

Reporting Economic Evaluations with Value of Information Analyses Using the CHEERS Value of Information (CHEERS-VOI) Reporting Guideline

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Value of Information (VOI) analyses are often performed as part of an economic evaluation to quantify the expected value of collecting additional information before making a decision.¹ VOI analyses can assess the impact of the uncertainty in the underlying evidence on the decision. Thus, they can be used as a sensitivity analysis and to design future research that has value. VOI analyses have been gaining in popularity over recent years. While the Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS) statement provides a set of minimal, essential items that should be provided when reporting economic evaluations,^{2,3} until now limited guidance has existed for reporting VOI analyses performed alongside economic evaluations.

The recently developed CHEERS-VOI checklist extends and replaces the CHEERS statement when economic evaluations include VOI.⁴ CHEERS-VOI provides the minimum, essential information for reporting VOI alongside economic evaluations and aims to improve the transparency, reproducibility, and rigor of these analyses. Given that the number of performed VOI analyses has been increasing, largely due to the development of efficient computation methods⁵ and recently published good practice guidelines,^{6,7} we believe that the time is right for a VOI-specific checklist to ensure accurate reporting of VOI analyses. By aligning with the widely used CHEERS statement,^{2,3} we expect that the CHEERS-VOI checklist will be easily identified and straightforward for stakeholders who are familiar with using CHEERS. The CHEERS-VOI checklist has been endorsed by the Enhancing the Quality and Transparency of Health Research (EQUATOR) Network.

Why Use CHEERS-VOI

When the reported economic evaluation includes a VOI analysis, the CHEERS-VOI checklist has clear added value over the CHEERS statement. Thus, the original CHEERS statement should not be used in this setting. The CHEERS-VOI checklist incorporates the items included in the CHEERS statement but modifies some of them to indicate the additional information needed

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for the calculation of VOI. The CHEERS-VOI checklist includes adaptations to the following CHEERS items: study population, time horizon, discount rate, rationale and description of model, analytics and assumptions, characterizing uncertainty, and summary of main results. Furthermore, the CHEERS-VOI checklist includes several new items that are specific to VOI methods. The following 6 VOI-specific items were added to the CHEERS-VOI checklist: VOI estimation methods, evidence base, parameter of interest in VOI analysis, study design(s) proposed in VOI analysis, data generation, and costs of research studies for expected net benefit of sampling (ENBS). Some of these items will be relevant only if specific VOI measures are calculated, for example, the ENBS.

Who Should Use CHEERS-VOI

All researchers, decision analysts, policy and decision makers, peer reviewers, and other stakeholders who perform, use, or assess the results of economic evaluations with VOI should use the CHEERS-VOI guideline to ensure that their reporting is complete. It can be applied to all types of economic evaluations as well as trial-based economic evaluations that include a VOI analysis. In these cases, the authors should report all relevant items, indicating the items that are not applicable. As CHEERS-VOI is a minimum set of reporting guidelines, authors are encouraged to include additional items they believe are relevant to support the interpretation and reproducibility of their analyses.


How to Use CHEERS-VOI


To use the CHEERS-VOI checklist, similar to the CHEERS checklist, authors should indicate where each of the items is provided (section heading and paragraph number). If the item is irrelevant to the particular economic evaluation and/or VOI analysis (e.g., ENBS was not calculated in the study), authors are recommended to report “Not applicable.” For not reported items, authors should state “Not reported.” If the information is available from another source (e.g., the comprehensive economic evaluation report is provided separately), authors should indicate the source for the reader. If word limits preclude the inclusion of parts of the CHEERS-VOI checklist in the main manuscript, authors should use supplementary materials to include all relevant


CHEERS-VOI items. Finally, the placement of the items in the CHEERS-VOI checklist⁴ represents a suggestion of the order to address each item, and the authors can report the items in a different order that is more suitable for their analyses.


We encourage readers of *Medical Decision Making* who are developing applied VOI analysis to explore the elaboration and explanation document for the CHEERS-VOI checklist to ensure they understand the key reporting guidance.⁴

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