## Principles and Methods reporting checklist

We recommend use of this table for reporting methods. For a specific costing study, the “Options” column should be completed according to how the study was conducted.

|  |  |
| --- | --- |
|  |  |
| **Reference Case Checklist Items** | **Options** |
| STUDY DESIGN AND SCOPE |
| Principle 1 - The purpose of the study, the population, and the intervention and/or service/output being costed should be clearly defined. |
| *Purpose* |
| Purpose type: | Economic evaluation, Financial Planning, Budget Impact Analysis, Efficiency Analysis, Other |
| Relevance for health practice and/or policy decisions: | Free text  |
| Aim of the cost analysis: | Free text |
| Intended user(s) of the cost estimate: | Free text |
| *Intervention* |
| Main activities/technologies involved: | Free text |
| Target population: | As relevant: age, gender, geographical location, clinical indication |
| Coverage level: | Percentage of target population or sites |
| Delivery mechanism (e.g., health system level, facility type, ownership, etc.): | As relevant: level of health service, facility type |
| Epidemiological context (i.e., incidence/prevalence of disease) | As relevant: incidence and/or prevalence |
| Intervention | Describe production process (e.g., list main activities and key technologies involved in delivering the intervention) |

|  |
| --- |
| Principle 2 - The perspective (extent of the resource use captured) of the cost estimation should be stated and justified relevant to purpose. |
| Study perspective (e.g., provider, health system, societal, household): | (Named) provider or societal, and list specific payers. State any stopping rules. |
| Principle 3 - The type of cost being estimated should be clearly defined, in terms of economic vs financial, real world vs guideline, and incremental vs full cost, and whether the cost is 'net of future cost', should be justified relevant to purpose. |
| Defining the cost |
| Economic vs. financial cost | Economic vs. financial cost |
| Real world' vs guideline cost | Real world' vs guideline cost |
| Full vs incremental cost | Full vs incremental cost |
| Net of future cost | Yes or No |
| Principle 4 - The ‘units’ in the unit costs for strategies, services and interventions should be defined, relevant for the costing purpose, and generalizable.  |
| List the unit costs used | Choose from list of standardized unit costs |
| Describe any adjustments made to reflect the quality of service output | Choose from list of standardized adjustments |
| Principle 5 - The time horizon should be of sufficient length to capture all costs relevant to the purpose, and consideration should be given to disaggregating costs into separate time periods where appropriate. |
| Time period |
| Period type (start-up vs implementation): | Start-up, implementation or both |
| Time period: | Years and months |

|  |
| --- |
| **SERVICE AND RESOURCE USE MEASUREMENT** |
| Principle 6 - The scope of the inputs to include in the cost estimation should be defined and justified relevant to purpose. |
| Defining the scope |
| Above service delivery costs included | Yes or No |
| Costs of supporting change included | Yes or No |
| Research costs included | Yes or No |
| Unrelated costs included | Yes or No |
| If incremental costs, assumptions made for existing capacity | Free text |
| Any exclusions other to scope | Free text |
| Principle 7 - The methods for estimating the quantity of inputs should be described, including data sources and criteria for allocating resources. |
| Describe the measurement of each input as either top-down or bottom-up | Top down or bottom-up |
| Describe method to allocate human resources inputs | Observation, time sheets, work-sampling, interviews, other |
| Describe methods to allocate above site/overhead inputs | Method, criteria and data source for criteria |
| Describe the methods for excluding research costs | Method, criteria and data source for criteria |
| Describe the methods for measuring other resources | Method and data source |
| Principle 8 - The sampling strategy used should be determined by the precision demanded by the costing purpose and designed to minimize bias. |
| Site/client selection process/criteria |
| Describe geographic sampling (if applicable) | Frame and method |
| Describe site sampling (if applicable) | Frame and method |
| Describe patient sampling (if applicable) | Frame and method |
| Describe methods to calculate sample size | Calculation |
| Principle 9 - The selection of the data source(s) and methods for estimating service use should be described, and potential biases reported in the study limitations.  |
| Identify the data source used to measure the units | Case note extraction, patient interviews, provider interviews, routine information systems, claims data, other |
| Where relevant describe the sampling frame, method and size: | Free text |
| Describe any method used to fill missing data | Free text |
| Principle 10 - Consideration should be given to the timing of data collection to minimize recall bias and, where relevant, the impact of seasonality and other differences over time. |
| The timing of data collection should be specified in the following ways: |
| Timing of data collection (resource and service use) | Date of data collection |
| Prospective or retrospective | Prospective or retrospective |
| Longitudinal vs cross-sectional data | Longitudinal vs cross-sectional data |
| Recall period, where relevant | Months or weeks |

|  |
| --- |
| **VALUATION AND PRICING** |
| Principle 11 - The sources for price data should be listed by input, and clear delineation should be made between local and international price data sources, and tradeable, non-tradeable goods. |
| Report the sources of price data by input | Ministry of Health, local market, etc. |
| Report inputs where local and international prices were used | Local or international |
| Principle 12 - Capital costs should be appropriately annuitized or depreciated to reflect the expected life of capital inputs. |
| Describe the depreciation approach  | Straight line depreciation, amortization |
| Describe any discount rate used for capital goods | Percentage |
| Report the expected life years of capital goods, and data sources | Years and free text |
| Principle 13 - Where relevant an appropriate discount rate, inflation and exchange rates should be used, and clearly stated. |
| Describe any discount rate used for future costs | Percentage |
| Describe the reported currency year | Currency and Year |
| Describe any conversions made | Exchange rate, Source and Year |
| Report the inflation type and rate used | Percentage, GDP deflator/ CPI, Source |
| Principle 14 - The use and source of shadow prices for goods and for the opportunity cost of time should be reported.  |
| Methods for valuing the following should be reported:  |
| Report methods for valuing volunteer time | Free text |
| Report adjustments for input prices (donated or subsidized goods) | Free text |
| **ANALYZING AND PRESENTING RESULTS** |
| Principle 15 - Variation in the cost of the intervention by site size/ organization, sub-populations, or by other drivers of heterogeneity should be explored and reported. |
| Describe any sub-groups or populations analyzed | Free text |
| Describe any statistical methods used to establish differences in unit costs by sub-group | Free text |
| Describe any determinants of cost (model specification) | Free text |
| Describe any multivariate statistical methods used to analyze cost functions | Free text |
| Principle 16 - The uncertainty associated with cost estimates should be appropriately characterized. |
| Describe sensitivity analyses conducted | Free text |
| List possible sources of bias  | Free text |
| Principle 17 - Cost estimates should be communicated clearly and transparently to enable decision-maker(s) to interpret and use the results.  |
| Limitations |
| Limitations in the design, analysis, and results | Free text |
| Aspects of the cost estimates that would limit generalizability of results to other constituencies | Free text |
| Conflicts of Interest |
| All pecuniary and non-pecuniary interests of the study contributors | Free text |
| All sources of funding that supported conduct of the costing | Free text |
| Non-monetary sources of support for conduct of the costing | Free text |
| Open access |
| Dataset available | Yes or No |