

## Appendix 1: Search strategy (Medline-Ovid)

Ovid MEDLINE(R) ALL <1946 to November 04, 2024>

- 1 exp Change Management/ or exp Implementation Science/ 1809
- 2 ((Implement\* adj2 barrier\*) or (implement\* adj2 factor\*) or (implement\* adj2 enabler\*) or (implement\* adj2 facilitator\*) or (implement\* adj2 challenge\*) or (implement adj2 effectiv\*) or (barrier\* adj2 effectiv\*) or (Resistance\* adj2 change\*) or "Organizational challenge\*" or "organizational barrier\*" or "Logistical challenge\*" or "logistical barrier\*" or (Policy adj2 barrier\*) or "Procurement difficult\*" or (Regulatory adj2 obstacle\*) or (regulatory adj2 barrier\*) or "Policy support\*" or "Successful case stud\*" or adoption or faisability or acceptability or acceptance or preference\* or tolerance\* or resistance\* or (user\* adj2 experience\*) or (staff adj2 experience\*) or (health\* adj2 experience\*) or (health\* professional\* adj2 experience\*) or (patient\* adj2 experience\*) or (staff adj2 preference\*) or (health\* adj2 preference\*) or (health\* professional\* adj2 preference\*) or transition\* or switching).ab,kf,ti. 2310261
- 3 1 or 2 2311541
- 4 exp "Cost-Benefit Analysis"/ or exp "Economics, Hospital"/ or exp "Health Care Costs"/ or exp "Cost Control"/ or exp "Efficiency, Organizational"/ or exp "Costs and cost analysis"/ 302251
- 5 ((Cost\* adj2 analys\*) or "Financial implication\*" or (Cost\* adj2 effectiv\*) or "Economic evaluation\*" or "Lifecycle\* costing" or (Budget adj2 impact\*) or "Purchasing expense\*" or "Cost\* comparison\*" or "Cost-benefit\* analys\*" or "Financial evaluation\*" or "Economic impact\*" or "Investment\* analys\*" or "Budget assessment\*" or "Expense\* comparison\*" or "Economic benefit\*" or "Cost saving\*" or "financial gain\*" or "economic gain\*" or "Financial advantage\*" or "Financial sustainability" or "Financial viability" or "Economic efficiency" or "economic sustainability" or "economic viability" or "economic evaluation\*").ab,kf,ti. 273387
- 6 4 or 5 491111
- 7 exp " Impacts, environmental "/ or exp "Carbon Footprint"/ or exp "Greenhouse Effect"/ or conservation of natural resources/ or "conservation of energy resources"/ or "conservation of water resources"/ 1616650

8 ((Environment\* adj2 impact\*) or (environment\* adj2 consideration\*) or "Sustainability" or "Carbon footprint\*" or (Waste adj2 reduction\*) or "Resource conservation\*" or "Green healthcare" or "Eco-friendly practice\*" or "Life cycle assessment\*" or "life cycle evaluation\*" or "Environmental sustainability" or "Ecological footprint\*" or "Environmental comparison\*" or (Ecological impact\* adj2 assessment\*) or (Ecological impact\* adj2 evaluation\*) or "Environmental footprint\*" or "Greenhouse gas emission\*" or "Energy consumption\*" or "Water usage\*" or "Material waste\*" or "Environmental benefit\*" or "Ecological efficiency" or "waste management" or "waste generation\*").ab,kf,ti. 125454

9 7 or 8 1705648

10 exp Consumer Behavior/ or exp "Infection Control"/ or exp "Infection control practitioners"/ or exp "Cross Infection"/ or exp "Sterilization"/ or exp "Hygiene"/ 190159

11 ((infection adj2 control\*) or (infection adj2 prevention) or "hygiene standard\*" or (contamination adj2 risk\*) or "sterilization efficacy" or "cross-contamination prevention" or "safety comparison\*" or (pathogen adj2 transmission\*) or "protective efficacy" or "protective value\*" or "protective performance\*" or "Sterility maintenance" or (sterilization adj2 maintenance) or (laundry adj2 efficacy) or (laundry adj2 efficiency) or (infection adj2 risk\*) or "healthcare-associated infection\*" or (staff adj2 protection\*) or (healthcare professional\* adj2 protection) or "cross-contamination\*" or "healthcare associated infection\*" or "nosocomial infection\*").ab,kf,ti. 128081

12 10 or 11 288996

13 Equipment reuse/ 3267

14 ((reusable adj2 mask\*) or (sustainable adj2 mask\*) or (eco friendly adj2 mask\*) or (eco-friendly adj2 mask\*) or (washable adj2 mask\*)).ab,kf,ti. 149

15 ((reusable adj2 gown\*) or (sustainable adj2 gown\*) or (eco friendly adj2 gown\*) or (washable adj2 gown\*) or (reusable adj2 scrub\*) or (sustainable adj2 scrub\*) or (eco friendly adj2 scrub\*) or (washable adj2 scrub\*) or (reusable adj2 surgical garment\*) or (sustainable adj2 surgical garment\*) or (washable adj2 surgical garment\*) or (reusable adj2 surgical textile\*) or (washable adj2 surgical textile\*) or (sustainable adj2 surgical textile\*) or (eco friendly adj2 surgical textile\*)).ab,kf,ti. 50

- 16 ((reusable adj2 glove\*) or (sustainable adj2 glove\*) or (eco friendly adj2 glove\*) or (eco-friendly adj2 glove\*) or (washable adj2 glove\*)).ab,kf,ti. 17
- 17 ((reusable adj2 head cover\*) or (sustainable adj2 head cover\*) or (eco friendly adj2 head cover\*) or (eco-friendly adj2 head cover\*) or (washable adj2 head cover\*) or (reusable adj2 shoe cover\*) or (sustainable adj2 shoe cover\*) or (eco friendly adj2 shoe cover\*) or (eco-friendly adj2 shoe cover\*) or (washable adj2 shoe cover\*)).ab,kf,ti. 4
- 18 ((reusable adj2 face shield\*) or (sustainable adj2 face shield\*) or (eco friendly adj2 face shield\*) or (eco-friendly adj2 face shield\*) or (washable adj2 face shield\*) or (reusable adj2 face protection\*) or (sustainable adj2 face protection\*) or (eco friendly adj2 face protection\*) or (eco-friendly adj2 face protection\*) or (washable adj2 face protection\*)).ab,kf,ti. 3
- 19 ((reusable adj2 goggle\*) or (sustainable adj2 goggle\*) or (eco friendly adj2 goggle\*) or (eco-friendly adj2 goggle\*) or (washable adj2 goggle\*) or (reusable adj2 eye protection\*) or (sustainable adj2 eye protection\*) or (eco friendly adj2 eye protection\*) or (eco-friendly adj2 eye protection\*) or (washable adj2 eye protection\*)).ab,kf,ti. 1
- 20 ((reusable adj2 respirator\*) or (sustainable adj2 respirator\*) or (eco friendly adj2 respirator\*) or (eco-friendly adj2 respirator\*) or (washable adj2 respirator\*)).ab,kf,ti. 50
- 21 ((reusable adj2 protective equipment\*) or (sustainable adj2 protective equipment\*) or (eco friendly adj2 protective equipment\*) or (eco-friendly adj2 protective equipment\*) or (washable adj2 protective equipment\*) or (reusable adj2 PPE) or (sustainable adj2 PPE) or (eco friendly adj2 PPE) or (eco-friendly adj2 PPE) or (washable adj2 PPE) or (protective equipment\* adj2 recycling) or (protective equipment\* adj2 reusability) or (protective equipment\* adj2 reuse)).ab,kf,ti. 37
- 22 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 3515
- 23 ((supply chain\* adj2 impact\*) or (supply chain\* adj2 effect\*) or (supply network\* adj2 impact\*) or (supply network\* adj2 effect\*) or (retail chain\* adj2 impact\*) or (retail chain\* adj2 effect\*) or (distribution chain\* adj2 impact\*) or (distribution chain\* adj2 effect\*) or (supply channel\* adj2 impact\*) or (supply channel\* adj2 effect\*)).ab,kf,ti. 259
- 24 3 or 6 or 9 or 12 or 23 4529780

25      22 and 24      1997

## Appendix 2: Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
<b>TITLE</b>			
Title	1	Identify the report as a scoping review.	1
<b>ABSTRACT</b>			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	2
<b>INTRODUCTION</b>			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	4-6
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	6-7
<b>METHODS</b>			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	3
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	8-9
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	9-10
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Appendix 1
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	8-11
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	11-12
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	10-11
Critical appraisal of	12	If done, provide a rationale for conducting a critical	Not

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
individual sources of evidence§		appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	applicable
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	12
<b>RESULTS</b>			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	n/a
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	n/a
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	n/a
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	n/a
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	n/a
<b>DISCUSSION</b>			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	n/a
Limitations	20	Discuss the limitations of the scoping review process.	n/a
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	n/a
<b>FUNDING</b>			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	n/a

JB1 = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

\* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

*From:* Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473. [doi: 10.7326/M18-0850](https://doi.org/10.7326/M18-0850).