

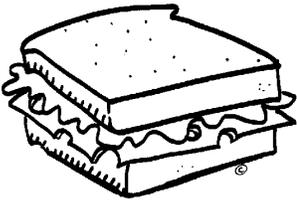


## DIAGNOSTIC TEST CRITICAL REVIEW FORM (12.22.12)

Name \_\_\_\_\_ Date \_\_\_\_\_ Section \_\_\_\_\_

Citation: \_\_\_\_\_

**Summarize what you found in an EBP sandwich in 1-3 sentences:**



### ***The EBP sandwich***

**The “meat”:** what was the answer to the clinical or research question?

**The “bread”:** What is the magnitude of treatment effect? (This should be expressed in numbers whenever possible).

**The other bread:** How strong is the evidence? (High quality study? Flawed? Low quality?)

### **Example:**

**The meat:** Vitamin B may help decrease the frequency of migraine headaches.

**How good:** Frequency was cut in half with an NNT 4.

**The evidence:** Based on a small moderate quality 2004 RCT (lack of blinding of outcome assessors).

Diagnostic Study Guide		Comments
<b>I Quality/validity: How good was the study?</b>		
1	Was this a convenience sample or consecutive patients?	
2	Did investigators compare the test to an appropriate, independent reference standard or gold standard?	
3	Were those applying and interpreting the reference/gold standard test blind to the index test results and vice a versa?	
4	Did investigators perform the same reference/gold standard on all patients?	
<b>II What are the Results?</b>		
1	What likelihood ratios were reported? (Turn page over to see how to calculate LRs if sensitivity and specificity numbers are provided.)	
2.	How <i>precise</i> were these results (e.g., confidence intervals)?	
3	How <u>good</u> was the test? <i>Statistically significant?</i> <i>Clinically significant</i> (i.e., would it change post-test probability enough to be helpful)?	
<b>III Generalizability: Can I apply the results to my patients?</b>		
1		
2	Was the test evaluated on an appropriate spectrum of patients (similar to mine)?	
3	Is the test practical (safe, cost effective, require special skill)?	

**Application:** Would you apply the results to one of your patients (why/why not)

- Yes\_\_ No\_\_ Not sure \_\_\_\_
- Why\_\_\_\_\_

## Calculating Likelihood Ratios

Sometimes studies do not provide likelihood ratios but do provide sensitivity and specificity numbers. It is to calculate positive and negative likelihood ratios.

$$\text{Positive LR} = \frac{\text{sensitivity}}{1 - \text{specificity}} \quad \text{Negative LR} = \frac{1 - \text{sensitivity}}{\text{specificity}}$$