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**Preliminary SCALECONOMICS CODEBOOK**

General instructions for codebook:

- Add '**not applicable**', '**not reported**' and '**unclear**' – for uncertain items that may promote review authors to contact study authors for clarification, especially on data items critical to reach conclusions.

| Data extraction variable                        | Value type              | Modality                       | Description of variable  | Comments  |
|---|-------------------------|--------------------------------|--|---|
| Completed by                                    | Text                    | Free text                      | Name of person extracting data                                   | State the name of person who has filled out the initial data extraction sheet                   |
| What is the reference number of this article?   | Numeric                 | Add reference ID number        | Reference number of the record                                   | It will be available in the initial data extraction sheet                                       |
| <b>General study characteristics</b>            |                         |                                |  |   |
| First Author's last name                        | Text                    | Report: First author           | It is the family name of the first author                        | It will be available in the initial data extraction sheet                                       |
| Publication year                                | Text                    | Year                           | It is the year of paper's publication                            | It will be available in the initial data extraction sheet                                       |
| Link to the publication                         | Text                    | Add hyperlink                  | It is the hyperlink for the paper's access                       | It will be available in the initial data extraction sheet                                       |
| Sources of funding                              | Categorical (Drop Down) | Stated<br>Not stated           | The name of institute that funded the study was reported or not. | Check in the paper if the name of institute that funded the study was reported or not.          |
| Competing interests                             | Categorical (Drop Down) | Stated<br>Not stated           | The competing interests were stated or not in the paper          | Check in the paper if the competing interests were stated or not in the paper                   |
| Specify competing interests (if any)            | Text                    | Free text                      | It is the description of competing interests                     | Please, report the description of competing interests if available or NOT REPORT if unavailable |
| Publication type (journal paper, HTA, or other) | Categorical (Drop Down) | Journal<br>HTA report<br>Other | It is a classification of the publication type                   | Duplicate publications of the same study need to be linked together.                            |

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| Data extraction variable   | Value type      | Modality                               | Description of variable  | Comments   |
|--|-----------------|--|--|--|
| Publication type – Other: free-text  | Text            | Free text                              | It is a category other than Journal and HTA report.  | Report type (if possible) and source   |
| Does the economic evaluation refer to a published checklist/tool (e.g., CHEERS)? | Multiple choice | No                                     | It is the published checklist was used or not for the study reporting  | Please report the information if available or NOT REPORTED if unavailable        |
|  |                 | Yes – BMJ                              |  |  |
|  |                 | Yes – CHEERS                           |  |  |
|  |                 | Yes – QHEC                             |  |  |
|  |                 | Yes – CHEC                             |  |  |
|  |                 | Yes – Phillips                         |  |  |
|  |                 | Yes – Drummond Ten-Point               |  |  |
|  |                 | Yes – Modified Checklist (name)        |  |  |
|  |                 | Yes – Other (name)                     |  |  |
|  |                 | Not reported                           |  |  |
| Unclear  |                 |  |  |  |
| Other: Name and free-text description of published checklist/tool                | Text            | Free-text description                  | If checklist adapted from another checklist, please describe here which checklists they used and how.  | Please report the information if available or NOT REPORTED if unavailable        |
| <b>Population characteristics</b>  |                 |  |  |  |
| Population used for effect/cost data   | Multiple choice | Population delivering the intervention | The population of interest can be the population delivering the scaling up strategy (e.g., staff, health care workers, managers); the population of interest can also be the population receiving the intervention (e.g., patients, individuals) | Please, report UNCLEAR if it is not possible to say what population was studied. |
|  |                 | Population receiving the intervention  |  |  |
|  |                 | Both                                   |  |  |
|  |                 | Unclear                                |  |  |

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|--|------------|---------------------------|--|--|
| Population used for effect/cost data - Other               | Text       | Free-text description     | Population benefiting from evidence-based practice   | Please report the information if available or NOT REPORTED if unavailable                    |
| Population size, #   | Integer    | Number of population size | Number of individuals included in the study  | Please report or calculate the information if available or NOT REPORTED if unavailable       |
| Population description (free-text)                         | Text       | Free-text description     | Description of population from which study participants are drawn.   | As reported by authors   |
| Population sex   | Numeric    | Number of females         | It is the number of females in the study sample  | Please, report the number of females or NOT REPORTED if neither available nor calculable     |
|  |            | Not reported              |  |  |
| Population age   | Numeric    | Number with one decimal   | It is the mean of age for the study sample   | Please, report the age mean if available or NOT REPORTED if neither available nor calculable |
| Ethnicity  | Text       | Free-text description     | Ethnicity as a demographic factor  | Describe as reported in text   |
| %Ethnicity   | Numeric    | Number of Caucasians      | It is the number of Caucasians in the study sample   | Please, report the number of Caucasians or NOT REPORTED if neither available nor calculable  |
| Clinical problem   | Text       | Free-text description     | State the area(s) that the intervention targets (e.g., hypertension, oncology, preventive services). (Mark UNCLEAR if information is not available.) | Please report the information if available or NOT REPORTED if unavailable                    |
| Characteristics of participating providers: Profession     | Text       | Free-text description     | For example, physicians, nurses, pharmacists, physiotherapists, dentists, psychologists, mixed, etc.   | If applicable.<br>If mixed, specify.   |
| Characteristics of participating lay personnel: Profession | Text       | Free-text description     | For example, lay community workers   | If applicable  |

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|---|------------|-----------------------|--|--|
| Characteristics of participating lay personnel: Level of training | Text       | Free-text description | It is the description of the training level for the participating lay personnel  | If applicable  |
| Characteristics of participating lay personnel: Other             | Text       | Free-text description | Other characteristics of the lay personnel part of the scaling up intervention   | If applicable  |
| <b>Intervention</b>   |            |                       |  |  |
| Scaling up strategy (free text)                                   | Text       | Free-text description | <p>It is the strategy used to scale the evidence-based intervention during the study.</p> <p>A scaling up strategy in healthcare is the "deliberate efforts to increase the impact of successfully tested health interventions so as to benefit more people and to foster policy and program development on a lasting basis." In other words, scaling up strategies are systematic courses of action that aim to roll out successful local health interventions to regional, national, or international levels to reach broader populations and settings over time.</p> <p>When scaling up interventions, most organisations need to adapt. Manage organisational change through processes such as staff retraining, mentoring, leadership development and coaching.</p> | Report the scaling up strategy as reported in text (if available). |

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|--|-----------------------------|--|---|--|
| Vertical or horizontal scaling up strategy                 | Multiple choice (Drop down) | Vertical                                   | A vertical approach involves the introduction of an intervention simultaneously across a whole system and results in institutional change through policy, regulation, financing or health systems change. | There are two main approaches to scaling up. These approaches are not mutually exclusive, and a combination of approaches can be used. |
|  |                             | Horizontal                                 | A horizontal approach involves the introduction of an intervention across different sites or groups in a phased manner.   |  |
|  |                             | Combination                                | Vertical + Horizontal   |  |
|  |                             | Unclear                                    |   |  |
| Vertical or horizontal scaling up strategy: Unclear        | Text                        | Free-text description                      | Unclear scaling up strategy   | Describe the strategy and why unclear  |
| Vertical or horizontal scaling up strategy: Other          | Text                        | Free-text description                      | Describe other types of scaling up strategies   | If applicable.   |
| Level or scope of the scaling up strategy                  | Multiple choice (Drop down) | National                                   | This item indicates how big the scope of the scaling up strategy.   | From a dropdown menu in Excel pick one (or more) of these items based on what is reported in the study.                                |
|  |                             | Subnational (state/province/municipal)     |   |  |
|  |                             | Multiple countries                         |   |  |
|  |                             | Multiple subnational within single country |   |  |
| Scaling up of what type of health intervention             | Text                        | As described in record                     | Health intervention that is being scaled up   | Please report the information if available or NOT REPORTED if unavailable  |
| Scaling up of what type of health intervention (free text) | Text                        | Free-text description                      | Health intervention that is being scaled up   | Please report the information if available or NOT REPORTED if unavailable  |
| <b>Comparator</b>  |                             |  |   |  |

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|--|-------------------------|--------------------------------|--|--|
| Comparator   | Categorical (Drop Down) | Current practice (No scale up) | Type of comparator used in the economic evaluations.   | Select one.  |
|  |                         | Other scaling up strategy/ies  |  |  |
| Comparator - Other                                   | Text                    | Free-text description          | Name & describe the comparator the other types of comparators/alternatives.  | Please describe if other types of comparators are included in the study. |
| Comparator – Rationale for choice of the alternative | Text                    | Free-text description          | The rationale for the choice of the alternative programmes or interventions for comparison should be given.  | Please report as in text if applicable.                                  |
| <b>Settings</b>                                      |                         |                                |  |  |
| Setting  | Text                    | Free-text description          | Healthcare setting (i.e., public health, primary care clinic, hospital, etc.) in both rural and urban areas  | Describe the healthcare setting  |
| Country (ies) where study took place                 | Text                    | Free-text description          | Countries where the study took place   | Name the country/ies   |
| <b>Study design</b>                                  |                         |                                |  |  |
| <b>Type of economic evaluation</b>                   |                         |                                |  |  |
| Cost-effectiveness analysis                          | Dichotomous             | Yes/No                         | CEA is a type of full economic evaluation in which the results are expressed in terms of the incremental cost per measured unit of each outcome (i.e., measures of resource use are valued, usually in monetary terms, but outcomes are not). Comparisons are thus limited to services or treatment options that produce the same outcome, | Please report the information if applicable                              |

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|--------------------------|-------------|----------|---|---|
|                          |             |          | which is measured strictly in one-dimensional, naturally occurring units. Interventions producing the same outcome are compared to assess the extent to which they may be judged favourably from an economic point of view. Cost-effectiveness analyses primarily address decisions relating to technical efficiency  |   |
| Cost-utility analysis    | Dichotomous | Yes/No   | CUA is a type of full economic evaluation in which the results are expressed in terms of the incremental cost per quality-adjusted life-year (QALY) (i.e., measures of resource use are valued in monetary terms and outcomes are valued in terms of QALYs –Quality-adjusted life-years) to allow comparisons of interventions within a given health system, in order to assess the extent to which they may be judged favourably from an economic point of view. | Please report the information if applicable |
| Cost-benefit analysis    | Dichotomous | Yes/No   | CBA is a type of full economic evaluation in which measures of both resource use and beneficial (and adverse) effects are valued in commensurate (often monetary) units, so that the costs and benefits of alternative interventions can be directly  | Please report the information if applicable |

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|-------------------------------|-------------|----------|--|---|
|                               |             |          | compared to assess the extent to which interventions may be judged favourably from an economic point of view. Results may be expressed in terms of an incremental cost-benefit ratio or incremental net benefit.   |   |
| Cost-minimization             | Dichotomous | Yes/No   | It is sometimes argued that if the two or more alternatives under consideration achieve the given outcome to the same extent, a cost-minimization analysis (CMA) can be performed. However, it is not appropriate to view CMA as a form of full economic evaluation. | Please report the information if applicable |
| Cost comparison/cost analysis | Dichotomous | Yes/No   | Approach that describes, measures and values resource use (costs) associated with alternative interventions.   | Please report the information if applicable |
| Cost outcome descriptions     | Dichotomous | Yes/No   | Approach that describes, measures and values resource use (costs) and consequences (outcomes) associated with a single intervention, with no comparison between alternatives.  | Please report the information if applicable |
| Cost descriptions             | Dichotomous | Yes/No   | Approach that describes, measures and values resource use (costs) associated with a  | Please report the information if applicable |



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|--------------------------|-------------|----------|--|---|
|                          |             |          | single intervention, with no comparison between alternatives.  |   |
| Budget impact analysis   | Dichotomous | Yes/No   | A BIA addresses the expected changes in the expenditure of a healthcare system after the adoption of a new intervention. A BIA can also be used for budget or resource planning. A BIA can be free standing or part of a comprehensive economic assessment along with a CEA. | Please report the information if applicable   |
| Trial-based              | Dichotomous | Yes/No   | The use of clinical studies (such as randomised trials) as vehicles for economic evaluation.   | Please report the information if applicable   |
| Model-based              | Dichotomous | Yes/No   | Economic evaluation using decision analytic models, where data from a number of different sources are brought together.  | Please report the information if applicable   |
| Methodological           | Dichotomous | Yes/No   | We define methodological papers as the presentation and critique of new approaches, changes to existing methods or the discussion of quantitative and data analytic approaches that are relevant to economic evaluation of scaling up strategies.                            | Overall, methodological papers can: <ul style="list-style-type: none"> <li>• Outline and review a new analytical approach that has recently been, or has potential to be, applied</li> <li>• Provide a detailed description, using some empirical examples, of the application of a new technique/method (such as, but need not necessarily be, a quantitative technique)</li> <li>• Examine a particular method which might benefit from a methodological</li> </ul> |

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|--|-------------------------|---------------------------|---|--|
|  |                         |                           |   | re-think or a methodological re-think based on its application in a new area of research, trying to address gaps and limitations of the methodology/method itself.                       |
| Type of economic evaluation - Other                        | Text                    | Free-text description     | Other (such a modified approaches).   | Please describe.   |
| If the study is model based, what is the model type:       | Categorical (Drop Down) | Markov                    | Detail any model used (e.g., Markov, Decision Tree, and Discrete Event Simulation).                               | Please report the information if available   |
|  |                         | Decision Tree             |   |  |
|  |                         | Discrete Event Simulation |   |  |
|  |                         | Microsimulation model     |   |  |
|  |                         | Other                     |   |  |
| If the study is model based, what is the model type: Other | Text                    | Free-text description     | It is the description of the model type other than Markov, Decision Tree, and Discrete Event Simulation           | Please report the information if applicable  |
| <b>Methods</b>   |                         |                           |   |  |
| Perspective – What is the perspective of the analysis?     | Multiple choice         | Society                   | State the viewpoint of the analysis.  | You can select more than one (as reported in the study). If not specified, it can often be guessed when reading the study. Please report “not specified” the information was unavailable |
|  |                         | Health-system             |   |  |
|  |                         | Care provider             |   |  |
|  |                         | Insurer                   |   |  |
|  |                         | Hospital                  |   |  |
|  |                         | Patient                   |   |  |
|  |                         | Other (describe)          |   |  |
| Not specified  |                         |                           |   |  |
| Perspective - other  | Text                    | Free-text description     | It is the perspective description other than society, health system, care provider, insurer, hospital and patient | Please, report the information if available. If not present, mark UNCLEAR.   |

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|--|------------|-----------------------------------|---|--|
| Perspective – Justification  | Text       | Free-text description             | A clear justification should be given for the form(s) of evaluation chosen in relation to the question(s) being addressed.                        | Please, report the information if available  |
| Time horizon (years & months) - benefits   | Integer    | Number of years, number of months | State the time horizon for benefits.  | Please indicated whether the number is in years/months. Write “Unclear” if not clear from the text.      |
| Time horizon (years & months) - costs  | Integer    | Number of years, number of months | State the time horizon for costs  | Please indicated whether the number is in years/months. Write “Unclear” if not clear from the text.      |
| <b>Costs</b>   |            |                                   |   |  |
| Evidence-based health intervention costs   | Text       | Free-text description             | Provide details about which costs are being reported (e.g., medication costs, transportation)   | Add if included  |
| Methods for identifying resource use – clinical (evidence-based intervention)        | Text       | Free-text description             | Describe the methods used to identify resource use (e.g., questionnaire, survey, cost dairies, expert consultation, and formal consensus methods) | Add if included  |
| Assumptions of the measurement of resources – clinical (evidence-based intervention) | Text       | Free-text description             | Describe all structural or other assumptions underpinning the decision-analytic model.  | Describe, for instance, assumptions for the imputation method when incomplete measurement occurred       |
| Scaling up strategy costs  | Text       | Free-text description             | Provide details about which costs are being reported (medication costs, transportation, etc.)   | Add if included – this should include the costs related to the implementation of the scaling up strategy |
| Methods for identifying resource use – scaling up                                    | Text       | Free-text description             | Provide details of the methods used to identify resource use  |  |

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|--|-------------------------|------------------------|---|---|
| Assumptions of the measurement of resources – scaling up | Text                    | Free-text description  | Describe all structural or other assumptions underpinning the decision-analytic model.  | Describe, for instance, assumptions for the imputation method when incomplete measurement occurred  |
| <b>Measurement of costs</b>                              |                         |                        |   |   |
| Methods used to calculate unit costs                     | Text                    | Free-text description  | Describe the methods used to identify relevant unit costs (guidelines, own cost price calculations, and literature). Mark UNCLEAR if missing.     | Add if included.  |
| Cost estimation methods                                  | Categorical (Drop Down) | Micro-costing          | Methods used to estimate costs.   | Add if included.  |
|  |                         | Gross costing          |   |   |
|  |                         | Hybrid                 |   |   |
|  |                         | Other (describe)       |   |   |
|  |                         | Not specified          |   |   |
| Cost estimation method - other                           | Text                    | Free-text description  | It is the cost estimation method other than macro-costing, gross costing, hybrid.   | Please, report the information if applicable  |
| <b>Valuing costs</b>                                     |                         |                        |   |   |
| What is the currency?                                    | Text                    | Free-text description  | Currency used in analysis.  | Please write the currency used for the analysis, and also whether there was any conversion (indicating the converted currency).   |
| What is the year of pricing?                             | Integer                 | Number of pricing year | Year of pricing   | Please, report the information if applicable  |
| <b>Health intervention effectiveness outcomes</b>        |                         |                        |   |   |
| Clinical outcomes - health benefits in natural units     | Numeric & Text          | Free-text description  | Specify number and type of natural units such as, for example, life years gained, disability days saved, points of blood pressure reduction, etc. | Add if applicable – Add in the way and measure presented in the study. If possible, when reporting the study outcomes, it is preferred to report the degree of uncertainty; therefore, in addition to reporting the mean (or median), a standard deviation (or range) should be reported. |

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|--|-----------------------------|---|---|---|
| Clinical outcomes - health benefits in monetary values                     | Numeric & Text              | Free-text description                           | Specify number of monetary values.  | Add if applicable – Add in the way and measure presented in the study. If possible, when reporting the study outcomes, it is preferred to report the degree of uncertainty; therefore, in addition to reporting the mean (or median), a standard deviation (or range) should be reported. |
| Health utility values - health benefits in utility values                  | Numeric & text              | Free-text description                           | Add values and utility measure, such as QALYs                                     | If applicable   |
| Patient-level outcomes (in natural units)                                  | Numeric & Text              | Free-text description                           | Add if included – Add in the way and measure presented in the study               | If applicable   |
| System-level outcomes (in natural units)                                   | Numeric & Text              | Free-text description                           | Add if included– Add in the way and measure presented in the study                | If applicable   |
| <b>Health intervention effectiveness outcomes – Data sources</b>           |                             |   |   |   |
| Source of effectiveness data of evidence-based health intervention         | Multiple choice (Drop Down) | Trials  | It is the data source for the effectiveness of evidence-based health intervention | If applicable   |
|  |                             | Observational studies                           |   |   |
|  |                             | Published literature (e.g., systematic reviews) |   |   |
|  |                             | Administrative data                             |   |   |
|  |                             | Clinical databases                              |   |   |
|  |                             | Medical records                                 |   |   |
|  |                             | Expert opinion                                  |   |   |
|  |                             | Observations                                    |   |   |
| Other  |                             |   |   |   |
| Source of effectiveness data of evidence-based health intervention – Other | Text                        | Free-text description                           | It is the data source other than the ones listed                                  | If applicable   |
| Year range of primary studies  | Integer                     | Number of years                                 | Year range  | Add if applicable   |
| <b>Health intervention effectiveness outcomes - measurement</b>            |                             |   |   |   |

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|--|------------|-----------------------|--|--|
| Methods of measurement of effects  | Text       | Free-text description | Specify source of effectiveness estimates (e.g., stated WTP, revealed WTP, and conjoint analysis). | If applicable  |
| Methods of valuation of effects  | Text       | Free-text description | Specify methods of valuation of effects (e.g., indirect or direct measurement).                    | If applicable  |
| Methods used for the synthesis of clinical effectiveness data - single experimental or nonexperimental study | Text       | Free-text description | Describe fully the methods used for the synthesis of clinical effectiveness data                   | If the economic evaluation is based on a single experimental or non-experimental study with patient-level data → then report: information on methods of selection of the study population; methods of allocation of study subjects; whether intention-to-treat analysis was used; methods for handling missing data; the time horizon over which patients were followed up and assessed; and, where appropriate, methods for handling potential biases introduced from study design, for example, selection biases |
| Methods used for the synthesis of clinical effectiveness data - Synthesis-based economic evaluation          | Text       | Free-text description | Describe fully the methods used for the synthesis of clinical effectiveness data                   | If synthesis-based economic evaluation → Report a reference to the study, and information on the strategy adopted to search and select relevant evidence, as well as information related to potential bias arising from study selection and synthesis methods. In addition, it may require reporting of long-term extrapolation methods.   |

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|---|-----------------------------|---|---|---|
| <b>Scaling strategy effectiveness outcomes</b>                |                             |   |   |   |
| Scaling up strategies' outcomes                               | Text                        | Free-text description                           | Scaling up strategies' implementation outcomes (see Milat, MacLean, Simons): coverage, acceptability adoption, appropriateness, costs feasibility, fidelity penetration, and sustainability | <b>(Not exhaustive, please be open to other types of outcomes present in the literature under review)</b> LIST of POTENTIAL SCLAING UP STRATEGY EFFECTIVENESS OUTCOMES: Acceptability, Adoption, Appropriateness, Feasibility, Fidelity, Penetration, Sustainability, Reach |
| Scaling up strategies' outcomes - Other                       | Text                        | Free-text description                           | It is the description of scaling up outcome other than the ones listed above  | Please report the information if applicable   |
| <b>Scaling strategy effectiveness outcomes – Data sources</b> |                             |   |   |   |
| Source of effectiveness data of scaling up strategy           | Multiple choice (Drop Down) | Trials  | It is the data source for the effectiveness of scaling up strategy  | If applicable   |
|   |                             | Observational studies                           |   |   |
|   |                             | Published literature (e.g., systematic reviews) |   |   |
|   |                             | Administrative data                             |   |   |
|   |                             | Clinical databases                              |   |   |
|   |                             | Medical records                                 |   |   |
|   |                             | Expert opinion                                  |   |   |
|   |                             | Observations                                    |   |   |
| Other   |                             |   |   |   |
| Source of effectiveness data of scaling up strategy - Other   | Text                        | Free-text description                           | It is the data source other than the ones listed above.   | Please report the information if applicable   |
| <b>Scaling strategy effectiveness outcomes - measurement</b>  |                             |   |   |   |
| Methods of measurement of effects                             | Text                        | Free-text description                           | Specify source of effectiveness estimates ( <i>whether from one single study or a synthesis</i> )   | Please, report the information if available OR NOT report if unavailable  |
| Methods used for the synthesis of effectiveness data          | Text                        | Free-text description                           | Specify methods for the synthesis of effectiveness estimates ( <i>This</i>  | Please, report the information if available OR NOT report if unavailable  |

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|--|-----------------|--|---|---|
|  |                 |  | <i>one I am not sure how it would look like)</i>  |   |
| <b>Analysis</b>  |                 |  |   |   |
| Statistical methods used   | Text            | Free-text description  | Describe all analytical methods supporting the evaluation. This could include methods for dealing with skewed, missing, or censored data; extrapolation methods; methods for pooling data; approaches to validate or make adjustments (such as half cycle corrections) to a model; and methods for handling population heterogeneity and uncertainty. | The analytic strategy should be fully explained as part of the “Methods” section of the article |
| <b>Modeling Methods – PLEASE NOTE: THIS SECTION APPLIES ONLY TO MODELING STUDIES</b> |                 |  |   |   |
| Source of data incorporated into the model:  | Multiple choice | Data collected alongside a trial<br>Population survey<br>Cohort study<br>Before and after study<br>Expert opinion<br>Other | Sources of data used in the model   | Please, select all that apply   |
| If from trial – identification of original study                                     | Text            | Free-text description  | Study from which participants are drawn, please report  | Please, report the information if applicable  |
| If from trial – characteristics of participants in trial                             | Text            | Free-text description  | Report number, sex, and mean age of participants included in trial  | Please, report the information if applicable  |
| Source of data incorporated into the model - Assumptions made:                       | Dichotomous     | Yes/No   | Did the authors make assumptions about the sources of data  | Please, report the information if applicable  |



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|---|-------------|-----------------------|---|---|
| Source of data incorporated into the model - Assumptions made: If the answer is "Yes" | Text        | Free-text description | If assumptions made please specify.   | Please, report the information if applicable  |
| Reasons for the specific model used   | Text        | Free-text description | Report reasons if described.  | Please, report the information if applicable  |
| Statistical assumptions   | Text        | Free-text description | Please specify statistical assumptions used in the model  | Please, report the information if applicable  |
| Statistical tests used  | Text        | Free-text description | Please specify what statistical tests were used in the model  | For model-based economic evaluations, authors should describe and report how they estimated parameters, for example, how they transformed transition probabilities between events or health states into functions of age or disease severity. |
| <b>Results</b>  |             |                       |   |   |
| Were findings reported as incremental costs?  | Dichotomous | Yes/No                | Incremental costs refer to the additional costs associated with an intervention in comparison to a specified comparator.  | Please, report the information if applicable  |
| Were findings reported as incremental effectiveness?                                  | Dichotomous | Yes/No                | Note that the results of such comparisons may be stated either in terms of incremental cost per unit of effect, or in terms of effects per unit of cost (life-years gained per dollar spent). | Please, report the information if applicable  |
| Net costs reported  | Numeric     | Numeric-value         | It is the value reported for the net costs  | If added  |
| Net benefits (outcomes) reported  | Numeric     | Numeric-value         | It is the value reported for the net benefits   | If added  |
| Cost-benefit ratio  | Numeric     | Numeric-value         | It is the value reported for the cost-benefits  | If added  |
| Incremental cost-effectiveness ratios (ICER, ICUR) reported                           | Numeric     | Numeric-value         | ICER. ICUR  | If added  |

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| Data extraction variable  | Value type     | Modality              | Description of variable  | Comments                                     |
|---|----------------|-----------------------|--|--|
| Confidence intervals (e.g., 95 % CI) of incremental cost-effectiveness ratios (ICER, ICUR) reported | Numeric        | Numeric-value         | It is the confidence value of economic parameter reported  | If added                                     |
| Category or type of costs included in cost analysis and costs per category/type                     | Numeric & Text | Free-text description | Cost description of the type or category of cost; please specify (if available) whether the studies includes both (or only) direct and direct costs of the intervention.   | Please, report the information if applicable |
| Results of cost-description studies   | Numeric & Text | Free-text description | Description of costs per unit of analysis  | Please, report the information if applicable |
| Results of cost-outcome descriptions  | Numeric & Text | Free-text description | Description of costs and outcomes of one intervention (no alternative)   | Please, report the information if applicable |
| <b>Analyses of uncertainty</b>  |                |                       |  |  |
| Was analysis of uncertainty done?   | Dichotomous    | Yes/No                | Sensitivity analysis is an exploration of the impact on the results of changing the value of one (or more) parameter(s) while keeping the values of all other parameters unchanged.  | Please, report the information if applicable |
| Analyses of uncertainty (e.g., sensitivity analyses) - Type   | Text           | Free-text description | Describe the type of analyses of uncertainty (e.g., statistical comparison, bootstrapping, sensitivity analysis [one-way, multiway], threshold analysis, analysis of extremes, and best/worst case analysis) and probabilistic sensitivity analysis. | Please, report the information if applicable |
| Intervention parameters examined in uncertainty analysis  | Text           | Free-text description | List intervention parameters examined in uncertainty analysis  | Please, report the information if applicable |

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| Data extraction variable  | Value type  | Modality              | Description of variable  | Comments                                     |
|---|-------------|-----------------------|--|--|
| Outcome(s) of analyses of sensitivity analyses [Single study-based economic evaluation] | Text        | Free-text description | Describe the effects of sampling uncertainty for the estimated incremental cost and incremental effectiveness parameters, together with the impact of methodological assumptions (such as discount rate, study perspective). | If applicable. Describe as reported.         |
| Outcome(s) of analyses of sensitivity analyses [Model-based economic evaluation]        | Text        | Free-text description | Describe the effects on the results of uncertainty for all input parameters, and uncertainty related to the structure of the model and assumptions.  | If applicable. Describe as reported.         |
| <b>Calibration</b>  |             |                       |  |  |
| Was a description of the data that the model was calibrated to provided?                | Dichotomous | Yes/No                | It is the description of the data that the model was calibrated to provide   | Please, report the information if applicable |
| Were details of the data that the model was fit to provided?                            | Text        | Free-text description | Details for the data that the model was fit  | Please, report the information if applicable |
| Was the model calibrated to equilibrium or trends?                                      | Dichotomous | Yes/No                | It is to check if the model was calibrated or not  | Please, report the information if applicable |
| What was the model calibration approach   | Text        | Free-text description | Target-fitting, minimize least squares, Bayesian, etc.   | Please, report the information if applicable |
| What was the model calibrated to  | Text        | Free-text description | List the data types (disease prevalence in each group, etc.)   | Please, report the information if applicable |
| What parameters were calibrated?  | Text        | Free-text description | List the parameters that were calibrated (uptake, etc.)  | Please, report the information if applicable |
| <b>Discounting</b>  |             |                       |  |  |
| Discount rate   | Dichotomous | Yes/No                | Was discounting performed?   | Please, report the information if applicable |
| Discount rate for costs   | Numeric     | %                     | What was the discount rate for the cost(s)?  | Please, report the information if applicable |

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| Data extraction variable                                  | Value type  | Modality              | Description of variable  | Comments                                     |
|---|-------------|-----------------------|--|--|
| Discount rate for effects                                 | Numeric     | %                     | What was the discount rate for the effect(s)? (i.e., the rate used to account for different timing of costs and effects) | Please, report the information if applicable |
| Inflation rate  | Dichotomous | Yes/No                | Was adjustment for inflation performed if unit costs stemmed from different years?                                       | Please, report the information if applicable |
| Data collection year                                      | Integer     | Year                  | Specify year.  | Please, report the information if applicable |
| Limitations of methodology used for discounting           | Text        | Free-text description | Report limitations as described in text.   | If authors report this.                      |
| <b>Authors/ conclusion and interpretations</b>            |             |                       |  |  |
| Authors' conclusions                                      | Text        | Free-text description | As reported  | Please, report the information if applicable |
| Authors' considerations of study limitations              | Text        | Free-text description | As reported  | Please, report the information if applicable |
| Results compared with those of other economic evaluations | Text        | Free-text description | As reported  | Please, report the information if applicable |

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**Table 1.1** Measurement of costs and consequences in economic evaluation

| Type of study               | Measurement / valuation of costs in both alternatives | Identification of consequences  | Measurement/ valuation of consequences  |
|-----------------------------|---|---|---|
| Cost analysis               | Monetary units  | None  | None  |
| Cost-effectiveness analysis | Monetary units  | Single effect of interest, common to both alternatives, but achieved to different degrees | Natural units (e.g. life-years gained, disability days saved, points of blood pressure reduction, etc.) |
| Cost-utility analysis       | Monetary units  | Single or multiple effects, not necessarily common to both alternatives                   | Healthy years (typically measured as quality-adjusted life-years)                                       |
| Cost-benefit analysis       | Monetary units  | Single or multiple effects, not necessarily common to both alternatives                   | Monetary units  |

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Some types of scaling up effectiveness outcomes (this is **NOT an exhaustive list**, and some items may not be relevant, but these should just work as a conceptual handle):

|                        | Proctor  | Milat   |
|------------------------|--|---|
| <b>Acceptability</b>   | Acceptability= perception that an intervention (scaling up strategy) is acceptable, palatable and satisfactory   | Milat ties it to reach → meaning the likely reach and acceptability of the intervention for the targeted population   |
| <b>Adoption</b>        | Adoption is defined as the intention, initial decision, or action to try or employ an innovation or evidence-based practice. Adoption also may be referred to as “uptake.”   | Adoption is the proportion of settings, practices or organisations that adopt an intervention.  |
| <b>Appropriateness</b> | Appropriateness is the perceived fit, relevance, or compatibility of the innovation or evidence-based practice for a given practice setting, provider, or consumer; and/or perceived fit of the innovation to address a particular issue or problem. The construct “appropriateness” is deemed important for its potential to capture some “pushback” to implementation efforts, as is seen when providers feel a new program is a “stretch” from the mission of the health care setting, or is not consistent with providers’ skill set, role, or job expectations. | Milat does not explain this in the context of scaling up but does mention it.   |
| <b>Feasibility</b>     | The extent to which a new treatment, or an innovation, can be successfully used or carried out within a given agency or setting  | Mentioned by Milat but not explained.   |
| <b>Fidelity</b>        | Fidelity is defined as the degree to which an intervention was implemented as it was prescribed in the original protocol or as it was intended by the program developers.  | Effects of interventions are likely to be smaller as they are scaled up; therefore, relatively large effect sizes should be demonstrated in the efficacy stage if an acceptable level of effect is to be maintained when interventions are scaled up. <sup>4</sup> This reduction in effect is in part because of difficulties maintaining the dose and fidelity of the original intervention in real-world settings. It is rare for interventions to remain unchanged as they are scaled up, because of the need to adapt them to suit the local context and the organisational, financial and human resources available for scaling up. <sup>4,6,10</sup> These adaptations may reduce effectiveness, but they can improve acceptability and efficiency, highlighting the importance of measuring intervention effectiveness throughout the scaling up process. |
| <b>Penetration</b>     | Is defined as the integration of a practice within a service setting and its subsystems. (...) Penetration also can be calculated in terms of the  |   |

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|                       |  |  |
|-----------------------|--|--|
|                       | number of providers who deliver a given service or treatment, divided by the total number of providers trained in or expected to deliver the service.    |  |
| <b>Sustainability</b> | is defined as the extent to which a newly implemented treatment is maintained or institutionalized within a service setting's ongoing, stable operations |  |
| <b>Reach</b>          |  | Reach refers to the level of individual participation of an intended target population in an intervention. |