DATA ANALYSIS PLAN

**For Observational Studies**

Last updated 25 November 20XX

Research School of Population Health

ANU College of Medicine, Biology & Environment

**Note**

This data analysis template is a modified version of the template created by the **Master of Philosophy (Applied Epidemiology) teaching team** at the Australian National University.

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| --- | --- | --- | --- | --- | --- | --- |
| **Reference No.** |  | | | **Study name** |  | |
| **Date of plan** |  | | | **Chief investigator** |  | |
| **Person conducting analysis** |  | | | **Telephone** |  | |
| **Mobile Number** |  | | | **Email** |  | |
| **Analysis team members** |  | | | | | |
|  | | | | | | |
| **Background to the study and analysis**  **(Please use plain language)** | | | | | | |
| Provide an overview of the necessary background for the study including evidence of what is already known in the area of study and what the gaps are in the literature. Finish with a clear stated aim of the project. | | | | | | |
| **Number study participants** | |  | | **Duration of study** | |  |
| **Study research**  **question** | |  | | | | |
| **Specific hypothesis under study** | |  | | | | |
| **Endpoints or**  **outcomes of interest** | |  | | | | |
|  | | | | | | |
| **Data details**  **(Please complete all that apply)** | | | | | | |
| **Study type** | | |  | | | |
| **Data sets used** | | |  | | | |
| **Analysis package** | | |  | | | |
| **Study population** | | |  | | | |
| **Inclusion/exclusion criteria for participants** | | |  | | | |
| **Exposure variables** | | |  | | | |
| **Outcome measures** | | |  | | | |
| **Covariates** | | |  | | | |
| **Sub-groups** | | |  | | | |
| **Approach to dealing with missing data** | | |  | | | |

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| **Interpretation** |
| Detail how you will interpret the results in the context of your stated hypothesis. I.e., if the  results do/do not meet your hypothesis, what will you conclude? A concept map (see below) may assist with this. |

# Concept map or directed acyclic graph

Drawing a diagram of the ways in which the exposure might be related to the outcome will help to visualise your hypotheses as well as serving as a basis for clearly communicating this to your collaborators. The diagram should include the possible confounders or mediators of the relationship. This will require good knowledge of the background to the study.

Directed acyclic graphs are a type of causal graph. Further information about these graphs can be found through a Google search and in the paper “Causal Diagrams for Epidemiologic Research” by Sander Greenland, Judea Pearl, and James M. Robins (Epidemiology 1999;10:37-4)

# Dummy tables & Charts

Dummy tables and charts are empty skeleton tables and charts which show how the results will be presented but which do not contain any data/results.