

SECTION 1

RAPID SITUATIONAL ASSESSMENT OF DATA AND DATA SYSTEMS

INTRODUCTION

Existing systems to routinely collect cervical cancer patient and programme information in low- and middle-income countries (LMICs) often face substantial challenges, including a lack of standards, tools, human resources, and other vital inputs and processes. In many cases the absence of timely population, surveillance, and cost data further hinders the ability of programme implementers to make critical decisions and plan strategically for future goals. The often complex landscape of cervical cancer prevention and control service delivery in LMICs presents additional barriers to collecting the information needed to:

- Track patients through the continuum of care;
- Monitor programme implementation;
- Evaluate individual and population level outcomes; and,
- Track the distribution and allocation of resources.

The tools and guiding information in this section provide a systematic approach for identifying the opportunities and challenges in implementing and strengthening cervical cancer data systems, and for generating actionable recommendations aimed at improving the availability of high-quality data for decision-making. Through documentation and analysis of country context and data systems and practices relevant to cervical cancer, the rapid situational assessment contributes to the evidence-base available to inform strategies for strengthening.

The primary focus of this assessment is secondary prevention (i.e. cervical cancer screening and precancerous lesion treatment); however, given the cross-cutting nature of health information, and the best practice of leverage existing systems and processes, information is gathered across the continuum of cervical cancer care. Primary prevention (HPV vaccination) and tertiary prevention and care (invasive cervical cancer treatment and management) are therefore addressed as components in the landscape of programmes and services, and the data and data systems they employ are assessed in a limited manner.

Optimal implementation of this assessment relies on the primary assumption that cervical cancer screening, precancerous lesion treatment, diagnostics, and invasive cervical cancer treatment and management services are being provided in some manner. Services may be provided only at certain levels of the health-care system, or only outside of the public or government health-care system. Services may be provided irregularly in an opportunistic fashion, or may be part of an organized cervical cancer prevention and control or women's health programme.

In the rare cases where no cervical cancer prevention and control services are being provided, the in-depth portion of this assessment can be adapted to focus solely on general health information systems' (HIS) processes and practices which could potentially be leveraged for cervical cancer.

DATA SYSTEMS ASSESSMENT PROCESS

OBJECTIVES AND SCOPE

The overall goal of the data systems situational assessment is to contribute to the available evidence-base for planning and implementing national cervical cancer monitoring and evaluation (M&E), surveillance, and information systems. In support of this goal the assessment aims to achieve the following objectives:

1. To identify strengths, challenges and gaps in programme implementation, as well as opportunities and threats relevant to cervical cancer data systems through a survey to document the country cervical cancer landscape.
2. To identify strengths, weaknesses, opportunities and threats effecting data and data systems relevant to cervical cancer through in-depth interviews with key personnel, direct observation, and desk review of key documents.
3. To use the analysis of combined assessment findings to develop actionable recommendations for improving cervical cancer data and data systems.

The resulting list of recommendations can be used to inform strategic planning, and as a tool to advocate for programme resources. Additionally, the recommendations assist in determining applicability of the other sections in this toolkit and guide their use. For example, the sample

recommendations presented later in this section, highlight a need for nationally standardized data collection tools – a need that can be filled by the tools and guiding information set out in Section 3 of this toolkit, Patient and Programme Monitoring.

This assessment is not a scored performance evaluation or assessment, nor are its findings intended to generate statistically significant or more broadly representative conclusions. This is strictly a systematic approach to documenting and describing the existing situation in order to inform improvement. Such a targeted purpose is highly conducive to the use of a rapid situational assessment approach, affording the following benefits:

1. The cost-effective approach is feasible in low-resource settings;
2. The limited time commitment optimizes personnel engagement;
3. Rapid availability of findings allows for immediate responses to priority needs; and
4. The use of participatory techniques for data collection and validation ensure incorporation of institutional knowledge, and supports ownership of the findings and recommendations.

TIMELINE

Information is gathered by an assessment team during two phases of data collection, using a mixed methods approach and employing participatory techniques to gather expanded detail. The first phase of data

collection and analysis is completed over a period of 3-4 weeks; the second phase is completed over 2 weeks. An additional 3-4 weeks should be allotted for report writing following the close of the assessment.

SAMPLING

The sampling of respondents for the assessment is purposive, focusing on Ministry or partner personnel who have in-depth knowledge of one or more of the domains and themes. Initial key contacts are identified during Phase 1, and additional respondents are

identified through referrals (i.e. snowball sampling) during Phase 2.

Patients or service clients should not be considered respondents for any portion of this assessment.

THE RAPID ASSESSMENT PROCESS TEAM

The Rapid Assessment Process (RAP) team is responsible for all data collection and analysis. Team members should

be selected by the assessment lead for their expertise in data systems, M&E, surveillance and informatics; or cervical

cancer programmes and clinical service provision. Ideally, all team members will have previous experience with qualitative data collection and analysis.

RAP team composition may vary based on the context of implementation; however, at least five to six team members are recommended in order to adhere to timeline:

1. Embedded RAP team member (1–2 persons)

- Where the assessment is implemented by a team outside of the national government Health Department or Ministry – or outside of the country – at least one member of the team must be sourced from inside the Ministry or their implementing partner

2. Data Systems, M&E, and Informatics Specialists (3 persons)

- One of these specialists will be designated as the RAP team lead

3. Clinical Content Specialist (1 person)

Details on the specific responsibilities for each role can be found in the Roles and Responsibilities Checklists at the end of this section. These checklists are intended to provide the basic assessment roles and responsibilities and can be used as general planning documents, to develop terms of reference for RAP team members, or to ensure all responsibilities are considered when adapting the assessment approach.

PHASE 1 OF THE ASSESSMENT

SPECIFIC OBJECTIVES

- To collect data/responses using a structured landscape survey questionnaire tool
- To identify preliminary programme strengths and weaknesses, and external opportunities and threats that may impact implementation of high-quality data systems for cervical cancer
- To analyse preliminary findings to inform and guide Phase 2 data collection
- To identify key persons to act as respondents for Phase 2 in-depth interviews
- To identify programmes and partners with exemplary monitoring and evaluation, surveillance, or information systems that can potentially be leveraged

comprehensive and accessible knowledge for the target domains and themes of Phase 1 and 2 data collection tools.

The same contact may have knowledge applicable to more than one domain or content area, therefore it is important – in both Phase 1 and Phase 2 – to cross-reference other domains in order to consolidate relevant questions for each respondent.

During Phase 1 the names, titles, and sufficient reliable contact information (e.g. phone, email, office location) for key personnel should be collected in a document or spreadsheet as designated by the assessment lead. Fields for noting specific relevant survey and interview questions, service areas (e.g. screening, treatment, etc.) and secondary survey or interview domains or themes for which a key contact has been listed can also be included to better prepare for interview scheduling, and to assist with cross-referencing between the assessment tools.

DATA COLLECTION

Phase 1 data collection is guided by the structured Landscape Survey Questionnaire, with responses provided directly by key personnel, supplemented by a desk review of policies, strategies, reports, guidelines and other documents.

Patients/clients are not eligible to be considered contacts or respondents at any point in this assessment.

IDENTIFYING KEY CONTACTS

There are two objectives for the identification of key contacts during Phase 1:

1. To obtain data and responses for the Landscape Survey Questionnaire
2. To identify respondents for the Phase 2 interviews

Contacts can be Ministry or national level programme personnel, district level health personnel, health-care providers, partners, etc. or anyone with the most

IDENTIFYING EXEMPLAR PROGRAMMES

In the context of this assessment, an exemplar programme or facility is one with a functioning high-quality system (paper-based or electronic) for patient or facility level data collection; monitoring and evaluation; surveillance; and data management and use. The programme may be fully governed by a government ministry, or may be governed in part or in whole by an implementing partner external to the Ministry.

If an exemplar programme or facility is identified during Phase 1, the RAP team will conduct a programme- or facility-specific interview during Phase 2 in order to document best practices, and to identify

potential opportunities for leveraging existing data systems and lessons learned.

STAKEHOLDER INBRIEF

The stakeholder inbrief may be planned for prior to the start of Phase 1 data collection, or prior to the more participatory Phase 2 data collection. The objective is to introduce the assessment objectives and methods, define expectations, and ensure engagement of key

ministry and programme personnel and other relevant stakeholders and key contacts.

Where the assessment is conducted by a team unfamiliar with the country cervical cancer landscape, the inbrief is an opportunity for key ministry and programme personnel to provide informational presentations on current cervical cancer screening programming and services, health information systems, procurement mechanisms, and laboratory structures and services.

PHASE 2 OF THE ASSESSMENT

SPECIFIC OBJECTIVES

- To conduct in-depth interviews in order to obtain the detailed information outlined in the Discussion Guide
- To verify and expand preliminary programme strengths and weaknesses, and external opportunities and threats and identify additional SWOT specific to data and data systems
- To monitor information saturation and iteratively refine discussion guides based on gaps
- To identify additional key persons to act as interview respondents as needed to validate existing responses and achieve saturation
- To obtain detailed information on programmes and partners with exemplary monitoring and evaluation, surveillance, or information systems in order to identify systems and lessons learned that could potentially be leveraged
- To finalize SWOT analysis and use it to inform the development of specific, actionable recommendations for strengthening cervical cancer data and data systems
- To validate findings and recommendations, and foster initial development of an action plan to address recommendations through a participatory assessment out-brief with key stakeholders and decision-makers

DATA COLLECTION

Phase 2 data collection is guided by the in-depth Discussion Guide included in the Implementation Tools and Materials package at the end of this section.

DATA ANALYSIS

The rapid situational assessment approach utilizes a basic iterative Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis as the primary method of analysis:

Responses are provided directly by key personnel through interviews, supplemented by direct observations of data systems and practices and a desk review of policies, strategies, reports, guidelines and other documents. A separate sample exemplar programme discussion guide has also been included to guide the programme- or facility-specific interviews with any exemplar programmes identified during Phase 1.

STAKEHOLDER DEBRIEF

Phase 2 data collection, and the assessment as a whole, culminates in a debrief session with ministry and programme personnel, and other key stakeholders. The objectives of this meeting are:

1. To present the RAP teams' findings and recommendations;
2. To have the refined SWOT analysis results and preliminary recommendations validated by those with the most situational knowledge;
3. To make immediate adjustments based on feedback, and flag other revisions to be completed during report drafting; and
4. To begin discussions concerning an action plan for addressing the validated recommendations.

It is ideal to have all stakeholders – including ministry and programme decision-makers – present at one joint debrief to ensure collective discussion and buy-in for next steps.

The RAP team lead will be responsible for facilitating the meeting, ensuring that each analysis and recommendation is reviewed, and feedback is solicited and documented.

- Strengths and Weaknesses – internal programme factors such as core competencies and capabilities, management and operations, organizational structure

and culture, capacity, programme strategies and plans, data management and use structures and processes

- Opportunities and Threats – external uncontrollable factors such as political will, resource allocation, general health infrastructure and health system capacity, partner programmes, information and communication technology (ICT) infrastructure and human resources capacity, existing national HIS and system architecture, national policy and priorities.

The factors identified in the SWOT analysis form the basis of the actionable recommendations aimed at improving the availability of high-quality data for decision-making. In line with a change management approach to improving systems, the recommendations are categorized by the core element which requires

action: Policy, Process, People, and Technology.

To aid in strategic planning, the recommendations can be prioritized and further categorized into time-bound groups based on urgency of need and feasibility for addressing (informed by SWOT): Short-term Recommendations (addressed within 1 year); Intermediate-term Recommendations (addressed within 2–5 years); and Long-term Recommendations (beyond 5 years to address).

In addition to the SWOT analysis, ongoing monitoring of the frequency of encountering new information (i.e. saturation monitoring) is key during the less structured Phase 2 data collection. Regular review and synthesis of information is required to determine where gaps or needs for validation remain.

DATA MANAGEMENT AND PROTECTION

Methods or platforms for data collection and management must be determined by the assessment lead based on implementation context. Electronic data capture is suggested – and is strongly recommended

for Phase 2 – in order to best facilitate analysis of such a large amount of information. Data confidentiality measures should be clearly established and monitored throughout the assessment.

POST-ASSESSMENT

ASSESSMENT REPORT WRITING AND DISSEMINATION

Validated refined SWOT analyses and preliminary recommendations, and any other feedback obtained should be incorporated prior to finalization of analyses and recommendations and report writing.

The format and content for the report will follow that outlined prior to the start of the assessment through conversations between the assessment lead and collaborators. Once the report is drafted, it will be circulated to those in attendance at the debrief for review and feedback prior to dissemination.

ETHICAL CONSIDERATIONS

There is very little risk associated with the type of data being collected in this assessment; however, it is still vital to ensure that all respondents have a clear understanding of the assessment and what will be done with any information they provide. Participation as a respondent must be voluntary, and respondents should feel free to decline to provide any responses which make them uncomfortable. Informed consent

and ethical approval requirements specific to the country or organizational context must be understood and adhered to. Where no requirements are in place, it is recommended that respondents be provided with an information sheet containing key details about the assessment and affirming the voluntary nature of participation, and that they be asked to provide verbal consent to participate.

ADAPTATION OF THE APPROACH

In order to ensure objectivity, this assessment was designed for implementation led by a team external to the government ministry; however, the approach may be adapted to a less rigorous internally conducted assessment where resources for contracting an external team are not available.

Whether conducted using an external or internal team, the assessment requires a high level of engagement and

collaboration from ministry and partner personnel and other stakeholders – including a commitment to address the recommendations resulting from this assessment. Those who do the work every day have invaluable knowledge about the challenges faced, and will likely have ideas for solutions as well. Therefore, it is vital to engage stakeholders not only as respondents during data collection, but also as contributors to the validation and refinement of final findings and recommendations.

DATA SYSTEMS ASSESSMENT TOOLS

LANDSCAPE SURVEY QUESTIONNAIRE

The Landscape Survey Questionnaire is a structured survey tool designed to collect information on the context in which cervical cancer data and data systems reside. In order to best identify opportunities for strengthening data systems, it is important to not only assess the existing systems, but also the country context and programme landscape in which they operate. As such, the Landscape Survey Questionnaire gathers information within nine key domains:

Domain 1

Demographics and Epidemiology – Gathers available population demographic and surveillance data relevant to understanding national cervical cancer epidemiology; collects descriptive information on cancer registry.

Domain 2

Governance, Management and Infrastructure – Documents the structure, organization and capacity of the entities responsible for health care and cervical cancer policy, governance, and programme management.

Domain 3

Policies, Plans, Strategies and Clinical Guidelines – Documents the existence and basic content of policies, plans and guidelines relevant to cervical cancer.

Domain 4

Service Availability and Utilization – Collects key data points and information in order to describe the landscape of available cervical cancer prevention and control services and their use.

Domain 5

Human Resources for Health – Collects key data points and information necessary to understand the availability of health professionals to provide cervical

cancer services, and the relevant training opportunities available.

Domain 6

Equipment, Supplies and Medicines – Gathers information on the availability of basic equipment, supplies and medicines necessary to provide quality cervical cancer services.

Domain 7

Laboratory – Documents the laboratory system landscape and gathers information to describe the services and linkages relevant to cervical cancer prevention and control services.

Domain 8

Financing, Budgeting and Costing – Collects information to describe budgeting and financing for cervical cancer services and programming.

Domain 9

Health Information Systems Overview – Documents and describes the health information systems context in which cervical cancer programmes and services operate; and identifies structures, systems and processes for the collection, management, analysis and use of client level and aggregate data for patient and programme monitoring.

The responses to the Landscape Survey Questionnaire are obtained primarily in Phase 1 of the assessment, and serve to frame the second phase of data collection and inform the final analyses and recommendations development. Additionally, findings from the landscape survey can be used to develop a programme summary or fact sheet for advocacy, partnership development and communications.

IN-DEPTH DISCUSSION GUIDE

The In-depth Discussion Guide is a semi-structured interview tool which uses open-ended questions (accompanied by more targeted probes) to gather detailed descriptive information. The questions and probes build on the basic context information collected through the landscape survey by soliciting additional information classifiable under nine predetermined standard themes associated with data and data systems (Table 1.1).

Data are primarily collected through interviews with Ministry and partner personnel who have extensive knowledge of one or more of the landscape survey domains, data system themes, or general content areas (i.e. key informants). Information collected through the interviews is supplemented by additional desk review and direct observation of data systems and practices, guided by the questions and probes in the Discussion Guide.

TABLE 1.1
Data system themes

DATA SYSTEM THEME	EXAMPLE QUESTIONS AND PROBES
Context	How many different policies, plans or strategies govern cervical cancer prevention and control? What is the level of integration between screening and PCL treatment and invasive cervical cancer?
Information and Communication Technology (ICT) Infrastructure	Are there key examples in the health-care sector of leveraging available ICT infrastructure for programming (e.g. data collection and management, patient follow-up, etc.)?
Governance, Management and Coordination	Do the different ministries or departments that oversee health care and information technology have standing coordination meetings, working groups or other collaborative opportunities?
Data Policies, Plans, Strategies and Guidelines	Are there guidelines for reporting invasive cervical cancer data into cancer registries? Are there guidelines for monitoring and quality control of the data?
Systems and Processes	What are the systems and processes to collect these data? How are the data aggregated and analysed? Are paper-based or electronic systems (or registries) in use?
Health Information Exchange	Are these data systems integrated with or linked to any other systems? Can information readily be shared between systems? Please describe the process.
Data Quality	What is the quality of these data in terms of the following 7 dimensions: Accuracy; Completeness; Conformity; Consistency; Duplication; Integrity; and Timeliness?
Accuracy	<i>Do the data being collected and reported reflect the true observed situation?</i>
Completeness	<i>Are all client level forms or facility registers filled out completely? Are there specific data elements that are most frequently left incomplete/blank?</i>
Conformity	<i>Do data values conform to the specified formats? What are the gaps?</i>
Consistency	<i>Are the values or response options for specific data elements standardized and consistent across datasets?</i>
Duplication	<i>Are there multiple unnecessary representations of the same data within your datasets? Are the same static data elements collected multiple times?</i>
Integrity	<i>Are vital relationships and linkages between data elements maintained throughout exchanges? What processes seem to corrupt data most frequently?</i>
Timeliness	<i>Are data reported in a timely fashion? Are specific data elements barriers to timely collection and reporting?</i>
Data Access and Use	How and by whom have these data been used in the past 12 months? If access is a barrier to obtaining timely data, who currently has access to these data? What is the process to expand access?
Budget and Financing	What percentage of the cervical cancer programme budget is allocated for Monitoring and evaluation, surveillance, and information systems?

PHASE 1 DATA COLLECTION: CONDUCTING THE LANDSCAPE SURVEY

ADMINISTRATION OF LANDSCAPE SURVEY QUESTIONNAIRE

As detailed in Table 1.2, the embedded (or other designated) RAP team member administers the Landscape Survey Questionnaire using one of the following methods:

1. Self-administration by RAP team member
2. Self-administration of specific domains, sections or questions by key Ministry or implementing partner personnel, based on their area of expertise

3. RAP team member administration of questionnaire to key Ministry or implementing partner personnel, based on their area of expertise

Responses to the structured survey questions, and information on data sources where applicable, should be entered into the tool or database designated by the assessment lead.

DESK REVIEW

The goal of the desk review is to gather information to supplement the landscape survey responses from readily

available documents, reports, and other data sources. A list of suggested key documents for desk review has been included as part of the Implementation Tools and Materials at the end of this section.

Documents will be collected through in-country sources by the embedded RAP team member and through web searches by the other RAP team members (see Table 1.2). Internet searches should be targeted, using key search terms pulled from the relevant landscape survey questions. The team lead may assign RAP team members specific questions or domains for the review.

Relevant content is identified in the source documents using a mixture of approaches (e.g. key word search, skimming or reading the full document, etc.), using the

landscape survey questions as a guide for key content to be recorded. In addition to content, the following information should be recorded for each document reviewed:

1. Name of document
2. Information regarding time of publication (e.g. date or year of publication, years covered by a long-term strategic plan, etc.)
3. Page number within the document where relevant text is located
4. URL for the website where document was found, or file name of document if a shared drive is being used for assessment files

TABLE 1.2
Summary of Phase 1 data collection methods

DATA COLLECTION METHOD	PRACTICAL DESCRIPTION
Self-administration of structured survey questionnaire by the embedded RAP team member	The embedded RAP team member will complete as much of the survey as possible based on their technical area of expertise and depth of programme knowledge.
Self-administration of structured survey questionnaire by key Ministry and/or partner organization personnel	Questions outside of the embedded RAP team member's area of programme knowledge can be answered through self-administration of the survey questionnaire by knowledgeable personnel.
Administration of structured survey questionnaire to key Ministry and/or implementing partner personnel	Questions outside of the embedded RAP team member's area of programme knowledge will be answered through administration of the survey questionnaire to knowledgeable personnel.
Desk review of key documents and existing information by RAP team	Documents be collected through in-country sources and internet searches. Documents are then reviewed to obtain or validate responses to the structured survey questions as needed.

WHEN DATA ARE NOT AVAILABLE

When specific data points (e.g. number of obstetricians or gynecologists; number of invasive cervical cancer cases per year, etc.) are not readily available in a report, database, or other existing document or system, efforts need not be made to collect or generate this information from primary sources and aggregate in order to complete the survey questions. Data not available is a valuable and informative response in this assessment.

EXAMPLE SCENARIO:

- The embedded RAP team member does not have access to the numbers of health-care workers in each cadre (Domain 5).
- As the next step, the team member contacts someone in the Ministry who could potentially have this human resource information in a database, report or other source.
- The additional contact (or their team) does not have this information available, and suggests that the RAP team member contact each facility directly to collect the number of health-care workers in each cadre at each facility and then aggregate these data to arrive at national level numbers.
- The RAP team member recognizes that these would be data collected from a primary source for the sole purpose of responding to the landscape survey questions, and rather selects "Data Not Available" as the appropriate response.

PHASE 1 DATA REVIEW AND PRELIMINARY ANALYSES

The full assessment team will review landscape survey responses on a regular schedule defined by the team lead. During the routine review, RAP team members will identify key gaps in information as well as any SWOTs:

1. Strengths – existing functional practices, processes, structures, strategies, policies, etc. within the cervical cancer programme or service delivery context.
2. Weaknesses – absence of a coordinated or dedicated programme; absence of strategies, policies or documents, or the absence of key content within existing strategies, policies or documents; etc.
3. Opportunities – external factors such as programmes, strategies, approaches that can be leveraged or used as models to strengthen or expand ministry cervical cancer activities, enhance monitoring and evaluation, develop targeted actionable policies and strategies, etc.
4. Threats – external factors such as heavy reliance on donor funding or partner organizations for programme implementation, management, monitoring or service delivery; lack of a coordinated ICT infrastructure; etc.

This preliminary analysis will be validated and expanded during Phase 2 to inform the final SWOT analysis on which the recommendations will be built.

While preliminary strengths, weaknesses, opportunities and threats may be identified through the landscape survey, the participatory techniques employed in the second phase of data collection gather more granular information and will aid in developing more actionable recommendations.

EXAMPLE SCENARIO:

During completion of the landscape survey the assessment team finds that the cervical cancer surveillance data queried in Domain 1 is available, but is not current. The team therefore identifies a lack of timely data as a preliminary weakness and provides a recommendation to strengthen processes to ensure timely data entry.

During Phase 2 interviews, the team asks a key informant why the data are not current. The key informant responds that the unit was downsized several years ago and while data are still entered in a timely fashion, none of the remaining staff were trained to extract data from the system, resulting in their use of old reports to complete the landscape survey. This additional detail serves to identify a more specific

weakness (lack of trained staff), as well as an external threat (mandated downsizing without support for transition), and the team is now able to generate a more actionable recommendation to allocate the necessary resources to train existing staff – a recommendation which can be used to advocate for resources and sustainability planning.

RECONCILING CONFLICTING RESPONSES

In the event of conflicting data or responses, RAP team members should discuss the conflict and weigh factors pertaining to the data source (e.g. quality of data in a report or system, area of the survey respondent's expertise, etc.) in order to come to a consensus. If the conflict cannot be resolved, the issue should be flagged for follow up during Phase 2.

PREPARING FOR PHASE 2

REFINING THE DISCUSSION GUIDE

The RAP team will collectively review all information collected during the 3 weeks of Phase 1 data collection, to identify any remaining gaps in landscape survey responses that will need to be addressed during Phase 2. The RAP team will then review the main Discussion Guide tool, and insert the remaining gaps as questions or probes (where not already addressed) – removing other questions or probes which are not applicable based on landscape survey responses (e.g. those asking about systems and processes to generate data where no data were available).

The RAP team then reviews the list of key contacts and their area of expertise, and allocates groups of questions (or themes) from the Discussion Guide to the appropriate contacts – attempting to ensure that the Discussion Guide for each contact is comprehensive enough to avoid repeat interviews. Where possible, questions should be allocated to more than one contact in order to avoid potential bias resulting from a single-source of information.

If specific questions or themes are lacking a contact (i.e. respondent) for the interviews – and the information cannot be gathered via direct observation or desk review – referrals should be solicited from other respondents during the initial rounds of interviews.

INTERVIEW SCHEDULING

Scheduling of the initial Phase 2 interviews will be largely dependent on the availability of key contacts. Depending on a respondent's area of expertise, and the number of questions they are expected to answer, interview time estimates may range from 30 minutes to 3 hours.

Interviews with high level Ministry officials regarding context (i.e. budget allocation, health system structure, etc.) may be completed in significantly less time than interviews with M&E or data management personnel. To ensure that the contact understands expectations, the contact can be sent the parent questions allocated to them along with the assessment information sheet when approaching them for interview participation.

As referral sampling is employed in this assessment, it is important to leave time during the second week of Phase 2 data collection for interviews with second or third tier contacts for the themes or content areas requiring the most depth (e.g. client level data systems, aggregate data systems, referral systems, health information exchange, etc.).

PHASE 2 DATA COLLECTION: IN-DEPTH INVESTIGATION OF DATA SYSTEMS

INTERVIEWS

RAP team members will conduct interviews in pairs to ensure high quality interviews and data collection. One team member is designated as the primary discussion facilitator, and the other is primarily responsible for taking detailed notes on the discussion; however, BOTH team members should participate in the discussion on some level, and both should take notes to ensure data quality.

As noted in Table 1.3, individuals targeted for Phase 2 interviews are those ministry and programme personnel with practical knowledge in one or more of the 9 Landscape Survey domains, and the content categorized under one or more of the 9 data system themes. Interviews may be conducted with one respondent alone, or may be conducted with a group of respondents (e.g. an M&E team or unit; the unit responsible for procurement of equipment and supplies; etc.) using a participatory discussion group format directed by the Discussion Guide, if deemed more efficient.

The RAP team members open each interview by introducing themselves, presenting the respondent with the assessment information sheet, ensuring that the respondent consents to being interviewed, and answering any questions that the respondent may have about the assessment. The RAP members then begin the interview by asking the initial open-ended question from the Discussion Guide developed for that respondent, and allowing the respondent to answer in their own words, with as much detail as they wish to provide initially. The probes that follow the initial question are much more targeted than the initial question, and are designed to solicit key information within the data system themes. If the interviewees initial response does not provide enough detail to fully address the probes, the RAP team members will use the probes as follow-up questions.

Where gaps in information or respondent knowledge exist, or where a secondary source is not yet identified, RAP team members will request referral of additional contacts from the initial interview respondent

(snowball sampling). Obtaining information from multiple sources for each theme is encouraged in order to obtain a complete non-biased picture of the situation.

Information collected during the interview (in the form of notes) will be reviewed collectively by both team members immediately following the interview to ensure that all questions and probes designated for that respondent have been fully addressed. Missing information due to RAP team member oversight will need to be obtained as soon as possible through a return interview with the respondent, or through a follow-up phone call or email. Information that is missing due to a lack of response from the interviewee (e.g. information was outside their scope of expertise) should be flagged for incorporation into the Discussion Guide for the next respondent identified for the set of questions or themes. If interview information was not collected directly into the assessment data collection tool or database, the RAP team members will enter the information prior to the daily debrief.

Subsequent interviews will be conducted until no new information emerges (i.e. information saturation) for a theme or defined sets of questions, and any conflicting responses or information have been resolved.

The RAP team will conduct interviews with personnel from the identified exemplar programmes (and direct observation) as agreed upon with the stakeholders and the embedded RAP team member.

DIRECT OBSERVATION

Direct observation is employed primarily to collect additional information on:

- the functionality, content or scope of existing electronic systems (e.g. through demonstrations or walk-throughs by systems users);
- the quality of data in electronic or paper-based systems (e.g. through cursory review of completed forms, registers or registries, or databases and systems); and

- data use (e.g. through observation of posters or graphs tracking specific indicators, or observations of electronic dashboards)

RAP team members will use the Discussion Guide to identify key content that should be recorded during the observation. Direct observation should be cross-referenced with information obtained from interviews, desk review or the Landscape Survey Questionnaire (see Table 1.3) to validate non-observational responses – and to identify conflicting responses. If observation findings were not collected directly into the assessment data collection tool or database, RAP team members will enter the information prior to the

daily debrief.

Clinical procedures should not be observed at any time during the assessment. Patient level data should not be abstracted or collected at any time during the assessment.

DESK REVIEW

Details and information on the desk review can be found in the earlier subsection “Phase 1 Data Collection: Conducting the Landscape Survey”, and below in Table 1.3.

TABLE 1.3

Summary of Phase 2 data collection methods

DATA COLLECTION METHOD	PRACTICAL DESCRIPTION
In-depth semi-structured or unstructured interviews with key Ministry and/or implementing partner personnel	A semi-structured approach follows the Discussion Guide closely, and is best used when interviewing those with limited time availability, or those who are the key contacts for a number of topics. An unstructured approach is best used when the interviewer has a clear agenda for the discussion (i.e. specific gaps have been identified), when information appears to be reaching saturation (i.e. no new information is being generated from interviews), or for information validation. This type of interview can begin with the interviewer recounting the information already gathered, in order to seek confirmation or an alternative response from the interviewee.
Direct observation	The RAP team observes data collection, management or practical use of data systems in the field under typical conditions, guided by the questions and probes in the Discussion Guide.
Desk review of key documents and existing information by RAP team members	Additional relevant documents may be uncovered as a result of interviews with key personnel, or identification of specific system gaps. Documents are then reviewed, adding any new information to the previous landscape survey responses.

PHASE 2 DATA ANALYSIS AND DEVELOPMENT OF RECOMMENDATIONS

ONGOING REVIEW AND ANALYSIS

The full assessment team will collectively review Discussion Guide responses on a daily basis. The information gathered from each interview (or observation), and any strengths, weaknesses, opportunities or threats identified, will be first collated by data system theme to identify any major gaps, as well as errors or misclassified SWOT. The information can then be further categorized by any subthemes (e.g. Systems and Processes: Client Level Systems; Systems and Processes: Aggregate Systems, etc.) or emergent themes not previously identified, in order to identify remaining gaps in information.

Based on the review, and information gaps identified, interview discussion guides will be refined prior to the next days' interviews.

When a theme reaches the point of information saturation, the RAP team will work together to refine the preliminary SWOT analysis and develop preliminary recommendations, effectively closing out data collection for that theme.

If conflicting responses – including those identified during Phase 1 – are not resolved by completion of the Phase 2 interviews, the issue should be flagged for discussion and consensus generation during the final assessment stakeholder debrief session.

DEVELOPMENT OF RECOMMENDATIONS

The RAP team will develop recommendations in line with the change management approach to organizational improvement and redirection of resources. Recommendations will be classified into one of four core elements: Policy, People, Process, and Technology. These

core elements allow for the recommendations to be directly actionable, with responsible parties easily identified.

Findings from the refined SWOT analyses can be characterized into one of the four core elements, and then translated into recommendations for improvement by replacing passive words with action words. The refined analyses and preliminary recommendations will be presented to stakeholders at the assessment debrief for validation and feedback prior to finalization.

EXAMPLE: SWOT ANALYSIS OF SYSTEMS AND PROCESSES THEME (CLIENT LEVEL DATA SUBTHEME)

STRENGTHS:

- Standardized registers for screening and precancerous lesion treatment have recently been developed

WEAKNESSES:

- No nationally standardized data collections forms for screening
- No nationally accepted minimum dataset for invasive cervical cancer
- Lack of adequate human resources to support client level data systems

OPPORTUNITIES:

- An exemplar programme exists which has fully implemented standardized data collection forms
- Once nationally standardized forms are developed, the Ministry-endorsed electronic system for patient health data can easily integrate data elements from those forms

THREATS:

- There are multiple, disconnected systems collecting patient data, which will make it difficult to coordinate and standardize information

- The Ministry-endorsed electronic system for patient health data may not be accessible to all providers or facilities (due to connectivity issues)

- Ministry is unable to provide sufficient funding for human resources for client level data systems support

RECOMMENDATIONS

POLICY:

1. Consultatively develop minimum datasets for screening and treatment of cervical cancer
2. Consultatively standardize data collection forms based on the agreed upon minimum datasets, using the exemplar programme forms and processes as a model

PEOPLE:

1. Improve knowledge and capacity of Ministry information technology (IT) personnel to support and maintain client level data systems through training

PROCESSES:

1. Leverage the new register roll out and trainings for opportunities to optimize processes and data flow for client-level data collection and quality

TECHNOLOGY:

1. Incorporate cervical cancer data elements (i.e. client-level forms) into Ministry-endorsed electronic system for patient health data
2. Improve information and system inter-operability through harmonization of data elements; or support transition to Ministry-endorsed system
3. Explore Health and mobile network solutions for increasing provider and facility access to the Ministry-endorsed electronic system

IMPLEMENTATION TOOLS AND MATERIALS

ASSESSMENT ROLES AND RESPONSIBILITIES CHECKLISTS

These checklists are intended for use in building the Rapid Assessment Process (RAP) team and creating country-specific assessment standard operating procedures and implementation plans or protocols. These lists of responsibilities are intended to be comprehensive but not exhaustive, and should be adapted or expanded as needed.

Where the assessment is being conducted by a party external to the Ministry or government system, the embedded RAP team member should be sourced from inside the Ministry or programme to ensure collaboration, as well as incorporation of institutional knowledge. Where the assessment is being conducted

internally, the checklists below can be adapted to better reflect teams sourced only from the Ministry, for example: the role of the embedded RAP team member can be replaced with an additional team member with expertise and knowledge in data systems, informatics, monitoring and evaluation or surveillance; and the responsibilities of the embedded team member can be re-allocated to the RAP team lead (e.g. ensure completion of the landscape survey questionnaire), the assessment lead (e.g. work with RAP team lead to coordinate interview scheduling and itinerary), and assessment team members (e.g. collect documents for desk review; maintain complete and extensive field notes; etc.).

PRE-ASSESSMENT CHECKLIST

ASSESSMENT ROLE (Total Personnel: 3–4)	PLANNING RESPONSIBILITIES The following responsibilities should be fulfilled prior to beginning any data collection activities.
ASSESSMENT LEAD/PRINCIPAL INVESTIGATOR (1–2)	<input type="checkbox"/> Develop budget for assessment implementation and ensure necessary funds are in place <input type="checkbox"/> Coordinate with Ministry and collaborators to identify embedded RAP team member <input type="checkbox"/> Coordinate with Ministry and collaborators and embedded RAP team member to develop assessment timeline <input type="checkbox"/> Choose RAP team members and designate team lead <input type="checkbox"/> Collaborate with embedded RAP team member and RAP team lead to adapt assessment tools to country context and develop country-specific materials <input type="checkbox"/> Develop data capture and management methods (e.g. paper-based data collection, excel spreadsheet data capture, tablet or smart phone data entry platform, etc.), and ensure appropriate data protection and quality assurance measures are in place <input type="checkbox"/> Coordinate with embedded RAP team member to ensure all necessary institutional approval processes are followed <input type="checkbox"/> Ensure letters of approval have been circulated to Ministry and collaborator personnel and other assessment stakeholders
RAP TEAM LEAD (1)	<input type="checkbox"/> Work with assessment lead and embedded RAP team member to adapt assessment tools to country context and develop country-specific materials and data collection/capture tools <input type="checkbox"/> Ensure RAP team is fully trained on assessment tools and processes <input type="checkbox"/> Assign phase 1 responsibilities to each RAP team member <input type="checkbox"/> Work with embedded RAP team member to plan in-brief meeting (before Phase 1 and/or Phase 2) <input type="checkbox"/> Serve as primary point of contact for collaborators, assessment lead, embedded RAP team member, and assessment team
EMBEDDED RAP TEAM MEMBER (1)	<input type="checkbox"/> Work with assessment lead and RAP team lead to adapt assessment tools to country context and develop country-specific materials and data collection/capture tools <input type="checkbox"/> Work with assessment lead and RAP team lead to ensure all necessary institutional approval processes are followed

PHASE 1 CHECKLIST

ASSESSMENT ROLE (Total Personnel: 6–7)	RESPONSIBILITIES The following responsibilities should be fulfilled during the 3–4 weeks of Phase 1 data collection and analysis.
ASSESSMENT LEAD/PRINCIPAL INVESTIGATOR (1–2)	<input type="checkbox"/> Ensure letters of approval have been circulated to Ministry and collaborator personnel, and other assessment stakeholders <input type="checkbox"/> Provide supervisory oversight for data entry and management, and monitor data protection and quality <input type="checkbox"/> Supervise ongoing data analysis and preliminary identification of Strengths, Weaknesses, Opportunities, and Threats (SWOT) <input type="checkbox"/> Ensure that key contacts identified for interviews are representative of country activities
RAP TEAM LEAD (1)	<input type="checkbox"/> Work with embedded RAP team member to plan in-brief meeting (before Phase 1 and/or Phase 2) <input type="checkbox"/> Provide supervision for Phase 1 data collection and lead regular check-in meetings to monitor progress and data quality <input type="checkbox"/> Ensure team compliance with data capture, management, protection and quality assurance methods and processes <input type="checkbox"/> Continuously work with RAP team members to determine outstanding gaps in landscape survey responses and to identify preliminary Strengths, Weaknesses, Opportunities, and Threats (SWOT) <input type="checkbox"/> Work with RAP team members to refine the discussion guide based on gaps in information following landscape survey completion <input type="checkbox"/> Work directly with embedded RAP team member to create interview schedules and itineraries for team members, and serve as co-coordinator for team interviews <input type="checkbox"/> Serve as primary point of contact for collaborators, assessment lead, embedded RAP team member, and assessment team <input type="checkbox"/> Identify and escalate any issues or concerns to the embedded RAP team member and assessment lead
EMBEDDED RAP TEAM MEMBER (1)	<input type="checkbox"/> Collect documents for Desk Review and share with RAP team lead <input type="checkbox"/> Ensure completion of landscape survey questions through self-administration or administration of survey to key personnel and desk review <input type="checkbox"/> Participate in regular check-in meetings to share landscape survey findings and monitor data collection progress and data quality <input type="checkbox"/> Identify key Ministry and partner contacts to act as respondents for Phase 2 interviews and ensure that contacts are representative of country activities at all levels (national, subnational, etc.) and through all funding streams (government, donor, private facilities, etc.) <input type="checkbox"/> Work with RAP team lead to plan Phase 2 interview schedule, and schedule interviews with key contacts <input type="checkbox"/> Serve as primary point of contact for key contacts (i.e. interview respondents) and co-coordinator for team interviews <input type="checkbox"/> Work with RAP team lead to plan Phase 2 in-brief meeting (if applicable) including: sending invitations letters, securing a location, and sharing a template for presentations
CLINICAL CONTENT SPECIALIST (1)	<input type="checkbox"/> Conduct desk review of key documents on clinical services, guidelines, etc. as assigned by RAP team lead <input type="checkbox"/> Participate in regular check-in meetings to share desk review findings and monitor data collection progress and data quality <input type="checkbox"/> Continuously work with RAP team lead and other members to determine outstanding gaps in landscape survey responses and to identify preliminary Strengths, Weaknesses, Opportunities, and Threats (SWOT)
DATA SYSTEMS, M&E, AND INFORMATICS SPECIALISTS (2)	<input type="checkbox"/> Conduct desk review of key documents on eHealth, information technology, guidelines, etc. as assigned by RAP Team Lead <input type="checkbox"/> Participate in regular check-in meetings to share desk review findings and monitor data collection progress and data quality <input type="checkbox"/> Continuously work with RAP team lead and other members to determine outstanding gaps in landscape survey responses and to identify preliminary Strengths, Weaknesses, Opportunities, and Threats (SWOT)

PHASE 2 CHECKLIST

ASSESSMENT ROLE (Total Personnel: 6–7)	RESPONSIBILITIES The following responsibilities should be fulfilled during the 2 weeks of Phase 2 data collection and analysis. This list of responsibilities is intended to be comprehensive but not exhaustive, and should be adapted or expanded as needed.
ASSESSMENT LEAD/PRINCIPAL INVESTIGATOR (1–2)	<input type="checkbox"/> Ensure letters of approval have been circulated to Ministry and collaborator personnel, and other assessment stakeholders <input type="checkbox"/> Provide supervisory oversight for data entry and management, and monitor data protection and quality <input type="checkbox"/> Supervise ongoing data analysis, identification of Strengths, Weaknesses, Opportunities, and Threats (SWOT), and development of preliminary recommendations
RAP TEAM LEAD (1)	<input type="checkbox"/> Review final interview discussion guides with RAP team interviewers before each interview is conducted <input type="checkbox"/> Maintain complete and extensive field notes and complete in-depth discussions with a wide variety of respondents, ensuring that the content area has been exhausted (e.g. no new information is being provided) <input type="checkbox"/> Supervise integration and analysis of findings from the in-depth interviews/discussions, landscape survey and desk review <input type="checkbox"/> Ensure team compliance with data capture, management, protection and quality assurance methods and processes <input type="checkbox"/> Work directly with embedded RAP team member to create interview itineraries for team members, review refined discussion guides for each respondent, and serve as coordinator for team interviews <input type="checkbox"/> Serve as point of contact between assessment lead, embedded RAP team member, and the RAP team <input type="checkbox"/> Lead in-brief (Phase 1 and/or Phase 2) and out-brief, daily team debriefs, and coordinate and facilitate out-brief <input type="checkbox"/> Identify and escalate any issues or concerns to the assessment lead and embedded RAP team member
EMBEDDED RAP TEAM MEMBER (1)	<input type="checkbox"/> Maintain complete and extensive field notes and complete in-depth discussions with a wide variety of respondents, ensuring that the content area has been exhausted (e.g. no new themes are arising) <input type="checkbox"/> Support integration and analysis of findings from the in-depth interviews/discussions, landscape survey and desk review and refinement and organization of discussion guides for each respondent <input type="checkbox"/> Facilitate in-brief (Phase 1 and/or Phase 2) and out-brief and support the RAP team in data collection implementation (e.g. logistics, transportation, etc.).
CLINICAL CONTENT SPECIALIST (1)	<input type="checkbox"/> Maintain complete and extensive field notes and complete in-depth discussions with a wide variety of respondents, ensuring that the content area has been exhausted (e.g. no new themes are arising) <input type="checkbox"/> Integrate and analyse the findings from the in-depth interviews/discussions, landscape survey and desk review <input type="checkbox"/> Organize discussion guide questions by respondent, and refine interview discussion guides for each respondent in their assigned domain, cross-referencing the landscape survey responses and other discussion guide domains as noted to identify gaps and avoid duplication
DATA SYSTEMS, M&E, AND INFORMATICS SPECIALISTS (2)	<input type="checkbox"/> Maintain complete and extensive field notes and completes in-depth discussions with a wide variety of respondents, ensuring that the content area has been exhausted (e.g. no new themes are arising) <input type="checkbox"/> Integrate and analyse the findings from the in-depth interviews/discussions, landscape survey and desk review <input type="checkbox"/> Organize discussion guide questions by respondent and refine interview discussion guides for each respondent in their assigned domain, cross-referencing the landscape survey responses and other discussion guide domains, as noted, to identify gaps and avoid duplication

POST-ASSESSMENT CHECKLIST

ASSESSMENT ROLE (Total Personnel: 6–7)	POST-ASSESSMENT RESPONSIBILITIES The following responsibilities should be fulfilled following Phase 2 of data collection.
ASSESSMENT LEAD/PRINCIPAL INVESTIGATOR (1–2)	<input type="checkbox"/> Supervise the drafting of the assessment report, with specific focus on recommendations development <input type="checkbox"/> Work with MoH and collaborators, and other assessment stakeholders to finalize the assessment report dissemination plan
RAP TEAM LEAD (1)	<input type="checkbox"/> Assign assessment report sections RAP team members for completion <input type="checkbox"/> Review analyses and lead drafting of the assessment report, ensuring that feedback from the out-brief has been incorporated <input type="checkbox"/> Submit assessment report to the assessment lead for review and final recommendations verification
EMBEDDED RAP TEAM MEMBER (1)	<input type="checkbox"/> Assist in the drafting of the assessment report through verification of findings and provide follow up where needed in order to fill any remaining gaps <input type="checkbox"/> Work with MoH and collaborators, and other assessment stakeholders to finalize the assessment report dissemination plan
CLINICAL CONTENT SPECIALIST (1)	<input type="checkbox"/> Complete the analysis of findings, incorporating feedback from the out-brief meeting, and write assessment report sections as assigned by RAP team lead
DATA SYSTEMS, M&E, AND INFORMATICS SPECIALISTS (2)	<input type="checkbox"/> Complete the analysis of findings, incorporating feedback from the out-brief meeting, and write assessment report sections as assigned by RAP team lead

LANDSCAPE SURVEY QUESTIONNAIRE

LANDSCAPE DOMAIN 1: DEMOGRAPHICS AND EPIDEMIOLOGY

The primary objective of this domain is to document population demographic data and surveillance data relevant to understanding national cervical cancer epidemiology. The secondary objective is to determine the availability of current population demographic and surveillance data, and identify its sources, as a prerequisite to the next phase of data collection.

DEMOGRAPHICS

1.1 What is the total population in the country?

Number:
Data Year:
Data Source:
☐ Data Not Available

1.2 What is the total female population in the country?

Number:
Data Year:
Data Source:
☐ Data Not Available

1.3 What is the number of women aged 21–29 years in the country?

Number:
Data Year:
Data Source:
☐ Data Not Available

1.4 What is the number of women aged 30–59 years in the country?

Number:
Data Year:
Data Source:
☐ Data Not Available

MORTALITY AND VITAL STATISTICS

1.5 What is the “All Cause” crude mortality rate in the country?

Overall Rate:
Rate for Males:
Rate for Females:
Data Year:
Data Source:
☐ Data Not Available
Sex-disaggregated
☐ Data Not Available

1.6 Can the “All Cause” crude mortality rate be disaggregated by Age?

☐ Yes ☐ No
If Yes, how is Age broken down (e.g. predetermined age categories [please list categories], individual ages):

1.7 At which level is there a system for registration of vital statistics?

Please indicate all levels at which data collection occurs
☐ National ☐ Subnational
☐ Facility/Institution ☐ Community
☐ No system for vital statistics

HIV EPIDEMIOLOGY

1.8 What is the HIV prevalence rate?

Overall Rate:
Rate for Males:
Rate for Females:
Data Year:
Data Source:
☐ Data Not Available
Sex-disaggregated
☐ Data Not Available

1.9 Can the HIV prevalence rate be disaggregated by Age?

☐ Yes ☐ No
If Yes, how is Age broken down (e.g. predetermined age categories [please list categories], individual ages):

CERVICAL CANCER EPIDEMIOLOGY

1.10 What is the incidence rate for invasive cervical cancer in the country?

Rate:
Units: ☐ Per 100 000 women per year
☐ Per 100 000 population per year
Data Year:
Data Source:
☐ Data Not Available

1.11 What is the total number of deaths from invasive cervical cancer per year (Cervical Cancer Mortality Rate)?

Rate:
Units: ☐ Per 100 000 women per year
☐ Per 100 000 population per year
Data Year:
Data Source:
☐ Data Not Available

1.12 Is there a cancer registry?

- ☐ Yes – at National level
☐ Yes – at Subnational level
☐ Yes – at Facility/hospital level
☐ No

1.13 Is there a separate registry for invasive cervical cancer other than the general cancer registry?

- ☐ Yes – at National level
☐ Yes – at Subnational level
☐ Yes – at Facility/hospital level
☐ No

1.14 Is cervical cancer screening and precancerous lesion treatment captured by the general cancer or cervical cancer registry?

- ☐ Yes ☐ No
 If No, is there a separate registry?
☐ Yes – at National level
☐ Yes – at Subnational level
☐ Yes – at Facility/hospital level
☐ No

1.15 Is there a registry that captures individuals immunized for HPV?

- ☐ Yes – at National level
☐ Yes – at Subnational level
☐ Yes – at Facility/hospital level
☐ No
 If Yes (at any level), is the registry separate from the general immunization registry?
☐ Yes ☐ No

1.16 When was the most recent population-based survey which included questions on cervical cancer conducted?

- ☐ Year:
☐ Name of Survey:
☐ No population-based survey including cervical cancer questions ever conducted

LANDSCAPE DOMAIN 2: GOVERNANCE, MANAGEMENT AND INFRASTRUCTURE

The primary objective of this domain is to document the structure, organization and capacity of the entities responsible for health care and cervical cancer policy, governance, programming and management. The secondary objectives are: to preliminarily identify associated strengths, weaknesses, opportunities and threats; and to identify key contacts for the next phase of data collection.

INFRASTRUCTURE**2.1 Does a basic framework for delivering energy, transport, water and sanitation, and information and communication technology services exist?**

- ☐ Yes ☐ No ☐ Don't Know

2.2 Are there national efforts to document measures on political stability, government effectiveness and control of corruption aligned with international governance and corruption indicators?

- ☐ Yes ☐ No ☐ Don't Know

2.3 What are the country data for the following ITU key telecommunication/ICT indicators?

Retrieve data from:
<http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>
 Overall country score:
☐ Data Not Available
 Percentage improvement in country score since 2008:
☐ Data Not Available
 Fixed-telephone subscriptions:
☐ Data Not Available
 Mobile-cellular subscriptions:
☐ Data Not Available
 Active mobile-broadband subscriptions:
☐ Data Not Available
 Wired-broadband subscriptions:
☐ Data Not Available
 Households with a computer:
☐ Data Not Available
 Households with internet access at home:
☐ Data Not Available
 Individuals using the internet:
☐ Data Not Available
 Data Year:
 Data Source:

GENERAL HEALTH-CARE GOVERNANCE**2.4 Is there an organizational structure for national health-care governance?**

- ☐ Yes – centralized ☐ Yes – decentralized ☐ No

2.5 Is there more than one national government Ministry or institution that oversees health care?

- ☐ Yes ☐ No
 If Yes, please provide the Ministry or institution name and a key contact for each.
 Name:
 Contact:

2.6 Is there a diagram or narrative of the current structure and organization of the national government Ministries or institutions that oversee health?

- ☐ Yes – current ☐ Yes – not current
☐ No ☐ Not accessible

If Yes, please provide a copy or link.

CERVICAL CANCER GOVERNANCE AND MANAGEMENT

2.7 Is there a dedicated cervical cancer screening and PCL treatment (cervical cancer secondary prevention) section, programme or unit within the MoH (or its equivalent)?

This refers to a unit/programme that coordinates and manages guidelines, policy, or programme for cervical cancer screening and PCL treatment.

- ☐ Yes ☐ No

If Yes, what is the name of the programme/unit and the department that it sits within?

Programme/Unit Name:

Dept. Name:

If No, what programme/unit has authority over cervical cancer screening and PCL treatment?

Programme/Unit Name:

Dept. Name:

2.8 What is the number of staff working in the cervical cancer screening and PCL treatment section, programme or unit?

Senior managers:

Permanent staff:

Temporary/contract staff:

External consultants:

Epidemiologists/statisticians:

TOTAL staff (categories overlap – may not be sum of above):

Data Year:

Data Source/s:

☐ Data Not Available

2.9 At which level is the cervical cancer screening and PCL treatment programme organized within your country?

Select one best option:

- ☐ National level (organizes and monitors most cervical screening programmes in the country either directly or through Subnational offices)
☐ Subnational/ Subcountry levels (authority to organize and monitor cervical screening programme directly without direction or guidance from the central/national level)
☐ NGO partners (organize and monitor most cervical screening programmes either in collaboration or independent of the government)
☐ Programme level (individual programmes or health

care systems organize and manage screening without direction or guidance from the central/national level or Subnational authorities)

2.10 Is there an invasive cervical cancer section, programme or unit within the MoH (or its equivalent)?

This refers to a unit/programme that coordinates and manages guidelines, policy, or programme for invasive cervical cancer.

- ☐ Yes – same as screening and PCL treatment
☐ Yes – separate from screening and PCL treatment
☐ No

If Yes – separate from screening and PCL treatment, what is the name of the section, programme or unit and the department that it sits within?

Programme/Unit Name:

Department Name:

If No, what section, programme or unit has authority over invasive cervical cancer?

Section/Unit Name:

Department Name:

2.11 What is the number of staff working in the invasive cervical cancer section, programme or unit?

- ☐ Same as for screening and precancerous lesion treatment

Or, enter data for each cadre below

Senior managers:

Permanent staff:

Temporary/contract staff:

External consultants:

Epidemiologists/statisticians:

TOTAL staff (categories overlap – may not be sum of above):

Data Year:

Data Source/s:

☐ Data Not Available

2.12 At which level is the treatment and management of invasive cervical cancer overseen and organized within your country?

- ☐ Same as for screening and precancerous lesion treatment?

Or, select one best option:

- ☐ National level (organizes and monitors invasive cervical cancer programming in the country either directly or through subnational offices)
☐ Subnational/sub country levels (authority to organize and monitor invasive cervical cancer programming directly without direction or guidance from the central/national level)
☐ NGO partners (organize and monitor most invasive cervical cancer programming either in collaboration or independent of the government)
☐ Programme level (individual programmes or health care systems organize and manage invasive cervical cancer

programming without direction or guidance from the central/national level or subnational authorities)

2.13 Is there a dedicated HPV vaccination (cervical cancer primary prevention) section, programme or unit within the MoH (or its equivalent)?

This refers to a unit/programme that coordinates and manages guidelines, policy, or programme for HPV vaccination and cervical cancer primary prevention.

- ☐ Yes – same as screening and PCL treatment
☐ Yes – separate from screening and PCL treatment
☐ No

If Yes – separate from screening and PCL treatment, what is the name of the programme/unit and the department that it sits within?

Programme/Unit Name:

Department Name:

If No, what section/unit has authority over HPV Vaccination (cervical cancer primary prevention)?

Section/Unit Name:

Department Name:

2.14 Are there organizations, agencies or institutions outside of the government that are responsible for aspects of cervical cancer prevention and control?

- ☐ Yes ☐ No

If Yes, please provide the name of each entity and indicate the areas for which they are responsible (select all that apply).

1. Name:

Responsibilities:

- ☐ Policy
☐ Research
☐ Training
☐ Health promotion
☐ Diagnostics
☐ Service Delivery (Screening)
☐ Service Delivery (Invasive)
☐ Other:

2. Name:

Responsibilities:

- ☐ Policy
☐ Research
☐ Training
☐ Health promotion
☐ Diagnostics
☐ Service Delivery (Screening)
☐ Service Delivery (Invasive)
☐ Other:

3. Name:

Responsibilities:

- ☐ Policy
☐ Research
☐ Training
☐ Health promotion
☐ Diagnostics
☐ Service Delivery (Screening)
☐ Service Delivery (Invasive)

☐ Other:

LANDSCAPE DOMAIN 3: POLICIES, PLANS, STRATEGIES AND CLINICAL GUIDELINES

The primary objective of this domain is to document the existence and basic content of policies, plans and guidelines relevant to cervical cancer. The secondary objectives are: to understand how cervical cancer is prioritized in the broader health system; and to identify potential strengths, weaknesses, opportunities and threats associated with the coordination and management of cervical cancer programming.

3.1 Is there a national health policy, plan or strategy? Does it address cervical cancer prevention and control?

Select all that apply, and provide document name, time period covered (if applicable), and the areas of cervical cancer prevention and control which are addressed in each.

- ☐ Policy: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Plan: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Strategy: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Strategic Plan: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ National health policy, plan or strategy does not exist

3.2 Is there a national policy, plan or strategy for cancer prevention and control? Does it include cervical cancer prevention and control?

Select all that apply, and provide document name, time period covered (if applicable), and the areas of cervical cancer prevention and control which are addressed in each.

- ☐ Policy: ☐ Time Period:
☐ HPV Vaccination

- ☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Plan: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Strategy: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Strategic Plan: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ National health policy, plan or strategy does not exist

3.3 Is there a policy, plan or strategy specific to cervical cancer (in addition to the national cancer prevention and control policy)? What does it cover?

Select all that apply, and provide document name, time period covered (if applicable), and the areas of cervical cancer prevention and control which are addressed in each.

- ☐ Policy: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Plan: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Strategy: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ Strategic Plan: ☐ Time Period:
☐ HPV Vaccination
☐ Screening
☐ PCL treatment
☐ Invasive Cervical Cancer
☐ Does not address cervical cancer prevention and control
☐ National health policy, plan or strategy does not exist

3.4 If policies, plans or strategies which address cervical cancer prevention and control exist, what cervical cancer screening method do they recommend?

Select all that apply

- ☐ National policy, plan or strategy addressing cervical cancer does not exist
☐ Cytology/Pap smear
☐ VIA
☐ VILI
☐ HPV DNA test
☐ Other (specify):
☐ No recommendation

3.5 What method for the treatment of precancerous lesions is recommended by policies, plans or strategies which address cervical cancer?

Select all that apply

- ☐ Cryotherapy
☐ LEEP
☐ Conization
☐ Thermal/cold coagulation
☐ Other (specify):
☐ No recommendation

3.6 Is a Single Visit Approach for cervical cancer screening and precancerous lesion treatment recommended by policies, plans or strategies?

- ☐ Yes ☐ No

3.7 Are there standardized national clinical practice guidelines for the following cervical cancer services?

May be national guidelines or international guidelines adopted by the country, and may be standalone or may be integrated within other guidelines (e.g. HIV, reproductive health).

- ☐ Screening
☐ Treatment of precancerous lesions
☐ Management of invasive cervical cancer
☐ Clinical practice guidelines do not exist for cervical cancer services

3.8 Are there clinical practice guidelines for cervical cancer screening specific to HIV infected women?

- ☐ Yes ☐ No

If Yes, are these guidelines a separate document from the clinical practice guidelines for screening noted above?

- ☐ Yes ☐ No

LANDSCAPE DOMAIN 4: SERVICE AVAILABILITY AND UTILIZATION

The primary objective of this domain is to describe the landscape of available cervical cancer services and their utilization. The secondary objectives are to determine whether data on cervical cancer service availability, distribution and delivery are available and current; and to identify the sources of these data as a prerequisite to the next phase of data collection.

SERVICE AVAILABILITY

4.1 What cervical cancer screening services are currently being provided?

Select all that apply

- ☐ Pap Smear/cytology
- ☐ Visual Inspection with Acetic Acid (VIA)
- ☐ Visual Inspection with Lugol's iodine (VILI)
- ☐ Human papillomavirus (HPV) testing
- ☐ Other (please specify):

4.2 At which level of the health-care system are cervical cancer screening services provided?

Select all that apply

- ☐ Primary ☐ Secondary ☐ Tertiary
- ☐ National referral hospital

4.3 Cervical cancer screening services are actively provided as part of.

Select all that apply:

- ☐ Routine preventative services for women
- ☐ Maternal child health services
- ☐ HIV services
- ☐ Special campaign for cervical cancer preventions
- ☐ Other arrangement (specify):

4.4 How many health care facilities in your country provide cervical cancer screening services?

Total number of facilities:

- ☐ Data Not Available

Number of public (government) facilities:

- ☐ Data Not Available

Number of private facilities:

- ☐ Data Not Available

Number of other (e.g. NGO) facilities:

- ☐ Data Not Available

Data Year:

Data Source/s:

4.5 What services are currently being provided for the treatment of precancerous cervical lesions?

Select all that apply

- ☐ Cryotherapy
- ☐ LEEP
- ☐ Cold knife conization
- ☐ Simple hysterectomy
- ☐ Other (please specify):

4.6 At which level of the health-care system are services for the treatment of precancerous cervical lesions provided.

Select all that apply?

- ☐ Primary ☐ Secondary ☐ Tertiary
- ☐ National referral hospital

4.7 Precancerous cervical lesion treatment services are actively provided as part of.

Select all that apply:

- ☐ Routine preventative services for women
- ☐ Maternal child health services
- ☐ HIV services
- ☐ Special campaign for cervical cancer preventions
- ☐ Other arrangement (specify):

4.8 How many health care facilities in your country provide treatment for precancerous cervical lesions?

Total number of facilities:

- ☐ Data Not Available

Number of public (government) facilities:

- ☐ Data Not Available

Number of private facilities:

- ☐ Data Not Available

Number of other (e.g. NGO) facilities:

- ☐ Data Not Available

Data Year:

Data Source/s:

4.9 Are cervical cancer screening and PCL treatment services provided as a Single Visit Approach?

- ☐ Yes, all facilities that provide screening use a Single Visit Approach
- ☐ Yes, some facilities that provide screening use a Single Visit Approach
- ☐ No, there are no facilities providing screening using a Single Visit Approach

4.10 Is there a standardized referral system in place for women who need:

PCL Treatment (CIN 2 & 3)

- ☐ Yes ☐ No

Large lesions or suspected cervical cancer

- ☐ Yes ☐ No

Radical Hysterectomy

- ☐ Yes ☐ No

Radiation Therapy

☐ Yes ☐ No

Chemotherapy

☐ Yes ☐ No

Palliative Care

☐ Yes ☐ No

4.11 What services are currently being provided for the diagnosis of precancerous cervical lesions or invasive cervical cancer?

Select all that apply

☐ Colposcopy

☐ Biopsy

☐ Histology/Pathology

☐ Other (please specify):

4.12 How many health care facilities in your country provide diagnostics for precancerous cervical lesions or invasive cervical cancer?

Total number of facilities:

☐ Data Not Available

Number of public (government) facilities:

☐ Data Not Available

Number of private facilities:

☐ Data Not Available

Number of other (e.g. NGO) facilities:

☐ Data Not Available

Data Year:

Data Source/s:

4.13 What services are currently being provided for the treatment and management of invasive cervical cancer?

Select all that apply

☐ Simple hysterectomy

☐ Radical hysterectomy

☐ Chemotherapy

☐ Radiation therapy

☐ Intra-cavitary radiation therapy

☐ Other (please specify):

4.14 At what health-care facility level is invasive cervical cancer treated in your country?

☐ Primary ☐ Secondary ☐ Tertiary

☐ National referral hospital

4.15 Are there cancer centres or speciality hospitals for cancer in your country?

☐ Yes ☐ No

If Yes, please list the name and location for each

Name: Location:

Name: Location:

4.16 How many health-care facilities in your country have the staffing and capacity to perform radical

hysterectomies (removal of the uterus, cervix, a part of the vagina, and the pelvic lymph glands)?

Total number of facilities:

☐ Data Not Available

Number of public (government) facilities:

☐ Data Not Available

Number of private facilities:

☐ Data Not Available

Number of other (e.g. NGO) facilities:

☐ Data Not Available

Data Year:

Data Source/s:

4.17 How many health care facilities in your country have the capacity to provide chemotherapy?

Total number of facilities:

☐ Data Not Available

Number of public (government) facilities:

☐ Data Not Available

Number of private facilities:

☐ Data Not Available

Number of other (e.g. NGO) facilities:

☐ Data Not Available

Data Year:

Data Source/s:

4.18 How many health care facilities in your country provide radiation therapy?

Total number of facilities:

☐ Data Not Available

Number of public (government) facilities:

☐ Data Not Available

Number of private facilities:

☐ Data Not Available

Number of other (e.g. NGO) facilities:

☐ Data Not Available

Data Year:

Data Source/s:

4.19 How many health care facilities in your country provide intra-cavitary radiation therapy?

Total number of facilities:

☐ Data Not Available

Number of public (government) facilities:

☐ Data Not Available

Number of private facilities:

☐ Data Not Available

Number of other (e.g. NGO) facilities:

☐ Data Not Available

Data Year:

Data Source/s:

SERVICE UTILIZATION

Data should reflect the total number of women receiving services nationally, within the last year for which data are available.

4.20 How many women are targeted nationally per year for cervical cancer screening?

Number:
 Data Year:
 Data Source:
☐ Data Not Available

4.21 How many women received screening for cervical cancer?

Number:
 Data Year:
 Data Source:
☐ Data Not Available

4.22 How many women received treatment for precancerous cervical lesions?

Number:
 Data Year:
 Data Source:
☐ Data Not Available

4.23 How many women received diagnostic services for precancerous cervical lesions?

Number:
 Data Year:
 Data Source:
☐ Data Not Available

4.24 How many women received diagnostic services for invasive cervical cancer?

Number:
 Data Year:
 Data Source:
☐ Data Not Available

4.25 If you are using the International Federation of Gynecology and Obstetrics (FIGO) staging system, please provide the number of women diagnosed in each of the stages.

If you are using another system, please provide the name of the system and provide the number for each stage.

- ☐ No staging system is used
☐ FIGO staging system

Stage I:
 Stage II:
 Stage IIA:
 Stage IIB:
 Stage III:
 Stage IV:

☐ Other staging system
 Stage and Number:
 Stage and Number:
 Stage and Number:

Stage and Number:

Stage and Number:

Stage and Number:

- Name: _____

☐ Data Not Available ☐ Data Not Available

Data Year:

Data Source:

4.26 How many invasive cervical cancer cases were treated/managed? Treatment and management services include surgery, radiation, chemotherapy, etc.

Number:
 Data Year:
 Data Source:
☐ Data Not Available

4.27 How many women received radical hysterectomy for invasive cervical cancer? Radical hysterectomy is the removal of the uterus, cervix, a part of the vagina and the pelvic lymph glands.

Please note that this IS NOT simple hysterectomy which is only removal of uterus and cervix.

☐ Radical Hysterectomy Not Available

Number:

Data Year:

Data Source:

☐ Data Not Available

4.28 How many women received chemotherapy for invasive cervical cancer? This includes adjuvant treatment or palliative chemotherapy for cervical cancer.

☐ Chemotherapy Not Available

Number:

Data Year:

Data Source:

☐ Data Not Available

4.29 How many women received radiation therapy for invasive cervical cancer?

☐ Radiation Therapy Not Available

Number:

Data Year:

Data Source:

☐ Data Not Available

4.30 How many women received intra-cavitary radiation for invasive cervical cancer?

☐ Intra-cavitary Radiation Therapy Not Available

Number:

Data Year:

Data Source:

☐ Data Not Available

LANDSCAPE DOMAIN 5: HUMAN RESOURCES FOR HEALTH

The primary objective of this domain is to document the availability of health professionals to provide cervical cancer services, and the relevant training opportunities available. The secondary objectives are to determine whether aggregate data regarding cervical cancer service providers and health workforce training capacity are available and current; and to identify the sources of these data as a prerequisite to the next phase of data collection.

CADRES OF SERVICE PROVIDERS

5.1 Who performs cervical cancer screening in your country?

Select all that apply.

Screening includes PAP smears, Visual inspection with acetic acid (VIA), Visual inspection with Lugol's iodine (VILI), Human papillomavirus (HPV) DNA testing, etc.

- ☐ Obstetrician/gynecologist (Ob/gyn)
- ☐ General/Family Practitioner/ Internist
- ☐ Practitioner
- ☐ Mid-level practitioner (Clinical Officer)
- ☐ Midwives & Nurses
- ☐ Other: (specify):

5.2 Who generally provides cryotherapy treatment for precancerous cervical lesions?

Select all that apply.

- ☐ Ob/gyn
- ☐ General/Family Practitioner/ Internist
- ☐ Practitioner
- ☐ Mid-level practitioner (Clinical Officer)
- ☐ Midwives & Nurses
- ☐ Other: (specify):

5.3 Who generally provides LEEP for the treatment of precancerous cervical lesions?

Select all that apply

- ☐ Ob/gyn
- ☐ General/Family Practitioner/ Internist
- ☐ Practitioner
- ☐ Mid-level practitioner (Clinical Officer)
- ☐ Midwives & Nurses
- ☐ Other: (specify):

5.4 Who generally provides conization or simple hysterectomy for the treatment of precancerous cervical lesions?

Select all that apply

- ☐ Ob/gyn

- ☐ General/Family Practitioner/ Internist
- ☐ Practitioner
- ☐ Mid-level practitioner (Clinical Officer)
- ☐ Midwives & Nurses
- ☐ Surgeon
- ☐ Other: (specify):

5.5 Who generally provides treatment for invasive cervical cancer?

Select all that apply

- ☐ Ob/gyn
- ☐ General/Family Practitioner/ Internist
- ☐ Practitioner
- ☐ Mid-level practitioner (Clinical Officer)
- ☐ Midwives & Nurses
- ☐ Surgeon
- ☐ Other: (specify):

TRAINING OF SERVICE PROVIDERS

5.6 Is there a national/regional strategy for training and capacity building for providers of cervical cancer services (screening and treatment of precancerous cervical lesions and invasive cervical cancer)?

- ☐ Yes ☐ No

5.7 Are formal opportunities available to obtain general medical or specialty training (e.g. residency, mMED, fellowship, oncology, radiation physics, cytotechnology etc.) outside of the country?

- ☐ Yes ☐ No ☐ Don't Know

5.8 How many medical schools do you have in your country?

Total medical schools:

- ☐ Data Not Available

Number of public medical schools:

- ☐ Data Not Available

Number of private medical schools:

- ☐ Data Not Available

Data Year:

Data Source/s:

5.9 How many nursing/midwifery schools do you currently have in your country?

Total nursing midwifery schools:

- ☐ Data Not Available

Number of public nursing/midwifery schools:

- ☐ Data Not Available

Number of private nursing/midwifery schools:

- ☐ Data Not Available

Data Year:

Data Source/s:

5.10 How many of the following specialty training (residency, mMED, fellowship, certification, etc.) programmes do you have in your country?

Reproductive Health (Obstetrics and Gynecology): ☐ Data Not Available
 Gynecological-Oncology: ☐ Data Not Available
 Surgery: ☐ Data Not Available
 Anesthesiology: ☐ Data Not Available
 Internal Medicine: ☐ Data Not Available
 Medical Oncology: ☐ Data Not Available
 Radiation Oncology: ☐ Data Not Available
 Palliative Care: ☐ Data Not Available
 Cytology: ☐ Data Not Available
 Pathology: ☐ Data Not Available
 Radiology: ☐ Data Not Available
 Data Year:
 Data Source/s:

5.11 How many of the following training programmes for health professionals do you have in your country?

Radiation technology: ☐ Data Not Available
 Radiation physics: ☐ Data Not Available
 Cytotechnologists: ☐ Data Not Available
 Data Year:
 Data Source/s:

AVAILABILITY OF SERVICE PROVIDERS

5.12 How many of the following public and private sector health-care professionals are currently providing health services. Individuals with multiple qualifications can be counted in each category for which they are qualified.

Ob/Gyn: ☐ Data Not Available
 Surgeons: ☐ Data Not Available
 Anaesthesiologists: ☐ Data Not Available
 Gyn Oncologists: ☐ Data Not Available
 Surgeons trained in radical pelvic surgery cancer: ☐ Data Not Available
 Radiation Oncologists: ☐ Data Not Available
 Medical Oncologists: ☐ Data Not Available
 Physicians providing palliative Care: ☐ Data Not Available
 Data Year:
 Data Source/s:

5.13 In each category below, how many health-care professionals are providing cervical cancer screening in your country?

Ob/Gyn: ☐ Data Not Available
 General/Family practitioner/Internist: ☐ Data Not Available
 Mid-level practitioner (clinical officer): ☐ Data Not Available
 Midwives & Nurses: ☐ Data Not Available

Others: (specify): ☐ Data Not Available
 Data Year:
 Data Source/s:

5.14 In each category below, how many health-care professionals provide PCL treatment with cryotherapy?

Ob/Gyn: ☐ Data Not Available
 General/Family practitioner/Internist: ☐ Data Not Available
 Mid-level practitioner (clinical officer): ☐ Data Not Available
 Midwives & Nurses: ☐ Data Not Available
 Others: (specify): ☐ Data Not Available
 Data Year:
 Data Source/s:

5.15 In each category below, how many health care professionals provide PCL treatment with LEEP?

Ob/Gyn: ☐ Data Not Available
 General/Family practitioner/Internist: ☐ Data Not Available
 Mid-level practitioner (clinical officer): ☐ Data Not Available
 Midwives & Nurses: ☐ Data Not Available
 Others: (specify): ☐ Data Not Available
 Data Year:
 Data Source/s:

5.16 In each category below, how many health care professionals are providing treatment for PCL with conization or simple hysterectomy?

Ob/Gyn: ☐ Data Not Available
 General/Family practitioner/Internist: ☐ Data Not Available
 Mid-level practitioner (clinical officer): ☐ Data Not Available
 Midwives & Nurses: ☐ Data Not Available
 Others: (specify): ☐ Data Not Available
 Data Year:
 Data Source/s:

5.17 In each category below, how many health care professionals are providing care for patients with invasive cervical cancer in your country?

Ob/Gyn: ☐ Data Not Available
 General/Family practitioner/Internist: ☐ Data Not Available
 Mid-level practitioner (clinical officer): ☐ Data Not Available
 Midwives & Nurses: ☐ Data Not Available
 Others: (specify): ☐ Data Not Available
 Data Year:
 Data Source/s:

LANDSCAPE DOMAIN 6: EQUIPMENT, SUPPLIES AND MEDICINES

The primary objective of this domain is to gather information on the availability of basic equipment, supplies and medicines necessary to provide quality cervical cancer services. The secondary objective is to document the associated systems and processes as a prerequisite to the next phase of data collection. NOTE: Additional information specific to procurement and supply chain for laboratories is collected under DOMAIN 7: LABORATORY.

AVAILABILITY OF ESSENTIAL SUPPLIES, MEDICINES AND EQUIPMENT

6.1 Are the minimum necessary cervical cancer screening supplies (e.g. 3-5% acetic acid, Lugol's iodine, Pap smear kit, HPV kit, etc.) on the national essential supply list?

- ☐ Yes – all minimum
☐ Yes – some minimum (please list):
☐ None
☐ No essential supply list

Where available, please provide copy of the essential supply list as an attachment or a URL to an online soft copy.

6.2 Are the following cervical cancer screening supplies available?

- 3-5% acetic acid:
☐ Always available ☐ Infrequent stockouts
☐ Frequent stockouts ☐ N/A
- Lugol's iodine:
☐ Always available ☐ Infrequent stockouts
☐ Frequent stockouts ☐ N/A
- Pap smear supplies:
☐ Always available ☐ Infrequent stockouts
☐ Frequent stockouts ☐ N/A
- HPV test supplies:
☐ Always available ☐ Infrequent stockouts
☐ Frequent stockouts ☐ N/A
- Specula:
☐ Always available ☐ Infrequent stockouts
☐ Frequent stockouts ☐ N/A

6.3 Which supply's availability presents the greatest barrier to providing effective cervical cancer screening?

Select one best answer

- ☐ 3-5% acetic acid ☐ Lugol's iodine
☐ Pap smear supplies ☐ HPV test supplies
☐ Specula ☐ Other (specify):

6.4 Are the following equipment and supplies for PCL treatment available?

Cryotherapy machines:

- ☐ Yes ☐ Yes – only at higher level facilities ☐ No

Electro-cautery machines for LEEP:

- ☐ Yes ☐ Yes – only at higher level facilities ☐ No

Monsel / Silver Nitrate:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ N/A

Liquid Nitrogen / Carbon Dioxide Gas:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ N/A

Cryotips:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ N/A

Loops for LEEP:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ N/A

6.5 Which equipment or supply's availability presents the greatest barrier to providing effective treatment of precancerous cervical lesions?

Select one best answer

- ☐ Cryotherapy machines
☐ Electro-cautery machines for LEEP
☐ Monsel / Silver Nitrate
☐ Liquid nitrogen / Carbon Dioxide Gas
☐ Cryotips
☐ Loops for LEEP
☐ Other (specify):

6.6 Are any chemotherapeutic agents on the essential medication list for your country?

- ☐ Yes ☐ No ☐ No essential medication list

6.7 Are the following chemotherapeutic agents available to treat invasive cervical cancer?

Cis-Platinum:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ Never

Paclitaxel:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ Never

Topotecan:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ Never

Gemcitabine:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ Never

Other Drug (specify):

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ Never

6.8 Are opiate pain medications available for patients with invasive cervical cancer? (e.g. Morphine, Dihydrocodeine, fentanyl, methadone)

For inpatients:

- ☐ Always available ☐ Infrequent stockouts

- ☐ Frequent stockouts ☐ Never
 By prescription:
☐ Always available ☐ Infrequent stockouts
☐ Frequent stockouts ☐ Never

6.9 How many radiation oncology machines are currently operational nationally?

- Number in ALL facilities: ☐ Data Not Available
 Number in public
 (government) facilities: ☐ Data Not Available
 Number in private facilities: ☐ Data Not Available
 Number in other (e.g. NGO)
 facilities: ☐ Data Not Available
 Data Year:
 Data Source/s:

PROCUREMENT AND SUPPLY CHAIN

6.10 Does the government/MOH procure and manage the inventory of supplies for cervical cancer screening (specifically or as part of a broader role in supply, procurement and management)?

- ☐ Yes – at central level
☐ Yes – at subnational level
☐ No

If No, what institution/organization is responsible for procuring and distributing supplies for cervical cancer screening within the country?

Institution Name:

6.11 What electronic system is used to procure and distribute supplies for cervical cancer screening (specifically or as part of a broader role in supply, procurement and management)?

- Name Of System:
 Organizations Using the System
 (list as many as possible):
 Organization that Developed
 and Maintains the System:
☐ No electronic system available

6.12 Does the government/MOH procure and manage the inventory of supplies for PCL treatment (specifically or as part of a broader role in supply, procurement and management)?

- ☐ Yes – at central level
☐ Yes – at subnational level
☐ No

If No, what institution/organization is responsible for procuring and distributing supplies for PCL treatment?

Institution Name:

6.13 What electronic system is used to procure and distribute supplies for PCL treatment (specifically or as part of a broader role in supply, procurement and management)?

- Name Of System:
 Organizations Using the System
 (list as many as possible):
 Organization that Developed
 and Maintains the System:
☐ No electronic system available

6.14 Does the government/MOH procure and manage the inventory for chemotherapeutic agents (specifically or as part of a broader role)?

- ☐ Yes – at central level
☐ Yes – at subnational level
☐ No

If No, what institution/organization is responsible for procuring and distributing chemotherapeutic agents?

Institution Name:

6.15 What electronic system is used to track the inventory of chemotherapeutic agents (specifically or as part of a broader role in supply, procurement and management)?

- Name Of System:
 Organizations Using the System
 (list as many as possible):
 Organization that Developed
 and Maintains the System:
☐ No electronic system available

LANDSCAPE DOMAIN 7: LABORATORY

The primary objective of this domain is to document the laboratory landscape and describe the services and linkages relevant to cervical cancer prevention and control services. The secondary objectives are to determine the availability of key data for cervical cancer patient and programme monitoring; and to identify the systems and processes for the collection and management of these data as a prerequisite to the next phase of data collection.

GENERAL ORGANIZATION AND MANAGEMENT

7.1 Is there a national policy plan or strategy for laboratory development and management?

- ☐ Yes ☐ No

7.2 Is there a national plan or strategy for laboratory accreditation and/or quality and performance management (separate from the above)?

- ☐ Yes – part of national laboratory development policy, strategy or plan
☐ Yes – separate from national laboratory development policy, strategy or plan
☐ No

procuring and distributing laboratory supplies for cervical cancer diagnosis?

Institution Name:

Institution Contact:

7.9 Is there a system used to procure and manage laboratory supplies for cervical cancer diagnosis (specifically or as part of a broader role in medication/drug procurement and management)?

- ☐ Yes – electronic system
☐ Yes – paper-based system
☐ No

Name of System:

Organizations Using the System:

Organization that Developed and Maintains the System:

LABORATORY RESULTS

7.10 Do all labs report cytology/cytopathology results according to a standard terminology (e.g. Bethesda)?

- ☐ Yes ☐ No
 Standard Used:

7.11 Are cervical cytology/cytopathology results entered into a national laboratory information system?

- ☐ Yes – electronic system
☐ Yes – paper-based system
☐ No

Name of System:

Organizations Using the System:

Organization that Developed and Maintains the System:

7.12 Do all labs report cervical histology/histopathology results according to a standard terminology (e.g. SIL)?

- ☐ Yes ☐ No
 Standard Used:

7.13 Are cervical biopsy results entered into a national laboratory information system?

- ☐ Yes – electronic system
☐ Yes – paper-based system
☐ No

Name of System:

Organizations Using the System:

Organization that Developed and Maintains the System:

7.14 Are HPV test results entered into a national laboratory information system?

- ☐ Yes – electronic system
☐ Yes – paper-based system
☐ No

Name of System:

Organizations Using the System:

Organization that Developed and Maintains the System:

LANDSCAPE DOMAIN 8: FINANCING, BUDGET AND COSTING

The primary objective of this domain is to describe the financing and budget for cervical cancer services and programming. The secondary objective is to determine the availability and use of data, structures and processes for cervical cancer programme budgeting and costing.

PROGRAMME AND SERVICE PROVISION

8.1 What are the sources of funding for cervical cancer prevention and control service provision?

Select all that apply

- ☐ Central Government/Ministry
☐ Private donors
☐ Multilateral agencies
☐ NGOs
☐ Individual programmes
☐ Patient fees
☐ Other (Specify):

If more than one response is selected, what is the primary source of funding (select one)?

- ☐ Central Government/Ministry
☐ Private donors
☐ Multilateral agencies
☐ NGOs
☐ Individual programmes
☐ Patient fees
☐ Other (Specify):

8.2 Is there a dedicated budget for cervical cancer prevention and control?

- ☐ Yes ☐ No

8.3 Is there a section, unit or team dedicated to cervical cancer programme budget planning and costing?

- ☐ Yes – at central level
☐ Yes – at subnational level
☐ No

If Yes, Section, Unit or Team Name:

If No, what department or section is responsible for cervical cancer budgeting and costing?

Department or Section Name:

8.4 Is there a system or tool used for cervical cancer programme budget planning and costing?

- ☐ Yes – electronic system
☐ Yes – paper-based system
☐ No

Name of System:

Organizations Using the System:

Organization that Developed and Maintains the System:

8.5 Are line item costs available for cervical cancer supplies and commodities?

- ☐ All line item costs available
☐ Most line item costs available
☐ Limited line item costs available
☐ Line item costs not available

8.6 Are the following costs for individual cervical cancer prevention and control services readily available?

- ☐ Cost of screening one woman for cervical cancer
☐ Cost of treating one woman for precancerous cervical lesion
☐ Cost of treating one woman for invasive cervical cancer
☐ Costs of services per woman are not available

HUMAN RESOURCES AND CAPACITY BUILDING**8.7 Is there a salary structure for government health personnel (including benefits)?**

- ☐ Yes ☐ No

If Yes, please provide the name of the document(s)/ upload the document(s) where this salary structure can be found.

8.8 What are the sources of funding for health workforce training and capacity building – including medical and nursing schools, continuing education, etc.?

Select all that apply

- ☐ Central Government/Ministry
☐ Private donors
☐ Multilateral agencies
☐ NGOs
☐ Faith-based organizations
☐ Student fees
☐ Private public partnerships
☐ Other (Specify):

If more than one response is selected, what is the primary source of funding? Select one

- ☐ Central Government/Ministry
☐ Private donors
☐ Multilateral agencies
☐ NGOs
☐ Faith-based organizations
☐ Student fees

- ☐ Private public partnerships
☐ Other (Specify):

8.9 What are the sources of funding for cervical cancer prevention and control provider training and capacity building? Select all that apply

- ☐ Central Government/Ministry
☐ Private donors
☐ Multilateral agencies
☐ NGOs
☐ Individual programmes
☐ Student fees
☐ Private public partnerships
☐ Other (Specify):

If more than one response is selected, what is the primary source of funding? Select one

- ☐ Central Government/Ministry
☐ Private donors
☐ Multilateral agencies
☐ NGOs
☐ Individual programmes
☐ Student fees
☐ Private public partnerships
☐ Other (Specify):

LANDSCAPE DOMAIN 9: HEALTH INFORMATION SYSTEMS OVERVIEW

The primary objectives of this domain are to document the health information systems context in which cervical cancer programming operates; and to identify structures, systems and processes for the collection, management, analysis and use of client level and aggregate health data for patient and programme monitoring. The secondary objective is to identify preliminary Opportunities and Threats in the health information system landscape and preliminary Strengths and Weaknesses in the systems and processes relevant to cervical cancer data.

NOTE: Additional information specific to systems for managing procurement and supply chain is collected under DOMAIN 6: PROCUREMENT AND SUPPLY CHAIN and DOMAIN 7: LABORATORY.

POLICIES, PLANS AND STRATEGIES**9.1 Is there a national policy, plan or strategy for Information and Communication Technologies (ICTs)?**

- ☐ Yes ☐ No

9.2 Is there a national policy, plan or strategy for eHealth?

- ☐ Yes ☐ No

9.3 Does a national monitoring and evaluation plan exist for cervical cancer prevention and control?

This plan may be standalone or may be integrated within other plans, such as the Cervical Cancer Strategic Plan

- ☐ Yes – standalone plan
☐ Yes – integrated within other plan (specify):
☐ No

COORDINATION, MANAGEMENT AND GOVERNANCE

9.4 Is there a government ministry, department or section dedicated to Information and Communication Technologies (ICTs)?

- ☐ Yes ☐ No

If Yes, what is the name of the ministry, department or section?

Ministry, Department or Section Name:

If No, what ministry, department or section has authority over national ICT policies, planning and programming?

Ministry, Department or Section Name:

9.5 Is there a government section, unit or team dedicated to eHealth?

- ☐ Yes ☐ No

If Yes, what is the name of the section, unit or team?

Section, Unit or Team Name:

If No, what section, unit or team has authority over national eHealth policies, planning and programming?

Ministry, Department or Section Name:

9.6 Who is responsible for financing and budgeting for the development and maintenance of electronic information systems for health (including cervical cancer)?

Select all that apply

- ☐ Central Government/Ministry
☐ Private donors
☐ Multilateral agencies
☐ NGOs
☐ Individual programmes
☐ Other (Specify):

9.7 Is there a section, unit or team within the MoH dedicated to Monitoring and Evaluation (M&E) for cervical cancer prevention and control?

- ☐ Yes ☐ No

If Yes, what is the name of the section, unit or team and the department that it sits within?

Section, Unit or Team Name:

Dept. Name:

If No, what section, unit or team is responsible for M&E for cervical cancer prevention and control?

Section, Unit or Team Name:

Dept. Name:

9.8 Are there budgetary funds specifically dedicated to M&E for cervical cancer prevention and control?

- ☐ Yes ☐ No

9.9 Are there institutions or organizations outside of the MoH that are conducting M&E for cervical cancer prevention and control?

- ☐ Yes ☐ No

If Yes, please provide Institution Name:

Institution Name(s):

HUMAN RESOURCES

9.10 What is the number of trained individuals who work on cervical cancer data related issues and systems? How many have 100% of their work time dedicated to cervical cancer?

Personnel trained in M&E:

100% time on cervical cancer:

Data management personnel

(includes data entry and analysis):

100% time on cervical cancer:

System developers:

100% time on cervical cancer:

IT support staff:

☐ Data Not Available

100% time on cervical cancer:

☐ Data Not Available

Data Year:

Data Source/s:

DATA COLLECTION AND AGGREGATION SYSTEMS

Cross-reference data sources for Domain 4: Service

Availability and Utilization; and Domain 7: Laboratory

9.11 What electronic systems are used for collecting and managing individual client level data for health-care services within the country?

Systems may collect comprehensive health-care data for individual clients or individual client data for a specific disease or health programme (e.g. electronic medical records, electronic health records, mobile health systems, etc.); or they may be systems collecting limited data for individual clients receiving specific services (e.g. Laboratory or Pharmacy Information Systems).

☐ No electronic systems used for collecting individual client level data

Please list all systems, with the information below for each:

1. Name of system:

Organizations Using the System (list as many as possible):

Organization that Developed the System:

Type of Data Collected:

☐ Comprehensive health-care

- ☐ Disease- or programme-specific
(specify disease or programme):
- ☐ Service-specific (specify service):
- Are any data related to cervical cancer prevention and control collected?

☐ Yes ☐ No

2. Name of system:

Organizations Using the System (list as many as possible):

Organization that Developed the System:

Type of Data Collected:

- ☐ Comprehensive health-care
- ☐ Disease- or programme-specific (specify disease or programme):

☐ Service-specific (specify service):

Are any data related to cervical cancer prevention and control collected?

☐ Yes ☐ No

3. Name of system:

Organizations Using the System (list as many as possible):

Organization that Developed the System:

Type of Data Collected:

- ☐ Comprehensive health-care
- ☐ Disease- or programme-specific
(specify disease or programme):

☐ Service-specific (specify service):

Are any data related to cervical cancer prevention and control collected?

☐ Yes ☐ No

9.12 How are individual client level data for cervical cancer prevention and control collected?

- ☐ Exclusively through paper-based forms
- ☐ Exclusively through electronic systems
- ☐ Combination of paper-based and electronic systems

9.13 What patient identification number or code is used on data collection forms or in electronic systems to uniquely identify clients attending health services? Select all that apply

- ☐ Unique national ID number or code
- ☐ Unique national client health ID number or code
- ☐ Unique ID number or code assigned to clients attending specific services or programmes (i.e. disease-specific unique identifier)
- ☐ Each individual facility assigns an ID number or code to an individual client at their first visit
- ☐ Each facility assigns a new ID number or code to an individual client at every visit
- ☐ No use of ID numbers or codes to identify individual clients

9.14 What patient identification number or code is used on data collection forms or in electronic systems to uniquely identify clients attending cervical cancer prevention and control services? Select all that apply

- ☐ Unique national ID number or code
- ☐ Unique national client health ID number or code
- ☐ Unique ID number or code assigned to clients attending specific services or programmes (i.e. disease-specific unique identifier)
- ☐ Each facility assigns an ID number or code to an individual client at their first visit
- ☐ Each facility assigns a new ID number or code to an individual client at every visit
- ☐ No use of ID numbers or codes to identify individual clients attending cervical cancer prevention and control services

9.15 Is there an electronic system used to aggregate health-care data and calculate indicators for monitoring?

1. Name of system:

Organizations Using the System (list as many as possible):

Organization that Developed the System:

Type of Data Collected:

- ☐ Comprehensive health-care
- ☐ Disease- or programme-specific
(specify disease or programme):
- ☐ Service-specific (specify service):

Are any data related to cervical cancer prevention and control collected?

☐ Yes ☐ No

2. Name of system:

Organizations Using the System (list as many as possible):

Organization that Developed the System:

Type of Data Collected:

- ☐ Comprehensive health-care
- ☐ Disease- or programme-specific
(specify disease or programme):
- ☐ Service-specific (specify service):

Are any data related to cervical cancer prevention and control collected?

☐ Yes ☐ No

3. Name of system:

Organizations Using the System (list as many as possible):

Organization that Developed the System:

Type of Data Collected:

- ☐ Comprehensive health-care
- ☐ Disease- or programme-specific
(specify disease or programme):
- ☐ Service-specific (specify service):

Are any data related to cervical cancer prevention and control collected?

☐ Yes ☐ No

9.16 How are data for cervical cancer prevention and control aggregated and reported?

- ☐ Exclusively aggregated manually and reported on paper-based forms
- ☐ Exclusively aggregated and reported electronically
- ☐ Combination of paper-based and electronic aggregation and reporting

9.17 Are there standardized national indicators for cervical cancer prevention and control?

☐ Yes ☐ No

If Yes, please provide a list of standardized indicators.
If No, are there institutions or organizations within the country that have established indicators for cervical cancer prevention and control?

☐ Yes ☐ No

If Yes, please provide institution name:

Institution Name(s):

Contact:

9.18 For high HIV prevalence contexts: Are there standardized national indicators for cervical cancer prevention and control that are specifically linked to HIV status?

☐ Yes ☐ No

If No, are there institutions or organizations within your country that have established indicators for cervical cancer prevention and control that are specifically linked to HIV status?

☐ Yes ☐ No

Institution Name(s):

Contact:

EVALUATIONS AND AUDITS**9.19 Have there been any evaluations or assessments of health information systems within the past 10 years?**

Please list all

☐ Yes, Conducted by:

Year conducted:

☐ No

9.20 Have there been any evaluations or assessments of the cervical cancer programme within the past 10 years?

Please list all.

☐ Yes, Conducted by:

Year conducted:

☐ No

If Yes, did the programme evaluation or assessment include an audit or assessment of cervical cancer data and data systems?

☐ Yes ☐ No

DECISION AND REFERRAL SUPPORT SYSTEMS**9.21 Which of the following are being used in clinical consultation and/or client referrals in the health-care system?**

- ☐ Real-time telephone based
- ☐ Telemedicine-based
- ☐ Paper/letter-based
- ☐ Mobile based store-and-forward systems
- ☐ Other (specify):
- ☐ None of these

Which systems are used for cervical cancer consultation and referrals?

- ☐ Real-time telephone based
- ☐ Telemedicine-based
- ☐ Paper/letter-based
- ☐ Mobile based store-and-forward systems
- ☐ Other (specify):
- ☐ None of these

9.22 Which of the following decision support systems are being used in health-service delivery?

- ☐ Electronic client-level
- ☐ Manual client-level
- ☐ Electronic or real-time M&E
- ☐ Manual M&E
- ☐ Electronic inventory management (includes pharmacy and laboratory)
- ☐ Manual inventory management (includes pharmacy and laboratory)
- ☐ Other (specify):
- ☐ None of these

Which systems are used in cervical cancer service delivery?

- ☐ Electronic client-level
- ☐ Manual client-level
- ☐ Electronic M&E or real-time
- ☐ Manual M&E
- ☐ Electronic inventory management (includes pharmacy and laboratory)
- ☐ Manual inventory management (includes pharmacy and laboratory)
- ☐ Other (specify):
- ☐ None of these

IN-DEPTH DISCUSSION GUIDE

DOMAIN 1: DEMOGRAPHICS AND EPIDEMIOLOGY

Data System Themes:

Systems and Processes (demographic, mortality, surveillance and epidemiological data); **Health Information Exchange**; **Data Quality**; **Data Access and Use**

REVIEW LANDSCAPE SURVEY QUESTIONS 1.1-1.11

For each subset (demographics, mortality and vital statistics, HIV epidemiology, and cervical cancer epidemiology) where data are available, ask the following questions:

1.1 What are the structures and processes to obtain and report data on population demographics, mortality and vital statistics, HIV epidemiology, and cervical cancer epidemiology?

Probes:

- What are the sources of these data and how are the reported numbers derived?
- How are the data aggregated and analysed? Are paper-based or electronic systems (or registries) in use? What is the system name, what entity maintains it, and who are the users?
- Are there guidelines for reporting data into the system (or registry)? What data quality checks are in place for these data?
- What is the quality of these data in terms of the following six dimensions: Completeness; Conformity; Accuracy; Duplication; Integrity; and Timeliness?
- Are the systems integrated or linked to any other systems (e.g. system for vital registration linked to the cancer registry; cancer registry linked to health management information system)?

1.2 How and by whom have these data been used in the past 12 months?

Probes:

- Used for programme planning, development or improvement?
- Used for policy development or modification?
- Used to determine resource allocation? Or for the development of a grant?
- Used to produce an internal or external report or presentation? Used to produce a peer reviewed article?

For each subset where data are available but are NOT

current, ask the following question (in addition to the questions above):

1.3 What are the barriers to collecting or obtaining current data on population demographics, mortality and vital statistics, HIV epidemiology, and cervical cancer epidemiology?

Probes:

- Is this an issue of data accessibility or availability?
- If an issue of access, who currently has access to these data? What is the process to expand access?
- If an issue of availability, are there other systems or processes that could potentially be leveraged to collect more current data?
- Is timeliness impacted by availability of resources to collect and manage these data?

For each subset where data are NOT available, investigate further by asking:

1.4 Why are these data not available?

Probes:

- Is this an issue of access or availability?
- Are there systems and processes in place to provide specific programmes with the necessary epidemiological and surveillance data for planning, management and targeting?
- What data and systems are other programmes using for planning, monitoring, and determining impact?

Data System Themes:

Systems and Processes (population-based surveys; cancer registries); **Policies, Plans and Guidelines**; **Health Information Exchange**; **Data Quality**; **Data Access and Use**

REVIEW LANDSCAPE SURVEY QUESTIONS 1.12-1.16

1.5 Please describe any other registries, systems and sources of surveillance or epidemiological data relevant to cervical cancer which were not described above.

Probes:

- Are there routinely conducted population-based surveys (e.g. DHS, PHIA, STEPS, etc.)?
- Are there surveys to collect: mortality data? HIV data? Cervical cancer data/information? When was the last survey and when will the next survey be?

- Where there is a cancer registry, is it paper-based or electronic? Are there guidelines for reporting invasive cervical cancer data? Are there guidelines for monitoring and quality control of the data?
- Where there is a cervical cancer screening and precancerous lesion treatment registry, is it paper-based or electronic? Are there guidelines for reporting? Are there guidelines for monitoring and quality control of the data?
- Where there is a registry capturing HPV immunization, is it paper-based or electronic? Are there guidelines for reporting? Are there guidelines for monitoring and quality control of the data?
- Who reports into the systems, who has access to the data and how have the data been used in the past 12 months?
- Are these systems integrated with or linked to any other systems? Can information readily be shared between systems? Please describe the process.
- What is the quality of these data?

DOMAIN 2: GOVERNANCE, MANAGEMENT AND INFRASTRUCTURE

Data System Themes: Context; Infrastructure

REVIEW LANDSCAPE SURVEY QUESTIONS 2.1-2.3

Where information and data on infrastructure are available, ask the following:

2.1 How is the health-care sector addressed and prioritized in government structures for delivering basic infrastructure and telecommunications, and ensuring government effectiveness?

Probes:

- Does the basic framework include infrastructure specific to health-care service provision? What are some gaps in this infrastructure? What, if any, efforts are in place to strengthen these domains?
- What is the percentage of facilities with access to basic infrastructure domains (e.g. electricity and water) and telecommunications technology? What efforts, if any, are in place to strengthen these domains?
- Are there key examples in the health-care sector of leveraging available ICT for programming (e.g. data collection and management, patient follow-up, etc.)?

Where information and data on infrastructure are NOT available, ask the following:

2.2 What are some of the largest gaps experienced by the health-care sector in terms of basic infrastructure (e.g. electricity and water) and telecommunications (e.g. telephones and mobile networks, computers and internet)?

Probes:

- Are there certain health-care system levels with better access to basic infrastructure and telecommunications? Do private or NGO facilities typically have better access than government/public facilities?
- Is there political will behind prioritizing delivery of basic infrastructure and telecommunications elements to the health-care sector?
- Are there key examples in the health-care sector of leveraging available ICT for programming (e.g. data collection and management, patient follow-up, etc.)?

NOTE: Landscape Survey questions 9.4-9.7; 9.9; 9.13 and Discussion Guide questions 9.4 and 9.7 collect expanded information on Coordination, Management and Governance of information technology and cervical cancer data systems.

Data System Themes: Context; Governance, Management and Coordination

REVIEW LANDSCAPE SURVEY QUESTIONS 2.4-2.6

Where there is an organizational structure for national health-care governance, ask the following:

2.3 Are there any key strengths or weaknesses in general health care or cervical cancer service delivery or programming as a result of the health-care governance structure?

Probes:

- Has this structure recently changed or been adapted? What impact did this have on service provision and access to health-care services?
- Is there a different ministry/department that oversees health care financing? Human resources for health? Information technology for health?
- Do the different ministries/departments that oversee health care and information technology have standing coordination meetings, working groups or other collaborative opportunities?

Where there is NOT an organizational structure for national health-care governance, ask the following:

2.4 Please describe how health care is provided.

Probes:

- Are there specific organizations, institutions or agencies responsible for providing health services? Are they private (for-profit)? Do they provide health care to the entire country, or only to specific subnational areas?
- Who is responsible for health-care financing and the provision of basic health-care infrastructure?
- What is the relationship between any entities providing health services, health-care infrastructure or financing and the government?

Data System Themes:

Context; Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 2.7–2.13

2.5 Please describe the organization and management of cervical cancer prevention and control activities (HPV vaccination, screening, PCL treatment, and invasive cervical cancer) within the MoH. If an organogram is available, please provide a copy.

Probes:

- How many units/depts. have authority over cervical cancer activities?
- Do the units/depts. also have authority over other disease areas? What areas?
- Are there staff dedicated specifically to cervical cancer at the department, section, unit, or programme level? Is this number of staff sufficient?
- What decisions regarding cervical cancer prevention and control programming are made at the centralized National level? Subnational level? Programme level?
- In high HIV prevalence contexts: What is the level of integration between cervical cancer prevention and control and HIV programming?

2.6 Please describe the level of interaction between different programmes/units and other stakeholders.

Probes:

- How do the cervical cancer screening and PCL treatment and invasive cervical cancer management programmes communicate with one another (e.g. regular meetings/forums)?
- Are data routinely exchanged between different sections/units? If applicable, are data exchanged with the HIV programme?

- What is the level of interaction between cervical cancer prevention, screening, invasive cervical cancer management programmes and units or departments responsible for Health Information Systems and ICT?
- Is there a national stakeholder forum for cervical cancer (prevention screening, or treatment)? Are any of the stakeholders designing or supporting systems for data collection around cervical cancer?

Data System Themes:

All Themes

REVIEW LANDSCAPE SURVEY QUESTION 2.14

2.7 For each organization, agency or institution outside of the government with responsibility for cervical cancer, use the Exemplar Programme Discussion Guide to conduct in-depth interviews with key contacts.

DOMAIN 3: POLICIES, PLANS, STRATEGIES AND CLINICAL GUIDELINES

Data System Themes:

Context; Policies, Plans, Strategies and Reporting Guidelines; Governance, Management and Coordination

REVIEW LANDSCAPE SURVEY QUESTIONS 3.1–3.8

NOTE: Landscape Survey questions 9.3, 9.13–9.16 and Discussion Guide question 9.5 collect expanded information on contents of the M&E plan for cervical cancer prevention and control.

3.1 Please describe the policies, plans and strategies that govern cervical cancer prevention and control.

Probes:

- How many different policies, plans or strategies govern cervical cancer prevention and control? What is the level of integration between screening and PCL treatment and invasive cervical cancer?
- Have the plans or strategies been fully costed?
- How widely are the policies, plans and strategies disseminated?
- Does service provision at all levels follow the policies, plans and strategies? In private facilities as well?
- What is the scope of recommendations in the policies, plans and strategies? Are they detailed enough to offer appropriate guidance for service provision?
- Who is responsible for drafting and updating plans or policies? Please briefly describe the process.
- Do any of the plans or strategies include a monitoring and evaluation plan?

3.2 Please describe the clinical practice guidelines for cervical cancer prevention and control services (screening, PCL treatment, diagnostics, invasive cervical cancer treatment and management).

Probes:

- How many different clinical practice guidelines are endorsed by MoH for cervical cancer prevention and control services? What is the level of integration between screening and PCL treatment and invasive cervical cancer?
- Are there clinical practice guidelines which address HIV?
- Are the guidelines developed at the National level? Subnational level? Programme/facility level? Partner level? What department, section or unit is responsible for updating and drafting the guidelines?
- How widely are the guidelines disseminated?
- Does service provision at all levels follow the guidelines? In private facilities as well?
- Are the guidelines detailed enough to guide service provision?
- If clinical practice guidelines do not exist, how do providers make decisions about patient care (e.g. are there other supportive resources that are in use)?

DOMAIN 4: SERVICE AVAILABILITY AND UTILIZATION

Note: Cross-reference Landscape Survey Questions 3.4 and 3.5 for information on services outlined in cervical cancer prevention and control policies, plans or strategies

Data System Themes: Context

REVIEW LANDSCAPE SURVEY QUESTIONS 4.1–4.19

4.1 Please describe the availability and general status of programmes and services for cervical cancer screening and precancerous lesion treatment?

Probes:

- What are the screening and PCL treatment services offered (national and subnational)? Are these the same as outlined in national policies, plans or strategies?
- Are screening and PCL treatment services available through mobile units? Are these units tied to specific facilities or programs?

- Are the services designated to be provided at each health care facility level provided with regularity and without interruption?
- Are there a sufficient number of facilities providing services to meet population needs?
- What type of service/location of service provision is the most accessible to women seeking services (e.g. at a facility, mobile unit, or campaign)?
- How does private facility service availability and provision differ from the public sector (e.g. Do private facilities use Pap smear, and public use VIA? Is it mostly public facilities that offer mobile services?)

4.2 Please describe the availability and general status of programmes and services for the management and treatment of invasive cervical cancer?

Probes:

- What services are offered for the management and treatment of invasive cervical cancer (national and subnational)?
- What services are offered by cancer centres/specialty cancer hospitals? How are the specialty centres distributed geographically? What are plans for such hospitals/centres in the future (e.g. are additional specialty centres planned?)?
- Are the services designated to be provided at each facility level provided with regularity and limited interruption?
- Are there a sufficient number of facilities providing services to meet population needs?
- What health facility level is the most accessible to women seeking services (if more than one level offers these services)?
- How does private facility service availability and provision differ from the public sector (e.g. Do private facilities offer radiation, and public only offer chemotherapy?)? Is there any integration between public and private services provision for invasive cervical cancer?

Data System Themes: Systems and Processes (service availability data; health facility registry/census); Governance, Management and Coordination; Health Information Exchange; Data Quality; Data Access and Use

REVIEW LANDSCAPE SURVEY QUESTIONS 4.4; 4.8; 4.12; and 4.16–4.19

Where data are available, ask the following questions:

4.3 What are the structures and processes to obtain and report data on health facilities and the services they provide?

Probes:

- What are the data sources? Are these data routinely collected and reported as part of programme service delivery? Or collected through periodic health facility census or surveys and assessments of service availability and facility readiness?
- Is there a national Master Facility List or Registry?
 - Does the list include all facilities in the country (public/government, NGO, faith-based, private, etc.)?
 - Does the list capture cervical cancer services provided?
 - What data elements are captured (e.g. services, equipment, availability of water and electricity, etc.)?
- What entity is responsible for collecting and maintaining information on health facilities (including location and distribution) and the services they provide?
- How are these data used? Who has access to these data?
- If these data are derived from routine data collection, how are the data aggregated, analysed and transmitted?
 - If electronic systems are in use, what is the system name, what entity maintains it, and who are the users?
- Are these data linked or accessible to other systems (e.g. through APIs)? How are they linked? To what systems?

4.4 What is the quality of these data?

Probes:

- Please describe data quality in terms of the following six dimensions: Completeness, Conformity, Accuracy, Duplication, Integrity, and Timeliness.
- What data quality checks are in place for these data? Are routine data audits or updates conducted?
- Is there a back-up system for these data?

Where data are available but are NOT current, ask the

following question (in addition to the questions above):

4.5 What are the barriers to collecting or obtaining current data? What are potential opportunities for strengthening?

Probes:

- Is this an issue of data access or availability?
- Are resources available for conducting more timely periodic surveys or assessments?
- Are there existing systems, or periodic surveys or assessments which could be better coordinated or leveraged to collect these data?

Where data are NOT available, investigate further by asking:

4.6 Why are data not available?

Probes:

- Is this an issue of data access or availability?
- If an issue of access, what are the barriers to obtaining these data for decision-making? Who currently has access to these data?
- If an issue of availability, are there existing systems, or periodic surveys or assessments which could be leveraged to collect these data for cervical cancer?
- What data and systems are other programmes and health-care areas using for planning and monitoring service delivery and distribution?

Data System Themes:

Systems and Processes (client level and aggregate service delivery and utilization data); Governance, Management and Coordination; Data Access and Use; Data Quality; Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 4.20–4.30

Note: Cross-reference Landscape Survey Questions 9.9–9.16 for information on client level and aggregate data systems. The responses for the questions 4.7–4.11 below will be referenced by questions 9.9–9.21 in order to consolidate information on existing data and data systems and to ensure there are no remaining gaps.

Where data are available, ask the following:

4.7 What are the structures, processes and systems in place to collect data on service delivery at the client/facility level, and to aggregate and report these data?

Probes:

- What is the level of standardization of existing structures and processes and what entities are responsible for coordination and management (e.g. National level? Subnational level? Programme or facility level?)?
- How are the numbers reported in the survey responses derived/obtained? What are the data sources?
- Who has access to these data?
- How are these data used (e.g. for patient management; for programme or policy development; to determine resource allocation; to inform research; to develop a report, etc.)? Are data used frequently and routinely?
- Are the data stored securely in order to maintain privacy and confidentiality?
- Are there standardized forms, registers or systems for the collection of client level data? And for summarizing and reporting facility level data to national or subnational level?
 - Is there a standardized set of minimum data elements to be collected?
 - Is this information sufficient for both patient management and programme monitoring?
- How do systems collecting client level data exchange information with data aggregation systems?

4.8 What is the quality of client level data?*Probes:*

- Please describe data quality in terms of the following seven dimensions: Completeness, Conformity, Consistency, Accuracy, Duplication, Integrity, and Timeliness.
- What data quality checks are in place for these data? Are routine data audits or updates conducted?
- What is being done to improve data quality?
- Is there a back-up system for these data?

4.9 What is the quality of aggregate data?*Probes:*

- Please describe data quality in terms of the following seven dimensions: Completeness, Conformity, Consistency, Accuracy, Duplication, Integrity, and Timeliness.

- What data quality checks are in place for these data? Are routine data audits or updates conducted?
- What is being done to improve data quality?
- Is there a back-up system for these data?

Where data are available but are NOT current, ask the following question (in addition to the questions above):

4.10 What are the barriers to collecting or obtaining current data?*Probes:*

- Is this an issue of data access or availability?
- Are there specific data elements which create a barrier to timely reporting of summarized facility data?
- What are the major challenges with data collection, management and aggregation?
- Is there a demand for these data for decision-making? For patient and programme management?

Where data are NOT available, investigate further by asking:

4.11 Why are data not available?*Probes:*

- Is this an issue of access or availability?
- If an issue of access, what are the barriers to obtaining these data for decision-making? Who currently has access to these data?
- Are there systems and processes in place to provide specific programmes with the necessary data for planning, management and targeting?
- What data and systems are other programmes and health-care areas using for planning, monitoring, and determining impact?
- Can the systems, structures and processes utilized by other programmes and health areas be leveraged for cervical cancer?

Data System Themes:

Context; Systems and Processes (tracking referrals); Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTION 4.10

Note: Cross-reference Landscape Survey Questions 9.21 for information on referral systems. The response for 4.12 below will be referenced by questions 9.13 in order

to consolidate information on existing data and data systems and to ensure there are no remaining gaps.

4.12 What are the systems and processes for tracking women referred to services following a positive screen, or cervical cancer diagnosis?

Probes:

- Do referral mechanisms work in a timely manner? If no, please identify the major gaps as you understand them.
- Is there integration or cross-referral between public and private facilities? For what services?
- Are there standardized paper forms or electronic systems and processes for referral mechanisms and tracking women through the continuum and between facilities? What are the primary gaps in these systems and processes?

DOMAIN 5: HUMAN RESOURCES

Data System Themes:
Context

REVIEW LANDSCAPE SURVEY QUESTIONS 5.1–5.17

5.1 Please describe the availability of trained health-care service providers – focusing on those relevant to the provision of cervical cancer screening, precancerous lesion diagnostic and treatment, and invasive cervical cancer diagnostic and treatment services.

Probes:

- What cadres of providers generally provide cervical cancer services?
- Are specific cadres outlined in policies, plans, strategies or clinical guidelines for cervical cancer? Are the providers who are currently providing services the same as those outlined?
- Are training needs or qualifications for cervical cancer service providers outlined in policies, plans, strategies or clinical guidelines for cervical cancer?
- Are these providers typically trained inside or outside of the country?
- Is the number of trained service providers sufficient to meet the needs of the population?
- What are the major gaps in the availability of trained service providers? How do these gaps impact service provision? Is anything being done to address these gaps?

- What entity is responsible for ensuring the training and distribution of a sufficient number of service providers?
- Are there opportunities that can be leveraged to increase the availability of trained cervical cancer service providers?

Data System Themes:

Systems and Processes (health-care provider training, education and capacity building management systems); Governance, Management and Coordination; Data Access and Use; Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 5.8–5.11

Where data are available, ask the following question:

5.2 What are the structures and processes to obtain and manage data on health-care provider training, certification programmes, continuing education and capacity building?

Probes:

- Is there a central system to track the training of cervical cancer service providers? Please describe the system: what are the data sources? What entity is responsible for maintaining the system? What entities report into the system?
- Is there a central system for tracking continuing medical education programmes? Please describe the system.
- Do systems include all available education and training opportunities (e.g. public/government, NGO, faith-based, private, etc.)?
- Are the systems for tracking provider training and certification integrated with or connected to the systems for managing human resource distribution (e.g. health provider registry or list)?
- How often is this information updated? What are the processes for updating and how is the information validated?

Where data are available but are NOT current, ask the following question (in addition to the question above):

5.3 What are the barriers to collecting, obtaining or maintaining current data? What are potential opportunities for strengthening?

Probes:

- Is this an issue of data access or availability?

- Are there existing systems, or periodic surveys or assessments which could be better coordinated or leveraged to collect and update these data?
- If an issue of access, what are the barriers to obtaining these data for decision-making? Who currently has access to these data?

Where data are NOT available, investigate further by asking:

5.4 Why are data not available?

Probes:

- Is this an issue of data access or availability?
- If an issue of access, what are the barriers to obtaining these data for decision-making? Who currently has access to these data?
- If an issue of availability, are there existing systems, or periodic surveys or assessments which could be leveraged to collect these data for cervical cancer?
- What data and systems are other programmes and health-care areas using for planning and monitoring service delivery and distribution?

Data System Themes:

Systems and Processes (health-care provider registry/census; human resources management information systems); Governance, Management and Coordination; Data Access and Use; Data Quality; Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 5.12–5.17

Where data are available, ask the following question:

5.5 What are the structures and processes to obtain and report data on health-care service providers?

Probes:

- What are the data sources (e.g. routine collection and reporting; periodic surveys and assessments of service availability and facility readiness; etc.)?
- Is there a national Master Provider List or Registry?
 - Does the list include all cadres of providers in the country (public/government, NGO, faith-based, private, etc.)? Or does it include only limited cadres (e.g. surgeons and doctors, but not nurses?)
 - What data elements exist within this provider registry (e.g. qualifications, location, services they provide, training)?

- Who has access to this provider list/registry?

- Is the national list or registry integrated with health-care provider training data or facility data?
- What entity is responsible for collecting and maintaining information on service providers (including location and distribution) and their qualifications?
- If these data are derived from routine data collection, how are the data aggregated, analysed and reported?
- If electronic systems are in use, what is the system name, what entity maintains it, and who are the users?
- What data quality checks are in place for these data?
- What is the quality of these data in terms of the following dimensions: Completeness; Conformity; Accuracy; Duplication; Integrity; and Timeliness?

Where data are available but are NOT current, ask the following question (in addition to the question above):

5.6 What are the barriers to collecting or obtaining current data? What are potential opportunities for strengthening?

Probes:

- Is this an issue of data access or availability?
- Are resources available for conducting more timely information updates through periodic surveys, assessments or other systematic means?
- Are there existing systems, or periodic surveys or assessments for general health care which could be better coordinated or leveraged to collect these data for cervical cancer?

Where data are NOT available, investigate further by asking:

5.7 Why are data not available?

Probes:

- Is this an issue of data access or availability?
- If an issue of access, what are the barriers to obtaining these data for decision-making? Who currently has access to these data?
- If an issue of availability, are there existing systems, or periodic surveys or assessments which could be leveraged to collect these data for cervical cancer?
- What data and systems are other programmes and health-care areas using for planning and monitoring

health-care provider availability, qualifications and distribution?

DOMAIN 6: EQUIPMENT, SUPPLIES AND MEDICINES

Data System Themes: Context

REVIEW LANDSCAPE SURVEY QUESTIONS 6.1–6.9

6.1 Please describe the availability of equipment and supplies for cervical cancer screening, precancerous lesion diagnostic and treatment, and invasive cervical cancer diagnostic and treatment services.

Probes:

- What equipment, supplies, medicines or commodities present the largest barrier to providing cervical cancer services without interruption?
- Are supplies and medicines for cervical cancer on the national essential supplies and medicines lists? If no, what are the processes for including them? What are the barriers?
- Are the available equipment and supplies sufficient to meet the needs of the population?
- Are equipment, supplies and medicines more regularly available at certain levels of the health-care system? Or at private versus public facilities?
- Are medicines for invasive cervical cancer pain management and palliative care available to out-patients as oral prescriptions? Are these medicines only available to in-patients? What are barriers to out-patient availability?
- Are the line item costs available for cervical cancer supplies and commodities?

Data System Themes: Systems and Processes (Procurement and Inventory Management Systems); Governance, Management and Coordination; Data Access and Use; Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 6.10–6.15

6.2 Please describe the structures, systems and processes for procuring and managing equipment, supplies, medicines and commodities for cervical cancer prevention and control services.

Probes:

- Who is responsible for procuring and distributing cervical cancer equipment? Are the same entities responsible for

procuring supplies, commodities and medicines?

- What is the level of government ownership of the procurement system?
- Is there a structure or process for strategically determining the geographic distribution of equipment in order to increase service accessibility? Who manages this process?
- What system is used to procure & track inventory of cervical cancer screening and treatment supplies and commodities? Is this an electronic or paper-based system? Who enters inventory information and who has access?
- How is inventory managed in order to prevent stockouts at facilities, and how are stockouts monitored and addressed? What are the strengths and weaknesses of the inventory management system?
- Are the systems for managing inventory for supplies and commodities linked to those for procurement of medicines? Are these systems linked to systems capturing information on service utilization?
- How is the functionality and maintenance of equipment for cervical cancer screening and treatment monitored? What entity is responsible for maintenance?
- Are periodic surveys or assessments conducted in order to determine availability of equipment and supplies at facilities designated to provide cervical cancer services?
- Are there existing systems, structures or processes for procurement and inventory management which function well and could be leveraged for cervical cancer?

DOMAIN 7: LABORATORY

Data System Themes: Context

REVIEW LANDSCAPE SURVEY QUESTIONS 7.1–7.7

7.1 Please describe the availability, organization and management of laboratory services for cervical cancer screening, and precancerous lesion and invasive cervical cancer diagnostics.

Probes:

- How is the laboratory system in the country organized? Are most cervical cancer services provided by government or private laboratories?
- Are most laboratories connected to hospitals or health facilities? Or are they standalone laboratories? Is this

organization service-dependent?

- Please provide a summary of the laboratory strategy and plan? If no strategy exists, are there future plans for such a strategy?
- Are there a sufficient number of laboratories to meet the demand for cervical cancer screening and diagnostic services?
- What are the primary gaps in the laboratory system?
- Please describe the processes, plans or guidelines for laboratory accreditation and/or quality and performance evaluations for cervical cancer screening and diagnostic test services (e.g. cytopathology, histopathology, HPV testing)?

Data System Themes:

Systems and Processes (Service Availability Data; Laboratory Accreditation Data); Governance, Management and Coordination; Data Access and Use; Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 7.5-7.7

Where data are available, ask the following questions:

7.2 What are the structures and processes to obtain and report these data?

Probes:

- What are the data sources? Are there data periodic census or surveys and assessments of laboratory service availability and readiness?
- Are there systems for tracking laboratory accreditation and/or quality and performance evaluations for cervical cancer screening and diagnostic test services (e.g. cytopathology, histopathology, HPV testing)? Please describe the systems.
- What data quality checks are in place for these data?
- What entity is responsible for collecting and maintaining information on laboratory human resources (including location and distribution), the services they provide and their level of accreditation/qualification?
- What entity is responsible for collecting and maintaining information on laboratories (including location and distribution), the services they provide and their level of accreditation/qualification?
- How are data on laboratory human resources, service availability and accreditation used? Who has access to these data?

Where data are available but are NOT current, ask the

following question (in addition to the questions above):

7.3 What are the barriers to collecting or obtaining current data? What are potential opportunities for strengthening?

Probes:

- Is this an issue of data access or availability?
- Are resources available for conducting timely periodic surveys, assessments or other systematic updates?
- Are there existing systems, or periodic surveys or assessments which could be better coordinated or leveraged to collect these data?

Where data are NOT available, investigate further by asking:

7.4 Why are data not available?

Probes:

- Is this an issue of data access or availability?
- If an issue of access, what are the barriers to obtaining these data for decision-making? Who currently has access to these data?
- If an issue of availability, are there existing systems, or periodic surveys or assessments which could be leveraged to collect these data for cervical cancer?
- What data and systems are other programmes and health-care areas using for planning and monitoring laboratory service delivery, distribution and quality?

Data System Themes:

Systems and Processes (Procurement and Inventory Management Systems); Governance, Management and Coordination; Data Access and Use; Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 7.8-7.9

7.5 Please describe the procurement and distribution of laboratory supplies for cervical cancer screening and diagnostic services.

Probes:

- Who is responsible for procuring and distributing laboratory supplies for cervical cancer diagnosis within the country? Are the same entities responsible for procuring supplies, commodities and medicines for health facilities?
- What system is used to procure & track inventory of laboratory supplies for cervical cancer? Is this an electronic or paper-based system? Who enters inventory information and who has access?

- What is the level of government ownership of this system? How broadly is it used?
- Are the systems for managing inventory for laboratory supplies and commodities linked to those for procurement of supplies, commodities and medicines for health facilities? Are these systems linked to systems capturing information on service utilization?
- How is inventory managed in order to prevent stockouts at laboratories, and how are stockouts monitored and addressed? What are the strengths and weaknesses of the inventory management system?
- Are periodic surveys or assessments conducted in order to determine availability of laboratory supplies for cervical cancer and functionality of procurement system and supply chain?

Data System Themes:

Systems and Processes (Results Reporting); Governance, Management and Coordination; Data Access and Use; Health Information Exchange; Data Quality

REVIEW LANDSCAPE SURVEY QUESTIONS 7.10–7.14

7.6 Please describe the systems and processes for documenting and communicating laboratory test results.

Probes:

- Is there a national Laboratory Information System which includes client level laboratory results data? What entity is responsible for maintaining and updating this system?
- What are the standards for documenting and reporting cytology results? HPV test results? Biopsy results? Is the standard terminology used consistently?
- Are there guidelines for collecting and reporting laboratory results data?
- What is the quality of these data in terms of the following dimensions: Completeness, Conformity, Accuracy, Duplication, Integrity, and Timeliness? Are data quality checks in place?
- What information is exchanged between the laboratory and health facility? What information accompanies the sample? What information is provided back to the facility and the provider?
- Please describe the flow of results information from the laboratory to the client? Is this direct, or via the health facility/provider?
- Is feedback provided to the facility/provider on inadequate or unusable samples?
- Are there forms or systems to facilitate timely

information exchange between health facilities/providers and laboratories?

- Are there specific laboratory-based tests or processes which delay results reporting?

DOMAIN 8: FINANCING, BUDGET AND COSTING

Data System Themes:

Context

REVIEW LANDSCAPE SURVEY QUESTIONS 8.1–8.9

8.1 What are the opportunities and threats resulting from the current financing and budgeting structure for cervical cancer services, programming, and human resources?

Probes:

- Is the current funding stream sustainable? Are there specific risks associated?
- If there is not a dedicated cervical cancer budget, is there a regular percentage allocation for cervical cancer services and programming?
- Who is involved in developing the budget for cervical cancer (i.e. Are programme personnel involved? Service providers or clinicians? A national costing and planning unit not specific to cervical cancer?)?
- Are there resources specifically allocated to supporting capacity building and provider training? Are these resources sufficient?

Data System Themes:

Systems and Processes (costing and budgeting); Governance, Management and Coordination; Data Access and Use; Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 8.1–8.6

8.2 What are the systems and processes for cervical cancer budgeting and costing?

Probes:

- Are cervical cancer costing data systematically collected and managed? Is collection of cost data an on-going process or was it done as a one-time activity?
- How are line item costs for cervical cancer estimated or determined? How are service costs per individual estimated? How often are line item costs updated?
- Who has access to these data and systems?
- Are the systems and processes for budgeting and costing linked to other systems (e.g. those for procurement and supply management)?

8.3 Where costing data (i.e. line item costs, service

costs per individual, overall budget requests and allocations) are available, how have these data been used in the past 12 months?

Probes:

- For programme budget forecasting?
- Inventory and stock maintenance?
- Cost-effectiveness or efficiency analyses?
- Programme or impact evaluation?
- Planning for service introduction or scale-up?
- Service feasibility studies?

DOMAIN 9: HEALTH INFORMATION SYSTEMS OVERVIEW

Data System Themes:

Context; ICT Infrastructure, Data Policies, Plans, Strategies and Guidelines

REVIEW LANDSCAPE SURVEY QUESTIONS 9.1 and 9.2

Where a national policy, plan or strategy for ICT exists, ask the following:

9.1 Please describe the national ICT policy, plan or strategy.

Probes:

- What pillars or focus areas are prioritized? Does the plan directly address health? And/or cervical cancer prevention and control?
- Does it outline a clear framework or strategy for implementation? For monitoring implementation?
- What are some of the activities outlined in the policy, plan or strategy?
- What are the expected outcomes? Is there a timeline associated with implementation and outcomes?

Where a national policy, plan or strategy for eHealth exists, ask the following:

9.2 Please describe the national eHealth policy, plan or strategy.

Probes:

- What does the plan hope to achieve? Is there a clear goal or vision?

- Is there an implementation framework or roadmap that reflects country priorities? What are the key priorities?
- Does it include a plan to monitor implementation? Assess opportunities and gaps?
- Are required components and resources identified?
- Is cervical cancer prevention and control addressed?

Where there are no national policies, plans, or strategies for ICT or eHealth, ask the following:

9.3 What are the barriers to the development of a national policy, plan, or strategy for ICT or eHealth?

Probes:

- Are resources available for development?
- Has the need for such a policy, plan or strategy been identified?
- Are there plans to draft such a policy, plan or strategy?
- What currently guides ICT and eHealth development and implementation?

Data System Themes:

Governance, Management and Coordination; Human Resources; Budget and Financing

REVIEW LANDSCAPE SURVEY QUESTIONS 9.4–9.6

9.4 Please describe the organizational structure of eHealth and ICT, and any key strengths or weaknesses.

Probes:

- Is there an eHealth coordinator? What Ministry or department is responsible for eHealth coordination?
- Is there one unit or multiple units that oversee health information systems?
- Are there established eHealth coordination structures specifically for cervical cancer on a national or subnational level?
- Do these structures engage all key stakeholders at the district/municipality level?
- Is there a sufficient number of staff to support national ICT and eHealth needs? Are staff adequately and appropriately distributed?
- Are there resources allocated to ICT and eHealth? How are they financed and who is responsible for budget?

development?

- What are some of the key opportunities or threats that the structure poses for high-quality cervical cancer data systems?

Data System Themes:

Data Policies, Plans, Strategies and Guidelines

REVIEW LANDSCAPE SURVEY QUESTION 9.3

Where a national M&E plan for cervical cancer exists, ask the following:

9.5 Please describe the M&E plan for cervical cancer prevention and control.

Probes:

- Is the M&E plan for screening and PCL treatment integrated with the M&E plan for invasive cervical cancer? If no, please describe each (use probes below for each plan).
- How widely is the plan disseminated?
- Are action plans included in the M&E strategy/plan?
- Does the plan outline processes, timelines and responsibilities? Please describe.
- Does the plan outline specific indicators and a plan for data collection, analysis and reporting?
- Is capacity building for M&E staff addressed? Is development of data systems and tools addressed?

Where a national M&E plan for cervical cancer does not exist, ask the following:

9.6 What are the barriers to developing a national M&E plan for cervical cancer prevention and control?

Probes:

- Are resources available for development? Does the technical capacity for the plan's development exist?
- Has the need for an M&E plan been identified?
- Are there plans to develop an M&E plan for cervical cancer?
- What currently guides cervical cancer monitoring and evaluation?

Data System Themes:

Governance, Management and Coordination; Budget

and Financing

REVIEW LANDSCAPE SURVEY QUESTIONS 9.7-9.9

9.7 Please describe the team responsible for M&E of cervical cancer prevention and control programming, noting any strengths, challenges and gaps.

Probes:

- How is this team structured? Are there protocols and lines of authority for these individuals?
- Is M&E for cervical cancer screening and precancerous lesion treatment integrated with M&E for invasive cervical cancer?
- What are the responsibilities and outputs for the M&E team?
- Are M&E efforts harmonized between public, private entities? Between national government and their implementing partners?
- Is there an active M&E working group, and are there minutes to demonstrate their work?
- Is there a dedicated budget allocation for M&E? What entity (or entities) finances M&E at the national level?
- Are M&E staff adequately and appropriately distributed in the country? Is there any bias toward distribution at central level?
- Does the number of staff meet needs? What are some of the key gaps in staffing?
- Is there harmonization between units/departments? And across the health system levels?

Data System Themes:

Human Resources

REVIEW LANDSCAPE SURVEY QUESTION 9.10

9.8 Please describe the availability of trained personnel to support data and data systems.

Probes:

- Are staff adequately and appropriately distributed in the country? Is there any bias toward distribution at central level?
- Does the number of staff meet needs? What are some of the key gaps in staffing?
- Is there harmonization between units/departments?

And across the health system levels?

- Are there IT staff or developers specifically dedicated to cervical cancer data and systems?
- Are staff to support data systems primarily MoH employees? Or contractors? Or external consultants?

Data System Themes:

Systems and Processes; Data Access and Use; Health Information Exchange; Data Quality

*REVIEW LANDSCAPE SURVEY QUESTIONS 9.11–9.12
AND DISCUSSION GUIDE QUESTIONS 4.7–4.11*

This question focuses primarily on information relevant to client level data systems and processes; responses to 4.7–4.11 provide additional detail on data access and use, health information exchange, and data quality.

9.9 Please describe the client level data systems in use, noting any key strengths and gaps.

Probes:

- Is the system exclusive for cervical cancer or part of a comprehensive client-level system?
- Do these systems collect data from static facilities only? From static facilities and mobile units? From campaigns or outreach?
- Are campaign data shared with other care settings? Which ones and how are they shared?
- Are there exemplar programmes that manage client level data well? If yes, which programmes?
- Are the data collected at the client level mostly free text or coded?
- If electronic systems exist, what is the level of MoH endorsement of system, and stage of maturity (early design, pilot, scaling, no longer operational)?
- What are the future plans for national/subnational client-level systems? What are the anticipated opportunities and challenges?
- If any systems have changed, what strategies are in place to integrate historical data?

Data System Themes:

Systems and Processes; Data Access and Use; Health Information Exchange; Data Quality

*REVIEW LANDSCAPE SURVEY QUESTIONS 9.15–9.18
AND DISCUSSION GUIDE QUESTIONS 4.7–4.11*

These questions focus primarily on data systems and process for aggregating and reporting service delivery and programme monitoring data; responses to 4.7–4.11 provide additional detail on data access and use, health information exchange, and data quality.

9.10 Please describe the data systems and processes for aggregating and reporting data, highlighting strengths and weaknesses of these systems and any systems for M&E.

Probes:

- Is the system exclusive for cervical cancer? Or a national health information system which collects cervical cancer data in addition to other health data?
- What data are reported into these systems and by whom (e.g. static facilities, mobile units, campaigns, hospitals, etc.)?
- Is feedback on the quality of reported data provided from the higher programme levels (e.g. national and subnational level) to the facility level?
- Do these systems allow for calculation of cervical cancer indicators? Which indicators?
- Are aggregate data systems electronic or paper-based? Is aggregation manual?
 - If electronic systems exist, what is the level of MoH endorsement of system, and stage of maturity (early design, pilot, scaling, no longer operational)?
- Are these data transmitted to the MoH and if so, through what process?
- Are there exemplar programmes that manage aggregate data well? If yes, which programmes?
- Are the data reported and entered into aggregate systems mostly free text or coded?
- What are the future plans for national/subnational aggregate systems? What are the anticipated opportunities and challenges?
- If any systems have changed, what strategies are in place to integrate historical data?

9.11 What indicators are currently used to monitor cervical cancer prevention and control (screening and PCL treatment; invasive cervical cancer treatment and management)? Please provide the list.

Probes:

- How have these indicators evolved/changed over time?

- What are the current and future national plans around M&E indicators for screening and PCL treatment?
- Who is responsible for developing and updating indicators?
- What are the barriers and opportunities to updating existing, or developing new, indicators?
- What other non-MoH institutions/organizations have established indicators for screening and PCL treatment?
- Are any of the indicators linked to HIV status?
- Do indicators align with global standards?

9.12 How widespread is the adoption of the nationally standardized indicators?

Probes:

- What proportion of cervical cancer programmes in the country routinely utilize these indicators for programme M&E?
- Are these indicators reported from facilities/regions to the MOH, at a regular frequency (e.g. at least annually)?
- Are there facilities or regions that are more compliant with reporting than others? If yes, which ones, and why?
- Do private facilities, or other facilities outside of the government health system monitor and report on these indicators?

Data System Themes:
Systems and Processes; Data Access and Use; Health Information Exchange; Data Quality

REVIEW LANDSCAPE SURVEY QUESTIONS 4.10, 9.21–9.22 AND DISCUSSION GUIDE QUESTION 4.12

9.13 What kinds of systems are used for cervical cancer clinical consultation and referral?

Probes:

- Are there protocols in place for client referrals?
- Are there data systems to support these across the continuum of cervical cancer prevention, screening and treatment?
- What is the predominate system used within the country for referral to screening services? To treatment services?
- What level of organization exists around these referral mechanisms?
- Describe whether telemedicine systems are synchronized/real-time or a synchronized?

- Are there any mobile-device based systems in use for prevention, screening and treatment?
- Are there exemplar referral, mobile-based or telemedicine systems?

9.14 Please describe any decision support systems relevant to cervical cancer.

Probes:

- What cervical cancer components are addressed by these systems?
- How does each decision support system work?
- What are some exemplar decision support systems in use around cervical cancer or other care-related CDSS?
- If any decision support systems exist that do not have cervical cancer components, what are the opportunities to integrate cervical cancer decision support within those systems?

Data System Themes:
Data Quality

REVIEW LANDSCAPE SURVEY QUESTIONS 9.15–9.18 AND DISCUSSION GUIDE QUESTIONS 4.4; 4.8; 4.9; 9.5; 9.10–9.12

9.15 What efforts are in place to improve quality of M&E data?

Probes:

- How routine and formal are these efforts?
- Are there individuals tasked with understanding and improving data quality gaps within the country?
- Is there routine supervision and data audit?
- Are data quality improvement efforts conducted in a systematic or ad hoc fashion?
- Is there a formal written policy for quality improvement (please get the documentation, if available)

9.16 Please describe the structures and processes in place for backing up cervical cancer data.

Probes:

- How routinely are the backups performed?
- What guidelines and processes are in place for backups and archiving?
- Is the back-up method standardized, or variable across institutions and regions? Is it within or outside of the country?

- Are there backup security mechanisms in place?
- Who has access and control of the data that have been backed up and archived?

9.17 What are the different legacy systems that exist relevant to cervical cancer screening and treatment?

Probes:

- Are legacy data reported on a national level?
- Are there efforts to integrate legacy systems to current systems?
- How are legacy data represented in national reporting systems?
- Are legacy data standardized to meet current standards and guidelines?

Data System Themes: Health Information Exchange

REVIEW LANDSCAPE SURVEY QUESTIONS 9.11–9.18 AND ALL DISCUSSION GUIDE QUESTIONS UNDER THE HEALTH INFORMATION EXCHANGE THEME (1.1; 1.5; 2.6; 2.7; 4.3; 4.7; 4.12; 5.2; 5.5; 6.2; 7.2; 7.5; 7.6; 8.2)

9.18 What is the status of health information exchange in the country?

Probes:

- What methods are in use for health information exchange?
- What is the level of interoperability of existing systems? Is there a health enterprise architecture?
- What is the level of horizontal integration of patient information across points of care (e.g. lab, pharmacy, etc.)?
- What is the stage of maturity (e.g. early design, pilot, scaling, no longer operational)?
- Which data standards are used? What hardware is required for use?
- What is the level of customization or continuous development required?
- What mechanisms are in place to measure the quality of data?

9.19 What methods are used (or planned for use) to uniquely identify clients?

Probes:

- Are IDs standardized across systems (e.g. across clinics, registries)?
- What systems are in place to generate and store identifiers?
- Are there guidelines on how identifiers are generated and issued?
- Are there systems for managing legacy identifiers?
- What national or subnational level initiatives are there for standardizing identifiers? Are there models for client ID systems?
- Are biometrics used?

9.20 Is there shared terminology, vocabulary or coding utilized in cervical cancer programme data systems and exchange?

Probes:

- Who is responsible for establishing terminology?
- How often is the terminology updated?
- Is the terminology aligned with international standards and if so, which standards are these?
- Is the terminology endorsed by the MoH?
- If there is shared terminology/definitions, is there an electronic version of the dictionary?

9.21 Please describe how facility level systems integrate or share information with national Ministry level systems (e.g. M&E and reporting systems).

Probes:

- What is the level of accessibility of these systems? Are they user-friendly?
- What is the timelines of data uploaded?
- How do the systems integrate with the M&E system or with registries?
- Are cervical cancer indicators incorporated into the national HMIS?
- What are the available systems for vertical data aggregation for cervical cancer (e.g. DHIS2)? What is the level of MoH endorsement and ownership level?
- What are examples of systems with good vertical integration?

SUGGESTED LIST OF DOCUMENTS FOR DESK REVIEW

This list of suggested documents is intended to be comprehensive but not exhaustive. There may be relevant documents available which are not on this list but should still be reviewed. Documents from the list will be collected from in-country sources as well as via internet searches by the RAP team. Paper copies of

documents should be scanned whenever possible, and all electronic copies should be maintained in accordance with the assessment data management protocol. If a document is in draft form, is not currently available, or does not exist, this should be noted in the response to the relevant survey questions.

Domain 1

Demographics and Epidemiology

- Census data report
- Population-based survey reports or fact sheets
- Cancer registry reports
- Programme data summary reports
- HIV prevalence and incidence modelling

Domain 2

Governance, Management and Infrastructure

- Organogram for the national Ministry
- Organogram for the cervical cancer programme
- List of key NGOs and partners working in cervical cancer. *Includes organizations working in research, training, service provision, surveillance, health promotion, etc.*

Domain 3

Policies, Plans, Strategies and Clinical Guidelines

- Strategic health plan for the country
- Cancer screening policy or strategic plan
- National cancer prevention and control policy
- HPV vaccination policy or strategic plan
- National cervical cancer treatment policy or strategic plan
- Policy relevant to any aspect of cervical cancer
- National clinical practice guidelines for cervical cancer screening
- Clinical practice guidelines for cervical cancer screening specific to HIV infected women
- National clinical practice guidelines for the management of invasive cervical cancer
- Policies and clinical practice guidelines used for cervical cancer screening and treatment of invasive cervical cancer

Domain 4

Service Availability and Utilization

- Documents and strategic plans outlining the cervical cancer prevention, screening and treatment programmes

- Cancer registry, national monitoring and other reports with cervical cancer screening, treatment and invasive cancer indicator data
- Service availability surveys, health facility census reports, and facility registry
- Standardized forms and registers for individual/client level cervical cancer data; standardized summary and reporting forms; data dictionary for electronic client level systems (e.g. EMR)

Domain 5

Human Resources for Health

- Reports from human resource management information systems, or health worker registry (e.g. master provider index)
- Budget reports for salary outlay
- Report on medical schools, training, specialty training
- Strategy for health worker capacity building or continuing education

Domain 6

Equipment, Supplies and Medicines

- Essential supply list and essential medications list
- Lists of cervical cancer supplies and equipment available (e.g. inventory reports, orders, etc.)
- Guidelines, standard operating procedures (SOPs) or technical specifications for system used to procure and distribute equipment and supplies for cervical cancer
- Reports or findings from health facility surveys (e.g. service availability and facility readiness surveys)

Domain 7

Laboratories and Diagnostics

- National policy, plan or strategy for laboratory development and management
- List of laboratories offering cervical cancer services (*Including Pap smear processing and review, cervical tissue histopathology processing and review, HPV test processing, etc.*)
- Guidelines for national quality assessment programme for cytology and histopathology
- Quality assurance (QA), control (QC) and improvement

- (QI) strategies, guidelines or SOPs for laboratories
- Sample cytology and histology request and results return forms

Domain 8

Budgeting, Financing and Costing

- Salary structure for government health personnel
- Donor country operations plans or memorandums of understanding showing budgetary commitments
- Previous programme budgeting or costing activity documents (e.g. spreadsheets or summary reports)
- Cost analysis and planning documents or reports (e.g. cost effectiveness analysis, analysis of average cost of services per individual)

Domain 9

Data and Data Systems

- Data management policies, plans or guidelines
- National eHealth and ICT strategy, policy or plan
- mHealth policy, strategy or plan

- National M&E plan for cervical cancer
- List of standardized national indicators for cervical cancer
- Organogram for cervical cancer M&E
- Document showing budget allocations for cervical cancer data systems and M&E efforts
- Reports of specific evaluations that have been conducted on cervical cancer information systems
- Reports of evaluations, assessments, and audits conducted on health information systems and cervical cancer information systems
- Data access policies and guidelines
- Predefined formats or standards for M&E and indicator data; national health information system technical notes and data dictionary
- Standardized forms and registers for individual/client level cervical cancer data; standardized summary and reporting forms; data dictionary for electronic client level systems (e.g. EMR)
- Guidelines for reporting data into HPV vaccine and cancer registries, and for monitoring and quality control of registry data
- Terminology or vocabulary in cervical cancer systems (e.g. comprehensive shared terminology/definitions; national concept dictionary)

EXEMPLAR PROGRAMME INTERVIEW DISCUSSION GUIDE

This targeted interview discussion guide is intended to elicit a description of a ministry or partner cervical cancer programme with existing monitoring and evaluation, surveillance, or information systems. The objective of these interviews is to describe the programme, its implementation, and the relevant

systems in detail, in order to identify best practices, lessons learned, and existing systems that can be leveraged for strengthening cervical cancer data and data systems nationally.

Programme Overview	
Question	• Please provide a brief history and overview of the programme, including the year of origin.
Probes	• Is this an offshoot of a pre-existing programme (e.g. HIV care and treatment)? If yes, is there still a high level of integration?
	• Is the programme integrated into a larger hospital/clinic?
	• Is this a publicly or privately funded programme/facility?
	• Is the facility/programme funded by several different mechanisms (e.g. supplies paid for by MoH and worker salaries paid for by PEPFAR, etc.?) And does this effect procurement/ordering/stock and inventory maintenance?
Question	• What is the programme/facility catchment area?
Probes	• Please describe the demographics of the patient population (including HIV prevalence).
	• What is the target population for cervical cancer screening and treatment?
Description of Service Provision	
Question	• Please describe service availability in this programme/facility.
Probes	• What cervical cancer screening method is used in this programme/facility?
	• Is cervical cancer screening provided as part of women's/reproductive health services? HIV services? Antenatal care/maternity services? Part of campaign?
	• What is the frequency of screening service provision (i.e. always available vs. only available on set "clinic days")
	• Is treatment available on site? Is there treatment of precancerous lesions only? Is cancer treatment available at the facility? If so what modalities are used for treatment?
	• What is the frequency of treatment service provision (i.e. always available vs. only available on set "clinic days")
	• What other gynecological or medical services are provided, if any?

Question	<ul style="list-style-type: none"> Please describe programme/facility staffing.
Probes	<ul style="list-style-type: none"> Where are screening/treatment providers trained? (e.g. local providers trained at medical schools in-country, local providers trained abroad, foreign providers trained abroad, etc.) Are there practical skills refresher trainings available in-country? Are there systems to track training/certification of providers?
Programme Capacity	
Question	<ul style="list-style-type: none"> How does this facility/programme ensure readiness to provide services?
Probes	<ul style="list-style-type: none"> What is the total number of women provided with screening annually by the programme/facility? Total number provided with treatment? What equipment is available on-site to provide services? Is the equipment well maintained/functional? If no, is there a reliable routine process/system for addressing issues, or is this done ad hoc? Is there access to on-site pathology services or real-time consultation? If not, where are pathology services located and what is the typical turnaround time? Are there currently any capacity limitations (e.g. personnel, equipment, physical space, supplies/reagents, internet/network system connectivity, and electricity)? Is there a process (or system) for giving feedback on capacity limitations to decision-makers? Is there a reliable routine process/system for addressing issues with supply/reagent procurement and stock management?
Question	<ul style="list-style-type: none"> Is there a functional referral process in this programme/facility?
Probes	<ul style="list-style-type: none"> Does the programme/facility have the ability to except referrals? Are referrals sent outside of facility? If yes, where are patients referred to? Are there methods/systems to track referrals? Is there bi-directional communication between referring and referral facilities? Is information collected that would enable the facility/programme to monitor referral time variables (e.g. time between screening and facility and patient receipt of result; time between screening result and treatment; etc.)?
Data Collection, Reporting, and Management Practices	
Question	<ul style="list-style-type: none"> Please describe the client level data collection process.
Probes	<ul style="list-style-type: none"> Do you use electronic medical records, electronic databases, or paper-based data collection tools? How many different tools hold patient data at a facility? Is there integration between tools/systems within the facility? Is there integration between electronic systems at this facility and systems at other facilities (or at the subnational or national level)? Do patients have a unique patient ID number? If so, how is it generated, and is this standardized nationally? Is the ID number used throughout the facility or for any other purposes? Can this number be used to reliably link patients from cervical cancer screening, all the way through to post-treatment outcomes?
Question	<ul style="list-style-type: none"> What staff are responsible for data collection and management?
Probes	<ul style="list-style-type: none"> Who is responsible for collecting patient level cervical cancer data and what data collection tool do they use (request a copy of form from the programme/facility)? Was this person trained on the data collection tools? If yes, how/when/by whom? Is this person responsible for collecting patient level data on other diseases/conditions? How many different tools/forms does this person have to complete per patient? Is there a different person responsible for entering the patient level cervical cancer data into an electronic system/paper register/patient chart? Was the person responsible trained on the data collection tools/systems? If yes, how/when/by whom? Is this person responsible for entering patient level data on other diseases/conditions? How many different tools per patient does this person have to take data from/enter data into?

Question	<ul style="list-style-type: none"> • Please describe the structures and processes for reporting and patient and programme monitoring.
Probes	<ul style="list-style-type: none"> • Is the information collected in the patient/facility-level records sufficient for patient management and monitoring? For programme management and monitoring? • What are the sources of data for reporting? • Who is responsible for reporting (i.e. aggregating from data sources and preparing reporting template)? • Is the person responsible for cervical cancer data reporting, also responsible for reporting on additional diseases? If yes, briefly describe the reporting burden on this individual (e.g. how many diseases; how many different forms/tools/recipient entities; etc.) • To whom are data reported (e.g. funding agency, regional versus national MOH, or a health registry)? What is the frequency of reporting to each entity? • Is the information reported standardized across entities (i.e. one standardized group of indicators with one standardized reporting form), or does the information differ depending on the recipient entity (e.g. one set of indicators for MoH, with a more detailed, larger set of indicators for an external donor/funding mechanism)? • Is any feedback received by the facility/programme concerning reported data/indicators? • Were providers engaged in the development of indicators reported to MoH, or other entities? • What are the challenges with reporting? • How is the data used (i.e. ordering of supplies, allocation of human resources, budget/resource allocation, grant proposals, requirement by programme stake holders, inform public health policy, programme monitoring)
Question	<ul style="list-style-type: none"> • How does the facility/programme ensure data quality?
Probes	<ul style="list-style-type: none"> • What is their quality (e.g. completeness, timeliness, validity, etc.)? • Are there any data quality assurance mechanisms in place? Have any data quality audits been conducted?
Programme Costing and Budgeting	
Question	<ul style="list-style-type: none"> • What are the facility/programme structures and processes for budgeting and costing?
Probes	<ul style="list-style-type: none"> • Is line item cost data available for screening and treatment supplies/reagents/consumables? • Who is responsible for projecting programme equipment/supply needs and the relevant budget allocation? • What is the process for determining facility programme budget (i.e. is there a specific tool/system utilized)? Are costs estimated, or reflect actual line item costs in-country?