

# The Evolution of Graduate Medical Education in the U.S.

Kenneth M. Ludmerer, M.D.  
Professor of Medicine and Professor of History,  
Washington University

No financial interests to disclose

# Hospitals in Opposition to Medical Education

- Charity Hospital (Cleveland)
- Charity Hospital (New Orleans)
- Boston City Hospital
- Peter Brent Brigham Hospital
- Bellevue Hospital
- New Haven Hospital
- Massachusetts General Hospital
- Roosevelt Hospital

# Routes to Specialty Practice, Pre-World War II

- Graduate medical schools
- European study
- Outpatient clinic work
- Apprenticeship with an established specialist
- Residency

# Residency

- Created at Johns Hopkins
- Genuine educational experience
- Academic emphasis
- Aimed for the elite

# Educational Principles of Residency

- Assumption of responsibility
- Manageable case load

# Establishment of Specialty Boards

- Ophthalmology—1917
- Otolaryngology—1924
- Obstetrics and Gynecology—1930
- Dermatology—1932
- Pediatrics—1933
- Orthopedic Surgery—1934
- Psychiatry and Neurology--1934
- Radiology—1934
- Urology—1935
- Internal Medicine—1936
- Pathology—1936
- Anesthesiology—1937
- Plastic Surgery—1937
- Surgery--1937

# House Staff Life

- Lived in hospital
- Low pay
- Monastic existence
- Many stresses
- Many rewards

# GME: Education or Service?

- In theory, education
- In practice, service
- The subordination of education to service is the dominant theme throughout the history of GME

# Improving GME, 1940

- “Hospitals must work out plans to relieve the intern and resident from many routine procedures which he is now performing but which have relatively little educational value.”
- Hospitals must expand their educational content.

Report of the Commission on GME, 1940

# Calls To Reform GME

- 1940—Report of the Commission on GME
- 1966—Millis Report (AMA)
- 1966—Coggeshall Report (AAMC)
- 1999—Council on Graduate Medical Education
- 2002—Commonwealth Fund Task Force
- 2003—Institute of Medicine
- 2003—Blue Ridge Academic Group
- 1994-2006—Restoring the “E” in GME, AAMC

# The Residency, Post-World War II

- Democratization of residency
- Decline of academic (research) emphasis
- End of paternalistic restrictions
- Loss of sense of camaraderie and family
- Greater stress

# The Modern Era

- 1984—Prospective payment (DRGs)
- 1984—Libby Zion case
- 1989—Bell Commission
- 2003—ACGME work hour regulations

# Deficiencies of ACGME Regulations

- Nights on call still arduous and long
- Amount of work has increased
- Insufficient support staff has been added
- Insufficient time to evaluate and study patients thoroughly and to engage in reflexive thinking
- No guarantee of adequate amenities while on call, a faculty that knows and cares about the house staff, stimulating conferences and rounds, the ready availability of advisers and mentors, a fair policy about parental leave, the immediate accessibility of help, or a strong sense of camaraderie.

# Economic Exploitation of House Staff: An Ongoing Problem

- “The chief problem has been the ongoing subordination of the educational aspects of residency to institutional service needs, the lesson for today, given the present controversy about work rules, is that GME must be judged by the total experience and not by the hours of work alone. Medical educators need to pay attention to what house officers do with their hours, not merely how many hours they work. It is crucial that professional leaders understand this point if GME is to be made better.”

Ludmerer and Johns, JAMA 2005

# Restoring the Balance

- Reduce number of patients on teaching service
- Provide residents greater relief from chores
- Enhance educational quality of GME
- Make culture of GME less stressful

# Accomplishing the Goals

- Regulatory reform
- External financing of GME
- Internal financing of GME

# GME: Major Issues, 2007

1. Education versus service
2. Supervision
3. Disconnect with nation's service needs