Improving Patient Care with Practice-Based Research

Roland N. Dickerson, Pharm.D., BCNSP, FACN, FCCP, FASHP

Learning Objectives:
As a result of attending this session, the participant shall be able to:

1. Differentiate between translational, clinical trials, and practice-based research.
2. Describe different techniques used to identify research projects designed to improve patient care.
3. Discuss overcoming barriers to conducting practice-based research.

Self-Assessment Questions

1. The primary intent for conducting practice-based research is which of the following?
   a. Gain preliminary data for designing a prospective, randomized clinical trial
   b. Solve a problem or dilemma encountered in clinical practice
   c. Promotion and tenure
   d. Evaluate efficacy of a regimen without need for a placebo control

2. From Dr. Dickerson’s experience, which of the following resources/techniques is the most common source of ideas for practice-based research?
   a. Routine critical reading of new literature
   b. Inspiration
   c. Observations from clinical practice
   d. Lack of published data

3. The most difficult barrier to overcome for many practitioners towards accomplishing practice-based research is:
   a. Lack of formal research training
   b. Inadequate understanding of statistics
   c. Unfamiliarity with institutional review board procedures
   d. Inadequate time

4. Which of the following represents a policy change in clinical practice at the Regional Medical Center at Memphis as a result of publication of their practice-based research?
   a. Withholding of continuous enteral feeding for one hour before and after warfarin administration
   b. Use of the Harris-Benedict equations for estimation of resting energy expenditure for patients with cerebral palsy and spastic quadriplegia
   c. Avoidance of combination prokinetic pharmacotherapy for patients with traumatic brain injury experiencing upper gastrointestinal intolerance of enteral feeding
   d. Implementation of a continuous intravenous calcium gluconate infusion for the treatment of severe hypocalcemia

Answer Key: 1.b; 2.c; 3. d; 4.a
Selected references illustrating practice-based research:


