

## Evidence Based Medicine Assignment

(10 points; 7.5% of final grade) Due 11:55pm in Sakai the Sunday at the end of your third week

### Learning Objectives

1. Utilize information technology to access and manage clinical information and perform online searches to support self-directed learning
2. Perform efficient literature searches and apply the results of medical research to clinical practice
3. Demonstrate an understanding of study design and basic testing characteristics to incorporate evidence based medicine into practice

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In medicine, Evidence Based Practice involves integrating the **best available evidence with clinical expertise and patient preferences and values** in order to provide excellent patient-centered care. Searching for and applying the best available evidence can be done in the following steps:

The process begins and ends with **assessing** the patient (gathering a history and physical exam and background data) and then proceeds as follows:

1. **Ask** – Asking a clinical question that arises from patient care.
  - a. After investigating background questions, pose a focused foreground question in the PICO format (Patient Problem, Intervention/Prognostic Factor or Exposure, Comparison and Outcome)
2. **Acquire** – Utilizing systematic and skillful search techniques, acquire evidence from the literature that is specific enough to provide an answer to the PICO question.
3. **Appraise** – Critically appraise the chosen article for validity, bias and usefulness.
  - a. This step involves understanding the TYPE of article you are appraising, and then utilizing appropriate User Guides (see Duke Modules and/or JAMA User Guides) to help you systematically review the article.
4. **Apply** – Apply the evidence you appraised to managing your patient, integrating with your clinical expertise and their preferences, expectations, and values.
5. **Analyze** – Analyze the effectiveness of your exercise and evaluate strengths and weaknesses in your own process for future improvement.

In the first two weeks of your clerkship, you completed your Library Module and Assignment, which helped you hone the skills involved in the first two steps (Asking and Acquiring). This project will allow you to work through the entire cycle of Evidence Based Practice and apply to a patient you have seen in your family medicine clerkship. The information you submitted for your Library Assignment may be used in this assignment.

**Steps for completing your EBM project:**

1. Review your formative feedback on the library assignment from the Health Sciences Library team in Sakai Assignments.
2. Review the Duke University Medical Center Library Module pertaining to your chosen type of article (Therapy, Diagnosis, Prognosis, Harm *or* Systematic Review)  
<http://guides.mclibrary.duke.edu/ebmtutorial> (These are great modules that take about 15 minutes each; consider also reviewing Module 1, 2 and any others!).

Another reference includes the User Guides to medical Literature from JAMA, which is the same information, but presented in book chapter form and links are below.

3. Using the Project Outline, complete and submit your project to Sakai Assignments by 11:55 pm Sunday at the end of your third week of the clerkship.
  - a. SUBMIT BOTH YOUR WRITTEN PROJECT AND THE ARTICLE YOU USED (or you will lose a point under “Acquire” portion of the rubric).
  - b. From “User Guides” at the bottom of the attached Project Outline, you should copy the questions needed to properly go through appraising the article.

## **Module & User Guides for Appraising Articles about Therapy, Diagnosis, Harm, Prognosis and Systematic Reviews**

### **Therapy (RCT)**

<https://guides.mclibrary.duke.edu/ebptutorial/therapy>

<http://jamaevidence.mhmedical.com.archer.luhs.org/content.aspx?bookid=847&sectionid=69031464>

### **Diagnosis**

<https://guides.mclibrary.duke.edu/ebptutorial/diagnosis>

<http://jamaevidence.mhmedical.com.archer.luhs.org/content.aspx?bookid=847&sectionid=69031491>

### **Harm**

<https://guides.mclibrary.duke.edu/ebptutorial/harm>

<http://archer.luhs.org/login?url=https://jamaevidence.mhmedical.com/ViewLarge.aspx?figid=69033494&gbosContainerID=0&gbosid=0&groupID=0&sectionId=69031497>

### **Prognosis**

<https://guides.mclibrary.duke.edu/ebptutorial/prognosis>

<https://jamaevidence-mhmedical-com.archer.luhs.org/ViewLarge.aspx?figid=69033494&gbosContainerID=0&gbosid=0&groupID=0&sectionId=69031497>

### **Systematic Reviews:**

<https://guides.mclibrary.duke.edu/ebptutorial/systematicreview>

<http://archer.luhs.org/login?url=https://jamaevidence.mhmedical.com/ViewLarge.aspx?figid=69033668&gbosContainerID=0&gbosid=0&groupID=0&sectionId=69031500&multimediaId=undefined>