

臺北醫學大學數據處健康資料加值暨統計中心

PICO 填寫可參考

The PICO Framework

The PICO framework is the most commonly used model for structuring clinical questions because it captures each key element required for a focused question. PICO stands for:

- Patient or problem
- Intervention or exposure
- Comparison or control
- Outcome(s)

The table below illustrates ways in which problems, interventions, comparisons and outcomes vary depending on the type (domain) of your question.

Question Type	Patient or Problem	Intervention or Exposure	Comparison	Outcome Measures
Therapy	The patient's disease or condition.	A therapeutic intervention, ex., a drug, surgical intervention, medical advice.	Standard care, another intervention, or placebo.	Ex: Mortality rate, complications, disease recurrence.
Diagnosis	The target disease or condition.	A diagnostic test or procedure.	The current "reference standard" test for the problem.	Measures of the test utility, ex., sensitivity, specificity.
Prognosis	The main prognostic factor or clinical problem in terms of its severity and duration.	The intervention or exposure of interest, ex. a disease, drug, or time.	Standard care, another intervention, or placebo for interventions. Absence of exposure for exposures. May not be applicable,	Ex: Rates of survival, mortality or disease progression.

Question Type	Patient or Problem	Intervention or Exposure	Comparison	Outcome Measures
			particularly if exposure of interest is time.	
Etiology or Harm	Your patient's risk factors, current health disorders or general health condition	The intervention or exposure of interest, ex. a disease, drug, or time, including some indication of the strength (dose) of the risk factor and the duration of the exposure.	Standard care, another intervention, or placebo for interventions. Absence of exposure for exposures. May not be applicable.	Ex: Disease incidence, rates of disease progression or rates.
Prevention	The patient's risk factors and general health condition.	A preventive measure, e.g., a medication or a lifestyle change.	Absence of preventive measure. May not be applicable.	Ex: Disease incidence, mortality rate, days lost from work.

When constructing your PICO question, a few important points to bear in mind:

- Your patient is a member of a *population* as well as a person with (or at risk for) a health *problem*.
 - Factors to consider include age, sex, comorbid conditions, past medical history, socioeconomic status or other demographic variables, as these factors may impact your patient's risk level.
 - You need to assess what reasonable clinical study population your patient could be part of. For example, if your patient is a 73 year old woman, "73 year old women" or "women in their 70s" is too specific because it is highly unlikely that clinical researchers would design a study that would exclusively enroll women in their 70s. Depending on the nature of your question, a reasonable population might be something like "post-menopausal women" or "older adults."
- Outcomes must be measurable and ideally measure clinically important outcomes rather than surrogate markers such as laboratory test results.

The Question Statement

Once you have identified the main elements of your question using the PICO format, it will be easier to write your question statement. To improve the flow of the question statements, we have placed the comparison after the outcome in the examples below.

Question Type	Patient or Problem	Intervention or Exposure	Outcome	Comparison
Therapy	In patients with hypertension and at least one additional cardiovascular disease risk factor	Does tight systolic blood pressure control	Lead to lower rates of myocardial infarction, stroke, heart failure, and cardiovascular mortality	Compared to conservative control?
Diagnosis	Among asymptomatic adults at low risk of colon cancer	Is fecal immunochemical testing (FIT)	As sensitive and specific for diagnosing colon cancer	As colonoscopy?
Prognosis	Among adults with pneumonia	Do those with chronic kidney disease (CKD)	Have a higher mortality rate	Than those without CKD?
Etiology or Harm	Are women	With a history of pelvic inflammatory disease (PID)	At higher risk for gynecological cancers	Than women with no history of PID?
Prevention	Among adults with a history of myocardial infarction	Does adherence to a mediterranean diet	Lower risk of a second myocardial infarction	Compared to those who do not adopt a mediterranean diet?

References

1. Centre for Evidence-Based Medicine (CEBM). Asking focused questions [Internet]. University of Oxford, Oxford UK; [cited 2021 Jul 1]. Available from: <https://www.cebm.ox.ac.uk/resources/ebm-tools/asking-focused-questions>
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From Mount Sinai

(https://libguides.mssm.edu/ebm/ebp_pico#:~:text=The%20PICO%20framework%20is%20the,Intervention%20or%20exposure)