

## Consolidated Health Economic Evaluation Reporting Standards (CHEERS) 2022 Checklist



The CHEERS 2022 statement replaces the 2013 CHEERS statement, which should no longer be used. The CHEERS 2022 checklist contains 28 items with accompanying descriptions. Checklist users should indicate the section of the manuscript where relevant information can be found. The authors recommend using a section heading with a paragraph number. If an item does not apply to a particular economic evaluation, checklist users are encouraged to report “Not Applicable.” If information is otherwise not reported, checklist users are encouraged to write, “Not Reported.” Users should avoid the term “Not Conducted” as CHEERS is intended to guide and capture reporting. Additional information on CHEERS 2022 can be found [here](#).

### Title

#### 1. Title

Identify the study as an economic evaluation and specify the interventions being compared.

Title, Page 1, Lines 2-3

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### Abstract

#### 2. Abstract

Provide a structured summary that highlights context, key methods, results, and alternative analyses.

Abstract, Pages 3-5, Lines 35-59

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### Introduction

#### 3. Introduction: Background and Objectives

Give the context for the study, the study question, and its practical relevance for decision making in policy or practice.

Background, Pages 5-7, Lines 74-133

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## Methods

### 4. Health economic analysis plan

Indicate whether a health economic analysis plan was developed and where available.

Methods, Pages 8-9, Lines 134-160

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### 5. Study population

Describe characteristics of the study population (such as age range, demographics, socioeconomic, or clinical characteristics).

Spontaneous bacterial peritonitis, Page 9, Lines 161-164

Hepatorenal syndrome, Page 10, Lines 183-186

Large-volume paracentesis, Page 11, Lines 202-206

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### 6. Setting and location

Provide relevant contextual information that may influence findings.

Methods, Page 8, Lines 134-143

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### 7. Comparators

Describe the interventions or strategies being compared and why chosen.

For Spontaneous bacterial peritonitis, Page 9, Lines 161-164 and Figure 1A

For Hepatorenal syndrome, Page 10, Lines 183-186 and Figure 1B

For Large-volume paracentesis, Page 11, Lines 202-206 and Figure 1C

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### 8. Perspective

State the perspective(s) adopted by the study and why chosen.

Methods, Page 8, Lines 134-136

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### 9. Time horizon

State the time horizon for the study and why appropriate.

Methods, Page 8, Lines 137-143

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### 10. Discount rate

Report the discount rate(s) and reason chosen.

Methods, Page 8, Lines 145-146 (This states that no discount rate was applied. Should this just be N/A instead?)

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### 11. Selection of outcomes

Describe what outcomes were used as the measure(s) of benefit(s) and harm(s).

Methods, Page 8, Lines 146-149

For Spontaneous bacterial peritonitis, Page 9, Lines 165-181

For Hepatorenal syndrome, Pages 10-11, Lines 187-190

For Large-volume paracentesis, Page 11, Lines 207-223

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### 12. Measurement of outcomes

Describe how outcomes used to capture benefit(s) and harm(s) were measured.

For Spontaneous bacterial peritonitis, Page 9, Lines 165-181

For Hepatorenal syndrome, Pages 10-11, Lines 187-200

For Large-volume paracentesis, Page 11, Lines 207-223

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### 13. Valuation of outcomes

Describe the population and methods used to measure and value outcomes.

Methods, Pages 8-9, Lines 150-159

For Spontaneous bacterial peritonitis, Page 9, Lines 165-181

For Hepatorenal syndrome, Pages 10-11, Lines 187-200

For Large-volume paracentesis, Page 11, Lines 207- 223

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#### **14. Measurement and valuation of resources and costs**

Describe how costs were valued.

Methods, Page 8, Lines 145-155

For Spontaneous bacterial peritonitis, Page 9, Lines 166-179 and Table 2

For Hepatorenal syndrome, Pages 10, Lines 194-198 and Table 2

For Large-volume paracentesis, Page 11, Lines 213-219 and Table 2

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#### **15. Currency, price date, and conversion**

Report the dates of the estimated resource quantities and unit costs, plus the currency and year of conversion.

Methods, Page 8, Lines 145-146

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#### **16. Rationale and description of model**

If modeling is used, describe in detail and why used. Report if the model is publicly available and where it can be accessed.

Methods, Pages 8-9, Lines 134-159 and Figure 1

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#### **17. Analytics and assumptions**

Describe any methods for analyzing or statistically transforming data, any extrapolation methods, and approaches for validating any model used.

Methods, Page 8, Lines 136-147

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### **18. Characterizing heterogeneity**

Describe any methods used for estimating how the results of the study vary for subgroups.

Methods, Page 9, Lines 156-160

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### **19. Characterizing distributional effects**

Describe how impacts are distributed across different individuals or adjustments made to reflect priority populations.

Not Applicable

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### **20. Characterizing uncertainty**

Describe methods to characterize any sources of uncertainty in the analysis.

Methods, Page 9, Lines 156-160

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### **21. Approach to engagement with patients and others affected by the study**

Describe any approaches to engage patients or service recipients, the general public, communities, or stakeholders (eg, clinicians or payers) in the design of the study.

Methods, Page 8, Lines 130-143

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## **Results**

### **22. Study parameters**

Report all analytic inputs (eg, values, ranges, references) including uncertainty or distributional assumptions.

For Spontaneous bacterial peritonitis, Page 12, Lines 226-240, Table 1, Table 2 and Table S1

For Hepatorenal syndrome, Pages 12-13, Lines 242-256, Table 2, Table 3 and Table S2

For Large-volume paracentesis, Pages 13-14, 258-272, Table 2, Table 4 and Table S3

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### 23. Summary of main results

Report the mean values for the main categories of costs and outcomes of interest and summarize them in the most appropriate overall measure.

For Spontaneous bacterial peritonitis, Page 12, Lines 226-235

For Hepatorenal syndrome, Pages 12-13, Lines 242-251

For Large-volume paracentesis, Pages 13, 258-267

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### 24. Effect of uncertainty

Describe how uncertainty about analytic judgments, inputs, or projections affects findings. Report the effect of choice of discount rate and time horizon, if applicable.

Results of the sensitivity analysis reported in the following sections and figures:

For Spontaneous bacterial peritonitis, Page 12, Lines 236-240 and Figure 3A

For Hepatorenal syndrome, Pages 13, Lines 252-256 and Figure 3B

For Large-volume paracentesis, Pages 13-14, 268-272 and Figure 3C

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### 25. Effect of engagement with patients and others affected by the study

Report on any difference patient/service recipient, general public, community, or stakeholder involvement made to the approach or findings of the study.

Page 17, Lines 359-362

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## Discussion

### 26. Study findings, limitations, generalizability, and current knowledge

Report key findings, limitations, ethical, or equity considerations not captured and how these could impact patients, policy, or practice.

Discussion, Page 17, Lines 351-364

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## Other Relevant Information

### **27. Source of funding**

Describe how the study was funded and any role of the funder in the identification, design, conduct, and reporting of the analysis.

Page 18, Lines 379-380

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### **28. Conflicts of interest**

Report authors' conflicts of interest according to journal or International Committee of Medical Journal Editors requirements.

Page 18, Lines 381-385

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