

Online Resource 2. STROBE Statement - Checklist for cohort studies

Manuscript: "Complicated urinary tract infections managed in a Hospital-at-Home program: clinical, urological and microbiological profile and 30-day outcomes".

Title:

Complicated urinary tract infections managed in a Hospital-at-Home program: clinical, urological and microbiological profile and 30-day outcomes

Authors:

Lira Pelari Mici¹, Elena Arranz Canales², Alexia Constanza Espiño Álvarez², Eva María Fernández Bermejo², Ángela Sánchez Juez², Victoria Gutiérrez Gómez-Lus², Fernando Ruiz Berraco², Saida Alonso Marrero², Jaime Bustos Carpio², José Curbelo³, Eduardo Albers Acosta⁴, Pablo Rodríguez Cortés².

Affiliations:

¹ Department of Urology, Hospital Universitario de La Princesa, Madrid, Spain.

² Hospital-at-Home Unit, Hospital Universitario de La Princesa, Madrid, Spain.

³ Faculty of Medicine, Universidad Francisco de Vitoria, Madrid, Spain.

⁴ Department of Urology, University Hospital Basel, Basel, Switzerland.

Corresponding author:

Lira Pelari Mici

lira.pelari@gmail.com

C/ Diego de León 62, 28006 Madrid, Spain

Item No	Recommendation	STROBE checklist (cohort)	Reported in manuscript (section / page)
1	Title and abstract	(a) Indicate the study's design with a commonly used term in the title or the abstract	Abstract - Methods ("Prospective observational cohort study")
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Abstract (Purpose / Methods / Results / Conclusion)
2	Background / rationale	Explain the scientific background and rationale for the investigation being reported	Introduction (paragraphs 1-6)
3	Objectives	State specific objectives, including any prespecified hypotheses	Introduction, final paragraph (primary and secondary objectives)
4	Study design	Present key elements of study design early in the paper	Methods, Study design and population
5	Setting	Describe the setting, locations and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Methods, Study design and population (HaH Unit of a tertiary teaching hospital in Madrid, Spain; March 2023-October 2025)
6	Participants	(a) Cohort study - Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	Methods, Study design and population (all consecutive cUTI episodes; admission-avoidance and early-discharge pathways) + Online Resource 1 (inclusion and exclusion criteria); 30-day follow-up described in Methods, Variables
		(b) Cohort study - For matched studies, give matching criteria and number of exposed and unexposed	Not applicable (single descriptive cohort; no matching)
7	Variables	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Methods, Definitions; Methods, Variables
8	Data sources / measurement	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	Methods, Variables (purpose-built structured prospective database with periodic quality-control checks); Methods, Definitions (EAU 2024 Guidelines; Sepsis-3 criteria; predefined clinical-cure definition)
9	Bias	Describe any efforts to address potential sources of bias	Methods, Study design and population (consecutive inclusion of all eligible episodes); Methods, Variables (prospective standardised data collection); Discussion, Limitations
10	Study size	Explain how the study size was arrived at	Methods, Study design and population (all consecutive cUTI episodes during the inclusion period; n = 262); Discussion, Limitations (low events-per-variable ratio acknowledged)
11	Quantitative variables	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Methods, Statistical analysis (continuous variables summarised as median/IQR; categorical as n/%). Age also categorised at >65 and >80 years for descriptive purposes (Table 1)
12	Statistical methods	(a) Describe all statistical methods, including those used to control for confounding	Methods, Statistical analysis (Mann-Whitney U test; chi-squared with Yates correction or Fisher's exact test; exploratory multivariable logistic regression with candidate variables selected by clinical relevance and bivariate association, avoiding inclusion of highly collinear geriatric markers)
		(b) Describe any methods used to examine subgroups and interactions	Not applicable (no formal subgroup or interaction analyses planned)

		(c) Explain how missing data were addressed	Methods, Statistical analysis: "No missing values were recorded for the variables included in the analyses, owing to the prospective and structured data-collection process." No imputation procedures were required. Stated as well in footnotes of Tables 1 and 2
		(d) Cohort study - If applicable, explain how loss to follow-up was addressed	Methods, Variables: "Thirty-day follow-up after HaH discharge was ascertained from the integrated electronic health record of the catchment area [...]. Patients with no recorded healthcare contact during the 30-day window were classified as event-free. Loss to follow-up was therefore considered negligible."
		(e) Describe any sensitivity analyses	Not performed in this descriptive cohort
13	Participants	(a) Report numbers of individuals at each stage of study - e.g., numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	Results, Baseline characteristics of the cohort (first paragraph): "All 262 consecutive cUTI episodes managed in the HaH Unit during the study period met the eligibility criteria and were included in the analysis; no patients were lost to 30-day follow-up (Figure 1)"
		(b) Give reasons for non-participation at each stage	Not applicable - consecutive inclusion of all eligible episodes; no non-participation
		(c) Consider use of a flow diagram	Figure 1 - Patient flow diagram (262 consecutive episodes; complete 30-day follow-up; components of the composite endpoint)
14	Descriptive data	(a) Give characteristics of study participants (e.g., demographic, clinical, social) and information on exposures and potential confounders	Results, Baseline characteristics of the cohort + Table 1; Results, Urological and microbiological characteristics + Table 2
		(b) Indicate number of participants with missing data for each variable of interest	No missing data for any variable; explicitly stated in footnotes of Tables 1 and 2 and applicable to Tables 3 and 4 given the prospective structured data collection
		(c) Cohort study - Summarise follow-up time (e.g., average and total amount)	Results, Treatment and management in Hospital-at-Home (median HaH stay 4 days, IQR 3); 30-day post-discharge follow-up window stated in Methods, Variables
15	Outcome data	Cohort study - Report numbers of outcome events or summary measures over time	Results, Treatment and management in Hospital-at-Home + Table 3 (clinical cure, in-HaH unplanned transfer, in-HaH deaths); Results, Factors associated with 30-day readmission or death + Table 4 (30-day readmission, 30-day death, composite endpoint)
16	Main results	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted for and why they were included	Results, Factors associated with 30-day readmission or death + Table 4 (bivariate analysis); exploratory multivariable logistic regression with OR and 95% CI for older age and prior urological manipulation, with rationale for variable selection described in Methods, Statistical analysis
		(b) Report category boundaries when continuous variables were categorised	Age categorised at >65 and >80 years (Table 1)

		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Not applicable (descriptive cohort)
17	Other analyses	Report other analyses done - e.g., analyses of subgroups and interactions, and sensitivity analyses	None performed
18	Key results	Summarise key results with reference to study objectives	Discussion, Main findings
19	Limitations	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	Discussion, Limitations (single-centre design, absence of a concurrent conventional-hospitalisation control group, low events-per-variable ratio, 30-day follow-up window)
20	Interpretation	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Discussion, Comparison with previous literature; Discussion, Prognostic factors; Discussion, Clinical implications
21	Generalisability	Discuss the generalisability (external validity) of the study results	Discussion, Limitations (single urban tertiary centre with defined catchment area)
22	Funding	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Statements and Declarations - Funding (no specific grant from any funding agency)

All STROBE items have been addressed in the final manuscript. An Editable Online Resource 1 (inclusion and exclusion criteria for HaH admission) accompanies this checklist. The completed STROBE checklist is provided in accordance with the EQUATOR Network recommendations for reporting of observational cohort studies.