Bringing Education & Service Together

Resident Physicians’ Curriculum in Clinical Teaching Skills

Elizabeth Morrison, MD, MSED
Lloyd Rucker, MD

University of California, Irvine
College of Medicine
Bringing Education & Service Together (BEST): Introduction

Bringing Education & Service Together (BEST) is an interdisciplinary “service learning” project for primary care resident physicians at the University of California, Irvine (UCI) and the University of California, Los Angeles (UCLA). The project is sponsored by the Bureau of Health Professions (U.S. Public Health Service), the Robert Wood Johnson Foundation, and the Tamkin Foundation. The underlying concept of the BEST initiative is that primary care residents become better physicians by learning through service, including service to their learners through better teaching skills. Most important, through self-directed learning, participating residents will serve their own educational needs.

A multidisciplinary group of medical faculty at UCI and UCLA undertook a randomized, controlled trial of a comprehensive, longitudinal, interdisciplinary residents-as-teachers curriculum. The project sought to address four specific aims:
1. To determine the specific learning needs of senior primary care residents for becoming better teachers, and to develop a curriculum to address these needs;

2. To undertake and evaluate a pilot study of a longitudinal residents-as-teachers curriculum;

3. To conduct a randomized, controlled, multicenter trial of a longitudinal residents-as-teachers curriculum; and

4. To disseminate the project's curriculum to residents and faculty across the country and support future research with an interactive web site developed in conjunction with the AAMC's Graduate Medical Education Section (www.residentteachers.com).

Sixty-two senior residents from internal medicine, pediatrics and family medicine were randomized to a six-month curriculum versus a control group. Published results of the pilot study are now available (Acad Med. 2003;78:722-729).
Investigators and Contact Information:

Elizabeth Morrison, MD, MSED (P.I.)
ehmorris@uci.edu
714/456-5171 (office)
714/480-2427 (voice mail)

Lloyd Rucker, MD (Co-Investigator)
lrucker@uci.edu
714/456-7539 (office)

Other Co-Investigators:

John Boker, PhD
Charles C. Gabbert
Maurice Hitchcock, EdD
Judy Hollingshead, PhD
F. Allan Hubbell, MD, MPH
Alberto Manetta, MD
Michael Prislin, MD
LuAnn Wilkerson, EdD

Many thanks to:

Debra K. Litzelman, MD
Kelley M. Skeff, MD, PhD
Georgette Stratos, PhD
Bringing Education & Service Together: Learning Objectives

By the end of the curriculum, residents will be able to:

1. Explain the concept of the “teachable moment”.
2. Describe the role of the resident physician as team leader and manager.
3. Orient a medical student or intern to a new rotation.
4. List and use the five microskills of clinical teaching with learners of various skill levels.
5. Give skillful and constructive feedback to learners.
6. Run inpatient work rounds, incorporating teaching appropriate to each level of learner.
7. Give a medical student helpful, constructive feedback about charting.
8. Teach a learner how to perform a procedure.
9. Give an interactive mini-lecture for learners at various levels of training.
10. Provide helpful feedback for colleagues about their teaching skills.
Learning objectives

At the end of this mini-retreat, participating residents will be able to…

1. List the five “microskills” of clinical teaching.
2. Teach a medical student using the microskills.
3. Give detailed and useful feedback to a colleague about teaching.
4. Describe their own teaching styles and ways they might like to alter them.

Agenda:

4:00 Orientation to the BEST program
4:15 Team-building exercises
4:45 Film clip and brief discussion
4:55 “Good” teachers/“bad” teachers exercise
5:10 Review of results on the Clinical Teaching Perception Inventory® (to be completed prior to session)
5:25 Introduction to the “teachable moment”
Introduction to the five-step microskills model of clinical teaching

5:40 Break

5:50 Practice microskills with students, feedback

6:45 Large-group summary of what was learned
Introduction to next module

The Five-Step “Microskills” Model of Clinical Teaching

• **Step One: Get a Commitment**
  — “What do you think is going on with this patient?”
  — “What would you like to do?”
  — Even a hunch or guess is better for learning than no commitment.

• **Step Two: Probe for Supporting Evidence**
  — “What led you to that diagnosis?”
  — “Why did you choose that drug?”
  — Helps preceptor identify what the learner does and does not know.
  — Must not be unpleasant.

• **Step Three: Teach General Rules**
  — “If the patient has cellulitis, incision and drainage won’t help. That’s for an abscess, which you recognize by fluctuance.”
  — Can skip if learner already knows general principles.
• **Step Four: Reinforce What Was Done Right**
  – “It was good that you considered the patient’s age when you prescribed that drug, because other drug classes can cause more side effects in the elderly.”
  – Must reward specific competencies.

• **Step Five: Correct Mistakes**
  – “You could be right that you won’t harm the brachial artery when you draw that blood gas. But if you use the radial artery, you won’t risk cutting off the arterial supply to the whole arm.”
  – Have them self-critique first.
  – Be specific about what learner needs to correct.
  – Best done in private if criticism is major.

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Formative Evaluation: Feedback “Sandwich”

Specific positive feedback
Constructive criticism
Specific positive feedback

Feedback should be:
1. Constructive
2. Timely
3. Valid
4. Specific
5. Useful