Assistive Product Provision

Costing Tool

User Guide

# Introduction

The Assistive Product Provision (APP) Costing Tool is designed to cost assistive product provision packages - eyeglasses, hearing aids, wheelchairs, protheses - or model combined provision of these services (e.g., school health or primary health care) and produce results to help plan future services and prepare investment cases.The user-friendly and excel-based tool is designed to be used by health system managers and policy makers. It allows users to calculate the costs of all elements of AT provision packages, including start-up, training, and service delivery costs. The tool also has a financing element that can be used to show programme financing sources and gaps in current and future funding.

# Contact

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# Overview of the costing tool

The *APP tool* is organized around five sections:

1. **Inputs**: contains two working sheets.
	* *Parameters:* Input country and general program information.
	* *Scale-up:* If the assistive product provision program will be scaled up, use this worksheet to input the assumptions for the scale-up.
2. **Package of Services** (SERVICES): contains three working sheets.
* *Package\_Services*: List all services, interventions, target population, and incidence rates
* *Coverage*: Lists current utilization and coverage target assumptions for each service
* *Treatment\_Guidelines*: Details normative Standard Treatment Guidelines (STGs) for each service in the package
1. **Cost Categories**: contains seven working sheets detailing input costs for variable and fixed resources.
* *Staff\_Costs*: Consolidated budget calculation for the forecasted years.
* *Training*: Lists all types of training provided to Health Care Workers (HCW)s e.g., in-service training and Training of Trainers (TOT)s.
* *Equipment*: Lists all equipment used by HCWs in service provision and its related unit costs.
* *Assistive\_Products\_Costs:* Lists all assistive products, commodities etc. for the specific program.
* *Other\_Recurrent\_Costs:* Lists all recurrent program related costs.
* *Start\_Up\_Capital\_Costs:* Lists all costs that are fixed, one-time expenses.
* *Financing:* Input funding commitments and anticipated funds towards the program.
1. **Summary Results** (SUMMARY TABS): contains three working sheets that summarize the program costs for the selected scale-up period.
	* *Summary\_Tables:* Consolidates all results for the forecasted years.
	* *Graphs:* Key results presented in graph format
	* *AP\_Quantification:* Consolidates units required assistive products, commodities, and related costs by forecast year.
2. **Reference data** (REFERENCE DATA): contains four working sheets.
* *REF | Country\_Database*: Reference information on countries, such as population and national currency.
* *REF | AT\_Catalogue\_Vision*: Reference prices of assistive product, commodities etc.
* *REF | Salary\_Scales*: Reference salary scales for HCWs.
* *REF | Blank\_1/2/3*: three working sheets left blank where the user can input any reference data deemed useful, such as cost reference data.
1. **Back Calculations**: financial and human resources assumptions that will be used for the cost assumptions.

The following sections will focus on the Inputs, Package of Services, Cost Categories, Results summary (SUMMARY TABS), and Back calculation sections. The Reference data section will not be considered.

# 4. Inputs

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| --- | --- | --- |
| INPUTS -> | Parameters | Scale-Up |

4.1. parameters

The first step is to enter information about the country and the program in the *Parameters* sheet. The information entered in this sheet will be used for calculations in other sections of the tool, all the white cells will be automatically calculated by formula.

1. **Country information**: *(Line 4-17)*
	* + Total population - This tool uses population groups (i.e., Children <5, Adolescents 10-19) to calculate the number of required services; these are country-specific using data from the United Nations Population Division. Default data can be adjusted on Demography calculation worksheet if desired.
		+ The name of the country.
		+ Population growth rate.
		+ The national currency - USD exchange rate Ensure that all cost and financing data are entered in the same currency. The results can be displayed in either USD or National Currency (toggle on the *Summary Tables* worksheet.
		+ Inflation rate (annual) Inflation figures will be applied annually to the costs of each projection year. If you do not wish to apply an inflation rate, simply leave blank or '0'.
2. **Program Information:** *(Line 19-29)*
* Program baseline year - If "Y" is selected, the user will be prompted to enter the number of provinces, districts, health care facilities, communities, etc. that will be covered for each projection year on the *Scale-up* worksheet. If "N" is selected, no data entry is required on the *Scale-up* worksheet.
* Percentage of population targeted by services - The user will need to specify the population covered each year, and account for population growth.
1. **Health Systems Implementing the Program:** *(Line 31-39)*
	* + Input the number of health administrative levels i.e., primary, secondary, tertiary etc. that are going to implement the program at baseline year.
2. **Sources of financing**: *(Line 42-64)*
	* + Financing - Enter all sources of funding for the program. The amount of funding provided by each source will be specified on the *Financing* worksheet.

4.2. scale-up

If the program will be scaled-up, use this worksheet to input the assumptions for the scale-up. The figures in (Column C) are populated automatically based on the user input in *Parameters* worksheet. Do not over-write any formulas in white cells. Enter data in blue shaded cells only.

1. **Total population covered**:This is the population covered by the program for each year. The tool will base all calculations such as projections of services, numbers of Health Care Workers (HCW) required per population, etc. using these figures. Double-check to ensure they are correct and logical based on your program's scale-up plan.
2. **Number of health system levels**: Input the number of health administrative levels that will be implementing the program. The assumptions for the baseline year will be read in automatically into (Column C).

# 5. Package of Services (SERVICES)

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| --- | --- | --- | --- |
| SERVICES -> | Package\_Services | Coverage | Treatment\_Guidelines |

5.1. package of service

List all services and interventions that will be provided *(Column B).* This should include the full range of services, from preventive interventions to curative services, to promotional services. Regular administrative tasks can also be included. Input the expected utilization rate for each service *(Column G)*. This rate should be expressed as the number of expected episodes per target population per year. The rate must be related directly to the target population selected.

5.2. coverage

Coverage is calculated as the actual number of services divided by expected number of services (Column C divided by Column D). If Coverage exceeds 100%, double-check that the target population and incidence rates have been entered correctly on the *Package\_Service* worksheet. If baseline coverage is unknown, include an estimate or leave as zero.

5.3. standard treatment guidelines

* Input the time required, in minutes or hours, to provide the service. This time includes the initial visit (screening, diagnosis, and initial treatment) as well as the time it takes for a follow-up, if applicable.
* Select assistive product or supply used to provide the service using the drop-down menu in *Column B.*
* Input the units. This should correspond with the cost per unit input on the *Assistive\_Products\_Costs* worksheet.

# 6. Cost Categories (Cost Categories)

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| --- | --- | --- | --- | --- |
| COST CATEGORIES-> | Staff\_Costs | Training | Equipment | Assistive\_Products\_Costs |

|  |  |  |
| --- | --- | --- |
| Other\_Recurrent\_Costs | Start\_Up\_Capital\_Costs | Financing |

6.1. staff costs

All HCW information should be input into the *Staff\_Cost* worksheet.

* Cadre *(Column D).*
* Total number of HCWs currently trained at baseline year *(Column F).*
* Attrition rate *(Column G).*
* Desired ratio per population *(Column H).*
* Expectation of working hours and days per year, refer to *Back\_Calculation* worksheet.
* Salary, social benefits, incentive payments etc., refer to *Back\_Calculation* worksheet.

6.2. training

All types of training provided to HCWs should be input into the *Training* worksheet.

* Specify type of training *(Column B).*
* Specify start year of training *(Column C).*
* Frequency of training sessions *(Column F).*
* Training costs per participant (note this should include all costs, fixed and variable, per training) *(Column I).*

6.3. equipment

Equipment can be defined as any materials used by HCWS recurrently in providing a service.

* List equipment used by HCWs when providing services *(Column B).*
* Units required per health system level *(Column E).*
* Replacement frequency for each type of equipment *(Column H).*
* Unit costs for each type of equipment *(Column I).*
* Costs of transport, management, storage, and delivery of equipment as total cost or percentage mark-up, if applicable *(Cell I5)*

6.4. assistive products costs

* List all assistive products, commodities etc. for the specific program *(Column C).*
* Unit costs *(Column D).*
* Costs of transport, management, storage, and delivery of medicines as total cost or percentage mark-up, if applicable *(Cell F6).*

6.5. other recurrent costs

The *Other\_Recurrent\_Costs* worksheet allows the user to input any recurrent program costs that have not previously been addressed in the Tool. Recurrent costs are defined as those that repeat annually throughout the program. Typically, these costs could include administrative or overhead costs such as office rental, communications, or vehicle maintenance costs.

* Description of cost or activity *(Column B).*
* Units required annually per health system level *(Column E).*
* Unit cost *(Column F).*
* Annual cost per health system level *(Column G).*

6.6. start-up and capital costs

All costs that are fixed, one-time expenses can be entered in this worksheet.

* List capital costs such as purchasing of equipment, construction, or renovation costs etc. or start-up activities (i.e., workshops, program design and development, technical assistance from experts) *(Column B).*
* Units required *(Column D).*
* Unit costs *(Column E).*
* Indicate year and health system level the costs are incurred *(Column F).*

6.7. financing

Input funding commitments and anticipated funds towards the program in the *Financing* worksheet.

1. **Financing Summary** *(Column B to E):* for each line,
* *Column B*: Select the name of a donor contributing to the program financing in the dropdown list. The dropdown list is based on the name of donors entered in the *Parameters* worksheet, section IV. Sources of Financing.
* *Column D*: Select the cost category covered by the donor funding in the dropdown list.
* *Column E*: Select in the dropdown list whether the funding amount will be reported as a percentage of the total cost (%) or as a discrete amount (Amount).

A donor name can appear several times if it funds several cost categories.

1. **Fixed commitments** *(Column G to L):* for each year, enter either the amount provided by the donor for each cost category, or the share of the total cost covered.
2. **Financing by donor** *(Column N to S)*: this section automatically generates the amount contributed by each donor, by cost category and by year. To view the summary table with the total cost amount covered by each donor, refer to the *Summary\_Tables* worksheet.

# 7. Results summary (SUMMARY TABS)

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| --- | --- | --- | --- |
| SUMMARY TABS -> | Summary\_Tables | Graphs | Equipment |

Contains a summary of the program costs for the selected scale-up period.

7.1. Summary tables

In cell B3, select in the dropdown list whether you want to see the summary budget displayed in local currency or USD. The tables below are automatically calculated.

1. **Number of HCWs:** this table provides an overview of the HCWs required by forecast year.
2. **Number of services by category:** this table provides an overview of the total number of services provided disaggregated by service type.
3. **Cost by cost category:** this table provides an overview of the total cost of the program by cost category and by forecast year.
4. **Funding by cost category:** this table provides an overview of the funding available for the program by cost category and by forecast year.
5. **Funding gap by cost category:** this table provides an overview of the gap between the program cost and the funding available for the program by cost category and by forecast year.
6. **Funding by donor:** this table provides an overview of the funding available for the program by donor and by forecast year.

7.2. Graphs

1. **Number of HCWs, by category:** visual representation of the ‘Number of HCWs’ table in *Summary\_Tables* worksheet.
2. **Total number of services, category:** visual representation of the ‘Number of services by category’ table in *Summary\_Tables* worksheet.
3. **Cost by cost category**: visual representation of the ‘Cost by cost category’ table in ‘*Summary\_Tables* worksheet.
4. **Funding by cost category**: visual representation of the ‘Funding by cost category’ table in *Summary\_Tables* worksheet.
5. **Funding by donor**: visual representation of the ‘Funding by donor’ table in *Summary\_Tables* sheet.
6. **Funding Gap by cost category**: visual representation of the ‘Funding Gap’ table in *Summary\_Tables* worksheet.

7.3. assistive products quantification

Contains a summary view of units required assistive products, commodities, and related costs by forecast year.

# Back Calculation

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| --- |
| Back\_Calculations |

If relevant, the user can enter here assumptions that will be used to calculate the unit costs.

1. **Financial Assumptions:** this section contains information about the inflation rate.
* **Year** (Column B): displays the baseline year and previous 6 years.
* **Inflation rate (%)** (Column C): for each year, enter the inflation rate.
* **Years** (Column D): automatically allocate a number to each year.
* **Cumulative rate** (Column E): automatically calculated the cumulative rate for each year.
* **Source** (Column F): indicate the source for the inflation rate.
* **Estimate** (Column K): enter the interest rate and discount rate for the baseline year. The Inflation rate is automatically reported from column C.
* **Source** (Column J): indicate the source for the interest rate and discount rate.
1. **Human Resource Assumptions:** enter here any human resources assumptions relevant to calculate costs. Modify the example as you see fit.