than primary level facilities). Commonly, facilities are selected randomly, but other sampling mechanisms can be used (including cluster sampling) if representation from specific geographical regions or domains need to be guaranteed.

Main data collection tools

The quantitative component of the Health Facility Assessment uses four data collection tools: a facility inventory, a provider interview guide, a client exit-interview, and observations of client-provider interactions. Cost estimates are derived from tools collecting information on costs.

The qualitative component uses guides for focus group discussions with providers, clients and communities respectively. Client flow analyses are tailored for each site. In addition, specialized qualitative modules are available for specific services such as Postabortion care and focused antenatal care.

Notes on data collection

The data collection team typically stays in a facility for 1-2 days depending on the size of the facility. For services that may have low case loads at specific facility levels, longer stays at facilities may be required until the sample size is reached. Longer stays are also recommended in those cases where there is reason to believe that the quality of care varies between shifts and days (e.g. Immediate post-partum care). Teams are trained to arrive early before services start and stay until closing time; and to observe ethical guidelines in data collection (e.g., maintain confidentiality, anonymity if pertinent, not intervene during service delivery).

Data collection teams are typically comprised of 2-3 members with complementary skills. At least one team member has expertise in clinical reproductive skills; and at least one is a social scientist with training in data collection.

Frequency

The frequency of use depends on the purpose of the use of the tool. When the assessment tool is used for diagnosis or needs assessment, it is used once; similarly, when it is used to evaluate an intervention, it is used once. When the assessment tool is used for hypothesis-testing, it is used twice—once, before the intervention is implemented and once after the intervention has been completely implemented. A modified assessment or modules of the assessment such as the inventory checklist can be used more periodically.

Database structure and analysis tools

To make the data collection and analysis feasible and accessible to national counterparts, we use software that professionals are already trained and familiar with such as Epi-info screens for data entry, quality control, and simple analyses, and SPSS for quantitative survey data, Excel spreadsheets for cost data collection and analysis, and Atlas.ti for qualitative data.

Data analysis plans

Data analysis proceeds in steps. The first step consists of generating simple, univariate statistics of key variables of interest which are presented in a graphical format. The purpose is to facilitate understanding of the data and its levels. The second step consists of generating bivariate tables including two principal variables; for example, the dependent variable (yes, no) by treatment group (experi-

mental, control). The third step consists of simple tests of association between the key variables. Multivariate analysis are rare. Core analysis plans are designed and developed in collaboration with national counterparts to reflect national priorities and interests.

Database update/maintenance

Data are stored in-country by national partners, counterparts and implementers. Data are available in tabular form via published reports and documents.

Capacity building

National counterparts are full partners and collaborators in the design and implementation of the Health Facility Assessment. Working in partnership, national counterpart capacity is built in survey management, data processing and quality control, data analysis, data interpretation, scientific writing, and utilization of evidence generated. Data interpretation workshops have been held at regional and district levels to facilitate the drawing of appropriate and program relevant conclusions, identify solutions and thereby promote the utilization of data. Academic evaluators are specifically trained in scientific writing such that they are able to write and translate the findings of the research for broader audiences.

Reporting and accessing results

Types of datasets

Data sets produced will be 1) facility level inventories 2) interviews with providers 3) exit interviews with clients 4) observations of client-provider interactions 5) FDG transcripts.

Access to datasets

Potential users of the data need can access data after national level dissemination and the final report has been released. Potential users can write a short concept paper on the principal hypothesis to be examined, the variables and indicators, and the potential policy or program implications. Access can be facilitated by the FRONTIERS Program of the Population Council.

Types of publications based on data

The key publication from data include: final reports, program briefs, PowerPoint Presentations of the summary findings, and where relevant, special analyses as required by key stakeholders.

Access to publications

Select publications can be accessed through the Population Council website at www.popcouncil.org

Data usage

Action to ensure use of results

Data users are national counterparts at national, regional, and district levels and will include program managers and decision-makers. Data interpretation and utilization workshops described earlier are the principal vehicle to facilitate discussion on key programmatic themes and services, identify systemic problems, devise solutions, develop action plans with benchmarks, and channel investments. Where relevant, civil society members representing beneficiaries and society at large participate.

Examples of use of results

A diagnostic study using the Health Facility Assessment tools conducted in the Dominican Republic assessed the level of integration of family planning and postpartum care services. Based on the findings, the MOH decided to train staff posted at maternity wards in family planning and extend the service hours for family planning. In South Africa, the tools were used to test an intervention. The purpose was to assess the level of integration of HIV testing and voluntary counseling in family planning and the assessment found: a) integration of HIV counseling and testing into family planning services is feasible b) is welcomed by clients c) family planning utilization does not decline d) improvements in selected aspects is possible

Support for data use

The mechanism for providing TA is usually a project arrangement under which Population Council staff support partners in understanding data gaps, the need for data, interpreting data, and facilitating the use of the generated data. Technical assistance is provided throughout the process from design of the methodology, training, implementation, data entry and quality control, analysis, report writing, dissemination, to utilization.

General information

Supporting organization (Technical assistance)

Population Council
Saumya Ramarao
One Dag Hammarskjold Plaza,
New York, NY 10017
sramarao@popcouncil.org

Countries in which Population Council HFA have been conducted

Countries in which the Health Facility Assessment have been conducted in full or in part include:

| | |
|--------------------|------|
| Dominican Republic | 2006 |
| Egypt | 2006 |
| Ghana | 2005 |
| Haiti | 2006 |
| Kenya | 2005 |
| Lesotho | 2007 |
| Nicaragua | 2006 |
| Senegal | 2006 |
| South Africa | 2006 |
| Swaziland | 2006 |
| Tanzania | 2006 |

Future plans

None planned.

Cost consideration

Costs depend on the number of health facilities to be included in the sample and on the number of specific services to be studied. For example, a country-level assessment of family planning services in postpartum, postabortion and prevention of mother-to-child transmission of HIV may cost more than a straight-forward assessment of stand-alone family planning services covering fewer facilities. Costs can also vary by how long a data collection team stays at facilities.

Funding sources

Dfid, UNFPA and USAID

Indicators

Indicators that are commonly collected with the Integrated HFAs depend on the services that are being assessed. As Integrated HFA may be used in many different services (e.g. family planning; youth services; maternal and child health; STI detection; prevention and treatment, etc.) a complete list of

indicators is too extensive. The following are illustrative indicators provided when the focus is on functional capacity and quality of care in service delivery:

A) Functional capacity:

- a.1. Training.
- a.2. Services offered.
- a.3. Equipment and supplies.
- a.4. Commodities and logistics.
- a.5. Supervision and management.

B) Quality of care:

- b.1. Services received and unmet needs.
- b.2. Observance of norms and protocols.
- b.3. Information given to clients.
- b.4. Technical competence.
- b.5. Mechanisms for ensuring continuity.
- b.6. Interpersonal relations.

For example, in the case of a HFA on the integration of the antenatal care component of PMTCT and FP services would produce, among others, the following indicators:

Training

- 1. Percent of staff trained in clinical family planning.
- 2. Percent of staff trained in family planning counseling.
- 3. Percent of staff trained in HIV counseling.

Services offered

- 4. Percent of SDPs that offer the minimum package of MCH/FP services on demand.
- 5. Percent of SDPs that offer HIV/PMTCT counseling during antenatal care.
- 6. Percent of SDPs that offer voluntary HIV testing during antenatal care.
- 7. Percent of SDPs that offer FP services or a referral for their HIV clients.

Equipment and supplies

- 8. Percent of SDPs with a written inventory of FP stocks.
- 9. Percent of SDPs having a stock-out of any one method in the last six months.
- 10. Percent of SDPs with a written inventory of reactors and other materials for HIV testing.
- 11. Percent of SDPs having to stop their HIV testing during the last six months because of stock-outs.

Service statistics

12. Percent of SDPs keeping a written record of women receiving HIV/PMTCT counseling during antenatal care.
13. Percent of SDPs keeping a written record of women being tested for HIV during antenatal care.

Quality of care indicators

14. Percent of antenatal care clients able to furnish information about MTCT of HIV.
15. Percent of antenatal care clients able to furnish information about HIV prevention (including condom use).
16. Percent of antenatal care clients with whom postpartum family planning was discussed.
17. Percent of antenatal care clients able to furnish information about at least one place where they can obtain a contraceptive method after delivery.

More indicators are available upon request.

Rapid Health Facility Assessment (R-HFA)

Summary

The Rapid Service Provision Assessment (R-HFA) was developed in 2006-07 by the Child Survival Technical Support (CSTS) project in collaboration with MEASURE Evaluation, the World Bank, the CORE Group (of US-based NGOs), and a panel of experts from US private voluntary organizations (PVO), USAID, and other cooperating agencies. It was piloted by eight CORE Group PVOs in two stages in 2006-2007, with guidance from CSTS and MEASURE Evaluation. The sampling and other instructions were refined collaboratively with the World Bank in 2007 for use in their Malaria Booster Initiative. The R-HFA was originally specifically designed for use by NGOs implementing child health interventions, particularly those within the Child Survival and Health Grants Program (CSHGP). As the Malaria Booster Initiative experience has shown, it is suitable for use by District Health Medical Teams (DHMTs). It is a relatively rapid instrument for measuring a small set of key indicators to give a “balanced scorecard” for MNCH services at the primary health care level, including an optional module for use with CHWs for community outreach services. The health facility scorecard includes health worker performance and not just service readiness. It identifies key bottlenecks to quality service delivery.

Key areas of information provided by R-HFA

The R-HFA has four components (and an optional fifth one for community health workers):

- a. Availability of a minimal level of infrastructure, supplies, and medications (the determination of what constitutes “minimal level” is based on the IHFAN core indicators).
- b. MNCH services offered, staffing, staff qualification, frequency of training, supervision, and other key processes.
- c. Adherence to national (IMCI) protocols for assessment, classification, and management of children under five.
- d. Caretaker knowledge of how to administer drugs received for common childhood illnesses (i.e., diarrhea, malaria, and/or breathing difficulty).
- e. OPTIONAL: Community health worker performance assessed through coverage of services and maintenance of up-to-date registers; availability of basic resources (equipment, supplies); and key processes (supervision, training) that prepare them for service provision in communities.

Benefits of R-HFA

The survey is designed to:

- Assess quality of MNCH service delivery;
- Assess key bottlenecks in MNCH service delivery at primary level facilities (A simple Excel data entry and analysis program is available on the CSTS Web site to rapidly produce graphical data for decision makers, in order to facilitate data use for action);
- Strengthen project – DHMT relations.

Limitations of R-HFA

- Only focuses on primary facilities (and their associated child health workers [CHWs]);
- Only focuses on MNCH services.

Most relevant program contexts

- NGO or Cooperating agency projects for strengthening basic MNCH services;
- District Health Medical Teams.

When to use R-HFA

- Baseline and endline project assessment evaluation of MNCH projects;
- Periodic evaluations of primary health services by DHMTs;
- Subset of indicators can be used for ongoing monitoring and supervision.

Methodology

Implementation

- Requires 2-3 data collectors per facility, at least one of whom should be an experienced health service provider;
- Requires about ½ day per facility (2-4 hours depending on the volume of patients). In urban settings, two facilities per day can be assessed; in rural areas, only one per day is advisable.

Sampling

- Can be census of all district level health facilities, but also can be sampled, using Lot Quality Assurance Sampling (LQAS) or stratified by type of HF (e.g. Hospital OPD, basic facility, etc.), Sampling strategies are described in manual, as well as references. A list of Primary Health Care Facilities obtained from the MOH and validated with the DHMT and participating MNCH projects, constitutes the sampling frame.
- Sick child cases and linked caretaker exit interviews – six consecutive cases (treated as approximating a simple random sample).
- If optional CHW format is used, a line listing of all government-recognized CHWs should be obtained so that a simple random sample of them can be obtained.

Data collection tools

Four components (and a fifth optional one):

- a. Facility Checklist (based on the IHFAN core indicators): To assess the presence of a minimal level of infrastructure, supplies, and medications;
- b. Health Worker Survey: To assess the staffing, MNCH services offered, as well as frequency of training, supervision, and other key processes;
- c. Observation Checklist for sick child care: observation of six consecutive cases of care of children with fever, diarrhea, or breathing difficulty; adherence to national (IMCI) protocol for assessment, classification, and treatment;

- d. Client Exit Interview: To assess correct knowledge of how to administer drugs given for diarrhea, malaria, and/or breathing difficulty (used a proxy for adequate counseling);
- e. CHW Survey and Checklist (optional): Collects data for CHWs on 6 of the 12 HF core indicators — inputs, processes, and service delivery (through examination of registers).

Note on data collection

Data collectors must be trained and familiar with the area in which health facilities are to be assessed. Good supervision is required during field work and it is preferable that the supervisors have a health service background or are technically qualified in health service subject area.

Frequency

- Surveys can be done at baseline and final of a project (3-5 years);
- A subset of indicators is appropriate for use during ongoing routine supervision and can be analyzed annually.

Database structure and analysis tools

Excel data entry sheet (with validation) for up to 50 health facilities, with automatic construction of disaggregated frequency tables and bar charts for attainment of set of 12 key indicators is available on the CSTS Web site.

Data analysis plans

See Excel sheet with instruments which have the tabulation plan and the separate Excel data entry sheet which automatically calculates core indicators

Database update/maintenance

Use Excel sheets

Access to results

Types of datasets

Excel results can be exported to any desired statistical package for further analysis

Access to datasets

Data sets managed by individual NGOs at this point, but there is some negotiation potentially to make them available at the Child Survival Technical Support web site in the future.

Types of publications based on results

Excel data entry sheet produces tables and graphs suitable for written report (sample report on CSTS website) or wall chart.

Access to publications

Reports presently only available through individual NGOs using R-HFA.

Homepage/access on internet

<http://www.childsurvival.com>

Data usage

Action to ensure use of results

Manual describes stakeholder workshop (in context of NGO Child Survival projects, if done at base-line, this can be done as part of Detailed Implementation Plan development workshop with local stakeholders).

Examples of use of results

Use for tracking of service delivery improvement for child health services and/or for IMCI compliance.

Support for data use

None

General information

Supporting organization (technical assistance) contact

Jim Ricca, MD, MPH
Child Survival Technical Support Project
Macro International
11785 Beltsville Dr.
Calverton MD 20705
301-572-0317
James.G.Ricca@macrointernational.com

Note on cost consideration

N/A

Funding source

USAID

Countries where R-HFA has been implemented

| | |
|-------------|------|
| Zambia | 2006 |
| Bangladesh | 2006 |
| Liberia | 2006 |
| Madagascar | 2007 |
| Philippines | 2007 |
| Rwanda | 2007 |
| India | 2007 |
| Tanzania | 2007 |

Publicly accessible datasets

None

In-country contact person

N/A

Future plans

- A slightly modified version to be utilized by World Bank as baseline for their Malaria Booster Initiative. Plans in 2007-8 are to apply the R-HFA nationwide in at least Malawi and Benin.
- Three to ten US-based PVOs will implement the R-HFA each year as part of their baseline assessment for the Child Survival Health Grants Program.

List of key data variables/key indicators to be reported

| Area | # | Domain | Indicator |
|-------------|----|----------------------------|--|
| Access | 1 | Service Availability | % HF that offer three basic child health services (growth monitoring, immunization, sick child care) |
| Inputs | 2 | Staffing | % staff in HF who provide clinical services working on the day of the survey |
| | 3 | Infrastructure | % essential infrastructure in HF to support child preventive/curative care available on the day of the survey |
| | 4 | Supplies | % essential supplies in HF to support child preventive/curative care available on the day of the survey |
| | 5 | Drugs | % first line medications for child services available in HF / CHW on the day of survey (HF: ORS, zinc, oral antibiotic for dysentery, oral antibiotic for pneumonia, first line anti-malarial, vitamin A / CHW: context-specific) |
| Processes | 6 | Information System | % HF/CHW that maintain up-to-date and complete records of sick U5 children (age, diagnosis, treatment) AND show evidence of data use |
| | 7 | Training | % HF/CHW where interviewed HW reports received in-service or pre-service education in child health in last 12 months |
| | 8 | Supervision | % HF/CHW that received external supervision at least once in the last 6 months (includes at least one: check records or reports, observe work, give feedback) |
| Performance | 9 | Utilization | # clinical encounters (annualized / CHW/HF) for sick children per U5 population in project area Alternative?: % HF with adequate population service coverage |
| | 10 | HW Performance: Assessment | % clinical encounters in HF in which ALL essential assessment tasks were made by HW for sick child |
| | 11 | HW Performance: Treatment | % clinical encounters (HF/CHW) in which treatment was appropriate to diagnosis for malaria, pneumonia, and/or diarrhea (source of data: observed cases for HF / register review for last 3 months for CHW) |
| | 12 | HW Performance: Counseling | % clinical encounters in HF in which the caretaker whose child was prescribed an antibiotic, anti-malarial, or ORS can correctly describe how to administer ALL prescribed drugs |

Health Facility Surveys around the World — IHFAN , 2008

| COUNTRY+ | SAM | SPA MCH | SPA HIV/ MCH | FASQ | HFC | PC HFA | Subject focused approaches* | | |
|---------------------------|------|------------|-----------------|------|------|--------|-----------------------------|------|---------|
| | | | | | | | Rapid HFA | ELMS | HRH-HFA |
| North Africa | | | | | | 2006 | | | |
| Egypt | | 2002, 2004 | | | | | | | |
| Sub-Saharan Africa | | | | | | | | | |
| Botswana | | | | 2002 | | | | | |
| Burkina Faso | 2005 | | | | | | | | |
| Cote D'Ivoire | | | | | | | | | 2005 |
| Ethiopia | | 2005/06 | 2004 | | | | | | 2005 |
| Egypt | | | | | | 2006 | | | |
| Ghana | 2004 | 2002 | | | | 2005 | | | |
| Kenya | 2004 | 1999 | 2004 | 2002 | | 2005 | | | 2006 |
| Liberia | | | | | | | 2006 | | |
| Lesotho | | | | | | 2007 | | | |
| Madagascar | | | | | | | 2007 | | |
| Malawi | | | | | 2002 | | | | |
| Nigeria | 2006 | | | | | | | | 2006 |
| Rwanda | 2005 | 2001 | 2007** | | | | 2007 | | |
| Senegal | | | | | | 2006 | | | |
| South Africa | | | | | | 2006 | | | |
| Swaziland | | | | | | 2006 | | | |
| Tanzania | 2006 | | 2006 | 2005 | | 2006 | 2007 | 2005 | |

Source: Developers web sites and Survey Focal Persons with each Organization.

* Covers a few districts or portions of a district in the reported countries, ** survey are national in some countries; & SPA survey is ongoing in these countries.

| COUNTRY+ | SAM | SPA MCH | SPA HIV/ MCH | FASQ | HFC | PC HFA | Subject focused approaches* | | |
|---------------------------|------|---------|----------------------|------|------|--------|---|------|---------|
| | | | | | | | Rapid HFA | ELMS | HRH-HFA |
| Uganda | 2004 | | 2006** | | | | | | |
| Zambia | 2004 | 2005 | HIV 2005 | | 2005 | | 2006 | | 2006 |
| Asia | | | | | | | | | |
| Bangladesh | | 1999 | | 2004 | | | 2006 | 2004 | |
| India | | | | | | | 2007 | | |
| Pakistan | | | | | | | | | |
| Philippines | | | | | | | 2007 | | |
| Vietnam | 2006 | | | | | | | | |
| Europe | | | | | | | | | |
| Albania | 2006 | | | | | | | | |
| Azerbaijan | | | | | | | | 2005 | |
| The Americas | | | | | | | | | |
| Bolivia | | | | | | | | 2005 | |
| Caribbean | | | HIV 2006 | | | | | | |
| Dominican Republic | | | | | 2006 | | | | |
| Ecuador | | | | 2005 | | | | | |
| Guatemala | | 1997 | | | | | | | |
| Guyana | | | HIV 2005 | | | | | | |
| Haiti | | | | | | 2006 | | | |
| Nicaragua | | | | | | 2006 | | | |
| Planned or ongoing | | | Sierra Leone 2007/08 | | | | Will be conducted in Bangladesh, Tanzania, & Azerbaijan | | |

Source: Developers websites and Survey Focal Persons with each Organization.

* Covers a few districts or portions of a district in the reported countries; ** survey are national in some countries; & SPA survey is ongoing in these countries.



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