

# THERAPY UNIT

## Internal Medicine, Chiropractic

### **Goal:**

This teaching module will review foundational concepts in critical appraisal for a therapy paper. An understanding will be gained in interpreting odds ratios and relative risk.

### **Instructional Objectives:**

To review the essential elements of critical appraisal of a therapy paper.

To gain an understanding of the derivation and interpretation of Odds Ratios.

To effectively explain the characteristics Odds Ratios, Relative Risk, Absolute Risk Reduction and NNT.

### **Reference (further readings):**

Users' Guides to the Medical Literature: A Manual for Evidence Based Clinical Practice, 3rd Edition, Editors: Guyatt GH, Rennie D, Meade M, Cook DJ. New York, NY: McGraw-Hill 2015.

Chapter 7 – Pages 59 – 73 Therapy (Randomized Trials)

Chapter 9 – pages 87 - 93 Does Treatment Lower Risk? Understanding the Results

### **Problem Based Educational Strategy:**

1. Read the Clinical Scenario
2. Compose a well-built clinical question about the clinical problem.
3. Complete a literature search using the headings from your well-built clinical question.
4. Read the Users' Guides to the Medical Literature reference articles.
5. Complete the attached Users' Guides to the Medical Literature Worksheet to critically appraise the supplied paper.
6. Extrapolate the results and show how the authors calculated the Odds Ratios.
7. Using the same numbers calculate Relative and Absolute Risk Reduction and NNT.
8. After exploring the above topics and based on the strength of the evidence, magnitude and precision of the findings as well as consideration of risks verses benefits, decide what you will say to your patient.

### **Scenerio:**

You have a patient who is scheduled for gynecological surgery. During the procedure she will be catheterized. She was informed that one of the potential complications to the procedure was the potential for a urinary tract infection. She asks you if taking cranberry juice could potentially reduce the likelihood of infection. You are aware of limited value to using cranberry juice to reduce URI's in the general population but you decide to look at the literature to see if the results are different for this particular group of patients.

### **Enclosed Materials:**

Foxman B, Cronenwett AE, Spino C, Berger MB, Morgan DM. Cranberry juice capsules and urinary tract infection after surgery: results of a randomized trial. Am J Obstet Gynecol. 2015 Aug;213(2):194.

Critical Appraisal worksheet.