Developing Clinical Questions for your HelpDesk Answer Writing Project

A. The goal is to develop 2 to 3 questions that meet the following criteria:

1. Lead to clinically relevant and useful answers.
2. Succinctly stated in one sentence.
3. Sufficiently narrow focus so your HDA Evidence Based Answer and Evidence Summary together are less than 900 words. This corresponds to no more than 5 references.
4. Sufficiently broad so that there are at least 2 references.

B. As you begin this process, it will be helpful to take a look at published HelpDesk Answers so you have a vision of the end product. Please read the following HelpDesk Answers:

Diagnostic Question: What is the best noninvasive test of cure to confirm eradication of H pylori infection?

Therapeutic Question: What is the best treatment for ingrown toenails?

You can also read more in the EBP Archives.

C. Remember the PICO acronym?

Patient or Population

Intervention

Comparison

Outcome

Although this framework may not work perfectly in all situations, it's a good place to begin.

1. Start with a patient and develop a ***succinct*** description of a group of patients similar to your patient.
2. What intervention are you interested in? This could be a treatment, diagnostic test, screening tool, etc.
3. What do you want to compare this intervention to? What is the alternative? This could be another treatment, placebo, no treatment, or a reference standard test.
4. What outcome or outcomes are you interested in? What do you hope the intervention will accomplish? This could be mortality, cure, resolution of symptoms, diagnosis of a condition, etc.

D. Let's walk through an example.

Scenario – You see a patient in clinic who you determine has vasovagal syncope. The episodes have become sufficiently common and bothersome that your patient wants to know if there are any treatments. You remember seeing patients on beta-blockers for vasovagal syncope but you also remember some of those patients continuing to have syncope. You want to know if beta-blockers are effective or not.

1. Population – **Patients with vasovagal syncope**
   It is helpful to think of other terms for the condition such as neuromediated syncope which may be preferred by search engines. We could narrow the question to adults, children, males, or females if we felt that was relevant.

2. Intervention – **Beta-blockers**

3. Comparison – **Placebo or no treatment**
   We are most interested in blinded comparisons to placebo because that would factor out the placebo effect of unblinded treatment with beta-blockers. We will accept, however, unblinded comparisons to no treatment.

4. Outcome – **Improvement**
   Sometimes we aren't picky what is better, just that our patient receives some noticeable benefit. Yes, a decrease in syncope is probably what we are after in this example but we may not want to not limit ourselves to just that outcome in case there are other outcomes studied. We are most interested in patient-oriented outcomes. These are outcomes related to our patients living longer or better such as decreased mortality, decreased symptoms, etc. These are opposed to disease-oriented outcomes which refer to measurements such as blood pressure or LDL cholesterol. Patients are not directly aware of disease-oriented outcomes. Another step is required to get to a patient-oriented outcome that patients would be aware of. An example would be lower blood pressure leading to decreased strokes. However, it cannot be automatically inferred that a disease-oriented outcome will lead to a patient-oriented outcome.

To put it altogether: **In patients with neuromediated (vasovagal) syncope, are beta-blockers more effective than placebo or no treatment in improving outcomes?**

We can make this more succinct:

> It can be assumed that if we ask "Are beta-blockers effective…", that we mean, "…are beta-blockers more effective than placebo or no treatment…"
>
> If we are interested in any beneficial outcome, we probably don't have to state that in the question. Our answer can state the outcomes that were investigated.

Final question:
Are beta-blockers effective for treatment of neuromediated (vasovagal) syncope?