Health Systems Financing (HSF)
Cost, Effectiveness, Expenditure and Priority Setting (CEP)

CostIt Software ©
(Costing Interventions templates)

Version 4.5

Short User's Notes

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Licence Agreement

Acknowledgements

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Introduction

This document is intended to provide researchers with a short description of the most important features of CostIt software. It is not intended to be a step-by-step user's guide, but only to serve as an overview of its main functions and objectives. A detailed user's guide will be provided in the near future.

CostIt is a work in progress and will accordingly be updated in an ongoing manner with successive versions and a detailed user guide. Currently, a short user's notes are available. Analysts wishing to use CostIt should be familiar with general cost concepts and have a basic knowledge of Excel software. Suggestions for modification or input from users will be appreciated. They should be sent to whochoice@who.ch.

User's Notes

CostIt software is designed to record and analyse cost data. It is not a data-collection tool but can guide the development of instruments for collecting primary data.

CostIt is used mainly to calculate the economic costs of interventions. If financial costs are to be calculated, the columns for financial unit costs may be used. Separate summary tables are provided for economic and financial costs.

CostIt software provides a set of separate templates for the reporting and analysis of costs at the following levels:

- ***Primary health facility:*** This template uses direct allocation of overhead costs, which is appropriate for costing at small facilities such as primary care centres or laboratory centres.

- ***Hospital***: The hospital-cost template uses step-down allocation of overhead costs; it is recommended for costing of hospital or other large, multiple-output facilities.

- ***Programme:*** The template for programme costs is used to collect costs incurred at different levels of the health system (national, regional and district), which is above the level of direct delivery of care to beneficiaries (recorded in the primary-health-facility or hospital CostIt templates). It may also be used for *programmes costs borne by communities*, such as for promotion and distribution of bed-nets in malaria control, or for services of village volunteers.

- ***Household:*** A spreadsheet recording intervention specific *care-seeking costs* (e.g., travel time to health facilities, cost of drugs, special food …) is included in CostIt template for programme-level costs. It is mainly intended to report quantities and average costs of different household care seeking costs, but assumes that the analysis done to derive average costs are done elsewhere.

CostIt includes a macro that automatically converts the costs from any given year to those of the base year chosen by the analyst. The base year should be specified early in the data-entry process, in the "intervention information" sheet. The years to which the collected data relate should be entered in the table on the upper right of the sheet. Use the GDP link provided above the table to select and enter local GDP deflators corresponding to each entered year. This is a link to all the local (country-specific) GDP deflators included in the World Development Indicators of the World Bank, 2001. For data entry, it will be sufficient to specify the year to which the data relate to ensure that costs are automatically converted to the base year.

A feature of CostIt software is that it allows costs to be adjusted for capacity utilization. The unit costs of a bed day in a hospital with 30% bed occupancy will be different from those for a hospital with 80% occupancy, simply because the capital is spread over fewer beds; the information obtained from a costing study would therefore not be generalizable to the intervention for different occupancy rates. For this reason, the spreadsheet is designed first to record actual costs and then to adjust them automatically for capacity utilization. Two types of cost may be calculated from the data entered: actual costs, and costs adjusted for a standard capacity level. To calculate capacity adjustment factors, norms are applied to collected data entered in the capacity utilization table. The norms may be based on expert opinion or established from information on the maximum achievable capacity at the study setting. CostIt allows users to also adjust capacity of major inputs directly. However, by making available to other users the information required to calculate adjustment factors, they make it possible for those who wish to do so to determine and change the level of capacity utilization. Users are recommended, therefore, to enter this information systematically; the template may still be used to record costs without this adjustment.

CostIt for Programme costs distinguishes between "*Start up''* and annual "*post-implementation"* costs. "***Start-up''*** costs are all costs incurred in the pre-implementation phase of the programme/intervention – capital costs, as well as recurrent-cost categories specific to pre-implementation. All pre-implementation, including recurrent, costs are annualized in the economic analysis. ***"Annual post-implementation''*** costs comprise capital and recurrent categories and are meant to be the costs of running the programme for one year.

In computing economic costs, annualization factors, completely automated, are applied to obtain a depreciated value of capital items. For financial costs, the user can choose either to enter the extra costs of adding the programme to the current services or to enter all, including infrastructural, costs incurred in running the programme. A depreciated value of financial capital costs is obtained by straight-line depreciation, but this step may be omitted by neutralizing the function: the user can then report the financial costs of start-up separately from those of running the programme each year, for example. ***The Community Programme Costs*** include costs borne by the community; these should not include household care-seeking costs.

A note on cost data from several facilities: When data originate from a number of health facilities, a new sheet should be used for each facility. This can be done by copying the spreadsheet in the same or new file. The summary tables of total and average costs are placed at the end of each sheet and will provide summary costs

automatically. For hospital costs, a new file should be used for each hospital. Finally, average costs across facilities may be computed and entered directly in the general summary sheets (available in the CostIt for programme level).

For some interventions, different types of activity take place at the facility level. For example, the Expanded Programme on Immunization may include vaccination visits to a facility as well as outreach activities. To study the costs of individual intervention activities, a user has two options: to allocate costs to each of the studied activities, using the columns on the right side of the spreadsheet; or, when studies do not require costs to be disaggregated by activity, or are concerned only with total costs of the intervention at facilities, to allocate facility costs directly and once in the designated columns; the right-side columns do not need to be filled in. The summary sheet will provide two summaries for the two options: the aggregated total intervention costs; and, in the same sheet below, the summary of intervention costs by activity.

Practical Notes

1. The template provides a default number of rows for additional items; rows may be deleted or added as needed**.** Before entering any data in an additional row, users must copy the formulae in the previous row. The links to summary costs will remain functioning, however, and *will not be affected* by the addition or deletion of rows.

2. A costing category not relevant to the studied intervention may be left blank or the rows concerned may be hidden.

3. As far as possible, to keep information comparable and transferable, cost category names should not be changed. Necessary changes should be made in the first data-entry sheets: subsequent related sheets, including the summary tables, will be automatically updated.

4. Note that information on capacity utilization should represent ALL the resources used at the facility, not only those specific to the intervention. For example, to estimate the capacity of medical staff at a facility, the total number of medical staff and of outpatient visits during the data-collection period should be entered.

5. In CostIt for hospitals, for the step-down cost procedures, all costs of the indirect (non-treatment) departments should be entered. For the direct (treatment) departments, the data entered should refer only to the departments responsible for the intervention. Names of departments may be changed as necessary; for example, if the facility provides other services, such as health education or vaccination, the pertinent data may be entered under any direct department, after its name is changed. The new departmental name will be automatically entered in subsequent sheets.

6. CostIt software will likely need minor revision after it is tested. Suggestions for modification or input from users will be appreciated.