



Description

Clear, transparent, and reproducible research isn't just an ideal — it's a necessity. Yet, without structured guidelines, crucial details can be overlooked, affecting credibility and fruitful peer review outcomes. That's where reporting guidelines come in. Developed to standardize and strengthen research manuscripts, these guidelines ensure that studies are complete, transparent, and ready for publication.







The <u>EQUATOR Network</u> (Enhancing the QUAlity and Transparency Of health Research) plays a pivotal role in promoting these standards, offering essential resources for researchers. Among the most widely <u>recognized guidelines</u> are PRISMA, CONSORT, ACCORD, and STROBE, each tailored to specific study designs. Let's explore them in detail.

Key Reporting Guidelines for Efficient Research Reporting

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses

Purpose: <u>PRISMA</u> is designed to improve the reporting of systematic reviews and other types of evidence synthesis, additionally <u>PRISMA-ScR</u> has been designed for scoping reviews.

The PRISMA 2020 statement includes:

- A 27-item checklist to ensure comprehensive reporting
- An expanded checklist for additional guidance
- A flow diagram to map the study selection process
- An "Explanation and Elaboration" document to clarify each checklist item



CONSORT: Consolidated Standards of Reporting Trials

Purpose: <u>CONSORT</u> provides a structured framework for clear and complete reporting of randomized controlled trials (RCTs).

The CONSORT 2010 Statement includes:

- A 25-item checklist covering key aspects of trial reporting
- Six structured sections: Title and Abstract, Introduction, Methods, Results, Discussion, and Other Information
- Extensions like CONSORT Outcomes 2022, which add sub-items to improve reporting on outcomes and statistical methods

ACCORD: Accurate Consensus Reporting Document

Purpose: <u>ACCORD</u> provides a structured framework for clear and complete reporting of consensus methods used in biomedical research and clinical practice.

The ACCORD Statement includes

- A comprehensive checklist with 36 reporting items applicable to various consensus methods, including simple meetings and systematic techniques like Delphi.
- Applicable to a wide range of health-related activities, such as clinical practice guidelines, diagnostic guidelines, and policy formulation.

STROBE: Strengthening the Reporting of Observational Studies in Epidemiology

Purpose: <u>STROBE</u> provides a structured framework for clear and complete reporting of observational studies in epidemiology, enhancing transparency and reproducibility.

The STROBE guideline includes:

- A 22-item checklist covering key aspects of observational study reporting, including study design, methods, results, and discussion.
- Extensions and adaptations for specific study types, such as cohort, case-control, and cross-sectional studies.

These guidelines enhance the reliability of research by ensuring rigorous documentation and strengthening evidence-based decision-making. Differentiating among them is crucial, as each serves distinct research purposes. Moreover, certain studies require specific guidelines mandated by journals, and following the appropriate standards ensures methodological accuracy, enhances transparency, and improves the validity of findings within the study's specific context.

Comparison of the Reporting Guidelines



The following table provides a comprehensive comparison of PRISMA, CONSORT, ACCORD, and STROBE, highlighting their focus, key features, checklist items, study types, and primary goals:

Guideline	Focus	Key Features	Checklist Items	Study Type	Primary Goal
PRISMA	Systematic Reviews & Meta-Analyses	Flow diagram	27	Systematic Reviews, Meta- Analyses	Improve the transparency, completeness quality of reposystematic rev
CONSORT	Parallel group randomized controlled trials	Flow diagram, emphasizes trial design and outcomes, extension for specific trial types	25-37 (varies by extension)	Randomized Controlled Trials	Clear Reportir Design
ACCORD	Specialized Consensus Documents	Ensures comprehensive reporting in specific contexts	35	Consensus Documents, Specialized Studies	Clarity in Cons
STROBE	Observational studies in epidemiology	Covers various observational study types	22	Cohort, Case- Control, Cross- Sectional Studies	Enhance Repo

While their specific focus areas differ, they share a common goal of strengthening research integrity and reliability. The below infographic offers few tips for implementing these guidelines.





Essential Tips for Reporting Research

- Identify the Relevant Guideline using resources like the EQUATOR Network for a comprehensive list of guidelines.
- Keep the checklist handy while structuring your manuscript.
- Describe study design, data collection, and analysis methods in enough detail for replication.
- Avoid vague descriptions—use standardized terms (e.g., PICO framework for clinical studies).
- Avoid selective reporting—negative or non-significant results should also be included.
- Use appropriate tables, figures, and flowcharts (e.g., PRISMA flow diagram for systematic reviews).
- Before submission, cross-check your manuscript with the guideline checklist.

Reference management tools help ensure citations align with journal requirements.



Stick to the recommended manuscript structure: Introduction, Methods, Results, and Discussion (IMRAD)

Discuss potential biases, missing data, and limitations in your study

Avoid vague descriptions—use standardized terms (e.g., PICO framework for clinical studies).

<u>PRISMA</u>, CONSORT, ACCORD, and STROBE guidelines are not just tools for compliance; they are instruments for excellence in research reporting. By integrating these guidelines early in the research process, researchers can streamline submissions, enhance the credibility of their work, and contribute to a more rigorous and transparent scientific literature. As the scientific community continues to evolve, embracing these standards will be crucial for fostering a culture of integrity, transparency, and reproducibility.

Category

- 1. Reporting Research
- 2. Trending Now



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