How to ask an answerable question for health care and health research: a workshop for consumers
Thursday 20 Oct, 14:00-15:30h

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Agenda

- Introductions – 5 min
- Slides – 20 min
  - What is the problem?
  - Asking an answerable question.
  - Q and A
- Small groups - 30 min
  - Divide into pairs + facilitator
  - Reword 5 questions on handout with your group
- Report back – 15 min
- Discussion – 10 min
- Evaluation - 10 min
Understanding EBHC: A Foundation for Action

The Learning Curve

1. Ask
2. Align
3. Acquire
4. Appraise
5. Apply
6. ACT
What is the problem?

- Consumers asked to join review groups, peer review systematic reviews, suggest questions for topic prioritization.
- Consumers may not know how to formulate questions properly so their questions don’t get asked.
- The point of consumer involvement is to obtain their perspective, so we want consumer questions and topics included.
## Classifying question types: Overview

<table>
<thead>
<tr>
<th>Question</th>
<th>Classification/Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>How can this problem be prevented?</td>
<td>Prevention</td>
</tr>
<tr>
<td>Will detecting this problem early, before symptoms, make a difference in my health?</td>
<td>Screening</td>
</tr>
<tr>
<td>What should be done to treat this problem?</td>
<td>Therapy</td>
</tr>
<tr>
<td>Will there be any negative effects (of an intervention)?</td>
<td>Harm</td>
</tr>
<tr>
<td>How good is this test at detecting this problem?</td>
<td>Diagnostic accuracy</td>
</tr>
<tr>
<td>What is the likely outcome of this problem?</td>
<td>Prognosis</td>
</tr>
<tr>
<td>What proportion of the population is newly diagnosed with this problem each year?</td>
<td>Incidence</td>
</tr>
<tr>
<td>What proportion of the population is currently living with this problem?</td>
<td>Prevalence</td>
</tr>
<tr>
<td>What causes this problem?</td>
<td>Etiology</td>
</tr>
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Classifying question types: Intervention questions

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Not intervention questions

Questions submitted to AHRQ for systematic reviews

1. What is the percentage of acute inflammation among appendices removed for acute abdominal pain that are microscopically validated?

2. What is the indication for IVC filter placement amongst different ethnicities?

3. What has been learned about people with CP and their later motor status (into young adulthood), as measured by the Gross Motor Function Classification System for Cerebral Palsy (GMFCS)?

4. What we can learn from children with autism exiting the school system (many of whom did not have intensive early intervention)? What can we do for them going forward? How can we prepare for the increased number of people with autism who will soon be adults?
An intervention question, but....

- **What can I take to feel better?**
  - Needs a description of what’s wrong and to whom the question applies
  - Needs information about options to be considered
  - Needs description of the outcome being sought

- What’s wrong with this question?
Components of an “answerable” clinical question

- **P**: Patients or populations
- **I**: Intervention/exposure
- **C**: Comparison group(s)
- **O**: Outcome
Formulating the question

**Types of people (P)**

- Define condition or disease, including explicit diagnostic criteria
- Population and setting of interest (age, race, sex, community, hospital, outpatient)
Step 1 -- Formulating the question (cont’d)

Types of *interventions* or exposures (I)

- What? (treatment, diagnostic, preventive, other?)
- When? How often?
- Dose?
- For how long?
Formulating the question (cont’d)

Types of comparison groups (C)

- For trials:
  - Placebo
  - Standard therapy
  - No treatment
Outcomes of interest (O)

- Important to consumers, provider
  Examples:
  - Symptom relief
  - Cure
  - Length of survival
  - Behavior change
Is drug therapy associated with long-term morbidity and mortality in older persons with moderate hypertension?

- **Intervention**: ACE Inhibitors, Angiotensin Receptor Antagonists, Beta Adrenergic Blockers, Combined Alpha and Beta Blockers, Calcium-Channel Blockers, Diuretics, Central Sympatholytics, Direct Vasodilators
- **Outcomes**: >1 year
- **Population Setting**: >60 yrs old outpatients
- **Condition of Interest**: Fatal and Non Fatal strokes, Fatal and Non Fatal Coronary Heart Disease, Cardiovascular Events, Total Mortality
- **Systolic**: 140-179
- **Diastolic**: 90-109
Do *exercise* interventions prevent *falls* in *community dwelling* or *institutionalized people*?

**Intervention**: Balance Training, Mobility Training, Physical Therapy, Strength Training, Thai Chi

**Outcome**: Number of falls, Injurious falls, Hospitalization, Fracture, Death

**Setting**: ≥65 yrs old outpatients, Community care, Institutional care, Nursing homes

**Population**: ≥65 yrs old outpatients, Community care, Institutional care, Nursing homes
Now let’s practice

Our advocacy group is provides advice on drug safety. We are trying to get the scoop on the COX-2 inhibitors: Have side effects been found with all drugs in the class? What is the size of the side effect problem? Do the cardiovascular side effects only apply to a subgroup of patients or are there some for whom the risk is very low?
How effective are COX-2 inhibitors in relieving pain and is there associated harm?

- People = individuals with pain
- Intervention = drugs in the COX 2 inhibitor class (Vioxx, Celebrex, xyz, xyz)
- Outcomes = pain relief, adverse events
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