NATIONAL HEALTH FACILITY SURVEY

GUIDE FOR DATA COLLECTORS

NATIONAL BUREAU OF STATISTICS/FEDERAL MINISTY OF HEALTH

OCTOBER, 2023

Table of contents

I. INTRODUCTION

The National Health Facility Survey (NHFS) 2023 is based on a standard health facility assessment methodology (Service Availability and Readiness—SARA) promoted by World Health Organization (WHO) to assist countries to monitor service availability and readiness to provide services at health facilities. Additional tools for assessing quality of care draw on indicators and tools being developed by international health system stakeholders and technical experts under the leadership of WHO.

These tools have been adapted to meet the objectives for monitoring quality of care for the Federal Ministry of Health (FMOH) Saving One Million Lives Program for Results (SOML P*for*R) Project and to provide information needed to strengthen the health system and specific health services at state and national levels. It is expected that a subset of this survey will be conducted on an annual basis to provide information on changes in SOML service availability and quality.

The survey is being conducted under the overall leadership of the Federal Ministry of Health (FMOH) through the SOML P*for*R. The survey implementation is led by the National Bureau of Statistics (NBS), with technical support provided by the World Bank and Hanovia Limited. Financial support for the survey is provided by the USAID, Global Fund for AIDS, Tuberculosis and Malaria (GFATM), Bill and Melinda Gates Foundation (GMGF) and the Federal Government of Nigeria.

The guide provides detailed explanations and definitions of specific questions to ensure a uniform understanding of the content and a consistent approach to recording results by different data collectors across different facilities; and more general instructions on how to collect data at a facility that is in the process of providing services.

The primary objectives of the Data Collector's Guide are to:

- Introduce participants to the National Health Facility Survey tools
- Help participants to understand the rationale for conducting a health facility assessment and issues of relevance when collecting information in a health service setting.
- Instruct participants on how to collect the information and complete the data entry using tablet and paper questionnaires
- Provide guidance in how to organize the field work at state and facility level

The guide is to be used both during training sessions and as supporting documentation while collecting information.

II OVERVIEW OF THE SURVEY METHODOLOGY

2.1. OBJECTIVES OF THE HEALTH FACILITY SURVEY

The NHFS and data collection tools have been developed to collect information on:

A. **Facility readiness to provide and maintain quality services**.

Elements assessed include:

- Basic management practices to support facility functioning;

- Services offered–with a focus on outpatient services;
- Facility infrastructure required to support quality services;
- General resources required for quality service provision (financial, human, equipment, diagnostics, pharmaceuticals and other commodities);
- Readiness to provide specific services, meeting minimum standards for quality (service setting, trained staff, equipment, pharmaceuticals and commodities, diagnostics, records, and systems to support the service);
- Competency among service providers in assessing patients, diagnosing and treating specific conditions;
- Knowledge among service providers of National protocols for diagnosing and treating specific conditions

B. **Quality of care**

Quality of care is assessed through:

- Observation of client-provider interactions for sick children, collecting information on the assessment, diagnostic, and treatment process followed to identify if the process is in adherence to standards;
- Exit interview to collect client and child caretaker demographic characteristics and perceptions related to services received;
- Record reviews to identify the assessment and care process that is documented. *Documentation is essential for continuity of care and for accountability for the quality of care provided.*
- Assessment of clinician's knowledge through case simulations (vignettes)

This information is important to inform decisions and actions to improve services and strengthen health systems.

2.2SURVEY IMPLEMENTATION PLAN

This survey is being conducted on a sample of public and private facilities. The sample includes public sector Hospitals, Health Centers, selected systematically from a list stratified by LGA and Zone. The numbers were selected to allow a reasonable representation of each type of facility, with results weighted so that the overall findings for each state are representative of the types of facilities functioning in the state.

Three data collectors will be trained to work as a team collecting data in each facility, with data collection in one facility being completed in one day, in most cases. One of the data collectors will be experienced with survey implementation and will function as the team supervisor/team leader. The other two data collectors will have a medical/health service provision background.

Data collection methods include

- Interviews with key informants—the persons most familiar with the subject being assessed;
- Observation of items and documents;
- Observation of consultation services for the sick child, using a checklist to capture the process for assessment, diagnosis and treatment

- Exit interviews with the client/caretaker of the sick child for client demographic characteristics and perceptions related to services received

Record reviews using checklists to capture information that is recorded for patient assessment, diagnosis and treatment. Training will take place over two weeks and will include classroom review of the data collection tools and practical experience in facilities.

During field work for survey data collection, data collectors will be supervised by NBS staff moving across teams to ensure uniformity in data collection methods and adherence to survey methodology for quality data. External data quality assessment (DQA) will be conducted by Hanovia Limited, who will validate that the methodology is being followed and will validate the results from a randomly selected sample of facilities.

2.3. ROLE OF THE INTERVIEWER

The interviewer's main responsibility is to collect information that is as accurate as possible. This will entail asking questions of the appropriate respondents and observing evidence, probing to ensure that the information collected reflects the true situation. ***This is a fact-finding survey only with selected information relying on respondent's opinion.***

During the training, interviewers will be instructed on how to follow the sampling list and who are the appropriate respondents to interview for each section of the survey. In addition, interviewers will be instructed on gathering comprehensive and accurate information and on completing the data entry electronically. Trainees will be given periodic tests and homework, which will be edited to check for completeness and accuracy.

We have recruited more health care providers to participate in the training than are needed to do the work. At the end of the course, we will be selecting the best qualified to participate in the survey. If selected to work in the survey, work on the NHFS may last for up to two months after the completion of this training.

2.4. SURVEY REGULATIONS

The following survey regulations have been established to ensure the success of the NHFS and are expected to be followed by all data collectors and supervisors.

- Every survey staff position is vital to the success of the survey and the data collector's attendance during each day of the training and fieldwork is required. Any person who is tardy or absent during any part of the training or any part of the fieldwork (whether it is a whole day or part of a day) without prior approval may be dismissed from the survey.
- The selection of the survey team members is competitive; it is based on performance, ability, and testing results during the training. Therefore, any person found offering assistance to or receiving assistance from another person during tests will be dismissed.
- Throughout the training and fieldwork period, interviewers are representing the FMOH and NBS. Your conduct must be professional and your behaviour must be congenial when dealing with the public. You must always be aware of the fact that we are only able to do our work with the good will and cooperation of the people we interview. Therefore, any team member who is consistently overly aggressive, abrupt, or disrespectful to others may be dismissed from the survey team.

- For the survey to succeed, each team must work closely together. Any team member who, in the judgment of the survey manager, is a disruptive influence on the team may be asked to transfer to another team or dismissed.
- It is critical that the data gathered during the fieldwork be both consistent and accurate. Field staff may be dismissed at any time during the fieldwork if the quality of their work is inadequate.
- Data are confidential. Under no circumstances should confidential information be passed on to third parties. Persons breaking these rules, and therefore the confidence placed in them by respondents, will be dismissed.

2.5 Planning the NHFS fieldwork

A. FIELDWORK SCHEDULE

The **survey manager** will assign each team a list of facilities to be visited for data collection. The list will include the name and location of the facility as well as the facility identification information required in the NHFS data collection tools.

If the information is available, the list may include the name of the person in-charge at the facility, telephone numbers or other information on how to contact the facility, and the hours during which the facility is open and/or various services offered. When possible, the survey manager will also provide the team with a map showing the location (or approximate location) of all of the facilities on their list.

Each **team supervisor/team leader** (TL) will work with other members of his/her team, including the driver and senior staff of the HFS, to prepare a schedule for the visits to the facilities assigned to his/her team. Because of the high costs of fuel, the schedule will be designed to minimize 'doubling back', thereby increasing the cost-effectiveness of the survey and decreasing the distances the teams are required to travel.

In developing the schedule, the TL will take into account the location of each of the facilities as well as the localities where the team will likely be staying overnight. The team generally will need to arrive at a facility on or before the official opening hours; therefore, the lodgings that the team will use each night must be within a reasonable distance of the facility that is to be visited on the next day.

The TL must provide a copy of the visit schedule to their survey supervisor prior to beginning fieldwork. It is likely that there will be changes in the visit schedule during the course of the fieldwork, and it is the TL's responsibility to keep the senior survey staff updated on the team's schedule. Survey supervisor need to know where each team is on any given day, so last minute changes must be reported. Phone time will be provided to ensure that communications can be carried out in a timely and efficient manner.

B. ADVANCE CONTACT WITH AUTHORITIES/FACILITIES

Generally, the survey manager will have notified appropriate state authorities of the ***nature*** and ***purpose*** of the NHFS in advance of the fieldwork. It is best if an official letter from the managing authority for the facilities being surveyed is sent to their state offices informing them of the organization's official agreement, and their obligation to participate. Each facility should be informed by their managing authority that they may or may not be visited, depending on the sample selection, and that if they are visited they should cooperate. Each data collection team should also have a copy of the letter to show at facilities if necessary. In addition, prior to visiting facilities in a specific area,

each team should contact the state offices of the managing authorities to let them know they are in the area and to plan for the visits to the sample. Such contacts can facilitate cooperation with the survey by the facility staff as well as provide pertinent information such as hours of operation, times when specific services are offered, and so forth, that is helpful when scheduling facility visits. State survey supervisors will be responsible for liaising with state authorities. Finally, if possible, the TL should directly contact (by phone or radio) each facility a few days in advance of the actual date of the planned visit. This contact may decrease the probability of essential respondents or services not being available the day of the visit as well as facilitate cooperation from facility staff. If the visit must be made on a day when an essential respondent will not be present (e.g., the in-charge, head of a specific service) ask that a person be delegated to respond to the survey questions and to show any documents requested. *The designated person should be provided with any keys normally kept by the person who will not be present that may be required to access items or documents.*

C. LOGISTICAL ARRANGEMENTS

Prior to beginning fieldwork, the TL must ensure that the team has all of the sampling materials, back-up questionnaires, tablets and charger, and other materials (pens, clipboards, briefcases, interviewer guides, and other supplies) necessary to complete the assignment. The TL must also have copies of introductory letters from the Federal Ministry of Health as well as other managing authorities whose facilities will be visited during the survey that can be left with the facility in-charge. In particular, the TL must make sure that the team has a sufficient number of paper-based questionnaires at all times for back-up if needed.

The TL will be responsible for all transport arrangements. Each team will have its own vehicle and driver. The TL also may be required to make/confirm accommodation reservations for the team during the fieldwork.

D. IDENTIFYING THE SURVEY FACILITY

The survey manager will provide each team with a list of the facilities they are responsible for surveying. The health facilities included in this survey have been specifically selected to meet special sample criteria. Every attempt should be made to conduct the survey at each facility on the list. The TL is responsible for making sure that the team visits all of the facilities that his/her team is assigned. If after contacting local authorities, you cannot locate a health facility on your list, or are not sure about whether a facility that you have found is actually the one identified on the facility list, contact the survey manager. If a facility included in the assignment has closed, no interview will be necessary, just note that fact on the cover sheet of the assigned questionnaire. Finally, no facility not listed in the sample should be visited and interviewed unless specifically approved by the survey manager.

Upon arrival at the health facility to be surveyed, fill out the cover section of the questionnaire.

2.6. Organization of activities during facility visit

Experience has shown that the following is a reasonable approach for organizing the facility survey work:

1. Arrive at the facility prior to opening time;
2. Collect geographic positioning (GPS) information if required (details to follow);
3. Gain access to the facility

Data collection teams will be visiting facilities operated by the government, operated by non-governmental organizations, and perhaps other private health facilities. All facilities must give permission for the survey to be conducted on their premises. Facilities may be less willing to

participate if they fear the survey will result in negative findings or that conducting the survey will interfere with service provision. Prior notification of the survey, either from the main office of the operating authority, or if it is a private facility, from one of the government sponsors of the survey, will help pave the way for agreement to participate. The private facilities may be especially concerned about the confidentiality of the survey results. You may provide reassurance that results will only be provided so that no individual respondent can be identified.

Although officially, the government health facilities may be obligated to allow the survey, the results will be much better if the staff at the facility see the benefits of the survey. The initial impression you give to the facility staff will be important to gaining their willing cooperation with the survey. At all times, the staff at the facility must be treated with respect and politeness.

The first contact at the site should be made by asking to speak with the person in charge. If the official "in-charge" is not present the day of the survey, ask to see the person acting "in-charge" for the day. The TL will introduce the team, explain the purpose of the visit. At this time, the introductory letters from the relevant organization and the letters explaining the survey and giving the authorization to visit the facility will be given to the person in-charge.

The team lead should provide a brief, informal overview of the survey. Key points include the following:

- Data collectors will go to different service sites in the facility and interview the most knowledgeable person present the day of the survey. Total data collection may take from a few hours to the full day, depending on the size and complexity of the facility.

- The service sites are outpatient maternal, child, and health preventive and curative services, services for HIV and TB, and general curative care for adults and children. In addition, basic surgical service availability and delivery services will be covered. Data collection will also require visits to the laboratory and pharmacy if applicable.

- In all sites data collectors will ask about the availability of services, routine service delivery practices, and the availability of items required to provide the service. They will ask to see items that are reported to be available such as equipment, furnishings, and commodities.

- The survey will also include observation of service provision, exit interviews, provider interviews and record reviews.

- Information from the facility will be provided to the survey managers, but any publications will only provide the facility information in aggregate form, such as by facility type or regional location. The specific service providers and patients who are individually interviewed about issues related to their personal knowledge or opinions will **not** be identified by name in any data base.

- *Reassure the in-charge that other than a few of the specific management questions, s/he can delegate others at the facility to help the survey team. Often the in-charge feels obligated to try to respond to all questions and to show the team around the facility. This is not necessary and may create resentment in the in-charge who has many responsibilities.*

- At this time, explain that you (the TL) are required to read an "informed consent" statement and that at the end you will ask for the official agreement for the survey to proceed in this facility. Then read the agreed upon informed consent statement. This statement must be read ***exactly as it is written***.

- If you are refused permission to conduct the data collection in the facility and nothing you say can make the in-charge reconsider, contact the survey manager, and provide the name of the facility, its managing authority, and location. The survey manager will make every attempt to contact appropriate persons who can help to convince the health facility staff to allow the interview.

An example of an informed consent statement follows.

INFORMED CONSENT STATEMENT

The Federal Ministry of Health in collaboration with the National Bureau of Statistics is working to collect information on indicators which includes quality of financial management and reporting, supervision of health facilities, diagnostic accuracy and adherence to guidelines, availability of essential medicines and other health related medicines and minimum equipment as well as readiness of facilities to provide key SOML interventions. This information will be collected in selected primary health care and secondary referral facilities across the country. The survey is part of government's on-going efforts to improve quality and utilization of health care services in our health facilities. This study is being conducted on behalf of the Federal Ministry of Health by NBS.

The present study will be conducted in all thirty-six states and the FCT. The facilities that will be visited in each state have been selected randomly from a list of all facilities in the state. The selection process was done in a manner that ensured equal opportunity for every facility in each state to be included in the sample. Survey instruments which have been developed to effectively measure the indicators of interest will be used to solicit information from respondents.

There are five survey instruments developed for the purpose of this survey. The first is the main facility questionnaire which contains six modules. The first module will be used to elicit information about the services provided by the facility, its management and staff - the number, cadre and qualification of medical and non-medical staff at the facility. The second module will be used to collect general information about the facility as well as information about available infrastructure, equipment, materials and supplies and drugs/vaccines. Module 3 contains information about outpatient services such as general outpatient services and resources, reproductive, maternal and newborn health, child and adolescent health, communicable and non-communicable diseases and malaria. The fourth module will be used to collect information about delivery and surgical services and resources. Module 5 is dedicated to data on blood transfusion, diagnostics and pharmacy while module 6 is about health management information system (HMIS).

In addition to the main facility questionnaire, there are 4 other survey instruments that will also be used for collecting data at this facility. These are

1. Questionnaire on budget, expenditure and finance
2. Observation of sick children – contains a checklist that will be used during clinician's consultation of sick children
3. Vignettes to assess what clinicians know
4. Exit interview to assess the level of patient satisfaction

As the ***officer-in-charge*** of this facility, we will require you to provide answers to the main facility questionnaire, and the questionnaire on expenditure, budget and finance. In case there is another person who can attend to some parts of the instrument other than you such as a pharmacist or an accounts clerk, please feel free to refer us to such a person. We anticipate that each module will take about 45 minutes to complete.

Your participation in this survey is voluntary and at no cost to you as an individual. You may choose not to participate at all or to stop at any time before the end of the survey. You may also choose not to answer any question that you are not comfortable with.

Although we will ask for names of participants, we want to assure you that adequate steps to ensure that each individual's identity is protected have been put in place. No information collected will be traced to you in any way because data will be kept and processed in an anonymous manner. pharmacist or an accounts clerk, please feel free to refer us to such a person. We anticipate that each module will take about 45 minutes to complete.

A. ORGANIZE THE FACILITY WORK

After permission is given, the TL should quickly discuss how to best organize work in the facility, asking if the other data collector(s) can go to the outpatient service area to start data collection while the TL remains with the in-charge. Often a nurse in-charge of the outpatient department is an excellent partner to help organize the data collection.

Issues to discuss up front are any services of interest that are only offered at certain times, or where staff may leave early. Also identify any services that may close early or during lunch. If needed, get the in-charge involved to ensure that essential respondents will be available.

The TL is responsible for working out a plan for completing all components of the questionnaire at each facility. The TL should discuss the plan with the in-charge. It may be helpful to meet with relevant supervisors (at large facilities) and other staff who may be requested to allow interviews and observations during the team's visit. For a small facility this may be relatively easy since most services are in the same general area. For larger facilities, this may involve different departments.

Priorities in organizing data collection:

- Observation of service provision: If observation of service provision is a part of the survey the data collectors (usually one observer and one person to conduct exit interviews) should be introduced to the area where observations are to be conducted immediately, to increase the probability that patients meeting the criteria for observation will be found. Instructions for organizing observation are provided later in this manual.
- Data collection in service sites that only function in the morning, or data collection sites (pharmacy or laboratory) that are closed at specific times of the day. It is important also to identify if any key staff will be leaving early. Some of the services that do not always operate the full day may include ART and VMMC.
- Record reviews that may require staff who are not available the full day, who might be needed to identify sample records or reports. After ensuring that information for drawing the sample is available, and the sample records are pulled, the actual record reviews can happen at any time, such as later in the day after other data collection that requires staff time is complete. More detailed instructions on record reviews is provided later in this manual.
- The TL should arrange with the in-charge a convenient time for asking the management questions (in section 1 of the facility audit/inventory).

❖ ***The most efficient plan for completing data collection will result if the team leader develops a collaborative planning strategy with the in-charge or another person designated by the in-charge, who is familiar with the day-to-day functioning of the facility, and together they determine the strategy.***

The duration of the data collection will depend on the size of the facility, the availability of suitable staff to provide the answers to the questions, and how busy the facility is on the day of the survey. It is expected that all data collection can be completed in one day even in busy and large facilities. Under rare circumstances if a second day is needed (for example if relevant staff were not available during the survey data collection) the TL will contact the supervisor to explain the need for a second day.

B. COLLECTING DATA IN THE FACILITY

The TL is responsible for making sure that all questionnaires and interviews are completed prior to leaving the facility. This will involve the team coordinating together. How to organize the work in each facility will vary depending on how busy the facility is and how the services are organized. In some cases data from one source must be linked with another. For example, the observed child and the related caretaker for the exit interview need to be linked, the provider who is interviewed for knowledge and the observation questionnaire for that provider should be linked.

The team should decide on the best way to link when this is necessary. Some teams have written the names lightly in pencil on the documents; sometimes they send a colored identification paper with the caretaker to give to the exit interviewer that provides the child's identification number.

Some general guidance on organizing data collection:

1. **Observation of the sick child and the related exit interview**
   - *These activities should be started as quickly as possible* since they are dependent on when the sick children come to the facility. In most cases, this is in the morning. One data collector will observe the consultation and the second will interview the caretaker before departure from the facility. Selection of children for observation will be discussed when the *Observation of the Sick Child* data collection tools are described.
   - The OPD in-charge should help to identify appropriate children for observation. If there is a low caseload the data collectors may go elsewhere to complete other data collection tools, and the provider or in-charge should be asked to come and get the data collectors when an eligible child arrives.
   - The OPD in-charge should also help to identify the best location for the exit interviewer to capture the caretakers of the observed children and other clients. The best location is near where the final interaction at the facility takes place. This is often near the pharmacy, near a main entry, or just outside the consultation area (if the clients return to this area prior to departure).
   - After observing the sick children, and conducting the exit interviews, the data collectors should liaise with the TL to determine the most efficient way to proceed.
     - *Linking identifying numbers for observed clients and the exit interviews with their caretaker is important.*

2. **Provider interviews**. It is important to capture for the providers who are not busy. However, sometimes providers will leave early if it is not busy, so *conducting the interviews as early as possible or making an appointment (encouraging the provider to stay until you can interview them) is important*. Identification of eligible providers and sample selection will be discussed when the *Provider Interview* data collection tools are described.
   - *Linking identifying numbers for observed providers and their knowledge interview is important.*

3. **Pharmacy and laboratory.** At the beginning of the day make sure you know the schedule for the staff who manage the pharmacy and laboratory. *These particular services often close for lunch or the staff may leave early if it is not busy*. If the most knowledgeable for pharmacy or lab must leave, try to get them to delegate and leave the key so that you can collect information, or else make an appointment to catch them when they are present.

4. **Record reviews:** Record reviews require selecting a sample from a register that may currently be in use (in busy facilities) and requires someone to find the sample patient chart/record. This is what takes the most time. Actually collecting the information for each sample patient is relatively quick. Early in the day discuss with the outpatient in-charge the best strategy for ensuring that the register will be available and the client charts/records will

be identified. Try to conduct the record review while the staff providing the service are still present so that they can answer questions and translate abbreviations that may be used, as well as identifying if information is kept in a different type of register/record than what you have on hand.

2.7. INTERVIEWER SKILLS

Collecting data that accurately reflect the services and service conditions in a facility requires skill and practice. This section provides general instructions on the skills required for gathering this information. Remember that the survey findings are only as good as the data from which they are calculated. The quality of that data depends to a large extent on the interviewer.

Following are some basic instructions on the practices that should be used when interviewing respondents and tips for how to handle difficult situations that you might encounter while conducting an interview.

A. GENERAL INTERVIEWING PRACTICES AND TECHNIQUES

In order to obtain accurate information from a health provider at work in a health service setting, it is very important that they be engaged in the data collection process. There are several basic ways to gain the provider's cooperation while collecting accurate and specific information.

1. Show respect for the respondent

The quality of the information you collect will depend to a large extent on the attitude of both the health providers and clients. Therefore, the interaction between yourself and all respondents is very important. All respondents should be treated respectfully and politely. The respondents should know that you appreciate their cooperation and the time they are taking to help make the survey successful.

If the respondent feels that the information is important and that you are sympathetic to their situation, they will be more straightforward with responses and will be more likely to answer questions to the best of their ability. If they feel pressured to respond, or feel that the interview is a burden, they may not carefully think about responses.

A respondent's first impression of you will strongly affect his/her willingness to fully participate in the interview. Therefore, it is important that you approach each person you will interview and his/her colleagues at work in a friendly, respectful, and professional manner.

One basic way to show respect for a health worker at work is to be considerate of what they need to accomplish during their workday and to let them know that you don't want to interfere with their client-related tasks. Two ways to accomplish this are: 1) If the health worker you need to interview is busy with a client, wait until that visit is completed before approaching him/her; and 2) Wait until there are no clients around or until there is a qualified person available to complete the questionnaire. You will discover other ways to fit smoothly into the health worker's busy schedule as you gain more experience gathering data in a variety of health service settings during the survey implementation.

If it appears that there will never be a convenient time for collecting the data, you should discuss with the health worker or the staff member in charge to determine the best approach for collecting the required data with the least interference possible.

2. Listen carefully to the respondent

Listening carefully to what your respondents say is as important as asking the questions on the questionnaire, and demonstrates respect. Some questions in the questionnaire require you to listen to what the respondent says and record it by simply circling a printed response category. Sometimes, you must write down exactly the answer given by the respondent if the answer does not fit in any of the listed categories. In either case, listen well. Do not rush into circling the code category before you have really listened to your respondent. This may be taken as a sign of disrespect or not paying attention. More importantly, people who rush into coding a response are often in danger of attributing their own biases, preferences, and favourite response categories to their respondents.

3. Explain the survey and confirm authorization for the respondent to answer your questions and provide information.

There is an explanation and background information at the start of each module that should be read to the respondent prior to beginning the interview. The interviewer should explain the purpose of the survey to each new respondent and should explain that the in-charge has authorized the team to collect information and the staff member to respond to questions. Usually the interviewers will be introduced to each respondent by persons designated by the in-charge.

4. Answer the respondent's questions without pressuring them

Some respondents may question you about the purpose of the survey before agreeing to participate. Answer the respondent's questions as directly as possible. If the respondents feel that the information is important and that you are sympathetic to their situation, they will be more straightforward with responses and will be more likely to answer questions to the best of their ability. If they feel pressured to respond, or feel that the interview is a burden, they may not carefully think about responses. The respondents should know that you appreciate their cooperation and the time they are taking to help make the survey successful.

5. Offer no opinions or advice on specific health facility practices or patient care issues

If a respondent has specific questions that require your medical opinion or advice, politely respond by saying that you are here to collect information to provide an overview of the services, and that you are interested in the systems and practices at this facility. Explaining this and then simply stating, “I am not in a position to provide any advice or opinions” may be sufficient. It is important to remember that your job is not to educate respondents, but only to collect information from them.

6. Reading the questions

The question should first be read exactly as worded. The, if needed, explanations or examples to clarify what you are asking can be provided. Examples for where some of the information being asked is not clear, are provided in this manual so refer to the question number in the manual if there are questions. Each section of the questionnaire also has an introductory paragraph that must be read to the respondent (when applicable) in its entirety. Questions in each section should be asked in the order they are listed. This is to ensure that questions are not missed, and that skips are appropriately followed.

Speak slowly and clearly so that the people you are interviewing will have no difficulty in hearing or understanding the question.

7. Be straightforward

There are some questions in the survey where you are asking about the availability of items, and then asking to see them. Providers will be more cooperative if they know beforehand what to expect. If you ask questions and then later ask to see items, people may think you are trying to trick

them, or "checking up" on their answer. In order to have the greatest amount of cooperation, always tell the respondent what is coming. For example:

"I am interested in knowing if the following basic equipment and supplies used in the provision of client services are available in the general outpatient area of this facility. For each item, please tell me if it is available today and functioning. I will need to see the item so that I can completely fill in this questionnaire."

8. Probing for a response

Occasionally, a respondent may answer a question incompletely, or seems to have misunderstood the question. The first thing to do is simply to repeat the question as written a second time. If this does not help, you will have to probe to obtain the response. Probing is a way of asking for further information without influencing the response. For example, "Could you explain that a little more?" or "Could you be more specific about that?" You must never interpret a respondent's answer and then ask the respondent if your interpretation is correct.

There is not a uniform understanding, even between health service providers within the same health facility, on some of the issues for which we are collecting data or on terms used to describe items or practices. If it appears that the respondent is not understanding what you are asking, or the response does not seem consistent with other information you have collected, you may rephrase or describe in more detail the item or practice that you are asking about, using examples, to ensure that the respondent completely understands the question to which he/she is responding.

In cases where it may be necessary to provide additional clarification, you should provide only the minimum information required for an appropriate response.

If, however, the respondent appears to understand the question and the response still is not consistent, you must record the response as given by the respondent.

9. Never suggest answers to the respondents

If the respondent's answer is not relevant to a question, do not prompt them by saying something like "I suppose you mean that…Is that right?" In many cases, the informants will agree with your interpretation of their answer, even when that is not what they meant. Rather, in most cases, you should probe in such a manner that the informants themselves come up with the relevant answer, e.g.

"Can you explain a little more?" "There is no hurry. Take a moment to think about it".

Specific questions for which it may be necessary to provide additional clarification will be discussed in the detailed instructions for completing the SARA questionnaires. Even in these cases, you should provide only the minimum information required for an appropriate response.

10. Remain neutral

Your job as an interviewer is to obtain the facts. An interviewer should be friendly, but firm; neutral, but interested. Your tone of voice, facial expressions, and even bodily postures all combine to establish the rapport you create with your respondent. Do not express surprise, pleasure, or disapproval at any response or comment made by the respondent.

11. Ask all applicable questions

In most cases, you will ask questions in the sequence in which they appear in the questionnaire. However, because the organization of facilities often differ, you may find that to complete one

section you have to talk to more than one respondent, or go to different areas of the facility. It is up to you to ensure that when sections of the questionnaire are skipped because the information must be collected from a different respondent or location, that those sections are completed before you depart from the facility.

12. Do not raise expectations of immediate changes in the situation of the staff or facility

Do not raise expectations that that you can immediately assist with solving problems that the staff or clients raise as problems. You are going to provide information to decision makers and health planners and administrators, but any changes as a result of the survey will most likely occur over an extended period of time, and be gradual in implementation. If clients or staffs complain about the poor state of repair of the facility, equipment, or supplies or other problems, provide a neutral or non-judgmental response (e.g., "I know these things are difficult").

13. Do not separate questionnaires

When using a paper questionnaire for backup, never separate stapled or bound questionnaire forms to speed up the process of data collection. Experience has shown that this strategy may result in lost pages.

14. Thank the respondent at the end of the interview:

At the end of every interview, thank the respondent for taking time out of his/her busy schedule, telling him/her it was very much appreciated. Ask if he/she can direct you to the next appropriate clinic/unit and/or person.

B. TIPS ON HANDLING DIFFICULT INTERVIEW SITUATIONS

1. The respondent is reluctant to participate

Occasionally, a potential respondent will refuse to participate in the survey. Do not take the initial unwillingness of a respondent to cooperate to mean a final refusal. Try to put yourself in their position and think of factors that might have brought about this reaction. The respondent may not be in the right mood at that particular time or they may have misunderstood the purpose of your visit. Try to find out why the respondent is unwilling to participate, and respond accordingly**.** Some points you can use to persuade a respondent to participate are:

- The information they provide will help the Ministry of Health and the government to better understand the effectiveness of programs and make improvements to the program that will ultimately help the clients.
- If confidentiality is an issue, assure the respondent that everyone working on the survey has pledged to maintain confidentiality and that the respondent's name will not be shared with others, including his/her supervisors or colleagues.
- The respondent cannot be replaced by anyone else.

However, in some circumstances a respondent may continue to refuse. In this situation, respect the respondent's right to refuse, and thank the respondent for his/her time. Do not take these refusals personally. Speak with the TL and try to get the in-charge to provide another person to respond to this section.

2. The respondent seems bored

There may be other situations where the respondent simply says, "I don't know", gives an irrelevant answer, acts bored or detached, contradicts something they have already said, or refuses to answer the question. This happens most when the respondent is concerned about their other clinic/unit

responsibilities and wants to get back to them. In these cases, you must try to re-interest them in the conversation. For example, if you sense that they are growing restless, reassure them that there are not many more questions and that their responses are very valuable. If needed, stop the data collection and arrange to return after the urgent work or client caseload is less.

3. The respondent is very talkative

If an informant is giving irrelevant or elaborate answers or complaining about something, do not stop him/her abruptly or rudely, but listen to what they have to say. Then try to steer them gently back to the original question. You can also write down what they say and tell them that it is duly noted. A good atmosphere must be maintained throughout the interview. The best atmosphere for an interview is one in which the respondents see the interviewer as a friendly, sympathetic, and responsive person who cares about them.

C. INTERVIEWER RESPONSIBILITIES

The following is a general list of interviewer responsibilities, which, if adhered to, will help the interviewers to collect accurate data and successfully complete the study.

Before the interview

- Be prepared and have all the necessary supplies: charged tablet, paper questionnaires for backup, Data Collector's Guide, paper, pen, letter of introduction
- Make sure to have the full list of sites to be visited
- Meet with the person in charge of the facility
- Get consent from the respondent prior to asking questions
- Identify the type of the facility and confirm the type to ensure proper collection of data

During the interview

- Read each question aloud exactly as it is written in the questionnaire prior to making clarifications
- Listen carefully and without judgment to your respondent's answers and comments
- Record accurately the answers on the questionnaire
- Probe for additional information when necessary
- Ask your supervisor for assistance whenever you have a question

At the end of the interview

- Thank the respondent at the end of the interview
- Verify that there are no missing responses

When using a handheld device

- Check the battery level and verify that they are properly working before you go to the field
- Charge the handheld device frequently (15 to 30 minutes per day).
- Review records entered and make sure that there is no record without a name and that no records are entered twice.
- Never remove the memory card from the handheld device
- Perform a backup at the end of the day with your supervisor

III. GENERAL INSTRUCTIONS: NORMS IN QUESTIONNAIRES AND RECORDING RESPONSES

The interviewer's main responsibility is to collect information that reflects the real situation in the health facility. This requires identifying the appropriate respondents and accurately recording responses, verifying information by observation when required.

The instructions and examples below explain the questionnaire format, the various types of questions and instructions, and procedures for correctly recording information.

Although we are using electronic devices to collect the information, if the device malfunctions, it may be necessary to fall back on paper copies of the questionnaires. For this reason, it is important to be familiar with how to enter responses in the paper copies.

When completing a paper version of the questionnaire, all responses are to be recorded using pens with blue ink. Blue ink is used because it can be distinguished from the black ink in which the questionnaires are printed. Never use red or green ink in recording responses since these colours are reserved for the survey manager and field supervisor to use in correcting the questionnaires in the office.

The information that you record in the paper forms will eventually be entered into an electronic database. At that point, it is very difficult to correct for errors or omissions in the questionnaires. Consequently, it is very important that you correctly record the answers and follow all special instructions in the questionnaire.

The procedures for recording responses will vary according to the type of question being asked. There are some basic types of questions in the questionnaire such as pre-coded questions and questions requiring a numeric response. Samples of all types of questions, and combinations of them, are reviewed below giving examples.

Most of the instructions for the paper questionnaires are applicable when using electronic devices as well.

A. ASKING QUESTIONS AND DETERMINING THE CORRECT RESPONSE

1. Question format

This questionnaire is typically divided into four columns, as shown below. The first column contains the question number with each question numbered separately within each section. The second column contains the questions and instructions to the interviewer for posing questions, the third column contains the response categories, and the fourth column contains skip and other instructions, if necessary.

Example

B. REFERRAL RESOURCES			
1211	Does the facility maintain records of patients who are received through referral from other facilities? IF YES, ASK TO SEE EVIDENCE OF DOCUMENTED REFERRALS OUT	YES, OBSERVED .....1 YES, REPORTED, NOT SEEN .....2 NO .....3 NO REFERRALS TO THIS FACILITY 4	

1213	Does the facility use a pre-printed referral form when patients are referred elsewhere? IF YES, ASK TO SEE A COPY OF THE FORM	YES, OBSERVED .....1 YES, REPORTED, NOT SEEN .....2 NO .....3 NEVER REFER PATIENTS 4	➔1301

2. Instructions to data collector

Questions are often accompanied by a set of instructions for the interviewer. Instructions are usually located in the question column and appear as bold-faced **CAPITAL LETTERS.** Instructions will help you to remember important directions for asking questions, making correct observations, and recording information. These instructions **should not** be read to respondents.

Example

5100	Does this facility have a ***functioning land line telephone*** that is available to call outside at all times client services are offered? **CLARIFY THAT IF FACILITY OFFERS 24-HOUR EMERGENCY SERVICES, THEN THIS REFERS TO 24-HOUR AVAILABILITY.**	YES.....1 NO 2	➔5102

Pay attention to instructions because they will help you complete the questionnaire as accurately and completely as possible. It is important that you follow the instructions in the questionnaire consistently.

3. Introducing a set of questions

You will notice sentences throughout the questionnaire that provide information to the respondent about the next set of questions to be asked. These sentences must be read to the respondent, so that they know what to expect from the next set of questions. Respondents who are provided information up front are less likely to be surprised or uncomfortable about certain questions and much more likely to respond sincerely. Below is an example of a set of sentences found in the questionnaire that are to be read to the respondent so that they will know what to expect.

Example:

3222	Do ANC providers provide any of the following services to pregnant women as part of routine ANC services?	YES	NO	
01	Iron supplementation	1	2	
02	Folic acid supplementation	1	2	
03	Intermittent preventive treatment in pregnancy (IPTp) for malaria	1	2	
04	Tetanus toxoid immunization	1	2	

If, during the training or the pretest, the interviewer finds that information such as this would be useful prior to a set of questions where there is no narrative, report this to the field supervisor so that the questionnaire can be modified if necessary.

4. Skip Instructions

The questionnaire is set up to avoid as much redundancy as possible and to ask only appropriate questions given a situation. This is accomplished through the use of skip patterns. It is very important to follow these skips for they will make the questionnaire more concise and relevant and thus increase the cooperation of the respondent.

In the sample question below, if the answer to question 1506 is "NO" the respondent does not need to answer about any system for quality assurance activities. The data collector will skip the following question (1507) and go to question 1511. If the answer is "YES", the data collector will ask question 1507.

Example:

1506	Does this facility routinely carry out quality assurance activities for any service areas? By this I mean some formal review system or comparison of work or systems to a standard?	YES ..... 1 NO..... 2	➔1511
1507	Is this system implemented throughout the facility or only in specific services?	THROUGHOUT FACILITY ..... 1 ONLY SPECIFIC SERVICES 2	
1511	Does this facility systematically practice any other type of continuous quality improvement? This refers to a systematic process of identifying and addressing, such as COPE[1]? IF YES, ASK: Is this for a specific service or across service sites in the facility	YES, SERVICE SPECIFIC ..... 1 YES, ACROSS FACILITY..... 2 NO..... 3	➔1600

5. Instructions for collecting information where items are to be observed

Throughout the questionnaire many questions ask if equipment, drugs, supplies and other items are present. The following criteria are to be used for classifying the presence of the item:

- "1" for "OBSERVED": The item was seen in the service provision area or in an adjacent room where it can easily be used. If the service is not being provided the day of the visit, the item may be stored in a different location. If staff reports that the item is brought to the service delivery area only at the time services are provided the correct response is "2" for "REPORTED, NOT SEEN".
- "2" for "REPORTED, NOT SEEN": The staff report the item is located in the facility or immediately adjacent, where it can easily be used, but for some reason (e.g., key to cabinet is missing or room is locked), the interviewer cannot observe the item.

[1]COPE, "client-oriented, provider-efficient" services is a process for problem identification and resolution.

- "3" for "NOT AVAILABLE": The item is reported either to not be within a reasonable proximity, or is not available. If the item is "NOT AVAILABLE" verify that the staff is not reporting "NOT AVAILABLE" when in fact the item is present but "non-functioning". If the item is available but is not functioning, it will be marked as "1" "OBSERVED" OR "2" "REPORTED, NOT SEEN" and then subsequently marked as "NOT FUNCTIONING". The program implication of having equipment that is not functioning is different than for when the equipment does not exist.

Example:

C. INFECTION CONTROL SUPPLIES					
3130	Please tell me if the following resources/supplies used for infection control are available in the general outpatient area of this facility today. ASK TO SEE EACH ITEM THAT IS AVAILABLE	**OBSERVED**	**REPORTED, NOT SEEN**	**NO**	
01	Clean running water (piped, bucket with tap, or pour pitcher)	1	2	3	
02	Hand-washing soap/liquid soap	1	2	3	
03	Alcohol based hand rub	1	2	3	
03a	Disposable towel for drying hands	1	2	3	

NOTE: In smaller facilities many rooms are near each other (e.g. within less than a one-minute walk to go from room to room) and it is reasonable to assume that equipment can be shared between the various rooms. You will need to assess if it is likely that the equipment is frequently needed in more than one room at the same time. If there is one provider this is not usually going to occur. If there are several providers and several busy services (e.g. family planning and ANC are offered by different providers at the same time) then two blood pressure apparatus' would be required and "OBSERVED" would only be a valid response for the service that has the blood pressure apparatus.

For some "OBSERVED" (or "REPORTED, NOT SEEN") items, you also will need to determine if the item is **functioning** at the time of your visit. For these cases use the following criteria:

- "1" for "YES": You observe that the item is in working order or in a location where it is not reasonable to ask to see the equipment function (e.g. a generator) the staff indicates that it is functional.
- "2" for "NO": The item does not function if the staff member indicates that it is not in working order.
- "98" for "DON'T KNOW": The respondent is not certain if the item is in working condition or not, and you cannot verify the functioning condition (e.g. the place where the item might be is locked and cannot be accessed at the time of the survey and the respondent does not know about the item).

Example:

3120	Now I would like to see equipment and resources that are available in the outpatient service area. IF THERE ARE MULTIPLE OUTPATIENT SERVICE AREAS, ASSESS THE RESOURCES AND EQUIPMENT THAT ARE IN THE SERVICE AREA FOR OUTPATIENT CURATIVE CARE FOR ADULTS.						
	Please tell me if the following basic equipment and supplies used in the provision of client services are available anywhere in the outpatient service area and are functional.	A) AVAILABLE			B) FUNCTIONING		
		OBSERVED	REPORTED, NOT SEEN	NO	YES	NO	DON'T KNOW
01	Adult weighing scale	1 → B	2 → B	3 02 ↵	1	2	8
02	Child weighing scale- 250 gram gradation	1 → B	2 → B	3 03 ↵	1	2	8
03	Infant weighing scale - 100 gram gradation	1 → B	2 → B	3 04 ↵	1	2	8

6. Collecting information that must be in the vicinity of a specific service site

Examples:

Infection control items should be present in a facility in multiple service areas as they are required for minimizing infection in all areas of service delivery. As a result, in several service delivery areas, the facility is assessed to determine if conditions to minimize infection are present. *The items must be in the service site or in proximity such that you can reasonably expect the provider to use the item* to be available (observed or reported, not seen).

If a blood pressure apparatus required to provide a specific service is shared between services (e.g., family planning and ANC) assess if it is reasonable to assume that it is available for all patients during service provision. If the same providers are providing the service, or the services are provided at different times but in the same area, this is reasonable. If the services are provided at the same time by different providers in different service areas, it is not reasonable to assume that the apparatus is available for all patients when needed.

B. QUESTION TYPES

1. Pre-coded questions

For some questions, we can predict the types of responses a respondent will give. The responses to pre-coded questions are listed in the questionnaire. To record a respondent's answer, circle the number (code) that corresponds to the response. When numbers indicate coding categories, the interviewer records only one response for each question. Make sure that each circle surrounds only a single number.

Example:

1203	What is the basis for the catchment population number?	GOVERNMENT CENSUS.....1 LGA.....2 PHYSICAL COUNT .....3 OTHER _____96 (SPECIFY) DON'T KNOW 98	

In some cases, a pre-coded question will include an "other" category. The "other" code should be circled when the answer provided is different from any of the pre-coded responses. When you circle the code "other" for a particular question, you must specify what the "other" response is. Write the answer in the space provided. If you need more room, use the margins.

Example:

1203	What is the basis for the catchment population number?	GOVERNMENT CENSUS.....1 LGA.....2 PHYSICAL COUNT .....3 OTHER _____96 (SPECIFY) DON'T KNOW 98	

Sometimes responses to particular questions must be entered in response grid (table). When recording a response in one of these grids, be sure that you are entering the answer in the proper row and column.

Example:

	Please tell me if the following basic equipment and supplies used in the provision of client services are available anywhere in the outpatient service area and are functional.	A) AVAILABLE			B) FUNCTIONING		
		OBSERVED	REPORTED, NOT SEEN	NO	YES	NO	DON'T KNOW
01	Adult weighing scale	1 → B	2 → B	3 02	1	2	8
02	Child weighing scale- 250 gram gradation	1 → B	2 → B	3 03	1	2	8
03	Infant weighing scale – 100 gram gradation	1 → B	2 → B	3 04	1	2	8

2. Numeric responses

Several questions require a numeric response. These should be recorded in the appropriate available boxes in the right column of the table.

Example:

3107	How many days per week is this facility open for outpatient services? THIS MAY BE ROUTINE SERVICES OR EMERGENCY SERVICES	DAYS OPEN FOR OUTPATIENT SERVICES [ ]	

Anytime a respondent's answer requires fewer digits than provided for in the response column, the interviewer must record zeros (0) in the left-hand box and the respondent's answer in the right hand box.

3577	On average, how long does it take from when a patient is diagnosed with TB and when this facility receives the individual patient drugs for treatment follow-up?	AVERAGE DAYS FROM CONFIRMED DIAGNOSIS TO RECEIVING INDIVIDUAL DRUG SUPPLY [0][0][2]	

If this is not done, data collectors will not be certain if the following means '2' or '20' or '200'.

3577	On average, how long does it take from when a patient is diagnosed with TB and when this facility receives the individual patient drugs for treatment follow-up?	AVERAGE DAYS FROM CONFIRMED DIAGNOSIS TO RECEIVING INDIVIDUAL DRUG SUPPLY [2][ ][ ]	

Whenever respondents do not know the answer to a numeric question, the interviewer must circle the "Don't know" or "Not Available" response option ('98") if it is offered. If "Don't know" is not one of the responses then you must probe to get a numeric response to fill in the boxes. All boxes should have a number recorded in them.

B. ENSURING QUALITY

All members of the survey team are responsible for ensuring that the data that is collected at each facility is as accurate and comprehensive as possible. Each interviewer is responsible for:

- Checking that questionnaire, you have filled are complete at the end of each interview, ensuring that all answers are clear and reasonable, and that your handwriting is legible.
- Returning to the original respondent(s) if questions are omitted or there appears to be errors, in order to complete the questionnaire. Apologize, explain that you made a mistake, and then ask the question again.
- Notifying the field supervisor whenever there are problems in completing the daily assignment.

The field supervisor has the overall responsibility for the quality of the work of the team in the field. The field supervisor must:

- Monitor the activities of the team during the course of each day's activities. In particular, the field supervisor must ensure that team members are conducting the interviews in an organized manner that will yield the appropriate number of completed instruments by the end of the day's activities.
- Check all questionnaires received at the end of the day to ensure that all items are completed and (for paper questionnaires) skip patterns are followed.

- Feedback information to the team members on any problems observed in the completed questionnaires, and discusses with the staff any problems they have encountered.
- Maintain regular contact with the central office. Feedback information on any problems with staff performance or aspects of the survey. Promptly notify the central office of any changes in the visit schedule initially prepared.

C. CORRECTING MISTAKES

If you make a mistake recording an answer or the respondent changes his/her reply, put two diagonal lines through the incorrect response. Do not try to erase an answer, use white-out, or write over an answer. It is particularly hard for data entry staff to understand which of two numbers is correct, if you have tried to write over a response. This instruction is particularly true when using paper questionnaire. CAPI will only require that the incorrect response be deleted and the correct response should be entered.

Example:

3305	How often does this facility offer all child immunization services as outreach?	DAILY…… 1 WEEKLY…… 2 MONTHLY…… 3 QUARTERLY…… 4 OTHER (SPECIFY)_____ 5	

Remember that if there are two responses for a particular question that requires only one response, it may be impossible later, when the data are being entered, to determine which the correct answer is. Also, if you write over an answer, the data input staff frequently cannot determine which of the two responses you meant as the correct response.

D. Questionnaire editing

Interviewers are required to edit their questionnaires before considering an interview complete. If questions are omitted or there appear to be errors, you must return to the original respondent(s) if possible. Apologize, explain that you made an error, and ask the question again.

Editing should be done on the spot in order to avoid the need for re-contacting respondents, which is impractical given the time frame for fieldwork completion, as well as inconvenient for both the interview teams and the respondents.

E. CHECK LIST

All questionnaires should be reviewed from beginning to end for the following:

- ❑ Verify that the interviewer has *signed the consent form.*
- ❑ Verify that all skip and filter instructions have been respected.
- ❑

- ❑ Verify that only one response code is ticked for each question.
- ❑ Verify that any corrections made by the interviewer are done appropriately according to the instructions above.
- ❑ Check that all questionnaires contain the correct number of pages.
- ❑ Check that there are no missing responses.

NEVER LEAVE A RESPONSE BLANK! A blank is recorded as "missing information" because it is not known if you asked the question or not. If a response is negative, the negative response must be circled. Likewise, if a response is "don't know", the number corresponding to the "don't know" response must be circled.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE AUDIT QUESTIONNAIRE

The facility audit questionnaire is broken into the following sections:

MODULE 1: Services, management, staff, and finance

MODULE 2: Facility infrastructure

MODULE 3: Community and outpatient services

MODULE 4: Delivery services

MODULE 5: Blood transfusion, diagnostics, and pharmacy

MODULE 6: Health information systems and statistics

Common definitions

This section provides detailed information on the content of individual questions, including specific instructions and explanations for each question where appropriate. As the questionnaire is completed by SERVICE SITE, there is some repetition of items such as basic equipment, infection control items, and medicines throughout the different service sites. Guidelines, job aids, and staff training all also have common definitions although in each section they refer to specific topics. In this guide, the basic equipment and infection control items are only defined once in the general infrastructure section. Please refer back to this section if you have questions pertaining to these items.

Availability of items

There are many sections where we ask to see specific pieces of equipment or documents. You must actually see the item for it to be recorded as "observed". If the item is reported to be available, but you cannot see it because the item is wrapped in a sterile pack, or is locked in a cabinet and the key is not available, or the respondent cannot find it, but assures you it is available, you may record '2' "reported, not seen".

If the item is located in another site, and that site is a reasonable one for the item to still be used for this service (e.g., tetanus toxoid may be in the immunization service area but easily available for ANC services), go to observe the item so that you can mark '1' "observed"—since this is a stronger answer, rather than "2" "reported, not seen". Some items, such as medicines, we specify that they must be in this service site. Later we have a specific section where we look for the same items in the pharmacy. So in these cases, the response relates to *items in this service area.* Most equipment cannot reasonably be shared between services, unless the services are offered on different days, or they are offered by the same service provider.

FACILITY AUDIT QUESTIONNAIRE

SECTION 1.0 COVER PAGE AND FACILITY IDENTIFIERS

A. INTERVIEWER VISITS

1001: Facility number

The facility number will be provided to you by the survey manager. If the number is not provided to you, please leave it blank. The number will then be assigned at the time of data processing.

1002: Supervisor validation visit

A supervisor validation visit occurs when the field supervisor returns to a health facility that has already been surveyed and completed a second survey as a data quality check. It is important to know if the survey is a supervisory data validation check so that the facility data are not duplicated in the final data set.

Dates and name of interviewer for each visit to the facility

There are times when more than one visit is made to a facility to complete the survey. Indicate the dates of each visit in the appropriate column for the first, second, or third visit to the health facility. Record the date of each visit in the format of two-digit day, two-digit month, and four-digit year.

Record the name of the interviewer for each visit.

Final visit

Record the date for the final visit in two-digit day, two-digit month, and four-digit year format, team code.

B. FACILITY IDENTIFICATION

1003-1003a: Facility name

Record the name of the facility. Take this information from the list of facilities assigned to the team. Please be sure to spell the facility name as it appears on the list and be sure to follow the national health facility naming standards.

Often a facility is known locally by different names than that used officially. Record all other names. This information is to help ensure that the correct facility has been surveyed and may help in the future to link data sets where different names are used for a facility.

1004: Facility location

Record the address and the name of the city, town, or village where the health facility is located. Write the most complete address possible for the facility. If there is not a specified address write the name of the location.

1005: State

Select the state name and code from the list in CAPI.

1006: Local Government Area (LGA)

Select the LGA name and code from the list in CAPI.

1006a: Ward name

Select the ward name and/or code if provided, otherwise, type the name as reported by the respondent.

C. GEOGRAPHIC COORDINATES

1007-1010: Geographic positioning readings

Follow the instructions in the questionnaire

D. INFORMED CONSENT STATEMENT

The officer-in-charge or acting officer-in-charge should provide the consent for collecting information in the facility. Separate consents for each respondent are not needed for the facility audit, since this section of the survey is collecting facility and not personal information. Individual staff do not have the authority to provide information unless the in-charge has authorized this. For subsequent respondents we will explain that the in-charge has provided the consent for collecting information in the facility so the respondents will understand that they have permission to cooperate.

The officer-in-charge or acting officer-in-charge consent for participation in the survey **MUST** be obtained before you can begin collecting information in the facility. The consent form included at the beginning of the questionnaires is intended to provide the respondent with all the information s/he should have about the purpose of the study and the types of questions that will be asked before deciding to participate. Read the informed consent statement exactly as it is written on the questionnaire.

Record the team code number and the date the informed consent was obtained.

When the respondent indicates the willingness or agrees to provide information, him/her to sign in the space provided as evidence of having agreed to the content of the informed consent. Then leave a copy of the consent form with the in-charge.

1010a-1010d: Position and qualification of person providing consent

If the officer-in-charge for the facility is present, record his/her qualification (1010d). If the in-charge is not present, record the position (1010b) and qualification (1010c) of the acting-in-charge who provided the consent.

E. FACILITY CATEGORIZATION

1011: Type of facility

Verify the facility type with the person in-charge. Sometimes a facility has been upgraded (e.g., from HC to general hospital), but the national listing has not yet updated the information. If there is a discrepancy between the facility-type provided by survey managers and what you find at the facility, enter the code that you believe is appropriate based on the discussion with the in-charge. If the facility is reported as a health post, stop the interview and report to your supervisor immediately.

- **General hospital-**General hospitals provide inpatient services and usually have basic laboratory and diagnostic capacity and provide emergency surgical services. They may also have some specialist physicians. There may be great variability in the resources and capacities for services in general hospitals. General hospitals are the main referral site for Primary and Comprehensive Health Centres.
- **Cottage hospital:**

- **Comprehensive Health Center** (CHC): A CHC provides a wide range of outpatient and sometimes basic inpatient services. A comprehensive health center may have overnight beds, and usually will have a basic level of diagnostic tests available. Staffing will often include doctors.
- **Primary health center** (PHC): PHSs vary widely in the range of services and level of diagnostics that are available, as well as whether there are doctors posted or not. Depending on the level of staff available, services provided may include curative, inpatient, maternity, referral, ANC/FP/Immunization and basic laboratory diagnostics.
- **Health clinic:** A health clinic provides level of health that are higher than a health post. Services available at health clinics may include routine home visits and community outreach, family planning, HIV/AIDS, Tuberculosis, promotion of proper nutrition and food education as well as maternal and newborn care. Health clinics are usually headed by a nurse/midwife/CHEW and may have a lying-in ward with up to 4 beds.
- **Health Posts:** A health post usually has one or two staff and provides a very basic level of curative care. Services available at this facility may include the treatment of minor illnesses, the tending of minor injuries, and where possible, the provision of basic immunization services. Please note that health posts are not covered in this survey.

Q1012: Managing authority

This is the type of organization that manages the facility and provides primary supervision.

Ask and record if the management of the facility is

- Public i.e. state government
- "NGO/not-for-profit" refers to a non-governmental organization that does not function for profit. If the staff working at the facility is hired by the government, but the managers of the facility are non-governmental, the managing authority is non-governmental.
- "Mission/faith based" are often also NGO/non-profit, however, we want to specify managing authorities that are religiously affiliated. (This is in response to donor interest).
- private-for-profit

Record the managing authority as provided by the in-charge.

Q1013: Facility sector

This information will be provided by the NBS

Q1014: Service levels available

Record the appropriate response

- **Outpatient only** refers to services where patient care is provided on an outpatient basis only. An outpatient only facility may have overnight beds for keeping patients temporarily but will either discharge or refer to inpatient facilities within 24 hours and there is no routine staffing pattern to take care of inpatients.

- **Inpatient/on Admission only**: An inpatient is a person who occupies a bed in a health facility for the purpose of treatment. Where a patient is admitted on the expectation that he or she will remain overnight, but the patient dies or is discharged before the midnight census (11:59PM), the patient should still be regarded as an inpatient, whether or not a hospital bed is occupied, or treatment is provided. However, patients who are held for observation in the Emergency Department or other observation areas, pending a decision whether to admit to an inpatient bed should NOT be regarded as inpatients

- Both out and inpatient services refer to a facility that offers both routine outpatient services and routine inpatient services.

MODULE 1: LINKAGES, MANAGEMENT, STAFF, FINANCE

SECTION 1.2 FACILTY LINKAGES WITH COMMUNITY

A. CATCHMENT POPULATION

Catchment population refers to a defined population for which the facility is responsible to provide services. The main purpose of defining a catchment population is to allow analysis of service coverage and to provide estimated numbers for planning services.

Q1201-1202: Catchment area and population

A catchment area is where the population for which the facility has service responsibility lives. Most government facilities have been assigned a catchment area with an estimated number of persons that the facility will serve, that is, the catchment population. Private facilities may or may not have defined catchment areas and populations.

If the facility has a defined catchment area, it should also have an official population number that is used for calculating service need and coverage.

Q1203: Basis for catchment population number

Catchment areas often conform with local government boundaries such as LGAs. They may, however, be different if the LGA is particularly large or small. Clarify if the catchment area population is based on the national census, if it was provided by the LGA (which often may also be based on the census), or if the population has been physically counted (sometimes the strategy for private or NGO/FBO organization. If there is another basis for the catchment population number, describe this.

B. REFERRAL RESOURCES

Q1211-1214: Referral records

Referrals are when a patient is sent by a provider to another provider or facility. There may be referral in—that is referrals to the facility; referrals out—that is referrals the facility makes to other facilities or providers, and internal referrals—that is referrals from one unit/provider to another within the same facility. When patients are referred, information on the reason for the referral and a history that includes any diagnostic tests or treatments that were provided prior to the referral should accompany the patient or be sent to the provider to facilitate rapid continuity of care. The following questions refer to referrals between facilities and **not** to internal referrals.

Q1211: Referrals received (in)

If the facility receives patients who are referred from other facilities or service providers, ask if there are any records kept on patients who are received. Ask to see any record or register that document when a referral is received. The types of records often kept on referral to this facility (referrals in) may be incorporated in the admissions registers, may be incorporated in unit registers or may be

referral forms that are received. The records may simply be number of patients received through referral, but also, ideally will document who made the referral and the reason for the referral.

Q1212-1213: Documentation for referrals out

Ask about when the facility refers patients to another facility. First we want to know if there is a preprinted form that is used (1212). A preprinted form will specify the type of information that should be sent with the patient (e.g., reason for referral, treatment provided prior to referral, any other notes to help the receiving facility provide care). A referral form may also include a part for the receiving facility to report back to the referring facility on the patient status. If the facility writes a referral note on a piece of paper or on a prescription form, this is not a preprinted referral form.

Then ask to see any record that is maintained of patients who are referred out (1213). Similar to the record for referrals in, at minimum the number should be recorded. Ideally, the referral location and the reason for referral, as well as patient identification information will be recorded. The types of records often kept on referral made by this facility (referrals out) may be incorporated in the discharge registers, may be incorporated in unit registers or may be copies of referral forms that are sent with the patient received. If the respondent says they never refer patients elsewhere, probe for referrals for any reason, before marking '4' that the facility never refers clients elsewhere.

Q1214: Time needed for referred patient to reach most common referral site

Ask the respondent to estimate the time it takes using the most commonly used mode of transportation, to go from this facility to the most commonly used referral site. In some situations, the time and distance are very different in the dry and rainy seasons. We specifically want to know the situation for the dry season.

SECTION 1.3: GOVERNANCE AND MANAGEMENT

A. GOVERNANCE

Q1301-1305 Ward development committee (WDC)

A ward/village/community development committee would link the community with the facility and may or may not provide resources and supervision. We are trying to identify how involved the community or local government is in the functioning of the facility—which might result in improved resources to the facility and better accountability of the facility to the community they are serving.

Q1301 -1304: WDC/VDC/CDC Meet regularly

First ask if there is a ward development committee linked to the facility (1301). Then ask if there is an established time period when the committee meets. The actual date may shift due to different factors, but whether it meets monthly quarterly, or other should be established if the meeting is "regular". If the committee is supposed to meet within a specified time frame but it almost never does, probe to determine how often the schedule is missed. For example, if the respondent says "the committee should meet every 3 months, but it never does", ask about the prior year. If it did not meet within 3 of the 4 time-frames when it should, this is not regular. Then ask how often the WDC meet (1303)

Q1304-1305: Activities of the WDC/VDC/CDC in the past 12 months

The support for the indicated activity may have been by manpower (workers to carry out the activity), funds, or even public advocacy.

Q1306-1310: Facility management committee

These questions are referring to a team or committee that is responsible for oversight and management of day-to-day issues for the facility. A management team/committee should meet routinely to discuss issues that affect the facility functioning. Issues they address may be related to scheduling, staffing issues, financing issues, utilization issues, plans for health-related campaigns, etc. These must, however, be regularly scheduled meetings with specific staff having defined areas of responsibility. A management team or committee may or may not include representatives from the community, but usually does not routinely include representatives from businesses. *If there are several different types of management meetings, ask for the most recent meeting that addresses overall facility management (e.g., inter-departmental issues) rather than individual department issues.*

The management committee meetings should have written minutes or notes that describe the issues discussed and any decision that were made or follow up that is needed. Scan through the notes to ensure that the most recent meeting did address issues relevant to the day to day management of the facility.

Q1311-1314: Data use for management

These questions refer to any data that are produced by the facility such as statistics on the numbers of patients or patients receiving specific services, as well as linkage of service statistic with catchment population number to provide indicators of coverage for relevant services.

SECTION 1.4A FULL-TIME STAFF SALARY

These questions refer to the full-time staff salary payment in this facility. The full time staff in this context are staffs captured under the nominal register of either the LGA or STATE government authority. If the junior and senior staff in the facility are paid from different sources interviewer should ask if the salary is coming from the managing authority of the facility.

Q1400A Please tell me the last month/year for which health workers in this facility received salary.

Q1400B When was the last time health workers in this facility received their salary

Q1400C Was this last salary paid in full?

Note: Staffs such as Volunteer, ad-hoc, casual, whose contracts of employment are without the knowledge of the LGA or STATE government is not to respond to this question.

SECTION 1.4B PERSONNEL MANAGEMENT AND SUPERVISION

These questions refer to supervision from outside the facility. If a manager visited the facility for a purpose other than supervision (e.g. an official visit to bring guests) such that the work of the facility, or official issues related to the facility were not addressed, this is not considered a supervisory visit.

Q1401-1403: Supervision from the Local Government Health Authority (LGHA)

These questions elicit information about the frequency of supervision from the LGA

Q1404-1405: Using checklist

A checklist provides a guide for a systematic way to check items, to ensure things are not forgotten and provides an outline for reporting findings. When a copy is left with the facility it provides a record of findings and recommendations that the in-charge and staff can use to improve management and quality within the facility.

Q1406-1407: External supervision other than from LGHA

Identify if the external supervision was from the national/federal level, state level, donors, or others.

Q1408-1412: Most recent external supervision

This may be from the LGHA or other levels and includes supervisors from any level.

Effective supervision requires knowledge of issues for which oversight is important, and what to check in those issues. We want to make sure that the most recent supervision addressed either management or service issues rather than being a general visit.

There are issues in facility functionality that are cross cutting general management issues. These include maintaining equipment and stocks of commodities and supplies, maintaining records and producing reports. This type of supervision may be carried out by a variety of types of managers/supervisors including logistics and finance personnel. There may be service specific issues. These may include the topic under the general management issue, but the focus is on one service. This type of supervision is usually carried out by service experts or (in the case of donor supported programs or resources) persons hired to focus on the one service. Check

(01) Q1410_01 -1410_03: Supervision activities Use checklist: This may be a supervision checklist, a checklist for observing provider activities, a checklist for availability of commodities and functional equipment to provide a specific service.
(02) Discuss with service providers: This could be done through on-the-job training, questioning about knowledge and skills, asking about any concerns related to knowledge or skills, etc.
(03) Observe outpatient consultations: This is usually to check the service process or the process used for performing diagnostic testing.

Q1410_04-1410_07: Issues discussed

(04) Management or service problems: This may have occurred during one-to-one discussions or in meetings.
(05) Service quality: This may include results of the observation process, or based on information that arises in discussions with service providers, or findings based on checklists.
(06) Staff availability or training
(07) Special activities that are upcoming: This might include community campaigns to provide a service (e.g. immunization, deworming), health fairs, special health service outreach.

Q1410_08-1410_11: Check any records

If necessary, go to the area that the supervisor visited to ask staff there if the supervisor checked records.

(08) Medicine stocks, records, storage conditions: These are usually in the pharmacy.
(09) Financial records: These records are usually with the facility management or finance office.
(10) Data: These records may be related to a specific service or may be those maintained by the health information staff. This may include checking data quality (e.g., rechecking math), checking completeness of registers, or checking graphs or presentations of data that the facility uses for monitoring their services or specific indicators.
(11) Administrative records: e.g.

Health workers activity reports: These might be related to specific activities (e.g., outreach or campaigns). Attendance and leave records: These records are usually with the facility management or personnel office.

Staff training records: These may be staff databases where in-service training received by each staff person are recorded, or more commonly lists of persons who attended certain in-service training. These may be trainings provided in the facility or outside the facility. These records are usually with the facility management or personnel office.

Q1411-1412: Documentation of most recent supervisory visit and content of document: Ask to see any documentation that was left with the facility by the supervisor and check for documentation

related to the indicated subjects. Often supervisor notes will identify a problem and then provide a general comment that the problem should be resolved. We are looking for specific recommendations for resolving the problem. "Must improve" is not specific.

SECTION 1.5 SYSTEMS AND PRACTICES FOR QUALITY

This section has sub-sections (a) quality assurance/improvement, (b) case reviews, (c) Disaster planning, facility safety and security, and (d) Standard precautions for infections.

A. QUALITY ASSURANCE/IMPROVEMENT

Q1500-1504: Quality assurance and quality improvement

Quality assurance can refer to a process where facility and service specific conditions are compared to standards.

Quality assurance systems require a routine system for monitoring and addressing issues related to quality of care and not general management. For Quality Assurance to be conducted there must be an established standard against which quality is measured and there must be some systematic means whereby results are assessed and interventions to rectify problems are developed. Quality assurance activities must be differentiated from basic supervision. Supervisors who use checklists against which they assess components of service delivery (e.g. are the registers in order? Are the listed equipment and supplies present?) may be conducting quality assurance activities if there is a means by which the checklists are evaluated and interventions developed. A list of items that should be present in a service delivery area is not a quality assurance tool unless the results are periodically reviewed and problems are addressed.

Examples of Quality Assurance activities include the following:

01) A supervisory checklist for ***health systems*** looks for such things as presence of equipment and supplies, completeness of HIS records, and other process indicators.

02) A supervisory checklist for ***health service provision*** indicating specific content for patient assessment, treatment, or consultation. This will often be used for observing a client receiving services.

03) Facility-wide review of mortality, which refers to a structured system for reviewing the care of clients who die while receiving services at the facility. There will normally be a committee established for this purpose.

04) Medical record/register audit, which refers to the checking of medical records for the presence of specific items or information. These may be simply the presence or absence of these items, or may be more detailed to assess if protocols are followed.

These types of activities may be carried out only by specific services or they may be facility-wide.

Other types of systems for continuous quality improvement may focus more on identification of problems and developing solutions than on measuring standards against conditions such as the process used by the COPE, “client-oriented, provider-efficient" process (1503).

SECTION 1.6 FACILITY BED COUNT

Q1600-1602: Facility Beds

Ask for the total number of overnight beds. This includes inpatient and overnight observation beds (1601). It does not include observation couch and delivery beds, where patients are monitored in active labour or delivery takes place. Ask how many of these beds are in use i.e. a patient can lie on the bed if s/he comes in right now (Q1602).

Dedicated maternity beds would usually be in a maternity ward, or these may be the only purpose for overnight beds.

SECTION 1.7 STAFFING

This section provides general information on the level of service that can be provided by describing the qualification and numbers of service providers and numbers for support staff.

This staffing list is referring to all staff for the facility regardless of whether the staff provide inpatient or outpatient services. This is important because we are capturing the staffing resources available to the facility and not how the staff are assigned. It is also common that staff (particularly physicians) may rotate between in and outpatient services so this prevents double counting.

The staff need not be on duty on the day of the survey to count as being employed/assigned/ seconded to the facility. Ideally, the in-charge should have a staff list that indicates the staffing pattern. Any staff that provides services during outreach should be counted if they are under the management and supervision of the facility. Public health staff assigned to the facility that provide any of the maternal, child, or reproductive health services, either at the facility or through outreach should also be counted. Trainees or students are not considered staff unless they are also official staff posted to the facility. Nursing and Medical Interns usually are counted as staff. For the staff, indicate the highest technical or professional qualification achieved, regardless of their initial training.

We are not looking for the position of the person or for the type of work they do, but rather the technical qualification. Thus, even the most senior of nursing supervisors should be placed either as a “Registered Nurse” or “Registered Nurse/Midwife” depending on his/her technical qualification. A midwife who is not working in antenatal or delivery services, but rather is working in a service that does not use midwifery, is still classified as a midwife since this is his/her technical qualification. Specialist physicians should have had some specialist training to be considered as specialists. Staff may only be counted once.

Examples:

- A unit manager who is a nurse is classified as a NURSE.
- A nurse who has received additional training for providing anaesthesia is classified as a professional nurse
- A physician who has a fully managerial position and does not provide client services is classified at the highest level of medical training received.

Health human resources generally have professional levels and assistant/technician levels for many of the health sciences related to client services.

The professional level requires specialized knowledge and mostly requires a bachelor degree or higher in the science of the health subject in question. Professionals have a degree of autonomy in planning client services including diagnosing patient needs and planning a course of action related to the health science in question.

Assistants/technicians usually have been trained in a subset of the professional content for the health subject in question and usually officially follow patient care plans developed by professionals. They may have formal training, or some cadres may have extensive on-the-job training. Staffing shortages may result in assistants/technicians working above their officially authorized level of independence. We first seek information for the professionals' staff, and then will ask about the assistants or technicians within the same subject categories.

HEALTH PROFESSIONAL

(01): Medical Officers: Medical officers are generalist medical doctors who have not achieved advanced training in a speciality. Medical officers provide general practice that includes family medicine, primary care, or general preventive and curative services. Medical officers require a completed medical university degree plus postgraduate clinical training.

Ex: Medical doctor (general), Medical officer (general), Physician (general), General practitioner, Family medical practitioner, Primary health care physician, District medical doctor, Resident medical officer specializing in general practice

(02): Dental officer: We are referring to professional dentists. A dentist has usually studied dentistry 4 to 5 years' post-secondary school and usually will have a bachelor degree at minimum. A dental surgeon may have up to 8 years' post-secondary school training.

(03): Specialist/consultants: Specialist or consultants are doctors who have a specialist qualification for certain disease categories, types of patient, or methods of treatment. Occupations included in this category require completion of a university-level degree in basic medical education plus postgraduate clinical training in a medical specialization or equivalent.

Ex: Specialist physician (internal medicine), Surgeon, Anaesthetist, Cardiologist, Emergency medicine specialist, Ophthalmologist, Gynaecologist, Obstetrician, Paediatrician, Pathologist, Preventive medicine specialist, Psychiatrist, Radiologist, Resident medical officer in specialist training

(05): Nurse: We are referring to professional nurses. A nursing professional is not trained in midwifery but has received training as a nurse. This is usually 3 or 4 years of training. Ex: Professional nurse, Specialist nurse, Nurse practitioner, Clinical nurse, District nurse, Public health nurse, Nurse anaesthetist, Nurse educator

(06): Midwife: We are referring to professional midwives. A midwifery professional is trained in midwifery but has not received training as a nurse. On average the training of a midwifery professional may be around 18 months, for a diploma in midwifery or more than 2 years for a certificate in midwifery.

(07): Nurse/midwife: A professional nurse midwife has been dual trained, both as a nurse and as a midwife.

(08): Pharmacist: We are referring to professional pharmacists who have usually completed university-level training in theoretical and practical pharmacy, pharmaceutical chemistry, or a related field. Pharmacists store, preserve, compound, and dispense medicinal products. They counsel on the proper use and adverse effects of drugs and medicines following prescriptions issued by medical doctors and other health professionals. They contribute to researching, testing, preparing, prescribing, and monitoring medicinal therapies for optimizing human health.

Ex: Hospital pharmacist, Industrial pharmacist, Retail pharmacist, Dispensing chemist

(09): Pharmacy technician: Pharmaceutical technicians and assistants perform a variety of tasks associated with dispensing medicinal products under the guidance of a pharmacist or other health professional. They take inventory, prepare, and store medications and other pharmaceutical compounds and supplies, and may dispense medicines and drugs to clients and instruct on their use as prescribed by health professionals. Occupations included in this category normally require knowledge and skills in pharmaceutical services as obtained through formal training, however, they have less training and less professional autonomy than professional pharmacists.

(10): Medical laboratory scientist: A laboratory scientist is a healthcare professional who performs chemical, haematological, immunologic, microscopic, and bacteriological diagnostic analyses on body fluids such as blood, urine, sputum, stool, as well as other specimens. Medical laboratory scientists work in clinical laboratories at hospitals, doctor's offices, reference labs, and biotechnology labs. A medical laboratory scientist typically earns a bachelor's degree in medical laboratory science, clinical laboratory science, medical technology or in a life / biological science (biology, biochemistry, etc.), in which case certification from an accredited training program is also required.

Ex: Medical laboratory scientist, Medical laboratory technologist

(11) Medical laboratory technician: The laboratory technician has less training and less professional autonomy than the Laboratory Scientist. They do, however, have formal training (either diploma or degree).

(12) Community Health Officers work with those who do not have health insurance or access to traditional medical care and are responsible for their health. Their primary responsibilities include treating minor illnesses, looking after pregnant women, and caring for children. They also provide family planning services, sanitation and hygiene services, screening for communicable diseases, performing health education activities, collecting statistics and providing health care referrals.

(13) Community Health Extension Workers are trained by institutions (such as schools of health technology) to provide care at the community level e.g. primary health centre. They spend forty percent of their time at the facility and sixty percent in the community.

(14) Other health professional or technical staff not elsewhere classified: This can include any type of professional or technical staff who provide patient services and who were not counted in the above qualifications. Examples might be other types of assistants to professionals, or professionals such as social workers, physical therapists, etc.

(15) All other non-technical staff: This refers to any other non-technical staff such as medical records officers and clerks, non-technically qualified health service or department managers, cleaners, guards,

A. STAFF NUMBERS AND PROFESSIONAL QUALIFICATION

Read through the list of staff types one by one and for each qualification ask for the following:

Q1700: Staff listing

Col a: Authorized staff: We are looking for the numbers of authorized staff for each staff qualification. Government facilities often have authorized staffing levels based on the type of facility. These may have been adjusted at the request of the facility, based on need. Other facilities may or may not have authorized staffing levels against which they can hire.

If the facility has authorized staffing plans, complete each column. If not, complete columns C-E.

For all eligible columns, if there are no staff of that qualification, record '000'. Do not leave blanks.

Col b: Positions vacant: For each qualification ask how many of the authorized positions have been vacant for at least 6 months during the past 12 months.

Col c: Total staff: Now we want to know the total staff of the qualification listed who are assigned or regularly work at the facility. This refers to staff who are managed by the facility managers, and may include staff employed by the managing authority, staff directly hired by the facility, or staff employed by another entity but who are seconded to the facility and who are managed by the facility.

In columns d and e, where indicated, separate out those staff who are part-time and those who are casual, contracted or volunteers.

Part-time staff are professionals hired for routine services and members of staff. They are employed persons whose normal hours of work are fewer than those of comparable full-time staff.

Casual staff are non-professionals hired on a time by time or occasional basis or as the need arises. They are paid only for the work done and have no expectation that there will be more work in the future.

Volunteer staff are people who donate their services usually on a part-time basis, not as employees and without contemplation of pay. They are not considered employees of the facility.

Contract staff are usually hired for a specific service and disengaged at the end of the task. They are not part of the managing authority of the staff.

Q1703: Source of funding for casual/contracted staff

For facilities with casual or contracted staff indicate how many are paid from each funding source listed.

Q1704: Staff roster

Complete the staff roster form.

Often medical (and sometimes nursing) staff will rotate between inpatient and outpatient services. If this is the case for this facility, complete the list including providers who this week are assigned to the outpatient service area. For this form you may need to clarify the numbers who are expected to be here this week.

- In the table, list only those health workers who are in contact with patients **through outpatient consultations (including specialty clinics such as HIV/AIDS and TB), or reproductive health (family planning or maternity) services** during the current calendar year (2019). These health workers have the capacity to diagnose and recommend treatment for patients. If they are not actively providing services in 2019 (because they are on extended leave, or because they are about to be transferred and so are not coming to the facility) then they will not be listed.
- Health workers to be listed include all those with qualifications indicating some form of clinical knowledge. This includes medical officers, nurses, midwifes, nurse-midwifes, Community Health Officers (CHOs), Community Health Extension Workers (CHEWs), and Junior Community Health Extension Workers. Pharmacy, laboratory, records clerks, maintenance staff, guards, etc. are not included. Specialists/consultants also are not eligible for this roster as they are often not official staff and are not expected to be on duty in the outpatient area every day.
- If there are more than 50 health workers providing outpatient curative or reproductive health, or delivery patient services, ensure that you systematically list (proportionally) from all services up to 50. In these large facilities get a quick idea of the proportion of staff assigned to each service of interest prior to beginning the list so that you know approximately how many staff from each service should be listed.

For absenteeism:

- Once all the information is filled up for all the health worker staff, proceed to ask if each staff listed is available at the time of the survey. For all those not available ask for the reason why they are absent. Note what the health worker was doing when you arrived or whether they are absent (if you cannot find them after inquiring within the health facility premise, write absent)
- If a health worker on the list is absent, collect the information about them by asking the most senior member of staff.

For provider knowledge interview:

- Health workers that will be interviewed for the provider knowledge are the only ones that regularly perform outpatient consultation (at least weekly) or delivery or PMTCT services.
- Randomly select 3 health workers (ask for assistance from a member of staff to identify them) for the provider knowledge sample. These should include the provider of PMTCT and delivery services.
- Interview the randomly selected providers of curative services. If one is absent, note this and randomly select a replacement.
- Interview the randomly selected PMTCT service provider and the randomly selected delivery service provider. If one is absent, note this and randomly select a replacement.

SECTION 1.8 FINANCE

This section asks some sensitive questions about budget amounts and there may be resistance from the respondent to answer these questions. You must use discretion to try to get responses. First make certain that your respondent is the person who knows actual numbers. You can ask to go to the finance department to speak with the in-charge for finance. Usually this person will need reassurance that the facility in-charge authorizes them to share numbers.

A. FUNDS RECEIVED

Q1800-1806: User fees

Q1800: User fees: User fees refers to any fees that clients pay out-of-pocket for services or goods received.

Q1800a: Ask if the facility has a record for collected user fees. If yes, ask to see the record and check that it is up-to-date (item recorded for today or yesterday or credible explanation for why the most recent date is not the most recent time user fees were collected). The record should be up-to-date within a day for funds received, with receipts allowed for funds received today and not yet entered into the record.

Q1801: Services with user fees: Charging user fees often varies by the service provided, and the item. For example, there may be no fee for some maternity services and child health services, but fees for curative services and some medicines and laboratory tests. For each service listed, if there is a user fee charged for any aspect of the service, circle '1' and ask to see if the fees are posted on the wall or a board where the patient can see them. Posting of fees promotes transparency and accountability within the facility and by facility.

Q1802: Exemption policy: Some facilities have policies to exempt certain categories of clients such as those using a specific service for which there are strategies to encourage utilization (e.g., child immunization, antenatal care, HIV testing) or those who are too poor to provide user fees. The exemption policy must be written and should include guidelines and procedures to support uniform application.

Q1803: Collection of fees: Some facilities have a central site for collection of fees. In this case the patient will usually bring a paper that specifies the service received so that the charge can be assessed. In others, the fee is collected at the service site (e.g., at the pharmacy, at the laboratory, etc.).

Q1804: Safety of money in the facility: Facilities may have different practices depending on whether the facility is open for routine services, or only for emergency services, or for when it is closed. We want to know if the funds are safe during normal working hours (usually when they are being collected). We also want to know if they are safe during times when emergency services are offered (not normal working hours). Some facilities will remove most money at the end of the normal working day, and store it outside the facility, or possibly in a safe with limited access. These same facilities may leave a small amount for emergencies during non-normal working hours and the location where these funds are maintained may be different than where they are kept during normal working hours or where the funds are stored at the end of the day.

Q1805: Written guidelines for user fees: Managing authorities for facilities will often develop specific guidelines on what the facility is authorized to use funds for. This may be specific types of goods, or personnel. There may be a maximum amount the facility can spend for any item, and there may be rules on how expenditure decisions are made, and who can make them, records that should be kept (e.g., signatures of persons authorizing expenditures). These guidelines should be written down.

Q1811: Record for fees received: There should be some register where information on the funds received is documented. Check to see that there is an entry for the most recent fee collected (usually the day of the survey or several days prior to the survey). If there is a central location where patients pay for services, there will be one register. If there are multiple sites where the fees are collected there should be multiple registers.

Q1812: Information recorded for user fees: For user fees, the patient name/ID, the service for which user fees were collected (general and specific), and the specific item charged should be recorded. This allows auditors to check if fees are being assessed correctly.

Q1813: Funds received other than user fees:

This refers to funds received from such sources as donors, LGA, state or federal MOH. Ask to see the record(s) and if there are more, make sure they are all up-to-date. Some funds may be received through direct transfers to a bank account. In this case the most recent bank statement is accepted so long as it is a bank account dedicated to the one source of the funds. If the bank account includes money from multiple sources the facility should show some record that indicates funds received from each source.

B. EXPENDITURES

Accountability and management of funds kept by the facility

Q1814-1816: Record for funds expended: Any time the facility spends money information on the date, amount, and reason for expenditure needs to be recorded. This provides the information needed when auditing for accountability in use of funds. The record should be up-to-date within a day for funds expended, with receipts allowed for expenditures today that have not yet been entered into the record. As for funds received, if expenditures are kept in different books for different sources of funds, these questions should focus on expenditures from user fee funds. If expenditures are direct payments from bank accounts where user fees are deposited, there should still be records indicating the date and reason for each payment. This book should also show the balance of funds remaining.

Q1817: Balance: Ask to physically see any cash on hand and see if this matches the balance in the records. You can use receipts from the day of the survey to balance the records if needed. If no money is available and the register shows a '0' balance, then there is reconciliation.

Q1818: Validate expenditures: There should be some type of signed receipt that validates the expenditure recorded. Even expenditures that are made by direct transfer or checks from bank accounts should have some evidence (e.g., a bill, a voucher for items procured; a receipt for payment received, etc.).

Q1819-1820: Facility expenditures for drugs: If needed, the respondent can check the expenditure records. But the reported response can also be accepted.

Q1821-1824: Bank account(s) for the facility: Ask if the facility has any bank account ((Q1821). Confirm if the facility has more than one bank account(Q1822) and who the signatories are to the main bank account if there is more than one (Q1823). Ask to see the bank statements for each bank account for the past two months (Q1824).

C. BUDGET AND RESOURCES AND ACCOUNTABILITY

Q1825: External audit

An external audit is conducted by persons external to the facility and external to the managing authority. This is usually an accounting firm hired by the facility or the managing authority or a donor. Ask to see a copy of the most recent external audit report and check that the date is for the prior year, and that the audit was performed by an entity external to the facility and managing authority.

Q1821-1833: Funds and Donations

All questions refer to the most recently completed fiscal year unless otherwise indicated.

Q1831: Amount of official budget for the year: This refers to the budget amount the facility has been officially informed that they will receive and that the facility will manage for this fiscal year. If the official allocated budget also includes salaries, try to remove the amount for salaries. For comparability, we want the official budget amounts to include budget for recurrent (running) costs and for capital investments (such as procurement, construction, etc.). If there is an official allocated budget probe to get a response—only accept "don't know" as a last resort. If there is no official allocated budget, circle '00000'.

Q1832: Percent of official budget received to date: If the response is that they don't know, probe for an estimate, and if needed, ask the respondent to refer to records of funds received (e.g., into the bank account or in cash).

Q1841: Sources of cash funding/ money transfers: We are looking for funds that the facility may receive in cash or through money transfers. The funds are those that the facility will be able to physically access and spend. We want to know the information for the most recently completed fiscal year.

Facilities may have multiple sources of funding. Sometimes funding from sources other than the managing authority are provided for specific services and commodities, sometimes they are received from NGOs or local government who want to provide extra support to the facility.

Below are examples of reasons funds may be provided from sources other than the managing authority. These are not all-inclusive examples, so if the respondent has other reasons funds were provided, that is acceptable.

After identifying a source of funding, complete the columns across that line. Clarify how the amount and how the funds were transferred, and whether they were earmarked for specific purposes or not.

Total entitled amount would be what the facility expected to receive versus what it actually received. If there was no expected amount received, record '000' in 'e'.

(01-05) Government: Any funds from government sources. Specify which level of government provided the funds. These may include funds for activities that relate to that government level responsibilities (e.g., environmental health) or reimbursement for services from the facility that are requested by the government. Local government sometimes provides funds to supplement staffing or to support specific activities such as community-based services or environmental safety.

(06, 14, 15) Insurance: This most commonly will be NHIS, but if other insurance programs provide reimbursement. Any insurance reimbursement that is not listed should be recorded under "other" item '15'.

(07) User fees: These are funds that clients provide for services received. User fees may, however, be sub-classified as revolving funds.

(08-09) Revolving funds: Revolving funds imply that funds received for a service/commodity only can be used to maintain that service/commodity. Costs are usually calculated so that this service/commodity will not have stock outs.

Drug revolving fund: If the user fees support a drug revolving fund (the money collected is then used to procure drugs only) then this should be recorded here and not under (09).

Other revolving fund: If user fees for specific items are only to be used to keep that service/commodity functional, this should be listed here and not under (09).

10-13: Other donors: These may be for any commodity, staff, specific programs, etc. These may include charity donations.

Q1841D-H: Ask for more details about the funds received by the facility

Q1851: Sources of non-money donations: This refers to anything that does not include providing the facility access to funds.

For each identified donation, complete the columns along the line. If there are more than one source of the donation, record each different source in column c-e using the listed codes. We want to know the information for the most recently completed fiscal year.

Drugs/commodities: Often donors will provide commodities such as specific types of drugs for their programs of interest

Other non-drug consumable commodities or equipment.

Utilities: They may directly pay for or provide utilities

Vehicles and transport: They may donate or loan vehicles or may fuel vehicles.

Staff: They may directly provide staff (either full-time or part time).

Copies of documents for required reporting: Sometimes donors will provide copies of registers and forms when the managing authority is unable to maintain the supply, or to supplement official documents to capture donor-specific information.

Information technology: We also specifically want to know about donations related to information technology and computers.

Other general office needs: This may include routine office supplies (paper, folders, pens) or printing of non-reporting documents. Any donated furnishings should be recorded in (18)

Advertising/publicity/Awareness: Payment for activities related to facility education and advocacy—such as MNCH weeks.

Furnishings and repairs: There are subcategories for these items. Try to fit items into the most appropriate sub-category:

Any furnishings and fittings for the facility: This tables, chairs, desks, file cabinets, cabinets for storing equipment and supplies, etc.

Appliances and non-medical equipment: This could include radios, generators, water pumps, etc.

Construction and maintenance: This may include replacing windows, doors, repairing walls, or major construction.

Q1861: Expenditure categories: Read each item and ask if the facility actually paid for this from funds received/money transferred. We want to know the information for the most recently completed fiscal year.

Q1871: Documents for accountability of funds and donations: Ask to see each type of document and indicate if the document is an official FMOH document, one provided by a donor, or another type of document (e.g., developed by the LGA or facility).

1872-1874: Financial reports

If the facility never submits financial reports externally, circle '3' for "no" and then indicate why a report is never submitted externally.

MODULE 2: FACILITY INFRASTRUCTURE AND MAINTENENCE

SECTION 2.1 FACILITY INFRASTRUCTURE

A. COMMUNICATIONS

Q2101: Means for external communication

Eligible means for external communication include the following:

a) Landline phone: A telephone that is inside the facility must be able to call outside the facility to be considered as having external communication.

b) Cellphone supported by facility: A cell phone supported by the facility requires that the facility either provide the phone and a sim card or that there be some mechanism for ensuring that personal cell phone users are reimbursed for time used for official calls. Make sure that on the day of the assessment there is a functioning cell phone- functioning requires that there be sufficient time on the phone card that calls can be made.

c) Short-wave radio is a receiver that can receive radio transmission on frequencies between 3 and 30 MHz The main characteristic of these frequencies is their ability to "propagate" for long distances, making possible world-wide communications. The short-wave radio must be located within the facility.

Q2102-2104: Computer and access to internet

Computers have become quite common in many health facilities. Please ask if there is a functioning computer within the facility. The computer must be functional on the day of the survey.

Ask if there is access to internet/email within the facility today. This may be via wireless, broad band, phone-up, or a mobile modem connection. For mobile modem connection this should not be a private modem, but should be provided by the facility.

B. POWER SUPPLY

Q2111-2216: Electricity

Q2111: Electricity from any source: This can include generator, solar, grid, or even battery generated.

Q2112: Main source of electricity: There may be multiple sources of electricity. Indicate the main source for the majority of the facility during normal working hours.

Central supply refers to electricity from a grid, a wired form of electricity from an external source usually managed by local authorities or a private company.

A generator requires fuel or battery to function.

A solar source converts sun light to energy for electricity using solar panels. The connections between the solar panels may be wired into the building, or may be connected to single pieces of equipment (e.g., vaccine refrigerators).

Battery may be connected to light bulbs or to specific equipment. This refers to a large battery (such as a car battery) that can be turned on for the evening and at least provides electricity for light bulbs or specific equipment.

Q2113: Secondary or back-up sources of electricity: This refers to a source of power or electricity that can be used when the primary source is not available. Most often this is a generator.

Q2114: Electricity available during the past 7 days: Ask the respondent if electricity has been available during the past 7 days during all times the facility was open or interrupted for less than two hours at a time. If the respondent is uncertain (i.e., the respondent was not present the past week) ask if there is someone else who can be asked to verify.

Q. 2115: Filter for generator and solar system for electricity

Check Q. 2112 response 2 or 3, or Q. 2113 response 2 or 3 to see if the facility uses a generator or solar system as the primary or backup system for electricity.

Functional equipment for generator or solar system: Ask if the generator is functional today. If yes, continue to the next question. If no or don't know, skip to question 2121

Q2116: Source of power for the generator or solar system:

Ask if fuel or a charged battery (as applicable) is available today.

C. WATER

Q2121: Water source

This question attempts to identify the main source of water that is used in the facility, and during analysis will be used to determine if this is a safe water source. Improved water source uses uniform definitions for safe water sources promoted by UNICEF. The water sources likely to be of suitable quality, or "improved", are: a piped water supply into the facility; piped water onto facility grounds; a public tap/standpipe; a tube well/borehole; a protected dug well; a protected spring; and rainwater collection. Water sources that are "unimproved" are: an unprotected dug well; an unprotected spring; a cart with a small tank/drum; a water tanker truck; and surface water. If water is kept in tanks, Veronica tap buckets, or basins, you must ask where the water comes from. If water is obtained from several sources, probe to determine the source from which the facility obtains the majority of its water. If the source varies by season, record the main source used at the time of interview. If no water is available on the day of the visit, ask about the most common source during the past month. Marking no source of water means that there is never water in the facility.

Piped into facility: Pipe is connected with facility plumbing to one or more taps.

Piped onto facility grounds: Pipe is connected to a tap outside the facility in the yard or plot (sometimes called a yard connection).

Public tap or standpipe: Public water point from which facility may collect water. A standpipe may also be known as a public fountain or public tap. Public standpipes can have one or more taps and are typically made of brickwork, masonry, or concrete.

Tube well or borehole: A deep hole that has been driven, bored, or drilled with the purpose of reaching ground water supplies. Boreholes/tube wells are constructed with casing or pipes, which prevents the small diameter hole from caving in and protects the water source from infiltration by run-off water. Water is delivered from a tube well or borehole through a pump, which may be powered by human, animal, wind, electric, diesel or solar means. Boreholes/tube wells are usually protected by a platform around the well, which leads spilled water away from the borehole and prevents infiltration of run-off water at the well head.

Protected dug well: A dug well that is 1) protected from runoff water through a well lining or casing that is raised above ground level and a platform that diverts spilled water away from the well and 2) covered so that bird droppings and animals cannot fall down the hole. Both conditions must be present for a dug well to be considered as protected.

Unprotected dug well: This is a dug well for which one of the following conditions is true: 1) the well is not protected from runoff water; or 2) the well is not protected from bird droppings and animals. If at least one of these conditions is true, the well is unprotected.

Protected spring: A spring protected from runoff, bird droppings, and animals by a "spring box" which is typically constructed of brick, masonry, or concrete and is built around the spring so that water flows directly out of the box into a pipe without being exposed to outside pollution.

Unprotected spring: A spring that is subject to runoff and/ or bird droppings or animals. Unprotected springs typically do not have a "spring box".

Rainwater collection: Rain that is collected or harvested from surfaces by roof or ground catchments and stored in a container, tank, or cistern.

Bottled water: Water that is bottled and sold in bottles.

Cart with small tank: Water is obtained from a provider who transports water into a community using a cart and then sells the water. The means for pulling the cart may be motorized or non-motorized.

Tanker truck: Water is obtained from a provider who uses a truck to transport water into the community. Typically, the provider sells the water.

Surface water: Water located above ground and includes rivers, dams, lakes, ponds, streams, canals, and irrigation channels.

Q2121a: Distance to main water outlet

This question refers to the outlet for the water source. For water sources that are not located directly in the facility, estimate the walking to and from as well as normal waiting time to collect the water.

Availability of water over time

Q2121b: Water availability the past 7 days: Ask the respondent if water has been available during the past 7 days during all times the facility was open or interrupted for less than two hours at a time. If the respondent is uncertain (i.e., the respondent was not present the past week) ask if there is someone else who can be asked to verify.

Q2121c: Seasonal differences in water availability: Sometimes there can be major differences in the availability of water during the dry and wet seasons. Probe to identify the situation for this facility comparing availability during the current season, to the season when availability is different from that experienced today.

Q2122: Availability of water today from the main source

Sometimes there is a main and a back-up source of water, but the water safety for these two sources may differ. We want to know if water from the main source is available today.

D. HEALTH CARE WASTE MANAGEMENT

The following section refers to the final disposal of sharp and other contaminated waste by the facility. If the waste is removed off-site, the final disposal within the facility refers to conditions in the facility for storing waste until it is removed.

Q2131: Disposal of sharps waste

This question refers to how sharps waste such as needles and filled sharp boxes are ***finally*** disposed of. If there is never sharps waste, skip to question 4142. There are four potential categories of disposal methods:

Burn incinerator: This is an enclosed structure (brick or other) where waste can be burned at a higher temperature than is achieved in a site open to air such as a pit. Two potential types of burn incinerators: the 2-chamber industrial and the 1-chamber drum or brick.

Open burning: Open burning, the next most effective means of destroying contaminated waste, could take place on flat ground with no protection whatsoever, or this could take place in a pit or protected ground, with some degree of security so that people or animals cannot easily access the site.

Dump without burning: This is simply dumping the waste at a location within facility premises. This could take place on flat ground with no protection, or in a covered pit or pit latrine. This could also take place in an open pit or protected ground or pit.

Remove offsite: Means the waste is kept somewhere prior to removal; this could be stored in covered container, stored in another protected environment, or stored unprotected before it is moved to a place outside the facility for final disposal. Responses '1' through '12' refer to how the sharps are stored in the facility prior to removal offsite.

Q2132: Observation of the sharps waste disposal site

Ask to see the place used by the facility for final disposal of sharps waste or where the sharps containers are stored until removed offsite. Look around and note if there are any unprotected sharps that animals or children would be able to reach. If the sharps are burned in a metal container with a lid, but the lid is not locked, look inside to determine if any remaining sharps are there. A locked container would be considered protected, an unlocked one that can be accessed by anyone is not protected.

Disposal of sharps is considered adequate if sharps waste is collected and disposed of by an external party/removed offsite, disposed of with a burn incinerator, disposed of with open burning in a pit or protected ground, or dumped without burning if in protected ground (animals and people do not have ready access) and the disposal or storage site has no visible sharps in a non-protected setting.

Q2133-2134: Disposal of medical waste

This question refers to how medical wastes other than sharps such as used bandages are disposed of. If there is no medical waste disposal, skip to question 2135. Refer to Q.2131 and Q.2132 for definitions and instructions for collecting information.

Q2135 Filter Question

Check questions Q.2131 and Q.2133. If **"2" or "3"** are circled for either question, continue. Otherwise skip to question 2318

Q2131-2134: Incinerator functional today

A function incinerator refers to the structure as well as availability of fuel. It is not uncommon to find an outside incinerator adapted to function as an open burning site, due to lack of sufficient fuel to operate as an incinerator.

Q2138: Guidelines on health care waste management

Healthcare waste (HCW) is a by-product of healthcare that includes sharps, non-sharps, blood, body parts, chemicals, pharmaceuticals, medical devices and radioactive materials. Management practices should include plans for waste minimization, segregation and containerization, intermediate storage, internal transport, centralized storage, external transport and treatment and final disposal of health care waste. If guidelines are available, ask to see the guidelines.

Q2139: Staff trained in health care waste management

Throughout the questionnaire there are questions related to presence of staff trained in the last two years. This training is referring to an ***in-service*** training meaning education for employees to help them develop their skills in a specific discipline or occupation. In-service training takes place ***after*** an individual begins work responsibilities.

Ask if any staff member has received training in health care waste management in the last TWO years. If the respondent is not certain ask if there is someone who can be called who might be more familiar with the training.

E. CENTRAL PROCESSING OF EQUIPMENT FOR REUSE

Q2141: Main equipment processing site

A facility may have one central location for processing equipment for reuse or it may have several different sites, with each site processing equipment for a different service area. The organization of equipment processing depends on facility specific decisions. Different sites may use different methods for processing equipment. For example, small dry heat sterilizers may be in some service sites to facilitate availability of sterile equipment for which there is high demand, but an autoclave may be used in other sites. Probe to know where the main site is. If the respondent does not think there is a "main site" ask to see the most sophisticated or highest-level processing that is available. For facilities with surgery services, this will usually be where surgical equipment is processed. For those without surgery it may be where delivery equipment is processed. Circle '1' if the main site is not affiliated with any particular service or unit (e.g., it is its own service). Circle '2' if the main site is affiliated with a particular service/unit (e.g., surgery). Circle '3' ONLY if there is no site in the facility, meaning either that equipment is never processed for reuse, or it is sent outside to be processed.

Q2142: Disinfecting or sterilizing equipment for reuse

There are two different processes for preparing equipment for reuse. One, referred to as "high level disinfecting" (HLD) uses chemicals, boiling or steam. This method kills most pathogens, but does not kill spores, such as those that cause tetanus. HLD, however, is sufficient for most non-surgical equipment.

Sterilization processes equipment at higher temperatures (either using dry heat or wet, pressurized heat) and does kill spores. This is why delivery and surgical services require sterilization.

Ask about each item and to see the item. If the item is present ask whether it is in working order, if applicable.

Autoclave: the autoclave uses pressurized heat—similar to a pressure cooker. To be functional there should be a functional pressure gauge. The autoclave may be electric, or may have an external gas or wood burning heat sources.

Dry heat sterilizer: Often autoclaves and dry heat sterilizers look similar, but the dry heat sterilizer will function at a higher temperature and will not have a pressure gauge.

Boiling or steaming: Boiling refers to the item being placed directly in a pot of water. Steaming refers to the item being on a tray that sits above boiling water so that the steam, but not the water, hits the items. Boiling and steaming equipment can be electric or may have an external gas or wood burning heat sources.

External heat source: This refers to the heat source for non-electric equipment. This may be a gas or wood stove, a gas burner, or any other source that can boil water. The fuel must be available or the electricity functional for the fuel source to be considered available today.

Automatic timer: All methods for processing equipment require that the process be carried out for a specific period of time. There should be a timer that can be set to notify when the correct time has passed. This may be a part of the equipment or may be external. Simply watching a clock or watch does not serve as having an automatic timer, since people will often forget when the process started, or miscalculate the minutes.

Temperature-steam-time (TST) indicator: This may be tape, paper tags, or other devices that are placed on the cloth that is used to package equipment being autoclaved. The tape/tag changes colour/shows a symbol when the correct temperature and time has been achieved for processing the equipment. This reassures persons using the packaged equipment that it has been properly processed.

Chemicals for HLD: Examples are ortho-phthaldehyde, glutaraldehyde, peracetic acid, chlorine dioxide, hydrogen peroxide, and formaldehyde, as well as chlorine. Betadine is not used as it may pit the equipment.

Q2143: Guidelines on final processing or sterilization of equipment

Guidelines on final processing or sterilization of equipment should present evidence-based recommendations on the preferred methods for cleaning, disinfection, and sterilization of patient-care medical devices. If guidelines are available, ask to see the guidelines.

SECTION 2.2 EMERGENCY TRANSPORTATION

Q2201: Facility emergency transportation systems and practices

Ask about each possible system or practice for carrying out emergency transportation of patients.

An ambulance is a dedicated vehicle for patient transportation. The ambulance may have special equipment inside, or may simply be a vehicle for transporting patients. Some facilities may use a motorcycle with an attached patient transport wagon for emergency transportation.

Q2202: Functional emergency transportation

1) **Ambulance owned by facility:** The vehicle is based at the facility.
2) **Other type of official vehicle:** This may be any type of official vehicle that is used for multiple purposes such as staff transportation, picking up supplies, but also can be used if needed for emergency transportation.

Q2203: Fuel and driver for emergency transport vehicle:

Ask if fuel is available today and accept the reported response. Ask if there is a driver available for the emergency transport vehicle. The driver may be stationed onsite or officially on call.

Q2204: Access to vehicle based offsite but available on call for emergency transportation

1) **Ambulance available on-call:** This refers to an ambulance that is based elsewhere—such as

at another facility or a LGA office, but that can be called for emergency transportation.

2) **Other official vehicle available on-call:** This official vehicle may be based elsewhere, and is used for multiple purposes, but can be called for emergency transportation. Often this would be the official vehicle of government officials or managers.
3) **Private vehicles (not ambulance) available on call**: This would refer to where there may be an agreement between the facility and private individuals to use individual's private vehicle. Sometimes NGOs lend vehicles for emergency transportation.
4) **Self arranged by patient:** This means that the facility does not provide any assistance (either by vehicle or funds) for emergency transportation.

MODULE 3: COMMUNITY AND OUTPATIENT SERVICES

SECTION 3.1 COMMUNITY SERVICES

A. LINKAGES WITH COMMUNITY VOLUNTEERS

Q3001-3002: Formal system for linking with volunteers

Community volunteers are not staff of the facility. Formal systems for linking refers to some sort of formal agreement that volunteers will refer patients to the facility or the facility can refer patients to the volunteers to receive services in the community. These are often based on relationships between NGO/FBOs or CBSs who manage the volunteers and the facility whereby they coordinate such things as referrals, training, resupplies, reporting on activities. In some cases, the facility may actually be responsible for managing community volunteers. In most cases these volunteers are referred to as Community Health Influencers and Promoters Service (CHIPS)

B. FACILITY ROUTINE OUTREACH ACTIVITIES

Q3010-3014: Routine extension or outreach activities

Routine means that the activities are carried out on a regular schedule at specific communities or sites. The frequency for activities may vary. If different activities are carried out with differing frequency, calculate on average, how many days each month facility staff routinely (on a schedule) go to communities to provide different services. MNCH week is not counted as routine extension or outreach since it is a special annual activity.

Q3012: Outreach activities and frequency: Read each activity and if it is provided through outreach ask how many days the particular service was offered as outreach during the past 6 months. You can provide an average if schedules are not readily available. Column (b) refers to the activities for the past full month—use the most recent completed month. Ask to see documentation of the activity for the most recent outreach for that service and record the number of patients who received the service. A schedule for the visit is not considered documentation that the visit actually occurred. You are looking for records and tally sheets where numbers of patients actually receiving the service are recorded. You may need to probe to harmonize responses. For example, if the facility says outreach immunization was provided weekly (4 times) during the prior full month, but the most recent record is for the 1st week of the month, you need to probe for why there is not a record for the last week of the month. Remember—this is a fact finding and not an opinion interview, so if the respondent changes their response after you probe (for example: "well normally we go 4 times a month, but because of insecurity last month we only went once") , you may change your recorded response in col. (b) from 4 to 1. Sometimes multiple services, such as those provided to pregnant women, may be offered during one outreach session.

Provision means that the commodity was physically distributed.

C. MNCH WEEKS Q3031-3032

Maternal, newborn, and child health weeks (MNCH) refer to the annually planned activity whereby facility staff go to communities to provide specific services. This is both to increase population coverage for preventive services and also to encourage the population to come to the facility in the future for these services. If the service is simply to encourage the community to go to the facility (such as for family planning) and the assessment and distribution of Family Planning commodities was not actually carried out, this service was not provided during MNCH week, and would be recorded in item '11' "Health Education".

SECTION 3.1: FACILITY-BASED OUTPATIENT SERVICES

Q3101 Common definitions

Availability of items

There are many sections where we ask to see specific pieces of equipment or documents. You must actually see the item for it to be recorded as "observed". If the item is reported to be available, but you cannot see it because the item is wrapped in a sterile pack, or is locked in a cabinet and the key is not available, or the respondent cannot find it, but assures you it is available, you may record '2' "reported, not seen".

If the item is located in another site, and that site is a reasonable one for the item to still be used for this service (e.g., tetanus toxoid may be in the immunization service area but easily available for ANC services), go to observe the item so that you can mark '1' "observed"—since this is a stronger answer, rather than "2" "reported, not seen". Some items, such as medicines, we specify that they must be in this service site. Later we have a specific section where we look for the same items in the pharmacy. So in these cases, the response relates to *items in this service area.* Most equipment cannot reasonably be shared between services, unless the services are offered on different days, or they are offered by the same service provider.

Functionality of equipment

Unless specifically instructed, you may accept the response for whether the item is functional or not. Items that require batteries must have functional batteries to be marked as functional.

Stock out

For the purposes of this survey we do not define a minimum amount of any commodity necessary for stock. We define stock out as *none of the commodity available in the facility.*

A. OUTPATIENT SERVICE INFRASTRUCTURE AND HOURS

Q3101-3102: Outpatient service area infrastructure

These questions are identifying if there are different service conditions in the outpatient area from those assessed in the previous section. This may be the case in large facilities where there are many different buildings and possibly separate buildings and service areas for outpatients and inpatients. Services that are provided across multiple different buildings that are not connected may operate under very different infrastructure conditions (e.g., consistency of electricity or water supply).

Q3102-3103 Availability of electricity today and in the last 7 days

Q3104-3105: Processing outpatient equipment for reuse

We are assessing the process if equipment from the outpatient service area is not sent to the main service area. In larger facilities you may find that every service that routinely uses examination equipment requiring high level disinfection between patients (e.g. family planning, ANC, minor

surgical/wound repair) has its own way of processing equipment to ensure timely processing. In this case, what we are interested in is the highest process used by any section of the outpatient services.

Q3106: Privacy

This refers to a location where discussions can take place without other patients or staff overhearing, or seeing the patient. It may be a private room, or a multi-purpose room such as a large room, where other clients are not nearby and cannot hear a quiet conversation (auditory privacy) and where there is a screen or partition to keep others from seeing the patient (visual privacy).

Q3107-3108: Patient toilet and number of toilets

Observe the outpatient client toilet/latrine(s) and if functional, mark the type that best describes the toilet. If it is stopped up, or there are signs of overflow or signs that it is stopped up, then it does not function. If the latrine is locked and the key is not available, or the latrine is only for staff, the answer is "NO FUNCTIONING TOILET".

A **pit latrine** may have a slab to stand on and to direct the waste (easy to clean), or may have bricks or wood to stand on. A pit latrine usually directly send waste to the pit below.

A **flush toilet** (requiring water to push waste past a barrier that blocks odor from the pit below and also reduces insect infestation) may be connected to a pit or to a septic tank. The water may be delivered by hand, or may be connected to the toilet and released with a handle.

The **ventilated improved pit latrine, or** VIP, is a pit toilet with a vent pipe fitted to the pit, and a screen (fly screen) at the top outlet of the pipe. VIP latrines are an improvement to overcome the disadvantages of simple pit latrines, i.e. fly and mosquito nuisance and unpleasant odors. The smell is carried upwards by the chimney effect and flies are prevented from leaving the pit and spreading disease (Wikipedia).

"A **composting toilet** is a dry toilet that uses a predominantly aerobic processing system that treats excreta, typically with no water or small volumes of flush water, via composting or managed aerobic decomposition. Composting toilets may be used as an alternative to flush toilets in situations where there is no suitable water supply or waste treatment facility available or to capture nutrients in human excreta as humanure. The human excrement is normally mixed with sawdust, coconut coir, peat moss to support aerobic processing, absorb liquids, and to reduce the odor. The decomposition process is generally faster than the anaerobic decomposition used in wet sewage treatment systems such as septic tanks". (from Wikipedia).

A **hanging toilet** is one that is elevated and where the waste goes down onto the ground or into water without sanitary disposal.

Q3107a-Q3107b:

Record the total number of patient toilets for outpatient services, and the total number that are functional today.

Q3108-Q3108a

Record the total number of days per week that a patient can receive outpatient curative care on a routine or an emergency basis. Record the same for the hours per day these services are offered.

Q3109-Q3111

If 24 hour services are available ask about the staffing strategy for different services. We want to clarify if it is only delivery services or emergency services that are available 24 hours, or if supportive services (laboratory and pharmacy) are also available.

At minimum the laboratory diagnostic services should include hemoglobin or hematocrit, HIV, and malaria testing.

Access to drugs means that the basic drugs that might be needed for the 24 hour services are available. This may be from a 24-hour dispensing pharmacy, or may be from a night-duty stock cabinet.

B. BASIC EQUIPMENT

Q3121: Basic equipment

This equipment may be at any site in the outpatient service area. For each piece of equipment, ask to see it, and then if applicable ask if it is functional today.

(01) Adult weighing scale: This may be a standing balance scale or similar to a bathroom scale that you stand on. It can be digital or not.

(02) Child weighing scale 250 gm gradation: If the facility has a digital or balance scale upon which the mother stands and holds the child, this counts as a child scale. A child scale may also be a balance scale or a hanging scale that is calibrated with at least 250-gram (¼ kilogram) gradation. ***A normal/regular dial bathroom scale does not count for the child scale.***

(03) Infant scale 100 gm gradation: If the facility has a digital or balance scale upon which the provider or mother stands and holds the infant, this counts as an infant scale. An infant scale may also be a balance scale or a hanging scale that is calibrated in 100-gram intervals. The normal/regular **child scale** with ¼ kilogram gradation is not sufficiently sensitive for an **infant scale** but is acceptable for the child scale. ***A normal/regular dial bathroom scale does not count for the infant scale.***

(04) Height board/stadiometer: This is either a board for standing that has increments of measure and a connected headpiece for marking the height as measured from the top of a child's head (to minimize error by using a self-held item that may be angled wrongly).

(04a) A tape measurer or wall mounted chart can be used for measuring height but there is more risk of error since a) a non-connected item linking the top of the head to the measure on the wall can easily be angled wrongly, and b) the chart/tape may not be placed correctly on the wall so that the measures from the floor to the tape are accurate.

(05) **Thermometer:** Check if thermometer is present, and functioning.

(06) **Stethoscope:** The stethoscope is used to listen to the lungs, heart, and abdomen. Often staff purchase their own stethoscopes. For our purposes, the stethoscope must belong to the facility.

(07) **Blood pressure apparatus:** This is a cuff that tightens around the upper arm, and that has a gauge to measure blood pressure. It is called a sphygmomanometer. Blood pressure apparatus is a devices designed for the indirect (noninvasive) measurement of arterial blood pressure with an inflatable cuff. The manual apparatus uses a mercury scale and requires a stethoscope that is used to hear the pulse through the arm. The sounds inform the provider when to read the pressure that is indicated on the scale. The digital apparatus displays the blood pressure on a screen. Ensure that the apparatus is functional.

(08) **Light source** that can be pointed for client examination (flashlight acceptable): Any light that can be pointed to visualize a throat, or wound, or perineum for deliveries counts. The light must be functional.

(08) Examination couch/bed: Any type of bed or platform that can be used for examination—that is the patient can lie down and be thoroughly examined in a stretched out position—is accepted.

(10-11) Intravenous and infusion sets: These are the plastic sets that hook into the intravenous solution and then connect (through an intra catheter or butterfly needle) directly into the patients

veins. Check that both parts (any size needles or intracaths) are present. Then observe either Normal Saline or Ringers Lactate (both of which can be used to replace lost fluids, help to raise a critically low blood pressure, or as an emergency treatment for severe hemorrhage that is causing shock or low blood pressure.

Q3122-3123 Availability of oxygen:

Oxygen may be provided in a variety of ways. It may be piped through the walls (central system), it may be in tanks (either kept in the service area or in a main site where it can be requested if needed) or it may be provided through an oxygen concentrator—a machine that pulls oxygen from the air and concentrates it for delivery to a patient. Check to see if any of these systems are present, or if the unit can call for oxygen.

Q3124_01A Flowmeter: This is a meter that connects to a container with liquid to humidify the air going through the meter. The flowmeter allows health workers to regulate the amount of oxygen the patient is receiving.

Q3124_02A Oxygen delivery apparatus: This refers to the tubing and connectors required to move oxygen from the source to the patient. The most common delivery apparatus are plastic tubes that connect to the flowmeter and then to nasal prongs or a plastic mask that fit on the face of the patient.

Q3125 Availability: Accept the reported response about whether the unit has been out of oxygen at any time during the past 3 months or not.

C. INFECTION CONTROL SUPPLIES

Q3131 Items for infection prevention

The infection control supplies listed must be in the service area or immediately adjacent such that you could reasonably expect the service provider to use these with or in between seeing patients. It can reasonably be assumed that a health provider does not walk more than a room away between client consultations to wash hands or to dispose of sharps or medical waste, so if the item is more than a room away, it is not counted in the service area unless the respondent can truly convince you that this is in a good location and routinely used. Syringes and masks can be further away (although not locked in a pharmacy) since they are not needed in between each patient.

Often there is one “procedure room” in an outpatient service area where wound care and injections are provided. This is acceptable for the location for items if the respondent can explain how this meets the needs for all services in the OPD.

(01) Clean running water: This water must be from a clean source and must be single use. Running water for single use can be achieved by piping water, putting it in a bucket with a tap, or using a bucket with a pitcher. The main point is that the water is not reused. If there is no water in a container and the explanation is that water is normally brought when services are being provided, the correct response should be “REPORTED, NOT SEEN”. If at the time of your visit services are being provided but there is no water, the correct response is “NOT AVAILABLE”, even if the respondent indicates that water is normally available.

(02) Hand-washing soap (either bar or liquid is accepted)

(03) Alcohol based hand rub (sanitizer)

(03a) Disposable towel for drying hands: These are usually paper (serviettes or tissue).

(04) Disposable latex gloves: make sure that the gloves are latex or a latex equivalent material. Very thin gloves such as those used by food preparers that tear easily are not accepted. If the staff tell you they often wear 2 or 3 pairs when doing a procedure, they are likely not latex gloves.

(05) Medical waste receptacle: The waste bin for medical waste (bandages and other non sharp items that may be contaminated with blood or other body fluids) must be marked in some manner, must have a lid and a plastic liner.

(06) Sharps container: The secure container in which needles or sharp items can be safely disposed has different names and shapes. For the SPA, this is referred to as a "Sharps Container". To qualify as a sharps container, it must be made of a substance that a needle does not readily penetrate (e.g. hard cardboard) with a sealed lid that has only a small opening to allow the sharp object to be placed inside. The container is used for placing sharp items, such as blades and needles. None of the following, which are often found in health facilities, qualify as a sharps container: an opened topped box, a plastic lined trash bin where the plastic bag is later removed, an open basin or bowl where used needles are placed for later disposal.

(07) Environmental disinfectants: such as a chlorine based solution and alcohol are generally ready-to-use, hard surface disinfectants effective against various microorganisms on inanimate environmental surfaces such as toilet seats, wash basins, metal beds and springs, trash receptacles, carts, and exam tables.

(08-09) Syringes: Sterile needles and syringes are packaged and may be separate needles and syringes, or combined. An autodestruct syringe is one that will only function one time.

(10) Surgical masks for patients: These are usually paper, and are for patients who have cough or suspect severe respiratory illness, including TB.

(11) Tissue: These would be in a box, for patients to use for runny nose or productive cough.

Q3132-3135 Guidelines and job aids:

Throughout the questionnaire there are questions related to the availability of guidelines and job aids. National Guidelines are usually comprehensive. They are frequently presented in a bound booklet.

Job aids are tools that help health care workers to follow standards and guidelines. Job aids may be posters that promote a particular aspect of care that is included in guidelines, they may be checklists that are used, or any other visual promotion for a part of guidelines. A poster for hand washing, or decontaminating equipment, or some other aspect of standard precautions is considered a job-aid. A poster advocating covering the mouth when coughing is a job aid. A poster that describes symptoms of an illness that is transmitted person-to person is a job aid for infection prevention.

They may be presented in booklets, pamphlets, poster, or charts. Sometimes guidelines and job aids may be the same item if the survey asks for a guideline for a specific treatment or procedure. For example, National Delivery Guidelines would usually cover many different procedures and steps in the care process during labour, delivery, and postpartum. A poster for how to manage postpartum haemorrhage may be a guideline for managing postpartum haemorrhage or may be a job-aid for Delivery services. When deciding if an item is a guideline or a job aid you must assess if the item fully covers the topic being asked about (a guideline), or only covers a part of it (a job aid).

Patient health education posters and pamphlets are not considered job aids unless they are expected to be used by health workers when providing health education or counselling about options for a treatment or procedure. A simple poster promoting safe sex or promoting birth control, is not a job aid since the patient usually is the one who interprets the information themselves. We will provide examples of these different informational materials where relevant.

All of the below focus on infection prevention:

Q3132 Standard precautions: Standard precaution guidelines refer to routine measures to reduce the risk of transmission of blood-borne and other pathogens from both recognized and unrecognized sources. They are the basic level of infection control precautions which are to be used, as a minimum, in the care of all patients. Hand hygiene is a major component of standard precautions and one of the most effective methods to prevent transmission of pathogens associated with health care. In addition to hand hygiene, the use of personal protective equipment should be guided by risk assessment and the extent of contact anticipated with blood and body fluids, or pathogens. Ask to see guidelines and ensure that they describe, at minimum standard precautions for disposing of sharps (needles, blades), medical waste, and hand washing requirements.

Q3133 Job aids: Job aids may be posters that promote a particular aspect of care that is included in guidelines, they may be checklists that are used, or any other visual promotion for a part of guidelines. A poster for hand washing, or decontaminating equipment, or some other aspect of standard precautions is considered a job-aid. A poster advocating covering the mouth when coughing is a job aid. A poster that describes symptoms of an illness that is transmitted person-to person is a job aid for infection prevention.

Q3134-3135 Other guidelines for transmission-based precautions: These might relate to Avian flu, or airborne illnesses, or hepatitis, or any other complete set of guidelines. The National TB Guidelines **(Q3134)** includes prevention of airborne transmission of TB.

SECTION 3.2 REPRODUCTIVE, MATERNAL, AND NEWBORN HEALTH

Each time you change to a different respondent, you must explain your objective and that you have the permission of the in-charge to collect this information. If there is any difficulty in gaining cooperation, contact the team leader. The TL will discuss this with the in-charge.

A. FAMILY PLANNING

Q3201 Eligibility for Family Planning Services:

The answer is "YES" if any counseling for, or other methods of family planning services are provided from the facility, even if there is no special clinic for family planning. If there are different areas where family planning services are offered (e.g. maternity, consultation area, family planning clinic) go to the area where the largest numbers of family planning clients are seen.

Q3202 Methods provided, prescribed or referred

Sometimes facilities physically provide some methods, but prescribe other methods for purchase outside, or refer patients elsewhere for some methods (e.g., implant, sterilization) if the facility cannot provide the method. If the method is provided in this facility but only on special days (e.g., sometimes an NGO comes only periodically, to provide IUD or implant), and patients must return later for the service, it is still considered "provided".

(01-02) **Oral pills:** Combined oral pills include both estrogenic and progestin, progestin-only pills.

(03-04) Injections: injectable progestin-only (2 or 3 monthly). Examples of the 3-monthly progestin-only injectable contraceptives are **DMPA (depot-medroxyprogesterone acetate), *Depo-Provera, and Depot.*** An example of the 2-monthly is NET-EN, also known as *Noristerat.* The combined injection is usually provided monthly and includes estrogen and progestin. An example of the combined progestin/estrogen injectable preparation is ***Norigynon***. Other names are ***Cyclofem/Cycloprovera.***

(05-06) Condoms: There are male and female condoms

(07) Intrauterine device: This is a device that is implanted into the uterus to prevent implantation of the sperm. Depending on the type of IUD it can remain without replacement for 3-5 years. The IUD can easily be removed if pregnancy is desired. This is a long acting contraceptive method.

(08) Implants: Implants are inserted under the skin, usually in the upper arm. The implants are several small vials with the contraceptive inside, and that are released over time. Most implants are good for 5 years. This is a long acting contraceptive method.

(09) Cycle beads: Cycle beads are a small round set of beads that a woman uses to help her count the days of her menstrual cycle to identify when she is least likely to be fertile. This is an aid for what is considered "natural" family planning.

(10) The emergency contraceptive pill: This is a regime of pills that can be taken after method failure or unprotected sex to prevent pregnancy. Common names are Levonorgestrel, Postinol 2 and Prevent. Some providers also use high doses of family planning pills (e.g. 50mg estrogen), or combined daily pills to achieve the dose required for emergency contraception. If the provider indicates s/he uses combined or progestin-only pills for the emergency contraceptive, and she can explain how to use them (4 tablets within 72 hours of unprotected sex and another 4 tablets 12 hours after the first 4, this is accepted as having "EMERGENCY CONTRACEPTIVE"). This is not considered a family planning method, but rather a back-up plan.

(11-12) Surgical methods: i.e., male sterilization (vasectomy) and female sterilization (tubal ligation).: These are minor surgical procedures usually conducted on an outpatient basis. These are usually considered non-reversible.

Q3203 Adolescent family planning:

Confirm if the methods are offered to adolescents and if guardian permission is required or not.

Q3204 Guidelines and job aids

Refer to Q3132 for instructions on guidelines and job aids.

Q3205-3206 Availability of contraceptive methods in stock

The main site for storing contraceptives may be in the main pharmacy or may be in another site such as the family planning service area. Ask to go to the main site for storage of contraceptive commodities and ask to see each item. Verify that there is at least one of the commodity with a valid date of expiration (if the date of expiration is the month of the survey this is considered valid). Ask if there has been a stock out—that is any day where there was none of the commodity in the facility—during the past 3 months. You may accept the response of the respondent. If they are uncertain, however, go to the stock records to verify whether at any time the stock is '0'.

Q3207 Blood pressure apparatus

Make sure that the apparatus is functional and located so that it reasonably can be used for family planning clients.

B. ANTENATAL CARE SERVICES (ANC)

Q3221 Antenatal care services:

This refers to services offered at the facility or through outreach, or both.

Q3222 Routine ANC services

(01-02) Iron and folic acid: These are tablets to prevent/treat anemia and may be provided separately or as a combined iron/folic acid tablet.

(03) Intermittent preventive treatment in pregnancy (IPTp): WHO recommends IPTp with sulfadoxine-pyrimethamine (IPTp-SP) in all areas with moderate to high malaria transmission in

Africa. As of October 2012, WHO recommends that this preventive treatment be given to all pregnant women at each scheduled antenatal care visit except during the first trimester. Three doses is currently considered adequate.

(04) Tetanus toxoid (TT) immunization: WHO recommendations are for two doses of TT/Td one month apart before delivery, if the woman has not previously had TT immunization. If the woman has had 1–4 doses of tetanus toxoid in the past, give one dose of TT/Td before delivery.

(05) Monitoring for hypertensive disorder of pregnancy (pre-eclampsia): This involves monitoring the blood pressure and urine protein status at each ANC visit. Accept the response even if both aspects are not actually provided in the facility.

(06) Corticosteroid use for risk of pre-term birth: This involves injections (the regimen may be Nigeria specific) of a corticosteroid (betmethasone or dexamethasone) to women at risk of preterm birth, to decrease the risk of newborn respiratory complications. Women at risk are those with pre-eclampsia, preterm uterine contractions, and premature rupture of the membranes.

(07) HIV testing: This is usually a rapid test given, preferably at the first ANC visit. If the result is negative, another test should be provided 3 months later.

(08) ARV for HIV positive pregnant women: HIV pregnant women should receive antirtrovirals for Prevention of Mother-to-Child transmission (PMTCT) of HIV. HIV positive women should be started on long-term antiretroviral therapy (ART) as soon as they are diagnosed. In Nigeria where this is not feasible, women are provided with a 3 drug ARV regimen during pregnancy and started on long-term ART as soon as feasible. You may also find different ARV regiments used. If the facility reports any ARV regimen for PMTCT circle '1'.

(09) Diagnosis and treatment for sexually transmitted infections (STIs): The diagnosis may be clinical or by diagnostic test. At minimum a pregnant woman should receive a diagnostic test for syphilis. This may be a rapid test or a more complex test (VDRL).

(10) STI treatment for ANC clients: Ask if women with suspect STI are diagnosed and treated in the ANC service area or if they are referred to the outpatient clinic (OPD) for diagnosis and/or treatment. Whether the service is provided in ANC or only through referral may impact follow through by the woman.

Q3222a Diagnostic tests provided routinely for pregnant women

(01) **Pack cell volume (PCV) test:** This measures hematocrit for anemia. It uses a centrifuge and capillary tubes.

(02) **Hepatitis test:** This is a rapid blood test.
(03) **Syphilis test:** This is usually a rapid blood test but may also be a more complex, VDRL test.
(04) **Blood grouping:** This is needed in case blood transfusion is needed.
(05) **Genotype:** This tells the type of hepatitis C a woman has which is needed for more accurate treatment.

(06) **HIV test**: This is a rapid blood test.
(07) **Urinalysis:** This may be for urinary track infection (using a centrifuge or microscopic examination), but also can tell if protein and sugar are in the urine (using dipstick).

Q3223 Documents Guidelines, job aids, patient cards

Q3224 Equipment for ANC

(01) **Blood pressure apparatus**: Make sure that the apparatus is functional and located so that it can reasonably be used routinely for ANC clients.
(02) **Fetal stethoscope**: Any apparatus that allows the provider to hear the fetal heart beat

through the mother's abdomen is accepted. This is most often a pinard (a two sided bell shaped apparatus) or another type of stethoscope with a bell that better allows one to hear the fetal heart through the abdomen. A dopplar machine also is accepted.

(03) **Adult weighing scale:** Make sure the scale is functional and located so that it can reasonably be used routinely for ANC clients.

(04) **Examination bed*:*** This may be any type of flat surface the woman can lie on and have her abdomen palpated.

(05) **Tape measurer:** This is used to measure the height of the fundus and the size of the abdomen.

C. PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) SERVICES

Q3231 PMTCT SERVICES

PMTCT services include counseling and testing for HIV infection, and providing antiretroviral medicines for HIV positive women, as well as follow up of the mother and newborn through delivery and the postpartum period. A facility may offer only part of these services, and refer for the others. If, at minimum, the facility offers HIV testing for the pregnant woman, circle '1'. Later questions will identify how complete the service is.

Q3232 Routine components of PMTCT services

(01)HIV testing services: All pregnant women are offered an HIV test and counselled on the results.

(02)Early infant diagnosis (EID): This requires taking a blood sample from the newborn at around 4-6 weeks of

age. Usually the blood for the infant is drawn in the postnatal care or PMTCT service area and there will be a register where the infant identifier, date the blood was drawn, and results are recorded.

(02a-02b) The actual test is usually only conducted in large facilities with laboratories. Most health centers may collect the specimen, but will send it out for the results.

(02c) Ask how long it normally takes to receive the results back for the specimen that is sent elsewhere for testing. It should be noted that receiving the results back in a timely manner is a problem in many settings.

(03-04) Antiretroviral Therapy for PMTCT: Pregnancy in HIV positive women is an absolute indication for ART. ART should be initiated in all HIV pregnant and breast-feeding women regardless of gestational age, WHO clinical stage and at any CD4+ cell count and continued for life. ART should be initiated urgently in all pregnant and breastfeeding women, even if they are identified late in pregnancy or postpartum. This is the most effective way to prevent MTCT of HIV through the reduction of maternal viral load. Same day initiation of ART is preferred except in patients with AHD

(04) ARV prophylaxis to newborns of HIV positive mothers: This refers to nevirapine provided immediately after birth until the newborn HIV status is confirmed (around 6-8 weeks of age). This may be provided during delivery or started at the first postnatal care visit if the infant was not started on nevirapine immediately after birth.

(05-5a) Provide ART: Use of Antiretroviral Therapy for PMTCT: Pregnancy in HIV positive women is an absolute indication for ART. ART should be initiated in all HIV pregnant and breast-feeding women regardless of gestational age, WHO clinical stage and at any CD4+ cell count and continued for life. ART should be initiated urgently in all pregnant and breastfeeding women, even if they are identified late in pregnancy or postpartum. This is the most effective way to prevent MTCT of HIV through the reduction of maternal viral load. Same day initiation of ART is preferred except in patients with AHD

Q3233 Guidelines and job aids

Refer to Q3132 for instructions on guidelines and job aids.

(01-02) Guidelines: We are looking for specific guidelines.

(04) Job aids may include any wall charts, check lists, or other tools that provide details on part of the PMTCT protocols and help the provider to adhere to standards for HIV testing, dosages for ART for the mother or newborn, provide appropriate counseling, or any other part of PMTCT.

Q3234 Privacy for PMTCT counselling

See Q3106 for the definitions of visual and auditory privacy. This may be the same room as for Q3106 or may be a different location. Ensure that the location is in proximity such that it is reasonable to assume that women receiving PMTCT counseling will have routine access to the privacy the location provides.

Follow up for HIV positive ANC patients

This refers to any systematic process for tracing HIV positive ANC patients who are irregular in attending ANC and receiving their PMTCT services.

Refer to Q3236 for explanations of the methods for tracing patients.

Commonly the providers will explain that they phone or text or even visit the patient (facility outreach) or ask community volunteers to track the woman. If any method is systematically used, ask to see any documentation that shows that the follow-up process was followed for women.

Q3235-3237 Follow up for mother/baby pair postpartum

We are looking for any systems that are routinely used in an attempt to ensure that the mother-baby pair receive PMTCT services postpartum—at minimum until breast feeding is discontinued. In particular, the concern is that the newborn receives the HIV blood test, treatment if HIV positive, and cotrim prophylaxis. Tracing the mother-baby pair is a weakness in many programs so efforts are being made to improve the follow up process. Multiple processes may be used. Circle '1' for all the different processes that apply, and look for any documentation that provides evidence that the process was followed.

Q3236

<u>Common methods for patient follow-up to improve compliance in treatment adherence include:</u>

Follow-up activities may include reminding the patient about an appointment, checking to see if a referral was followed up, asking about signs and symptoms the patient may be experiencing, checking on the need for supplies.

(01)Trace through phone calls/text message: This is when the staff uses the phone to call or send messages to the patient.

(02) Trace through community volunteers or facility outreach: This may be asking persons to go to contact the patient for a specific reason, or a routine system where the patient is referred to the volunteer or facility outreach staff for routine follow up.

(03)– (06) Referral forms used or other linkages with delivery services: Sometimes a preprinted referral form is used, and other times a phone call provides the information about the referral.

Receive feedback from delivery services: This might be on half of the referral form or through phone calls or meetings.

(07) Information on appointments, follow up plan, treatment is routinely recorded on the MCH card retained by the mother. This can be taken with her if she needs to access services elsewhere, or when she goes for delivery.

(08) Linkages between mother-baby unique patient ID numbers: This may include using the same number or another system to readily allow the record and information on the two patients to be linked.

Q3238 Follow up for long-term ART for the HIV positive pregnant woman/new mother

Similar to 3236, we are looking for systematic processes to ensure that a referral is followed through and that the woman actually is enrolled in ART after referral. Refer to Q3239 for an explanation of the different methods.

D. POSTNATAL CARE (PNC)

Q3239 Postnatal care as an outpatient service

This refers to the postnatal checks that a mother and newborn receive after going home if delivery was in a facility, or after their home delivery.

Q3240 PNC register

If there is a PNC register check if there is a location where the items in 3246a are expected to be recorded. This provides information for the international indicator on PNC received within 48 hours of delivery.

Q3241 Individual patient charts/cards/records

This will often be the same maternal health card used for all of the woman's reproductive health services such as family planning and ANC. It may or may not include the newborn information as well. The record may be maintained by the woman or may be kept at the facility. We ask to see a blank one to ensure that the facility can provide this for a woman if she does not already have an individual record.

3242-3243 Guidelines and job aids

Refer to Q3132 for instructions on guidelines and job aids.

E. POST ABORTION CARE (PAC)

Q3251-3253 Post abortion care services, guidelines, and job aids

This may be a sensitive topic to address. PAC may be needed for spontaneous abortions, as well as for induced abortions. PAC services include using vacuum aspiration (preferable) or dilation and curettage to scrape inside the uterus, to remove any retained products of conception that may result in bleeding. PAC services often also include treatment for pelvic infections and counseling on contraception to prevent unwanted pregnancies.

Refer to Q3132 for instructions on guidelines and job aids. We are looking for any guidelines or job aids related to the service.

F. CERVICAL CANCER DIAGNOSIS

Q3261-3263 Materials and guidelines for PAP smears

The PAP smear is based on a specimen from a scraping from the uterus. We are looking for the materials to prepare the slide and for national guidelines. If PAP smears are done, the specimen is usually collected during the woman's routine outpatient visit and then the prepared slide is sent to the laboratory—or to an external laboratory for reading the result.

SECTION 3.3 CHILD AND ADOLESCENT HEALTH SERVICES

A. IMMUNIZATION SERVICES

Q3301-3302 Availability of immunization services

This refers to any immunizations, whether for children or for adults.

(01)Birth doses are advised for newborns.
(02)Infant vaccines are the full set of vaccines that include diphtheria, pertussis, tetanus (DPT), hepatitisB (HepB), and flu (Hib) (together these are provided in the Pentavalent vaccine), measles, BCG, and polio that should be received in recommended dosages prior to 12 months of age.
(03)Vaccines also recommended for adolescents and adults include HPV (human papillovirus)—a vaccine to prevent cancer associated with sexually transmitted viruses, tetanus, flu, and yellow fever (Nigeria specific)

Q3303-3305 Availability of child immunizations

These questions provide information on the frequency of child immunizations and where they are provided. These help us to understand immunization coverage results. We ask if immunization services are being provided today to know if the vaccines should be available, even if the facility does not routinely store them.

Q3306-3307 Guidelines and job aids

Refer to Q3131 for instructions on guidelines and job aids.

Q3308 Equipment for child immunization services

(01-02) Syringes: either single use (that are not autodisabled) or autodisabled (the syringes cannot be used a second time).

(03)**Sharps container:** A safety box for disposing of used syringes and needles

(04-05) Vaccine carrier and ice packs: Even at the facility, when there is a day for immunizations, a vaccine carrier and ice packs is needed to maintain the cold chain for the vaccines that are out of the fridge for hours while immunizing numerous children. During outreach, these are the only tools for maintaining the cold chain.

(06-08) Documents for child immunization services: An individual record for immunizations received by the child should be kept by the parent. This may be on a growth card, a specific immunization card/booklet, or a child or maternal-child health booklet. Tally sheets allow the facility to count the numbers of immunizations provided and the official immunization register allows calculation of fully immunized children from among all children receiving any immunization. Both of these are important for monitoring community coverage for immunizations.

Q3309-3311 Storage of vaccines

Q3309 Fridge: The fridge/cold box should be specific for vaccines, and should have a power source (gas, electric, or other) in order to maintain the desired temperature.

Q3310-3311 Temperature monitoring: To maintain potency, most vaccines need to be stored at 2-8 degrees celsius. The temperature of the fridge should be monitored twice daily and recorded on a graph to document that this has taken place, or there should be an automatic temperature monitoring system.

Q3313 Availability of vaccines

Go to where the child vaccines are stored (or where services are being offered today if the facility does not store vaccines) and check for the availability of all the listed vaccines. Other vaccines listed are not part of the routine child immunization series, but are important (rotavirus against a type of intestinal infection that causes diarrhea, The adult vaccines will likely be in the same location, but if needed go to where they are stored (e.g., tetanus toxoid vaccine may also be in the antenatal care

service area). Check to make sure that at least one of each type of vaccine is available with a valid date of expiration.

Q3314: Availability of vaccines the most recent day immunizations were offered: If the facility does not store vaccines and is not offering the service today, ask about the availability of the vaccines on the most recent day when they should have been available (either for outreach or facility-based immunization services).

B. OTHER PREVENTIVE AND CURATIVE CARE SERVICES FOR CHILDREN UNDER 5

Q3321-3328 Specific child health services

For each service and treatment practice, clarify if it is always available/used, sometimes but not always available/used, or never available/used.

Q3322 Routine growth monitoring: Children should have their weight plotted against either their height or their age to identify if they are growing as expected or if they are at risk for malnutrition or stunting. This is a preventive service that also includes providing education and advice to the caretaker about age-specific healthy feeding habits for the child.

Q3323: Treatment of malnutrition: These are different types of fortified foods for children who are malnourished. Often the foods are sent home with the caretaker, but severely malnourished children may be referred elsewhere in this facility or to another facility or site for intensive feeding therapy.

Q3324: Routine Vitamin A supplementation: Starting at 6 months of age, children should receive a high-dose vitamin-A capsule every 6 months for prevention of illnesses associated with low vitamin A levels. This is often combined with immunization services.

Q3324a: Treatment of anaemia: Anemia (or low hemoglobin levels) is often a result of infections such as hookworm, or illnesses, such as diarrhea. Iron supplements should be provided for children who may be anemic.

Q3325: Treatment for pneumonia: If the facility provides treatment for pneumonia for children, ask about the routine drug of choice for treatment.

Q3326: Treatment for malaria: If the facility provides treatment for malaria in children ask about the routine practices for conducting blood tests for diagnosis and the routine drug of choice for treatment. Also check if the child routinely receives an insecticide treated bednet (either when being treated or as part of well-child services) or a voucher that can be exchanged for a bednet outside the facility. If the facility routinely provides bednets as a part of a community outreach program, this counts.

Q3327: Treatment for watery diarrhea: Ask about the facility practices for treatment (zinc tablets and/or oral rehydration salts (ORS), and whether oral rehydration therapy (ORT) is started at the facility for dehydrated children. If ORT is started at the facility, ask about the service conditions: Is there a specific site and are the necessary equipment available for the onsite provision of ORT.

Q3328 Guidelines, job aids, and registers

Refer to Q3132 for instructions on guidelines and job aids.

(01)**IMCI guidelines** may be in a chartbook, or a wall chart format.
(02)**Job aids** would include instructions/information related to some, but not all of the IMCI guidelines.
(03)**National HMIS Health Facility Daily OPD Register:** If the facility has made their own register by hand, and they report that they normally have the register but currently there is a stock out, even if the exact columns as the National HMIS OPD Register have been created, mark '2' for "reported not seen".

Q3329 Training in Integrated Management of Childhood Illnesses (IMCI)

Refer to Q2139 for information on staff training. This is a specific training. If the respondent is not certain, ask them to check with other staff in an attempt to provide the most accurate response.

Q3330-3335 Newborn sepsis

Q3330: Severely ill newborns: Some facilities never receive severely ill newborns because they are bypassed for higher level facilities. Isolated lower level facilities may, however, receive severely ill newborns. If they do, we want to know about their training and practices.

Q3331: Practices for newborns with severe infection/sepsis: If a severely ill newborn with high fever and suspect severe infection or sepsis comes to the facility, clarify if they are immediately referred, or if there is a pre-referral dose of an injectable antibiotic provided prior to referral, or if the facility can prescribe the full treatment and follow up. The facility may have different practices depending on the situation—sometimes following one practice and sometimes following another.

Q3332-3333: Guidelines, job aids, referral guidelines: Refer to Q3131 for instructions on guidelines and job aids.

Ask to see any documents that provide guidance on eligible newborns for treatment and/or referral and practices to be followed.

Q3334: Cases of newborn sepsis: Usually staff will remember, but if uncertain, skim through the outpatient register for the reasons newborns were brought to the facility.

Q3335: Training on newborn sepsis: Refer to Q2410 for information on staff training. If the respondent is not certain, ask them to ask other providers to provide the most accurate response.

C. ADOLESCENT HEALTH SERVICES

Q3341 Service availability

This refers to services that specifically focus on these age groups. If the facility simply says that they provide services if adolescents seek them, but there is no particular strategy or effort to improve utilization of the services by adolescents, the facility does not specifically offer "adolescent health services".

01 **Special hours:** Services that are specifically offered at times that are more convenient for adolescents (e.g., after school hours)

02 **Special service location:** Some adolescents are reluctant to be seen accessing certain services, or feel uncomfortable in general service areas. If there is a specific service location for any service, selected specifically to encourage adolescent utilization, this is accepted.

03 **Service offered without guardian consent:** This may be a sensitive issue. There are some services, particularly reproductive health services, that adolescents may require where some cultures require guardian (e.g., parent or husband) prior to providing the service. This may result in adolescents not receiving the services they require, such as birth control, testing for HIV infection, or post abortion care.

04 **Peer counseling:** This refers to trained youth of similar age being the persons who counsel the adolescent. This is often a more effective way to educate adolescents and change behavior than having adults provide counseling.

Q3342 Guidelines

There may be specific guidelines established at national level to guide providers for what services can be offered without guardian permission, or for ways to improve effectiveness of services for adolescents.

SECTION 3.4 COMMUNICABLE DISEASES

A. COMMUNITY HIV SERVICES

Q3401-3403 Links with community for HIV services

These questions seek to identify links with the community either through outreach (that is staff assigned to the facility who go to the community) or other links such as with volunteers (persons who are not officially linked with the facility but where there is an agreement between the facility and the community workers on ways to improve case detection, service utilization, and follow up. See Q3101 for explanations and instructions related to community services.

B. HIV TESTING SERVICES (HTS)

Q3411-3413 Guidelines, and job aids

Refer to Q3132 for instructions on guidelines and job aids.

HIV testing services (often called Voluntary Counseling and Testing (VCT) or HIV Counseling and Testing (HCT) services are when HIV testing is client initiated.

Q3415: HTS for adolescents: If the services are offered clarify if guardian permission is required or if the adolescent can request the test and receive the result without guardian knowledge.

Clarify the national policy. For example, below is an excerpt from a National Guideline:

> As minors(under the age of 18 years), children cannot legally provide informed consent, thus informed consent for HIV testing should be obtained from the child's parent or guardian. Where there is no parent or legal guardian available, health care providers should seek consent from an individual
>
> (sometimes known as a "substitute decision-maker" or "surrogate decision-maker") who has authority under the law to make a decision based on the best interests of the child. However, a child above age 10 years does have the right to participate in decisions affecting his or her life and according to the Convention on the Rights of the Child, their desires should be given due weight in accordance with their maturity. Verbal communication is adequate for the purpose of obtaining informed consent.

In this case, the adolescent cannot receive the HIV test without guardian permission.

Q3414 Systems to promote enrolment in HIV/AIDS care and support services

HIV positive patients should be enrolled into HIVAIDS care and support services, where they are routinely monitored as to the stage of their illness, early identification and prevention or treatment of opportunistic infections (those that persons with weak immune systems are most susceptible to) and their initiation antiretroviral therapy (ART). When initiated on ART, they need to be monitored for early diagnosis and management of side effects of the ART drugs.

HIV positive patients, either deliberately or for other reasons, may not follow through with enrollment in care and support services, after being informed of their HIV positive status. It is important the HIV testing service knows whether the HIV positive patients have been enrolled in care and support. We look for this information in the HTS registers and records.

For patients who do not follow through with care and support service enrollment, there should be a systematic process for follow up to encourage and help patients to enroll in the care and support services.

Methods that have been used include

(01) SMS/phone contact: This is when the staff uses the phone to call or send messages to the patient.

(02)Asking **community workers** to contact the person: This may be asking persons to go to contact the patient for a specific reason, or a routine system where the patient is referred to the volunteer or facility outreach staff for routine follow up.
(03)Using **official referral forms** that provide information and official notification to the care and support service about the patient.
(04)**Feedback from care and support services**: This notifies the HIV testing service when their patients have been enrolled in care and support. They can then identify the patients requiring follow up to encourage enrollment.

The enrollment status, and attempts to follow up HIV positive patients who have not enrolled should be recorded, for continuity of care and evaluation purposes.

Q3416 Condoms in service site

Condoms must be observed in the HTS site so that they are easily provided to all HTS clients.

Q3417 Privacy for HTS counselling

See instructions for Q3106.Counseling related to their risk for HIV infection and their HTS results should be provided in an environment that provides auditory privacy (no one else can overhear the conversation) and visual privacy (no one can observe the counseling). This may be provided by a screen and distance from other persons, or in a private room.

Q3418-3421 HIV testing site

If HIV testing for client-initiated testing takes place in a location other than the laboratory, go to that location and assess the availability of HIV testing kits and infection control conditions for that site. Refer to Q3131 for instructions on assessing infection control.

C. ANTIRETROVIRAL THERAPY (ART)

Q3431-3433 ART prescription and treatment follow up

This section assesses the ART services. If the facility only offers ART related to PMTCT, and does not provide any clinical or adherence follow up for ART, the response to 3431 is '2' for 'No ART services". Refer to Q3415 for explanation about adolescent services.

Some facilities provide routine drug supply and adherence support to patients, but do not periodically conduct the blood tests and physical examinations for ART follow up. Some facilities provide the initial prescription and revise the treatment depending on how the patient responds to treatment. Identify which ART services the facility offers.

Q3433aStaff trained in ART

Refer to Q2410 for information on staff training. We are looking for participation in a specific training course. If the respondent is not certain, ask if there are other staff who might know if they or other staff attended the training.

Q3434-3435 ART compliance follow up

ART patients may deliberately or for other reasons drop out of ART treatment, or miss drug treatment dates, or not go to where clinical checking appointments. Ask about each of the listed methods to see if the facility systematically uses these common systems to promote patient compliance for treatment and follow up. There should be some documentation that attempts have been made to contact defaulters (patients who are late for drug pickup or for clinical appointments) and of the result of those attempts.

(01)**Community follow-up (phone/text message, volunteer, or outreach):** Refer to Q3414.
(02)**Treatment buddies:** This refers to an identified person from the community who meets with the ART patient to encourage adherence to the drug dose and timing for taking

medicines. This is a one-on-one relationship (although treatment buddies may accept responsibility for more than one ART patient). The treatment buddy is a specific type of community follow-up.

(03) **Identify late drug pick-up and ensuring follow-up:** This refers to a systematic process being used to identify when patients are late for drug pick-up and a procedure for follow up (e.g., community follow up as described in (01)).

(04) **Identify missed appointments for clinical follow-up and ensuring follow-up:** This refers to a systematic process being used to identify when patients miss appointments for clinical follow-up and a procedure for follow up (e.g., community follow up as described in (01), or a system for contacting the facility providing the treatment adherence follow-up to find the patient.

(05) **Clinical monitoring by staff:** This refers to checking vital signs, laboratory tests for signs of problems with the drugs or progression of the illness. This is usually performed in the facility where ART prescription is provided.

(06) **Pill counts:** This refers to a system for checking the number of pills remaining with the patient against the number that should be there if the patient is taking the drug as prescribed. This may be performed in the home by volunteers or outreach workers. The person checking would need to know the amount of the drug(s) the patient picked up and what should be remaining when comparing that amount and the number of days since pick up.

(07) **Appointment systems:** Appointment systems refer to the planning the date and time the patient should return to the facility either for drug pick up or for clinical follow-up. Appointment systems allow the patient to plan, and in providing a specific time for the appointment, reduce the waiting time—which should reduce the time burden on the patient in keeping appointments.

(08) **Appointment reminder systems:** This refers to contacting the patient the day or a few days prior to remind them of the appointment date and time and to confirm that the patient will be able to attend. This may be using any of the systems in (01) or by post.

D. HIV CARE AND SUPPORT SERVICES

Q3441 HIV care and support services are provided for HIV positive patients who may or may not be on ART. Care and support services include providing preventive interventions, monitoring for early identification of risk or complications, treating opportunistic infections, as well as psycho-social services.

Q3442 Types of HIV and AIDS care and support services (CSS)

Clarify if there are specific HIV CSS that are linked with routine follow up and interventions '1', or if the facility will treat sick patients who are HIV infected, but have no specific CSS for HIV infected patients '2'.

Specific care and support services

(01) Treatment of opportunistic infections: This includes complex infections such as respiratory fungal infections, as well as less complex infections such as topical fungal infections. If the facility treats any level of opportunistic infection, mark '1' for 'Yes".

(02) Palliative care: This refers to treatments and interventions to reduce pain and suffering. Provision of pain medicines and intravenous fluids for maintaining hydration are palliative care interventions. If the facility provides any level of palliative care, topical fungal infections. If the facility treats any level of opportunistic infection, mark '1' for 'YES".

(03) Provide systemic intravenous treatment of specific fungal infections such as cryptococcal meningitis. Internal fungal infections requiring intravenous treatment (e.g., cryptococcal pneumonia

or meningitis—affecting the covering of the brain and spinal cord) are serious opportunistic infections.

(**04) Provide treatment for Kaposi's sarcoma:** This is a type of cancer that is most commonly appears as discoloured (purple/brown) lesions on the skin or mucous membranes. It is a defining illness for AIDS.

(05) Nutritional rehabilitation services: This refers to intensive nutritional support (either as an inpatient service, or supplements provided for home care, with outpatient follow-up.

(**06) Fortified protein** supplement may be provided through inpatient services or prescribed for the patient to take home.

(07) Micronutrient supplementation: These are usually tablets taken daily (e.g., iron, folic acid, vitamins)

(08) Family planning counselling: HIV infected patients need to plan pregnancies carefully and often are encouraged to prevent pregnancy depending on their condition. The question is if HIV infected patients are routinely counselled about the importance of family planning in relation to their HIV infection. The actual services may be provided onsite, or through referral.

(09) Condoms: This refers to routinely providing condoms at the service site through free distribution.

(10) CPT (cotrimoxazole preventive treatment): HIV infected patients are at risk for respiratory infections. Cotrimoxazole (Cotrim or septrim) is the drug that is usually provided routinely as a preventive service.

TB and HIV coinfection

HIV infected patients are at high risk for TB infections, and sometimes the first indication that a patient is HIV infected is when they are diagnosed with TB infection.

(11) Routine screening for TB infection: All HIV infected patients should routinely be screened for TB during their clinical follow-up visits. Standard screening for TB includes assessing patient for 4 items: a) cough, b) fever, c) weight loss, d) history of exposure to TB contacts. They may also be tested (usually sputum) for TB infection.

(12) Preventive treatment for TB: INH is provided for persons who have latent TB (not active), or persons at risk of TB infection. Country protocols for this intervention may vary and should include pyridoxine, a B vitamin. Some countries have not adopted this practice as a routine preventive intervention for HIV infected patients.

(13) Management of TB and HIV coinfection: This includes ensuring that the patient receives both HIV care and support services and TB treatment. Adherence counseling and follow up is important for these patients.

(14) Counsel on risk reduction in TB and HIV co-infected patients: This would include counselling about the higher risk that HIV infected patients have for TB, and the linkages that are common between TB and HIV infection; and behaviours to minimize exposure to active TB or HIV infection.

(15) Partner testing: The partner of the HIV positive patient should be tested for HIV infection since they are at high risk.

(16-17) Screening and treatment for sexually transmitted infections: At minimum a history that indicates the risk for STIs (e.g., multiple partners, addictions associated with risky sexual practices) should be checked. Diagnostic testing for specific STIs should also be conducted.

18 Care for pediatric HIV/AIDS patients: We want to clarify that the facility does provide care and support services for pediatric patients rather than routinely referring them.

Q3443-3444 Routine follow up to support TB testing for HIV patients

All HIV infected patients should be screened, and preferably diagnostically tested for TB. Following are ways the care and support services may support TB testing and follow up on results for their patients. For each system reported used, ask to see evidence showing the system is functional.

(01) Health worker provides **clinical screening for TB:** Evidence would be recorded results in a patient record or chart.
(02) **Take sputum specimen and send to laboratory for testing**: Evidence would be a register that shows the patient identifier, the date the sputum specimen was sent to the laboratory, and the test results and date received.
(03) **Referral form:** The referral form should be printed and in the care and support service area.
(04) **Results of TB test returned to HIV care and support unit:** Evidence would be in the register or the individual client chart/card.

Q3440 Record of HIV patients tested for TB: Ideally it should be possible to calculate the percent of patients enrolled in care and support who were tested for TB. At minimum, however, there should be a register or record of HIV positive patients with TB diagnostic test results. A note about TB suspect status is not sufficient since this is based on clinical assessment and not based on a diagnostic test. Check first for evidence in the HIV Care and Support service area. This might be a column in a register that notes TB test results or a patient card/chart that has TB test result. If not in the HIV care and support service area, the evidence might be in the laboratory register or a TB service register. Any evidence where the patient HIV and TB test status can be ascertained is accepted. If we want to know how consistently the information is recorded this will be included in a record review questionnaire for quality of care.

Q3446 Guidelines and job aids

Refer to Q3132 for instructions on guidelines and job aids.

SECTION 3.5 OTHER COMMUNICABLE DISEASES

A. SERVICES FOR SEXUALLY TRANSMITTED INFECTIONS (STI)

Q3501-3506 STI service components and conditions

STI services are most often provided as a part of general outpatient curative care services. There may be a special clinic in large facilities.

Refer to Q3132 for instructions on guidelines and job aids. Check for the services, guidelines, and job aids in the STI service area.

B. TUBERCULOSIS (TB) SERVICES

Q3511-3512 TB services

Similar to ART services, facilities may offer a full package of case identification, diagnostic, treatment, and follow up services, or they may offer only a part of these services.

Infection prevention for airborne pathogens

Q3512a **Masks and tissues:** Check if there are tissues and masks/cloths for patients who are coughing or sneezing. These may be placed so that patients can access themselves, or may be with the staff to provide if a patient who may have an airborne transmissible illness is identified.

Q3512b **Airflow and non-crowded conditions:** to reduce the risk of patient transmission and contracting an airborne pathogen

(01) Doors and windows open: If the waiting area is open air, this is accepted. Otherwise assess if there seems to be adequate movement of air and no stuffiness.

(02)Signage

There should be signs that remind staff to keep doors and windows open.

(03)If the building has air conditioning, assess if there seems to be adequate movement of air and no stuffiness.

(04)Non-crowded conditions: This will be subjective, but the assessment is whether conditions are those that will reduce or increase the risk of contracting an airborne pathogen. Many facilities have open-air waiting areas which reduce the risk of airborne pathogens transmission.

Q3513-Q3514 Collection of sputum for TB diagnosis

Q3513 Collection of sputum specimen: Often facilities that do not actually conduct sputum testing do identify suspect cases and collect the sputum to send elsewhere for testing. This improves the possibility that patients at risk will actually be investigated since referral for testing may not be followed up by the patient.

Q3514 Sputum cup *(P)* and/or referral form: We are looking for items in location in the general outpatient service area. The referral form should be printed and may go with a collected sputum specimen or may go with the patient who is referred elsewhere (either in this facility or to another facility) to provide the sputum specimen.

Q3515 Results of sputum test: There needs to be a system for ensuring that the test result is linked with a specific patient and that the result is returned to the location where the suspect TB patient was identified. This may be in a register where the patient identifier, date the sputum/referral was sent, and date results received and results are recorded. This may be in the general outpatient service area, where the suspect TB patient is identified, but may also be in the laboratory if the collected sputum is handled by the lab. If suspect TB patients are sent to the TB service area for sputum specimen collection they should go with a referral form, to improve follow up, and the results should be returned to the outpatient service area so the provider will know the results and if follow up is needed.

Q3517 Follow up for enrolment of TB infected patients

See Q3414 for explanations and instructions.

Q3518-3521 Community TB services and patient follow up

See Q3001-Q3002 for explanations and instructions related to community services.

Q3518 Community links: These services may be provided by community workers directly associated with the facility or may be by workers associated with NGOs or civil society organizations.

Q3519 Reports from community volunteers: This refers to routine provision of reports on the services provided. This may include such information as numbers of patients identified as suspect TB and referred, numbers of patients being followed for Direct Observed Treatment (DOT), numbers of community education sessions related to TB, etc.

Q3520 Facility supervision for community volunteers: Clarify if the volunteers are supervised by facility staff.

Q3521 Community TB activities: Ask about each of the activities.

(01) **Promote general awareness:** This sometimes takes the form of group education.
(02) **Identify suspect TB cases and refer for testing:**
(03) **Identify suspect TB cases and collect sputum specimens for testing:**
(04) **Compliance:** This is usually daily observing the patient taking their treatment

(05) **TB patent follow up:** This may include responding to requests from the facility to find patients who have not collected their medicines or kept appointments.

Q3522-3527 Specific TB diagnostic and treatment practices for adults and paediatric patients

Clarify the diagnostic and treatment methods used for the specific group.

More than one diagnostic method may be followed in a facility so ask for each one.

Q3523,3525a Diagnose TB: This means the facility actually determines that the patient has TB. This may be based on clinical symptoms or diagnostic testing. The diagnostic tests may be conducted in the facility or outside. The practice may be different for children and for adults. Clarify if a guardian permission is required for a suspect TB patient who is an adolescent to be tested.

Q3526-3527 TB diagnostic methods:

Diagnosis of TB for adults and children may use different methods. It is often difficult to get a sputum specimen from a child.

(01)**Clinical symptoms:** This means that the patient is diagnosed as having TB without a positive test result. The diagnosis would be based on clinical signs and history (e.g., weight loss, coughing blood).

(02) (02c) Sputum smear microscopy: Regardless of where the test is performed, if the facility uses the results for diagnosis, clarify how many positive tests are required for a diagnosis based on sputum.

(03) Culture: This involves growing a smear from sputum or specimen collected through suction. This provides more specific information on the pathogen and can be used for testing the specimen sensitivity (responsiveness) to specific drugs.

(04) Rapid test (GeneXpert MTB/RIF): This test also uses sputum but tests using a machine that mixes the sputum with reagents and automatically detects the TB pathogen. The test provides sensitivity information for isoniazid (INH) and rifampicin (RIF)—two of the drugs in the first-line treatment regimen.

(05) Chest x-ray: This shows damage in the lungs that may be indicative of TB infection.

Q3528-3530: Prescription of TB drugs

Some facilities may perform the test and provide the diagnosis but not conduct any further follow up of the patient. The result may be sent back to the referring provider who then determines the treatment regimen and prescribes the drugs. Clarify if providers in this facility actually write the prescription for the treatment regimen. Also clarify if guardian permission is required to enroll an adolescent TB infected patient into a treatment regimen.

Q3530_01-3530_04 Drug resistant TB

Clarify the routine practices for diagnosing and treatment of TB drug resistance.

Criteria for testing: High risk patients include those who are re-infected after successful treatment, those who remain sputum positive after 2 (or 3—Nigeria specific definition) months on treatment.

Testing for drug resistance: The Xpert test indicates resistance to rifampicin. A culture and sensitivity test is when a culture is grown on a petri dish and then different drug discs are put on the culture to identify if the pathogen responds to the drug on the disc or not. The actual availability of these tests will be assessed when the laboratory data is collected. The facility might also diagnose drug resistance by referring the patient of specimen outside: The facility should receive the results back but may or may not follow up patients who are positive for drug resistance.

Prescription for drug-resistant TB: It is commonly found that a facility may follow up TB patients, and may even revise drug prescriptions, but when a patient is found to be drug resistant they are transferred to a higher level facility for treatment prescription and follow up.

Q3530_05-3538 Clinical follow up

This refers to routine examination of the patient and treatment of conditions associated with the TB infection. Clinical follow up should also include being able to revise the treatment regimen. If the facility provides the clinical follow up only if the patient is sick and attends the outpatient clinic for that sickness, this is not clinical follow up for TB.

Q3539 Documents and guidelines: Refer to Q3132 for instructions on guidelines and job aids.

3531-3536 HIV and TB coinfection

Q3531 Routine screening of TB patients for HIV infection

Q3533 Follow up for HIV testing: If the patient or specimen is referred, check for evidence that the TB service keeps track of which patients have been referred, and if the results have been returned. Also check for any evidence that the TB service knows which patients have been enrolled in ART. This may be recorded in a register, or on the individual patient chart/card.

Q3534-3536 HIV testing practices for TB patients: We want to know the most common process for TB patients to receive the HIV test and, if by referral (either inside or outside this facility) if a referral form is used.

Q3537-3538: Treatment monitoring for TB patients

TB patient monitoring principles are similar to those for ART patients. Refer to Q3434-Q3435 for instructions.

Q3539 Guidelines and job aids

Refer to Q3132 for instructions on guidelines and job aids. In Nigeria the national guidelines for adults and for pediatric patients, as well as TB infection control are included in the Guidelines for Clinical Management of TB and HIV/AIDS Related Conditions in Nigeria (2008). We are also interested in whether the other specific guidelines are available.

Q3540-3548 TB drugs and storage conditions

Facilities may have different systems for storing TB drugs. Ask if the main storage site for TB drugs is in the main pharmacy or in another site, such as the TB service site or another location. Some facilities have bulk drugs (in jars and boxes) and others receive a packet of the regimen specific for each patient.

Q3540 Provision of TB drugs: We are looking for eligibility for assessing TB drug supply ordering and storage systems. If the facility does not provide drugs (i.e., some facilities may only provide the laboratory diagnostic results) then skip to Q3600.

Q3541 System for storing TB drugs: We are clarifying if there is bulk storage of only patient specific drugs expected to be available. Facilities that only provide adherence follow up may have only patient specific drugs. They may also have bulk drugs, however, for replacement of lost or spoiled individual patient drugs. Some facilities only store the bulk drugs and prepare the patient packet for the patient to take home as needed.

Q3542 Shortage of individual patient drugs: This may be because the patient supply did not arrive or because the patient drugs were lost or spoiled.

Q3543-3544 Time between ordering and receiving TB drugs

Individual patient drugs: Record the most common experience for the time between when a patient is diagnosed (the TB sputum test and diagnosis is known to the facility) and when the drugs

arrive for routine resupply and patient follow up. If the respondent cannot readily provide this information, ask to see records that show the date of diagnosis and the date the patient first picked up their drugs. There should be some record of receipt of the test results, registration of the patient, and when the drugs were received by the facility. Survey managers should review the TB registers that are used and identify in which columns the diagnosis and start treatment dates are recorded. They should also identify if there is expected to be a register to record receipt of TB drugs and which patient these are for.

Q3544-3545: Bulk drugs: If the respondent is uncertain, ask to check the order sheet and the receipt sheet. If the facility does not store bulk drugs, SKIP TO Q3600. If the bulk drugs are not stored here, the respondent may not know about the storage, in which case you should record and this information will be collected when the main pharmacy is assessed.

Q3546: Availability of TB drugs outside of the main pharmacy: Assess the availability and history of stock out for each item listed.

Q3547-3548: Storage conditions for TB drugs: If this is the main storage area for TB drugs, assess the storage conditions. If the main pharmacy is the main storage area for TB drugs storage conditions will be assessed when the main pharmacy is assessed.

SECTION 3.6 MALARIA

Q3600 Malaria services

This is a screening question for eligibility for completing this section.

Q3601-3602 Community malaria services

See Q3001-Q3002 for explanations and instructions related to community services.

(01) **Malaria testing:** The community volunteer might actually test the suspect malaria patient or might refer suspect malaria patients to the facility for testing.

(02) **Malaria treatment:** The community volunteer might actually provide the antimalarial drugs or might refer test positive patients for treatment.

(03) **Insecticide treated bednets (ITN):** The community volunteer might have the ITNs for distribution or might follow up households who received the nets from the facility or with high-risk persons (e.g., pregnant or child below 5) to promote appropriate use.

Q3603-3604 Diagnosis of malaria

A facility may use more than one method for diagnosing malaria. Clinical diagnosis means that the provider thinks the signs and symptoms are indicative of malaria, regardless of any parasitic test.

Q3605-3606 Malaria rapid diagnostic test (RDT) kits

Check to see if there is a RDT with a valid date of expiration in the service site. If the test is in the lab, you may record '3' and the RDT will be assessed when the laboratory is assessed. If the RDT is located in the outpatient service area but not in the laboratory, ask to see it and continue.

Q3607 Prescribe treatment for malaria

Check to see if any providers in the facility prescribe the drugs for treating malaria.

Q3608 Guidelines and job aids

Refer to Q3131 for instructions on guidelines and job aids.

SECTION 3.7 NON-COMMUNICABLE DISEASES (NCD)

Q3701 Eligibility

Non-communicable disease services include any services to prevent, diagnose, or treat non-communicable diseases which are diseases that are not infectious. Risk factors such as a person's lifestyle, genetics, or environment are known to increase the likelihood of certain non-communicable diseases. Check question 3701 to determine if non-communicable disease services are offered, if non-communicable disease services they are not offered, skip to next section.

Q3702-3704 Diabetes

Diabetes screening is a procedure that is performed to detect the presence of diabetes, a condition in which a person has a high blood sugar (glucose) level as a result of the body either not producing enough insulin, or because body cells do not properly respond to the insulin that is produced. Management can include counselling, continuous glucose testing, treatment with medication, and/or monitoring for diabetes related complications. If providers in this facility do not diagnose and/or manage diabetes, skip to question 3705.

Q3705-3707 Hypertension or other cardiovascular diseases

Diagnosis of cardiovascular diseases including hypertension, heart attack, stroke, and ischaemia can be accomplished using clinical history, physical examination, and blood pressure measurement. Management of cardiovascular diseases includes monitoring, treatment, counselling, and/or emergency response, if necessary. If providers in this facility do not diagnose and/or manage cardiovascular disease, skip to question 3708.

Q3708-3710 Chronic respiratory disease

Diagnosis of chronic reparatory diseases, including lung cancer, asthma, and chronic obstructive pulmonary disease can be accomplished by lung capacity, chest x-ray, or other diagnostic tools, depending on the disease. Management of these diseases can include monitoring, treatment, and/or counselling. If providers in this facility do not diagnose and/or manage chronic respiratory disease, skip to question 3711.

Q3711: Peak flow meter and spacers: A peak flow meter is a hand held device that measures how well air is moving in and out of lungs. It helps patients to manage asthma by providing measures that they can use to identify when asthma symptoms are changing prior to experiencing severe symptoms. A spacer is used with an inhaler that administers aerosol medicine. The spacer makes administration of the medicine easier.

If these are in the pharmacy, mark '2' and these will be assessed when the pharmacy is assessed.

Q3712 SERVICE CONDITIONS

General conditions of the sites visited in the outpatient service areas. Provide the response that best reflects the situation observed.

01-02: Clean floors and counters: Record if the floor of this service area was swept and the counters wiped clean with no obvious dirt or waste. Do not count against the service area if there are one or two items on the floor or counters, or a small area that is not swept or not clean. We do not want to be too picky, but we want to know if overall it looks like these areas are routinely kept clean (despite small problems) or if it looks that they are generally not tended.

(03-04): Safe sharps disposal: Record if you note used needles or sharp items (blades) that are not in a sharps box but that are sitting on counters, trays, the ground, trash containers, or otherwise in locations where people could inadvertently stick themselves. If you observe these anywhere, this is not safe disposal.

(05) **Safe contaminated waste disposal:** Record if you note bandages with blood or other contaminated materials that are lying around and not disposed in a waste bin with a liner and lid. If you observe these anywhere, this is not safe disposal.

(06-07) Staff uniforms and badges: There is a wide variation in types of uniforms that are acceptable. You will note what is accepted in the service area being assessed. Nurses should always

have some sort of uniform and badge. Physicians should always have a badge and usually should wear a lab coat if not wearing scrubs. Badges should be easily observed and give evidence that the person is an authorized employee. Street clothes with a lab coat are not acceptable for uniforms in the surgical theater area. Staff should be wearing scrubs to prevent bringing outside germs into surgical theaters. In most facilities deliveries should also not be conducted in street clothes even with a covering lab coat.

(08) Smoking rules: Record if non-smoking signs were observed in the service area being assessed.

SECTION 4: DELIVERY, POSTNATAL CARE, AND REPRODUCTIVE HEALTH SURGICAL SERVICES

4.1 DELIVERY SERVICES

Q4101 Availability of delivery services

Obstetric services refer to all services related to pregnancy, delivery, and postpartum care. Delivery services refer to all services related to delivery, normal and complicated deliveries as well as caesarean sections (surgical deliveries). Normal delivery refers to a birth that is spontaneous in onset, low-risk at the start of labour, and remaining so through labour and delivery. A caesarean section (CS) is a surgical procedure in which incisions are made through a mother's abdomen and uterus to deliver a baby. New-born care refers to treatment received by a new-born child from the date of birth and for the first four weeks of life.

There are multiple levels of delivery services ranging from normal delivery and healthy new-born care to complicated surgical deliveries and neonatal resuscitation. The subsequent questions will provide information on the level of delivery and new-born care services provided. At this point ask to be shown to the location in the facility where most normal delivery and new-born care services are provided.

A. HUMAN RESOURCES AND GUIDELINES FOR DELIVERY SERVICES

Q4111-4112 24-hour delivery services

This means that a provider is always available either onsite or "on call" (that is, usually within a short distance (Nigeria specific) of the facility and reachable by phone or person going to the location) to perform delivery services. If a provider lives onsite, but there is no planned staffing for 24 hour services—that is the person living there has no responsibility to provide delivery services during off hours, this is not 24-hour delivery services.

Q4113 and 4115 Lowest level delivery service providers

Probe to make sure that you identify the real practice, and not simply the planned practice.

Q4114 and 4116 Staff trained in new-born resuscitation

Refer to Q2139 for information on staff training.

Training in newborn resuscitation refers to management of a newborn who does not immediately breathe with the normal immediate post-partum clearing of the mouth and nose and stimulation. Newborn resuscitation may include mechanical suction to clear airways and stimulate breathing, and may include using the ambu bag and mask to support the newborn who is not breathing or who is having trouble breathing, by providing artificial respirations. Probe to clarify that if delivery providers have received newborn resuscitation, that one of the staff who has been trained is <u>always</u> available in the facility during the day.

Q4117 Maternity waiting area

This may be a simple structure but is a location where women who live a distance from the facility can come and stay for number of days to wait until their birth occurs. Most often there is simply a shelter and the women are responsible for their own food and care.

Q4118 Labour room

This would be a dedicated room, separate from the postpartum ward or delivery room, where women who are in active labour can rest and be examined prior to time for the actual delivery.

Q4119 Delivery room

This would be a special room (not used for other services) where the physical delivery takes place.

Q4121 Guidelines and job aids

Refer to Q3132 for instructions on guidelines and job aids.

(01): Guidelines for IMPAC: Integrated management of pregnancy and childbirth (IMPAC) is a package of guidelines and tools developed through WHO which focuses on the continuum of care from pregnancy through the perinatal period and on universal coverage of skilled care at every birth. IMPAC guidelines address key areas of maternal and perinatal health services and program including aspects related to health systems, training and skills of health workers, promotion of maternal and perinatal health. http://www.who.int/maternal_child_adolescent/topics/maternal/impac/en/index.html

Guidelines for IMPAC includes performing basic emergency obstetric [and newborn] are (BEmOC/BEmONC) services such as parenteral oxytocic's, antibiotics and anticonvulsants; assisted deliveries; manual extraction of the placenta; removal of retained products. The guidelines also should provide evidence-based recommendations to guide health care professionals in the management of women during pregnancy, childbirth and postpartum, and post abortion, and newborns during their first week of life, including management of endemic diseases like malaria, HIV/AIDS, TB and anaemia.

(02) Other guidelines for essential childbirth care: These would include the same issues as covered in IMPAC, but may use different terminology

(03) Nigeria PMTCT Guidelines or other guidelines for safe delivery practices for HIV positive women: The Nigeria PMTCT guidelines do include safe delivery practices for HIV positive women.

Q4121_3 Safe delivery practices for PMTCT:

If a woman's HIV status is not known prior to delivery she should be tested so that the provision of ARVs can be started immediately. Although the test should be carried out prior to delivery, within 24 hours should be acceptable. The newborn of the HIV infected should receive the ARV within 72 hours of birth, and certainly before discharge from the facility where the delivery took place.

Commonly PMTCT intrapartum guidelines advise the following:

- Assess HIV status before discharge, preferably prior to discharge
- Avoid manual rupture of the membranes—prolonged membrane rupture is a risk for PMTCT
- Avoid instrumental delivery and invasive monitoring procedures, including episiotomy
- Vaginal cleansing with chlorhexidine may reduce the risk of puerperal and neonatal sepsis and may reduce risk of HIV infection
- Minimize vaginal examinations
- Only suction the newborn if there is meconium-stained liqueur.
- Infants should start immediate exclusive breast feeding, and those with HIV positive mothers should receive an ARV (nevirapine) prophylaxis

(04) Job aids for IMPAC or essential childbirth care: Checklists and job aids provide guidance to the service provider for specific practices usually included in the full guidelines. These may include posters that describe the procedure for a particular intervention (e.g., management of postpartum haemorrhage, newborn resuscitation), or may include a checklist to provide guidance on routine care during delivery or immediately postpartum. Although the partograph is a job aid, do not count this here, since we ask about use of the partograph separately.

(05) Job aids for PMTCT: These may be posters that describe the process for assessing the HIV status of a woman who is delivering; the care of an HIV positive woman and her newborn.

Q4122-4123 Staff trained in delivery services and lifesaving skills

Refer to Q2139 for information on staff training.

Newborn resuscitation includes specifically suctioning secretions and using the bag and mask to resuscitate a baby that does not spontaneously breathe. Lifesaving skills include the basic emergency obstetric skills including treatment of sepsis, and active management of third stage labour (using oxytocin). Any of these life-saving skills are acceptable.

B. ROUTINE DELIVERY AND NEWBORN CARE PRACTICES

Q4124: Routine delivery practices

(01) Active management of third stage labour (AMTSL): This refers to immediately providing oxytocin
within 1 minute of delivery, controlled cord traction, and fundal massage.

(02) **Parenteral administration of oxytocin:** Parenteral refers as intravenous or intramuscular drug administration. Oxytocic drugs are those used for active management of the third stage of labour to prevent postpartum haemorrhage and for the management of postpartum haemorrhage. These drugs cause continuous or sustained contractions of the uterine muscles so that local blood vessels are compressed, bleeding at the placental site is controlled, and a clot forms.

(03)**Misoprostol** is an oral medicine commonly provided for less skilled providers of delivery services to use to prevent postpartum hemorrhage.

(04)**Use of the partograph:** Refer to Q5535

Q4125 Routine newborn care practices

(01) Hygienic cord care: Cut with sterile item and apply disinfectant to tip and stump, and no application of other substance.

(02) Thermal protection: Drying and wrapping the newborn without immersion in water.

(03. 05,06) Immediate skin to skin contact and breast feeding: Immediately after resuscitation is established and the baby is dried the newborn should be given to the mother for skin-to-skin contact for warmth and establishing immediate breast feeding. This should occur even if the placenta has not yet been expelled. Immediate breast feeding will stimulate uterine contractions for expelling the placenta and reducing postpartum bleeding.

(04) Delayed cord clamping: This is a practice that allows as much of the placental blood as possible to continue to be infused into the newborn, reducing the risk of anaemia.

C. MANAGEMENT OF COMPLICATIONS OF DELIVERIES

Q4131: Management practices for complications of deliveries

(01) Parenteral administration of antibiotics for the mother: Parenteral refers as intravenous or intramuscular drug administration. The most commonly recommended antibiotics for maternal sepsis are gentamicin, or ampicillin plus penicillin.

(02) Parental administration of oxytocin or misoprostol for treating postpartum haemorrhage: This would not necessarily be the routine administration postpartum, but rather in response to postpartum haemorrhage.

(03) Parenteral administration of magnesium sulfate: Although injectable diazepam is sometimes used for the same purpose, magnesium sulphate is the recommended drug (either pre-referral or treatment) for eclampsia. Eclampsia is a hypertensive disorder characterized by hypertension with convulsions/seizures. Anticonvulsants are medications used to control (prevent) seizures (convulsions) or stop an ongoing series of seizures.

(04) Assisted vaginal delivery: Occasionally the strength of labour contractions is insufficient to result in a delivery. At those times, women need assistance. That assistance may take various forms: labour-augmenting medication, forceps, or the Ventous (vacuum extractor). Although advanced skill is required to use forceps safely, the manual vacuum extractor (MVE) is relatively simple and safe to use.

(05) Manual removal of placenta: Manual removal of placenta is the process by which a retained placenta is removed. It involves extraction of the placenta manually by a clinician. A retained placenta occurs when the baby is born, but the placenta fails to separate and expel within 30 minutes of the birth of the baby. When a placenta is retained, oxytocin may be administered and controlled cord traction may be attempted to deliver the placenta. However, if the placenta still is not delivered, it must be manually removed.

(06) Removal of retained products after delivery: Removal of retained products after delivery is the process by which the uterus is cleaned of retained products of conception following a miscarriage or abortion. This can be accomplished with a manual vacuum aspirator (MVA) or dilatation & curettage (D&C).

(07) Neonatal resuscitation with bag and mask: Newborn resuscitation includes resuscitation using a self-inflating bag and mask (Ambu bag) and room air.

(08) Caesarean section: This refers to the surgical removal of the newborn through the mother's abdomen. This is the practice if the newborn cannot be vaginally delivered or if there is fetal distress necessitating immediate birth and resuscitation of the newborn.

(09) Blood transfusion: Facilities may store blood, or may collect blood from relatives or others at the time of need. Blood should be tested for HIV, hepatitis B and C, and syphilis, prior to transfusion.

Q4132-4133 Antibiotics for premature rupture of the membranes (PROM)

If the amniotic sac breaks more than 24 hours prior to labor onset, the woman and newborn are at risk for infection. WHO advises providing antibiotics when there is PROM. If the respondent is not certain about whether the practice has been implemented in the past 12 months ask if there is someone else who might know, or somewhere this is recorded so that dates can be checked. This provides an indication of the staff readiness to provide the service.

Q4134-4135 Use of corticosteroids for preterm labour

This service may be provided in antenatal care or in the delivery service area. This service may be provided in antenatal care or in the delivery service area. Refer to Q3222 (06) for an explanation of

using corticosteroids for preterm labour. If the respondent is not certain about whether the practice has been implemented in the past 12 months ask if there is someone else who might know, or somewhere this is recorded so that dates can be checked. This provides an indication of the staff readiness to provide the service.

Q4136 Prevention of mother to child transmission (PMTCT) services in the delivery service area

If a woman's HIV status is not known prior to delivery she should be tested so that the provision of ARVs can be started immediately. Although the test should be carried out prior to delivery, within 24 hours should be acceptable. If the respondent is not certain about whether HIV positive women have delivered in the facility in the past 3 months ask if there is someone else who might know, or somewhere this is recorded so that dates can be checked. This provides an indication of the staff readiness to provide the service.

D. STANDARD PRECAUTIONS FOR INFECTION PREVENTION AND CONTROL FOR DELIVERY

Q4141 Infection control in the delivery service area

Refer to Q3131 for explanations and instructions.

Q4142 Electricity in delivery service area

Check on functional electricity or a functional backup electric source for the delivery room at the time of the survey.

E. EQUIPMENT FOR DELIVERY

Q4151 Equipment and supplies for delivery

The assessed items must be located in the delivery service area or immediately adjacent so that they reasonably could be used for the woman who is delivering.

(01)**Blank partograph**
(02) Delivery bed

(03-04) Gloves: Refer to Q3131 (04). We are looking for sterile and for unsterile, but clean, latex gloves.

(05) Examination light: Refer to Q3121 (08) for instructions.

(06) Delivery pack

(07) Cord clamp

(08) Episiotomy scissors

(09) Scissors or blade to cut cord

(10) Suture material with needle

(11) Needle holder

(12) Manual Vacuum Extractor

(14) Manual vacuum aspirator

(15) Dilation and Curettage (D&C) kit

(16) Speculum

(18) Blood pressure apparatus: Refer to Q3121 (07) for instructions.

(19) Fetal stethoscope: Refer to Q3224 (02) for instructions.

(20) Towel for drying newborn

(21) Infant scale: Refer to Q3121 (03) for instructions.

(23) Incubator

(24) Resuscitation table

(25) Suction pump

(26) Suction catheter for newborn: If the facility describes using intravenous or other types of tubing to fill a gap in availability of infant catheters, this does not count.

(27-28) Suction bulb

(29) Thermometer: Refer to Q3121 (05) for instructions.

(30) Self inflating bag and mask for adult resuscitation: Often referred to as an ambu bag.

(31) Self inflating bag and mask for preterm babies: This is a size '0'.

(32) Self inflating bag and mask for term babies: This is a size '1'.

(33) Functionality of neonatal bag and mask past 3 months: Probe to identify if the neonatal bag and mask has been unavailable for this unit for <u>any reason</u> during the past 3 months.

(34-35) Details on oxygen supply. Refer to Q3122-Q3124 for explanations on the oxygen equipment.

F. DRUGS FOR DELIVERY SERVICES

Q4161-4163: Drug storage in delivery service area

Ask if medicines and commodities for delivery and new-born care are stored in this service site. If no, circle '2' and skip to Section 4.2. If yes, read each of the drugs in Q4163 and observe their availability, whether valid dates of expiration are there, and whether there has been a stock out during the past 3 months.

Oxytocin may be stored in a fridge or a cold box.

SECTION 4.2 POSTNATAL CARE

A. ROUTINE POSTPARTUM CARE

Q4201-4202: Postpartum care

These questions refer to the routine postpartum care prior to a delivered mother and her newborn being sent home.

We are looking for practices that are routinely conducted, and then for evidence in documentation.

Routine monitoring of the newborn: The items listed provide early evidence of illness in the newborn.

(01)**Temperature:** Hypothermia (too low a temperature) and fever are both risk symptoms.

(02)**Respiratory rate**: This provides evidence of problems breathing—which may be more frequent in a premature infant, as well as evidence of pneumonia. Sometimes during the birth, the newborn will have breathed in fluids that can cause illness.

(03) **Jaundice:** The symptom is that the baby skin and eyes have a yellowish color, commonly at 3-7 days after birth. This is a symptom that the liver is not mature enough to perform its function in getting rid of bilirubin (a byproduct of red blood cells). This usually will self-cure in the premature infant, but must be monitored in case it does not. Then interventions are needed.
(04)**Umbilical cord status:** This is being checked for bleeding and for infection.
(05)**Feeding status:** Monitoring if the baby is feeding sufficiently.

Q4203 Routine monitoring of the postpartum woman: The items listed provide early evidence of illness

(01) Blood pressure: Low blood pressure may provide evidence of excessive bleeding, high blood pressure of symptoms from pre-eclampsia.
(02) Temperature: This provides early symptoms of infection or sepsis.
(03) Fundal status: Whether the fundus (the top portion of the uterus) is retracting (it should reduce to where it cannot be palpated through the abdomen) or not—if it does not retract, this may lead to bleeding. There are interventions to aid this. When palpating the fundus if the abdomen is tender this may be an early sign of infection.
(04) Check pads for bleeding: Postpartum women will have some vaginal discharge of blood, mucous, and uterine. Lochia is the term that is used to describe the postpartum vaginal discharge (that may continue for 4-6 weeks). It will rapidly change in color, consistency and amount. If the changes do not occur as expected this is an early symptom for excessive bleeding or infection.

Q4204 Guidelines: Refer to Q3132 for instructions on guidelines and job aids.

(01) Guidelines for routine monitoring of the newborn: These should cover items listed Q4121.
(02)**Records for recording newborn care**: Ask to see any registers or individual patient cards/charts where items to be monitored are specified and place is available for recording results. This is a job aid that reminds service providers of what should be monitored and how frequently.
(03)**Guidelines for care for maternal postpartum care:** These should cover items listed in Q4203. The guidelines should at minimum describe routine postpartum examinations and vital signs to be monitored, but should also describe care for common complications, such as heavy bleeding, fever, pain, engorged breasts

B. POSTPARTUM CARE FOR THE SMALL OR SICK NEWBORN

Q4211: Kangaroo mother care (KMC)

KMC refers to the practice where the premature or underweight newborn is maintained in a skin-to-skin relationship with the mother or another person. This is an effective means for maintaining the at-risk newborn's temperature. The newborn is usually held against the abdomen and chest of the person providing KMC using some sort of cloth or sling. There should be a place where the person providing KMC can lie down.

There should be a register to document provision of KMC. Accept the response of the respondent, but if they are uncertain, ask to see a register.

Q4212 Provision of KMC in the past 3 months: This provides information on the actual experience of staff with KMC,

Q4213 Job aids or guidelines for KMC: Refer to Q3132 for instructions on guidelines and job aids.

These would explain which infants should benefit from KMC, exactly how KMC should be carried out, and guidelines for KMC participant education and infant monitoring.

Register for KMC: An example of a register for KMC shows a few key weights (birth, weight at time started on KMC; weight when left KMC program). The register is important for monitoring the newborns who are identified for KMC and outcomes (discharged alive or died). Other information

that might be in a register, or in a newborn patient care are information on temperature and feeding. This can be considered a job aid.

Q4214 Trained staff: Refer to instructions for Q2139.

Q4215-4219: New-born sepsis

We are looking for practices where the newborn with sepsis is provided a pre-referral parental dose of antibiotic (usually gentamicin) prior to referral, or is treated onsite. In this case we are referring to identification of newborn sepsis in the inpatient or delivery service area. This question is also asked in the outpatient service area for infants brought from outside.

Q4216 Management of newborn sepsis: If the delivery or inpatient postpartum care service areas provide any services for newborn sepsis clarify if the service is immediate referral, or if pre-referral drugs are routinely provided, or if the full treatment and follow-up is provided on an outpatient basis. If the patient is referred to a newborn/neonatal intensive care unit, still clarify if this is with or without pre-referral drugs. Continue the questions because we want to know the guidance and training staff in the delivery service/postpartum care area with regards to identifying and managing newborn sepsis.

Q4217 Guidelines and job aids related to newborn sepsis: Refer to Q3132 for instructions on guidelines and job aids. Ask to see any materials where identification of newborn sepsis and the expected action by the provider is described. These might be a part of National Delivery Service Guidelines.

Q4218 Cases of newborn sepsis: This provides information on the actual experience of staff with newborn sepsis. Ask staff the best location to find this information (e.g., the postnatal care ward, newborn ward, or neonatal intensive care) Usually staff will remember, but if uncertain, skim through the relevant register for diagnosis or reason for referral out.

Q4219 Training for service providers: Refer to instructions for Q2139.

C. REVIEWS FOR QUALITY OF DELIVERY SERVICES

Q4221 Maternal death reviews

Officially, a maternal death is defined as a woman who dies during pregnancy or within 6 weeks of giving birth. Maternal deaths that occur after going home, even when the mother comes to the facility later, are often not identified as maternal deaths. Maternal death reviews should follow a specific process for investigation and reporting. There should also be persons trained in the death reviews who are responsible for leading the investigations. We are looking for the consistency with which the maternal death reviews are conducted.

Q4222: Neonatal death reviews

A neonatal death includes perinatal deaths and deaths in the infant through 30 days postpartum.

Q4223 Perinatal deaths

A perinatal death is a death that occurs with the fetus (stillbirth) to 7 days postpartum.

Q4224 Delivery register

The delivery register usually will have columns for identifying the mode of birth (normal vaginal), the maternal and newborn status immediately post-delivery, and birthweight. The register will also often have columns where interventions and complications are recorded, including reasons for referrals.

Q4225 Service site conditions

SECTION 4.3 SURGERY

Q4300 Surgical procedures

Explain that you want to know about a few specific minor and major surgical procedures that might be provided in the facility. This includes procedures that may require local anesthetic, as well as those that may require general anesthetic.

A. SURGICAL PROCEDURES

Ask to speak with the person most familiar with the surgical procedures available for patients in this facility. These procedures may be offered as inpatient or as outpatient procedures. For each procedure, clarify if it is offered only for outpatients, only for inpatients, or for both out and inpatients.

Q4301 Specific surgical procedures

(01) **Tubal ligation:** Female sterilization. A procedure that closes the fallopian tubes and stops an egg from travelling to the uterus from the ovary. It also prevents sperm from reaching the fallopian tube to fertilize an egg. In a tubal ligation, fallopian tubes are cut, burned, or blocked with rings, bands, or clips.
(02) **Vasectomy:** Male sterilization. A minor surgical procedure wherein the vasa deferential of a man is severed and then tied or sealed in a manner such to prevent sperm from entering the seminal stream.
(03) **Voluntary male medical circumcision:** Removing the foreskin (small flap of skin that covers the top of the penis). This procedure is recommended as a way to reduce transmission of HIV virus during sex.

Obstetric/Gynaecologic procedures

(04) **Dilation and curettage or vacuum aspiration** for evacuation of uterus: Dilation and curettage (D&C) refers to manually dilating the opening of the uterus and physically scraping the inside of the uterus to remove the lining of the uterus or retained placenta. Vacuum aspiration is similar to a D&C except rather than physically scraping the inside of the uterus a vacuum suction is used to remove the lining of the uterus or retained placenta.
(05) **Episiotomy, cervical and vaginal laceration repair**: An episiotomy is a deliberate cutting of the perineum (area below the vagina) to facilitate birth and minimize uncontrolled tearing. It requires sutures to repair. If there are cervical and vaginal lacerations during birth they frequently require sutures to repair.
(06) **Caesarean section (C-section):** This is a surgical removal of the infant from the uterus through the lower abdomen. It is a common practice for prolonged or obstructed labor or where there are complications that make a lengthy labor dangerous to the mother or the baby.

D. HUMAN RESOURCES FOR CAESAREAN SECTION

Q4311-4312 Staff for caesarean section

Onsite staff means that the staff remain physically on the premises. On call staff means that the person is required to remain available within a short distance so that they can be called (either phone, radio, or messenger) to come to the facility for an emergency. Usually they need to be able to reach the facility within 30 minutes or less.

Staff who can perform caesarean section are usually medical doctors, but may be lower level training in particularly isolated areas.

Anesthetists are usually doctors or nurses, but may be other qualification for providing emergency anesthetic services.

Q4313 Trained staff for Comprehensive Emergency Obstetric [and Newborn] Care (CEmOC /CEmONC)

CEmONC refers to basic emergency obstetric [and newborn] care (BEmOC/BEmONC) signal functions (assisted delivery, manual removal of the placenta, use of parental antibiotics, use of parental oxytocics, use of parental anti-convulsives, newborn resuscitation) as well as use of blood transfusions and caesarean section.

Training includes providing guidance for when procedures, including blood transfusion or surgery, should be considered, as well as how to provide emergency interventions such as management of postpartum hemorrhage.

Essential lifesaving skills include procedures that are a part of basic essential obstetric care such as newborn as well as adult resuscitation.

Refer to Q2139 for information on staff training. Ask if any staff who provide emergency obstetric care have received training in any of these topics during the past 2 years. If the respondent is not certain ask if there is someone to all who might know. If guidelines are available, ask to see the guidelines. Guidelines need to be in the service area or in immediate proximity.

Q4314-4315 Guidelines and job aids

Refer to Q3132 for instructions on guidelines and job aids.

MODULE 5 BLOOD TRANSFUSION, DIAGNOSTICS, AND PHARMACY

SECTION 5.1: BLOOD TRANSFUSION

Blood transfusion services consist of the transfer of blood taken from one person into the circulation of another to restore blood volume, increase haemoglobin levels, or combat shock. We are asking about any blood transfusion services, whether the facility has a blood bank, whether it receives blood and stores it for use, or whether it performs transfusions by collecting blood for transfusion at the time of need. If the respondent says that blood transfusion services are offered ask to go to where blood is stored and ask to speak with the person most familiar with blood transfusion services. If blood is not routinely stored, ask to speak with the person most familiar with blood transfusion services. If there is not a specific person, ask to speak with the person who is most familiar with the blood supply used for blood transfusion. Read the statement of information about the survey and the consent of the in-charge to your respondent.

Q5100: Eligibility for blood transfusion service questions

This is a screening question for eligibility for collecting information on blood transfusion service.

Q5102 Interruptions in availability of blood for transfusion

We are referring to the inability to perform blood transfusion of any type for any reason to a patient in need during the past 3 months.

Q5103: Blood from national or regional blood centre or bank

A national or regional blood bank is coordinated by the national blood transfusion service which is concerned with blood donor recruitment and the collection, testing, processing, storage and distribution of blood and blood products, and the clinical use of blood and surveillance of adverse transfusion events. A blood bank is a place where blood is collected from donors, typed, tested for

transmissible diseases, separated into components, stored, and prepared for transfusion to recipients. A blood bank may be a separate free-standing facility or part of a larger laboratory in a hospital. If a facility receives blood from national or regional centers or banks it is more likely to have a regular supply of safe blood than otherwise.

Q5104: Blood from sources other than national or regional blood banks or centres

This refers to all sources, including if the facility collects blood from donors (e.g., family) at the time it is needed. Sources other than national or regional blood banks or centres potentially is not as safe as that from national or regional centers if their quality controls are not strong. This may require a facility to put stronger quality controls in place.

Q5104a-5105: Blood screening for infectious diseases prior to transfusion

Ask if the blood used for transfusion is screened for infectious diseases at the facility. If the facility only receives screened blood as is often the case if all the blood comes from a national/regional blood bank, or if the facility does not screen blood, circle '1' and skip to question 4107.

Blood screened for specific infectious diseases

It is imperative that blood transfusion services have effective screening systems to detect, segregate, and remove reactive blood donations and all components derived from these donations from the quarantined useable stock. Only non-reactive blood and blood components should be released for clinical or manufacturing use. Ask for each infectious disease listed and probe for whether blood is always, sometimes but not always (e.g., at least ½ the time), rarely (meaning less than ½ the time) or never tested for the diseases

(01) HIV: Screening for HIV should include HIV-1 and HIV-2 screening for either a combination of HIV antigen-antibody or HIV antibodies.

(02) Syphilis: Screening for syphilis involves screening for specific treponemal antibodies.

(03) Hepatitis B: Screening for Hepatitis B involves screening for hepatitis B surface antigen.

(04) Hepatitis C: Screening for Hepatitis C involves screening for either a combination of HCV antigen-antibody or another type of antibody.

Q5106a: Blood storage systems

Ask if the facility has a refrigerator that is used for storing blood. If yes, ask to see the refrigerator used for storing blood. There may be more than 1 refrigerator where blood is stored prior to transfusion, for example, drug refrigerators in service areas where clients have orders for blood transfusion. We are looking for the main blood storage refrigerator such as that in a blood bank.

Availability and functioning of refrigerator and thermometer: Record if each item is observed, and if it is functioning.

Temperature chart: Record the temperature at the time of the visit.

Q5107: Guidelines for appropriate use of blood and safe transfusion practices

Guidelines including safe transfusion procedure, testing information for infectious disease, testing information for blood type, and protocol on when blood transfusion in appropriate. If guidelines are available, ask to see the guidelines.

Q5108: Staff for blood transfusion

Dedicated staff for blood transfusion services: This refers to a staff member who may be full-time or may be part-time but always called if blood transfusion is to be performed. A dedicated staff member implies that there will be someone with more expertise than others with the assumption of better quality control.

Q5109: Staff trained in appropriate use of blood and safe transfusion practices: Refer to Q2139 for information on staff training. Ask if any of the staff has received training safe blood transfusion procedures in the last two years. Record the verbal answer of the respondent.

Q5110, 5117: Record for blood transfusion

At minimum the record should indicate the name, age, and sex of the patient, how much blood was transfused, and the date. If there is a record, ask to see it.

SECTION 5.2: LABORATORY ORGANIZATION AND SYSTEMS

Laboratory diagnostic services include the collection of specimens, laboratory tests, and rapid diagnostic tests. Ask if the facility collects specimens either for testing in the facility or for sending elsewhere for testing, or if the facility conducts any laboratory testing. This includes rapid tests, using dipsticks, as well as sophisticated laboratory diagnostics. If the respondent says that laboratory diagnostic testing services are offered ask to go to the main area where laboratory diagnostic services are available and ask to speak with the person most familiar with the laboratory diagnostic services.

Q5200 Laboratory diagnostic services offered

This is a screening question for eligibility for collecting information on laboratory diagnostic services. The settings for laboratory diagnostics can vary widely. They may be provided in a small service site, or in a sophisticated laboratory. Be sure to probe for the availability of any testing, including rapid tests and dipsticks and for collection of specimens to send elsewhere for laboratory diagnostic testing. If there are never any diagnostic tests of specimens or if specimens are never collected and sent elsewhere for testing, skip to section 6.

A. LABORATORY RECORDS AND DOCUMENTS

Q5201 Computer for laboratory

This refers to a computer used solely for laboratory purposes such as storing information on tests and test results.

Q5202 Documentation of specimens received and results sent

All specimens that are received, whether collected by the laboratory, another service site within the facility, or received from outside the facility, should be logged in to show they were received. The specimen should also have an associated data element that shows the results were provided to the client or provider (or site that sent the specimen). We are looking for a written or computer record that notes, at minimum, every specimen received with the name of the patient, the type of specimen, the date, and the test results. The records are usually (but not always) maintained separately by test or department (e.g. hematology) and source (inpatient or other).

Verify if the system is used for all specimens or only for specific types of specimens.

Q5203-5204 Guidelines, protocols, standard operating procedures

Refer to Q3132 for instructions on guidelines and job aids.

These guidelines and standard operating procedures may be in one document or in multiple documents, or in job aids.

Section 5.3 Laboratory equipment and tests

A. RAPID TESTS

Q5301 Availability of rapid tests

Most of the rapid tests for blood use pinprick blood and they can be conducted by minimally trained persons. If the test is not performed in the area that you are assessing, but is performed elsewhere in the facility, write a note and go to verify the test availability after finishing questions in this service area.

Q5302 (01-01b) Supply of malaria rapid tests

Ask about stock outs of the malaria rapid test kits. If the respondent is not certain, ask to see stock records to or find another person who might know.

Q5303 Pack cell volume (PCV)

This is a test for hematocrit, which is a measure for anemia. Pinprick blood is drawn into small capillary tubes, and then put in a centrifuge where it spins to separate the red blood cells from plasma.

Q5304-5305 Glucometer for blood glucose

Q5306 Widal blood test for typhoid

This is a blood test where a blood specimen is mixed with a serum with typhoid antibodies in a test tube for a reaction.

Q5307 Screening question for eligibility for further questions about laboratory tests

If the facility provides <u>any</u> other diagnostic tests using patient specimens or if the facility collects the specimen for any other type of diagnostic test and sends it elsewhere for testing, proceed to the next question.

B. MULTIPURPOSE LABORATORY EQUIPMENT

This section is assessing the availability of equipment that is not test-specific, but rather is frequently used for a variety of tests. For each item listed, probe for whether it is '1', available and functional; '2' available but not functional, '3', the item is available but the respondent is uncertain if it is functional, or '4' not available.

Note: You are not expected to know all equipment. We provide some pictures to help you but we are relying on the laboratory respondent to accurately show you the equipment and items in question.

Q5311: Multipurpose equipment

(01) Light microscope

(02-03) Glass slides and cover slips

(09) Centrifuge for plasma and urine

(10) Test tubes

(12) Incubator

(13) Agar plates for culture

(14) Autoclave or dry heat sterilizer: Refer to Q2143 (01-03). In the laboratory, this is to sterilize equipment for reuse or to decontaminate items prior to disposal.

(15) Ice box and packs: Refer to Q3308 (04). Similar to those used for vaccines, these are used to transport specimens that require refrigeration.

(16-17) Vortex mixer; Rocker/shaker

Q5312 Laboratory staff

Q5312: Microscopist: A laboratory scientist is a professional who can identify a variety of pathogenic diseases using microscope.

Q5313: Malaria slides: This may be a laboratory scientist or may be a technician or other staff member who has specifically been trained to prepare and read malaria slides.

Q5314: TB sputum slides: This may be a laboratory scientist or may be a technician or other staff member who has specifically been trained to prepare and read TB sputum slides.

C. OTHER DIAGNOSTIC TESTS

The following diagnostic tests refer to tests other than rapid tests captured in Q. 5301.

For each of the following pieces of equipment and diagnostic test, ask first:

Col (a): Is the test available either onsite or by sending a specimen offsite and receiving the results back? If yes, record if the test is '1', conducted in this facility (onsite) or '2' if a specimen is sent offsite for testing, or '3' if the test is not available from this facility either onsite or offsite.

Col (b): If the test is available onsite probe to know if the item in question, or all items for the test specified are available. Record if you observe the item, if the item is reported available but is not seem, or if it is not available today.

Col (c): Where applicable, confirm if the item is functional or not. You can accept the response of your respondent.

Many of the blood analysis tests performed by the more sophisticated machines need reagents specific to the item being measured. These are consumable commodities, requiring continuous resupply. Stock outs can prevent the test from being available.

Note: You are not expected to know all of these tests and all of these equipment and reagents. We provide some pictures to help you, but we are relying on the laboratory respondent to accurately show you the equipment and items in question.

01 Blood test for red and white cells

White blood cells provide evidence of infection or the ability to fight infection. A differential describes different types of white blood cells. These are affected differently in the presence of certain illnesses or infections.

Red blood cells provide information on the ability of the body to move iron and oxygen through the system.

The full blood count provides information on both white and red cells.

Anemia is a insufficient level of iron in the blood and is measured by hematocrit or hemoglobin. Hemoglobin is a protein in red blood cells that carries oxygen. Hematocrit measures the volume of red blood cells in relation to the total blood volume.

There are a variety of sizes and types of equipment available for measuring different aspects of blood cells. Ask if the equipment can perform the specific test listed in the questionnaire.

(11) Hemotology analyzer

(17) Hemoglobinometer

02 Blood chemistry tests

These tests can be conducted by biochemistry analyzer machines that may test a limited number of blood chemistry elements, or a complex variety of blood chemistry elements. You must ask for each of the below items whether each of the blood chemistry elements can be measured by the blood chemistry machines used in this laboratory.

There are assay kits specific to different blood chemistry elements. These may test one or two elements and rely on comparing specimens against standards, or color changing for the reading. The assay kits provide the reagents and other materials for conducting the test.

Specific blood chemistries measured:

Liver (hepatic) function tests (LFTs)

Liver function tests are a collection of blood tests that measure the amount of liver enzymes, such as ALT, AST, ALP, GST, and LDH, in a sample to determine if the liver is damaged, usually from hepatitis, alcohol, or other diseases.

ALT: An ALT test measures the amount of alanine aminotransferase, an enzyme usually found in the liver, in blood to detect liver damage.

Specific assay kit(s) for liver (hepatic) function tests (LFTs): Materials for blood test to measure liver disease or damage, including testing for PT/INR, aPTT, albumin, bilirubin, and enzymes produced by the organ in response to damage. Includes other enzymes, reagents, stain and/or dye, and binding antibodies or antigens. Any assay kit for any LFT is acceptable.

Renal (kidney) function

Renal function tests are a collection of blood and urine tests that measures the excretory function of the kidney for to determine if the kidney is functioning normally. Blood tests for renal function include measuring creatinine, blood urea nitrogen (BUN), glomerular filtration rate (GFR) and creatinine clearance rate (CrCl) Urine tests for renal function include *urine osmolality and protein tests.*

Serum creatinine: A creatinine test measures the amount of creatinine, a substance which is used in skeletal muscle contraction, in a blood sample to determine kidney function.

Other renal (kidney) tests (e.g., blood urea nitrogen—BUN)

Specific assay kit-serum electrolytes: Materials for test to measure amount of different molecules which can carry an electric charge in the blood, including sodium, potassium, and calcium. Kit includes macroduct tubing and/or gauze, pilocarpine, electrodes, enzymes, reagents, and stain and/or dye. Any assay kit for any serum electrolytes are acceptable. The assay kits may come in a box or a package.

Blood chemistry analyzer

HIV blood tests other than rapid test

ELISA washer and reader

Specific assay kit- HIV antibody testing by ELISA: Materials for blood test to identify if HIV is present in a sample and the amount of HIV (viral load) present. Includes enzymes, reagents, stain and/or dye, and binding antibodies or antigens specific for HIV.

Molecular biological techniques for HIV viral load or HIV early infant diagnosis

Assay specific automated system

CD4 count (absolute and percentage)

Specific assay kit- CD4: Materials for blood test to measure the amount of CD4 immunity cells in a sample. Includes other enzymes, reagents, stain and/or dye, and binding antibodies or antigens specific to CD4 cells.

Syphilis blood tests other than rapid test

Syphilis blood tests are used for diagnosing syphilis, a sexually transmitted infection. They determine whether antibodies against syphilis and/or the pathogen *Treponema pallidum*, exist in the bloodstream.

Specific assay kit- syphilis serology (VDRL OR RPR): Materials for blood test to detect syphilis and identify the severity of the infection. Includes enzymes, reagents, stain and/or dye, and binding antibodies or antigens specific to syphilis bacteria.

Blood grouping and serology testing

Blood grouping will tell the type of blood a person has.

ABO blood grouping testing: A blood test to check for the presence of A, B, or both antigens in the blood.

Rhesus blood grouping testing: A blood test to check for the presence of the Rh antigen in the red blood cells, very important for pregnancy. The RH factor is an inherited trait. It refers to a protein on the surface of red blood cells that may cause a life-threatening reaction for women who are RH negative if their infant is RH positive. This can be prevented if detected before the mother and baby blood mix.

Cross-match testing by direct agglutination: Compatibility testing used to give an indication of blood group compatibility between blood donor and recipient, and to check for irregularities in the recipient's blood serum. Cross-matching is a test performed after blood typing, tests for both Rh and AB antigens, and is used to find a donor that the recipient's body will accept. There are several types of cross-match testing. Ask if cross match testing by DIRECT AGGLUTINATION is provided.

Cross-match testing by indirect anti-globulin or equivalent: Compatibility testing used to give an indication of blood group compatibility between blood donor and recipient, and to check for irregularities in the recipient's blood serum. Cross-matching is a test performed after blood typing, tests for both Rh and AB antigens, and is used to find a donor that the recipient's body will accept. There are several types of cross-match testing. Ask if cross match testing by INDIRECT ANTI-GLOBULIN or equivalent is provided. If this service is provided, ask if the test is performed onsite or offsite.

Grouping sera: Serum specific to each blood type used to determine blood types from a sample.

Tuberculosis (TB) diagnostic testing

Ziehl-Neelson testing for TB: Ziehl- Neelsen test, also called fast acid staining, uses microscopy and staining to examine sputum samples for the bacteria that causes TB. If this service is provided, ask if the test is performed onsite or offsite.

Ziehl-Neelson stain: The Ziehl–Neelsen stain, also known as the acid-fast stain, is a special bacteriological stain used to identify acid-fast organisms, mainly Mycobacteria, and including Mycobacterium tuberculosis, the most important of this group as it is responsible for Tuberculosis.

Auramine Rhodamine stain for fluorescent microscopy

Xpert MTB/RIF rapid diagnostic testing for TB: The Xpert test also provides information on the TB resistance to rifampicin, a critical 1st line drug for treatment of TB.

Hepatitis diagnosis

We are looking for hepatitis diagnosis using enzyme-linked immunosorbent assay **(**ELISA/EIA). An ELISA test is a blood test that detects the presence of specific antibodies or antigens. It requires a reader, and specific assay kits for different types of hepatitis (e.g., B or C)

General microscopy

General microscopy uses a light microscope to view samples mounted on a slide. This method allows for a sample to be viewed at a cellular level and is usually used for diagnosis.

Wet mount: Feces and vaginal smears are common wet mount examinations. Used frequently to identify bacteria and parasites (e.g., chlamydia).

Urine microscopy: Used to identify bacteria.

Malaria smears

Malaria smear tests are blood tests used to diagnose malaria by staining a blood sample and using microscopy to detect parasites.

Wright-Giemsa stain or other acceptable malarial stain: Wright-Giemsa stain is a modified stain using a combination of Wright's stain and Giemsa's stain in order to detect parasites, fungi, viral inclusion bodies, and other organisms in blood smears. Look for the presence of this stain or any other acceptable malaria stain such as Field Stain A or Field Stain B.

Gram stain testing

An empirical method of distinguishing bacterial species into two groups (Gram-positive or gram-negative) based on their chemical properties. Gram staining requires a microscope, slides, and covers for slides.

Stains for gram stain testing: A stain used to identify the physical and chemical properties of bacteria by being absorbed into the call wall of bacteria. There are a variety of types of stains used for gram staining. They include a stain (e.g., crystal violet), counterstain (e.g., safanin), an iodine and postassum iodid solution (Gram's iodine solution), and a decolorizer (e.g., ethyl alcohol or acetone)

Culture and sensitivity

Culture and sensitivity refers to growing a culture of a bacteria and then placing small test papers with different antibiotics on them. This will show which antibiotics the bacteria respond to (the bacteria will die around the effective test paper). This requires a media to grow the bacteria, a culture media, an incubator, and antibiotic test papers.

Media for antimicrobial sensitivity testing: The most common media is plastic plates filled with agar (agar plates) where the item being tested is spread and then grown in an incubator.

Testing for drug resistant tuberculosis

Drug resistance is a growing problem. If the laboratory sends the sputum specimen outside for testing for drug resistance, there should be a register where the specimen is logged out when sent, and the result is logged in, as well as indicating that the result was sent to the provider. In order to test for drug resistance to INH and rifampicin (two of the main first-line TB drugs) the laboratory must have small discs that are placed on a culture plate where the specimen is grown. If the specimen is resistant to the drug on the disc, there will be no reaction.

D. LABORATORY QUALITY CONTROL

Q5331-5334 External quality assessment for laboratory tests

Ask if the laboratory uses any systems for external quality control for any of the tests conducted in the facility. Common external methods for quality control include external supervisors observing methods or re-checking results, sending a sample of specimens (following a specific sampling procedures such as sending every 10th specimen) to an outside laboratory for verification of results, or proficiency panels. Proficiency panels are test samples from outside that the facility is to read. The results are already known so this provides evidence of lab staff capacity. Routine means that the external quality control is carried out according to a set time or number of specimens. There is not a standard time-gap or number of specimens that constitution "routine", but the respondent should be able to provide you the routine schedule for this facility.

E. LABORATORY SERVICE SITE CONDITIONS

Q5341 Service site conditions

Refer to Q3712 for explanations and instructions.

SECTION 5.4 PHARMACEUTICAL COMMODITY MANAGEMENT AND AVAILABILITY

Q5400 There may be several stores for pharmaceuticals.

- A distributing pharmacy refers to a store for pharmaceuticals that usually has high turnover of stock since this is where service areas and often clients picking up prescriptions collect medicines they need.
- There may be two types of distributing pharmacies, one for facility use and one where outpatients or discharged patients pick up prescribed medicines prior to leaving the facility.
- There may also be a smaller, emergency pharmacy that functions 24-hours for emergency needs.
- There may also be different stores for different commodities depending on how services are organized and to meet any donor/supplier accountability demands.
- And finally, some facilities will have separate pharmacy stores for inpatient and for outpatient service needs.

Ask to speak with the person most familiar with pharmacy practices and commodities.

Ask if the facility has any central location where pharmaceutical commodities for outpatients are stored prior to being distribute to client service areas or to patients. If commodities being assessed are not available in the main outpatient service area and there is another location where the commodities can be accessed for outpatients if needed, you can go there to assess availability.

In some facilities family planning commodities and medicines for tuberculosis and antiretroviral medicines are stored outside the main pharmacy. If family planning and TB commodities are stored in the service site, these will be assessed when those services are assessed, and you will skip these questions in the pharmacy section.

Read the statement of information about the survey and the consent of the in-charge to your respondent.

B. PHARMACEUTICAL COMMODITY AVAILABILITY

To start off, do not get overwhelmed by the long list of medicines. The pharmacy respondent will be familiar with the medicines and will be able to show them to you.

Q5400-5401 Eligibility for pharmacy commodity assessment

This is a screening question for eligibility to complete this section of the questionnaire.

Q5402 Availability of pharmaceuticals for common outpatient needs

Commodities are organized by the conditions they are used for. If a commodity is not in the outpatient pharmacy, ask if the pharmacy can access this item from another pharmacy in the facility if needed. This may be applicable in hospitals. If yes, go to that location to assess availability.

Col (a) Availability of at least one valid item

Ask the respondent to show you the main storage area for medicines. Read through the list of medicines one by one and **OBSERVE** whether they are present. Whenever a particular medicine is reported as being stocked, ask to see it. When you do, indicate if at least one item in stock is valid and of the appropriate dosage. If no dosage is specified any dosage/formulation is acceptable. If the

item is observed available, please note if at least one is valid or if the medicine is available but not valid. If the item is not observed, please note if the item is reported available but not seen, not available today, or never available.

Do not go to service or patient care units to check the availability of these items. We are already capturing items that may be stored in specialty units such as family planning, tuberculosis, or delivery services.

Col (b) Stock outs

For selected items please ask the respondent if there has been any stock out of the item during the past 3 months. Stock out is defined as there is not even one of the item available. If the respondent is not certain, ask to check stock records. If the item is not in this main store, there is a stock-out even if the item may be present in patient or service units.

Q5402a: Anti-infectives: These are antibiotics and antiparasitic medicines.

Q5403a: Respiratory: These are drugs primarily used for asthma or other breathing problems.

Q5404a: Cardio-vascular: These are drugs for angina (chest pain due to poor blood flow to the heart), high blood pressure (hypertension).

Q5405a: Diabetes: These medicines are used to control blood sugar in diabetics and treat emergency cases of low blood sugar (hypoglycaemia).

Q5406a: Other non-communicable illnesses: These medicines are multipurpose for a variety of medical conditions.

Q5407: Mental health/neurological: These include medicines for treating depression, anxiety and other psychological conditions.

Q5408: Maternal/neonatal: These are drugs that are essentially only used for maternal/newborn care. Other relevant maternal/neonatal drugs are included in the list under "other non-communicable illnesses" since they are multipurpose.

> **Oxytocin** should be stored in a fridge or in a cold box. Sometimes oxytocin is kept on a tray for easy access, with the bulk in a fridge, sometimes when out of the fridge the oxytocin for easy access is kept in a coldbox, and sometimes the oxytocin is not refrigerated. There are some forms of oxytocin that do not require refrigeration.

5409: Intravenous solutions: Normal saline (0.9% NS), Dextrose 5% and Normal Saline (D5NS), and Ringers lactate are used when there is a need to increase blood volume such as when a patient is in shock. Dextrose 5% water (D5W) is used to infuse other medicines.

Q5410 Malaria treatment

(01-04) Check for each formulation of the artemether lumefrantrine (Coartem). If the respondent is uncertain about days of stock out, ask to see the stock records. A stock out means that there was none of the commodity available.

(04)**Fansidar/SP:** This is the most common drug used for IPTp during pregnancy.

(05-13) There may be specific conditions under which some of these drugs will be used, and for some we want to know if they are still available in stock even though they are not commonly recommended for use.

(14-15) Insecticide treated bednets (ITNs) or vouchers: If these are maintained in another storage area (including in ANC or the immunization service areas) go there to see at least one ITN in stock.

Q5412-5414 Availability of medicines for tuberculosis (TB)

In some facilities the main storage area for TB medicines is in the TB service area. If this is the case, you will skip this section because the information will be collected when the TB services are assessed.

Ask for each formulation.

(14) Streptomycin is commonly a 2nd line treatment drug

(15) National first-line drug resistant treatment regimen: If the facility treats drug resistant TB, ask to see the drugs that are part of the 1st line treatment for drug resistant TB.

Q5415-5418 Time from ordering to receiving first line treatment drugs: If the respondent is not certain, ask to see the order form and receipt and try to calculate the most correct response.

Availability of antiretroviral (ARV) medicines and protease inhibitors

In some facilities the main storage area for ARVs may be in the ARV service area or there may be a separate store for special accountability and control. If this is the case, you must go to that storage area to assess ARV medicine availability.

Q5419-5420 Family planning commodities

In some facilities the main storage area for family planning commodities is in the family planning service area. If this is the case, you will skip this section because the information will be collected when the family planning services are assessed.

Q5421 Other consumable commodities

Ask where each consumable commodity listed is stored and go there to assess availability. The main storage site for the items may be in the pharmacy or may be in another location. You must go to the site.

SECTION 5.5 PHARMACEUTICAL STORAGE CONDITIONS

Q5500-5507 Storage conditions for main pharmacy area(s)

Look around the main area(s) where the assessed drugs were stored, including the TB and ARV drugs and mark the response that best reflects the situation you found. If some medicines are in a cabinet, and some are in a room, or if there are multiple rooms for the main drug storage area mark the weakest infrastructure situation that existed. Example: If medicines are on shelves in one part of the storage area but some are in boxes directly on the floor in other areas, mark '2'.

(01) **Off the floor:** If medicines are in boxes on the floor and not on pallets or shelves, the response is "NO". Even if a new shipment has just arrived and not yet been put away, the boxes should be stored on wooden pallets or some other method used to keep the boxes off the floor.

(02) **Protected from water:** Look around the ceiling and areas where the floor and walls connect. Respond "YES" if you see fresh water stains on the walls or ceiling, pools of water, or holes/cracks in the roof. If water stains are dry and the respondent can confirm that these are old and no longer leak, you may accept their word and consider that "dry".

(03) **Protected from direct sunlight:** Respond "NO" if there are openings in the room where the sun can penetrate and shine directly on the medicines. Indirect sunlight, that provides lighting for the room but cannot directly shine on supplies is acceptable.

(04) **Clean of pests/rodents:** Pests include cockroaches, and rodents include rats and bats. Respond "NO" if there is evidence of feces or urine, holes in boxes caused by pests/rodents, or partially consumed products.

Thermometer and room temperature

If there is a thermometer or thermostat in the room, ask to see it and record the room temperature at the time of the survey. If there are multiple rooms and there is only one thermometer this is

acceptable. If there are multiple rooms and multiple thermometers, record the results for the main storage area where general antibiotics are stored. The temperature should be monitored at least once daily, with a written (or computerized) record that the monitoring took place.

Q5504 Security of the main pharmaceutical storage area

This question applies to the main pharmaceutical areas assessed for this module. If there are several different rooms, record the response that reflects the weakest condition observed or reported.

(01) **Ability to lock storage area:** When assessing pharmaceuticals in different rooms, ask the respondent if the room can be locked. We are referring to locking to prevent external access, not necessarily locking of doors within the drug storage areas.

(02) Limited access: The main drug storage area(s) should have access limited so that only authorized persons can enter. This may be accomplished by a counter separating the pharmacy from clients, by a locked door, or any other method. If drugs are stored in a room where other activities are going on and the medicines are easily accessible by all persons entering the area, there is no limited access.

(03) Solid doors between pharmaceutical storage areas and non-pharmaceutical storage areas: Observe if the doors are solid enough that they could not be kicked in or forcibly broken by a person.

(04) Secure windows: Observe if all external windows connecting the pharmacy storage area with non-pharmacy storage areas have bars or shutters so that they can be securely closed and a person could not break in without serious force.

Q5505-5507 Monitoring adverse drug reactions

Sometimes adverse or side effects of drugs are not fully known, as they may react differently in different types of patients, or they may not occur until someone has taken the medicine for an extended period of time, or in a specific dose. Facilities are to complete official reports on adverse drug reactions that are identified. These may be anything from rash or minor symptoms to major conditions affecting blood counts or breathing. Monitoring this type of information is referred to as “pharmacovigilance” and it supplements the information that is collected during drug testing.

SECTION 6 HEALTH MANAGEMENT INFORMATION SYSTEM

We are interested in service statistics for some of the most common services. For each type of information, indicate where the number comes from. In most cases, this should be the monthly report. Where available, the line number in the report is indicated.

Indicators for quality or coverage

Quality indicators are indicators for which data are routinely collected and results over time are monitored for improvement. Outpatient services often monitor preventive service coverage such as immunization rates, deliveries by skilled providers, using population-based figures and service statistics. Other quality indicators such as infection rates, caesarean section rates, maternal mortality rates, and perinatal mortality rates are often monitored by facilities with inpatient or delivery services. There should be a systematic process for annual (at minimum) reporting on and reviewing the quality indicators and reports should be submitted to managers. Common indicators used by outpatient services are listed in the question. Probe for other indicators.

Coverage indicators require analyzing services against a denominator—this is usually either an estimate of eligible patients or a target.

These refer to numbers that may or may not be provided in a context of targets or eligible population.

Monthly summary statistics

Information that is reported in the monthly summary form and into the DHIS2.

Cross check information in monthly report with source data

You will now need to review source data for compiled monthly reports on the outpatient services listed. We want to be able to compare the numbers that you independently count from the source data with the numbers that are on the reports compiled by the facility. You must compile the information using the exact same dates as those used for the monthly compiled reports.

This will require first ascertaining where the source data are kept, and then going to each register or record and physically adding the numbers for the appropriate time period. In most cases, monthly reports are compiled from service registers that are kept in the service area. Your respondent should be able to show you the source data. When you arrive in a specific service area for source data explain what you are doing and probe for whether other source data feed into the compiled report.

Bring the numbers from compiled reports with you when verifying the numbers. If you do not reach exactly the same number, ask the staff member to help you identify whether the difference is an error (e.g., mathematic or transcribing error), or if there is an explanation that will result in the numbers reconciling. Sometimes you will find that different dates are being used, or the source data includes some other record and that you can reconcile the numbers.

PART 2 OBSERVATION OF THE SICK CHILD

A. Eligibility

Discuss with the most knowledgeable person in the outpatient area the best way to identify eligible patients for observation. This is often the nurse in charge.

For the sick child we're looking for

- children who are sick (e.g., diarrhea, fever, respiratory problems) or who have non-specific symptoms (lethargy, loss of appetite)
- FIRST VISIT (New attendance)/ FOLLOW UP
  The first visit for an episode of illness can also be referred to as new attendance for that case.
  For example: Type of Attendance: patient is classified as "New" or first visit if the patient is attending the OPD for the first time on the episode of presenting complaints and classified as "Follow up" for a follow up patient on the same episode of presenting complaint.

- We do not want to observe consultations for skin infections or injuries

B. Method for identifying observed patient who also should be interviewed on exit

This may be a colored piece of paper, a token, or something that makes

C. Observation

Observe using the checklist. Where counseling or eliciting information is the data item, if information is shared about the item listed, circle it, even if you feel the information was not accurate or not complete.

Note: We are not assessing the accuracy of information or examinations, simply whether the information was shared or whether the examination took place. Observers should be advised to write a note if they observe something they think is wrong, but not to say anything. If by chance they think something wrong is a danger to the patient, they should say something to the in-charge—not in front of the patient and not to the provider.

If the patient is sent for a laboratory test or to the pharmacy to pick up drugs, and they are to return to this provider, let the provider know that the observer wants to observe this interaction as well.

Prior to the patient and caretaker leaving the area, request that they return when their tests and/or pharmacy visits are completed so that the caretaker can be interviewed.

SPECIFIC INSTRUCTIONS

Cover sheet:

001-002: See 1001 and 1002 in the facility audit.

Dates of survey: See instructions for cover sheet for facility audit

002 Date of observation and observer identification number

003 Provider and caretaker permission

004 Provider category

Ask the service provider who you are observing their qualification and write the code number in the box on the right that best reflects the qualification.

005 Sex of provider

Record the sex of the provide.

006 Provider serial number

Copy the serial number for the observed staff member from the staff listing. You may need to write the name in pencil so that you can check the serial number later.

Write the name and the assigned code of the data collector who is collecting the observation information.

007 Informed consent

Read the consent form to the provider and take the signature where the provider agrees to be observed. You only need to take the consent once for observation of services of a provider.

Read the consent form to the client/caretaker of the sick child and take the signature showing that the client/caretaker agrees for the consultation to be observed.

Give the provider and the client/caretaker a copy of their consent form.

008 Patient number:

Give each observed client a sequential number. Make sure that this number is the same as that used for the exit interview of the caretaker of the sick child.

009 Time observation started

Use a 24-hour clock to record the time the observation starts.

101 First observation

Record if this is the first observation of this provider by any of the data collectors.

102 Sex of the sick child

103 Wash hands

Observe the provider between patients and note if the hands are washed or hand disinfectant used between each client. If you do not see whether the hands were washed or not, circle '98'

105 Client history

Listen to the information shared between the provider and the caretaker. For each main symptom (fever, cough, diarrhea, vomiting, loss of appetite, convulsions) for which information is shared indicate if the main symptom was positive (e.g., there was fever reported) or not. If the item is not mentioned, circle '8'. The questions following the main symptom where there is a response for positive or negative, will usually only be asked if the symptom was positive, but this may vary.

Following each main symptom are a series of quantifying symptoms for which information may or may not have been shared. Circle the associated letter for each quantifying symptom that is mentioned, regardless of whether the finding is positive or negative.

106 History of this illness

Circle the associated response for each item of the history for this illness, indicating if the result was positive, negative, or if the information was not.

Circle '8' if no information is shared about

(01) Whether the child previously sought services for the same symptoms
(02) Whether the child is currently being treated for any conditions—even if it is not associated with the problem that brought the child to the clinic today.
(03) Whether the child is currently on any medicines.

107 Risk History

We want to know if information was shared that would indicate that the client/child might be at high risk for TB or for HIV infection and then, if the information was positive or negative. If no information is shared that provides the information about risk related to these elements, circle '8'.

108 Physical measures and examinations

Circle '1' if you observe the measure being taken for the specific observed child. Circle '2' if you observe that the measure is routinely being taken for all sick children prior to the consultation. Circle '3' if the measure is not taken or you did not observe—that is you cannot reasonably state that the measure was taken. You need to note if (03) counting the respiratory rate actually takes 60 seconds, or if the respiratory rate is counted for less time (e.g., 15 or 30 seconds). If needed, at the end of the consultation, clarify if this measure was recorded and if yes, for how long the measure was counted.

109 Assessment of need for preventive interventions

We are interested in whether the provider assessed routine preventive issues for intervention. These would include problems with feeding, whether the child received preventive vitamin A, whether the child needs an immunization, whether the child received routine deworming medicine, and whether the child sleeps under an insecticide treated bednet (ITN) for preventing malaria.

Circle '1' if the item was discussed, regardless of whether the response was positive or negative.

110 Prescribed oral medicine

Circle the correct response for the information about oral medicines.

111 Information shared with caretaker about illness

Record if the caretaker was told what the illness of the child is, if a follow-up visit was mentioned, and if visual aids were used during any of the consultation.

112 Use of the child's individual health card

Record if the provider reviewed the health card or immunization card in order to identify information from earlier interactions and services received from the health sector. Record if the provider writes on the health card, providing information that others can use for history and follow up during subsequent visits.

113 End of initial observation

At this time, if the patient and caretaker are completely finished and leaving the facility, ask the caretaker to participate in the exit interview mentioned when obtaining consent for the observation, and send the caretaker to the data collector who is conducting exit interview with a small paper that has the client ID number written on it. This will be entered into the Exit Interview form. You should write the first name of the child on the paper as well to help ensure that the exit interview and observation are properly linked.

If the caretaker is going elsewhere in the facility, such as the laboratory or pharmacy, give them the data card and ask them to give this to the person providing services in other parts of the facility (laboratory or pharmacy) and then to take it with them to give to the observer if they are returning to talk with the provider, or to the data collector conducting the exit interview, if they are leaving without returning to the consultation area.

Stress the request that they ensure the services are written on the card and that the card is returned to the observer or exit interviewer.

113: Outcome of consultation

Complete this section when the child is no longer returning to the consultation area. At this point you can ask the provider about the different outcomes if you are not certain. Circle the associated letter for all outcomes that apply. There may be more than one.

201-203: Diagnosis and treatment

Now we want to know from the provider, the diagnosis and treatment provided. After the caretaker has left, briefly discuss with the provider which (if any) diagnostic tests were ordered, and whether the provider received the results, and if yes, what the results were. Do not share any information you may have from the exit interview.

DO NOT READ ANY RESPONSES, BUT RATHER, PROBE "WERE THERE ANY OTHER [TESTS OR DRUGS OF THIS TYPE OR DIAGNOSES]. DO NOT SHOW ANY APPROVAL OR DISAGREEMENT WITH WHAT THE PROVIDER REPORTS, EXCEPT TO CLARIFY IF YOU DO NOT UNDERSTAND THE RESPONSE. YOU ARE SIMPLY TO RECORD WHAT THE PROVIDER REPORTS, NOT TO ASSESS IF THIS WAS CORRECT OR NOT.

Probe to identify all diagnoses the provider has made for the child.

If you must leave to collect data elsewhere prior to the patient returning to the consultation area with test results or pharmacy items, or the results from diagnostic tests, ask the provider to keep the observed patient chart/card aside so that you can return to review the document if this facility maintains the charts. When you return, check to see if diagnostic test results are recorded. If the patient is leaving with their card/chart, the exit interviewer should be collecting this information from the cards as part of the exit interview.

204: Additional information

01: Clarify if this is a first or follow-up visit for the child. We want the visits to be first visits, but it is possible that errors in identifying these occur.

02: Immunization: Check if the provider referred the child for vaccination (or provided a vaccination), and if not, why not.

PART 3 EXIT INTERVIEW

The exit interview should take about 10 minutes. When getting permission for the observation mention the exit interview and ask the caretaker to participate. The child observation number and first name will be put on a card and the first name penciled on the observation questionnaire. Prior to leaving the consultation area give the card to the caretaker and urge them to return for the interview prior to leaving the consultation area.

As a team you will figure out the best way to elicit cooperation and identify the caretaker for the exit interview. Depending on how the facility is organized, you will find the best place for the interviewer to be placed, that is convenient for the caretaker to find, and that provides some privacy and a place to sit.

Exit interview we will be looking at any laboratory tests that are written on a child card maintained by the caretaker, and for any medicines that the caretaker has received, so it is important that the exit interview be conducted AFTER the caretaker and child are finished at the pharmacy and laboratory.

100a-100b Cover sheet

Record the name and facility identification number.

Record the date of the exit interview.

Informed consent

100c Obtain the informed consent and signature for the exit interview.

Ask the caretaker for the data card if they went to the laboratory or pharmacy or any other site in the facility for services. **Do not** use the results from the data card to complete your interview.

100d Time exit interview started

Record the time using a 24-hour day

Information on services received

Reason for visit

Record the number that best represents the reason for the visit today.

1-3 Visits to this facility

Record if the child has ever used any services from this facility previously, and, if yes, if the child has received services for the current illness prior to this visit.

4-5 Sex and age of child

If the birthdate is known, the age can be calculated. Use the calculated age to double check with the caretaker that the birth date is correct.

If the caretaker is not certain of the age and did not know the birthdate, help them to estimate, based on key events (e.g., an election, a bad storm) that occurred at around the time you estimate the child was born. Work with the caretaker to make the best estimate of the age that is possible. Record complete months only.

6-11 Characteristics of the caretaker

12-13 Time and distance to facility

Probe to help the respondent provide the best estimate if uncertain.

14-15 Travel means and cost

If multiple transportation modes were used, select the main one. Provide the sum of all costs related to transportation.

16-17 Waiting time

Do not count time waited prior to the facility opening. If the caretaker is uncertain, help them to estimate.

18-19 Time and cost for consultation

This refers to the time with the main service provider who assessed the child, diagnosed, and prescribed. The cost refers to the cost for seeing the main service provider.

20-21 Laboratory tests and cost

Laboratory diagnostic tests

Be sure to record any diagnostic tests that were performed or prescribed but not performed. If the test was performed, check any documentation the caretaker has that provides the result. If the result is not known by the caretaker and is not recorded, circle '98' for 'don't know'.

22-23 Drugs prescribed or received

Drug prescriptions

Ask if any medicines were dispensed by the facility or if some prescriptions were not dispensed in the facility. Check to see all prescriptions that remain with the patient and any drugs received. Ask

why some drugs were not received if the caretaker has not received some of the prescribed medicines.

24 Total cost at the facility

Include money that was spent for any reason related to the services. These may be official or unofficial payments. Do not include money spent for food or drinks.

25 Source of funds for visit to facility

26-27 Insurance or third-party payer

These refer to costs that the patient/caretaker will not pay out of pocket. Either the facility will be reimbursed for costs associated with the visit, or the patient/caretaker will be reimbursed later.

30-31 Reason this facility was used

Do not provide any of these answers. If the caretaker cannot think of a reason, or mentions more than one reason, probe for one most important reason. Do not provide any examples that may lead the caretaker to one or another response.

32-53 Opinion of the facility and services received

Read each question in a neutral manner, without indicating your own opinion of the issue. Probe for whether the respondent agrees or disagrees with the statement, and if yes if they feel strongly, or not strongly about that opinion

54-58 Household socio-economic status

Probe to help the respondent provide the most accurate response for each item.

PART 4: RECORD REVIEWS

A. GENERAL INSTRUCTIONS

1. Information to determine methodology:

- Check if individual patient charts/cards for the service are maintained at the facility. This is required for a **retrospective record review**. If yes, identify where the sampling list can be identified, for retrospective record review. This is usually a register or a computer database.
- If individual patient records are not maintained at the facility, your sample will be an **opportunistic sample** of patients who seek services on the day of the visit. This most often will apply to antenatal care (ANC) and general outpatient curative care (OPD) services.

1a. Retrospective record review:

- Source data for sampling list: On arrival to each service site, identify the different registers and record that are maintained where the information for that service might be recorded.
- Eligible patients can usually be identified from a service register, but may be a computer database. There must be some database where eligible patients can be identified in order to conduct the retrospective record reviews. Identify which is the most appropriate *register or database* for developing the sampling list.
  - Issues with registers: Some registers record detailed information on services provided. Others record only a few key items. Make sure that the source you are using to develop the sampling list is up-to-date for the items required to identify eligible patients.
  - If the register/database is only partially complete, check with the staff to see if there is a better place for identifying eligible patients.
  - If the only source is an incomplete register/database, go ahead and use this, but make a note to explain that the sample was biased toward those patients whose information was recorded.
- Identifying eligible patients from the source data for sampling list
  - Counting backwards from the end of the most recent month where eligible clients will be identified, identify eligible clients (2 times the desired sample). List these clients on the patient sampling listing form by writing their patient identification number (col b), the date of service (col c), and the first and last name (col d and e). Do not go back further than 6 months
  - Toss a coin to determine a starting point for sample selection. One side will mean you start with number 1 on the list and one side you start with number 2. Then select every other patient for the sample. On the patient sampling list indicate in col a if the patient was selected for sample by writing "S'. If the patient card cannot be found, you will replace the patient with the next person on the sampling list, and record 'R' in column a. In column 'f' record the reason the selected sample person was dropped from the sample.
- Complete the Patient Sampling List form. Reassure staff that no patient names will leave the facility and that the list will be torn up once the record review is complete.
- Ask the staff to pull the patient cards for the selected sample patients and begin the record review for each sampled patient using the register(s), the patient cards, and any other recorded information (e.g. lab or pharmacy records).

1b. Opportunistic sample from today's patients

- Ideally staff from the service will identify patients who are seeking services and who meet the eligibility criteria. Discuss with them the best way to meet with these patients just before they leave the facility. This may vary by the service being assessed.
- OPD patients: Ideally the data collector would sit outside the consultation area and after a caretaker/patient has returned with laboratory results and is ready to depart, the record can be reviewed. When the patient first leaves the consultation area for the laboratory or pharmacy, the data collector should ask them to return so that their card can be reviewed. If exit interviews are being conducted, the exit interview and card review will be conducted at the same time. The service staff should be able to help develop the most feasible system for ensuring that eligible cases are identified and are captured for record review.
  - In some cases, it may be more feasible to identify eligible cases at the pharmacy (assuming almost all patients receive prescriptions of some type and this is usually the last place that patients go prior to going home.
  - This sample would be biased because patients who are referred (for admission or specialist services) or who do not receive a prescription will not be identified.
- Antenatal care patients: Eligible patients are readily identified by the ANC staff and record reviews usually can be completed in the ANC service area.

2. Organizing the work:

a. Go to where the services in question are provided and ask to see registers or databases that will provide the sampling frame for drawing a sample of eligible patients.
b. Identify all eligible patients as per the instructions for the specific service, then draw the sample as per the specific service.
    a. You should identify twice the number of eligible patients as you will need for the agreed upon sample. For most services these will be identified sequentially starting with the month of data agreed upon. Service specific selection methods are identified under the detailed instructions
    b. If an individual patient record cannot be found, select the next eligible from the patient listing as a replacement.
c. Complete the patient sampling list. The unique patient identifier, patient name, and date of service provision for the sample selections should be recorded on a separate piece of paper to allow tracking of the same patient across different records. This should be destroyed at the end of the exercise.

3. Data sources

SUMMARY REGISTER: A summary register may list patients as they arrive for visits or may provide space to follow the same patient through multiple visits. It is usually the source record for reporting service statistics and often has preprinted columns to support uniform data collection for specific items.

INDIVIDUAL PATIENT CHARTS/RECORDS: Identify where the records are maintained and ask the staff to bring the individual patient records where information on the sample women is recorded. Find a place to sit with the register and individual patient records/cards.

Listing eligible patients: Use the patient listing form and list all patients identified following the eligibility criteria and service specific patient selection instructions.

4. Fact sheet

Q001 Enter the Facility Number

Q001a: Inclusion criteria: Options will vary by service.

001b: This response is for paper-based data collection where the sample is more than 5. Indicate if this is page 1 or page 2 of data collection for this particular sample. If it is page 2 you do not need to complete the information from 001-the first column of the service specific information for this will be the same as for page 1. If the sample is not greater than 5, this item can be deleted.

Q002-Q005: Complete the information in the face sheet using an assigned code where applicable.

Q006: Refer to instructions for Q1002 for recording visit dates and final visit information.

5. Complete service specific questions

Ask the staff to help if you do not understand the abbreviations that are used. There are often abbreviations for symptoms, types of diagnostic tests, and medicines

Q9012 COLUMN B-F: Each column represents one sample patient. Complete each column for one woman before moving to the next column. Circle the appropriate response for each item for each woman. IF NORESPONSE IS CIRCLED THE INTERPRETATION IS THAT THE DATA COLLECTOR DID NOT CHECK FOR THE INFORMATION.

If the response is not clear or not observed if observation is required, probe for whether the item is recorded elsewhere (such as in the laboratory) and if so, go to where the record is and collect the information for the sample patient, tracking them by their patient ID number.

The observed information may be recorded in any routine register, database, or the individual patient chart/card.

A. SERVICE SPECIFIC INSTRUCTIONS FOR RECORD REVIEWS

B1. DETAILED INSTRUCTIONS FOR COMPLETING THE ANC/IPT/PMTCT HTS RECORD REVIEW FORMS

See general instructions for completing face sheet and column a for service specific information.

Q9000 If the facility provides any ANC services in the last 6 months, continue with the questionnaire. If not, stop and go to next record to be reviewed.

Q9011_01a-01c Record the monthly ANC total attendants for each month used to identify a number of eligible patients that is twice the desired sample size. In this case the **sample will be 5 records, so list 10 eligible patients in the patient listing form using the following criteria.**

Eligibility of patients: ANC patients who were 32 or more weeks pregnant during the most recent visit. The start date for identifying eligible patients will depend on how women are entered into an ANC database.

- Cohort: if women are entered by cohort (listed in the month of their last menstrual period (LMP) the first month where eligible women might be identified will be 8 months prior to the day of the survey.
- Sequential: if women are listed sequentially by date of first visit, start from the end of the most recent month for which a monthly summary report has been completed.

Q9011_02a-02c Record the number of eligible patients who were identified within the first month where eligible patients can be found. If needed take the next earlier month, etc. until the desired number of eligible patients is reached. **Do not go back further than 6 months.**

Q9011_03 Record the systematic sampling interval. This will be '2' in most cases.

Q9011_04 Record the random starting number for beginning sample selection (if applicable)

Q9011_05 After record review is completed record the number of the original selected sample that were replaced because information for record review was not available.

Q9011a Record the time record review began.

COMPLETE Q9012 column b-f, with each column representing one sample woman. Most of this information will be in the woman's individual ANC card/chart, but often a register has a column for this information as well. The ANC service providers will know where this information is routinely recorded.

Q9012B_01 Observe a recorded blood pressure for the most recent visit.

Q9012B_02 Observe a recorded blood test measure for anemia (hemoglobin or hematocrit) for the most recent visit.

Q9012_03 Observe a note that describes paleness, anaemia, or uses Plus signs (+) to indicate degree of anemia (+ being less severe and +++being very severe)

Q9012B_04 Observe a recorded syphilis blood test result.

Q9012B_ 05 Count the number of ANC visits for the patient, including the most recent visit. Record the number the most recent visit represents.

Q9012C IPTp

IPTp: this refers to intermittent preventive therapy in pregnancy for malaria. If the facility does not offer IPTp, then skip to section D.

Q9012C_ (01-03) Review the records and indicate how many doses of the IPT drug had been received as of the most recent visit. The most common IPTp drug is Sulfadoxine/pyrimethamine (fansidar) tablet. If a patient is HIV positive and on cotrim preventive treatment, then they are not eligible for IPT.

Q9012C_ 04 Check the dates and indicate the gestational age at the time the woman received her first IPT dose.

Q9012C_ 05 Check if there is any indication the woman received an ITN or voucher. There is often an ITN register where this information is recorded. Ask the staff if this information is recorded in another location, such as the store or pharmacy, and not in the ANC client records.

Q9012D PMTCT:

Check with the staff if you do not find the indicated information to make sure there is not another location or another type of document where the information is recorded

Q9012D_01 Check if there is any note indicating the woman was referred for or received an HIV test at any time during her pregnancy. If there is a note indicating that the woman was known to be HIV positive prior to her first ANC visit, mark this response and skip to (06).

Q9012D_02 Check for any note that indicates the patient received the results of their HIV test. This might be a checked column, an indication that a negative woman was informed/had a second test during 3rd trimester, any notes showing the woman was enrolled in ART. An indication the patient did not receive the results would be that there is no follow up after the test—usually the woman did not return.

Q9012D_03 Mark the appropriate response and follow the indicated skips. If there is no HIV test result recorded, skip to item 12. *Non-reactive* or *NR* is often the note to indicate HIV negative results. *Positive, +,* or *reactive* is a common note to indicate a positive result.

Q9012D_04 HIV negative women who are tested prior to 32 weeks pregnancy are advised to have a 2nd HIV test during the 3rd trimester to ensure they did not contract HIV during pregnancy. The data collectors should count the weeks between when the HIV test was conducted and the most recent visit. If this is 12 weeks or more, they are eligible for another HIV test.

Q9012D_05 Check if a second HIV test is recorded.

Q9012D_06-07 This refers to ART (for life). Whether a woman actually followed through on a referral may or may not be recorded in the PMTCT register. You may have to trace the same patient to the ART clinic, or look for *documentation* that indicates there was follow up and the woman's status is known. If there is a record showing the woman was an ART client prior to ANC, this should be recorded. *The ANC sample will likely not include many HIV positive ANC women.*

Q9012D_08-10 Pregnancy in HIV positive women is an absolute indication for ART. ART should be initiated in all HIV pregnant and breast-feeding women regardless of gestational age, WHO clinical stage and at any CD4+ cell count and continued for life. ART should be initiated urgently in all pregnant and breastfeeding women, even if they are identified late in pregnancy or postpartum. This is the most effective way to prevent MTCT of HIV through the reduction of maternal viral load. Same day initiation of ART is preferred except in patients with AHD.

Q9012D_11 Ask if the woman started ART after delivery.

Q9012D_12 Cotrim preventive therapy (CPY): This is to prevent opportunistic respiratory infections. CPT is a routine protocol in some countries.

9012D_13 The partner of the woman should be encouraged to be tested at least once, and the test result recorded.

Q9012E This section provides information to help with analysis.

Q9012E_01 Record the gestational age the most recent visit

Q9012E_02 Record the gestational age the first ANC visit. If the gestational age at first visit is not recorded mark '98'.

Q9012E_03 Record the age of the woman at the time of the most recent visit

Q9012E_04 Circle the letter for all types of different records that were used to collect the information in the table. Describe any other documents that were used.

In Nigeria there is an ANC register, a PMTCT register, and individual patient charts that will provide most of the information.

Q9013 Record the time this section was completed.

Q9014 Write a note to explain if time included simply waiting for the provider to be available to help. If the provider is actively looking for records, this is not considered "waiting" time- this is included in the time required to complete the task. Write any notes that will help us to understand issues that may arise in accurately identifying this information in other facilities or issues that arose in this facility.

B2. PMTCT: DETAILED INSTRUCTIONS FOR COMPLETING THE RECORD REVIEW FORMS FOR HIV POSITIVE ANC PATIENTS

See general instructions for completing face sheet and column a for service specific information.

Q9000: If the facility provides any ANC continue with the questionnaire. If not, stop and go to next record review section.

Q9020 If the facility provides any PMTCT services with ANC continue with the questionnaire. If not, stop and go to next data collection assignment.

Q9021 Indicate the data source that was used to identify eligible women.

Selecting eligible patients: Eligibility: Women who attended ANC and were HIV + who should have delivered around 8 weeks or more prior to the day of the survey. For most this will be 8 weeks prior to the estimated Expected Date of Delivery (EDD). This allows assessment of compliance with ART drug pick up as well as newborn testing and follow up

It is preferable to identify the women from the ANC or the PMTCT register where both HIV positive and negative results are recorded. If the sample is selected only from women who were enrolled in ART, the results will be biased against finding women who might not have accepted referral and treatment.

How you identify eligible women will depend on how ANC women are recorded in the register. If it is a cohort listing, go back to the full month that is 11 months from today and begin listing women who are HIV + who should have delivered. If it is a sequential listing, go back to the full month that is 3 months prior to today and identify women who should have delivered at least 8 weeks prior.

Q9021_01 a) List the total number of ANC patients who were tested for HIV during the 11^{th,} 12th and 13th months prior to the day of the survey, depending on whether 1,2 or 3+ months were required to complete the eligible listing.

Q9021_02 Whether the ANC clients are listed sequentially or by cohort, record how many are identified in 1 month, 2 months, or if 3 or more months are required to identify the women a number of eligible patients that is twice the desired sample size. In this case the sample will be 5 records, so **list 10 eligible patients in the patient listing form who should have delivered at least 8 weeks prior.**

Q9021_03 Record the systematic sampling interval. This will be '2' in most cases.

Q9021_04 Record the random starting number for beginning sample selection (if applicable)

Q9021_05 Indicate how many of the original sample charts had to be replaced because the client record could not be found and the type of information being collected was not recorded in a register.

Q9021a: Record the time the work began

Complete Q9022 col b-f (see following instructions)

The information for PMTCT may be located in a variety of places including

- ANC, Delivery, PMTCT, ART registers, Laboratory and/or Pharmacy records.
- Individual patient record – general, ANC specific, PMTCT specific, ART specific—the same patient may have different numbers for each chart/record. Probe to understand the information needed to track the same patient and the newborn.

- Newborn patient record or register separate from the mother—but you will need to link the mother and the newborn.

Q9022_01 Mark if the patient individual card/chart is available for review

Q9022_02-9022_03 Ask staff to explain the system for linking the mother and the baby and circle the correct response. Sometimes the mother-baby records will be together, and sometimes the baby will have a different record. Sometimes the mother/baby numbers can be linked, and sometimes they cannot. The staff can show you how their system works to allow linking a mother with her infant, if the system allows this.

Q9022_04 There should be two positive HIV tests recorded prior to the woman receiving ART.

Q9022A **PMTCT during pregnancy**. Refer to ANC record review Q9012_06-Q9012_12.

Q9022B **PMTCT during delivery:** The following questions refer to PMTCT during delivery and immediately postpartum. If the woman did not deliver in the facility the information may be recorded when she returned for follow-up, or may not be available ("DON'T KNOW").

Q9022B_01 Ask for the staff to help you to find if the woman delivered in the facility or not. If there is no systematic way to trace the ANC HIV positive woman to find if she delivered in the facility or not, then mark "DON'T KNOW".

Q9022B_02 There should be some record that the individual patient card/chart that the woman received ARV during delivery. If she was on ART, the response is "YES".

Q9022B_03-04 Ask for any evidence that the newborn received ARV prophylaxis (usually nevirapine) and, if yes, how soon after birth. Sometimes the dose is given during prior to leaving the facility after birth, sometimes during the first postnatal care visit, and where home deliveries are expected, sometimes the dose is given to the mother to provide after delivery.

Q9022C **Postpartum PMTCT:** These questions refer to the postpartum follow up for the baby of the HIV positive mother.

Q9022C_01 It is common practice to draw the blood sample from the baby at postnatal care, and to send it to a higher-level facility for actual processing. There is often a separate register "blood spot book" that shows the sample was drawn and sent.

Q9022C_02 Check if the date the blood was drawn is 6-8 weeks after birth.

Q9022C_03 Look for any indication that the mother received the result. For HIV positive babies if there is follow up you can assume the mother received results.

Q9022C_04 Record if the result was positive, negative, ore is not recorded.

Q9022C_05-06 Look for any evidence the HIV positive newborn was referred for care and support and evidence that the infant was entered into care and support services.

Q9022C_07-08 Indicate if the infant was started on cotrimoxazole preventive therapy (CPT) within 2 months of birth, longer than 2 months, or if the timing is not known.

Q9022_D **Information on final sample**

Q9022D_01 Circle the letter for all types of different records that were used to collect the information in the table. Describe any other documents that were used.

In Nigeria sources of information will include the ANC register, the PMTCT register, Baby blood test register, and individual patient charts (either mother and baby

together or separate). Information may also be in the delivery service register and ART service registers.

Q9023 Record the time this section was completed.

Q9023a Write a note to explain if time included simply waiting for the provider to be available to help. If the provider is actively looking for records, this is not considered "waiting" time- this is included in the time required to complete the task. Write any notes that will help us to understand issues that may arise in accurately identifying this information in other facilities or issues that arose in this facility. Notes should explain if there is any way the facility follows up on women who do not delivery in the facility. Also, if the staff provide stories about sample patients whose information could not be found, record this in notes so we can better understand if there is a way to calculate PMTCT women who are lost to follow-up.

C2. DETAILED INSTRUCTIONS FOR COMPLETING THE RECORD REVIEW FORMS FOR ANTIRETROVIRAL THERAPY (ART) SERVICES

See general instructions for completing face sheet and column a for service specific information.

Q9220 Indicate if ART services are offered in this facility. If service is not provided,

go to the next record review.

Q9221 Selecting eligible patients: Eligibility: Patients who are in their 6th or more month of antiretroviral therapy (ART) who meet the inclusion criteria adult, child, TB infected, or pregnant. **In this case we are looking for any patient five years and older. If services are in different sites, draw the sample from adults.**

Q9221_01 Record the number of ART patients who were under treatment during the prior completed month.

Q9221_02 Record the number of eligible patients who were identified from the most recent completed, month, and then, if needed, from earlier months. In this case the **sample will be 5** so 10 eligible patients should be identified. **To be eligible the patient must have completed 5 full months of ART.** This is so that the follow up process can be assessed.

Q9221_01a Record the systematic sampling interval. This will be '2' in most cases.

Q9221_01b Record the random starting number for beginning sample selection (if applicable)

Q9221_05 Indicate how many of the original sample charts had to be replaced because the client record could not be found and the type of information being collected was not recorded in a register.

Complete Q9222

Q9222_01 Mark if the patient individual card/chart is available for review

Q9222_02 Record the actual number of full months the patient has been on ART. Do not confuse the start date with the date the patient is identified as "eligible for ART".

Q9222_03-04 Prior to beginning ART, the patient should have another HIV test to confirm the positive status.

Q9222_05 ART should be initiated in all adults, adolescents, pregnant and breastfeeding women, and children with a diagnosis of HIV regardless of WHO clinical stage and

CD4+ cell count. This recommendation maintains that people who test HIV positive will be initiated on ART once they are willing and ready to start ART for life. However, as a priority, health care workers should initiate ART in the following;

- All adults and adolescents with severe or advanced HIV clinical disease (WHO stage 3 or 4)
- All adults and adolescents with HIV and CD4+ cell count of less than 350 cells/mm.
- All HIV positive pregnant and breastfeeding women.
- All HIV positive children older than 5 years of age with severe or advanced disease (WHO stage 3 or 4).
- All HIV positive children older than 5 years of age with CD4+ cell count less than 350 cells/mm
- All HIV positive children less than 2 years of age.
- All HIV positive children less than 5 years of age with CD4+ cell count of less than 750 cells/mm.

In addition, all HIV positive pregnant women are eligible for ART

Q9222_06-08 Ask the service provider to help you to find these laboratory results if necessary.

Q9222_09 There should be a note that indicates the patient is routinely picking up their ARVs or some other note indicating whether the patient is adhering to the ART regimen or not. This is important to know if the patient is not improving. If the viral load is still positive it is important to know if this is an adherence issue or if the patient is showing signs of drug resistance.

Q9222_10-11 Check for timing of CD4 or clinical staging that is recorded.

Q9222_12-13 **Cotrimoxazole prophylaxis for adults**

- Cotrimoxazole (CTX) prophylaxis is recommended for adults (including pregnant women) with severe or advanced HIV clinical disease (WHO stage 3 or 4) and/or with a CD4+ cell count ≤500 cells/mm3 ;.
- Due to the high prevalence of malaria and severe bacterial infections in Nigeria, Cotrimoxazole prophylaxis should be initiated regardless of CD4+ cell count or WHO stage. Priority should be given to adults (including pregnant women) with severe or advanced HIV clinical disease (WHO stage 3 or 4) and/or with a CD4+ cell count <500 cells/mm3.
- Routine cotrimoxazole prophylaxis should be given to all HIV-infected patients with active TB disease regardless of CD4+ cell count.
- Cotrimoxazole prophylaxis may be discontinued in adults (including pregnant women) with HIV who are clinically stable on ART, with evidence of immune recovery and virological suppression.

Q9222_14-16 ART patients have “long” visits, that are for clinical assessment, and “short” visits that are simply to pick up medications. At each long visit these symptoms should be assessed. If the information is not in the patient ART chart, ask if it is routinely assessed elsewhere. In some cases, this may be in the patient OPD card and you may need to find that card.

Q9222_17-19 Check for documentation of an assessment to know whether the patient has been exposed to TB or not, and for documentation of the patient TB status during the most recent long visit. Mark if the record notes the patient TB status.

Q9222_20 If the record shows the patient was referred for TB treatment, track the records that will show that the patient is actually enrolled in TB treatment, or not. This may be in the TB clinic.

Q9222_21-22 Prior to the survey, clarify the national guidelines for eligibility for INH preventive treatment and adapt the response for this item.

"*A diagnosis of **latent tuberculosis** (LTB), also called **latent tuberculosis infection** (LTBI) means a patient is infected with Mycobacterium tuberculosis, but the patient does not have active tuberculosis. Active tuberculosis can be contagious while latent tuberculosis is not, and it is therefore not possible to get TB from someone with latent tuberculosis. The main risk is that approximately 10% of these patients (5% in the first two years after infection and 0.1% per year thereafter) will go on to develop active tuberculosis. This is particularly true, and there is added risk, in particular situations such as medication that suppresses the immune system or advancing age. The identification and treatment of people with latent TB is an important part of controlling this disease. Various treatment regimens are in use to treat latent tuberculosis, which generally need to be taken for several months.*

Following is the IPT eligibility guideline for Nigeria (2010).

Steps to Initiating IPT

4. Verify/Confirm HIV Status.
5. Counsel on TB/HIV interactions.
6. Exclude active TB.

- Ask the patient about Cough, Chest Pain, Fever and Night Sweats.
- Check for Lymph Node enlargement
- Those with above symptoms/signs should not be considered for IPT.
- Do sputum examination
- If smear positive refer/commence short course chemotherapy for TB (DOTS, preferably).
- Those with negative sputum results should be referred to medical officers for confirmation of diagnosis.
- If signs and symptoms absent, do chest X-ray,
- If no active TB confirmed commence IPT.

Check if the status for latent TB and INH preventive treatment is recorded. The patient remains on IPT with the TB status periodically monitored. If active TB is identified, TB treatment should be started and IPT discontinued.

Q9222_23 Record if the ART regimen is in accordance with national standards.

Q9222_24 Identify the various sources of information that were used.

Q9223 Record the time this section was completed.

Q9224 Write a note to explain if time included simply waiting for the provider to be available to help. If the provider is actively looking for records, this is not considered "waiting" time- this is included in the time required to complete the task. Write any notes that will help us to understand issues that may arise in accurately identifying this information in other facilities or issues that arose in this facility.

D1. DETAILED INSTRUCTIONS FOR COMPLETING THE RECORD REVIEW FORMS FOR TUBERCULOSIS (TB) SERVICES

See general instructions for completing face sheet and column a for service specific information.

Q9090 This is a screening question for eligibility for the record review.

For Nigeria, inclusion criteria follow:

- Pulmonary TB patients who:
  - is on 1st line treatment
  - has completed at least 5 full months of treatment or has successfully completed the 1st line treatment.

Go backward in the TB register to identify patients who meet the above criteria

Reviewing records for patients who have been on 1st line treatment for 5 or more months allows us to capture the care process and monitoring that was carried out on the patients.

9091 Types of TB services available in the facility

Which package of TB services the facility provides depends on the country TB Guidelines and the level of the facility.

Q9091_01a and b Record the number of eligible 1st line TB patients who were identified, and how many months of information were required to identify these patients. For Nigeria the sample will be 5 patients, so 10 eligible patients should be identified.

Q9091_02a Record the total number of TB patients who were identified as "cured" during the most recent quarter for which this information is available.

Q9091_02b Record the total number of TB patients who are currently under treatment for TB under any regimen.

Q9091_05 Indicate how many of the original sample charts had to be replaced because the client record could not be found and the type of information being collected was not recorded in a register.

Q9091a Record the time the work began

Complete Q9093 col b-f (see following instructions)

Q9092_b1 Circle 'Y' if the patient individual card/chart is available for review

Q9092_b2 Record the actual number of full months the patient has been on TB. If this is a readmission, count only the months for this new admission regimen.

Q9092_b3-b6 Record the criteria that was the basis for the TB diagnosis.

2. b3_In most cases patient diagnosis is based on 2 positive sputum smears
3. b4_One smear may be used (however this is not recommended)
4. b5_The Xpert MTB/RIF rapid diagnostic test not only provides diagnosis with one blood test, but also will provide evidence of rifampicin drug resistance.
5. b6_A diagnosis on clinical history means that there are not sputum positive or other tests, but the clinician feels the symptoms are indicative of TB. If there is no other basis for the diagnosis, it is a clinical diagnosis.
6. Other criteria for TB diagnosis should be something specific (and a note written to describe what this "other" criteria is).

Q9092_b7 Look for the date of diagnosis, and the date that the patient was first provided drugs, and record the days between diagnosis and start of treatment.

Q9092_b8-b9 All household members of a TB patient should also be tested for TB. This information sometimes is in a separate register where a contact for a specific patient may or may not be traced (Q9093_08) but often whether all household members were tested or not is not specified. Probe to identify any records that will provide this information. If any household members are recorded as contacts mark this for (08). (09) would indicate that all household members are listed as contacts and there are TB sputum reports for all members.

Q909_b10 These are categories of patients classified as at risk for having drug resistant TB. Probe to identify where this information might be recorded for the sample patients.

Q9092_b11-b12 Probe for where information on drug susceptibility testing and results might be recorded. If the patient has an Xpert MTC/RIF test, they were tested for rifampicin drug resistance. If this test was conducted, probe for where the drug resistant results are recorded.

Q9092_b13-b14 These are routine times that a sputum microscopy result should be assessed.

Q9092_b15 This information may not be recorded if the sample patient has not completed their course of treatment. If the patient is not yet in the last month of treatment mark '3' for not eligible.

Q9092_b16-17 Probe for how clinical monitoring is carried out. If this is only conducted monthly or quarterly, check the records for that time period. It is understood that if the patient comes daily for observed ingestion of drugs that clinical monitoring will not happen every day. Probe for the routine (at minimum quarterly) and then probe for where this information is recorded. If the facility reports the information is routinely recorded in an OPD patient card, you should ask for the OPD card to be pulled for review. If the OPD card is only used when the patient goes to the general OPD for sickness (not necessarily related to their TB) then this is not an information source for routine clinical monitoring.

Q9092_b18 This is usually recorded on the patient TB card.

Q9092_b19-b20 the specific treatment regimen should be recorded. 2nd line treatment will usually include streptomycin.

Q9092_b20-b22 Record if the patient HIV test results are recorded, and if they are positive.

Q9092_b23 Mark if there is anything written that documents that the patient was referred for ART or for HIV care and support services.

Q9092_b24 Mark if there is anything written that documents that the patient was actually enrolled in either ART or HIV care and support services for follow up. You may have to go to the HIV care and support service site or the ART service site in the facility to find documentation of this information. If the referral was to another facility probe to make sure there is nowhere else the information might be recorded.

Q9092_b25-26 Record if the patient is eligible and if the patient was started on preventive cotrim treatment. Nigeria specific protocol for preventive cotrim treatment in HIV+ patients is the standard for eligibility. Refer to Q9222 (12-13) for instructions.

Q9093 Mark each data source that provided information for the record review.

Q9094 Record the time this section was completed.

Q9095 Write a note to explain if time included simply waiting for the provider to be available to help. If the provider is actively looking for records, this is not considered

"waiting" time- this is included in the time required to complete the task. Write any notes that will help us to understand issues that may arise in accurately identifying this information in other facilities or issues that arose in this facility.

E1. DETAILED INSTRUCTIONS FOR COMPLETING THE RECORD REVIEW FORMS FOR SUSPECT MALARIA

The WHO quality of malaria care indicators specifies that

- *Any patient (regardless of final diagnosis) who presents with fever should be tested for malaria*
- *If the malaria test is positive, the patient should receive antimalarial drug treatment (ACT)*
- *If the malaria test is negative, regardless of clinical symptoms, the patient should not receive antimalarial treatment, but rather should receive further assessment to find the cause of the fever.*
- *There is evidence that many of the "clinically diagnosed" (that is without confirmatory positive malaria test) cases, in fact, have another diagnosis that is missed because of the immediate determination that fever=malaria.*

See general instructions for completing face sheet and column a for service specific information.

Q9300 Mark if the facility offers outpatient curative care services.

Q9300_01 Inclusion criteria: Indicate which age groups are included in this response sheet.

Q9301 Selecting eligible patients:

For malaria diagnosis and treatment, we will try to divide selection of eligible patients among the most recent 3 months for which summary reports have been completed. This increases the probability of assessing data from a variety of service providers since this ensures at least 3 different ways of curative care provision.

If by chance, most of the patients were assessed by one provider, this most likely implies that this is the provider actually providing the services to the most patients.

INSTRUCTION: Starting at a random spot in the outpatient register for each of the past 3 months, select the first 4 patients who meet the criteria for suspect malaria.

- Presenting symptoms or diagnosis of: malaria, fever, prescription of an antimalarial or a malaria test. Even if a patient diagnosis is not malaria, if they had a presenting symptom of fever, then they are eligible.
- **Select a total of 12 eligible cases, regardless of age.** Spread the sample such that the selection is not skewed towards a particular age group.

In order to identify 12 eligible patients, you can go back additional months, up to six months prior to the survey date. Do not select more than 4 eligible patients from any one month.

(01)Record the total number of months reviewed to identify 12 eligible patients.
(02)Calculate the sampling interval
(03)The random starting number should be recorded.
(04)Note the number of original samples replaced

COMPLETE Q9314 b-f (see following instructions)

Q9302_A01 Mark if the patient card/chart has any physical examinations results noted. Recorded findings from physical examination should be findings from physically assessing the patient (e.g., measuring temperature or assessing by feel, listening to

heart or lungs), physically checking for dehydration, measuring weight, physically assessing anemia, diagnostic test results, etc.). This is different from a *symptom* which may be a self-perceived condition.

Q9302_A02 The normal temperature is 36-37c

Q9302_B01 Symptoms may or may not be supported by physical findings. Symptoms are most often self/caretaker reported perceptions (e.g. patient response to questions about history of the symptoms, history of care seeking, whether the patient is eating/drinking or not, patient reported symptoms such as “I feel hot”, I'm having trouble breathing” etc.).

Q9302_B2 A positive symptom for anemia may be a provider finding that the patient is pale, mucosa is pale.

Q9302_B03 Tiredness, fatigue, lethargy are symptoms associated with illness, and the degree may indicate the severity of illness. A child who is running around and playing is usually not seriously ill, even if having symptoms of illness. A patient with the same symptoms, but with fatigue and lethargy, is likely to be more seriously ill.

Q9302_B04 A positive symptom for fever may be reported as fever, hot body, feels hot, etc.

D MALARIA ASSESSMENT

Q9302_D01-D02 All patients with fever in endemic malaria areas should have a blood test for malaria. The type of blood test should be specified

Q9302_D03-D04 The results should be recorded. Positive results should be treated with an ACT. Negative results should not be treated with an antimalarial, but rather, another cause of the fever/symptoms should be assessed. It may be necessary to go to the laboratory to check the laboratory test register to find the results. The patient identifier and date of service will be needed for this.

Q9302_D05 Clinical diagnosis of malaria means that despite no blood parasite test, or a negative blood parasite test, the provider has decided to treat the child for malaria. WHO is discouraging this practice.

Q9302_D06-D09 If any antimalarial is prescribed, the type should be recorded. ACTs often come in blister packs that are different colors. For example, “blue” has three 25 mg tablets—one for each of 3 days for the treatment. This is usually for children 2-11 months of age. “Yellow” has 6 25 mg tablets—two per day for three days. This is usually for children 12-59 months of age. Check how the providers record the prescriptions so that you can correctly note if they prescribed according to protocol or not.

Common names of other antimalarial should be identified by the survey managers and provided to the data collectors.

Q9302_D10 Record the total number of drugs that are recorded as prescribed for the patient.

F. ADDITIONAL DIAGNOSES OTHER THAN MALARIA

Q93102_G01 Commonly patients who are sick have multiple illnesses, and the symptoms of malaria are also symptoms for other illnesses.

Q9302_G02 Often the symptom of fever accompanies a respiratory illness.

Record the time this section was completed.

Write a note to explain if time included simply waiting for the provider to be available to help. If the provider is actively looking for records, this is not considered

"waiting" time- this is included in the time required to complete the task. Write any notes that will help us to understand issues that may arise in accurately identifying this information in other facilities or issues that arose in this facility.

DETAILS FOR PROVIDER INTERVIEW [VIGNETTE]

Sample selection:

1. **Interviews for all case studies (a-i) and the IMCI knowledge questionnaire:**

   - To randomly select eligible service providers, go to the staff list and count the number of staff for whom col 8=1 and col 9=1. These are eligible providers. Divide the number by 2— this is your sampling interval. Then toss a coin with one side=#1 and other side=#2. This is your random starting place. Starting from the 1st or 2nd eligible (based on the coin toss) person, select the 1st person selected by the sampling interval.

   E.g., Assume:
   - 4 eligible providers of outpatient consultation. Divide by 2:
   - Sampling interval is 2.
   - Coin toss indicates the random starting point is the 1st person on the list.
   - Count 2 (the sampling interval) from the random starting point.
   - Person #3 and person #1 will be your randomly selected providers for interview.

- If a randomly selected health worker is not available to participate/refuses to participate select another health worker either randomly or opportunistically.
- If you interview an observed health worker, conduct the provider interview only after all observations are completed.

2. **Interviews for maternity service providers**

   - In the ANC service area, using the same process during the site visit, randomly select 1 service provider to complete case study H, I and knowledge questionnaire for PMTCT.

   - In the delivery service area using the same process during the site visit, randomly select 1 service provider to complete case study H, I and knowledge questionnaire for PMTCT.

Vignette Administration Procedure

Questionnaire Administration Procedure

Case Simulation

The basic idea:

- The Type 2 Enumerator (the Case Study Patient) pretends to be a patient. He has a very specific illness. He tells the Clinician his main symptom(s) in response to questions asked by the Clinician.
- The Clinician makes a diagnosis and treats the Case Study Patient, as far as possible just like he would do with real patients.
- The Type 1 Enumerator (the Observer) observes what the Clinician does during the "consultation". The observer also records the responses appropriately in the questionnaire and also takes notes.

General Instructions to enumerators

i. The vignette enumerator (type 1enumerator/observer) is responsible for administering the case simulation to the randomly selected health workers but with the support of the data collector (type 2 enumerator).
ii. The type 2 enumerator pretends to be a patient. He has very specific illness. He tells the clinician his main symptom(s) in response to questions asked by the clinician.
iii. The clinician makes a diagnosis and treats the case study patient, as far as possible just like he would do with real patient.
iv. The vignette enumerator (type 1 enumerator) will act as the observer who is expected to have clinical knowledge. He/she observes what the clinician does during the 'consultation' and records the responses appropriately in the tablet and also take notes.

Instructions to the Case Study Patient (Enumerator Type 2):

- You will act as 2-3 different patients suffering from 7+2 different illnesses.
- You shall hold a paper printout of the case simulations that will help you to respond to the clinician correctly (You should NOT hold on to your tablet during case simulations)
- Please, carefully study what you are suffering from (see information in survey instrument about how to respond to questions asked by the clinician).
- **Give the answers only as they are written**.
- Use your judgment for questions for which there are no answers. **The basic rule is that unless it is specifically stated here, all other signs and symptoms should be normal.**
- For questions requesting information other than symptoms e.g. residence, history of travel, use of mosquito nets, **please answer no or to the best of your judgment without providing a response that leads the clinician.**
- **Responses outside of what was written should be treated as NORMAL.**

Instructions to the Observer (Enumerator Type 1):

- Case simulation is your responsibility and you will have the full complement of the case simulations questions on your tablet.
- It is your responsibility to make sure that the Clinician understands what to do.
- It is your responsibility to make the Clinician relax and – as far as possible – make the Clinician behave like s/he would with normal patients. Do NOT give any impression of wanting to make a test of how well the Clinician is able to perform. The Observer can give the clinician a piece of paper to take notes on the case, they can keep their notes
- **Read instructions carefully and slowly, exactly as outlined in the survey instrument.**
- You are responsible for making entry in the survey forms on the tablet based on the clinician responses during the case simulations.
- If the Clinician, during the "consultations" shows that he has not understood how to act (for instance, if he tries to physically examine the patient), it is your obligation to provide proper instructions.
- Stay a bit "on the sideline" during the "consultation". Do not reveal the content of the data collection forms to the clinician.

- Enumerators Type 1 and Type 2 should discretely meet after concluding each module 3. They should discuss if what was recorded was correct before marking the incorrect answers
- You are not supposed to help the clinician perform better than normal.

Section A: Introduction

Type 1 Enumerator reads this to the clinician: We have come here today as part of our research on Quality Enhancement of Primary Healthcare in Nigeria. The research is conducted by the Federal Ministry of Health in collaboration with the National Bureau of Statistics (NBS).

One of the aims of our research is tocollect information and statistics on quality of health services and infrastructure, and is part of the government's on-going efforts to improve utilization of resources and quality of services. We therefore want to kindly ask you to spend a few minutes to assist us in learning more about the daily work that clinicians do and understand the realities of your work. It is important to understand how the work could be conducted, this time without the presence of a real patient. To achieve this, my colleague will **pretend** to be a patient, and would then ask you to do a consultation on him/her. What I ask from you is simply to pretend that he/she is one of your normal patients and to treat him/her just like normal.

All information and responses that you provide will be confidential and no information will be attributed to you personally. All the summaries of information collected in this survey will be available in reports within about 6 months.

The questionnaire will take approximately 30 minutes to complete. Do you have any questions?

Instructions to the clinician

Type 2 Enumerator reads to the clinician: I will now pretend to be different patients – one at a time. Some of the patients will be children, and others women.

Please manage the patients like you would, your usual patients, i.e. **ask history questions**, tell us what **systems you would examine, what tests you would request**, **make preliminary diagnosis**, **prescribe treatment and provide the patient any health information** as necessary. You should not ask for any test that you cannot do or prescribe any medicines that you do not think the patient can get locally. Everything should be just as you would attend to your usual patient during a regular consultation.

Observer (Type 1 Enumerator) asks the clinician: Have you understood what to do? Do you have any questions? We will begin by showing you an example.

ILLUSTRATION: The two of you will then go through the illustration and show the clinician your expectation.