

## ADMINISTRATION

HEADING	ELEMENTS
Study name	Study name and any abbreviation. If the study is a clinical trial the title should reflect that. Project name and number
Investigators	Names and institutions of investigators Indicate the principal Investigator. Name of contact person and address for correspondence including e-mail address.
Study countries	Provide the names of the countries where the research took place.
Ethics	Provide names of institutional review boards (IRB) that reviewed and approved the research. If research was exempt from IRB review indicate this and the reason for the exemption
Funding	Indicate sources of funding
Oversight committees	Provide the name of the committee, data safety monitoring board (DSMB), technical advisory group (TAG), or other oversight body if applicable, and the names of the chairs and the names of the committee members and their institutional affiliations
Abstract	Provide a brief abstract describing the research. Use a structured format. The abstract should include: <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Results</li> <li>• Methods</li> <li>• Discussion</li> </ul>
Key words	Provide up to eight keywords that reflect the content of the report. Avoid use of abbreviations.

## PROBLEM FORMULATION

HEADING	ELEMENTS
Background/introduction	Provide a concise statement of the purpose and scope of the study. <ul style="list-style-type: none"> <li>• Explain why the topic is important if this is not obvious.</li> <li>• Summarize previous research on the topic. Include citations of both published and gray literature.</li> <li>• Explain why previous work is not sufficient. Indicate how this study fills gaps in existing knowledge, addresses unresolved issues, overcomes shortcomings of previous research or contributes to new knowledge.</li> <li>• If appropriate, provide the conceptual framework or theoretical underpinnings of the study and rationale for it.</li> <li>• If appropriate, provide the rationale for the methodological orientation of the study.</li> <li>• If appropriate, provide the rationale for the groups studied.</li> <li>• Describe the context of the study in detail to provide information relevant to how the findings may or may not be applicable to other settings.</li> </ul>
Objectives	Primary study objective, question, or hypothesis. Secondary study objective(s), question(s), or hypothesis(es).

# METHODS

HEADING	ELEMENTS
Design	Describe the study design and comparison groups (if any).
Sampling	<ul style="list-style-type: none"><li>• Describe the population under study and the rationale for choosing this population if not obvious.</li><li>• Describe the sampling frame used.</li><li>• Describe the type of sample drawn (e.g. simple random, stratified, systematic, probability-proportional-to-size, purposeful, snowball, etc.), the methodology used, and the rationale.</li><li>• Describe how the sample size needed for statistical testing was calculated. Include power calculations.</li><li>• Describe any non-participation or non-inclusion among sample approached and document reasons.</li></ul>
Sources of data and methods of data collection	<ul style="list-style-type: none"><li>• Describe all sources of data used.</li><li>• Describe how instruments were developed and attach all instruments used in data collection.</li><li>• Describe the unit(s) of analysis.</li><li>• Describe in detail how, where, when and by whom data were collected and how field settings or timing may have influenced data collected in that context.</li></ul>
Variables and measures	<ul style="list-style-type: none"><li>• Describe any standard measures or instruments used and provide information on their reliability and validity.</li><li>• If new measures or indexes were developed (e.g. through data reduction techniques), sufficient detail should be provided to make clear how the variables were constructed and how their reliability and validity was assessed.</li><li>• When transcripts of recordings or notes are used, the method to classify/code response categories or characterize actions should be clearly described.</li></ul>
Data analysis	<ul style="list-style-type: none"><li>• Describe the procedures used for analysis including software packages.</li><li>• Describe the analytic techniques/test statistics used.</li><li>• For qualitative studies, describe how data were organized into analytic categories and how any constructed analytic concepts/domains have been used, if applicable.</li></ul>

## RESULTS AND CONCLUSIONS

HEADING	ELEMENTS
Issues in data collection	<ul style="list-style-type: none"> <li>• Disclose any issues that arose in data collection and processing (e.g. missing data, losses to follow up, violations of statistical assumptions, possible sources of bias etc.) and how these were handled in cleaning and data analysis.</li> <li>• Describe the quality of data sources such as clinic records and the context of their use.</li> </ul>
Presentation of results	<ul style="list-style-type: none"> <li>• Use tables and graphs to summarize information. In general, tables are better than graphs for giving structured numeric information, whereas graphs are better for indicating trends and making broad comparisons or showing relationships. Tables and graphs should, ideally, be self-explanatory. The reader should be able to understand them without detailed reference to the text. The title should be informative, and rows and columns of tables or axes of graphs should be clearly labeled. The source of data should be given at the bottom.</li> <li>• For each statistical result there should be included a measure of the relation between variables (e.g. odds ratio, regression coefficient), an index of uncertainty (e.g. confidence interval), and a qualitative judgment as to the importance of the finding.</li> <li>• For qualitative analyses, describe the processes throughout data collection of identifying categories of events, actions, subgroups of people, or other substantive categories by which data were organized and patterns of observations identified. The process of developing descriptions, claims and interpretations should be clearly described and illustrated. Evidence to support each claim should be presented. Practices used to develop and enhance the evidence for each claim should be described including the search for disconfirming evidence and alternative interpretations. Interpretive commentary should provide a deeper understanding of the claims—e.g. how and why the patterns described may have occurred; how they relate to one another; how they support or challenge theory and findings from previous research. Use direct quotations from informants to illustrate points made.</li> <li>• Report unexpected findings and how that affected analysis.</li> </ul>
Presentation of conclusions	<ul style="list-style-type: none"> <li>• Summarize the main findings and their interpretation, clearly linking them to the purpose/ hypothesis of the study presented above.</li> <li>• Indicate alternative explanations for the findings and any possible sources of bias.</li> <li>• Indicate to whom the results in this context may be generalized, or the limits to generalization.</li> <li>• Discuss how the results might be applied in practice as well as the policy and program implications.</li> </ul>
Ethical considerations	<ul style="list-style-type: none"> <li>• State which institutional review boards approved the study or if the study was deemed exempt.</li> <li>• Report research results in a way that honors consent agreements with human subjects and any other agreements with respect to gaining access to research sites, data or materials.</li> <li>• Include statements about potential conflicts of interest.</li> </ul>
Dissemination of findings	<ul style="list-style-type: none"> <li>• Discuss how findings were shared with the research population and other key stakeholders.</li> </ul>