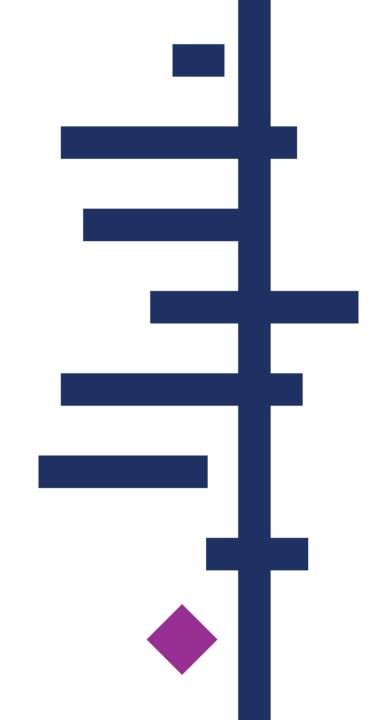


Planning your review at protocol stage: recent developments in methods

Trusted evidence. Informed decisions.

Better health.





### **Background reading**

Sue E Brennan, Miranda S Cumpston, Rebecca Ryan, Joanne E McKenzie. InSynQ (Intervention Synthesis Questions) checklist and guide for developing and reporting the questions addressed in systematic reviews of interventions. Version 1.0, updated 29 April 2023. Available from InSynQ.info

Higgins JPT, Thomas J, Chandler J, et al, eds. Cochrane Handbook for Systematic Reviews of Interventions version 6.3 (updated February 2022). Available from www.training.cochrane.org/handbook. Cochrane; 2022.



### The first step

Formulate your review question by specifying your PICO in advance. PICO stands for Population, Interventions, Comparators and Outcomes.

OR

Tell us what you want to know



# How to formulate a FINER question

Feasible

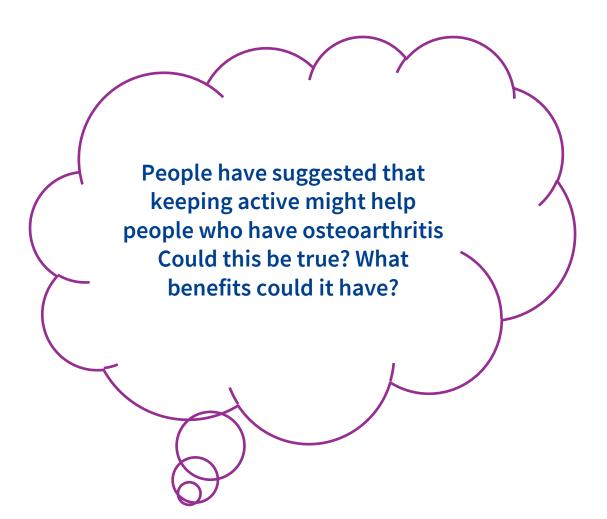
Interesting

Novel <

Ethical <

Relevant 🔽







For people with osteoarthritis of the knee, what is the effect of exercise compared to no exercise on pain, physical and psychosocial function, and quality of life?

### Population: osteoarthritis of the knee

Intervention: exercise (any type – static or dynamic, weight bearing or non-weight bearing, aerobic or non-aerobic, low or high force; any mode of delivery; any duration, frequency or intensity)

Comparator: no exercise (placebo, usual care, no intervention, wait list)

Outcome: any health outcome



### Considering scope at the review planning stage

Questions in medicine are becoming more complex which may tempt authors to embark on too much when planning a systematic review. It is essential that reviews are targeted to specific questions relevant to stakeholders and are scoped correctly so that the reviews are not only feasible but can be delivered in a timely manner.

This web clinic will address how the scope of a review can be set in the review planning stage through considerations of PICO inclusion criteria, planning analyses, and structuring of 'Summary of Findings' tables.



#### Presenter Bio

Leslie Choi, Methods and Evidence Synthesis Team, Cochrane. In this role, Leslie supports author teams in the development of priority systematic reviews that may have a high impact in terms of policy influence. He has been an author of multiple Cochrane systematic reviews, particularly in the topic of tools for controlling mosquitoes for the prevention in malaria.

### Sign up

Thursday, 1 June 2023, 08:00 UTC [Check the time in your time zone] SIGN UP HERE





### The second step

Specify your Population, Intervention, Comparator and Outcome for each synthesis that you are planning. By synthesis we mean either a meta-analysis, or another type of synthesis where the data are not amenable to meta-analysis.

OR

Tell us how you will break your question down



## The population





### The intervention and comparators





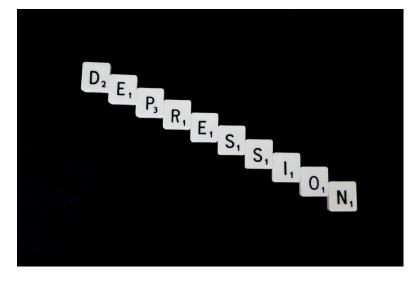


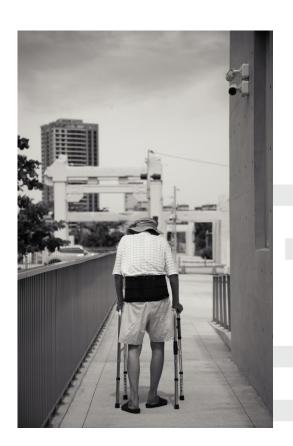




### The outcomes











### **Broad synthesis questions**

#### Question 1

Effect of exercise vs. no exercise on pain



### Criteria for inclusion in synthesis 1.1

- P. osteoarthritis of the knee
- I. exercise (as per review PICO)
- C. no exercise (as per review PICO)
- pain intensity (any measure; first follow-up end of intervention period)

#### Question 2

Effect of exercise vs. no exercise on physical function



### Criteria for inclusion in synthesis 1.2

- P. osteoarthritis of the knee
- I. exercise (as per review PICO)
- C. no exercise (as per review PICO)
- physical function (any measure; first follow-up end of intervention period)

Question X. each outcome of interest

Effect of exercise vs. ...



### **Broad groupings**

What is the effect of any type of exercise versus no exercise on pain for people of all ages?

What is the effect of Mental Health First Aid versus no intervention on mental well-being in all settings?

What is the effect of medical/surgical masks versus no masks on the prevention of all viral illnesses?



### Narrower groupings

. Narrower synthesis questions/grouping

#### Question 1.1

Effect of aerobic exercise vs. no exercise on pain



#### Criteria for inclusion in synthesis 1.1

- P. osteoarthritis of the knee
- any aerobic exercise\* (e.g. Tai Chi, cycling, running, strength/resistance, aqua-aerobics, multicomponent; any mode, duration etc)
- C. no exercise (as per review PICO)
- pain intensity (any measure; first follow-up end of intervention period)

#### Question 2.1

Effect of aerobic exercise vs. no exercise on physical function



#### Criteria for inclusion in synthesis 2.1

- P. osteoarthritis of the knee
- I. any aerobic exercise (as per 1.1)
- C. no exercise (as per review PICO)
- physical function (any measure; first follow-up end of intervention period)

### Question X. each outcome of interest

Effect of aerobic exercise vs. ...

#### Question 1.2

Effect of non-aerobic exercise vs. no exercise on pain



#### Criteria for inclusion in synthesis 1.2

- P. osteoarthritis of the knee
- any non-aerobic exercise\* (e.g. general physical activity; strength/resistance; flexibility; gait, balance, and functional (task) training; yoga; multicomponent
- C. no exercise (as per review PICO)
- pain intensity (any measure; first followup end of intervention period)

#### Question 2.2

Effect of non-aerobic exercise vs. no exercise on physical function



### Criteria for inclusion in synthesis 2.2

- P. osteoarthritis of the knee
- any non-aerobic exercise (as per 1.2)
- C. no exercise (as per review PICO)
- physical function (any measure; first follow-up end of intervention period)

#### Question X. each outcome of interest

Effect of non-aerobic exercise vs. ...



### Narrower groupings

What is the effect of any type of exercise versus no exercise on pain in people over 75?

What is the effect of Mental Health First Aid on anxiety when delivered in education settings?

What is the effect of medical/surgical masks versus no masks for the prevention of influenza?



### Plan your time points!

At longest follow-up?

At end of the intervention?

At 6 months, one year, two years after randomization?

How will you deal with multiple timepoints within one 'window?



### Why plan syntheses in advance?

Prevents ad-hoc decision making after searches have been completed

Helps to formulate a search strategy

Ensures that you only extract data that will be relevant

Helps to formulate plans for analysis and any subgroup analyses, but be careful!