



# Developing research questions

# Choosing a research idea

- Choose something you are **interested in**, that's fascinating, **and** relevant for your specialty ...
  - You'll need that personal motivation when things become challenging

# Choosing a research idea

- How exactly am I supposed to come up with a project that has never been done before?
- How exactly am I supposed to come up with a project that I can actually do?

# Asking the right question

- Hardest part of research discipline is asking the right **question(s)**
- Problems that motivate us to do research are generally enormous



# Asking the right question

- Vital to define clear (and feasible) research aim
- Risk if not well defined:
  - **collect data that will not be used**
  - **don't collect data that will be useful**

# Asking the right question

Sackett and colleagues suggest following components should guide question:

- **Population**
- **Intervention**
- **Comparison**
- **Outcome**
- **Timing**

# Asking the right question

An example:

- (**Population**) for patients with advanced cancer; (**Intervention**) does physical exercise; (**Comparison**) when compared to standard care; (**Outcome**) result in better quality of life and physical function; (**Timing**) over 8 weeks?

The  
Oncologist®

Symptom Management and Supportive Care

Physical Exercise for Cancer Patients with Advanced Disease: A  
Randomized Controlled Trial

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# Research question: the 'population'

- Population defined as a 'patient', 'population', 'condition', even a 'service'
- Issue is how **narrow** or **broad** to frame your problem? **Let's go back to exercise...**
  - Too narrow - scope of study very limited
  - Too broad - potentially enormous variation



# Research question: the 'intervention'

- Term 'intervention' very broad
- Can imply a treatment, a service, diagnostic test, screening tool, outcome measure etc.
- Interventions frequently complex – which bit matters to you and the specialty?

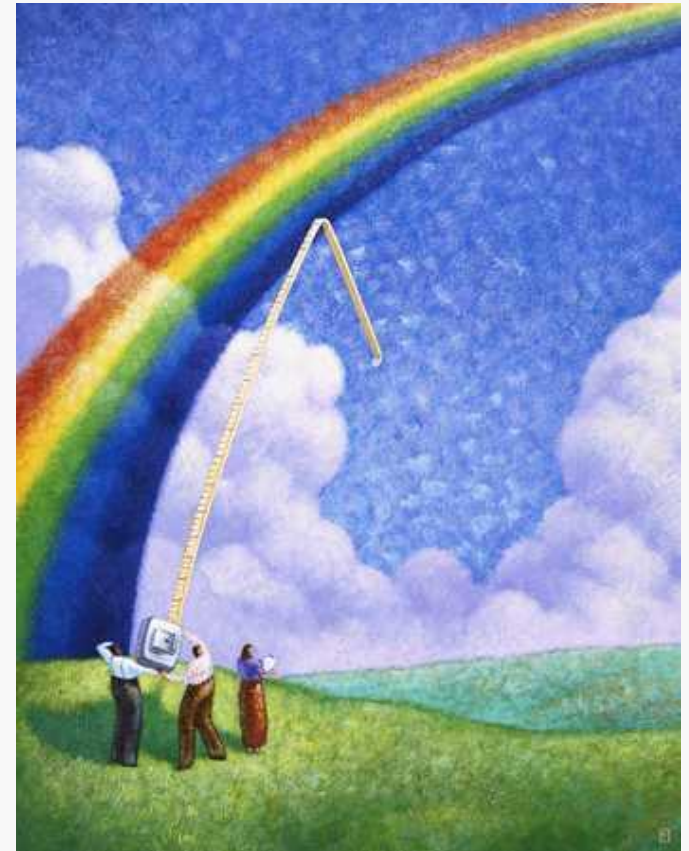
**think of your practice**

# Research question: the 'comparison'

- Defined as an *alternative intervention of interest*:
  - usually standard care
  - best available treatment
    - finding reasonable comparators can be hard

# Research question: the 'outcome'

- The 'measurable' study finding
- Maybe easy to define e.g. reduction in fatigue or distress
- However, frequently complex/ multifaceted e.g. how does one measure spiritual distress, restlessness, quality of life, well being?



# Research question: the 'timing'

- Feasible
- How long will it take for an effect to be present?
- Will any effect be maintained?

# To start...

- Pick a topic
- Narrow the topic
- List some questions
- Pick a question
- Narrow the question