

CovCo Writing Workshop

Session Three: The Methods Section



Structured Manuscripts

Title and Abstract: Summarizes your work

Introduction

- Highlights gaps in current scientific knowledge
- Explains the focus of your manuscript

Methods: Describes what you did in enough detail that someone else could reproduce your study

Results: Objectively share your findings, often using tables or graphs

Discussion

- Interprets your findings in the context of the literature and limitations
- Suggests scientific, clinical, or operational next steps

Declarations: Provides transparency to support ethical conduct of researcher



Content of methods section

- ✓ Describes what you did in enough detail that someone else could reproduce your study
- ✓ Helps readers assess the validity of your study → Are the study conclusions valid?
- ✗ Do not include limitations – these are reported in the discussion

Structure of methods section

1. Study setting
2. Study design and population
3. Data collection/Data source
4. Data analysis
5. Ethics statement

Structure of methods section

1. **Study setting**

Where did the study occur?

2. Study design and population

3. Data collection/Data source

4. Data analysis

5. Ethics statement

What is special to your setting that will be important for the reader to interpret your results?

- Standard of care?
- Description of intervention/program?

Structure of methods section

1. Study setting
- 2. Study design and population**
3. Data collection/Data source
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Design of the study

- Cross-sectional, cohort, time series, randomized trial...
- Retrospective or prospective
- Selection of participants:
 - Recruitment procedures
 - Inclusion/exclusion criteria
 - Target sample size

Structure of methods section

1. Study setting
2. Study design and population
- 3. Data collection/Data sources**
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Primary data collection

- Methods: Surveys? Interviews? Biologic analysis of samples?
- Cite sources for data collection tools or laboratory equipment

Secondary data analysis

- Description of original data source
- Description of specific variables used

Data quality processes

- Training data collectors
- Validation
- Double entry



Structure of methods section

1. Study setting
 - Define key variables
2. Study design and population
 - Outcomes
 - Exposures
3. Data collection/Data sources
4. **Data analysis**
 - Describe the statistical methods used for **each set** of analyses described in the results section
 - Type of summary statistics
 - Types of statistical tests
5. Ethics statement

Structure of methods section

1. Study setting
2. Study design and population
3. Data collection/Data sources
 - Details of consent process
4. Data analysis
 - Information on ethical reviews, including name of ethical review boards and protocol numbers
5. **Ethics statement**

Style of methods section

- Uses sub-headings for each sections
- Use past tense
- Use active voice
 - Active voice: “We analyzed the data.”
 - Passive voice: “The data were analyzed.”

Methods section overview

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Structure

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Style

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