Surgical Education in the 21st Century

Mohsen Shabahang, M.D., Ph.D.
Assistant Professor of Surgery
Director, Surgical Residency Program
Introduction

- Grand Rounds
- Faculty Development
- State of the Residency
- Increased Pressures of Directing a Residency
- Personal Philosophies
Paradigm Shift in Surgical Education

- Knowledge acquisition to application
- Process to competency and outcome assessment
- Single evaluation to multiple tools
- Use of aggregate data to improve educational program
Competency-Based Training

- Trainee has to demonstrate competence to progress in training (ability to perform under test conditions).
- Need for reliable measurement tools.
- Idea is to develop life-long learning based on EBM and QI.
• Founded in 1981

• Mission: “We improve health care by assessing and advancing the quality of resident physicians’ education through accreditation”
ACGME

- 8037 GME Programs
- 101,810 Residents
- 702 Institutions
- 26 RRC (Resident Review Committee)
ACGME: Outcome Project

- Phase 0: ended in 6/01 – development of competencies
- Phase 1: 7/01-6/02 – defining competencies
- Phase 2: 7/02 – 6/06 – sharpening the focus of the competencies
ACGME: Outcome Project

- Phase 3: 7/06-6/11 – categorizing and improving programs based on competencies
- Phase 4: 7/11 – benchmarking programs based on competencies
Patient Care*

- Residents are expected to provide patient care that is compassionate, appropriate and effective for promotion of health, prevention of illness, treatment of disease, and at the end of life. * PC
Residents are expected to demonstrate knowledge of established and evolving biomedical, clinical, and social sciences, and the application of their knowledge to patient care and the education of others.* MK
Professionalism*

- Residents are expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, an understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession and society. *P
Professionalism

- Respect
- Compassion
- Integrity
- Commitment to excellence
- Sensitivity to patients
- Responsiveness to patient diversity
Residents are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, their families, and colleagues.* ICS
Interpersonal and Communication Skills

- Building the doctor patient relationship

- Gather information

- Understand patients’ perspective

- Share information

- Reach agreement on plan

- Provide closure
• Residents are expected to use scientific evidence and methods to investigate, evaluate, and improve patient care.

• Evidence-based medicine/Quality Improvement *PBL
Systems-based Practice*

- Residents are expected to demonstrate both an understanding of the contexts and systems in which health care is provided, and the ability to apply this knowledge to improve and optimize health care. *SBP
Teaching Tools

Clinic/Hospital Rounds (PC, MK, P, ICS, PBL, SBP)

Grand Rounds/Journal Club (PC, MK, PBL, SBP)

Scholarly Activity (PC, MK, PBL)

Most effective practice and QI projects (SBP)

Module-based teaching (PC, MK, PBL, ICS, SBP)
Teaching Tools

Seminars/Online Courses (PC, MK, ICS, PBL, SBP)

Animate Curriculum (PC, MK, ICS, PBL, SBP)
(Standardized Patient/Hi Fidelity Simulation)

Tumor Board (PC, MK, ICS, PBL, SBP)

& M (PC, MK, P, ICS, PBL, SBP)

Curriculum must be competency based
Evaluation

• 360 Evaluations (PC, MK, P, ICS)
• Self-Evaluation (Portfolio)
• Standardized Patient (PC, MK, P, ICS)
• OSCE (PC, MK, P, ICS, SP, PBL)
• In-training Exams (PC, MK, P, ICS, SP, PBL)
• Faculty Evaluation (PC, MK, P, ICS, SP, PBL)

• Must be fair and unbiased
Portfolio

• Concept of self-reflection and evaluation
• Continuous learning
• Information is available to resident, mentor, and program director
Inanimate Curriculum

- Value of Clinical Simulation
  - Fine tuning skills
  - Increasing technical speed
  - Remediation
  - Focus on learner not patient
  - Reliably tests different skills levels
Inanimate Curriculum

- Use of simulators at Temple College
- Cadaver lab
- Laparoscopic lab
- Vascular and bowel anastomosis
- Learning modules based on ACGME competencies
Duty Hour Restrictions

- 80 hours/week averaged over 4 weeks
- No more than 30 continuous hours of work
- 10 hours free between shifts
- 24 hours off from all duties per week
Surgical Educator

- Maintains surgical knowledge and technical skills
- Role model
- Teaches PC, MK, P, ICS, PBL, SBP
- Utilizes “teachable” moments
- Gives good formative and summative feedback
Surgical Educator

- Shows enthusiasm
- Creates a supportive environment that is experience-oriented, problem centered
- Feedback is supportive and constructive
- Teaching is active vs. passive
Quality Surgical Education Requirements

Supportive Chairperson

Dedicated Program Coordinator

Supportive Faculty

Administrative Chief Residents
Lessons and Dilemmas

- Apply principles of Graduate Education to Surgical Education.
- Education should be based on completion of certain required competencies.
- Promotion should not be taken for granted.
Lessons and Dilemmas

• “There is no room for mediocrity in Surgery and surgical education.” - Robert Wallace
Lessons and Dilemmas

- Residents must be personally involved in their education
- The challenge is in determining how much involvement the resident should have in setting the educational agenda.
Lessons and Dilemmas

- Students choice of surgery
  - Begins with first MS1 impression of surgeons teaching in the basic sciences
  - Continues with MS3 quality of experiences on general surgery block
  - Peeks with quality MS4 surgical electives
  - Culminates in a positive interviewing process
Lessons and Dilemmas

- Reconcile faculty role as disciplinarian, cheer leader, encouraging coach, drill sergeant

- Faculty do not strive for popularity

- Faculty must be a fair and honest champion of the residents, faculty, and residency program
Closing Statement

To the Faculty:

Residents are STUDENTS
Residents are here to LEARN
Residents are NOT here to make faculty lives more comfortable

To the Residents:

You are STUDENTS
You are in an educational program
You are NOT in the first job of your career