PRISMA - COSMIN OUTCOME Measurement Instruments

Full report

Item 27a: Results of syntheses – Results of syntheses conducted

Present results of all syntheses conducted. For each measurement property of an OMI, present: (a) the summarized or pooled result and (b) the overall rating against quality criteria.

Title	1	Title
Abstract	2	See tip sheets for Abstracts
Summary	3	Plain language summary
Open Science	4	Registration and protocol *a. Registration information* *b. Accession of protocol* *c. Protocol amendments*
	5	Support
	6	Competing interests
	7	Availability of data and other materials
Introduction	8	Rationale
	9	Objectives
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 results of all syntheses described in the protocol and all syntheses conducted that were not pre-specified.
- If qualitative synthesis was conducted, report the summarized result (e.g., a range of the results, the number of hypotheses confirmed).
- If meta-analysis was conducted, specify: 1) the pooled estimate and its precision (such as standard error or 95% confidence/credible interval), 2) measures of statistical heterogeneity (such as τ2, I2, prediction interval), and 3) pooled sample size across studies included.
- Report the overall rating against quality criteria used at a synthesis level.
- If an OMI is multi-dimensional, report results per subscale relevant to the outcome domain of interest.

Examples:

"Construct validity via hypothesis testing was assessed in three studies for the PROMIS-PF item bank and in two studies for the UE [upper extremity] subdomain. For convergent validity and known-groups validity together, 12 out of 15 hypotheses (80%) for unique correlations/group differences were correct for the PF item bank, and 4 out of 5 (80%) for the UE subdomain. Correlations for some instruments (i.e. HAQ-DI, SF-36-PF10 and MHQ-ADL) were determined in more than one study. Since these showed consistent positive results in study populations of adequate sample size, even without statistical pooling these correlations clearly confirmed the hypothesis and contributed to the high quality evidence for sufficient construct validity for both the PROMIS-PF item bank and the UE subdomain."

Abma IL et al. Measurement properties of the Dutch–Flemish patient-reported outcomes measurement information system (PROMIS) physical function item bank and instruments: a systematic review. *Health Qual. Life Outcomes,* 2021;19(1):1-22. https://doi.org/10.1186/s12955-020-01647-y.

See the E&E for more examples.

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.