Evidence-based Medicine Journal Club
Program Handbook

University of Alabama at Birmingham
Department of Obstetrics and Gynecology
Expectations:
The Journal Club is designed to be an interactive session requiring attendance and participation from all residents. Each resident is expected to enter the dialog and contribute. Selected articles are to be read in their entirety before Journal Club. Each resident should then develop their own thoughts regarding validity, design, etc. The Journal Club will serve as a platform to discuss the most recent medical literature from the perspective of Evidence-based Medicine (EBM) and address how to effectively analyze study design and apply the findings in your patient care.

ACGME Competencies Addressed by the EBM Journal Club:
1. Medical Knowledge
2. Practice-Based Learning
3. Interpersonal and Communication Skills
4. Systems-Based Practice

Goals:
1. Improve residents' knowledge of current women's health literature,
2. Improve residents' knowledge of study design and statistical methods
3. Improve residents' ability to apply this knowledge to the appraisal of clinical studies
4. Improve residents ability to apply EBN to their clinical practice

Educational Objectives:
Residents will be able to:
1. define EBM and terms associated with EBM
2. formulate a well-designed clinical question
3. locate EBM resources available to answer clinical questions
4. conduct a critical appraisal of published research
5. assess the validity of various types of journal articles
6. use results of critical appraisal to guide decisions about applying research evidence to patient care.

Program Objectives:
1. To provide residents with practical experience in actively discussing, presenting, and evaluating important journal articles on an ongoing basis.
2. To prepare residents for medicine board questions bearing upon matters of article evaluation, basic statistical analysis and methodology, recent therapeutic advances, etc.
3. To keep residents abreast of ObGyn related advances through articles in the medical literature, as well as discussing the strengths and weaknesses of the studies.
4. To provide residents with insight regarding current articles that may provide guidance for them as they care for their patients.
5. To introduce the resident to various resources discussing issues of critiquing medical literature.
6. To provide residents with convenient access to a faculty member on an ongoing basis for questions, concerns, and advice regarding medical literature.
7. To provide residents with models of various study protocols.
8. To provide residents with guidance pertaining to practical statistical issues.
9. To emphasize concepts of practicing "evidence-based medicine" based on the journal club experience.
Course Structure:

- A one hour EBM methods didactic session will be held early in the year during Friday Lecture.
- Journal Club sessions will be held in the WIC Hauth Conference Room (unless notified otherwise) during Friday afternoon conference.
- The article selection will include 1 OB and 1 GYN paper and both will be equally reviewed for that hour. A premium will be given to recent articles addressing major clinical questions or with potential to significantly change practice.
- The administrative chief residents select the presenting residents who will then contact a faculty member from the appropriate division to mentor their article presentation. The resident is encouraged to select an article – with faculty oversight and approval – on a pertinent obstetric or gynecologic topic from a high impact journal. Some examples of appropriate journals include but are not limited to *The Lancet*, *The New England Journal of Medicine*, *The Journal of the American Medical Association*, *Obstetrics & Gynecology*, and *the American Journal of Obstetrics and Gynecology*. Please direct any questions regarding this process to Dr. Sinkey.

**Work Sheet:**

A work sheet with a set of questions for each article will be supplied to all residents for use in guiding reading and critical analysis of the literature. This will help ensure that residents have the skills needed to critically appraise the literature as a basis for applying research evidence to patient care. With these guidelines in place, residents will be clear about what to focus on and the depth of analysis that is expected of them.

**What is Evidence-based Medicine?**

Evidence-based medicine (EBM) is the integration of clinical expertise, patient values, and the best evidence into the decision making process for patient care. Clinical expertise refers to the clinician's cumulated experience, education and clinical skills. The patient brings to the encounter his or her own personal and unique concerns, expectations, and values. The best evidence is typically clinically relevant research that has been conducted using sound methodology.

The evidence, by itself, does not make a decision for you, but it can help support the patient care process. The full integration of these three components into clinical decisions enhances the opportunity for optimal clinical outcomes and quality of life. Patient encounters that generate questions about the effects of therapy, the utility of diagnostic tests, the prognosis of diseases, or the etiology of disorders usually trigger the practice of EBM.

To practice medicine in an evidence-based fashion, the clinician requires skills, which include:

- being able to form focused clinical questions that pertain to specific patient care issues
- being able to perform efficient searches of the medical literature
- being able to apply formal rules of evaluation of that literature (i.e., critical appraisal skills)

The principles of EBM allow the physician to:

- make more accurate estimates of prognosis about a given disease,
- use therapeutic interventions more wisely,
- make sounder judgments about which diagnostic test to use given a certain clinical scenario, and
- ultimately practice more cost-effective medicine.
Faculty Role Modeling: An Important Factor in Implementing EBM

Evidence-Based Medicine (EBM) is both a “content area” and a “process” for teaching and practicing medicine. As a content area, residents must learn to become proficient in the basic skills of framing testable questions, searching for best evidence, and critically appraising that evidence. To fully utilize EBM as a method for teaching and practicing medicine, residency faculty must model EBM when treating patients and when discussing patient care with residents during clinical experiences.

The educational research examining the implementation of EBM curricula suggests the following:

1. There is little evidence to support that the conclusion that learning EBM as a “content area” through didactics alone (or even through journal clubs) encourages residents to use EBM in their practices. EBM must be integrated into clinical practice on the wards and in the clinics.

2. **Faculty members need both to embrace the EBM approach to teaching medicine and to model its use in their own practice. Some ways to do this might be to:**
   - cite systematic reviews when lecturing and expect residents to do the same when presenting;
   - keep an updated file of systematic reviews in your area of practice, update it quarterly, and use it while precepting;
   - use computer resources (both online and CD-ROM) on site;
   - expect “evidence” to be part of morning report, ambulatory rounds, work rounds, etc.;
   - model integrating “best evidence” with expert opinion and the specific needs of patients;
   - model “communicating best evidence” with patients.

1. ACGME Outcomes Toolbox
   [http://www.acgme.org/Portals/0/PDFs/commonguide/IVA5c_EducationalProgram_ACGMECompetencies_PBLI_Documentation.pdf]