A Health System’s Novel Approach to Evidence-based Practice

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1. STATEMENT OF PROBLEM:
- Variations in clinical practice result from the persistent use of inefficient technologies and the under use of efficient technologies
- Difficulty in translating research into practice, as well as industry influence, may be factors responsible for such inefficiencies
- For academic health systems, these inefficiencies may lead to lesser quality patient care and opportunity costs, such as less ability to reinvest in education, research and patient care

2. OBJECTIVES OF PROGRAM:
- The Center for Evidence-based Practice (CEP) opened in July 2006 and is funded by the Office of the University of Pennsylvania Health System (UPHS) Chief Medical Officer (CMO) to support patient care quality and safety at UPHS through the practice of evidence-based medicine (EBM).
- When a clinical issue of “high impact” arises at UPHS that requires an objective evaluation of a drug, device or process of care, CEP performs a systematic review (SR) of the issue alongside the key stakeholders to produce an actionable guideline for UPHS.

3. PROGRAM DESCRIPTION:
- CEP includes co-directors boarded in medicine with masters in public health and epidemiology who report directly to the UPHS CMO, as well as a research and administrative coordinator, and a clinical librarian (Figure 1).
- CEP evaluates issues referred from medical and nursing leaders, and 3 types of committees from each UPHS hospital: 1) Pharmacy and Therapeutics, 2) Technology, and 3) Quality Improvement (Figure 2).

3. PROGRAM DESCRIPTION (continued):
- For each issue, CEP:
  1) forms a Task Force of clinical experts without financial conflicts to define the question
  2) performs a SR
  3) presents the SR to the Task Force qualitatively or quantitatively using meta-analysis
  4) grades the quality of evidence
  5) receives input from outside experts (input from industry scientists assures industry representatives market their products at UPHS under CEP guidelines)
  6) develops a consensus guideline balancing the risks and benefits of the technology
  7) sends the guideline to the CMOs of each hospital for approval and dissemination to the relevant departments for implementation
  8) uses administrative data to measure practice changes occurring after implementation
  9) revisits guideline as needed
- Participants in evaluations receive CME
- Residents may participate in evaluations as part of an EBM elective

4. FINDINGS TO DATE:
- 70 faculty, staff and industry scientists have participated in our five completed evaluations, and five other evaluations are nearing completion (Table)
- Four residents have completed the CEP EBM elective
- Collaborations with government and payor organizations are underway
- Evaluations are posted on our website (http://www.uphs.upenn.edu/cep/) and may be published

5. KEY LESSONS LEARNED:
- A small center funded by a corporate office of an academic health system can offer objective and systematic evaluations of “high impact” clinical issues efficiently under appropriately trained leadership
- Such evaluations can facilitate constructive relations between industry, payers and health systems, and offer educational and publishing opportunities for participants