

SECTION 2

POPULATION-BASED SURVEY MODULES

INTRODUCTION

Population-based surveys can be used to assess cancer screening coverage, and to identify barriers to accessing screening and treatment services. This section of the toolkit builds on the Global Monitoring Framework cervical cancer screening indicator, and provides survey administrators, cervical cancer programme implementers, ministries of health, and other stakeholders with a set of standardized questions related to cervical cancer. The use of a set of standardized questions will help ensure the data collected are useful for programme planning and evaluation, and are comparable over time and across countries.

The questions will provide information on the quality of cervical cancer screening policies and programmes. When used in countries with existing cervical cancer programmes, the data provided will generate robust and meaningful estimates of screening and treatment prevalence. Countries without national programmes can select appropriate questions from the modules to generate information for advocacy and programme planning.

Through adaptation and incorporation of these standardized questions, programmes can leverage existing population-based surveys to measure key indicators of cervical cancer screening and treatment, including:

1. Screening prevalence;
2. Follow-up and treatment of screened women; and,
3. Barriers and facilitators to screening and treatment.

The 13 standardized questions, with accompanying introductory statements, are set out in two modules: i) a “Core” (C) module comprising five questions; and ii) a “Core Plus” (CPLUS) module comprising the five Core questions, plus a further eight questions. The Implementation Tools and Materials at the end of this section provide the modules in survey format, as well as reference sheets for each of the introductory statements and Core and Core Plus questions. These reference sheets provide survey administrators with the necessary background information and instructions for adapting and incorporating the questions into an existing population-based survey. All potential changes to questions and introductory statements should be discussed with and approved by supervisors, including those based on key information gathered during cognitive testing. Where applicable, reference sheets also include special considerations for analysis, and for intersections with Section 3, Patient and Programme Monitoring, and Section 4, Facility-based Surveys, of this toolkit.

Cognitive testing of the modules found that some women had difficulty understanding definitions of the cervix and cervical cancer testing methods, and that their understanding improved with the use of images. Examples of open-source images that can be adapted based on context and used with the introductory statement to increase understanding can be found in the Implementation Tools and Materials sub-section at the end of this section.

CORE MODULE

The Core module comprises an introductory statement and five questions designed to measure cervical cancer screening coverage, screening interval, and follow-up and treatment. The five questions and the indicators they measure are listed in Table 2.1 below.

Notable is that treatment related indicators cover both treatment of precancerous lesions and treatment of invasive cervical cancer. Palliative care is not addressed in this module.

TABLE 2.1

Core module: measuring key aspects of screening and treatment

SUBJECT AREA	QUESTION	INDICATOR
Screening		
Screening Prevalence	C1: Has a health-care worker ever tested you for cervical cancer?	C1: Percentage of women who have ever been screened for cervical cancer
Last Screening	C2: When was your last test for cervical cancer?	C2: Percentage of screened women who were last screened within a specific time frame
Result		
Last Screening Result	C3: What was the result of your last test for cervical cancer?	C3: Percentage of screened women who received the result of their last screening test Percentage of screened women who received each type of result (e.g. Abnormal, Normal, etc.) on their last screening
Follow-up and Treatment		
Follow-up after Abnormal/Positive/Unclear Result on Last Screening	C4: Did you have any follow-up visits because of your last test result?	C4: Percentage of women with an abnormal, positive, or unclear result on their last screening test who received follow-up
Treatment after Abnormal/Positive/Unclear Result on Last Screening	C5: Did you receive any treatment to your cervix because of your last test result?	C5: Percentage of women with an abnormal, positive, or unclear result on their last screening test who received treatment

CORE PLUS MODULE

The expanded – or “Core Plus” – module includes the five Core module questions plus an additional eight questions. The additional eight questions focus on: knowledge and awareness; barriers and facilitators to screening; screening location; single-visit approach; barriers to treatment; and willingness to accept sample self-collection (e.g. for HPV testing). Palliative care is not addressed in this module.

Whereas questions from the Core module generate key basic information, the additional questions of the Core Plus module can be selected by survey administrators

where appropriate to country context, priorities and needs.

The Core Plus module questions and the indicators they measure are listed in Table 2.2. In order to distinguish between the Core questions embedded within the Core Plus module, Core questions are coded “C#”, and Core Plus questions are coded “CPLUS#”. When incorporating Core or Core Plus questions into existing surveys, survey administrators may alter this naming convention to align with the existing survey.

TABLE 2.2
Core Plus module: measuring further aspects of screening and treatment

SUBJECT AREA	QUESTION	INDICATOR
Knowledge and Awareness		
Knowledge and Awareness	CPLUS1: Have you heard of cervical cancer?	CPLUS1: Percentage of women who are aware of cervical cancer
Screening		
Screening Prevalence	C1: Has a health-care worker ever tested you for cervical cancer?	C1: Percentage of women who have ever been screened for cervical cancer
Age at First Screening	CPLUS2: At what age were you first tested for cervical cancer?	CPLUS2: Average age at first screening
Last Screening	C2: When was your last test for cervical cancer?	C2: Percentage of women who were last screened within a specific time frame
Facilitators to Last Screening	CPLUS3: What is the MAIN reason you had your last test for cervical cancer?	CPLUS3: Percentage of women who report a specific facilitator as a motivator for receiving last screening
Last Screening Location	CPLUS4: Where did you receive your last test for cervical cancer?	CPLUS4: Percentage of women who were screened at a specific location
Result		
Last Screening Result	C3: What was the result of your last test for cervical cancer?	C3: Percentage of screened women who received the result of their last screening test Percentage of screened women who received each type of result (e.g. Abnormal, Normal, etc.) on their last screening
Follow-up		
Follow-up after Abnormal/Positive/Unclear Result on Last Screening	C4: Did you have any follow-up visits because of your last test result?	C4: Percentage of women with an abnormal, positive, or unclear result on their last screening test who received follow-up
Treatment		
Receipt of Treatment after Abnormal/Positive/Unclear Result on Last Screening	C5: Did you receive any treatment to your cervix because of your last test result?	C5: Percentage of women with an abnormal, positive, or unclear result on their last screening test who received treatment

SUBJECT AREA	QUESTION	INDICATOR
Prevalence of Single-visit Approach Services Received	CPLUS5: Did you receive the treatment during the same visit as your last test for cervical cancer?	CPLUS5: Percentage of women who received screening and treatment through a single-visit approach (SVA)
Barriers		
Barriers to Treatment	CPLUS6: What is the MAIN reason you did not receive treatment as a result of your last test result?	CPLUS6: Percentage of untreated women with an abnormal, positive, or unclear result on last screening who reported a specific barrier to treatment
Barriers to Screening	CPLUS7: What is the MAIN reason you have never had a cervical cancer test?	CPLUS7: Percentage of unscreened women who reported a specific barrier to screening
Self-collection		
Acceptability of Self-collection	CPLUS8: Would you be willing to collect a sample by yourself to test for cervical cancer either at a health-care clinic, or in your home, if you were given instructions on how to collect the sample?	CPLUS8: Percentage of women willing to administer sample self-collection

METHODOLOGICAL CONSIDERATIONS FOR THE SURVEY MODULES

The Population-based Survey modules provide countries with the data required to measure the prevalence of screening and treatment.

Once prevalence data are appropriately weighted, based on survey design and country context, screening and treatment coverage can be assessed.

SAMPLING METHOD

The questions included in the survey modules are designed for incorporating into existing population-based surveys. Population-based surveys are diverse and the country contexts in which they work are

varied; each survey will have its own methodology and design, and employ its own sampling methods. Examples of the differences in survey sampling methods are shown in Table 2.3.

TABLE 2.3

Sampling method by select population-based survey

SURVEY	TYPICAL SAMPLE SIZE	RESPONDENT AGE RANGE	SAMPLING METHOD
DHS	Varies based on country context	15–49	Probability Proportion to Size (PPS) sampling to select clusters. Systematic selection of households (HHs) from a list of all HHs in the cluster. Random selection of eligible HH member. (Often, all women aged 15–49 in the HH are interviewed.)
PHIA	Varies by country context and dependent on HIV incidence and prevalence	Varies by country context: 15–49 All adults >15 Module for adolescents: 10–14	Two stage cluster-based sampling at the HH level.
MICS	Varies based on country context	15–49	Cluster sampling at HH level. (Respondents include mothers or caretakers of the children in each HH.)
RHS	Varies based on country context	15–49	Cluster sampling at the HH level.
STEPS	Varies based on country context	18–69	Cluster sampling at HH level. Random selection of eligible HH member.

DHS: Demographic Health Survey; PHIA: Population-based HIV Impact Assessments survey; MICS: Multiple Indicator Cluster Survey; RHS: Reproductive Health Survey; STEPS: WHO Stepwise approach to surveillance survey.

Survey administrators should work closely with their survey's biostatisticians, methodologists and epidemiologists when determining sample size and respondent age. Cervical cancer data should be weighted appropriately based on the survey's design.

The following section includes methodological factors – including sample size, statistical significance, respondent age, HIV status, and bias – to consider when incorporating cervical cancer questions into an existing population-based survey.

SAMPLE SIZE ESTIMATION

Sample size is one of the most important methodological considerations in surveys as it affects the precision and stability of estimates, as well as the cost and duration of data collection. Available budget and data quality requirements must be considered during sample size estimation to ensure the data produced are useful and affordable. Sample size calculations require:

- The level of precision required (confidence interval),
- The level of confidence desired (P-value),
- The estimated (or known) proportion of the population in the specified target group,
- The predicted or estimated rate, or prevalence, of a specific indicator,

- The sample design effect (DEFT),
- The average household size,
- An adjustment for potential loss of sample households due to non-response.

The estimated screening coverage proportion and DEFT will have an impact on factors of data precision including standard error and confidence intervals.

The factors outlined above vary by indicator and context, therefore survey sample size is typically based on the indicators that require the largest sample sizes. For many large-scale, population-based surveys, these indicators are typically child mortality and contraceptive incidence; for HIV-focused surveys with biomarkers, the indicator will likely be viral load suppression. Survey administrators will need to work with their biostatisticians to determine if the survey's design provides a sufficient sample size to measure cervical cancer screening and treatment indicators, and make appropriate adjustments as needed.

Survey administrators should carefully consider respondent age, screening prevalence, and HIV prevalence when selecting questions and determining sample size.

INFLUENCE OF ESTIMATED SCREENING PREVALENCE ON SURVEY QUESTION SELECTION

Geographical differences in the availability, accessibility and acceptability of screening methods, and differences in HPV prevalence contribute to the large variation in cervical cancer rates around the world. Country-level screening prevalence will impact the precision of all indicators included in the modules. If screening prevalence is low, the sample size of screened participants may not be large enough to calculate precise estimates, particularly for indicators related to treatment.

While treatment prevalence is included as a core indicator, survey administrators should weigh the cost of including treatment-related questions against the estimated precision they can expect from their screening prevalence and sample size. However, even in areas with low screening and treatment prevalence, the modules include questions that can provide important information for programme planning. These include the knowledge and awareness questions (CPLUS1), the facilitator question (CPLUS3), the barrier questions (CPLUS6 and CPLUS7), and the self-collection acceptability

question (CPLUS8); facilitator and barrier questions will require slight adaptation if being used without the filter screening and treatment questions.

RESPONDENT AGE

WHO recommends that women are screened for cervical cancer at least once in their lifetime between the ages of 30–49 years, or more frequently according to national guidelines [WHO, 2014]. However, population-based surveys typically target women aged 18 years and older, while some include adolescents as young as 10 years of age. Survey administrators should be mindful of respondent age when selecting questions, as the sample size of women aged 30–49 years may be too small to produce meaningful data on screening and treatment.

Administrators can provide training to survey enumerators on how to adapt the survey based on targeted respondent age. For example, if women younger than 30 years of age are not typically recommended to receive cervical cancer screening in a particular area but are included in a survey population, it may not be appropriate to ask them questions related to cervical cancer screening and treatment. However, adolescents and women younger than the recommended screening age could be asked knowledge and awareness question (CPLUS1), as well as the question related to acceptability of sample self-collection (CPLUS8).

SPECIAL CONSIDERATIONS FOR AREAS WITH HIGH PREVALENCE OF HIV

Women living with HIV/AIDS are at increased risk for chronic HPV infection and cervical cancer. HIV-positive women are also more likely to develop cancer earlier in life and die from the disease sooner than HIV-negative women. WHO recommends screening HIV-positive women for cervical cancer at the onset of sexual activity regardless of age, and re-screening HIV-positive women with a Negative/Normal screening test result every 3 years [WHO, 2014]. Therefore, theoretically, the questions in the Core and Core Plus modules are applicable to, and could be answered by, women of all ages who are either infected with HIV or living in areas with high rates of HIV, and who have initiated sexual activity.

Note that the modules do not include a question on HIV status. In order to appropriately disaggregate key indicators (e.g. screening prevalence) by HIV status, the HIV status of respondents (Positive, Negative or Unknown) will need to be collected.

ADDRESSING BIAS

As with any self-reported data, bias – including misclassification error (when a participant incorrectly

identifies a response category) – is a concern. Misclassification error can be attributed to several

causes. For example, women may not receive enough information about the procedures conducted during gynecological visits and may confuse a pelvic examination with cervical cancer screening. Some women may incorrectly assume that treatments (e.g. antibiotics prescribed for infection) or procedures performed after screening are a form of treatment for precancerous or cancer. Social desirability bias can also contribute to overreporting, particularly during face-to-face interviews. For example, women may change their answers in order to “save face” or please the interviewer.

A number of validity studies have found that overreporting of cervical cancer screening is common. Studies have identified agreement values between self-report and medical records (predictive values) that range between 40% and 90% [M Howard, 2009; Eltoun IA, 2007; Rauscher GH, 2008]. Sociodemographic characteristics, including economic status, education level and ethnicity, can impact agreement values. Suggestions on adjustment factors to correct for overreporting, range from 10% to 60% depending on the context. Conducting a validation study can confirm the accuracy of self-reported screening and treatment data, and inform the adjustment factors required to correct for misclassification error.

VALIDATION

Criterion validation compares self-reported data with medical records to assess the accuracy of self-

reported screening and treatment status. Measures of self-report include:

- Sensitivity: the proportion of positives that are correctly identified as positives;
- Specificity: the proportion of negatives that are correctly identified as negatives; and
- Positive and negative predictive values: the proportions of positive and negative results that are true positive and true negative results.

Measures of self-report can be calculated by determining report-to-record ratios. Multivariable regression analysis can be used to determine which demographic characteristics are independently associated with overreporting and underreporting of screening and treatment.

Access to medical records, an identifier to link screened and unscreened women to their medical records, and assurance that medical services were received in the same location as the validation study are required.

Conducting a validation study comes with ethical considerations. Informed consent that allows for access to medical records, privacy and confidentiality protections, safeguards for HIV positive women, and mechanisms for follow-up and report back are necessary.

COGNITIVE TESTING

Survey questions were designed to address key indicators in a standardized way. However, some terms may not be easily understood or translated, which can contribute to misclassification and response bias. Adaptation of language and concepts may be required to minimize error and produce high quality data. Cognitive testing is highly recommended because it provides insight into:

- How wording can be adapted;
- How the questions perform when administered; and
- Whether the questions measure the constructs intended.

Cognitive testing can also provide a foundation

for follow-on qualitative research that investigates perceptions of cervical cancer and screening methods.

Cognitive testing was conducted during the development of the Core and Core Plus modules to test the reliability of the survey questions and introductory statements, as well as item analysis. All questions were tested except CPLUS7, which was added based on the findings of cognitive testing. The data collected were used to adjust question wording and order, and to provide recommendations for country-specific adaptation and translation. The results underscored the importance of cognitive testing for each country context to ensure the language and terminology were appropriate and easily understood.

ETHICAL REVIEW AND HUMAN SUBJECTS PROTECTIONS

All large-scale, population-based surveys maintain robust ethical research standards, and strict protocols concerning the protection of their survey respondents. While

specifics will vary by survey and implementing agency, the fundamental principles of research ethics are fairly standard across surveys and are described in Table 2.4.

TABLE 2.4
Principles of research ethics

ETHICAL PRINCIPLE	EXPLANATION
Ethical Review	Research protocols including all questionnaires must be reviewed by an Institutional Review Board (IRB). Surveys will have their own regulations regarding which review boards they use; but most will seek approval from multiple sources. For example, DHS seeks approval from the ICF International Institutional IRB and an IRB within each host country [USAID, The DHS Program, 2016].
Informed Consent	<p>Respondents must be informed of and have an understanding of some or all of the following:</p> <ul style="list-style-type: none"> • The purpose and contents of the survey; • The interview process including estimated duration; • How the data collected will be used; • Confidentiality; • Voluntary participation*; • Any potential risk and/or benefit to the respondent; and be given • Contact information. <p>Some countries or specific surveys will require written consent, while others may require only verbal consent.</p> <p>* Respondents must understand that participation in the survey is strictly voluntary, and that they can end the interview at any time.</p>
Privacy during data collection	Interviews with respondents should be conducted as privately as possible. Privacy not only protects the respondent's personal information; it also helps minimize bias associated with self-report. Respondents may answer sensitive questions more accurately in a private setting.
Confidentiality throughout the research process	Confidentiality must be maintained throughout the data collection, input, analysis, reporting and dissemination processes. Thus confidentiality not only requires ethical interviewing practices, but ethical data management processes as well.
Test results to respondents (where applicable)	Some surveys collect biological samples from respondents for testing. In the majority of these surveys, this is considered ethically appropriate only if there is a plan for providing the results of the tests to the respondent.
Feedback to families and communities	Most surveys will have a plan for providing feedback to families and communities when applicable and appropriate. While sample sizes in many communities will be too small for statistical validity, local authorities still appreciate receiving feedback concerning the health and wellbeing of their communities [UNICEF, 2013].

RECOMMENDATION REGARDING HPV TESTING IN POPULATION-BASED SURVEYS

HPV DNA testing can be applied at a population level to estimate the prevalence of infection with specific HPV types in a population. Additionally, HPV serology can be used to detect antibodies against specific HPV types to identify past exposure. Data gathered in select, high-income countries from population-level HPV testing are being used to measure the impact of HPV vaccination programmes on reducing HPV infection and cervical abnormalities, as well as monitoring trends in the distribution of HPV types causing cervical cancer and precancerous lesions [Soderlund-Strans A, 2014; Markowitz LE, 2013]. HPV testing can be used as a screening test in national cervical cancer programmes and in cervical cancer research projects. However, population-based HPV testing is complex and requires financial, infrastructural, logistical, and human resources.

The potential utility of including HPV testing in population-based surveys must therefore be weighed against the considerable challenges and costs of doing so, particularly in low-resource settings, and in the context of competing health priorities. Additional resources have been included in the bibliography for reference.

As part of toolkit development, consideration was given to the potential role of, and methodological and operational considerations for incorporating HPV testing into population-based surveys. However, currently it is not recommended to include HPV testing in population-based surveys due to the complexity and cost which limit its utility. Furthermore, results of poorly controlled tests can be misleading and may confuse policy decisions.

IMPLEMENTATION TOOLS AND MATERIALS

SURVEY FORMATS

This subsection provides the Core and Core Plus Survey Modules in the typical survey format to assist in the incorporation of the modules – or specific questions within – into an existing survey. This format, which includes answer response coding categories and skip patterns, allows for a clear visualization of module flow.

A note on answer response coding categories: different population-based surveys handle response categories

in different ways. For example: In the Demographic Health Survey (DHS), answer response categories are not read to respondents unless additional probing is required; whereas within the Stepwise Approach to Surveillance (STEPS) all response categories are read to respondents except “Don’t Know” and “Refused”. Survey administrators should provide instructions on this to their survey enumerators based on their practice.

CORE MODULE

The Core Module includes the Introductory Statement and the five Core questions (question numbers beginning with C).

INTRODUCTORY STATEMENT

Please read out the following: “Now I’m going to ask you about tests a health-care worker can do to check for cervical cancer. The tests a health-care worker can do to check for cervical cancer are called a Pap smear, HPV test, and VIA test.”

Pap smear supplementary statement: “For a Pap smear test, a health-care worker puts a small stick or swab inside the vagina to wipe the cervix, and sends the sample to the laboratory.” (Optional: show reference images here)

HPV test supplementary statement: “For an HPV test, a small stick or swab is put inside the vagina to wipe the cervix, and the sample is sent to the laboratory. This can be done by a health-care provider or by a woman herself.” (Optional: show reference images here)

VIA supplementary statement: “For a VIA test, a health-care worker puts vinegar on the cervix and looks to see if the cervix changes colour.” (Optional: show reference images here)

If necessary, clarify terms by reading the following:

*“The **uterus** is where a baby grows when a woman is pregnant. The **cervix** connects the uterus to the vagina.” (Optional: show image of cervix here)*

NO	QUESTION	ANSWER RESPONSES	CODING CATEGORIES	SKIPS
C1	Has a health-care worker ever tested you for cervical cancer?	Yes No (Do not read) Don't know (Do not read) Refused	1 2 —————→ 88 99	End Module
C2	When was your last test for cervical cancer?	Less than 1 year ago 1-2 years ago 3-5 years ago More than 5 years ago (Do not read) Don't know (Do not read) Refused	1 2 3 4 88 99	
C3	What was the result of your last test for cervical cancer?	Did not receive result Normal/negative Abnormal/positive Suspect cancer Inconclusive (Do not read) Don't know (Do not read) Refused	1 —————→ 2 3 4 5 88 99	End Module
C4	Did you have any follow-up visits because of your last test result?	Yes No (Do not read) Don't know (Do not read) Refused	1 2 88 99	
C5	Did you have any treatment to your cervix because of your last test result?	Yes No (Do not read) Don't know (Do not read) Refused	1 2 88 99	
END MODULE				

CORE PLUS MODULE

The Core Plus Module includes the Introductory Statement, the five Core questions (question numbers beginning with C), and the additional eight optional questions (question numbers beginning with CPLUS).

INTRODUCTORY STATEMENT

Please read out the following: “Now I’m going to ask you about tests a health-care worker can do to check for cervical cancer. The tests a health-care worker can do to check for cervical cancer are called a Pap smear, HPV test, and VIA test.”

Pap smear supplementary statement: “For a Pap smear test, a health-care worker puts a small stick or swab inside the vagina to wipe the cervix, and sends the sample to the laboratory.” (Optional: show reference images here)

HPV test supplementary statement: “For an HPV test, a small stick or swab is put inside the vagina to wipe the cervix, and the sample is sent to the laboratory. This can be done by a health-care provider or by a woman herself.” (Optional: show reference images here)

VIA supplementary statement: “For a VIA test, a health-care worker puts vinegar on the cervix and looks to see if the cervix changes colour.” (Optional: show reference images here)

If necessary, clarify terms by reading the following:

“The **uterus** is where a baby grows when a woman is pregnant. The **cervix** connects the uterus to the vagina.” (Optional: show image of cervix here)

NO	QUESTION	ANSWER RESPONSES	CODING CATEGORIES	SKIPS
CPLUS1	Have you heard of cervical cancer before?	Yes No (Do not read) Don't know (Do not read) Refused	1 2 88 99	
C1	Has a health-care worker ever tested you for cervical cancer?	Yes No (Do not read) Don't know (Do not read) Refused	1 2 → 88 99	CPLUS7
CPLUS2	At what age were you first tested for cervical cancer?	Age (Do not read) Don't know (Do not read) Refused	<input type="text"/> <input type="text"/> 88 99	
C2	When was your last test for cervical cancer?	Less than 1 year ago 1-2 years ago 3-5 years ago More than 5 years ago (Do not read) Don't know (Do not read) Refused	1 2 3 4 88 99	
CPLUS3	What is the MAIN reason you had your last test for cervical cancer?	Part of routine examination Follow up on abnormal or inconclusive result Recommended by health-care provider Recommended by other source Experiencing pain or other symptoms Other (specify): _____ (Do not read) Don't know (Do not read) Refused	1 2 3 4 5 6 88 99	
CPLUS4	Where did you receive your last test for cervical cancer?	Doctors office Mobile clinic Community clinic Hospital Other (specify): _____ (Do not read) Don't know (Do not read) Refused	1 2 3 4 6 88 99	
C3	What was the result of your last test for cervical cancer?	Did not receive result Normal/negative Abnormal/positive Suspect cancer Inconclusive (Do not read) Don't know (Do not read) Refused	1 → 2 3 4 5 88 99	CPLUS8
C4	Did you have any follow-up visits because of your last test result?	Yes No (Do not read) Don't know (Do not read) Refused	1 2 88 99	
C5	Did you receive any treatment to your cervix because of your last test result?	Yes No (Do not read) Don't know (Do not read) Refused	1 2 → 88 → 99 →	CPLUS6 CPLUS8 CPLUS8
CPLUS5	Did you receive the treatment to your cervix during the same visit as your last test for cervical cancer?	Yes No (Do not read) Don't know (Do not read) Refused	1 → 2 88 → 99 →	CPLUS8 CPLUS8 CPLUS8

NO	QUESTION	ANSWER RESPONSES	CODING CATEGORIES	SKIPS
CPLUS6	What is the MAIN reason you did not receive treatment as a result of your last test result?	Was not told I needed treatment Did not know how/where to get treatment Embarrassment Too expensive Didn't have time Clinic too far away Poor service quality Afraid of the procedure Afraid of social stigma Cultural beliefs Family member would not allow it (specify the relationship of the member to the respondent) _____ Other (specify): _____ (Do not read) Don't Know (Do not read) Refused	1 —————→ 2 —————→ 3 —————→ 4 —————→ 5 —————→ 6 —————→ 7 —————→ 8 —————→ 9 —————→ 10 —————→ 11 —————→ 12 —————→ 88 —————→ 99 —————→	CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8 CPLUS8
CPLUS7	What is the MAIN reason you have never had a cervical cancer test?	Did not know how/where to get the test Embarrassment Too expensive Didn't have time Clinic too far away Poor service quality Afraid of the procedure Afraid of social stigma Cultural beliefs Family member would not allow it (specify the relationship of the member to the respondent) _____ Other (specify): _____ (Do not read) Don't Know (Do not read) Refused	1 2 3 4 5 6 7 8 9 10 11 88 99	
CPLUS8	Would you be willing to collect a sample by yourself to test for cervical cancer either at a health-care clinic or in your home, if you were given instructions on how to collect the sample?	Yes No (Do not read) Don't know (Do not read) Refused	1 2 88 99	
END MODULE				

REFERENCE SHEETS

This subsection contains reference sheets for the Introductory Statement, each of the five Core questions, and each of the eight Core Plus questions. These reference sheets provide the purpose of the introductory statement or question, instructions on administration, “skip pattern” logic, definition of

terms, details on numerators and denominators, and recommendations for adaptation when applicable. To see the full answer responses for each question, as well as how each question fits within the Core and Core Plus Modules, please see the modules in survey format.

INTRODUCTORY STATEMENT

REFERENCE SHEET FOR INTRODUCTORY STATEMENT

PRIMARY INTRODUCTORY STATEMENT: “Now I’m going to ask you about tests a health-care worker can do to check for cervical cancer. The tests a health-care worker can do to check for cervical cancer are called a Pap smear, HPV test, and VIA test.” (Optional: show image of cervix here)

PAP SMEAR SUPPLEMENTARY STATEMENT: “For a Pap smear test, a health-care worker puts a small stick or swab inside the vagina to wipe the cervix, and sends the sample to the laboratory.” (Optional: show reference images here)

HPV TEST SUPPLEMENTARY STATEMENT: “For an HPV test, a small stick or swab is put inside the vagina to wipe the cervix, and the sample is sent to the laboratory. This can be done by a health-care provider or by a woman herself.” (Optional: show reference images here)

VIA SUPPLEMENTARY STATEMENT: “For a VIA test, a health-care worker puts vinegar on the cervix and looks to see if the cervix changes colour.” (Optional: show reference images here)

Purpose:

To provide information to the respondent that will help them understand and accurately answer the survey questions

Instructions:

Only use the name and supplementary introductory statement of the cervical cancer test or tests (e.g. Pap, HPV, or VIA) provided in the survey country

Adaptation:

Alter terms as needed based on language and cultural context. For example:

Uterus = Womb

Vagina = Birth canal

Stick = Brush, Swab, or Instrument

VIA = Vinegar test

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality. Cognitive testing can provide insight into how best to translate the word, or adapt the introductory statement to appropriately address any sensitivities.

Using images when defining the cervix and testing methods helped some women better understand the introductory statement. Cognitively testing images before survey administration can provide insight into which images are most appropriate for the country context.

Where cervical or cervicovaginal sample self-collection (e.g. for HPV testing) screening methods are in use, consider adapting the primary introductory statement to read: “Now I’m going to ask you about tests that can be done to check for cervical cancer. The tests to check for cervical cancer are called a Pap smear, HPV test, and VIA test.”

CORE QUESTIONS

REFERENCE SHEET FOR CORE QUESTION 1 (C1):

Has a health-care worker ever tested you for cervical cancer?

Purpose:

To measure the current screening prevalence

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

Skip pattern: End module if respondent answers No.

If the survey has limited space for questions on cervical cancer, this question should be prioritized for inclusion before the other four core questions.

Definitions:

Health-care worker = Doctor, nurse, other trained health-care provider

Tested = Screened

Refused = Declined to answer the question

Indicator:

Percentage of women who have ever been screened for cervical cancer

- Numerator: Number of screened respondents
- Denominator: Total number of respondents

Adaptation:

Adapt language based on country context, for example:

Tested = Screened.

Conducting cognitive testing before survey administration can provide insight into which term is most appropriate for the country context.

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality. Cognitive testing can provide insight into how best to translate the word, or adapt the question to appropriately address any sensitivities.

Where cervical or cervicovaginal sample self-collection (e.g. for HPV testing) screening methods are in use, consider adapting the question to read: Have you ever been tested for cervical cancer?

Intersections with other sections of the toolkit:

Results from this question can be compared to data on screening coverage and service availability gathered using the tools and processes presented in Section 3, Patient and Programme Monitoring and Section 4, Facility-based Surveys.

REFERENCE SHEET FOR CORE QUESTION 2 (C2):**When was your last test for cervical cancer?****Purpose:**

To measure the average number of years since a woman's last cervical cancer screening

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

Definitions:

Last = most recent

Indicator:

Percentage of women who were last screened within a specific time frame.

- Numerator 1: Number of respondents who reported their last screening occurred <1 year ago
- Numerator 2: Number of respondents who reported their last screening occurred 1–2 years ago
- Numerator 3: Number of respondents who reported their last screening occurred 3–5 years ago
- Numerator 4: Number of respondents who reported their last screening occurred >5 years ago
- Denominator: Total number of screened respondents or total number of screened respondents within a specific age range

Note: “specific time frame” refers to each of the individual response choices (<1 year ago, 1–2 years ago, 3–5 years ago, >5 years ago). This indicator should be calculated for each response choice (see the module in survey format for answer responses in context).

Adaptation:

Adapt language based on country context:

Test = screening

Last = Most recent

Conducting cognitive testing before survey administration can provide insight into which term is most appropriate for the country context.

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality. Cognitive testing can provide insight into how best to translate the word, or adapt the question to appropriately address any sensitivities.

Survey enumerators can be trained on asking additional probing questions to help women link testing with other life events to improve recall.

REFERENCE SHEET FOR CORE QUESTION 3 (C3):**What was the result of your last test for cervical cancer?****Purpose:**

1) To measure the percentage of screened women who received their last test result and; 2) To measure the proportion of specific results among screened women

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

Skip pattern: End module if respondent answers DID NOT RECEIVE RESULT.

Definitions:

Normal = no indication of precancerous lesions

Abnormal = precancerous lesions suspected or confirmed

Suspected cancer = health-care provider suspects the patient has cancer

Inconclusive or Unclear = results could not be determined

Last = most recent

Indicator 1:

percentage of screened women who received a test result from their last screening

- Numerator 1: number of screened respondents who reported receiving their last screening test result
- Denominator 1: total number of screened respondents or total number of screened respondents within a specific age range

Indicator 2:

Percentage of women that received a specific result from their last screening.

Note: "specific result" refers to each of the individual response choices (e.g. Normal, Abnormal, Suspect cancer, etc.). This indicator should be calculated for each response choice (see modules in survey format for answer responses).

- Numerator 2.1: Number of respondents who reported receiving a normal result on their last screening test
- Numerator 2.2: Number of respondents who reported receiving an abnormal result on their last screening test
- Numerator 2.3: Number of respondents who reported receiving a suspect cancer result on their last screening test
- Numerator 2.4: Number of respondents who reported receiving an inconclusive result on their last screening test
- Numerator 2.5: Number of respondents who reported that they did not receive the results of their last screening test
- Denominator 2: total number of screened respondents or total number of screened respondents within a specific age range

Adaptation:

Adapt language based on country context:

Test = screening

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality. Cognitive testing can provide insight into how best to translate the word, or adapt the question to appropriately address any sensitivities.

Pap smear results are often characterized as NORMAL or ABNORMAL. VIA and HPV results are often characterized as NEGATIVE or POSITIVE. Alter terms as needed. For example:

Normal = negative

Abnormal = positive

Inconclusive = unclear

Not all countries will tell women that they are suspected for cancer, but rather simply refer for additional testing; it is therefore very important to cognitively test the "suspected cancer" response to ensure quality data collection.

Intersections with other sections of the toolkit:

Results from this question can be compared to programme data on screening results gathered using the tools and processes presented in Section 3, Patient and Programme Monitoring.

REFERENCE SHEET FOR CORE QUESTION 4 (C4):**Did you have any follow-up visits because of your last test result?****Purpose:**

To measure the prevalence of screened women who received follow-up because of their last test result

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

Definitions:

Follow-up visit = any subsequent visit related to the result of the test

Last = most recent

Indicator:

Percentage of women who received an abnormal, suspect cancer or inconclusive result who received follow-up.

- Numerator: Number of respondents who received follow-up because of their last test result
- Denominator: Total number of respondents who received the following result at last test: abnormal, suspect cancer, inconclusive

Note: A separate indicator for each result type (abnormal, suspect cancer, inconclusive result) can be calculated. Both the numerator and denominator for each separate indicator would be limited to one specific result type (abnormal, suspected cancer or inconclusive). For example: to calculate the indicator “Percentage of women who received an abnormal result on their last test who received follow-up”, the numerator would be “number of respondents who received an abnormal result on their last test who received follow-up”, and the denominator would be “total number of respondents who received an abnormal result at their last test”.

Adaptation:

“Follow-up” can mean different things to respondents. Cognitive testing can provide insight into whether the term needs to be adapted and how best to translate this question.

Analysis in areas with low screening prevalence:

Note that in areas with low screening prevalence, the denominator for this indicator may be too low to offer meaningful estimates on follow-up.

Intersections with other sections of the toolkit:

Results from this question can be compared to data on screening coverage and service availability gathered using the tools and processes presented in Section 3, Patient and Programme Monitoring.

REFERENCE SHEET FOR CORE QUESTION 5 (C5):**Did you have any treatment to your cervix because of your last test result?****Purpose:**

To measure the prevalence of screened women who received treatment because of their last test result

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

Definitions:

Treatment to the cervix includes: cryotherapy (cryo), loop electrosurgical excision procedure (LEEP), cold knife conization (CKC), simple and radical hysterectomy, radiation, chemotherapy.

Indicator:

Percentage of women who received an abnormal, suspect cancer or inconclusive result who received treatment.

- Numerator: number of respondents who received treatment to their cervix because of their last test results
- Denominator: total number of respondents who received the following result at last test: abnormal, suspect cancer, inconclusive

Note: A separate indicator for each result type (abnormal, suspected cancer, inconclusive result) can be calculated. See the reference sheet for C4 for a relevant example.

Adaptation:

Adapt language based on country context:

Test = screening

Analysis in areas with low screening prevalence:

Note that in areas with low screening prevalence, the denominator for this indicator may be too low to offer meaningful estimates on treatment.

Intersections with other sections of the toolkit:

Results from this question can be compared to programme data on treatment gathered using the tools and processes in Section 3, Patient and Programme Monitoring.

CORE PLUS QUESTIONS**REFERENCE SHEET FOR CORE PLUS QUESTION 1 (CPLUS1):****Have you heard of cervical cancer?****Purpose:**

To measure the prevalence of cervical cancer awareness

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

Indicator:

Percentage of women who are aware of cervical cancer

- Numerator: Number of respondents who have heard of cervical cancer
- Denominator: Total number of respondents

Adaptation:

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality. Cognitive testing can provide insight into how best to translate the word, or adapt the question to appropriately address any sensitivities.

REFERENCE SHEET FOR CORE PLUS QUESTION 2 (CPLUS2):**At what age were you first tested for cervical cancer?****Purpose:**

To determine the age at first screening, for screened women

Instructions:

Do not read DON'T KNOW and REFUSED

Write in the age, writing only 1 number in each box. For example:

Age

Indicator:

Average age at first screening

Adaptation:

Adapt language based on country context:

Tested = Screened

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality. Cognitive testing can provide insight into how best to translate the word, or adapt the question to appropriately address any sensitivities.

Respondents may have difficulty recalling their age at first screening. Survey enumerators can be trained on asking additional probing questions to help women link testing with other life events to improve recall.

Analysis in areas with high rates of HIV:

Recommended age at first screening is lower for women living with HIV/AIDS than it is for HIV negative women. For women who are HIV positive, the WHO recommends screening for cervical cancer at the onset of sexual activity regardless of age, and re-screening (after a negative/normal result) every three years. See the Methodological Considerations section for more information.

REFERENCE SHEET FOR CORE PLUS QUESTION 3 (CPLUS3):**What is the MAIN reason you had your last test for cervical cancer?****Purpose:**

To determine factors which most frequently facilitate screening

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

If respondent provides another reason, record OTHER and write the reason in the space provided

Definitions:

Last = most recent

Abnormal = precancerous lesions suspected or confirmed

Inconclusive = results could not be determined

Health-care provider = doctor, nurse, community health worker

Indicator:

Percentage of women who report being motivated by a specific facilitator to receive their last screening test.

- Numerator: number of respondents motivated by a specific facilitator
- Denominator: total number of screened respondents

A separate indicator should be calculated by each specific facilitator listed as an answer category

Note: Separate indicators can be calculated for each facilitator listed as an answer category.

Adaptation:

Adapt language based on country context:

Test = screening

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality.

Include additional answer choices relevant to programme integration:

Part of HIV care

Recommended by HIV care provider

Part of family planning visit

Follow-on Research:

Findings from this question can provide preliminary insight into respondents' care-seeking behaviour and act as the foundation for follow-on qualitative research that explores barriers and facilitators to cervical cancer screening, treatment and care in more depth.

REFERENCE SHEET FOR CORE PLUS QUESTION 4 (CPLUS4):**Where did you receive your last test for cervical cancer?****Purpose:**

To determine where women are being screened

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

If respondent provides another location, record OTHER and write the location in the space provided

Definitions:

Last = most recent

Indicator:

Percentage of women who were screened at a specific location

- Numerator:
number of screened respondents that received screening by each location
- Denominator:
total number of screened respondents
A separate indicator should be calculated for each location

Adaptation:

Adapt language based on country context:

Test = screening

Community Clinic = health post or health facility

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality.

If cervical or cervicovaginal sample self-collection (e.g. self-collection for HPV testing) is used as a screening method, consider adding SELF COLLECTION as a response option.

Include additional answer choices relevant to programme integration or service delivery point:

HIV care and treatment facility

Family Planning clinic

Adapt answer choices to capture more specific facility type:

Government health facility

NGO health facility

Private health facility

Intersections with other sections of the Toolkit:

Results from this question can be compared to programme and service availability data gathered using the tools and processes in Section 3, Patient and Programme Monitoring and Section 4, Facility-based Surveys.

REFERENCE SHEET FOR CORE PLUS QUESTION 5 (CPLUS5):

Did you receive any treatment to your cervix during the same visit as your last test for cervical cancer?

Purpose:

To measure the prevalence of single-visit approach services

Instructions:

Only ask this question in areas where single-visit approach services are provided.

Do not read DON'T KNOW and REFUSED

Skip pattern: Skip to question CPLUS8 if the respondent answers YES, DON'T KNOW or REFUSED

Definitions:

Single visit approach (also referred to as “See-and-Treat”): providing screening for precancerous lesions and needed treatment on the same day

Last = Most recent

Indicator:

Percentage of treated women who received single-visit approach services at their last test

- Numerator: number of respondents who received treatment during the same visit
- Denominator: total number of screened respondents who received treatment

Adaptation:

Adapt language based on country context:

Test = screening

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality.

When to include:

This question is only appropriate in countries with programmes providing the single visit approach.

Analysis in areas with low screening prevalence:

Note that in areas with low screening prevalence, the denominator for this indicator may be too low to offer meaningful estimates on the prevalence of single-visit approach services.

Intersections with other sections of the Toolkit:

Results from this question can be compared with programme and service availability data on the single-visit approach gathered using the tools and processes in Section 3, Patient and Programme Monitoring and Section 4, Facility-based Surveys.

REFERENCE SHEET FOR CORE PLUS QUESTION 6 (CPLUS6):**What is the MAIN reason you did not receive treatment as a result of your last test result?****Purpose:**

To determine barriers to treatment

Instructions:

Only ask this question if the response to question C5 or CPLUS5 is NO

Read response options

Do not read DON'T KNOW and REFUSED

If respondent answers FAMILY MEMBER WOULD NOT ALLOW IT, ask WHO? and write in response

If respondent provides another barrier, record OTHER and WRITE IN barrier in the space provided

Skip pattern: Skip to question CPLUS8

Indicator:

Percentage of untreated women receiving an abnormal or positive result who identified a specific barrier to treatment

- Numerator: Number of respondents reporting each barrier as the MAIN barrier to treatment
- Denominator: Total number of screened respondents with abnormal, suspect cancer results who did not receive treatment

A separate indicator for each barrier response category should be calculated

Adaptation:

The response categories include examples that can be used as introductory statements, and to help survey enumerators accurately mark survey answers. Examples can be adapted based on language and cultural context. In order to ensure comparability across surveys, efforts should be made to keep the larger response categories as consistent as possible.

Follow-on Research:

Findings from this question can provide preliminary insight into respondents' care-seeking behaviour and act as the foundation for follow-on qualitative research that explores barriers and facilitators to cervical cancer screening, treatment and care in more depth.

REFERENCE SHEET FOR CORE PLUS QUESTION 7 (CPLUS7):**What is the MAIN reason you have never had a cervical cancer test?****Purpose:**

To determine barriers to screening

Instructions:

Only ask if response to question C1 is NO

Do not read DON'T KNOW and REFUSED

Record one response

If respondent answers FAMILY MEMBER WOULD NOT ALLOW IT, ask WHO and write in response

If respondent provides another barrier, record OTHER and WRITE IN barrier in the space provided

Indicator:

Percentage of unscreened women who reported a specific barrier as the MAIN barrier to screening

- Numerator: number of respondents reporting each barrier as the MAIN barrier to screening.
- Denominator: total number of unscreened respondents

A separate indicator for each barrier response category should be calculated

Adaptation:

Adapt language based on country context:

Test = screening

Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality.

The response categories include examples that can be used as introductory statements, and to help survey enumerators accurately mark survey answers. Examples can be adapted based on language and cultural context. In order to ensure comparability across surveys, efforts should be made to keep the larger response as consistent as possible.

Follow-on Research:

Findings from this question can provide preliminary insight into respondents' care-seeking behaviour and act as the foundation for follow-on qualitative research that explores barriers and facilitators to cervical cancer screening, treatment and care in more depth.

REFERENCE SHEET FOR CORE PLUS QUESTION 8 (CPLUS8):

Would you be willing to collect a sample by yourself to test for cervical cancer either at a health-care clinic, or in your home, if you were given instructions on how to collect the sample?

Purpose:

To measure the prevalence of respondents willing to administer sample self-collection

Instructions:

Do not read DON'T KNOW and REFUSED

Record one response

Reference images can be used to illustrate the process of self-collection to ensure understanding

Indicator:

Percentage of women willing to administer sample self-collection

- Numerator: number of respondents reporting willingness to administer self-collection
- Denominator: total number of respondents

Adaptation:

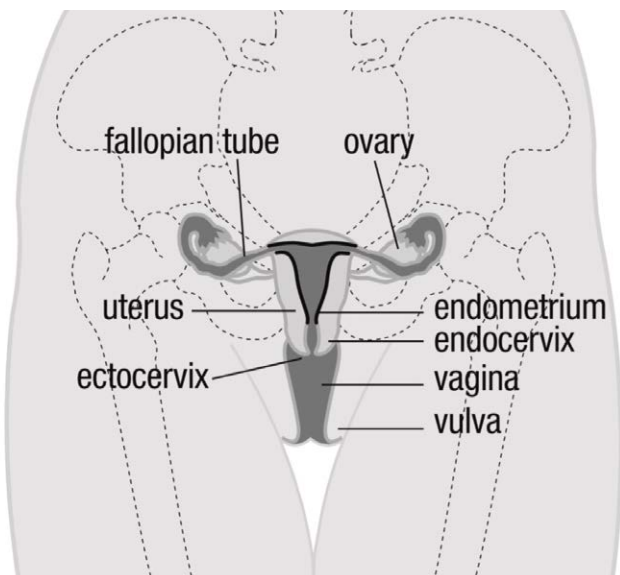
Cancer may be difficult to translate in some languages, and/or a taboo subject in some cultural contexts. Both of these challenges can compromise data quality.

When to include:

This question is most appropriate for use in areas where cervical or cervicovaginal sample self-collection has been introduced and/or where pilot studies or randomized controlled trials are planned.

IMAGE EXAMPLES FOR USE WITH INTRODUCTORY STATEMENTS

THE CERVIX



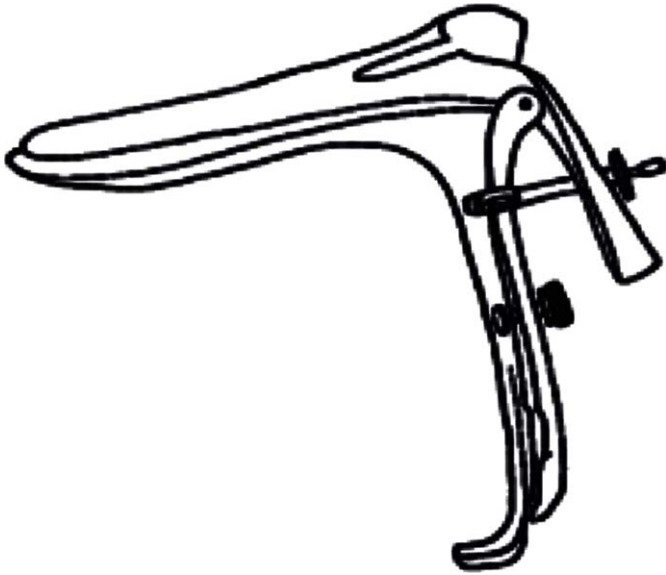
Source: WHO – Comprehensive Cervical Cancer Control: A guide to essential practice (http://apps.who.int/iris/bitstream/10665/144785/1/9789241548953_eng.pdf)

INSTRUMENTS FOR CERVICAL SAMPLING SPATULA, BRUSH AND BROOM

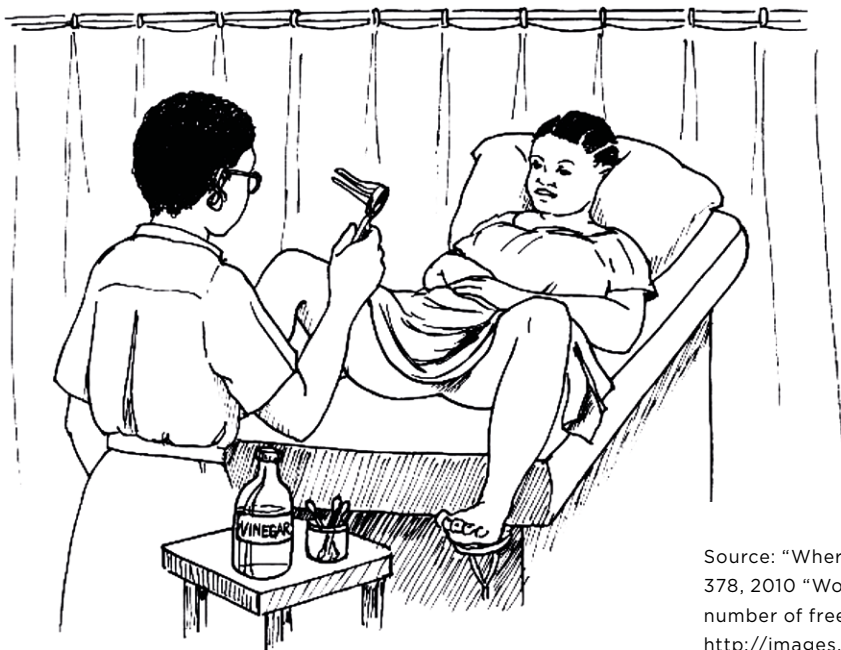


- (a) Wooden spatula
- (b) Endocervical brush
- (c) Plastic brush / broom

Source: WHO – Comprehensive Cervical Cancer Control: A guide to essential practice (http://apps.who.int/iris/bitstream/10665/144785/1/9789241548953_eng.pdf)

SPECULUM

Source: Hesperian.org. Hesperian has a number of free images and images for purchase available online: <http://images.hesperian.org/libraryhome.tlx>.

**CERVICAL CANCER TESTING METHODS
PAP SMEAR AND HPV TEST AND VIA**

Source: "Where Women Have No Doctor," 2014, Chapter 24, Page 378, 2010 "Women's Health Exchange, Issue 1." Hesperian has a number of free images and images for purchase available online: <http://images.hesperian.org/libraryhome.tlx>

EXAMPLE TABLE SHELLS

Before developing an analysis plan the design of the existing survey which has incorporated the modules must be taken into account – with special attention paid to sampling. In most cases, the precision of information gathered from the cervical cancer questions will not be the driver of the sampling design and sample size. As discussed in methodological considerations and highlighted in several question reference sheets, a low screening prevalence in the survey country may result in sample sizes too small to conduct some analyses with precision.

This subsection provides several examples of tables that

may be considered when developing an analysis plan. There are a number of potential ways to analyse and display the data generated by these questions in the context of a larger survey, and it is highly recommended that survey methodologists and biostatisticians be consulted to determine the limitations of these data.

Note that demographic characteristics and the questions used to gather them may differ by parent survey, and screening and treatment options will differ by country. Survey administrators should adapt the content and structure of the tables based on country context and need.

EXAMPLE 1

Where cervical cancer programme managers are interested in determining screening prevalence, describing trends in screening access, or identifying populations that may need to be targeted for screening awareness generation and demand creation, analysis should include the responses to the following survey questions:

From Core Module

- Question C1: Has a health-care worker ever tested you for cervical cancer?

From Parent Survey

- How old are you?
- What is your current marital status?
- What is the highest level of school you have attended? What is the highest grade completed at that level?

Note: If the programme is operating in a high HIV prevalence country, the programme manager may also wish to include an HIV status variable from the parent survey in this analysis to better understand how well the HIV-positive population is being reached.

The analysis of these variables could then be presented in a table such as the following:

EXAMPLE TABLE SHELL 1:
Screening status by select demographic characteristics

EVER SCREENED			
Demographic characteristics	Unscreened	Screened	Total
Percentage (95% CI)			
Overall			100%
Age			
Group 1			100%
Group 2			100%
Group 3			100%
Group 4			100%
Residence			
Urban			100%
Rural			100%
Marital status			
Single			100%
Married			100%
Cohabiting			100%

Demographic characteristics	Unscreened	Screened	Total
Widowed			100%
Divorced			100%
Education level			
Category 1			100%
Category 2			100%
Category 3			100%

EXAMPLE 2

If screening prevalence is found to be low, programme managers may wish to better understand the barriers women in different demographic subgroups face with regards to accessing screening services. This issue may be elucidated by analysis of responses to the following questions:

From Core Plus Module

- Question CPLUS7: What is the MAIN reason you have never had a cervical cancer test?

From Parent Survey

- How old are you?
- What is your current marital status?
- What is the highest level of school you have attended? What is the highest grade completed at that level?

The analysis of these variables could then be presented in a table such as the following:

EXAMPLE TABLE SHELL 2:

Barriers to cervical cancer screening by select demographic characteristics

Note on adaptation: A table with the same basic format can be easily adapted to examine factors which act as barriers to treatment.

BARRIERS TO CERVICAL CANCER SCREENING											
Demographic characteristics	Lack of knowledge	Embarrassment	Too expensive	Didn't have time	Poor service availability	Poor Service quality	Afraid of Procedure	Cultural beliefs	Family member	Other	Total
Percentage (95% CI)											
Overall											100%
Age											
Group 1											100%
Group 2											100%
Group 3											100%
Group 4											100%
Residence											
Urban											100%
Rural											100%
Marital status											
Single											100%
Married											100%
Cohabiting											100%
Widowed											100%
Divorced											100%
Education level											
Category 1											100%
Category 2											100%
Category 3											100%

EXAMPLE 3

Suppose that programme managers wish to gain information on the prevalence of abnormal or suspect cancer screening test results in different subgroups of the population in order to assist with targeting and programmatic decision-making. Or they want to better understand whether or not women are receiving their screening test results. They would thus want to analyse responses to the following questions:

From Core Module

- Question C3: What was the result of your last test for cervical cancer?

From Parent Survey

- How old are you?
- What is your current marital status?
- What is the highest level of school you have attended? What is the highest grade completed at that level?

Note: If the programme is operating in a high HIV prevalence country, the programme manager may also wish to include an HIV status variable from the parent survey in this analysis.

EXAMPLE TABLE SHELL 3:***Screening test results by select demographic characteristics***

RESULT OF LAST CERVICAL CANCER SCREENING TEST AMONG WOMEN WHO RECEIVED A RESULT					
Demographic characteristics	Normal	Abnormal	Inconclusive	Suspect cancer	Total
Percentage (95% CI)					
Overall					100%
Age					
Group 1					100%
Group 2					100%
Group 3					100%
Group 4					100%
Residence					
Urban					100%
Rural					100%
Marital status					
Single					100%
Married					100%
Cohabiting					100%
Widowed					100%
Divorced					100%
Education level					
Category 1					100%
Category 2					100%
Category 3					100%

EXAMPLE 4

Where a programme manager wants to ensure that they are adhering to current guidelines or achieving current targets with regards to the treatment of women with precancerous lesions or invasive cervical cancer, they would want to look at responses to the following questions:

From Core Module

- Question C3: What was the result of your last test for cervical cancer?
- Question C4: Did you have any follow-up visits because of your last test result?
- Question C5: Did you receive any treatment to your cervix because of your last test result?

And if Single Visit Approach is a programmatic strategy, the programme manager may also want to look at:

From Core Plus module

- Question CPLUS5: Did you receive the treatment during the same visit as your last test for cervical cancer?

As presented in the example below, it may only be necessary to present the 'yes' responses to some of the above questions.

EXAMPLE TABLE SHELL 4:***Prevalence of follow-up and treatment by last screening test result***

FOLLOW-UP AND TREATMENT FOR CERVICAL CANCER			
Result	Any follow up	Any treatment	Treatment received during single visit
Overall			
Abnormal			
Inconclusive			
Suspect cancer			