

Without Face-to-Face Limits

Using Online Modules to Expand Specialty Focused Residency EBM Instruction for the ACGME Milestone Project

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ACGME BACKGROUND

Accreditation Council for Graduate Medical Education (ACGME) Milestone Project

ACGME Milestones:

- Are competency-based developmental outcomes that can be demonstrated progressively by residents and fellows.
- Provide a rich descriptive framework for defining clinical competency.
- Guide curriculum development.
- Support better self-directed assessment and learning.
- Each specialty develops a detailed Milestone framework based on ACGME's 6 core competencies.
- Evidence Based Medicine (EBM) Milestones are included in the Practice-based Learning and Improvement competency.

UNC-CH MODULES DEVELOPED

EBM Review and Practice: Asking Questions and Acquiring Evidence

- for Anesthesiology Residents
- for Surgical Residents
- for Pediatrics Residents
- for Obstetrics & Gynecology Residents
- for General Medical Residents

guides.lib.unc.edu/medicalresidents

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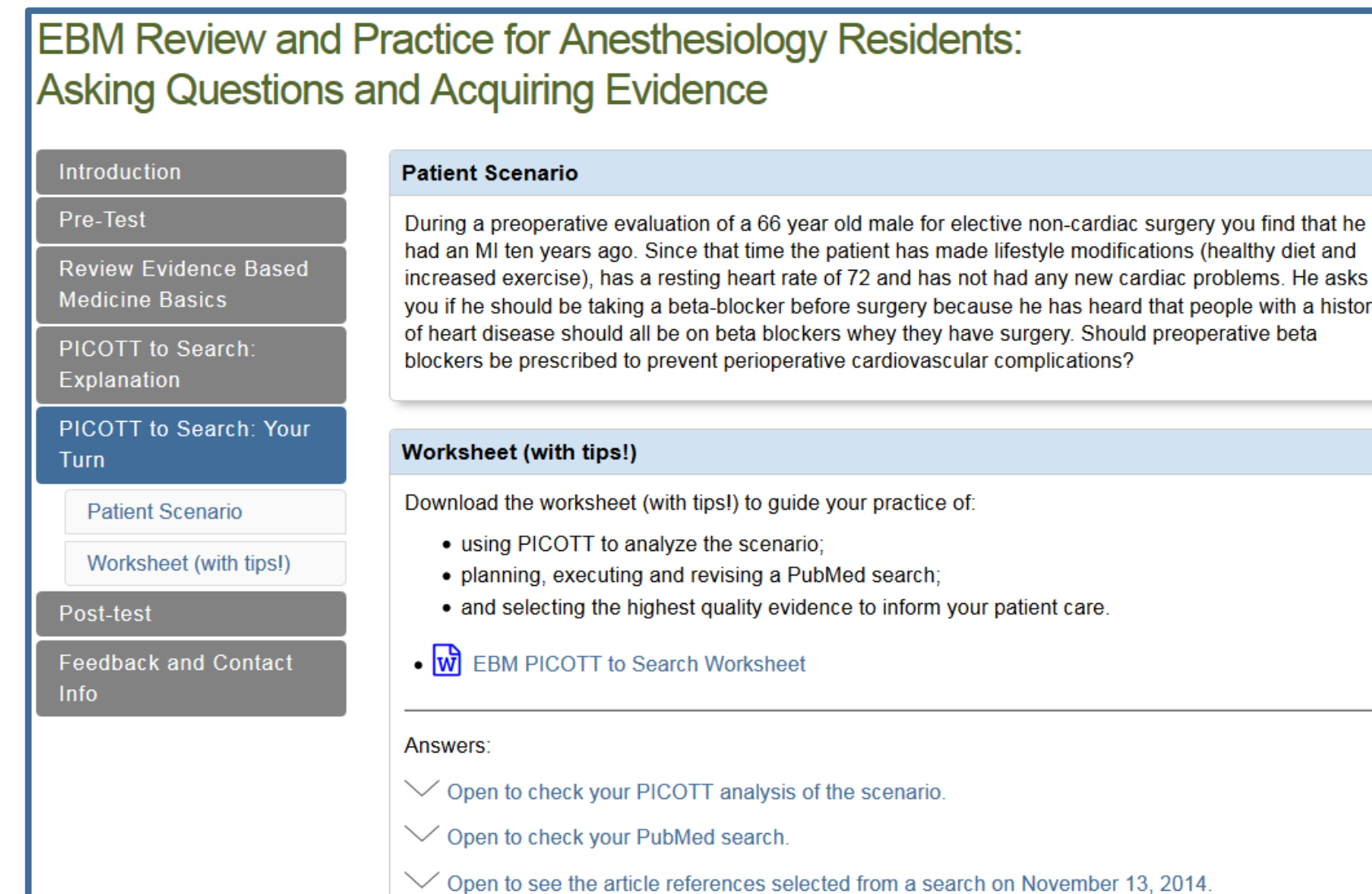
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OBJECTIVES

- Extend current staff capacity for Milestone focused EBM instruction by creating online module templates that can be adapted to meet the specific needs of more residency programs.
- Test effectiveness, quality and usability of sample modules.

EBM Review and Practice for Anesthesiology Residents: Asking Questions and Acquiring Evidence



Patient Scenario

During a preoperative evaluation of a 66 year old male for elective non-cardiac surgery you find that he had an MI ten years ago. Since that time the patient has made lifestyle modifications (healthy diet and increased exercise), has a resting heart rate of 72 and has not had any new cardiac problems. He asks you if he should be taking a beta-blocker before surgery because he has heard that people with a history of heart disease should all be on beta blockers when they have surgery. Should preoperative beta blockers be prescribed to prevent perioperative cardiovascular complications?

Worksheet (with tips!)

Download the worksheet (with tips!) to guide your practice of:

- using PICOTT to analyze the scenario;
- planning, executing and revising a PubMed search;
- and selecting the highest quality evidence to inform your patient care.

• [EBM PICOTT to Search Worksheet](#)

Answers:

- ✓ Open to check your PICOTT analysis of the scenario.
- ✓ Open to check your PubMed search.
- ✓ Open to see the article references selected from a search on November 13, 2014.

METHODS

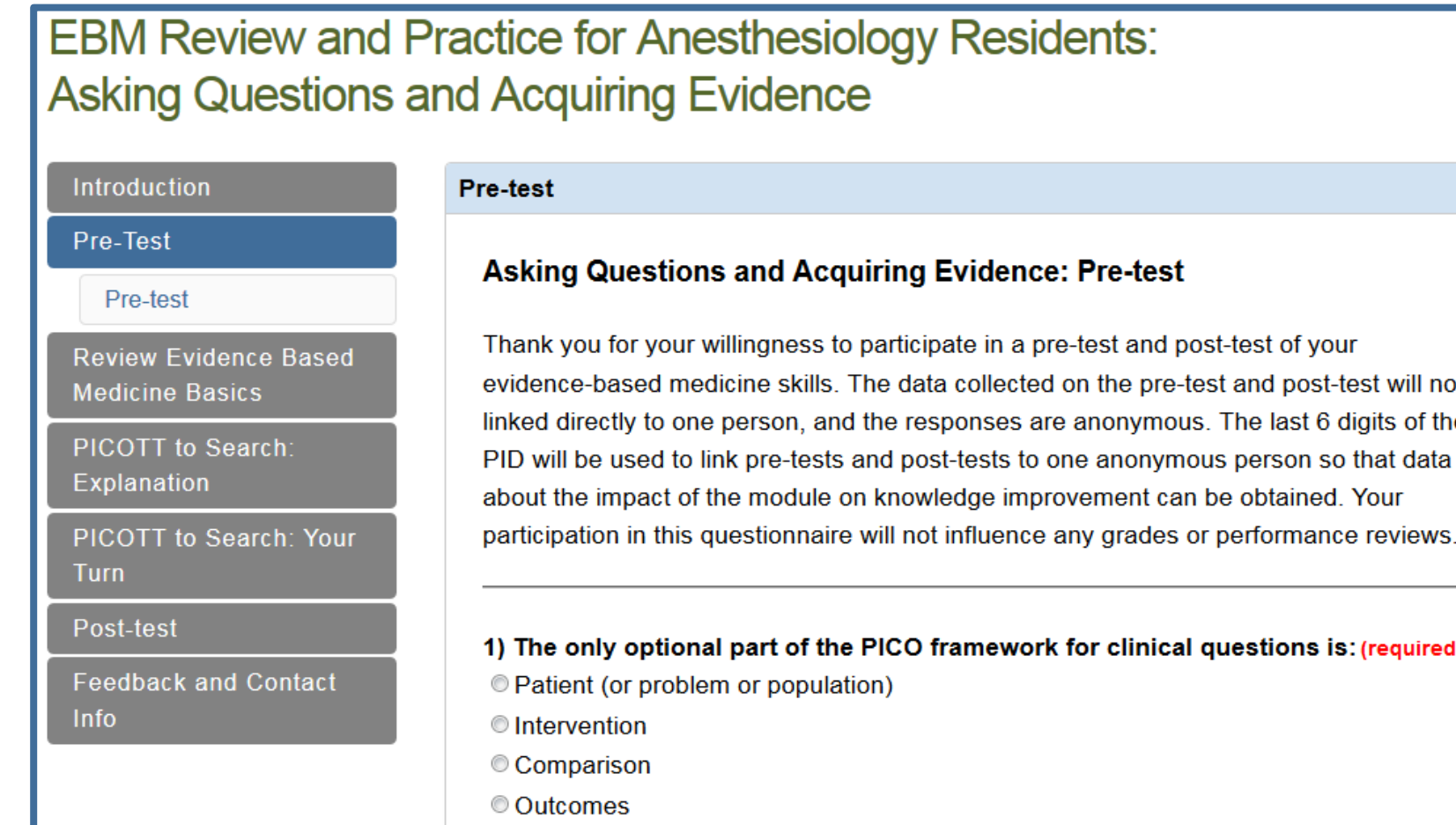
Online templates were developed in LibGuides v.2. Content was modeled on the 2014 face-to-face EBM instruction session for the Clinical Base Year anesthesiology residents.

LibSurveys was used to integrate a pre-test and post-test with 5 knowledge and 2 self-perception questions.

The pre-test and post-test were completed by 10 residents in the anesthesiology session to provide baseline data to compare with future online-only learners.

These residents were asked to review the online version of the instruction and answer a brief survey about ease of use and preferred learning mode.

EBM Review and Practice for Anesthesiology Residents: Asking Questions and Acquiring Evidence



Pre-test

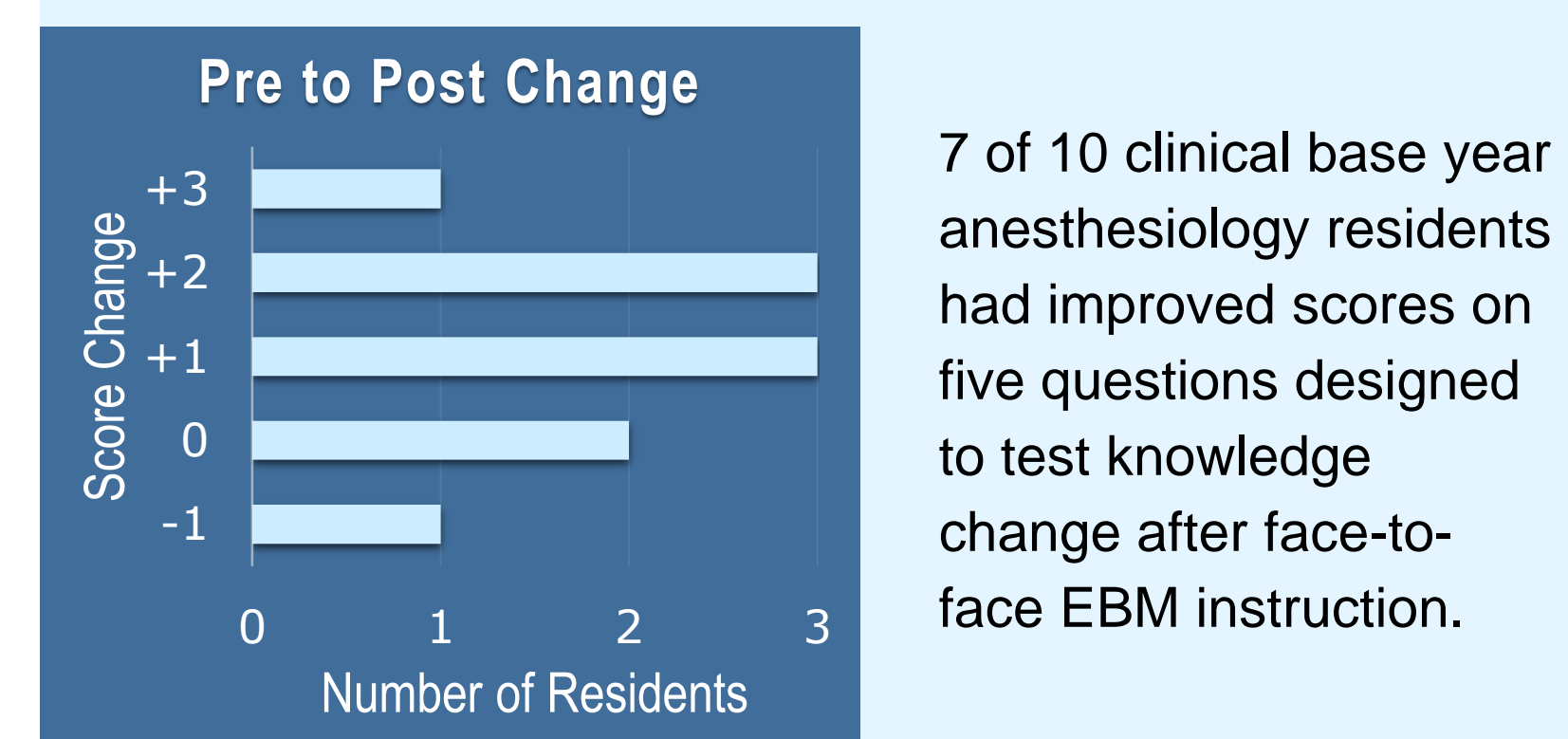
Asking Questions and Acquiring Evidence: Pre-test

Thank you for your willingness to participate in a pre-test and post-test of your evidence-based medicine skills. The data collected on the pre-test and post-test will not be linked directly to one person, and the responses are anonymous. The last 6 digits of the PID will be used to link pre-tests and post-tests to one anonymous person so that data about the impact of the module on knowledge improvement can be obtained. Your participation in this questionnaire will not influence any grades or performance reviews.

1) The only optional part of the PICO framework for clinical questions is: (required)

- Patient (or problem or population)
- Intervention
- Comparison
- Outcomes

BASELINE PRE to POST RESULTS



SURVEY QUESTION: What is your comfort level in completing an EBM search in PubMed?

#	Pre-Test	Post-Test
2	Not very comfortable	Somewhat comfortable
5	Somewhat comfortable	Somewhat comfortable
2	Somewhat comfortable	Very comfortable
1	Very comfortable	Very comfortable

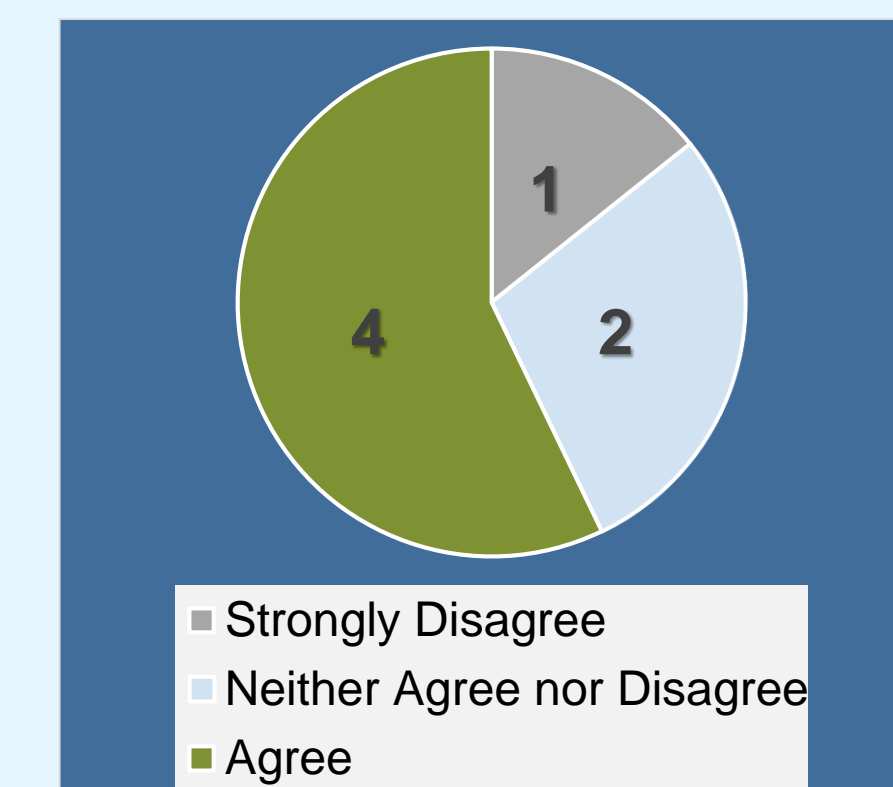
PRELIMINARY FEEDBACK

7 clinical base year anesthesiology residents completed the feedback survey.

All found the module easy to understand and clearly organized.

Chart shows the distribution of answers to the statement:

“I would prefer to learn and practice these skills in a group session with an instructor.”



DISCUSSION & NEXT STEPS

- The number of participants providing baseline information is small and resulting information must be used cautiously.
- Pre/post test data suggest that knowledge about searching and self-perceived comfort can be improved through these tailored instructions.
- Survey responses suggest that learning style preferences are varied.
- Face-to face instruction is still preferred by some. Well-designed online materials provide an option for learners who prefer that format and for those unable to attend a class.
- Positive feedback on ease of use confirms that the template is adequate.
- Library school students will conduct a more structured evaluation of the modules.
- Promotion of the modules will be needed.