**CHEERS Checklist**

**Items to include when reporting economic evaluations of health interventions**

The ISPOR CHEERS Task Force Report, *Consolidated Health Economic Evaluation Reporting Standards (CHEERS)—Explanation and Elaboration: A Report of the ISPOR Health Economic Evaluations Publication Guidelines Good Reporting Practices Task Force*, provides examples and further discussion of the 24-item CHEERS Checklist and the CHEERS Statement. It may be accessed via the *Value in Health* or via the ISPOR Health Economic Evaluation Publication Guidelines – CHEERS: Good Reporting Practices webpage: [http://www.ispor.org/TaskForces/EconomicPubGuidelines.asp](http://www.ispor.org/TaskForces/EconomicPubGuidelines.asp)

| Section/item | Item No | Recommendation | Reported on Page Number/Line Number | Reported on Section/Paragraph |
|--------------|---------|----------------|-------------------------------------|-----------------------------|
| **Title and abstract** | | | | |
| Title | 1 | Identify the study as an economic evaluation or use more specific terms such as “cost-effectiveness analysis”, and describe the interventions compared. | Page 1 Line 4 | Title Page section Title paragraph |
| Abstract | 2 | Provide a structured summary of objectives, perspective, setting, methods (including study design and inputs), results (including base case and uncertainty analyses), and conclusions. | Page 4 Line 67 | Abstract section |
| **Introduction** | | | | |
| Background and objectives | 3 | Provide an explicit statement of the broader context for the study. Present the study question and its relevance for health policy or practice decisions. | Background/Page 6 line 112 | Introduction section |
| **Methods** | | | | |
| Target population and subgroups | 4 | Describe characteristics of the base case population and subgroups analysed, including why they were chosen. | Page 9, line 183 | Overview section |
| Setting and location | 5 | State relevant aspects of the system(s) in which the decision(s) need(s) to be made. | Page 9, line 179 | Overview section |
| Study perspective | 6 | Describe the perspective of the study and relate this to the costs being evaluated. | Page 9, line 185 | Overview section |
| Comparators | 7 | Describe the interventions or strategies being compared and state why they were chosen. | Page 10, line 207 | Patient pathway and |
| Time horizon | 8 | State the time horizon(s) over which costs and consequences are being evaluated and say why appropriate. | Page 9, line 185 | Overview section |
| Discount rate | 9 | Report the choice of discount rate(s) used for costs and outcomes and say why appropriate. | Page 9, line 191 | Overview section |
| Choice of health outcomes | 10 | Describe what outcomes were used as the measure(s) of benefit in the evaluation and their relevance for the type of analysis performed. | Page 9, line 195 | Overview section |
| Measurement of effectiveness | 11a | Single study-based estimates: Describe fully the design features of the single effectiveness study and why the single study was a sufficient source of clinical effectiveness data. | Page 7, line 149 | Introduction section |
|------------------------------|-----|----------------------------------------------------------------|-----------------|---------------------|
| 11b | Synthesis-based estimates: Describe fully the methods used for identification of included studies and synthesis of clinical effectiveness data. | N/A | N/A | Clinical effectiveness data |
| Measurement and valuation of preference based outcomes | 12 | If applicable, describe the population and methods used to elicit preferences for outcomes. | Page 13, line 267 | Health state utility section |
| Estimating resources and costs | 13a | Single study-based economic evaluation: Describe approaches used to estimate resource use associated with the alternative interventions. Describe primary or secondary research methods for valuing each resource item in terms of its unit cost. Describe any adjustments made to approximate to opportunity costs. | N/A | N/A | It's a model-based study |
| 13b | Model-based economic evaluation: Describe approaches and data sources used to estimate resource use associated with model health states. Describe primary or secondary research methods for valuing each resource item in terms of its unit cost. Describe any adjustments made to approximate to opportunity costs. | Page 12, line 246 | Page 12, line 264 | Cost data section |
| Currency, price date, and conversion | 14 | Report the dates of the estimated resource quantities and unit costs. Describe methods for adjusting estimated unit costs to the year of reported costs if necessary. Describe methods for converting costs into a common currency base and the exchange rate. | Page 12, line 264 | Cost data section |
| Choice of model | 15 | Describe and give reasons for the specific type of decision-analytical model used. Providing a figure to show model structure is strongly recommended. | Page 10, line 204 | Patient pathway and model structure section |
| Assumptions | 16 | Describe all structural or other assumptions underpinning the decision-analytical model. | Page 10, line 204 | Patient pathway and model structure section |
| Analytical methods | 17 | 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. | Page 11, line 228 | Page 13, line 272 | Clinical data section Sensitivity analysis section |
| Results | | | | |
| Study parameters | 18 | Report the values, ranges, references, and, if used, probability distributions for all parameters. Report reasons or sources for distributions used to represent uncertainty where appropriate. Providing a table to show the input values is strongly recommended. | Page 32, line 634 | Table section |
| Incremental costs and outcomes | 19 | For each intervention, report mean values for the main categories of estimated costs and outcomes of interest, as well as mean differences between the comparator groups. If applicable, report incremental cost-effectiveness ratios. | Page 14, line 296 | Base-case analysis section |
| Characterising uncertainty | 20a Single study-based economic evaluation: 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). | N/A It's a model-based study | N/A It's a model-based study |
|----------------------------|--------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|
| 20b Model-based economic evaluation: Describe the effects on the results of uncertainty for all input parameters, and uncertainty related to the structure of the model and assumptions. | Page 15, line 311 | Sensitivity analysis result section |
| Characterising heterogeneity | 21 If applicable, report differences in costs, outcomes, or cost-effectiveness that can be explained by variations between subgroups of patients with different baseline characteristics or other observed variability in effects that are not reducible by more information. | N/A | N/A There is no analysis of subgroups in this study |

**Discussion**

| Study findings, limitations, generalisability, and current knowledge | 22 Summarise key study findings and describe how they support the conclusions reached. Discuss limitations and the generalisability of the findings and how the findings fit with current knowledge. | Page 16, line 336 | Discussion section |

**Other**

| Source of funding | 23 Describe how the study was funded and the role of the funder in the identification, design, conduct, and reporting of the analysis. Describe other non-monetary sources of support. | Page 22, line 482 | Acknowledgements section |
| Conflicts of interest | 24 Describe any potential for conflict of interest of study contributors in accordance with journal policy. In the absence of a journal policy, we recommend authors comply with International Committee of Medical Journal Editors recommendations. | Page 23, line 493 | Footnote section |

For consistency, the CHEERS Statement checklist format is based on the format of the CONSORT statement checklist.

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The citation for the CHEERS Task Force Report is: Husereau D, Drummond M, Petrou S, et al. Consolidated health economic evaluation reporting standards (CHEERS)—Explanation and elaboration: A report of the ISPOR health economic evaluations publication guidelines good reporting practices task force. Value Health 2013;16:231-50.

Article information: https://dx.doi.org/10.21037/atm-21-1803

*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.*

Updated on April 13, 2020