

Item 15: Data collection process

Specify the methods used to collect data from reports, e.g., including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools/Al used in the process.

Title	1	Title	S
Abstract	2	See tip sheets for Abstracts	S
Summary	3	Plain language summary	V
Open Science	4	Registration and protocol a. Registration information b. Accession of protocol c. Protocol amendments	
	5	Support	Y
	6	Competing interests	
	7	Availability of data and other materials	
Introduction	8	Rationale	
	9	Objectives	7
Methods	10	Followed guidelines	
	11	Eligibility criteria	
	12	Information sources	
	13	Search strategy	
	14	Selection process	
	15	Data collection process	
	16	Data items	
	17	Study risk of bias assessment	
	18	Measurement properties	
	19	Synthesis methods a. Eligibility processes b. Methods for synthesis c. Causes of inconsistency d. Sensitivity analyses	
	20	Certainty assessment	
	21	Formulating recommendations	
Results	22	Study selection a. Results of search and selection b. Excluded reports with reasons	
	23	OMI characteristics a. Characteristics of OMIs b. Interpretability aspects of OMIs c. Feasibility aspects of OMIs	
	24	Study characteristics	
	25	Risk of bias in studies	
	26	Results of individual studies	
	27	Results of syntheses a. Results of syntheses conducted b. Results of causes of inconsistency c. Results of sensitivity analyses	
	28	Certainty of evidence	
	29	Recommendations	
Discussion	30	Discussion a. Interpretation of results b. Limitations of evidence c. Limitations of review processes d. Implications	

Tips for reporting this item:

- Report how many reviewers collected data from each report, whether multiple reviewers worked independently or not (for example, data collected by one reviewer and checked by another), and any processes used to resolve disagreements between data collectors.
- Report any processes used to obtain or confirm relevant data from OMI developers or study investigators (such as how they were contacted, what data were sought, and success in obtaining the necessary information).
- See the <u>E&E</u> for specifics on what details should be reported if automation tools/AI, software, and decision rules were used, or if articles required translation.

Examples:

"For each included study, data were extracted independently by one reviewer. This was then verified for accuracy by a second reviewer. Where disagreements occurred, these were resolved through discussion. Data were extracted onto a bespoke data extraction table."

Smith TO & Harvey K. Psychometric properties of pain measurements for people living with dementia: a COSMIN systematic review. *Eur Geriatr Med*, 2022;13(5):1029-1045. https://doi.org/10.1007/s41999-022-00655-z.

"Data extraction was undertaken independently by two reviewers using a pre-prepared data extraction sheet, with consensus reached through discussion. The data extraction sheet was first piloted (on two development paper articles and two measurement property articles), before being revised for further use. Extraction was informed by tools developed by COSMIN on reporting guidance: https://www.cosmin.nl/tools/guideline-conducting-systematic-review-outcome-measures/."

Carlton J & Powell PA. Measuring carer quality of life in Duchenne muscular dystrophy: a systematic review of the reliability and validity of self-report instruments using COSMIN. *Health Qual. Life Outcomes*, 2022;20(1):1-33. https://doi.org/10.1186/s12955-022-01964-4.

From: Elsman EBM, Mokkink LB, Terwee CB, Beaton D, Gagnier JJ, Tricco AC, et al. Guideline for reporting systematic reviews of outcome measurement instruments (OMIs): PRISMA-COSMIN for OMIs 2024. J Clin Epidemiol, 2024, https://doi.org/10.1016/j.jclinepi.2024.111422.

More resources are available at www.prisma-cosmin.ca.