

## *Educational Implications of Health Workforce Issues for PAs*

James F. Cawley  
David Asprey  
Roderick S. Hooker  
*PAEA - October 2007*

## *Objectives...*

1. Identify the major forces influencing the expansion of the medical workforce
2. Be familiar with the medical workforce studies that pertain to the PA profession
3. Describe the implications for PA program expansion related to steady state maintenance, possible expansion and barriers to expansion
4. Be aware of PA supply estimates and demand projections
5. Understand workforce policy implications of these estimates

## *PA Education: Workforce Issues and Implications...*

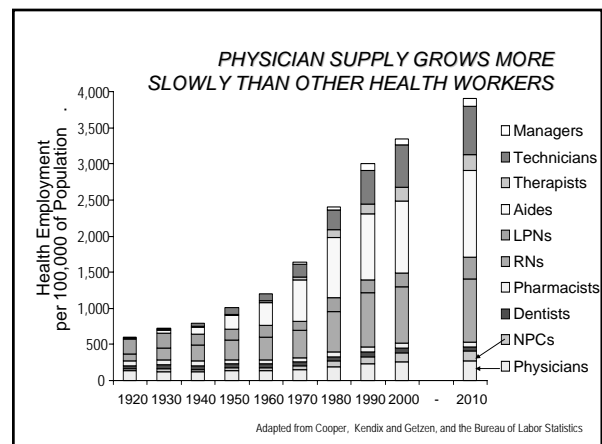
- ✦ There is a general consensus that the health system will require an increased number of physicians in the future
- ✦ Advocates of this position have also indicated that the workforce will also require an increase in the numbers of PAs (and NPs)

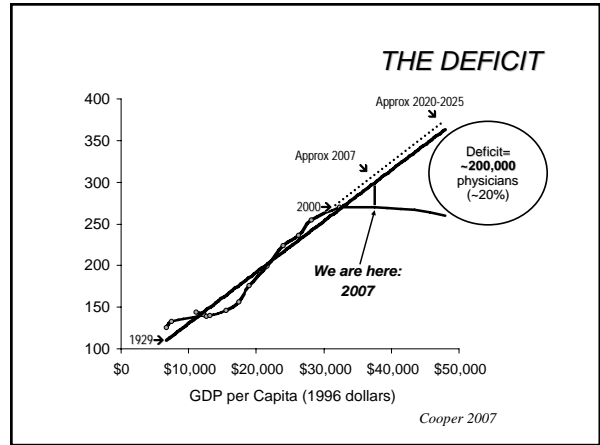
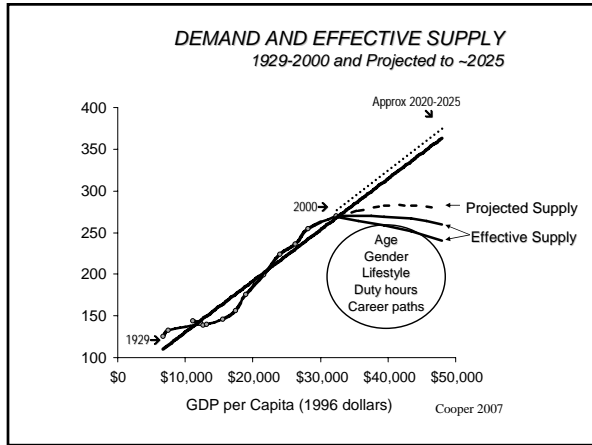
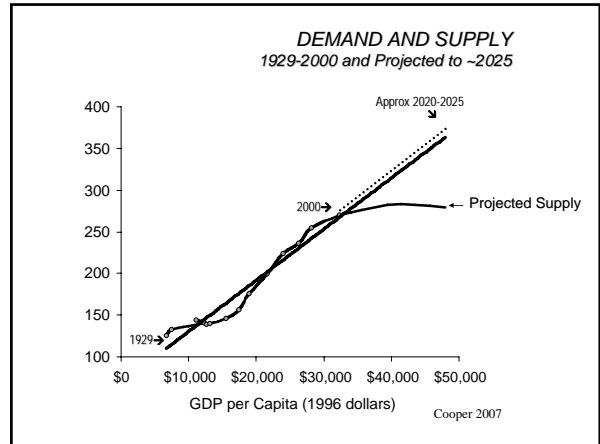
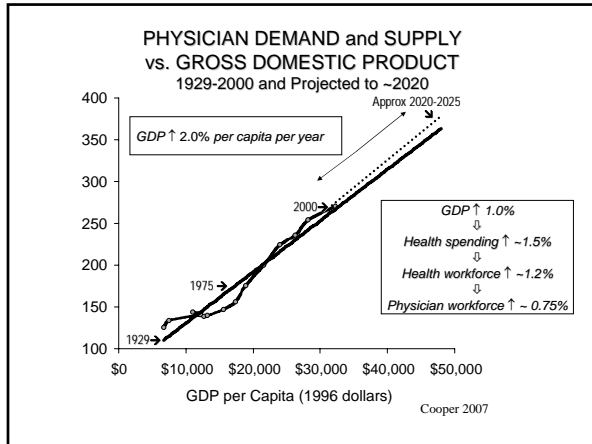
## *PA Education: Workforce Issues and Implications*

- ✦ Can or should PA education increase its output?
- ✦ Can the identified barriers to expansion be overcome? If so, what are the strategies that program's can utilize?
- ✦ Should expansion of PA education be a function of the educational marketplace, or should PAEA officially endorse/support this policy direction?

## *The Rationale for Expansion of the Medical Workforce*

- ✦ The evidence for a shortage of physicians
- ✦ Physician shortages in specialties and primary care
- ✦ The theories of Cooper and his influence in health workforce policy
- ✦ The new expansion of medical education





### Reports of Physician Shortages (US)

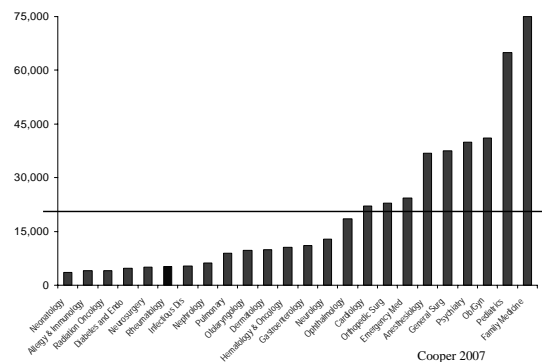
SPECIALTY	STATE
Allergy and Immunology (2000)	Arizona (2005)
Anesthesia (2003)	California (2004)
Cardiology (2004)	Florida (2005)
Child Psychiatry (2006)	Georgia (2006)
Critical Care Workforce(2006)	Kentucky (2005)
Dermatology (2004)	Massachusetts (2006)
Endocrinology (2003)	Michigan (2006)
Family Medicine (2006)	Mississippi (2003)
Geriatric Medicine (2007)	Nevada (2006)
Medical Genetics (2004)	New York (2007)
Neurosurgery (2005)	North Carolina (2005)
Oncology (2007)	Oregon (2004)
Pediatric Subspecialty (2005)	Texas (2002)
Psychiatry (2003)	Wisconsin (2004)
Rheumatology (2007)	

- ### Drivers of Future Demand for Physicians
- Population growth: 25 million/decade
  - Aging of the population
    - Over 65 will double 2000-2030
    - Over 65 make twice as many visits as under 65
    - Major illness/chronic illness far more prevalent among the elderly
  - Public expectations of the baby boom generation: high resources and expectations
  - Lifestyle factors: obesity, diabetes, cardiac disease, cancer - rising rapidly
  - Economic growth of the nation
  - Medical advances

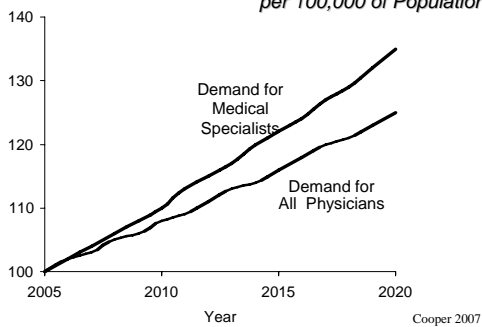
## Drivers of Future Supply

- o Medical school enrollment doubled from 1960 to 1980, then flat for 25 years
- o Aging of physician workforce & retirement
  - o 250,000 active physicians over 55
  - o Number retiring each year is rising rapidly
- o Gender and generational differences
  - o Female physicians are more likely to have family responsibilities and to work fewer lifetime hours in medicine
  - o Younger physicians highly value personal life
- o International migration and IMG policies
  - o Concern with brain-drain/competing opportunities
  - o Increase in US citizens attending schools outside US
- o Residency training positions key factor in future supply

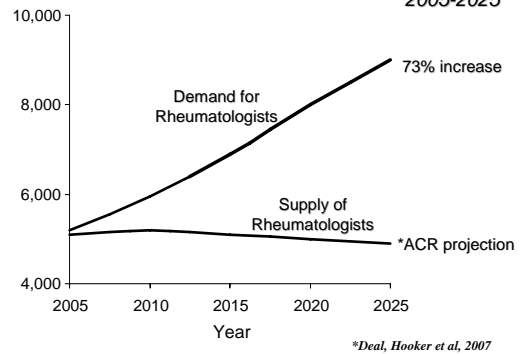
## SUPPLY OF SPECIALISTS



## PROJECTED DEMAND FOR ALL PHYSICIANS and MEDICAL SPECIALISTS per 100,000 of Population.



## SUPPLY and DEMAND of RHEUMATOLOGISTS 2005-2025



## Challenges to PA Education

- ✦ 2007: Cooper states that PA education should increase its annual production of graduates, similar to medicine.
- ✦ More PAs (and NPs) needed since physicians now include them as members of the medical team; need will be across the board and include roles in GME.
- ✦ Cooper, 2007

Source: Cooper, R.A. New Directions for Nurse Practitioners and Physician Assistants in an Era of Physician Shortages. Academic Medicine 2007;82:827-828.

## PA Education - 2007

- ✦ Number of programs = 136
- ✦ Annual total enrollment = 10,400
- ✦ Annual capacity = 5,700
- ✦ Annual graduates = 5,300
- ✦ An unknown but believed to be small number of new programs in the pipeline

## Expansion of PA Education

- ✦ 2006: 59% of PA educational programs planned to increase their enrollment in the next 5 years.
- ✦ Similar to the responses of US medical schools.
  - ✦ *Glicken & Lane, 2006*

Source: Glicken, A., Lane, S. Results of the PAEA 2006 Survey of Physician Assistant Program Expansion Plans. Journal of Physician Assistant Education Association 2007; 18:48-53.

## Enrollment Increases - the 2006 PAEA Survey

- ✦ Of those programs indicating they have or will increase enrollment:
  - mean increase of 288 students among those "definitely" increasing enrollment
  - mean increase of 125 among those "probably" increasing enrollment
  - mean increase of 108 among those "possibly" increasing enrollment
- ✦ Total gain in enrollment projected = 521

Source: Glicken, A., Lane, S. Results of the PAEA 2006 Survey of Physician Assistant Program Expansion Plans. Journal of Physician Assistant Education Association 2007; 18:48-53.

## Challenges to PA Education

- ✦ "PA programs need to be lengthened to train the types of providers needed for the future."
  - ✦ "PA training is insufficient given the future"
  - ✦ "PA programs should be required to have an affiliation with a medical school or academic health center."
- ✦ *M. Whitcomb 2007*

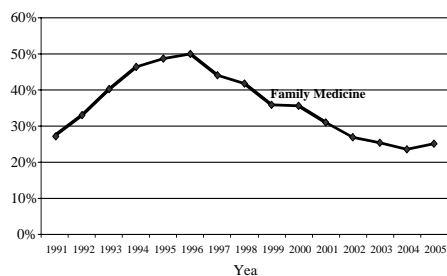
Whitcomb, M. The Shortage of Physicians: A Challenge for the Physician Assistant Profession. JPAEA 2007; 18:5-6.

## Whither Primary Care?

- ✦ The PA profession is over specialized.
  - ✦ 62% of the profession are practicing in specialties and subspecialties.
  - ✦ Can or should the profession consider this trend a problem?
  - ✦ Is there a role for the PA in primary care any longer?
- ✦ *Jones, 2007*

Sources: Jones, P.E. Physician Assistant Education in the United States. Academic Medicine 2007;82:882-887; American Academy of Physician Assistants, Annual Census, 2006, Alexandria, Virginia, 2007.

## New PA Graduates Entering Family Medicine, 1991-2005

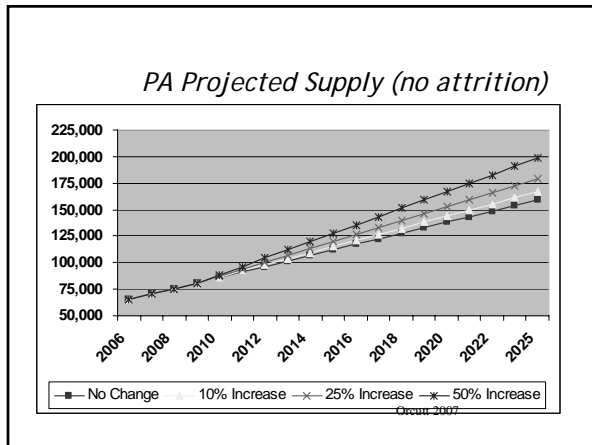
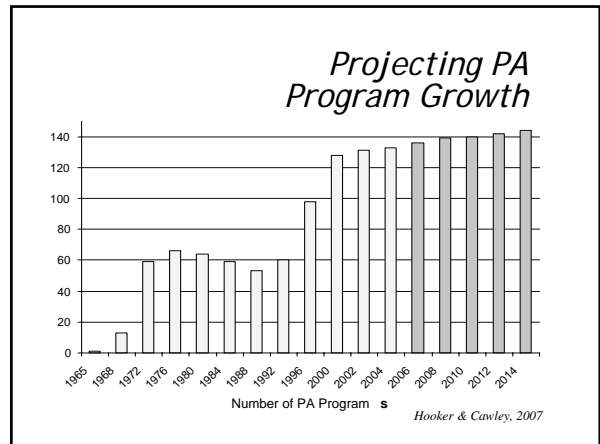
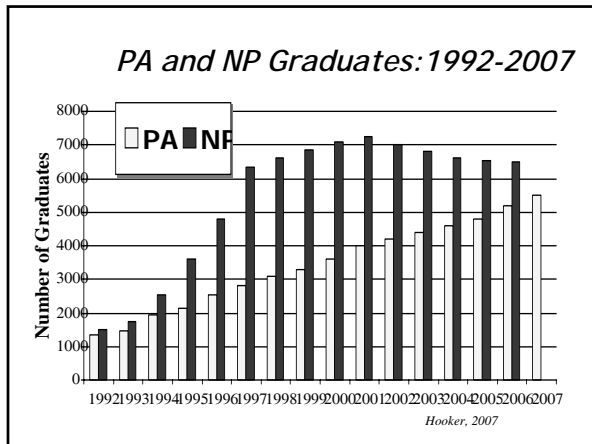


Source: AAPA Membership Census Survey, 1991-1995; AAPA Physician Assistant Census Survey, 1996-2005. \*PAs graduating in year immediately preceding the census reference year are considered New Graduates.

## Barriers to Expansion

- ✦ Insufficient availability of clinical sites
  - Cited as "major" concern by 49.4%
- ✦ Insufficient number of qualified faculty
  - Cited as "major" concern by 31.3%
- ✦ Enrollment capacity limitations
  - ARC PA approval needed for programs to increase their enrollments (identified by only 13.3% as a "major" barrier)

Source: Glicken, A., Lane, S. Results of the PAEA 2006 Survey of Physician Assistant Program Expansion Plans. Journal of Physician Assistant Education Association 2007; 18:48-53.



- ### Barriers/Challenges to Increasing PA Production
- ✦ Lack of trained PA Program faculty
  - ✦ Lack of facilities at existing programs
  - ✦ Accreditation restrictions/limitations on expansion
  - ✦ Lack of a sufficient # of preceptor sites
  - ✦ Inadequate quality in the applicant pool

- ### For Consideration...
- ✦ When considering the total pool of healthcare providers what is the ideal proportion of PAs?
  - ✦ If we increase national PA production, is it best done by increasing existing programs, creating new programs or both?
  - ✦ What are the most significant barriers to expanding PA production nationally?