

SECTION 5

**PREVENTION AND CONTROL COSTING –
ANALYSIS AND PLANNING MODULE
FOR SCREENING AND TREATMENT**

INTRODUCTION

The goal of a comprehensive cervical cancer prevention and control programme is to reduce the burden of cervical cancer by (i) reducing human papillomavirus (HPV) infections, (ii) detecting and treating precancerous cervical lesions, and (iii) providing timely treatment and palliative care for invasive cancer [WHO, 2014]. WHO recommends two primary strategic interventions for achieving this goal: 1) introducing HPV vaccine to girls aged 9–13 years according to WHO guidelines; and 2) introducing cervical cancer screening and treatment. In order to plan, implement, and sustain effective cervical cancer prevention and control programmes capable of achieving the goal, it is critical to understand the financial investments required over time. Programme managers and policy-makers need information on the projected costs of cervical cancer interventions in order to make decisions on the “when”, the “where” and the “what” of service introduction and scale-up. Key issues in determining sustainability and scalability include: estimation and analysis of service delivery costs, as well as costs associated with social mobilization; information, education, and communication (IEC); behaviour change communication (BCC); training; supervision; and monitoring and evaluation.

This section presents a facilitated costing analysis and planning process and tool which enable users to:

- Estimate service costs and coverage based on national and subnational data and needs;
- Estimate financial, economic, introductory and recurrent costs of cervical cancer programmes and interventions;
- Estimate service coverage rates based upon service

cost, distribution, population need and predicted scale-up; and

- Explore cost versus service access trade-offs based on different models of public service delivery.

The screening and treatment module of the Cervical Cancer Prevention and Control Costing Tool (C4P-ST) presented in this section is an Excel-based data analysis tool, designed specifically to allow health programme managers and planners to estimate, analyse and synthesize costs for cervical cancer programmes and services. The C4P-ST tool was developed by WHO as a “screening and treatment” companion module to the C4P-HPV tool, which supports the costing of HPV vaccine programmes.

The robust analysis and planning process for which the C4P-ST tool was designed requires the engagement of a trained facilitator, as well as strong buy-in and commitment from the national government and partners in cancer control. Key roles in the process include a user or users (i.e. those who enter and analyse data using the Excel-based tool), and a multidisciplinary team of stakeholders who participate in the larger planning and costing process.

(To request the C4P-ST tool and the support of a trained facilitator, please contact: ncdsurveillance@who.int)

THE COSTING ANALYSIS AND PLANNING PROCESS

PURPOSE

In countries with an established cervical cancer prevention and control strategic programme or plan, and existing service provision, the process provides a structured way for stakeholders to collectively review, discuss, verify and update critical plan assumptions, which may impact programme costs. Cost trade-offs of various screening and treatment scenarios can be analysed to inform new plans for scale-up or modification of existing plans. Retrospective analyses can be used to validate prospective costs in current budget requests and to improve accuracy of costs and budgeting over time.

In countries without an established cervical cancer prevention and control strategic plan, programme or services, the process can help to operationally define the main programme components required to implement such a plan, to determine associated critical assumptions, and to estimate costs based on the assumptions and inputs. When costing initial

strategic plans, the tool's embedded sample cost inputs may be used in the absence of country-specific cost data.

Many countries will have existing planning and costing processes for general health programmes, and some will have specific processes in place for cervical cancer screening and treatment programmes. Where functional, the existing processes and tools can be compared to the C4P-ST planning process, cost analysis tool, and inputs and critical assumptions (see Implementation Tools and Materials) to determine opportunities for strengthening. In addition to the information presented in this section, nascent programmes may find it useful to reference the comprehensive recommendations for national cervical cancer programme organization and development found in the WHO publication, *Comprehensive Cervical Cancer Control: A Guide to Essential Practice* [WHO, 2014].

ROLES AND RESPONSIBILITIES

Best practices for programme costing include robust planning processes with a team of multidisciplinary stakeholders.

Members to consider for participation in the in-country planning and costing team ideally include:

- An impartial facilitator trained in use of the C4P-ST tool;
- An in-country influential “champion” who can facilitate buy-in and engagement from country stakeholders;
- A technical lead (“user”) who has access to the data required and is responsible for leading primary data collection;
- A health economist(s) or someone with quantitative skills and a background in economics or financing (“user”); and,
- Cervical cancer experts involved in the strategic planning and scale-up of cancer control programmes, and other stakeholders.

A strong skill-set in Excel and costing analyses is required for the team members identified as “users”,

i.e. those responsible for data entry and stewardship of the Excel-based tool.

The trained facilitator will provide further support and guidance for building the in-country team; however, the team composition should be based primarily on country preference.

Cervical cancer experts and stakeholders engaged in the process can include:

- Cervical cancer prevention and control programme managers;
- Financial planners and administrators;
- Health economists;
- Consultant economists;
- Health providers;
- Researchers; and
- Donors/external partners of cervical cancer programmes.

THE C4P-ST FACILITATOR

Facilitation is a requirement for the use of the C4P-ST tool. Because successful planning and costing requires the critical review of prevailing assumptions that contribute to costs and outcomes, facilitation by a skilled professional without ties to programme funding, implementation, services or outcomes helps ensure the objectivity of the process, and, by extension, the accuracy of the data collected, and the robustness of the results.

While gaining consensus on all key points used in planning and cost analysis can be tedious, a good facilitator can ensure engagement throughout the process so the resultant outcome is agreeable and of the best quality. It is the facilitator's role to enhance understanding and use of the tool; to work with tool users to ensure that key data needed to make objective decisions are available and collected; to gain the costing team's buy-in; and to ensure that all voices are heard. If some costing data are unavailable, the facilitator must ensure that stakeholders agree on the appropriate proxy data to use.

The recommended skills for a C4P-ST facilitator include:

- Impartiality – with no ties to cervical cancer programme funding, implementation, services, or outcomes;
- Working knowledge of health programme planning and costing;
- Group facilitation skills, including management of sensitive discussions and successful consensus building;
- A demonstrated ability to facilitate the use of costing tools is preferred; and,
- A strong skill-set in Excel and costing analyses is preferred.

Ownership of the planning and decision-making process of the national cervical cancer strategic plan lies with the national government, programme planners, policy-makers and other relevant stakeholders. While an external facilitator will guide the process to ensure that all activities are executed in an impartial and transparent manner, ultimately the process of using and implementing C4P-ST lies with the in-country stakeholders.

ACTIVITIES

There are five main activities in the C4P-ST planning and costing analysis process:

1. Preliminary data collection
2. Stakeholder agreement and buy-in
3. Data entry
4. Addressing data gaps
5. Analysis of outputs

PRELIMINARY DATA COLLECTION

The C4P-ST tool is a data analysis tool, not a data collection tool. In-country costing teams can develop data collection tools using the list of inputs and assumptions in the Implementation Tools and Materials at the end of this section. Data requirements include service costs and non-service costs that fit into several broad categories (see Table 5.2).

To reduce data collection burden, preliminary data collection, using country-developed data collection tools, can begin prior to the formal planning meetings conducted as part of stakeholder agreement and buy-in (outlined in the subsection “Acquiring Stakeholder Agreement and Buy-in” below).

DATA SOURCES

Some data can be gathered through publicly available data and/or by working collaboratively with partners in the country. Such data may include overall country population, size of the target population, health worker salaries, and number of facilities in the country, among others. Other data required for critical assumptions may be abstracted from existing routinely collected programme data or surveillance and survey data. To better facilitate cost data collection, a “Master Price List” has been included as a worksheet within the C4P-ST tool. This reference list includes equipment costs from Tanzania, Uganda, and Zambia, which can be used in countries with similar characteristics when costs are unknown or unavailable.

Users can also refer to the resources provided in other sections of this toolkit, such as the lists of minimum equipment and supplies in Section 4, Facility-based Surveys, and the requirements for monitoring outlined in Section 4, Patient and Programme Monitoring. Where an assessment of data and data systems was conducted using the tools presented in Section 1, Data Systems Assessment of this toolkit, the team can refer to the findings in the Financing, Budgeting and Costing domain to obtain foundational information.

NOTE ON ETHICS

Much of the costing data will come from interviews with country-level cervical cancer experts. Information gathered during interviews is not subject to standard research ethics, including confidentiality and protections of human subjects. Interviewees should be provided with information on the scope and purpose of the C4P-ST process, and on how the data they provide will be used and referenced.

ACQUIRING STAKEHOLDER AGREEMENT AND BUY-IN

The C4P-ST tool is a social tool which allows stakeholders to discuss programme goals and priorities, and agree upon assumptions and other inputs during facilitated planning and costing meetings. A critical step in the planning and costing process, is for key stakeholders to meet, review the preliminary data collected, identify gaps in data, resolve any discrepancies, and agree upon the best data to be used. Successful engagement in such meetings will result in consensus on sources of information and improve the integrity of the data collected.

The process of stakeholder discussion and consensus building optimizes the costing outcomes on service delivery options and related budgetary implications.

PURPOSE OF THE FACILITATED PLANNING AND COSTING MEETING

The Facilitated Planning and Costing Meeting provides a venue for a multidisciplinary, in-country costing team to interact and reach consensus on the data collected, and to ensure that the sources of data and cost analysis assumptions are acceptable to all team members.

The meeting allows team members to interact with several stakeholders responsible for policy-decision and service delivery in cervical cancer prevention and control, ranging from procurement specialists, to nurses that provide VIA, to oncologists conducting radiotherapy and chemotherapy.

CONDUCTING THE PLANNING AND COSTING MEETING

In countries with an existing, national cervical cancer strategy, the facilitator should use the strategy as the foundation for the Planning and Costing Meeting. The facilitator will need to familiarize him/herself with any existing strategic plans, initiatives, or campaigns ahead of time, and use these as the basis for discussion.

The facilitator should examine the worksheets under General Assumptions and Service Assumptions and gain consensus from the in-country costing team on the programme components and service delivery

strategy to be used in the country. Planning meeting participants should identify the sites where services will be provided and the resources required for a five-year time period. Participants should also work to reach consensus on all data sources.

Key discussion questions include:

- Where will the cervical cancer screening take place (e.g. type and levels of health facilities, or other venues)?
- What is the target age group of the women to be screened?
- What is the plan for training health staff?
- Will the screening and treatment be phased-in or delivered nationwide simultaneously?
- What are the non-medical activities of the programme?
- What other assumptions are required for the cervical cancer screening and treatment in the country?

DATA ENTRY

As the in-country planning and costing team identifies the strategies to be costed, and data are collected, users can simultaneously enter data. This section includes a series of tables (Tables 5.6–5.13) that outline the worksheets included in the C4P-ST Tool, their purpose, and simple step-by-step instructions for entering data where applicable.

ADDRESSING DATA GAPS

As data are collected and transferred to the C4P-ST tool, it is important to assess and ensure that no critical data elements are missing. The in-country costing team should follow up with the most appropriate stakeholder to collect the missing data, or agree upon the use of proxy data.

ANALYSIS OF OUTPUTS

Stakeholders should use the collected data and tool analyses and outputs to guide their discussions on programme goals and priorities, and reach consensus on the overall cervical cancer prevention and control strategy. After the strategy has been defined and agreed upon, the tool can be used to estimate/project the costs of implementing one strategy or comparing the costs of implementing two or more strategies. For example, the government may want to compare the costs of introducing cervical cancer screening at all health facilities against introduction at a specific level (such as provincial hospitals). Users wishing to compare costs for different strategies should make a copy of the C4P-ST tool for each strategy, complete the strategy-specific costs, and make comparisons.

THE C4P-ST TOOL

STRUCTURE AND FUNCTIONALITY

SOFTWARE REQUIREMENTS

The tool is designed to be used with Microsoft Excel 2010 and subsequent versions.

CUSTOMIZATION

The tool aims to be transparent and logical by allowing users to see all input, calculations, and outputs. Estimates are based on the most current data available within the country at the time, and programme plans are customized to local needs.

The C4P-ST tool is easily customized to help countries discuss and determine:

- Target population(s);
- What community/social mobilization and sensitization activities will take place;
- What services will be provided (for guidelines on cervical cancer screening and treatment services, see *Comprehensive Cervical Cancer Control: A guide to essential practice* [WHO, 2014]);
- What types of providers will provide services;
- When and where services will be implemented and scaled; and
- Their monitoring, evaluation and supervision strategy.

The tool is sufficiently flexible to incorporate these different local assumptions; however, it is important to note that adding or deleting columns or rows will compromise the structure of the tool and render it unusable. If a row or cell is not applicable to the programme, the user must leave the field blank.

EFFICIENT NAVIGATION

The tool provides users with a hyperlink-based “Table of Contents” for efficient navigation throughout the different worksheets.

The Table of Contents also acts as a summary of the structure and content of the tool, outlining the various assumptions, outputs, presentation outputs, and appendices sections.

While the tool can be navigated by manually clicking worksheet tabs, the hyperlinks within the Table of Contents and embedded in each worksheet are more efficient, as users can navigate between any two worksheets using only two clicks.

EXPANDABLE AND COLLAPSIBLE CONTENT

The worksheets include the ability to expand and collapse headings, allowing users to focus their attention on specific content. Users can click on boxes containing plus or minus signs located to the left of the row numbers to expand (+) and collapse (-) the content and modify the amount of data being viewed at any given time.

STANDARDIZED SHEET CONSTRUCTION

PURPOSE AND CONTENT OF WORKSHEETS

Every worksheet is classified into one of five categories according to its purpose, with the core of the tool comprising “Assumption” sheets and “Output” sheets.

1. **Assumption** sheets are those with the suffix “BA” (Broad Assumption) or “TA” (Time-based Assumption) after the main title in the worksheet tab name. These sheets allow entry of user inputs, referred to as “Assumptions”, via free text entry or selection from a list of options.
2. **Output** sheets are those with the suffix “BO” (Broad Output) or “TO” (Time-based Output) after the main title in the worksheet tab name. These sheets calculate and present results based on the assumptions provided by the user.
3. **Navigation** sheets facilitate tool navigation through the hyperlinked Table of Contents and Quick Find Index.
4. **Section and Subsection Cover** sheets are those with the suffix “SC” (Section Cover) or “SSC” (Subsection Cover) after the main title in the worksheet tab name. These cover sheets provide information about a specific section of the tool and the inputs required, and provide a hyperlinked Table of Contents for that section.
5. **Analysis and Presentation sheets** are those with the suffix “P” (Presentation) after the main title in the worksheet tab name. These sheets,

including the Dashboard-styled worksheet, present a summary of calculated outputs and other key information in table or graph form.

Every worksheet in the tool contains common content, such as a sheet title, a reference to the model name, hyperlinks to neighbouring sheets, error checks, and a hyperlink returning to the Table of Contents.

In addition to classification of worksheets by purpose, some sheets are further subcategorized based on content. Most non-cover sheets in the tool are

categorized as either a BA or a TA sheet.

FORMAT, CONTENT AND PURPOSE OF CELLS

The C4P-ST tool employs the principle of purpose-based formatting, in which the content and purpose of each cell is communicated through consistent, standardized formatting. Each cell is classified as containing one of three types of content: Constant, Formula, and Mixed, with the additional feature of colour coding (Table 5.1).

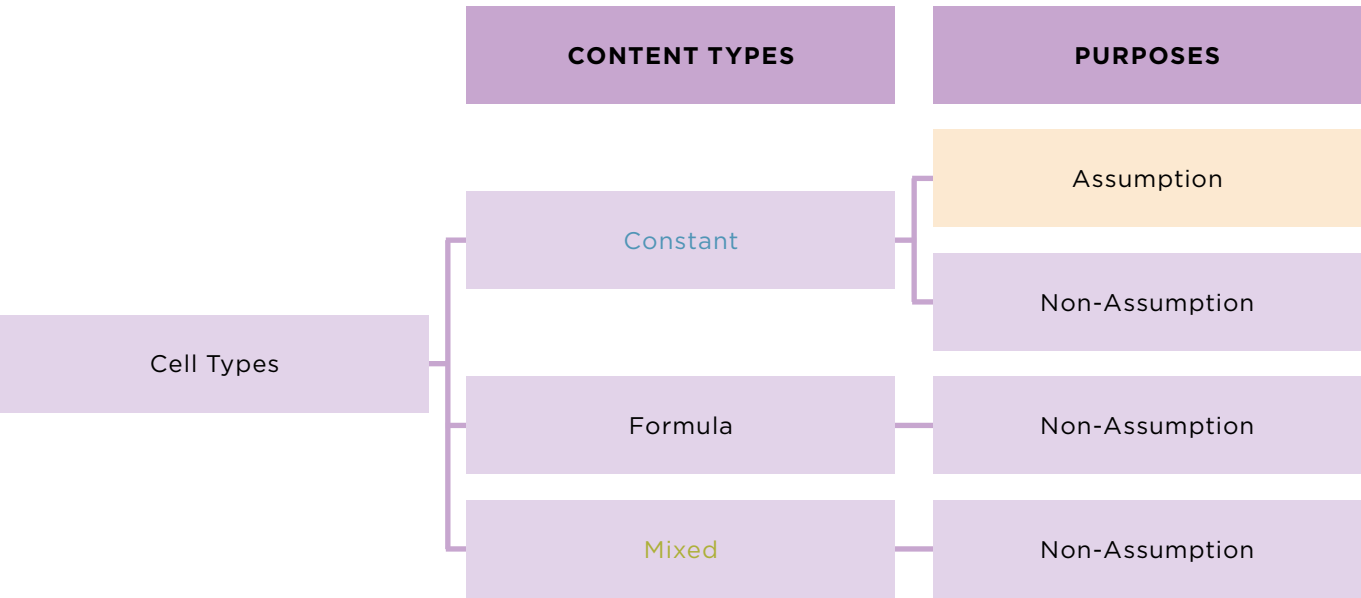
TABLE 5.1
Cell content types

Content Type	Description	Example	Text Colour
Constant	Hard-coded, non-formula	100	Blue
Formula	Pure formula	=J20*J45	Black
Mixed	Formula containing constants	=J20+100	Green

Many users will be familiar with distinguishing constants and formulas; however, this tool further distinguishes cells containing mixed content because of risks created by hard-coding data into formulas (e.g. hiding assumptions within formulas). Because font colouring is applied

consistently, each worksheet becomes a visual dictionary of the content within each of its cells. Users can quickly and easily identify all the constants, formulas and mixed cells within each worksheet. A visual overview of cell types and their purpose are provided in Figure 5.1.

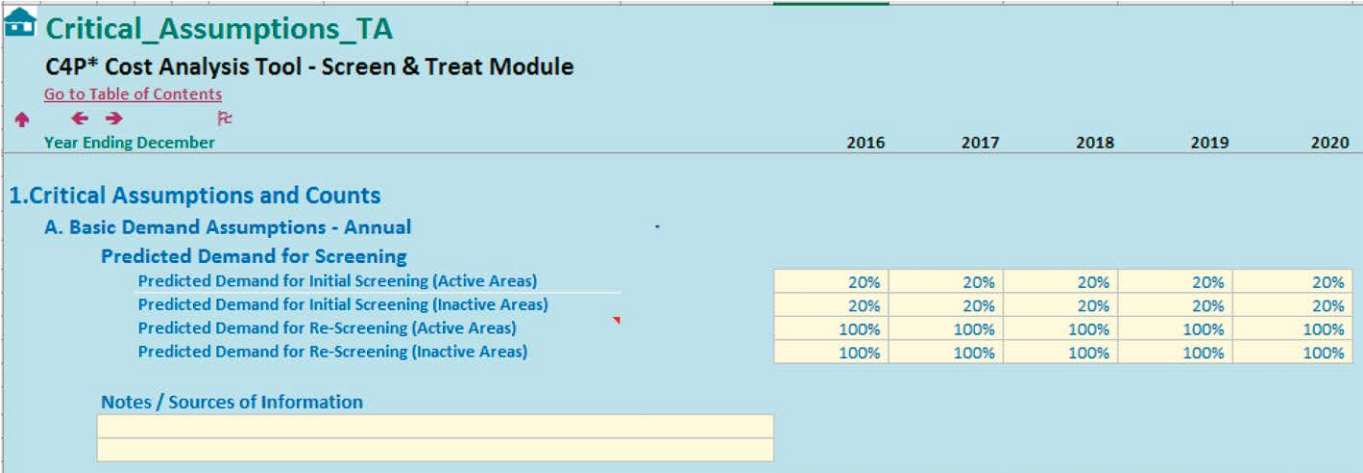
FIGURE 5.1
Cell content and purpose



While it is useful to be able to quickly and easily distinguish cell content based on font colour, model users will likely be more concerned with quickly and easily locating worksheets and cells containing assumptions. Assumptions sheets have a light blue

overall background, making them visually distinguishable from other sheets, such as the output sheets with their white-background. Additionally, cells capturing the user inputs or assumptions can be clearly distinguished by their yellow fill, as shown in Figure 5.2.

FIGURE 5.2
Colour coding



CENTRALIZED CHECK SYSTEM

The tool contains a centralized check system to ensure that any data entry errors – such as invalid assumptions – are quickly and easily located and addressed. All checks within

the tool are identified on the sheet in which they occur, and are summarized in a separate “Alert Check” summary worksheet. Any triggered alerts are communicated through the cell name on every worksheet, allowing users to quickly navigate to the source of the alert.

CALCULATED COSTS

The C4P-ST tool enables the user to estimate the additional resources required to add cervical cancer screening and treatment to existing health programmes at a regional or national level, and provides estimates of cost per screening or treatment service. Users can also calculate the percentage of shared costs for supplies, equipment and human resources that are shared between cervical cancer screening and treatment services and other health services. The tool is not, however, designed to calculate patient-borne costs, mobile-clinic costs, or to determine quality of services or number of lives saved due to services provided. The structure of the

inputs allows both retrospective and prospective planning and costing.

With appropriate inputs, the tool generates basic programmatic cost data that can be supplemented by intervention effectiveness data to calculate the cost-effectiveness of allowing users to prioritize possible interventions. Outputs generated can also be used as the basis for budget impact analysis. The tool groups costs into several broad categories based on the activity to which they are related. These categories, as described in Table 5.2, are comprehensive and standardized yet flexible enough to apply to many country contexts.

TABLE 5.2
Description of cost categories of C4P-ST tool, by activity

Activity	Description
Screening Services	Services that consist of screening women for cervical cancer and precancerous lesions. The type of services offered can be defined by the user. Up to three methods can be included in the Screening Assumptions worksheet of Version 1.0 of the tool.
Diagnostic Service	Diagnostic service for women who have been screened and identified as having symptoms which might be caused by cancer. The type of services offered – biopsy, colposcopy, histopathology – can be defined by the user. This part of the tool is designed strictly for diagnostic services for cervical cancer. It should always include a diagnostic pathology. If diagnostic pathology is included as part of a treatment procedure, the costs for the diagnostic service and laboratory fees should be added to the treatment service provided.
Treatment Services	Service which consist of treating either precancerous lesions or invasive cancer in women. Space for seven treatment services are included in Version 1.0 of the tool.
Microplanning	Operational planning meetings at the national and subnational levels which are designed to facilitate the introduction or scale up of a cervical cancer screening and treatment programme by the government.
Training	Initial competency-based training of service providers, trainers, and supervisors designed to facilitate the initiation of cervical cancer screening and treatment services and programmatic support. It is assumed that after initial trainings, additional education will be incorporated into the government's routine training programme.
Social Mobilization and Communication	Initial and continuing social mobilization, behaviour change communication, and information and educational communication support activities.
Supervision, Monitoring, and Evaluation	Initial and continuing supervision, monitoring, and periodic evaluation activities specifically related to cervical cancer screening and treatment.
Other Activities	Reserved for Other Direct Costs not previously added in any of the above. Both recurring and capital costs may be entered here.

The costs within the broad activity categories are operationally differentiated into the standard financial and economic costs, and recurrent and capital costs.

FINANCIAL AND ECONOMIC COSTS

Both financial and economic costs are calculated (Table 5.3). The user can choose which is most appropriate depending on the objective of the analysis.

Financial costs (also referred to as “bookkeeping costs”) are the value of resources to the MoH or other implementing agencies and involve actual monetary payments and expenditures for introducing programmes such as supplies, equipment, training resources, and developing new communication materials. If the user wants to know the additional costs incurred by the MoH, for example, they should focus on the financial cost calculation.

Economic costs comprise the value of expenditures directly incurred when introducing a programme and those previously paid for or owned by the MoH or implementing agency, such as the salaries of health personnel, donated equipment, and time of volunteers. This analysis gives a more complete and true picture of resources that are tied up in the provision of cervical cancer screening and treatment and their opportunity costs, and could be used in cost-effectiveness or cost-benefit analyses.

Table 5.3 presents a comparison of resources included in cost estimation based on whether financial or economic costs are being calculated. For microplanning, for example, the value of time spent in meetings of salaried personnel is included in economic costs but not in financial costs.

The main difference between financial and economic costing relates to whether “opportunity cost” is considered:

1. The time spent by salaried health personnel, and volunteers, is valued in economic costing because there is an opportunity cost to this time (i.e. the workers are unable to spend time on other activities when they are occupied with cervical cancer screening and treatment), but are not included in financial costs because these are already paid for with implementing agency salaries;
2. The value of donated goods and services is included in economic costs but not in financial costs because there is an opportunity cost to their use.

In other words, financial costs include only costs that have been explicitly incurred, whereas, economic cost includes opportunity costs. In cases where the financial cost is low, ignoring economic costs may produce the illusion that the programme would cost little to introduce. The opportunity costs then become “hidden” costs. Financial costs can be equal or less (but never higher) than the economic costs.

TABLE 5.3**Examples of financial and economic costs by screening and treatment activity**

Activity	Financial Costs	Economic Costs
Microplanning	Per diems and travel allowances Venue rental Transport	Personnel time spent in meetings Per diems and travel allowances Venue rental Transport
Training	Development of training materials Per diems and travel allowances Venue rental Transport Training materials Stationery	Value of personnel time spent on training Development of training materials Per diems and travel allowances Venue rental Transport Training materials Stationery
Social Mobilization/ Information, Education and Communication	Facilitator time in meetings Per diems and travel allowances Stationery Printing of materials Production of TV and/or radio spots	Value of personnel, and volunteer, time spent on material development and other activities Facilitator time in meetings Per diems and travel allowances Stationery Printing of posters and leaflets Production of TV and/or radio spots
Service Delivery	Transport fuel Personnel per diems to travel to outreach sites Supplies – e.g. cotton Screening, diagnostic and treatment equipment	Value of personnel time spent on vaccination Transport fuel Personnel per diems to travel to outreach sites Supplies – e.g. cotton Screening, diagnostic and treatment equipment
Monitoring and Evaluation	Tally sheets or registers Pens and pencils Materials for surveillance	Tally sheets or registers Pens and pencils Materials for surveillance
Supervision	Travel allowances Transport fuel and maintenance Stationery	Value of personnel time spent on supervision Travel allowances Transport fuel and maintenance Stationery
Waste Management	Purchase of incinerators (annualized) Fuel Transport	Purchase of incinerators (annualized/ discounted) Fuel Transport

RECURRENT AND CAPITAL COSTS

The costs of the resources listed in Table 5.3 can be categorized by whether they must – in the simplest of terms – be effectively paid for once (capital costs) or on a regular basis (recurrent costs).

Recurrent costs (Table 5.4): the value of resources that last less than one year:

- Personnel costs – using cost per personnel engaged in a single procedure per minute.
- Transport
- Maintenance
- Monitoring, evaluation and supervision
- Short term training activities that last less than one year (does not include initial training activities or material development)
- Supply costs – using cost per units of supply required per procedure
- Other direct costs – using unit costs multiplied by the number of units required to complete one procedure (laboratory tests, bed days, and other direct costs are included).

TABLE 5.4***Associated recurrent costs of screening and treatment activities***

Activity	Recurrent Costs
Information, Education and Communication	Personnel Time, Printing, Production of Leaflets, Posters, Radio and Television Spots
Service Delivery	Personnel Time, Supplies, Drugs, Per Diems, Transport
Supervision	Supervisor Time, Driver Time, Per Diem, Transport
Monitoring and Evaluation	Tally Sheets, Data Entry Time
Waste Management	Fuel for Incinerators

Capital costs (Table 5.5): the value of initial investments and resources that last longer than one year:

- Microplanning
- Initial training
- Communication material development
- Equipment costs – using cost per site (user-

designated collection of equipment required to conduct one or more procedures). When estimating equipment costs, equipment-useful-life years should be considered, and a user-defined, maintenance cost percentage can be added. For example:

- laboratory equipment
- vehicle requirements
- incinerators

TABLE 5.5***Associated capital costs of screening and treatment activities***

Activity	Recurrent Costs
Service Delivery	Equipment – e.g. cryotherapy machines, LEEP, radiotherapy machines
Introduction	Microplanning, initial training, curriculum development, communication material development
Waste Management	Additional incinerators
Other Transport	Additional vehicles, motorcycles, boats, bicycles, etc.

Calculation of capital costs are annualized and/or discounted, differing from recurrent costs. The specific type of depreciation will depend on the purpose of the analysis and whether financial or economic costs are preferred. When calculating financial costs, straight-line depreciation is used in the calculation of capital costs – that is, the cost of the item is annualized through dividing it by the useful life years of that item. For example,

a cryotherapy machine could be expected to last for ten years and the total cost would be divided by ten. Straight-line depreciation assumes that capital goods are used up equally over the useful time period of the item. For economic costs, capital goods are discounted as well as annualized. This type of depreciation assumes that people have time preference and prefer to use goods and services now rather than in the future.

INSTRUCTIONS FOR USE

The following tables provide detailed instructions for data entry into the C4P-ST tool and are organized by sections that correspond with those listed in the Contents tab of the tool:

1. Country Setup (Table 5.6)
2. Assumptions (Tables 5.7–5.9)
3. Outputs (Table 5.10)
4. Analysis (Table 5.11)
5. Helper-Plug-ins (Table 5.12)

6. Appendices (Table 5.13)

Similar instructions for some worksheets are included directly in the tool, and the trained facilitator will provide guidance throughout the process as needed. Please see the Implementation Tools and Resources at the end of this section for complementary resources that support the creation of data collection tools.

REMINDER: Adding or deleting columns or rows will compromise the structure of the tool and render it unusable. If a row or cell is not applicable to the programme, the user must leave the field blank. In order to enter data, the user must turn off worksheet protection: Go to FILE, select INFO, and then select UNPROTECT.

TABLE 5.6
Country set-up

COUNTRY SET-UP		
REMINDER: Click on the boxes containing plus/minus signs located to the left of the row numbers to expand (+) and collapse (-) the content.		
Worksheet Name	Purpose	Instructions (Comments)
Team Information	To record information on the user and the planning and costing team members.	<ol style="list-style-type: none"> 1. Enter the user's name, organization, address and email address. 2. Enter the costing team's names, email addresses, and organization.
Custom Labels	To record information on target population characteristics, subnational level types, facility types, and population segment and category.	<ol style="list-style-type: none"> 1. Enter the country name and subnational level name labels 2. Enter up to ten types of health facilities (for example: community clinic, provincial/regional hospital, national hospital, etc.). (Once this information is entered, the names are automatically entered into other worksheets in the tool.) 3. Define and fill in subsegments within the target population. (Subsegments could include HIV status, age group, etc.)
Time Period	To list the financial year end month, programme start year, programme term, and local currency denomination.	<ol style="list-style-type: none"> 1. Enter the Financial Year End 2. Enter the Programme Start Year (the first year of programme planning and costing). If your programme is ongoing, simply enter the year in which you want to start planning and costing. (The tool is designed to have a baseline "existing" year and up to five years of projection. If the country is already providing some screening and treatment methods and is considering scaling up or introducing other methods, the start year should be the baseline existing year.) 3. Enter the Programme Term (Years): the number of years you want to plan and cost. 4. Enter the local Currency Denomination: the three-letter code for your local currency.

The Assumptions sections (see Tables 5.7–5.9) allow the user to enter the data from which the tool will calculate the projected outputs and associated costs. "Assumptions" are defined as inputs to the calculations that are accepted as true. Assumptions should be as accurate as possible, based on the most reliable information available. Sources should be documented in the notes/source of information cells.

1. The General Assumptions SSC subsection (Table 5.7) includes:
 - a. Subnational names and programme timing.

- b. Critical assumptions related to population, epidemiology, and services.

- c. Economic assumptions.

- d. Pricing assumptions.

2. The Service Assumptions SSC subsection (Table 5.8) includes:

- a. The names of each service to be provided.

- b. The capacity of each type of facility to provide each service.

c. The types and quantities of personnel, supplies, equipment, and other direct costs required to provide each service.

d. The types and numbers of service sites to be open in each type of facility in each service area, by year.

TABLE 5.7
General assumptions

GENERAL ASSUMPTIONS		
REMINDER: Click on the boxes containing plus/minus signs located to the left of the row numbers to expand (+) and collapse (-) the content.		
Worksheet Name	Purpose	Instructions (Comments)
Subnational Names and Timing	To enter information on subnational levels in which the programme will be active. Data elements include the regions, number of districts, and programme start year by second level area.	<ol style="list-style-type: none"> Province names: <ol style="list-style-type: none"> In the first column, enter the names of the second level areas (e.g. regions or provinces). In the second column, enter the number of third level areas (e.g. districts). For example, if there are three districts in a province, the user would enter "3" in this cell. Programme start year: <ol style="list-style-type: none"> Enter the year that the cervical cancer screening and treatment programme will begin in each second level area.
Critical Assumptions	To specify basic assumptions and counts required to estimate costs of screening and treatment, specifically: <ol style="list-style-type: none"> Predicted demand for screening, Basic screening method distributions, Epidemiological assumptions, Basic referral assumptions, Basic re-screening timing assumptions, and Annual population counts by province. 	<ol style="list-style-type: none"> Critical Assumptions and Counts <ol style="list-style-type: none"> Basic Demand Assumptions-Annual: <ol style="list-style-type: none"> Enter the percentage of women eligible for screening that will seek services in "active areas" (where facilities are providing screening services): Enter the percentage of women eligible for screening living in "inactive areas" (areas without screening services) that will seek services in active areas: Basic Initial Screening Method Distribution <ol style="list-style-type: none"> Enter the percentage of screenings conducted with each screening method over the project period (up to 5 years) Epidemiological assumptions: Enter the percentage of women that will have small precancerous lesions, large precancerous lesions, suspect cancer, and the percentage that will have different stages of invasive cancer) (If this information is not available at the country level, the user can use data from neighbouring countries, or the <i>WHO Six-Country Study</i> [WHO, 2012]. The user should look for appropriate comparability across HIV positivity; population size, density, and demographics; density of services within health system; etc.) <ol style="list-style-type: none"> Basic referral assumptions: Enter the assumptions for treatment referral proportions and diagnostic pathology referrals Basic re-screening time assumptions: Enter the re-screening interval for both women receiving a normal test result and women who were referred. Annual population counts: Enter the population counts for each target population subsegment by second level area. (Target population subsegments are autopopulated as sub-bullets under the Annual Population Counts.)
Economic Assumptions	To specify exchange rates for local and foreign currencies as well as annual inflation and discount rates.	<ol style="list-style-type: none"> Enter currency codes and exchange rates. Enter economic rates
Master Price List	To specify prices of resources used in the cervical cancer programme.	<ol style="list-style-type: none"> Select the currency from the dropdown menu (The worksheet is prefilled with currency abbreviations. When a currency is selected, the equipment tables will prepopulate with default data from the country. The user can write over these data with actual data from the country.) Enter information on health personnel salaries, and prices for equipment and supplies. (NOTE ON SHARED EQUIPMENT: Equipment costs should be costed for the proportion of use for cervical cancer. For example, if a radiotherapy machine is used 1/3 of the time for cervical cancer therapy, then the user should designate the number of equipment units as 0.33 rather than 1.) The Master Price List can be cross-referenced with the Equipment Lists included in Section 4 of this toolkit, Facility Based Surveys.

TABLE 5.8
Service assumptions

SERVICE ASSUMPTIONS		
REMINDER: Click on the boxes containing plus/minus signs located to the left of the row numbers to expand (+) and collapse (-) the content.		
Worksheet Name	Purpose	Instructions (Comments)
Screening Assumptions	To record assumptions for up to three screening methods.	<p>1. Name of Service and Service Short Code: Enter the name of the service (Visual Inspection with Acetic Acid, Pap Smear, etc.) and a short code (SCREEN_VIA for example).</p> <p>2. Annual Capacity per Individual Facility Type: Enter the estimated annual capacity for each facility type.</p> <p>3. Service Requirements and Costs</p> <p>a. Enter the prerequisite infrastructure requirements and sources of information. These are equipment that were already at the facilities and don't need to be costed in an incremental analysis (for example, gynaecological couches).</p> <p>b. Enter the average number of service days, service hours per days, and average minutes per type of service by name of health facility offering each type of screening.</p> <p>Specify the personnel required for screening by facility level. Also, indicate the number of minutes spent by each type of personnel on pre-procedure activities, procedure, and post-procedure care.</p> <p>c. List the supplies required for each diagnostics method and the units needed per procedure.</p> <p>d. List the equipment required for each diagnostics method and the units needed per site.</p> <p>e. Enter all Other Direct Costs. An illustrative list of other direct costs is included below the data entry tables.</p> <p>(Note on Customization: The Screening Assumptions worksheet includes space for up to 3 screening methods. Screening methods – including VIA, VILI, cytology, HPV/DNA testing – can be added by the user to the Screening Assumptions worksheet. Equipment lists for these procedures are included in the tool's Appendices under Supplies_and_equipment_P_MS.)</p>
Screening Assumptions_ ANNUAL	To designate the number of facilities offering screening services.	Enter the number of eligible facilities that offer each type of screening service by region and year.
Diagnostic Assumptions	To record assumptions for diagnostic services provided in the country, specifically cervical biopsy/histopathology services.	<p>1. Name of Service and Service Short Code: Enter the name of the service (colposcopic biopsy, endocervical curettage, etc.) and a short code.</p> <p>2. Annual Capacity per Individual Facility Type: Enter the estimated annual capacity for each facility type.</p> <p>3. Service Requirements and Costs</p> <p>a. Enter the prerequisite infrastructure requirements and sources of information. These are equipment that were already at the facilities and don't need to be costed in an incremental analysis (for example, gynaecological couches).</p> <p>b. Enter the average number of service days, service hours per days, and average minutes per type of service by name of health facility offering each type of diagnostics. Specify the personnel required for diagnostics by facility level and indicate the number of minutes spent by each type of personnel on pre-procedure activities, procedure, and post-procedure care.</p> <p>c. List the supplies required for each diagnostic method and the units needed per procedure.</p> <p>d. List the equipment required for each diagnostic method and the units needed per site.</p> <p>e. Enter all Other Direct Costs. An illustrative list of other direct costs is included below the data entry tables.</p>
Diagnostic Assumptions_ ANNUAL	To designate the number of facilities that will provide diagnostic services by facility level.	Enter the number of eligible facilities that offer diagnostic services by region and year.

Table 5.8 continued

Intervention Assumptions	To record assumptions on treatment services for precancerous lesions and invasive cancer.	<p>1. Name of Treatment Method and Short Code: Enter the name of treatment (LEEP, cryotherapy, chemotherapy, radiology, etc.) and a short code.</p> <p>2. Enter the proportion of women that are referred that seek services for each service and the source of information for that assumption.</p> <p>3. Annual Capacity per Individual Facility Type: Enter the estimated annual capacity for each facility type.</p> <p>4. Service Requirements and Costs</p> <p>a. Enter the prerequisite infrastructure requirements and sources of information. These are equipment that were already at the facilities and don't need to be costed in an incremental analysis (for example, gynaecological couches).</p> <p>b. Enter the average number of cervical cancer service days per year, average number of service hours per day, and average number of minutes per service by type of facility. Specify the personnel required for treatment by facility level. Also, indicate the number of minutes spent by each type of personnel on pre-procedure activities, procedure, and post-procedure care.</p> <p>c. List the supplies required for each cervical cancer and pre-cancer treatment method and the units needed per procedure.</p> <p>d. List the equipment required for each cervical cancer and pre-cancer treatment method and the units needed per site.</p> <p>e. Enter all Other Direct Costs. An illustrative list of other direct costs is included below the data entry tables.</p>
Intervention Assumptions_ ANNUAL	To designate the number facilities that will offer each type of cervical cancer service.	<p>1. Fill in the number of facilities with the capacity to provide treatment services by region and year for each treatment method. (These facilities should be limited to those outlined in the Intervention Assumption sheet.)</p>

TABLE 5.9
Other cost assumptions

OTHER COST ASSUMPTIONS	
The “Other Cost Assumptions” section includes only 1 worksheet (“Non-Service Assumptions”) with multiple sections. Purpose: To record the assumptions related to non-clinical activities. REMINDER: Click on the boxes containing plus/minus signs located to the left of the row numbers to expand (+) and collapse (-) the content.	
Section Name	Instructions (Comments)
Microplanning	<ol style="list-style-type: none"> 1. Choose the applicable currency from the dropdown menu. 2. Enter the financial and economic costs of conducting micro-planning activities by level (national, subnational, etc.). 3. Enter the estimated number of microplanning activities per year. <p>(The financial cost is the outlay or direct expenditures invested in the service [e.g. facilitators’ fees, travel allowance, venue rental, etc.], but does not include donated goods or salaried personnel costs. The economic cost includes the outlay plus the value of donated goods, salaried personnel costs and other “hidden” costs.)</p>
Training	<ol style="list-style-type: none"> 1. Choose the applicable currency from the dropdown menu. 2. Enter the financial and economic costs for each training activity based on the max number of participants trained. 3. Enter the estimated number of training activities per year.
Social Mobilization and Communication	<ol style="list-style-type: none"> 1. Choose the applicable currency from the dropdown menu. 2. Enter in the financial and economic cost per activity to increase the number of women availing of screening and treatment services. 3. Enter the estimated number of social mobilization and communication activities per year. 4. Enter the financial and economic costs per initial IEC and BCC support activities (for example, production of brochures). 5. Enter in the cost of continuing support such as re printing of flyers or brochures over the period of the cost projection. 6. Enter the estimated number of initial support packages per year. 7. Enter the estimated number of continuing support packages per year.
Supervision	<ol style="list-style-type: none"> 1. Choose the currency from the dropdown menu that will be used for supervision costs. 2. Supervision: Enter the financial and economic cost of supervision visits, and the number of expected supervisory visits by level. 3. Monitoring: Enter the financial and economic costs for monitoring activities. 4. Evaluation: Enter the financial and economic costs for evaluation activities.
Other Recurrent and Capital Costs	<ol style="list-style-type: none"> 1. Choose the applicable currency from the dropdown menu. 2. Enter in the financial and economic cost per additional recurrent cost item. 3. Enter the estimated volume of each recurrent item. 4. Enter in the financial and economic cost per additional capital good. 5. Enter the estimated volume of each additional capital good.

TABLE 5.10
Other cost assumptions

OUTPUT AND COST SUMMARIES	
The C4P-ST tool is an algorithm that produces outputs and summary information for programme planning based on the complete data set. Outputs are automatically generated based on the data entered into the Assumptions worksheets. Outputs are generated based on the most current data available within the country at the time of estimation and programme plans can be customized to fit country needs. Results of the cost estimation are found in the Outputs and Cost Summaries sections. Results are provided for population counts, annual screenings, annual diagnostics provided, annual interventions provided, and other costs. REMINDER: Click on the boxes containing plus/minus signs located to the left of the row numbers to expand (+) and collapse (-) the content.	
Worksheet Name	Purpose
Outputs	The Outputs sheets show the capacity, need, demand (total eligible population seeking the procedure), total procedures provided and outcomes (i.e. number of women with VIA-negative results, and number of women referred for treatment by type of services).
Cost Summaries	<p>The Cost Summary sheets show cost per service by subnational region over a five-year period.</p> <p>The Programme Cost Summaries sheet shows the financial and economic costs of the planned cervical cancer screening and treatment activities by year and cost component, as well as the financial and economic costs of initial investment (initial upfront resource requirements for starting the cervical cancer programme). It also has tables on the introduction costs (i.e. microplanning, training, and social mobilization, recurrent costs, and service delivery outputs). Other Outputs and Cost Summary sheets are organized by type of service (e.g. VIA Cost Summary).</p>

TABLE 5.11
Analysis

ANALYSIS	
The four sheets included in the Analysis section provide the in-country costing team with the ability to visualize the costing data, and identify gaps and issues at a glance. All analysis sheets are autopopulated as data are entered into the Assumptions sheets.	
Worksheet Name	Purpose
Model logic	Allows the user to follow patients through the continuum of care, and identify the number of women availing of services and those who are lost to follow up.
Cost per service	Includes the financial and economic costs by service.
Proportional costs	Includes a series of pie charts that allow users to see the proportion of financial and economic costs by type of service and activity.
Service by year and area	Includes financial and economic costs for each service by year; as well as the number of women eligible for the service, the number of women seeking the service, and the available capacity to provide each service.

TABLE 5.12
Helper plug-ins

HELPER PLUG-INS		
The C4P-ST tool has five plug-ins to help the in-country costing team make decisions on programme capacity, demand, training and meeting costs. REMINDER: Click on the boxes containing plus/minus signs located to the left of the row numbers to expand (+) and collapse (-) the content.		
Worksheet Name	Purpose	Instructions (Comments)
Service unit capacity and staffing requirements estimator	Helps users estimate the number of services that can be provided by each health staff person and the number of staff that should be available to provide services.	Enter the following information to estimate the number of services that can be provided per health worker: 1. Minutes required to provide each service, 2. Number hours per service day; and 3. Service days per month. (This plug-in includes sliders that allow users to easily adjust the number of minutes, hours and days in order to observe the effect on service capacity.)
Effect of demand on current assumed capacity	To compare the estimated number of women seeking cervical cancer services with the screening capacity to provide services by year and area.	(The slider on this page allows users to adjust the percentage of women seeking screening (demand) in order to observe the effect on capacity.)
Training programme cost estimator	To estimate training costs.	Enter the information on the travel and allowances for facilitators, support personnel and participants, as well as lodging and room costs, meals and refreshments, material and supplies, equipment, and other direct cost.
Meeting cost estimator - assumptions	To estimate meeting costs.	Enter the assumptions needed for sensitization, microplanning, and community mobilization meeting. (Sensitization meetings include meetings with community leaders; microplanning meetings include operational meetings at the national and subnational levels, and community meetings include community members)
Meeting cost estimator - outputs	Shows the financial and economic cost outputs by type of meeting.	(The outputs are auto-populated as data are entered into Plug-in #4.)

TABLE 5.13
Appendices

APPENDICES	
The C4P-ST tool has seven in-built Appendices.	
Appendix	Purpose
Revisions Log	Helps users detail and track revisions made.
Checks and Alerts	To detect and isolate issues—such as invalid assumptions. Helps ensure users can quickly and easily locate and address any data entry errors.
Notes	Provides users with minimal notes on the structure of the tool as well as contact information for the developers of the tool.
Supplies and Equipment	<p>Provides lists of equipment needed to perform pelvic examinations, as well as:</p> <ul style="list-style-type: none"> • Screening methods including: <ul style="list-style-type: none"> - Pelvic examination - VIA - HPV DNA testing • Biopsy • Treatment of precancerous lesions including: <ul style="list-style-type: none"> - LEEP - Cryotherapy <p>The Equipment Lists can be cross referenced with the Equipment Lists included in the Facility Based Surveys section of this toolkit.</p>
Glossary	To provide definitions of terms used throughout the tool.
Style Sheet	Contains formats and styles, sheet naming conventions, and range naming keys to improve usability.
Quick Find Index	Includes hyperlinks to each worksheet for easy navigation.

IMPLEMENTATION TOOLS AND MATERIALS

ASSUMPTION INPUTS REFERENCE SHEET

This references sheet defines each of the inputs, or assumptions, that will be entered into the C4P-ST Excel-based tool. This list can be used by the multidisciplinary costing team in conjunction with the tool itself, to develop data collection or

aggregation tools and to determine data sources. Where a process for costing analysis and planning is being used outside of the C4P-ST process, this list of assumptions can be referenced to identify any gaps in the existing process.

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
GENERAL ASSUMPTIONS			
NAMES, LABELS AND TIMING			
Country name label	The full name of the country		Custom_Labels_BA
Subnational level name labels	Labels for each type of subnational administrative level present in the country which will be used to autopopulate other assumptions, outputs, and presentation worksheets	Example: region, state or province; county or district; etc.	Custom_Labels_BA
Facility type name labels	Labels for each type of facility present in the country health-care system which will be used to autopopulate other assumptions, outputs, and presentations worksheets	Example: central referral hospital, district hospital, health centre, health post, etc.	Custom_Labels_BA
Population segment and category name labels	Labels for the different segments and categories of the programme's target population which will be used to autopopulate other assumptions, outputs, and presentations worksheets	Example: the target population broken down into HIV+ status and HIV- status segments, with those segments further broken down into target age group categories	Custom_Labels_BA
Financial year end	The month in which the country's financial year ends		Time_Period_BA
Programme start year	The year when this costing and planning process was begun		Time_Period_BA
Programme term	The number of years (up to 5) which will be costed		Time_Period_BA
Local currency denomination	The 3-letter code for the local currency		Time_Period_BA
Names of second administrative level units	The actual names of the individual units in the second administrative level.	Example: Western Region, Mountain Region, etc.; Sunrise State, Eastern State, etc.; Northern Province, Capital Province, etc.	SubNational_Names_and_Timing_BA
Number of subdivisions in each second administrative level	Clarifies how subnational units are further broken down.	Example: where provinces are the second administrative level, and districts are the third administrative level, the input would be the number of districts in a specific province.	SubNational_Names_and_Timing_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
BASIC DEMAND ASSUMPTIONS – ANNUAL			
Predicted annual demand for first-time screening and routine re-screening in active and inactive programme areas	<i>Predicted demand</i> is the estimated number of women who will seek services out of the target population in a given year. <i>Active programme</i> areas are the subnational levels in which cervical cancer services are being (or will be) provided.	Numerator: [Estimated] number of women in [active or inactive] areas who will seek services Denominator: Total [expected] number of women eligible for screening in all [active or inactive] areas	Critical_Assumptions_TA
BASIC SCREENING METHOD DISTRIBUTION ASSUMPTIONS			
Initial screening method distribution	The percentage of screenings conducted with each screening method over the project period	Numerator: [Estimated] number of screenings conducted using a specific methodology Denominator: Total number of [expected] screenings	Critical_Assumptions_TA
EPIDEMIOLOGY ASSUMPTIONS			
Cervical cancer screening and precancerous lesions	Percentage of women with a normal screening result, with small precancerous lesions (e.g. cryotherapy eligible), and with large precancerous lesions.	Numerator: [Estimated] number of women receiving a specific result [normal result, small precancerous lesions, large precancerous lesions] Denominator: Total [expected] number of women screened	Critical_Assumptions_TA
Invasive cervical cancer	Percentage of women identified with early stage invasive cervical cancer, mid stage invasive cancer, and late stage invasive cancer.	Numerator: [Estimated] number of women receiving a specific diagnosis [early stage, mid stage or late stage invasive cervical cancer] Denominator: Total [expected] number of women screened	Critical_Assumptions_TA
BASIC REFERRAL ASSUMPTIONS			
Screening referral proportions	Proportion of screened women who were referred for treatment of precancerous lesions or further evaluation or diagnostics	Numerator: [Estimated] number of screened women referred for each treatment intervention or diagnostic service Denominator: Total [expected] number of women screened	Critical_Assumptions_TA
Diagnostic pathology referral proportions	Proportion of women receiving diagnostics for invasive cervical cancer who were referred for invasive cervical cancer treatment and management services	Numerator: [Estimated] number of women referred to each invasive cervical cancer treatment and management service Denominator: Total [expected] number of women receiving diagnostics	Critical_Assumptions_TA
BASIC RE-SCREENING TIMING ASSUMPTIONS			
Years until re-screening (last result normal)	Screening interval (in years) for women receiving a negative screening test result (for HIV+ and HIV- women, where timing is different)	WHO recommendations for screening intervals can be found in the <i>Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention</i> [WHO, 2013].	Critical_Assumptions_TA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Years until re-screening (last screening resulted in referral)	Screening interval (in years) for women referred at screening for further evaluation and/or treatment	WHO recommendations for screening intervals can be found in the <i>Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention</i> [WHO, 2013].	Critical_Assumptions_TA
ANNUAL POPULATION COUNTS			
Annual population counts by subnational level and population segment and category	“Annual” means for each year being costed. “Subnational level” refers to the second administrative level named in the <i>Names of second administrative level units</i> input. “Segment” refers to the larger disaggregation or breakdown of the target population. “Category” refers to the second level of disaggregation within each target population segment. Note: there is also an option to enter the HIV prevalence rate, for more precise estimation	Example: Number of HIV+ women, aged 15–24 in the Western Region; Number of HIV+ women, aged 25–49 in the Western Region; Number of HIV- women, aged 25–49 in the Western Region; Number of HIV+ women, aged 15–24 in the Mountain Region; Number of HIV+ women, aged 25–49 in the Mountain Region; Number of HIV- women, aged 25–49 in the Mountain Region; etc. for all Regions and target population disaggregates.	Critical_Assumptions_TA
ECONOMIC ASSUMPTIONS			
Currency codes and exchange rates	For each year being costed		Economic_Assumptions_TA
Annual discount rate	The interest rate used to determine the present value of future cash flows in standard discounted cash flow analysis for each year being costed	Generic rate = 3%–5%	Economic_Assumptions_TA
MASTER PRICE LIST			
Master currency	Select the currency which will be applied to all cost assumptions in this section		Master_Price_List_BA
Hospital level personnel costs		For each personnel type at the hospital level, input the following: position/cadre/specialty name; year of price listing; salary and benefits package period (usually 1 month); unit for specifying quantity; price per package (matches package period)	Master_Price_List_BA
Personnel costs at other health facilities		For each personnel type at other health facility levels, input the following: position/cadre/specialty name; year of price listing; salary and benefits package period (usually 1 month); unit for specifying quantity; price per package (matches package period)	Master_Price_List_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Equipment prices	This is the master list of all equipment required for cervical cancer services (screening, precancerous lesion treatment, diagnostics, invasive cervical cancer treatment and management). See Section 4 Implementation Tools and Materials for lists of minimum equipment for each service.	For each type of equipment, input the following: equipment name; year of pricing; name of package/group that equipment is sold by; price per package/group; unit for specifying quantity; the number of pieces in the package/group; and useful life years of equipment. Equipment costs should be costed for the proportion of use for cervical cancer. Example: if a radiotherapy machine is used 1/3 of the time for cervical cancer, the user should designate the number of equipment units as 0.33 rather than 1.	Master_Price_List_BA
Supply prices	This is the master list of all supplies required for cervical cancer services (screening, precancerous lesion treatment, diagnostics, invasive cervical cancer treatment and management). See Section 4 Implementation Tools and Materials for lists of minimum supplies for each service.	For each type of supply, input the following: name of supply; year of pricing; name of package/group that supply is sold by; price per package/group; unit for specifying quantity; and number of pieces in the package/group.	Master_Price_List_BA
Other direct costs	Other direct costs for providing services, such as laboratory testing, fuel, etc.	For each entry, input the following: name of item; year of pricing; name of package/group item is sold by; price per package/group; unit for specifying quantity; number of pieces per package/group.	Master_Price_List_BA
SERVICE ASSUMPTIONS			
SCREENING ASSUMPTIONS The tool allows entry of input for the group of assumptions below for up to three different cervical cancer screening methods. Prior to determining each input, users should list the names and short codes for each individual screening method that will be provided in the country for each year being costed. All assumption inputs should then be provided for each screening method. The names and short codes, and assumptions for each screening method will be entered into the tool to create screening method-specific groupings.			
Proportion of all screenings performed using a specific screening method	The proportion of screenings performed using one screening method. If only one screening method is in use (e.g. VIA), the proportion will be 100%. Same as <i>Initial screening method</i> distribution critical assumption.	Numerator: [Estimated] number of screenings conducted using a specific methodology Denominator: Total number of [expected] screenings This should be provided for each individual screening method in use.	Screening_Assumptions_BA
Average number of service days per year for each facility type	The average number of days that each facility type provides a specific screening service per year.	Weighted averages may be used as needed (for example, where most facilities of a specific type offer services 1 day per week, but one facility offers services 3 days per week).	Screening_Assumptions_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Average number of service hours per service for each facility type	The average number of hours that each facility type provides the screening service per day.	Weighted averages may be used as needed (for example, where most facilities of a specific type offer services 2 hours per day on 1 day per week, but one facility offers services 8 hours per day for 3 days per week).	Screening_Assumptions_BA
Average number of minutes per service hour	The average number of minutes per hour that each facility type provides the screening service.	This will typically be 60 minutes; however, issues such as stockouts or rotating personnel may affect the average for service days, service hours, and minutes per service hour.	Screening_Assumptions_BA
Average number of minutes per service	The average number of minutes required to perform the screening service at each facility type.	Time motion study using systematic observation of the performance of each diagnostic service is suggested in order to establish a standard time	Screening_Assumptions_BA
Prerequisite equipment required to provide the screening service	This list tracks the required equipment or infrastructure which is already in place – typically for common use – and therefore does not need to be costed under the cervical cancer programme. An example is a private examination area with examination table/ gynaecological couch, etc.	Equipment entered into this list will not be included in costing – equipment to be included should be entered as an input under <i>List of equipment required to outfit a site</i> below.	Screening_Assumptions_BA
Number of minutes required by each personnel type for pre-procedure activities at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of pre-procedure activities is suggested in order to establish a standard time	Screening_Assumptions_BA
Number of minutes required by each personnel type to perform the procedure at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of screening procedure is suggested in order to establish a standard time	Screening_Assumptions_BA
Number of minutes required by each personnel type for post-procedure activities at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of post-procedure activities is suggested in order to establish a standard time	Screening_Assumptions_BA
Supplies required to perform screening procedure	This input is required to calculate the cost per procedure. List separately any supplies required for procedure that should not be included in costing (e.g. standard basic supplies also used for procedures other than screening).	Within the group of assumptions for each screening method, input the following for each required supply: name of supply, number of units required per procedure.	Screening_Assumptions_BA
Equipment required to outfit a site to perform the screening procedure	This input supplements the Master Price List inputs in order to calculate the initial investment, annualized financial and annualized economic costs per site.	Within the group of assumptions for each screening method, input the number of units of equipment required to outfit a site.	Screening_Assumptions_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Annual equipment maintenance add-on	Percentage of total costs for annual equipment maintenance		Screening_Assumptions_BA
Other direct costs required for a site to perform the screening procedure (including laboratory tests)	This input is required to calculate the cost per procedure.	Within the group of assumptions for each screening method, enter the number of units required per procedure for each item.	Screening_Assumptions_BA
Number of facilities of each facility type, in each subnational unit that will be providing a screening service each year	This input should be provided for each year being costed. The number of facilities currently providing services can be entered under "Pre-existing". This worksheet allows input of this information for up to three different screening methods.		Screening_Assumptions_Annual_TA
DIAGNOSTIC ASSUMPTIONS The tool allows entry of input for assumptions for all diagnostic pathology services, i.e. colposcopic biopsy, endocervical curettage, histopathology, etc.			
Percentage of screened population applicable	Same as critical assumption <i>Screening referral proportions</i> for diagnostics.	Numerator: [Estimated] number of screened women referred for each treatment intervention or diagnostic service Denominator: Total [expected] number of women screened	Diagnostic_Assumptions_BA
Referral attrition rate	Percentage of women referred for diagnostics who do not attend the referral visit.	Numerator: [Estimated] number of screened women referred for diagnostic pathology who did not attend the referral visit Denominator: Total [estimated] number of screened women referred for diagnostic pathology	Diagnostic_Assumptions_BA
Average number of service days per year for each facility type	The average number of days that each facility type provides diagnostic services per year.	Weighted averages may be used as needed (for example, where most facilities of a specific type offer services 1 day per week, but one facility offers services 3 days per week).	Diagnostic_Assumptions_BA
Average number of service hours per service for each facility type	The average number of hours that each facility type provides diagnostic services per day.	Weighted averages may be used as needed (for example, where most facilities of a specific type offer services 2 hours per day on 1 day per week, but one facility offers services 8 hours per day for 3 days per week).	Diagnostic_Assumptions_BA
Average number of minutes per service hour	The average number of minutes per hour that each facility type provides diagnostic services.	This will typically be 60 minutes; however, issues such as stockouts or rotating personnel may affect the average for service days, service hours, and minutes per service hour.	Diagnostic_Assumptions_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Average number of minutes per service	The average number of minutes required to perform a diagnostic service at each facility type.	Time motion study using systematic observation of the performance of each diagnostic service is suggested in order to establish a standard time	Diagnostic_Assumptions_BA
Prerequisite equipment required to provide diagnostic services	This list tracks the required equipment or infrastructure which is already in place – typically for common use – and therefore does not need to be costed under the cervical cancer programme.	Equipment entered into this list will not be included in costing – equipment to be included should be entered as an input under <i>List of equipment required to outfit a site</i> below.	Diagnostic_Assumptions_BA
Number of minutes required by each personnel type for pre-procedure activities at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of pre-procedure preparatory activities is suggested in order to establish a standard time	Diagnostic_Assumptions_BA
Number of minutes required by each personnel type to perform the procedure at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of diagnostic procedures is suggested in order to establish a standard time	Diagnostic_Assumptions_BA
Number of minutes required by each personnel type for post-procedure activities at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of post-procedure activities is suggested in order to establish a standard time	Diagnostic_Assumptions_BA
Supplies required to perform diagnostic pathology procedures	This input is required to calculate the cost per procedure. Separately list any supplies required that should not be included in costing (e.g. standard basic supplies used for non-cervical cancer diagnostic procedures).	For each supply required, input the following: name of supply, number of units required per procedure.	Diagnostic_Assumptions_BA
Equipment required to outfit a site to perform diagnostic pathology	This input supplements the Master Price List inputs in order to calculate the initial investment, annualized financial and annualized economic costs per site.	Input the name of the equipment and number of units required to outfit a site to perform diagnostics.	Diagnostic_Assumptions_BA
Annual equipment maintenance add-on	Percentage of total costs for annual equipment maintenance		Diagnostic_Assumptions_BA
Other direct costs required for a site to perform diagnostic pathology	This input is required to calculate the cost per procedure and includes any laboratory fees for processing diagnostic samples.	For each type of item, enter the number of units required per procedure.	Diagnostic_Assumptions_BA
Number of facilities of each facility type, in each subnational unit that will be providing diagnostic pathology services each year	This input should be provided for each year being costed. The number of facilities currently providing services can be entered under 'Pre-existing'.		Diagnostic_Assumptions_Annual_TA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
INTERVENTION ASSUMPTIONS The tool allows entry of input for the group of assumptions below for up to seven different customizable precancerous lesion and invasive cervical cancer treatment and management interventions – including palliative care. Prior to determining each input below, users should list the names and short codes for each individual intervention that will be provided in the country for each year being costed. All assumption inputs should then be provided for each treatment intervention. The names and short codes, and assumptions for each intervention will be entered into the tool to create intervention-specific groupings.			
Percentage of screened population applicable	Same as critical assumption <i>Screening referral proportions</i> for each individual treatment intervention (should autopopulate).	Numerator: [Estimated] number of screened women referred for each treatment intervention Denominator: Total [expected] number of women screened	Intervention_Assumptions_BA
Referral attrition rate	Percentage of women referred for each type of treatment intervention who do not attend the referral visit	Numerator: [Estimated] number of screened women referred for each treatment intervention who did not attend the referral visit Denominator: Total [estimated] number of screened women referred for each treatment intervention	Intervention_Assumptions_BA
Average number of service days per year for each facility type	The average number of days in a year that each facility type provides each treatment intervention. Required to estimate Annual Capacity per Facility Type for each treatment intervention.	Weighted averages may be used as needed (for example, where most facilities of a specific type offer services 1 day per week, but one facility offers services 3 days per week).	Intervention_Assumptions_BA
Average number of service hours per service day for each facility type	The average number of hours that each facility type provides each treatment intervention (on the days when they provide that service). Required to estimate Annual Capacity per Facility Type for each treatment intervention.	Weighted averages may be used as needed (for example, where most facilities of a specific type offer services 2 hours per day on 1 day per week, but one facility offers services 8 hours per day for 3 days per week).	Intervention_Assumptions_BA
Average number of minutes per service hour	The average number of minutes per service hour that each facility type provides each treatment intervention. Required to estimate Annual Capacity per Facility Type for each treatment intervention.	This will typically be 60 minutes; however, issues such as stockouts or rotating personnel may affect the average for service days, service hours, and minutes per hour.	Intervention_Assumptions_BA
Average number of minutes per service	The average number of minutes required to provide each treatment intervention service – including pre-procedure and post-procedure activities – at each facility type. Required to estimate Annual Capacity per Facility Type for each treatment intervention.	Time motion study using systematic observation of the performance of each treatment intervention service is suggested in order to establish a standard time	Intervention_Assumptions_BA
Prerequisite equipment required to provide each treatment intervention	This list tracks the required equipment or infrastructure which is already in place – typically for common use – and therefore does not need to be costed under the cervical cancer programme. An example is a standard operating theatre with bed, anesthesiology equipment, etc.	Equipment entered into this list will not be included in costing – equipment to be included should be entered as an input under <i>List of equipment required to outfit a site</i> below.	Intervention_Assumptions_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Number of minutes required by each personnel type for pre-procedure activities at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of pre-procedure preparatory activities for each treatment intervention is suggested in order to establish a standard time	Intervention_Assumptions_BA
Number of minutes required by each personnel type to perform each treatment procedure at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of the performance of each treatment intervention procedure is suggested in order to establish a standard time	Intervention_Assumptions_BA
Number of minutes required by each personnel type for post-procedure activities at each health facility type	Required to estimate time and cost per procedure	Time motion study using systematic observation of post-procedure activities for each treatment intervention is suggested in order to establish a standard time	Intervention_Assumptions_BA
Supplies required to perform each type of treatment intervention	This input is required to calculate the cost per procedure. Separately list any required supplies that should not be included in costing (e.g. standard supplies also used for non-cervical cancer procedures).	Within the group of assumptions for each type of treatment intervention, input the following for each required supply: name of supply, number of units required per procedure.	Intervention_Assumptions_BA
Equipment required to outfit a site to perform each type of treatment intervention	This input supplements the Master Price List inputs in order to calculate the initial investment, annualized financial and annualized economic costs per site.	Within the group of assumptions for each treatment intervention, input the name of the equipment and number of units required to outfit a site to perform that intervention.	Intervention_Assumptions_BA
Annual equipment maintenance add-on	Percentage of total costs for annual equipment maintenance		Intervention_Assumptions_BA
Other direct costs required for a site to perform each type of treatment intervention	This input is required to calculate the cost per procedure.	Within the group of assumptions for each treatment intervention, enter the number of units required per procedure for each item.	Intervention_Assumptions_BA
Number of facilities of each facility type, in each subnational unit that will be providing each treatment intervention	This input should be provided for each year being costed.	The number of facilities currently providing treatment and management services should be entered under "Pre-existing".	Intervention_Assumptions_TA
NON-SERVICE ASSUMPTIONS			
MICROPLANNING Microplanning activities are those focused at lower levels of the health system to ensure nationally endorsed interventions are implemented in a way that meets local needs (e.g. targeted operational planning meetings at the national, subnational, facility and local community level). The tool includes a worksheet to capture the assumptions below for up to four types of microplanning activities. Users should list the names for each type of microplanning activity and provide all assumption inputs below for each type. The tool also includes a separate worksheet to assist with estimating the financial and economic costs for meetings (including microplanning meetings), with space for up to three customizable meetings – the assumptions for input into the separate meeting budget worksheet are listed under the Meeting and Training Budget Planning section below.			
Applicable currency	Select the currency which will be applied to all cost assumptions entered into the Microplanning section		Non-Service_Assumptions_TA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Financial cost of microplanning activity unit for each activity type	The financial cost is the outlay or direct expenditures invested in the service [e.g. facilitators' fees, travel allowance, venue rental, etc.], but does not include donated goods or salaried personnel costs.	Each type of microplanning activity (e.g. national microplanning meetings, district microplanning meetings, etc.) should be listed, with financial costs per unit (i.e. costs for one meeting) provided for each type.	Non-Service_Assumptions_TA
Economic cost of a microplanning activity unit for each activity type	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Each type of microplanning activity (e.g. national microplanning meetings, district microplanning meetings, etc.) should be listed, with economic costs per unit (i.e. costs for one meeting) provided for each type.	Non-Service_Assumptions_TA
Assumed number of microplanning activities to occur each year	This number will be used as a multiplier to estimate the overall financial and economic costs of each type of microplanning activity for each year being costed.	The number of expected microplanning activities of each type should be listed for each year being costed.	Non-Service_Assumptions_TA
TRAINING ACTIVITIES Training activities may include clinical trainings for providers, infection control trainings, data management trainings, etc. at the national, subnational or facility levels. The tool includes a worksheet to capture the assumptions below for up to seven types of training activities. Users should list the names for each type of training activity and provide all assumption inputs below for each type. The tool also includes a separate worksheet to assist with estimating the financial and economic costs for training activities, with space for up to four customizable trainings – the assumptions for input into the separate training budget worksheet are listed under the Meeting and Training Budget Planning section below.			
Applicable currency	Select the currency which will be applied to all cost assumptions entered into the Training section.		Non-Service_Assumptions_TA
Maximum number of participants per training	This number will be used as a multiplier to estimate the financial and economic costs per unit for each type of training.		Non-Service_Assumptions_TA
Financial cost of a training activity unit for each activity type	The financial cost is the outlay or direct expenditures invested in the service [e.g. trainers' fees, travel allowance, venue rental, etc.], but does not include donated goods or salaried personnel costs.	Each type of training activity (e.g. VIA, cryotherapy and data use training for providers; data management training, etc.) should be listed, with financial costs per unit (i.e. costs for one training) provided for each. The costs for one training should be estimated based on maximum number of participants per training.	Non-Service_Assumptions_TA
Economic cost of each training activity for each activity type	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Each type of training activity (e.g. VIA, cryotherapy and data use training for providers; data management training, etc.) should be listed, with economic costs per unit (i.e. costs for one training) provided for each. The costs for one training should be estimated based on maximum number of participants per training.	Non-Service_Assumptions_TA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Planned number of training activities to occur each year	This number will be used as a multiplier to estimate the overall financial and economic costs of each type of training activity for each year being costed.	The number of expected training activities for each type of training should be listed for each year being costed	Non-Service_Assumptions_TA
SOCIAL MOBILIZATION AND COMMUNICATION The tool allows entry of up to four types of social mobilization activities, up to four types of introductory communication support packages, and up to four types of continuing communication support packages. Data collection for this section should begin by listing all planned activities and communication packages, and the associated line item financial and economic costs for one activity or package (i.e. one unit). The activities can then be further grouped into categories/types as needed to enable entry of the unit cost for each type into the tool.			
Applicable currency	Select the currency which will be applied to all cost assumptions entered into the social mobilization section		Non-Service_Assumptions_TA
Financial cost of social mobilization activity unit for each activity type	The financial cost is the outlay or direct expenditures invested in the service (e.g. airtime, transport, etc.) but does not include donated goods or salaried personnel costs.	Each type of social mobilization activity (e.g. patient recruitment at the facility level, patient recruitment at the district level, patient follow-up at the facility level, etc.) should be listed, with financial costs per unit (i.e. costs for one activity) provided for each type.	Non-Service_Assumptions_TA
Economic cost of a social mobilization activity unit for each activity type	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Each type of social mobilization activity (e.g. patient recruitment at the facility level, patient recruitment at the district level, patient follow-up at the facility level, etc.) should be listed, with financial costs per unit (i.e. costs for one activity) provided for each type.	Non-Service_Assumptions_TA
Assumed number of social mobilization activities to occur each year	This number will be used as a multiplier to estimate the overall financial and economic costs of each type of social mobilization activity for each year being costed.	The number of expected social mobilization activities of each type should be listed for each year being costed.	Non-Service_Assumptions_TA
Financial cost of an introductory communication support package unit for each package type	The financial cost is the outlay or direct expenditures invested in the service (e.g. development and production of brochures and posters, distribution/transport, development and production of radio and TV spots, etc.) but does not include donated goods or salaried personnel costs.	Each type of introductory communication support package (e.g. national programme launch, provincial programme launch, initial facility IEC/BCC package (production of brochures and posters for facilities, etc.) should be listed, with financial costs per unit (i.e. costs for one package) provided for each type.	Non-Service_Assumptions_TA
Economic cost of an introductory communication support package unit for each package type	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Each type of introductory communication support package (e.g. National programme launch, Provincial programme launch, initial facility IEC/BCC package [production of brochures and posters for facilities], etc.) should be listed, with financial costs per unit (i.e. costs for one package) provided for each type.	Non-Service_Assumptions_TA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Financial cost of a continuing communication support package unit for each package type	The financial cost is the outlay or direct expenditures invested in the service (e.g. re-printing, distribution/transport, airing radio and TV spots, etc.) but does not include donated goods or salaried personnel costs.	Each type of continuing communication support package (e.g. screening promotion campaign, re-screening campaign, campaign to reduce loss to follow-up, etc.) should be listed, with financial costs per unit (i.e. costs for one package) provided for each type.	Non-Service_Assumptions_TA
Economic cost of a continuing communication support package unit for each package type	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Each type of continuing communication support package (e.g. Screening promotion campaign, Re-screening campaign, Campaign to reduce loss to follow-up, etc.) should be listed, with financial costs per unit (i.e. costs for one package) provided for each type.	Non-Service_Assumptions_TA
Assumed number of introductory communication support packages of each type per year	This number will be used as a multiplier to estimate the overall financial and economic costs of each type of introductory communication support package for each year being costed.	The number of expected introductory communication support packages of each type should be listed for each year being costed. While there is typically only one national programme launch, there may be several launches at the subnational levels when a phased approach to service introduction or scale-up is being employed.	Non-Service_Assumptions_TA
Assumed number of continuing communication support packages of each type per year	This number will be used as a multiplier to estimate the overall financial and economic costs of each type of continuing communication support package for each year being costed.	The number of expected continuing communication support packages of each type should be listed for each year being costed.	Non-Service_Assumptions_TA
SUPERVISION, MONITORING AND EVALUATION The tool allows the input of up to six types of supervisory team visits, up to five types of monitoring activities, and up to four types of evaluation activities. Data collection for this section should begin by listing all planned visits and activities, and the associated line item financial and economic costs for one visit or activity (i.e. one unit). The visits and activities can then be further grouped into categories/types as needed to enable entry of the unit cost for each type into the tool.			
Applicable currency	Select the currency which will be applied to all cost assumptions entered into the supervision, monitoring and evaluation section		Non-Service_Assumptions_TA
Estimated unit financial cost for each type of supervision team visit	The financial cost is the outlay or direct expenditures invested in the service (e.g. airtime, transport, printing, etc.) but does not include donated goods or salaried personnel costs.	Each type of supervision team visit (e.g. national supervision team yearly visit, subnational supervision team visit, district supervision team visit, etc.) should be listed, with financial costs per unit (i.e. costs for one visit) provided for each type.	Non-Service_Assumptions_TA
Estimated unit economic cost for each type of supervision team visit	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Each type of supervision team visit (e.g. national supervision team yearly visit, subnational supervision team visit, district supervision team visit, etc.) should be listed, with financial costs per unit (i.e. costs for one visit) provided for each type.	Non-Service_Assumptions_TA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Percentage allocated to screening and treatment	The proportion of the supervisory visit that will be allocated to cervical cancer screening and treatment. This number will be used as a multiplier to estimate the overall financial and economic costs of each type of supervision team visit for each year being costed.	The proportion of the facility supervisory visit that will be allocated to cervical cancer screening and treatment.	Non-Service_Assumptions_TA
Assumed number of supervision team visits of each type per year	This number will be used as a multiplier to estimate the overall financial and economic costs of each type of supervision team visit for each year being costed.	The number of expected supervision team visits of each type should be listed for each year being costed.	Non-Service_Assumptions_TA
Estimated unit financial cost for each type of monitoring activity per year	The financial cost is the outlay or direct expenditures invested in the service (e.g. data systems, printing, etc.) but does not include donated goods or salaried personnel costs.	Each type of monitoring activity (e.g. initial development of standardized indicators, ongoing programme monitoring, etc.) should be listed, with financial costs per unit (i.e. costs for one activity) provided for each type for each year being costed. The costs for developing and introducing a monitoring activity (e.g. developing or aligning data systems, printing new registers or data collection and summary forms, etc.) are typically higher than the costs of continuing the activity in subsequent years.	Non-Service_Assumptions_TA
Estimated unit economic cost for each type of monitoring activity per year	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Each type of monitoring activity (e.g. initial development of standardized indicators, ongoing programme monitoring, facility readiness assessments, etc.) should be listed, with financial costs per unit (i.e. costs for one activity) provided for each type for each year being costed. The costs for developing and introducing a monitoring activity (e.g. developing or aligning data systems, printing new registers or data collection and summary forms, etc.) are typically higher than the costs of continuing the activity in subsequent years.	Non-Service_Assumptions_TA
Estimated unit financial cost for each type of evaluation per year	The financial cost is the outlay or direct expenditures invested in the service (e.g. planning meetings, printing, etc.) but does not include donated goods or salaried personnel costs.	Each type of evaluation (e.g. national programme evaluation, feasibility study, mid-programme evaluation, data quality audit, etc.) should be listed, with financial costs per unit (i.e. costs for one evaluation) provided for each type for each year being costed.	Non-Service_Assumptions_TA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Estimated unit economic cost for each type of evaluation per year	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Each type of evaluation (e.g. national programme evaluation, feasibility study, mid-programme evaluation, data quality audit, etc.) should be listed, with financial costs per unit (i.e. costs for one evaluation) provided for each type for each year being costed.	Non-Service_Assumptions_TA
OTHER RECURRENT AND CAPITAL NON-SERVICE DELIVERY COSTS The tool allows the input of up to six types of recurrent non-service delivery costs, and up to six types of capital non-service delivery costs. Data collection for this section should begin by listing all planned recurrent and capital non-service delivery costs, and the associated line item financial and economic costs for one unit (e.g. one vehicle for the supervision team, one programme review meeting, leasing office space for national or subnational programme management, airtime for supervisors, etc.). The unit costs can then be further grouped into categories/types if needed to enable entry of the unit cost for each category/type into the tool.			
Applicable currency	Select the currency which will be applied to all cost assumptions entered into the recurrent and capital non-service delivery costs section		Non-Service_Assumptions_TA
Financial cost of recurrent non-service delivery units for each unit type	The financial cost is the outlay or direct expenditures invested in the service (e.g. airtime, transport, printing, etc.) but does not include donated goods or salaried personnel costs.	Recurrent non-service delivery programme costs include programme administration, programme review meetings, programme re-costing activities, etc. Each type of recurrent non-service delivery programme costs should be listed, with financial costs per unit provided for each type.	Non-Service_Assumptions_TA
Economic cost of recurrent non-service delivery units for each unit type	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other "hidden" costs.	Recurrent non-service delivery programme costs include programme administration, programme review meetings, programme re-costing activities, etc. Each type of recurrent non-service delivery programme costs should be listed, with financial costs per unit provided for each type.	Non-Service_Assumptions_TA
Assumed number of recurrent non-service delivery unit costs each year	This number will be used as a multiplier to estimate the overall financial and economic costs of each unit of recurrent non-service delivery cost categories for each year being costed.	The number of expected recurrent non-service delivery units of each type should be listed for each year being costed.	Non-Service_Assumptions_TA
Financial cost of capital non-service delivery units for each unit type	The financial cost is the outlay or direct expenditures invested in the service (e.g. vehicles, computers, etc.) but does not include donated goods or salaried personnel costs.	Capital non-service delivery programme costs include vehicles for supervision teams, computers, etc. Each type of capital non-service delivery programme cost should be listed, with financial costs per unit provided for each type.	Non-Service_Assumptions_TA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Economic cost of capital non-service delivery units for each unit type	The economic cost includes the outlay or direct expenditures plus the value of donated goods, salaried personnel costs and other “hidden” costs.	Capital non-service delivery programme costs include vehicles for supervision teams, computers, etc. Each type of capital non-service delivery programme cost should be listed, with financial costs per unit provided for each type.	Non-Service_Assumptions_TA
Assumed number of capital non-service delivery unit costs each year	This number will be used as a multiplier to estimate the overall financial and economic costs of each unit of capital non-service delivery cost categories for each year being costed.	The number of expected capital non-service delivery units of each type should be listed for each year being costed.	Non-Service_Assumptions_TA
MEETING AND TRAINING BUDGET PLANNING The tool includes separate worksheets to assist in planning the budget and estimating costs for meetings (including microplanning meetings) and trainings, with space for up to three customizable meetings and their cost assumptions and up to four customizable training activities and their cost assumptions.			
MEETING BUDGET PLANNING The tool includes a worksheet to assist with planning the budget for meetings (including microplanning meetings), with space for up to three customizable meetings and their cost assumptions. Prior to determining each input below, users should list the names for each individual meeting. All assumption inputs should then be provided for each meeting. The names and assumptions for each meeting can then be entered into the worksheet as meeting-specific groupings. The overall financial and economic costs, as well as any other required inputs, for each type of microplanning meeting can then be transferred by the costing facilitator over to the Non-Service Assumptions worksheet. Where more than three meetings require costing, the inputs may be deleted by the costing facilitator once relevant information has been transferred and new budget planning input may be entered into the worksheet.			
Applied currency	Select the currency which will be applied to all cost assumptions in this section		Meeting_Budget_Assumptions_BA
List of personnel types (or cadres) who will be facilitating the meeting	For each personnel type or cadres who will be facilitating, provide the following inputs: number who will be facilitating and number of days they will be facilitating. Note applicable to this group of assumptions: <i>Personnel types and cadres are context- and meeting type-dependent. Different personnel/cadres may have different costs associated with their facilitation and participation.</i>	Personnel types may include salaried and non-salaried or part-time employees, contractors, etc. Cadres may include professors, medical doctors, community health workers, etc.	Meeting_Budget_Assumptions_BA
Financial cost per person per day for each personnel type (or cadre) who will be facilitating	The financial cost is the outlay or direct expenditures invested in the service (e.g. fees, honorariums, etc.) but does not include donated goods or salaried personnel costs.	This number should reflect only direct costs for personnel . Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Meeting_Budget_Assumptions_BA
Economic cost per person per day for each personnel type (or cadre) who will be facilitating	The economic cost includes the outlay or direct expenditures plus the value of salaried personnel costs and other “hidden” costs.	This number should reflect only direct and indirect costs for personnel . Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Meeting_Budget_Assumptions_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
List of personnel types (or cadres) who will be participating in the meeting	Personnel types may include salaried and non-salaried or part-time employees, contractors, etc. Cadres may include professors, medical doctors, community health workers, etc.	For each personnel type or cadres who will be participating, provide the following inputs: number participating and number of days they will be participating.	Meeting_Budget_Assumptions_BA
Financial cost per person per day for each personnel type (or cadre) who will be participating	The financial cost is the outlay or direct expenditures invested in the service (e.g. facilitators' fees, honorariums, etc.) but does not include donated goods or salaried personnel costs.	This number should reflect only direct costs for personnel. Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Meeting_Budget_Assumptions_BA
Economic cost per person per day for each personnel type (or cadre) who will be participating	The economic cost includes the outlay or direct expenditures plus the value of salaried personnel costs and other "hidden" costs.	This number should reflect only direct and indirect costs for personnel. Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Meeting_Budget_Assumptions_BA
List of personnel types (or cadres) who will be providing support to the meeting	For each personnel type or cadres who will be participating, provide the following inputs: number providing support and number of days they will be providing support.	Personnel types may include salaried and non-salaried or part-time employees, contractors, etc. Cadres may include assistants or administrators, drivers, technical support staff, etc.	Meeting_Budget_Assumptions_BA
Financial cost per person per day for each personnel type (or cadre) who will be providing support	The financial cost is the outlay or direct expenditures invested in the service (e.g. over-time fees, honorariums, etc.) but does not include donated goods or salaried personnel costs.	This number should reflect only direct costs for personnel. Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Meeting_Budget_Assumptions_BA
Economic cost per person per day for each personnel type (or cadre) who will be providing support	The economic cost includes the outlay or direct expenditures plus the value of salaried personnel costs and other "hidden" costs.	This number should reflect only direct and indirect costs for personnel. Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Meeting_Budget_Assumptions_BA
List the types of allowances for each category of meeting attendees	These allowances may include: per diems, meal allowances, transport allowances, etc. Lodging costs should not be included, as they are a separate input. "Category" refers to the 3 categories subdividing the previous personnel assumptions: facilitators, participants, and support staff.	For each type of allowance under each attendee category, provide the following inputs: number of persons receiving that type of allowance; number of allowances per person (e.g. if the meal allowance is for 2 meals per day, and the meeting will last 2 days, the meal allowance per person would be 4); unit (per allowance) financial cost; and unit (per allowance) economic cost.	Meeting_Budget_Assumptions_BA
List the types of rooms needed for the meeting	This includes the meeting room or venue itself, as well as lodging for the attendees.	For each type of room, provide the following inputs: number of rooms needed; number of days (or nights, if rooms are for lodging) the room is required; unit (per room) financial cost; and unit (per room) economic cost.	Meeting_Budget_Assumptions_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
List the full meals and refreshments that will be provided at the meeting	“Full meals” refers to breakfast, lunch or dinner; “refreshments” refers to morning tea break, afternoon tea break, etc.	For each type of meal/refreshments, provide the following inputs: number of persons who will be provided meals and refreshments; number of days they will be provided; unit (per person per meal/refreshment) financial cost; and unit (per person per meal/refreshment) economic cost. These inputs should not count any meals being paid for by participants through their per diem allowance.	Meeting_Budget_Assumptions_BA
List the materials and supplies required for the meeting	List each material or supply required for the meeting (e.g. notepads, folders, pens, etc.).	For each supply or material, provide the number needed, the unit financial cost and the unit economic cost.	Meeting_Budget_Assumptions_BA
List the equipment which will be rented for the meeting	List the equipment which will be rented for the meeting (e.g. audio equipment, projector, etc.).	For each piece of equipment, provide the following inputs: number of units needed; number of days of rental; the unit financial cost; and the unit economic cost.	Meeting_Budget_Assumptions_BA
List any other direct costs associated with the meeting	List any other direct costs associated with the meeting (e.g. fuel, equipment purchased, etc.).	For each item, provide the following inputs: number of units needed; the unit financial cost; and the unit economic cost.	Meeting_Budget_Assumptions_BA
TRAINING BUDGET PLANNING <p>The tool includes a worksheet to assist with planning the budget for training activities, with space for up to four customizable training events and their cost assumptions. Prior to determining each input below, users should list the names for each individual training event. All assumption inputs should then be provided for each event. The names and assumptions for each training activity can then be entered into the worksheet as event-specific groupings.</p> <p>The overall financial and economic costs, as well as any other required inputs, for each type of training activity can then be transferred by the costing facilitator over to the Non-Service Assumptions worksheet.</p> <p>Where more than four events require costing, the inputs may be deleted by the costing facilitator once relevant information has been transferred and new budget planning input may be entered into the worksheet.</p>			
Applied currency	Select the currency which will be applied to all cost assumptions in this section		Training_Budget_Tool_BA
List of personnel types (or cadres) who will be facilitating the training	For each personnel type or cadres who will be facilitating, provide the following inputs: number who will be facilitating, and number of days they will be facilitating. Note applicable to this group of assumptions: <i>Personnel types and cadres are context- and training type-dependent. Different personnel/cadres may have different costs associated with their facilitation and participation.</i>	Personnel types may include salaried and non-salaried or part-time employees, contractors, etc. Cadres may include professors, medical doctors, community health workers, etc.	Training_Budget_Tool_BA
Financial cost per person per day for each personnel type (or cadre) who will be facilitating	The financial cost is the outlay or direct expenditures invested in the service (e.g. fees, honorariums, etc.) but does not include donated goods or salaried personnel costs.	This number should reflect only direct costs for personnel . Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Training_Budget_Tool_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
Economic cost per person per day for each personnel type (or cadre) who will be facilitating	The economic cost includes the outlay or direct expenditures plus the value of salaried personnel costs and other “hidden” costs.	This number should reflect only direct and indirect costs for personnel . Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Training_Budget_Tool_BA
List of personnel types (or cadres) who will be participating in the training	Personnel types may include salaried and non-salaried or part-time employees, contractors, etc. Cadres may include professors, medical doctors, community health workers, etc.	For each personnel type or cadres who will be participating, provide the following inputs: number participating and number of days they will be participating.	Training_Budget_Tool_BA
Financial cost per person per day for each personnel type (or cadre) who will be participating	The financial cost is the outlay or direct expenditures invested in the service (e.g. facilitators’ fees, honorariums, etc.) but does not include donated goods or salaried personnel costs.	This number should reflect only direct costs for personnel. Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Training_Budget_Tool_BA
Economic cost per person per day for each personnel type (or cadre) who will be participating	The economic cost includes the outlay or direct expenditures plus the value of salaried personnel costs and other “hidden” costs.	This number should reflect only direct and indirect costs for personnel. Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Training_Budget_Tool_BA
List of personnel types (or cadres) who will be providing support to the training	For each personnel type or cadres who will be participating, provide the following inputs: number providing support and number of days they will be providing support.	Personnel types may include salaried and non-salaried or part-time employees, contractors, etc. Cadres may include assistants or administrators, drivers, technical support staff, etc.	Training_Budget_Tool_BA
Financial cost per person per day for each personnel type (or cadre) who will be providing support	The financial cost is the outlay or direct expenditures invested in the service (e.g. over-time fees, honorariums, etc.) but does not include donated goods or salaried personnel costs.	This number should reflect only direct costs for personnel. Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Training_Budget_Tool_BA
Economic cost per person per day for each personnel type (or cadre) who will be providing support	The economic cost includes the outlay or direct expenditures plus the value of salaried personnel costs and other “hidden” costs.	This number should reflect only direct and indirect costs for personnel. Travel allowances (per diem), lodging costs, venue costs, meals etc. are accounted for through a separate assumption.	Training_Budget_Tool_BA
List the types of allowances for each category of training attendees	These allowances may include: per diems, meal allowances, transport allowances, etc. Lodging costs should not be included, as they are a separate input. “Category” refers to the 3 categories subdividing the previous personnel assumptions: facilitators, participants, and support staff	For each type of allowance under each attendee category, provide the following inputs: number of persons receiving that type of allowance; number of allowances per person (e.g. if the meal allowance is for 2 meals per day, and the training will last 2 days, the meal allowance per person would be 4); unit (per allowance) financial cost; and unit (per allowance) economic cost.	Training_Budget_Tool_BA

Table continued

Input	Description	Notes on Calculation or Determination of Input	Worksheet Name
List the types of rooms needed for the training	This includes the training room or venue itself, as well as lodging for the attendees.	For each type of room, provide the following inputs: number of rooms needed, number of days (or nights, if rooms are for lodging) the room is required, unit (per room) financial cost, and unit (per room) economic cost.	Training_Budget_Tool_BA
List the full meals and refreshments that will be provided at the training	“Full meals” refers to breakfast, lunch or dinner; “refreshments” refers to morning tea break, afternoon tea break, etc.	For each type of meal/refreshments, provide the following inputs: number of persons who will be provided meals and refreshments; number of days they will be provided; unit (per person per meal/refreshment) financial cost; and unit (per person per meal/refreshment) economic cost. These inputs should not count any meals being paid for by participants through their per diem allowance.	Training_Budget_Tool_BA
List the materials and supplies required for the training	List each material or supply required for the training (e.g. notepads, folders, pens, etc.).	For each supply or material, provide the number needed, the unit financial cost and the unit economic cost.	Training_Budget_Tool_BA
List the equipment which will be rented for the training	List the equipment which will be rented for the training (e.g. audio equipment, projector, etc.).	For each piece of equipment, provide the following inputs: number of units needed; number of days of rental; the unit financial cost; and the unit economic cost.	Training_Budget_Tool_BA
List any other direct costs associated with the training	List any other direct costs associated with the training (e.g. fuel, equipment purchased, etc.).	For each item, provide the following inputs: number of units needed, the unit financial cost and the unit economic cost.	Training_Budget_Tool_BA

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