# Clinical science or epidemiology abstract

Hello! Welcome to this “fill in the blank” approach to writing a clinical science or epidemiology abstract. The first part is to define key terms to later place in the abstract. In the following bullet points, please define these key terms. Then, please plug your key terms in the correct spots in the abstract that follows.

* **DISEASE OR CONDITION** – This is the “umbrella” thing that is driving your research that your PRIMARY OUTCOME is trying to approximate. The DISEASE OR CONDITION might be coronary heart disease (CHD), heart failure (HF), chronic kidney disease (CKD), etc.
  + Your **DISEASE OR CONDITION** is: DISEASE OR CONDITION 🡨Click to edit
* **PRIMARY OUTCOME -**  This is how you will approximate this DISEASE OR CONDITION (or at the very least an event related to this disease or condition). Your PRIMARY OUTCOME will be defined using a variable or variables in your database. The PRIMARY OUTCOME might be incident CHD events, incident HF hospitalizations, or end-stage renal disease.
  + Your **PRIMARY OUTCOME** is: PRIMARY OUTCOME
* **EXPOSURE OF INTEREST** – This is the continuous, ordinal, nominal, dichotomous/binary variable that will be the dependent variable in your analysis. It might be a biomarker (e.g., CRP), a co-existing medical condition (e.g., prevalent hypertension), something from a survey (e.g., depression [based upon a high PHQ-2 or 9 score]), or something else. You will describe how this exposure is constructed.
  + Your **EXPOSURE OF INTEREST** is: EXPOSURE OF INTEREST
* **ANALYTICAL SAMPLE** – Your dataset likely comes from a parent dataset (i.e., large existing study). Your ANALYTICAL SAMPLE is a subset of that parent database, which is defined by INCLUSION and EXCLUSION CRITERIA. You will want to present the
  + **INCLUSION CRITERIA** FOR ANALYTICAL SAMPLE: VERY BRIEF INCLUSION CRITERIA
    - Things that make it reasonable to include a participant. E.g., adults will follow-up data.
  + **EXCLUSION CRITERIA** FOR ANALYTICAL SAMPLE: VERY BRIEF EXCLUSION CRITERIA
    - Things that make it inappropriate to include a participant. E.g., adults with prevalent CHD.
  + Your **ANALYTICAL SAMPLE** is: ANALYTICAL SAMPLE
    - This is a very brief combination of the INCLUSION and EXCLUSION CRITERIA. E.g., adults without prevalent CHD.

## Background:

***Describe DISEASE OR CONDITION and its relevance to public health (note: these bold/italicized/underlined headings should be deleted later)****:* DISEASE OR CONDITION Keep ≥1 of the following (1of4) ‘affects’ then list proportion of the population(2of4) ‘costs’ then dollars per year(3of4) ‘is the’ then describe its rank for death or another health outcome of interest(4of4) ‘adversely affects’ then describe high risk group that it affects(other) other association that isn’t otherwise provided here.

***Describe why EXPOSURE OF INTEREST relates to the DISEASE OR CONDITION***: EXPOSURE OF INTEREST Choose ≥1 of the following, delete those unused (1of3) is present at higher/lower levels among those with the DISEASE OR CONDITION. (2of3) is associated with greater risk of [bad outcome related to DISEASE OR CONDITION] (3of3) is known to affect risk of other condition related to the DISEASE OR CONDITION in [some way](other) other association that isn’t otherwise provided here.

***Describe the gap in knowledge in the relationship of EXPOSURE OF INTEREST and the DISEASE OR CONDITION****:* It is unclear if Keep ONLY 1 of the following (1of3) higher/lower levels of EXPOSURE OF INTEREST relates to DISEASE OF INTEREST in cross sectional/prospective data (2of3) EXPOSURE OF INTEREST precedes development of/worsens outcomes related to DISEASE OF INTEREST (3of3) EXPOSURE OF INTEREST mediates excess burden of DISEASE OF INTEREST among [at risk group](other) other association that isn’t otherwise provided here.

## Objective and hypothesis:

We sought to descriptive linking term like ‘estimate’, ‘compare’, or ‘tabulate’ risk of PRIMARY OUTCOME among ANALYTICAL SAMPLE by measure (e.g., ‘level’, ‘status’) of EXPOSURE OF INTEREST. We hypothesized that hypothesis.

## Methods:

***Describe the parent study/database from which the ANALYTICAL SAMPLE was derived***: Name of the parent study/database included number of participants and brief eligibility criteria of the parent study (not the eligibility of the analytical sample), like ‘3,101 adults aged ≥45’ enrolled at description of enrollment sites [e.g., # of hospitals], geographic locations of enrollment sites [e.g., in New England] between dates of enrollment.

***Describe the ANALYTICAL SAMPLE using eligibility criteria (note: don’t put the N for analytic sample here)***: This analysis included name of parent dataset participants with VERY BRIEF INCLUSION CRITERIA and no VERY BRIEF EXCLUSION CRITERIA.

***Describe how the EXPOSURE OF INTEREST was quantified/measured***: EXPOSURE OF INTEREST was descriptive linking term such as ‘measured’, ‘surveyed’, ‘assessed’ using tool for measurement, such as ‘ELISAs’, ‘PHQ2 surveys’, or ‘billing data’ collected timing of assessment like ‘at baseline’ or ‘in 2008’.

***Describe the analysis used***: Method like logistic regression, negative binomial/modified Poisson regression, Cox proportional hazard model, or whatnot estimated the measure from that method, like odds ratio (OR), risk ratio (RR), hazard ratio (HR), or whatnot of PRIMARY OUTCOME by quantification of the EXPOSURE OF INTEREST [e.g., by each 1-SD higher level of CRP or quartile of CRP]. Also, describe any *major* subgroups of interest. A manuscript will typically go in-depth on multiple subgroups, which you might not have space for in this study.

## Results:

***Brief descriptive statistics***: Among the N for ANALYTICAL SAMPLE participants in the analytical sample (mean [SD] age # years (SD ##), #% women, #% of RACE OR ETHNIC GROUP), median follow-up was duration of follow-up (delete if cross-sectional). There were # (%) PRIMARY OUTCOME events; if time-to-event analysis (e.g., Cox proportional hazards model), present as # events per 100, 1,000, or 10,000 person-years.

***Primary outcome***: Describe the results of your model (e.g., OR, RR, HR, or whatnot) overall and by any *major* subgroups described above. If you are including a table with these data, you might avoid presenting the raw data in the text here to minimize redundancy. Instead, just highlight general observations in the analysis, e.g., “Incident CHD events were higher by quartile of CRP”.

## Conclusions:

***Super brief summary (avoid causal terms like ‘increased’ and ‘decreased’ unless this was an RCT and the EXPOSURE OF INTEREST was randomized)***: Among ANALYTICAL SAMPLE, association such as ‘higher levels of’, ‘lower levels of’ EXPOSURE OF INTERESTED was/was not associated with greater/lower risk of PRIMARY OUTCOME.

***Hardest sentence to write – what’s the interpretation or next steps based on these findings? This sentence varies based upon the context of the study and your results. The writer of this guide recommends against stating that ‘more research is needed’, since it’s cliché.***

Perhaps you found an association between a biomarker and an outcome? You might comment on possible biological processes, such as ‘Inflammation might represent a modifiable pathway among those at risk for myocardial infarction.’ Perhaps you didn’t observe an association in your analytical sample that has been described in different populations? You might comment on differences in the subgroup, such as “The lack of observed association between depression and incident hypertension in this population of Black US adults might indicate complexities of mood disorder and other sociodemographic factors in this high-risk population.”