

# Developing and Using Poll Questions

Interactive Lecture



AMERICAN ACADEMY OF  
FAMILY PHYSICIANS

## Why do We Use Poll Questions in our CME Presentations?

- Emphasize key learning points
- Provide clinical decision making opportunities for enhanced learning
- Assess the baseline competencies of your audience
- Keep the audience engaged

The optimal use of poll questions should be designed to address the key learning points of your presentation.

When writing your poll questions, keep in mind:

- the session's Learning Objectives
- your Best Practices Recommendations slide
- key take home messages.

The Poll Questions should be meaningful to the learner, and reflect what happens in clinical practice.

The results of your audience's answers to your questions will give you a good idea of how in-depth you may need to go with a particular learning point or topic area. Make each question a "teachable moment" – you may find that it may be as important to talk about why NOT to do something as it is TO DO, or that you may have to adjust the scope of emphasis.

The use of the Poll Questions throughout your presentation provides the learner:

- a self-assessment and feedback on their current practices
- areas they need to improve
- a mixed learning environment
- a springboard for further discussion
- helps to maintain alertness and improve learning

# What Type of Questions Should I Write?

## Competency vs. General Knowledge

Examples of general knowledge questions:

- How many Americans are infected with HIV?
- Lower back pain affects what percentage of the population?

The following set of slides will give you examples of Patient-specific questions. For your interactive lectures, the emphasis should be on patient-specific and case-based questions, as they are more effective to contributing to practice competencies than are General Knowledge Questions.

# What Type of Questions Should I Write?

- **Clinical Vignettes/Case-based questions**

A 65 year old smoker complains of dyspepsia, weight loss, early satiety, and occasional nausea and vomiting. Which would be your initial diagnostic method of choice?

- A. Upper GI endoscopy
- B. CT of the upper abdomen
- C. Single-contrast upper GI barium swallow
- D. Endoscopic ultrasonography

There are a variety of the types of questions you can use, depending on the goal you want to achieve.

Developing questions around a clinical vignette or case study helps you to know about the learners' current scope of practice. For the learner, this type of question helps them to identify what areas of change they may need to make in practice. Framing these questions emphasizes "What would you do?" These types of questions also advance the plot of your presentation, and represent true clinical decision making.

You may want to use 1 patient case throughout your presentation, going through multiple clinical scenarios with the same patient. This approach reflects what happens in practice and provides meaningful opportunities to improve patient care. When using case-based questions, remember to always review not only the correct answer, but WHY it is correct.

Use of case-based questions may include:

- treatment options
- making a diagnosis
- decisions on screening tools
- any other clinical decision made in practice.

## Elements of a Clinical Vignette

- Age and Gender
- Site of care
- Presenting complaint
- Duration of symptoms
- Patient history/Family history
- Physical findings
- Diagnostic studies
- Initial treatment
- Subsequent findings

To build your case-based question, you will build your patient vignette using as much of this information as appropriate for the question. The vignette should give enough information to the learner to answer the questions, but not include unnecessary distractions or unnecessary information.

# Elements of a Clinical Vignette

A **23 year-old woman** comes **to the office** because of a **slow growing mass on her neck** for the **past 3 months**. **Exam shows a 4 cm palpable, freely movable nontender mass just below the angle of the mandible**. **Ultrasonography** indicates that the mass is cystic. Which of the following is the most likely diagnosis?

- A. Branchial Cyst
- B. Lymphangioma
- C. Parathyroid adenoma with cystic change
- D. Thyroglossal duct cyst

**Age and Gender**

**Site of care**

**Presenting complaint**

**Duration of symptoms**

**Patient history/Family history**

**Physical findings**

**Diagnostic studies**

**Initial treatment**

**Subsequent findings**

Here is an example that uses many of these elements.

## What Type of Questions Should I Write?

- Assessing level of ***confidence***

Please rate your level of confidence in your ability to improve your Obstructive Sleep Apnea patients' adherence to CPAP treatment:

- A. Extremely confident
- B. Very confident
- C. Somewhat confident
- D. Not very confident
- E. Not at all confident

Using a confidence rating question can also let you know how in-depth you need to go towards a specific topic. Confidence questions may be especially useful when approaching an area that may be controversial, new and emerging, or an area that may be generally unfamiliar to primary care physicians.

## What Type of Questions Should I Write?

- Current use of a ***strategy***

How often do you educate your patients with insomnia about sleep hygiene?

- A. Every time
- B. Almost every time
- C. Sometimes
- D. Almost never
- E. Never

Assessing a current practice strategy gives you an opportunity to emphasize the importance of that strategy or practice, and current guideline recommendations. Strategies can address any clinical practice such as screening, procedures, patient education, and treatment.

## What Type of Questions Should I Write?

- Current use of a ***strategy***

Please indicate your level of agreement with the following statement:  
I routinely administer intra-articular injections in my practice.

- A. Strongly Agree
- B. Agree
- C. Somewhat Agree
- D. Disagree
- E. Strongly Disagree

Here is another example of how to assess a current use of strategy in practice.

## What Type of Questions Should I Write?

- Open-ended questions
- Response is a few words

In 1 to 2 words, identify any additional labs you would order to continue the work-up for this patient's anemia.

Attendees will be able to type a response to open-ended questions using their web enabled device. You will be able to see their responses on the presentation screen. This will work best if the question requires a response with only a few words, as opposed to a complete sentence. We recommend you clarify this with your audience when asking an open ended question.

## How Many Questions?

- 1 question for every 10 minutes of content; 4-5 questions for a 50 minute presentation
- Each question takes about 1 minute
- Place questions prior to the content they are addressing
- Several teaching points can be made with 1 question

Each question will take about a minute, which includes time to read the questions, read the answer options, wait time for the audience to answer, and then identifying the correct answer.

When questions are interspersed throughout the presentation, each question should be placed directly before the content the question is addressing. This will help to reinforce the educational message and key learning point.

The way the audience answers the question will also let you know how you might need to cover that content. For example, if only a minority got the correct answer, or answers are evenly distributed to all the options, a deeper dive into the subject matter might be needed.

Keep in mind that you can make several teaching points with 1 question. For example, if you are giving a talk on Women's Health, you can develop a question that touches on all 3 gynecological cancers; endometrial, ovarian, and cervical.

## How Many Answer Options?

- The answer options that are not correct: Distractors
- Four answer options are optimal; A, B, C, D
- 1 correct, or best, answer per question
- Distractors should be logical misconceptions of the right answer

Each question should have ONLY 1 correct or best answer. Distractors should be logical misconceptions of the correct answer.

*Distractors that are out of context, obviously wrong, tricky, or silly should be avoided.*

## A Few Do's

Do keep distractors:

- Similar in length, format and detail
- Parallel in the category of information
- In logical order, example: if they are number values, list them least to most

Formatting your answer options in the same way, with consistent format, detail and category of information will help to avoid having the learner pushed to, or pulled from, a specific answer. For example, a response option with a lot more detail tends to lead the learner to that choice.

## A Few Don'ts

### Avoid:

- *All of the Above* and *None of the Above*
- Multi-options: A and B; A, B, and C, etc.
- Silly answer options
- Trick Questions
- Overly complex language
- Question with: *All of the following except* and *Which of the following are not*
- Stereotyping in Patient-specific questions

*All of the Above*, *None of the Above*, or *multiple options* answer options are distracting to the learner. When they get to *All of the Above* or *None of the Above* or the multi-answer option, it forces them to go through the whole answer set again. Also, question writers tend to use these *ONLY* when that is the correct answer, which is a dead giveaway to the answer.

If you are only giving 4 answer options, they should all be viable answers. We want to assess the learners' competencies, not their test taking abilities. Try and keep it simple.

*Which of the following except* and *Which of the following are not* questions can get confusing for the reader, and cause a potential for answering the question incorrectly.

And lastly, be sensitive to patient specifics so that they do not fall into stereotyping, such as having an HIV patient be Haitian or talking about teen bullying and have the patient be a young black male.

## Additional Information

- For an excellent tutorial on question writing developed by the National Board of Medical Examiners, go to <http://download.usmle.org/IWTutorial/intro.htm>

The use of Poll Questions within your presentation will serve a variety of functions, including promoting higher level thinking and learning for the learners, helping you to assess current clinical practices, and engaging the audience. Well written questions will help in this process. For more information on Poll Questions, please go to this link.