

Planning a Systematic Review: Using PRISMA-P

By Eileen Wafford, Research Librarian

Teams conducting a systematic review have access to various tools and resources to help manage the multi-step process. A key tool is the [PRISMA-P checklist](#), which contains three sections and 17 essential items to consider and report when planning your review. Using PRISMA-P ensures you develop a publication-ready protocol that will meet journal submission and peer reviewer expectations. Here, we highlight key sections and selected items from the PRISMA-P checklist as well as a number of resources to take your systematic review planning to the next level.

Section 1: Administrative Information

Item 2 in Section 1 of the PRISMA-P checklist requests protocol registration information. Teams can register their protocol free on [PROSPERO](#), an international protocol registry. Other registration options are journals such as [Systematic Reviews](#) and institutional repositories such as Northwestern Medicine's [DigitalHub](#).

Section 2: Introduction

The introduction section presents the rationale (Item 6) and objectives (Item 7) of the review. Teams should consider the [PICO](#) (patient/population/problem, intervention/exposure, comparator, and outcomes) framework to identify key elements of their rationale and objectives. PICO is similarly useful in identifying information for the eligibility criteria (Item 8) reported in the next section.

Section 3: Methods

As systematic reviews attempt to identify, appraise and synthesize all the empirical evidence, it is important to search multiple information sources (Item 9). Along with MEDLINE via [PubMed](#) or [Ovid](#), teams should search other databases with in-depth coverage in the relevant discipline. Examples are:

- [The Cochrane Library](#) – connects to a collection of databases with high-quality evidence.
- [Embase](#) – contains strong coverage of research on drug events, drug efficacy studies, medical devices, and disease-related research from international sources.
- [PsycINFO](#) - provides abstracts and citations in behavioral and social sciences research.
- [CINAHL Plus with Full Text](#) – covers topics related to nursing and allied health.

Review teams should also consider incorporating grey literature, which [Cochrane defines](#) as “reports published outside of traditional commercial publishing,” to minimize [publication bias](#). Sources of grey literature include dissertations and clinical trial protocols, such as those found in [clinicaltrials.gov](#). Galter's [bibliographic databases and grey literature sources](#) page lists additional information sources.

Item 11b of the PRISMA-P checklist asks for details on the screening process. [Rayyan](#) and [Covidence](#) are web-based tools designed to facilitate blind screening by multiple reviewers. Rayyan is free while Covidence requires teams to purchase a plan. Covidence also offers the ability to assess the risk of bias along with customizable data extraction forms.

There is no standard data extraction form; however, the Cochrane Collaboration provides [recommendations](#) and templates that can be modified for each review. Teams can create their forms using Microsoft Excel or Google forms. Just remember to cite the source and describe the data extraction plan on Item 11c of the PRISMA-P checklist.

The [Cochrane Collaboration's approach to bias](#) helped shape the PRISMA reporting guidelines. This approach distinguishes bias (Item 14) from quality (Item 17). The [Tools for Reviewers](#) page on the Reporting Research and Evaluating Studies GalterGuide lists several risk of bias checklists. Teams can use the [Grading of Recommendations, Assessment, Development and Evaluations \(GRADE\)](#) approach to assess the quality of the included studies.

Galter Health Sciences Library and Learning Center offers the class, [Conducting a Systematic Review: Part 2 - Tools & Resources](#), which explores the tools presented in more depth. Systematic review teams can also meet with their [liaison librarian](#) for more information about these tools and the systematic review process.

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