U.S. Plans to Increase the Medical Workforce

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Data From

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Center for Workforce Studies
Association of American Medical Colleges

Washington DC,
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Overview of Presentation

Part I – Update on the Medical Workforce

Part II – Issues in Expanding Enrollment

Part III – Shift to New Models of Care

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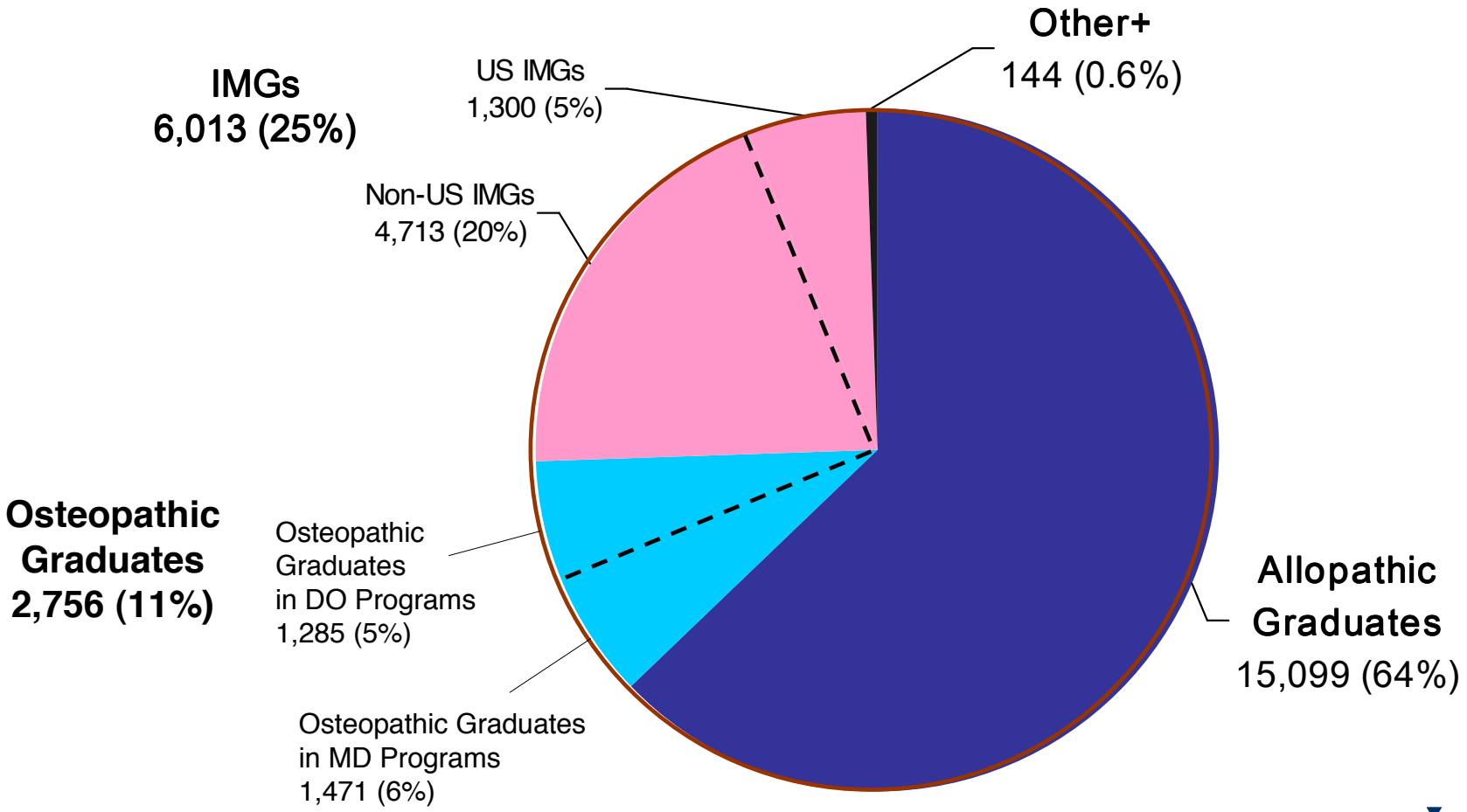
Number and Source of Physicians Entering Training in 2004

24,012 Entered MD and DO Training in 2004



* Total IMGs = 6,013; Distribution among US and Non-US IMGs is estimated.
+ Includes Canadian Graduates (72)
Source: AAMC GMETrack and AOA Master File

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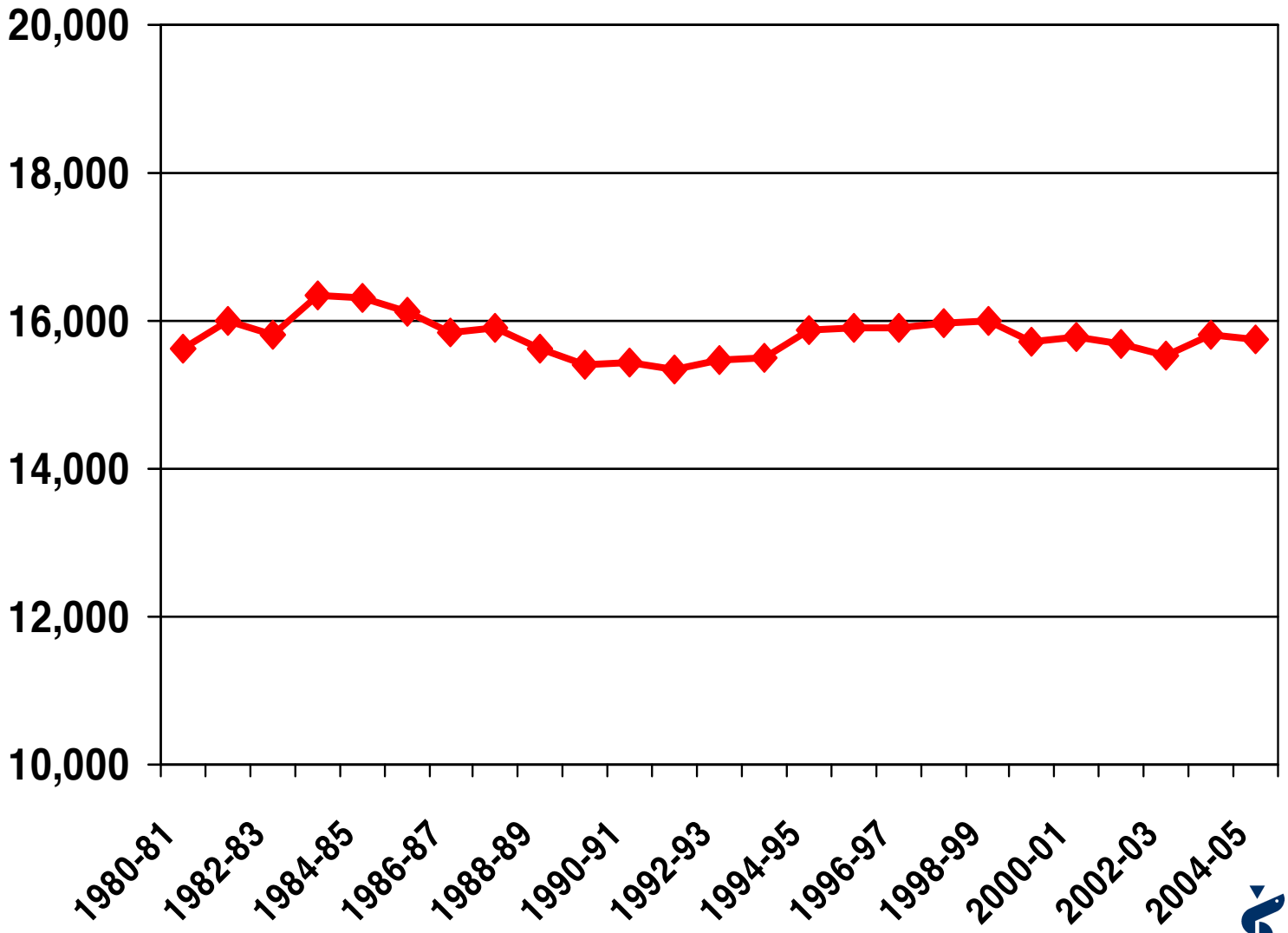
Allopathic Graduation Trends



Source: AAMC Data Book, AAMC Facts

Prepared by AAMC, Center for Workforce Studies, Jan 2006

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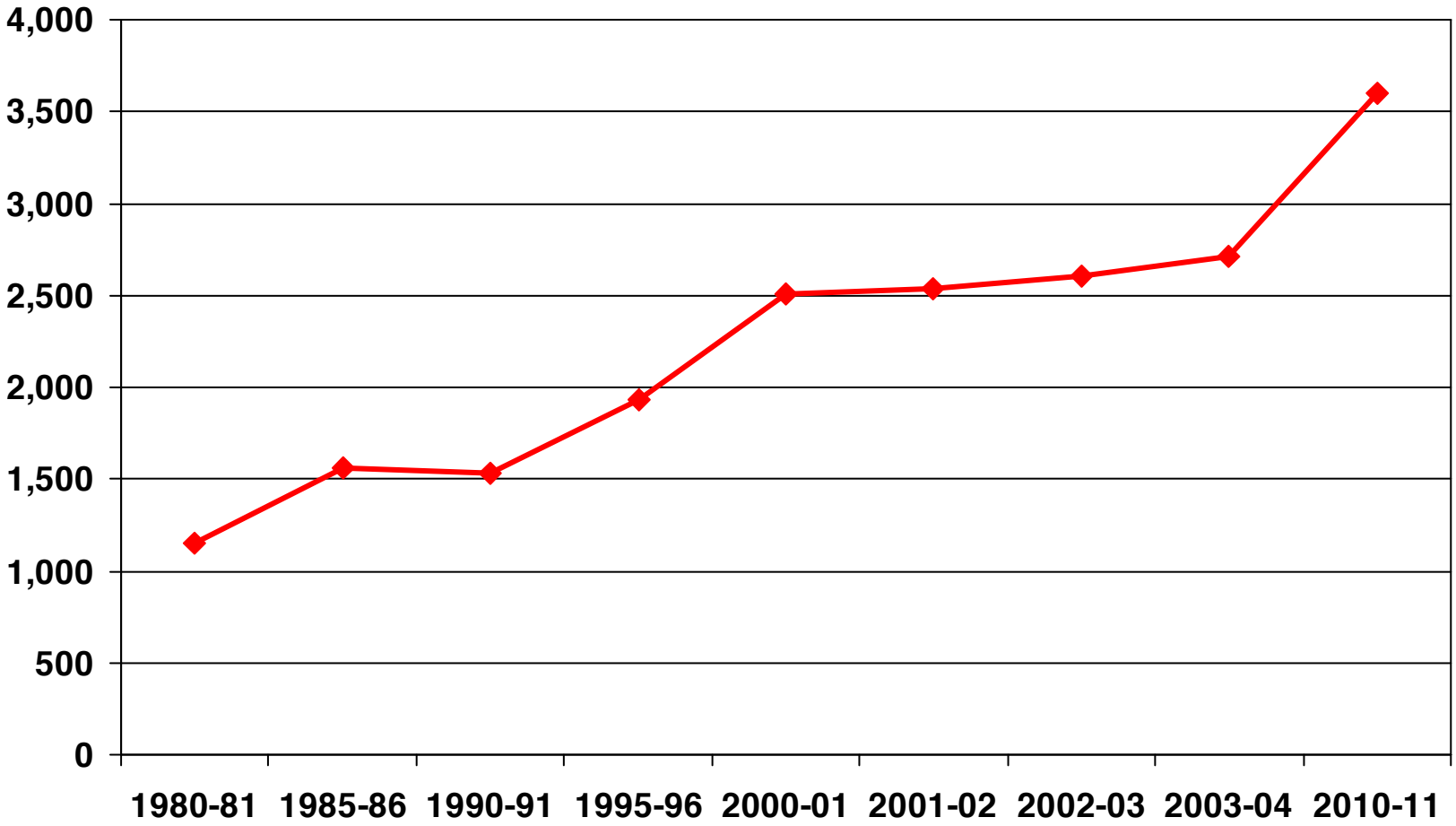
Osteopathic Graduation Trends



Sources: 2004 Annual Report on Osteopathic Medical Education

*2010-11Osteopathic graduates projection is extrapolated from AACOM 2003-06 projections of enrollment

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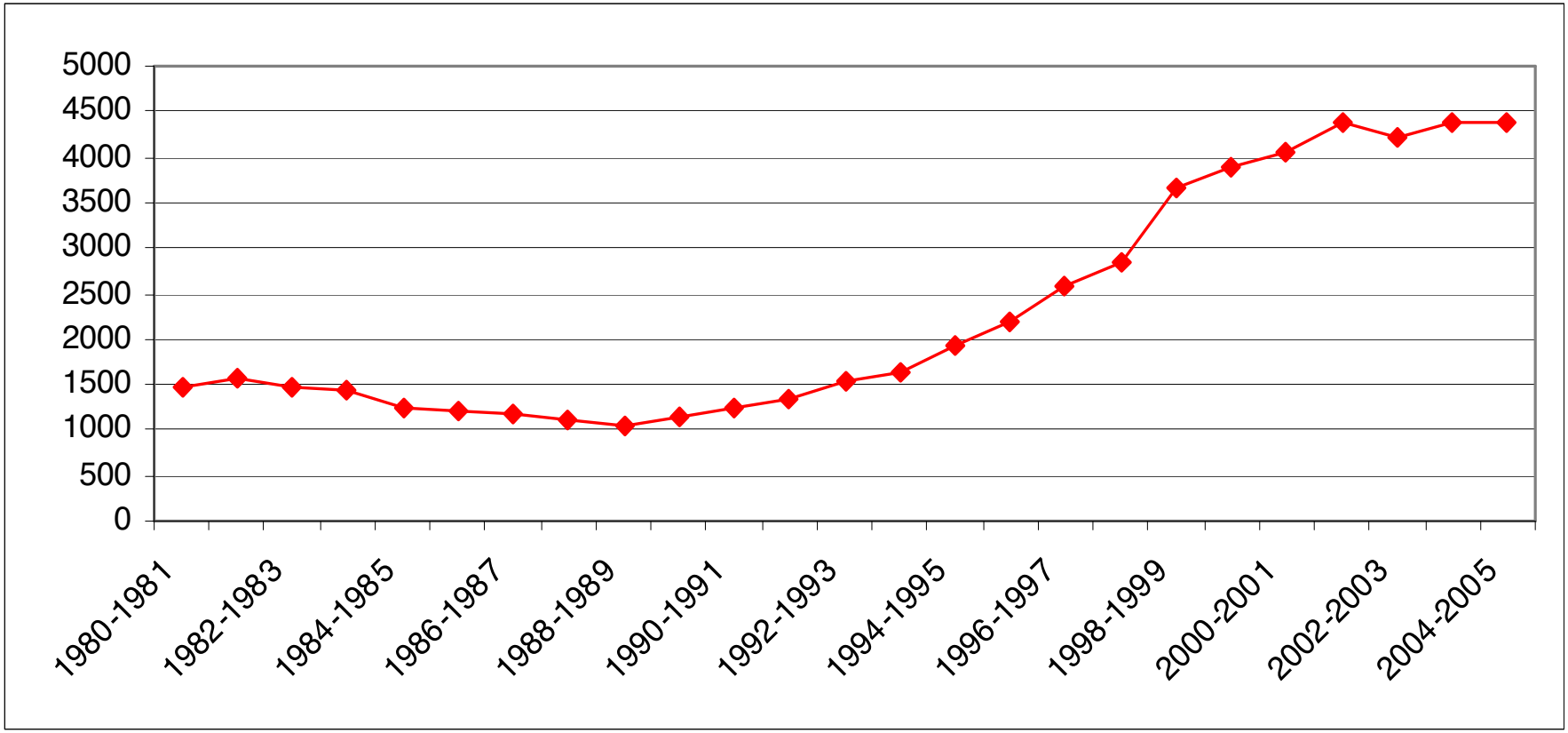
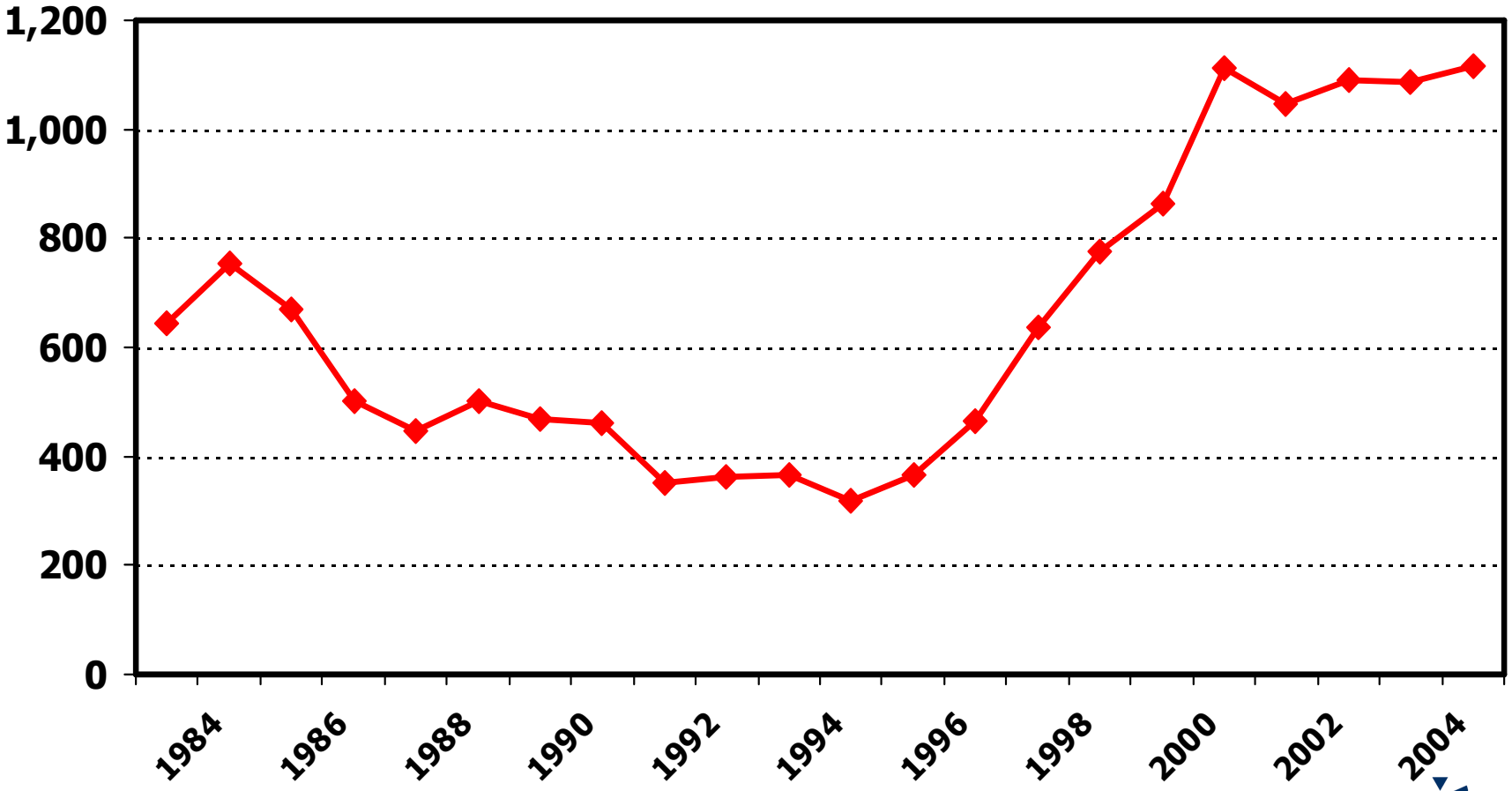
PA Pipeline, 1980-2005



Source: AAPA

Number of US-IMG Matches in the NRMP, 1983-2004



Source: AAMC

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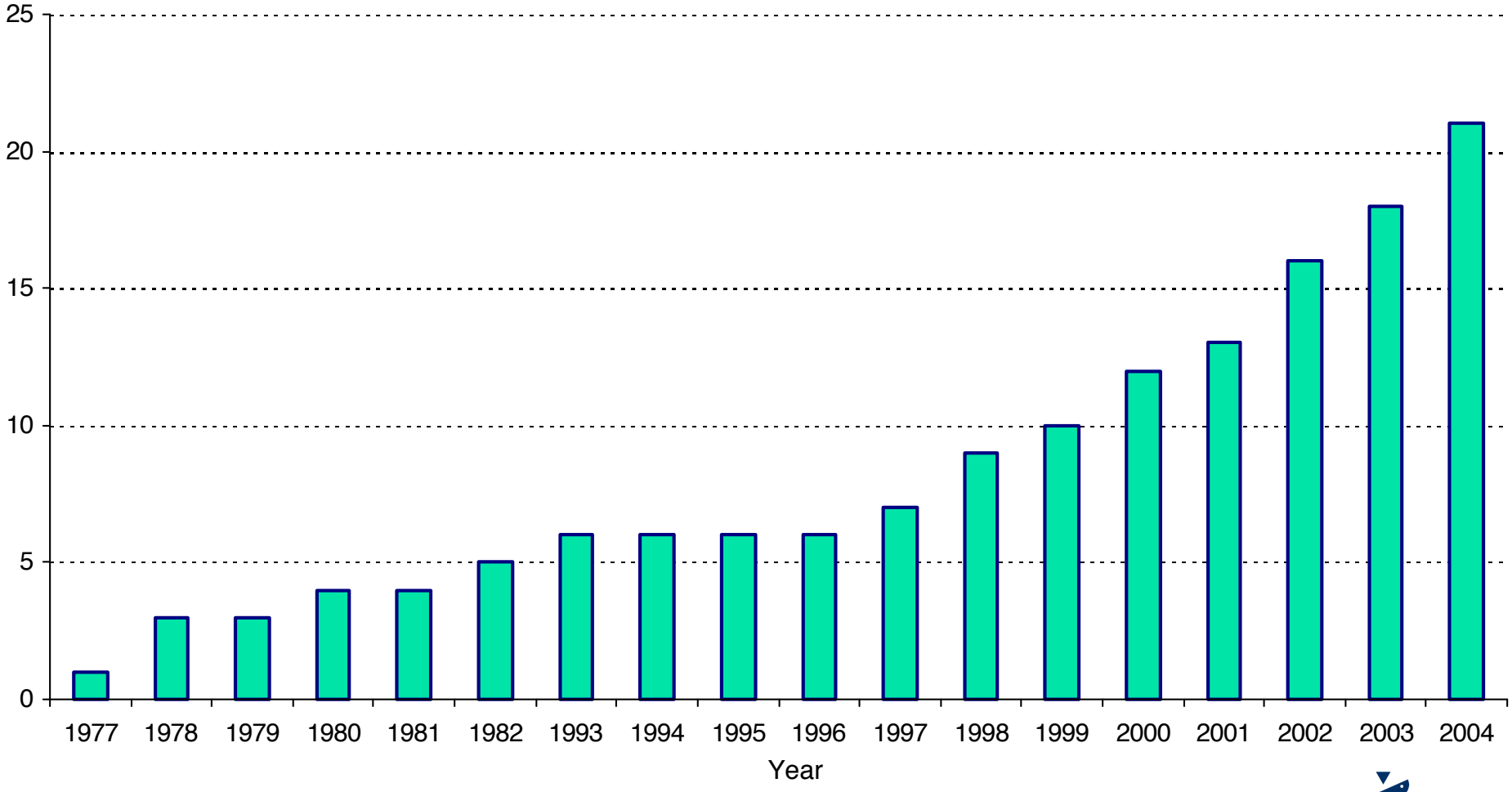
Cumulative Number of Caribbean Medical Schools by Year of Establishment



Source: List of Caribbean Medical Schools (http://www.valuemd.com/index.php) & ECFMG's IMED

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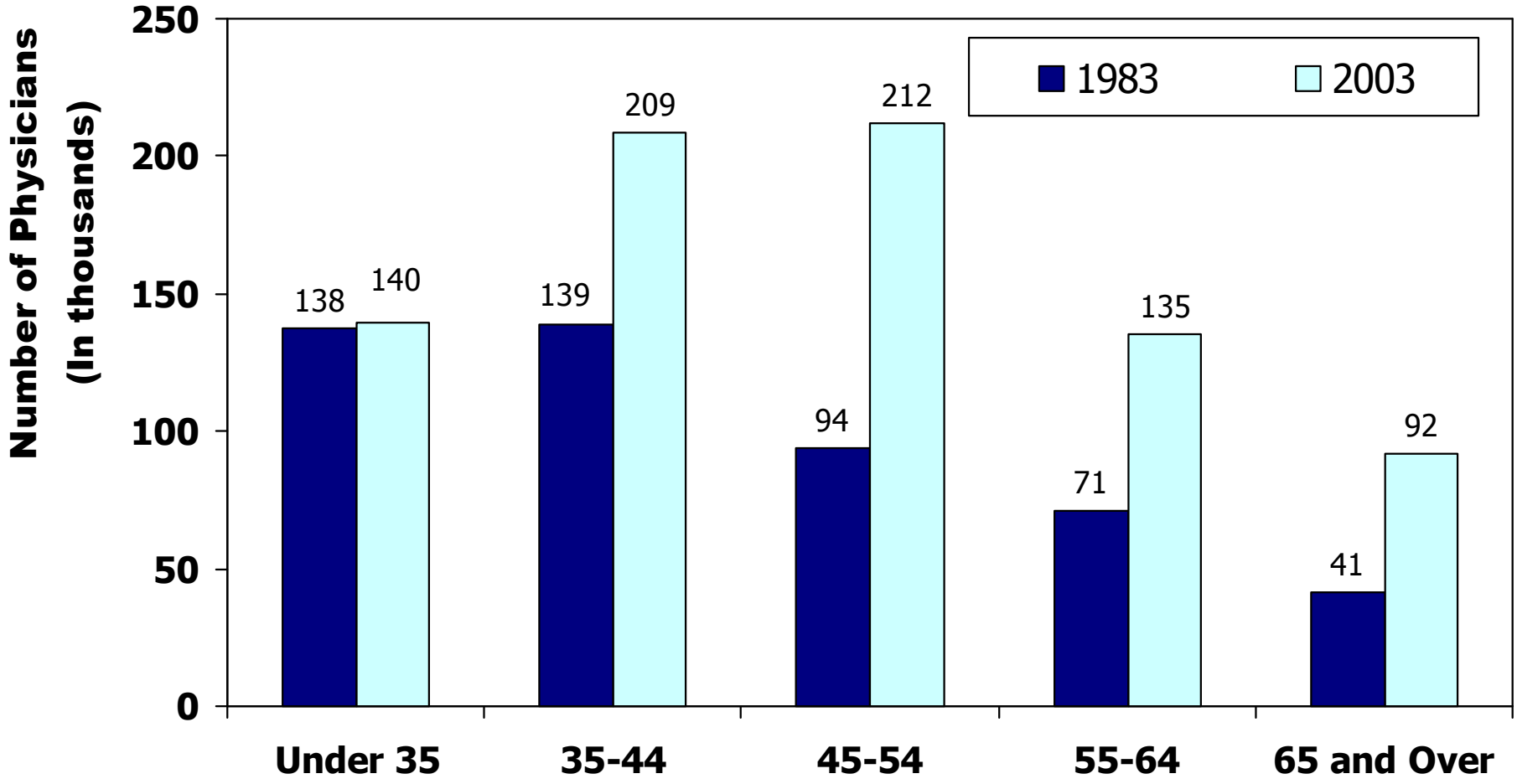
Active Physician Age Distribution
1983 and 2003



Source: AMA PCD 2005 Edition.
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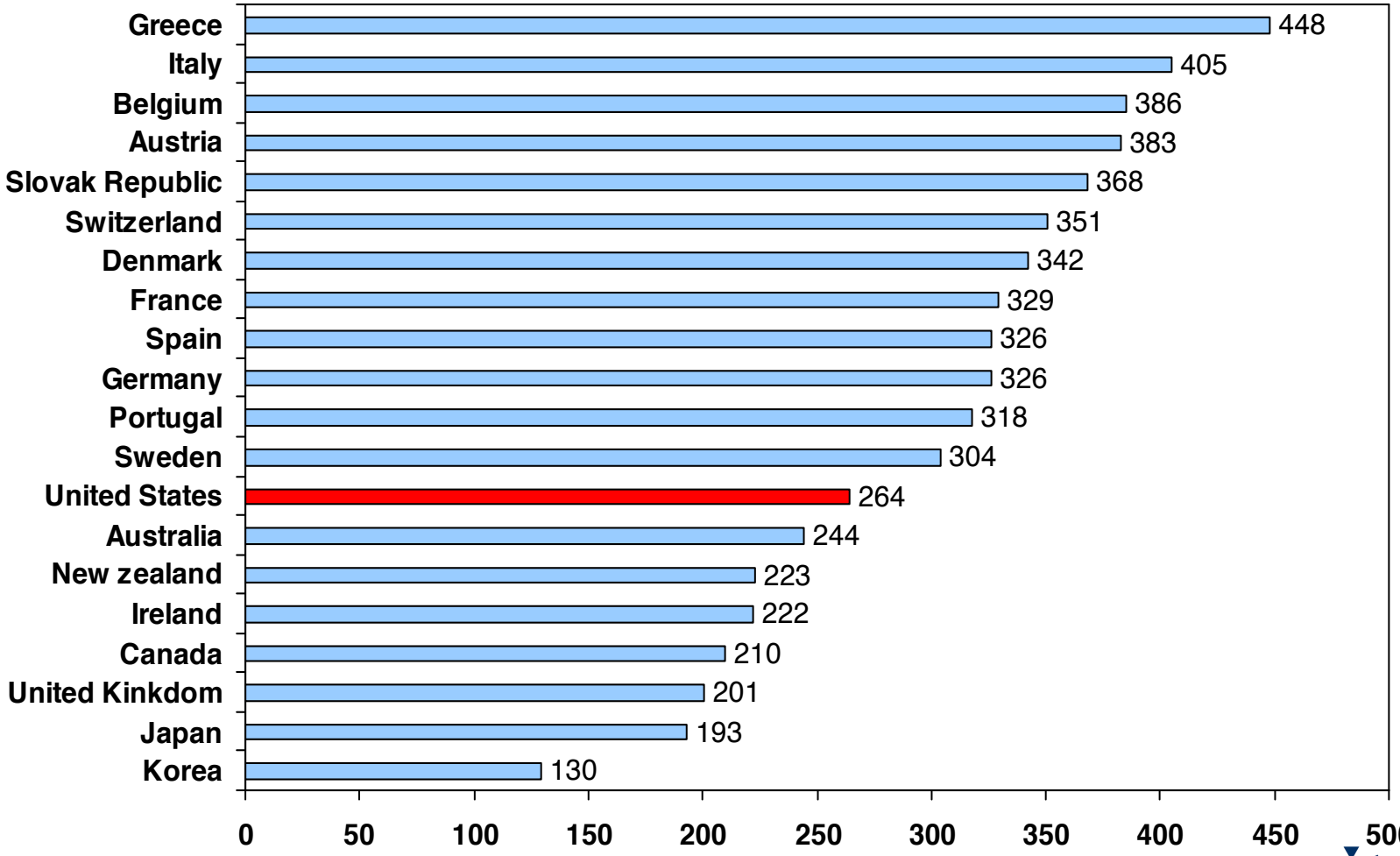
The Per Capita Number of Physicians in the US is Lower Than Most Developed Countries
Physicians Per 100,000, 2000



Source: The Supply of Physician Services in OECD Countries. OECD, Steven Simoens & Jeremy Hurst. Health Working Papers. 2006

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Demand for Physician Services

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Key Factors Influencing Future Demand for Physician Services

- Population growth ↑
- Aging of the population ↑
- Public expectations ↑
- Economic growth of the nation ↑
- National investment in health care interventions ↑
- Advances in medicine leading to improved diagnosis and treatment ↑ ↓
- Changes in organization, delivery financing ↑ ↓
- Efforts to weed out unnecessary/marginally beneficial services ↓
- Cost containment efforts ↓

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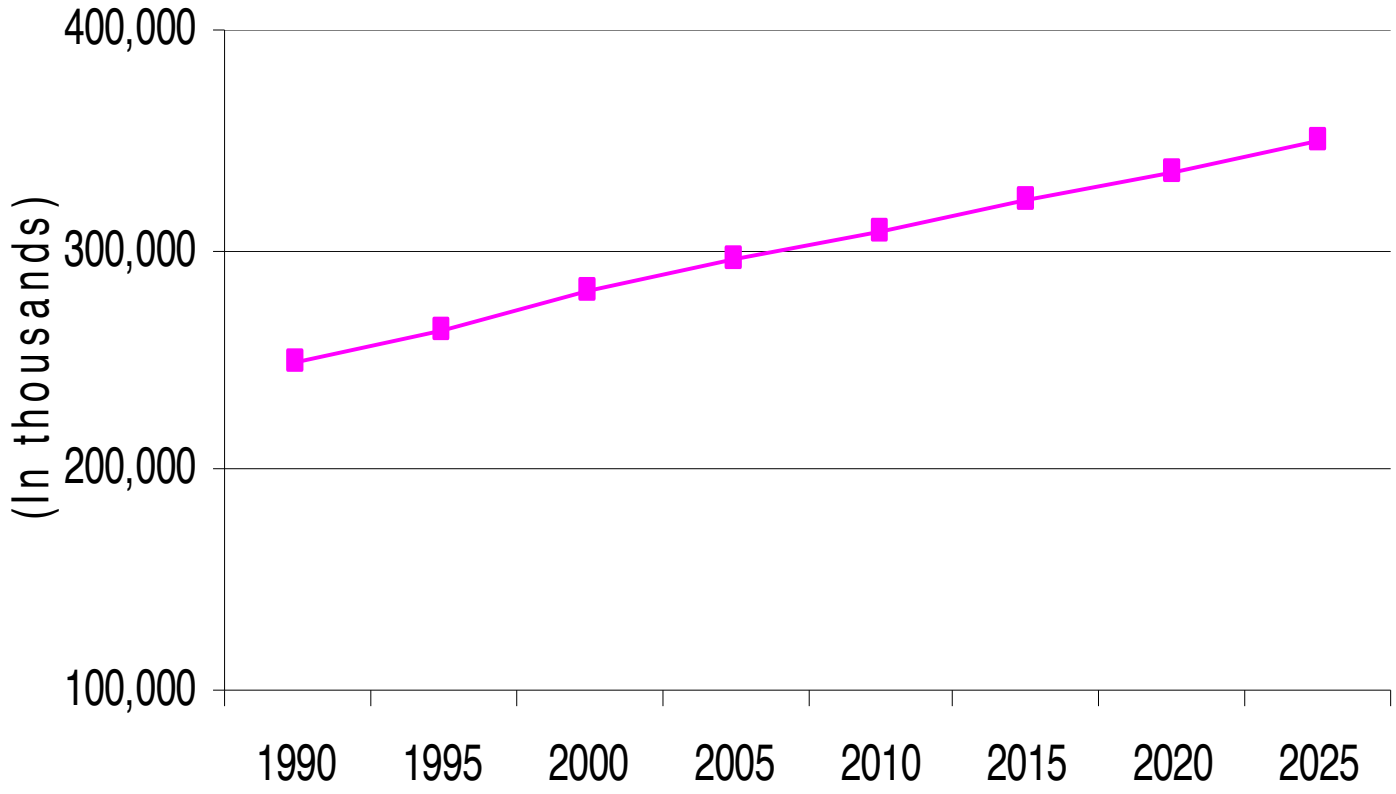
U.S. Population Growth: 1990 – 2025

The Nation is Growing by 25 Million per Decade



Source: U.S. Bureau of Census Annual Population Estimates by Age Group, Sex, selected Year for 1990-2000; Interim Projections Consistent with Census 2000
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The Eleven Most Costly Medical Conditions Are Far More Prevalent Among the Elderly, US 2000

Condition	Treated Prevalence per 100,000	Spending (millions of dollars)	% in total health care spending
Heart disease	6,226	56,700	**9%**
Trauma	12,338	41,100	**7%**
Cancer	3,348	38,900	**6%**
Pulmonary conditions	15,526	36,500	**6%**
Mental disorders	8,575	34,400	**5%**
Hypertension	11,382	23,400	**4%**
Diabetes	4,260	18,300	**3%**
Arthritis	6,966	17,700	**3%**
Back problems	5,092	17,500	**3%**
Cerebrovascular disease	854	15,000	**2%**
Pneumonia	1,370	12,600	**2%**
Total		312,000	**50%**

Source: Thorpe, K.E., C.S. Florence, & P. Joski (2004)
Prepared by AAMC Center for Workforce Studies

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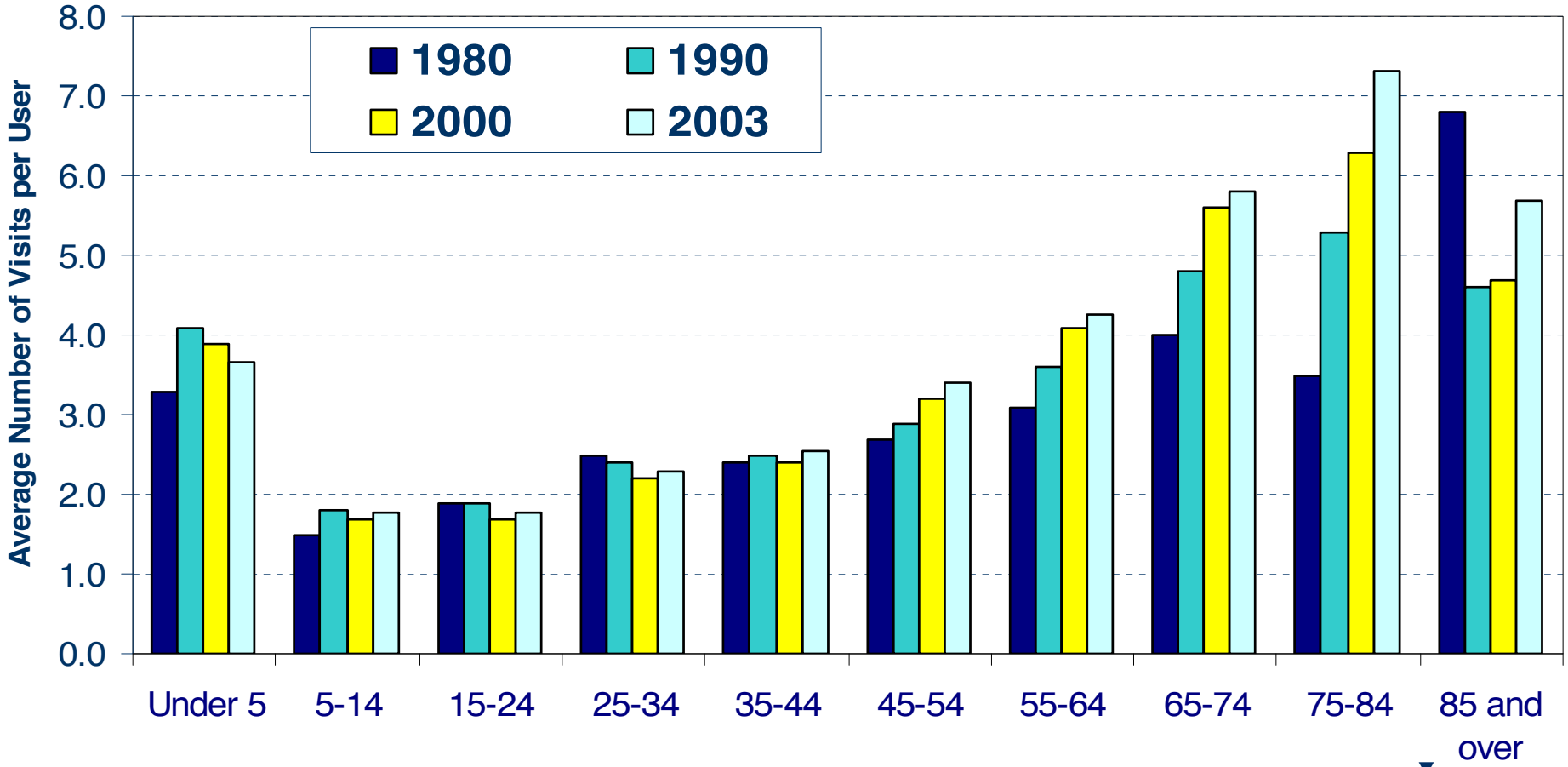
Visit Rates are Higher and Growing for Those Over 45

Ambulatory Care Visits to Physician Offices and Clinics, 1980-2003



Source: NAMCS, 1980, 1990, 2000 & 2003
Prepared by AAMC Center for Workforce Studies

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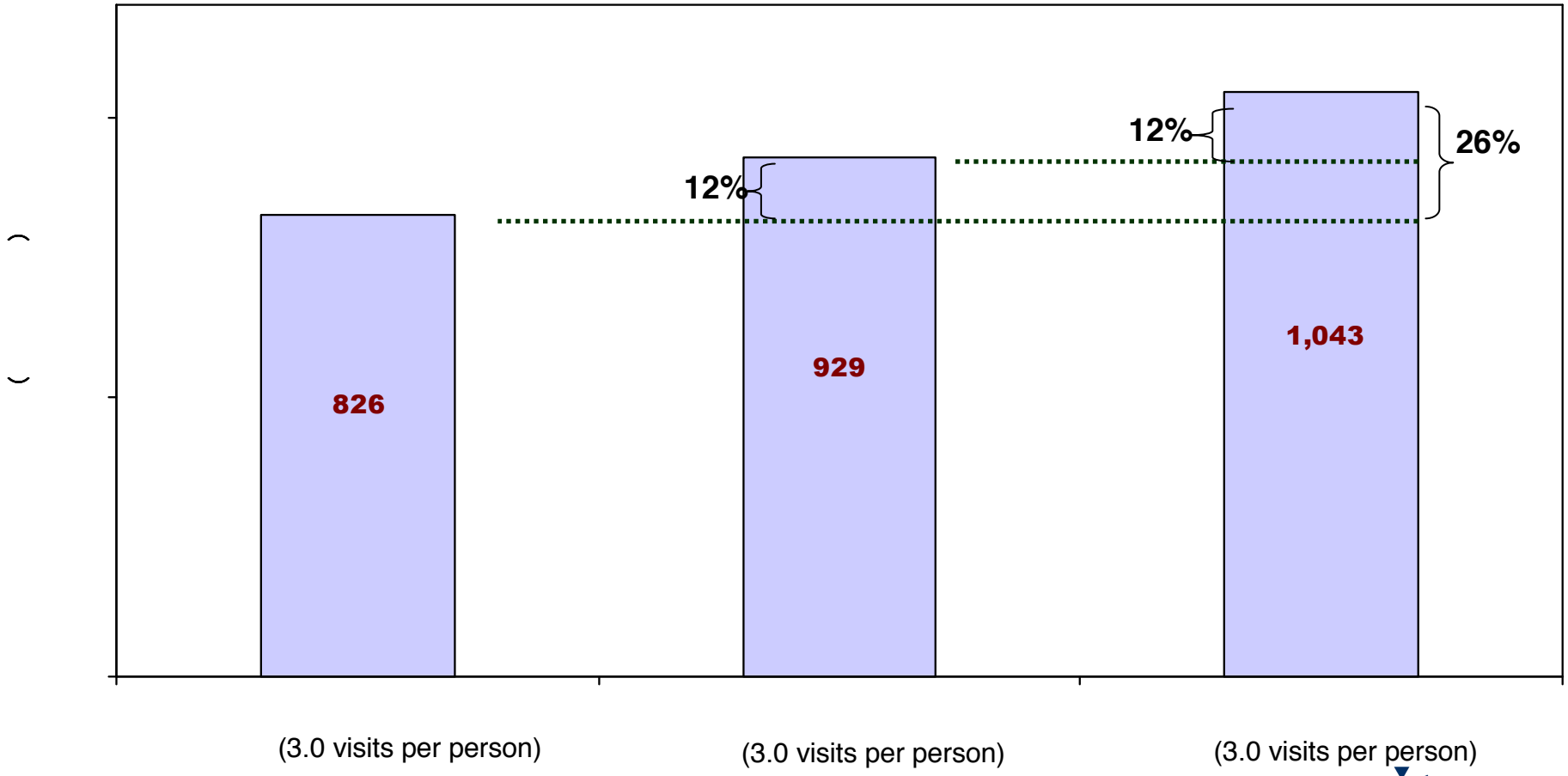
Physician Visits Will Rise Significantly Due to the Aging and Growth of the Population:

26% if visit Rates Stay at the 2000 Level



Sources: NAMCS, 1980, 1990 & 2002
US Census, Projected Population of the United States, by Age and Sex: 2000 to 2050

Prepared by AAMC Center for Workforce Studies

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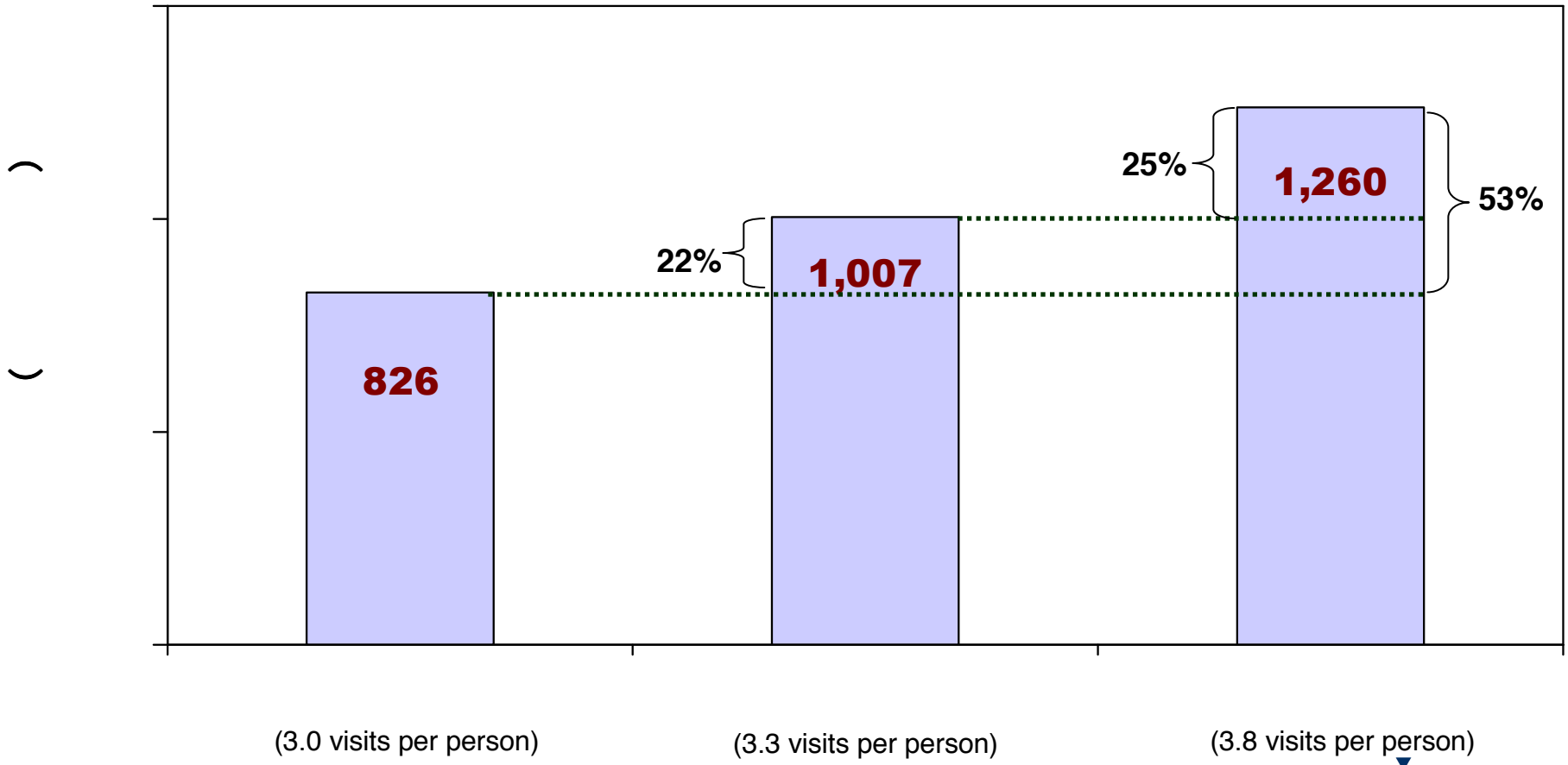
If Visit Rates Continue to Rise as They Did etween 1980 and 2000, Visits to Physicians Will Rise Very Sharply by 2020



Sources: NAMCS, 1980, 1990 & 2002
US Census, Projected Population of the United States, by Age and Sex: 2000 to 2050

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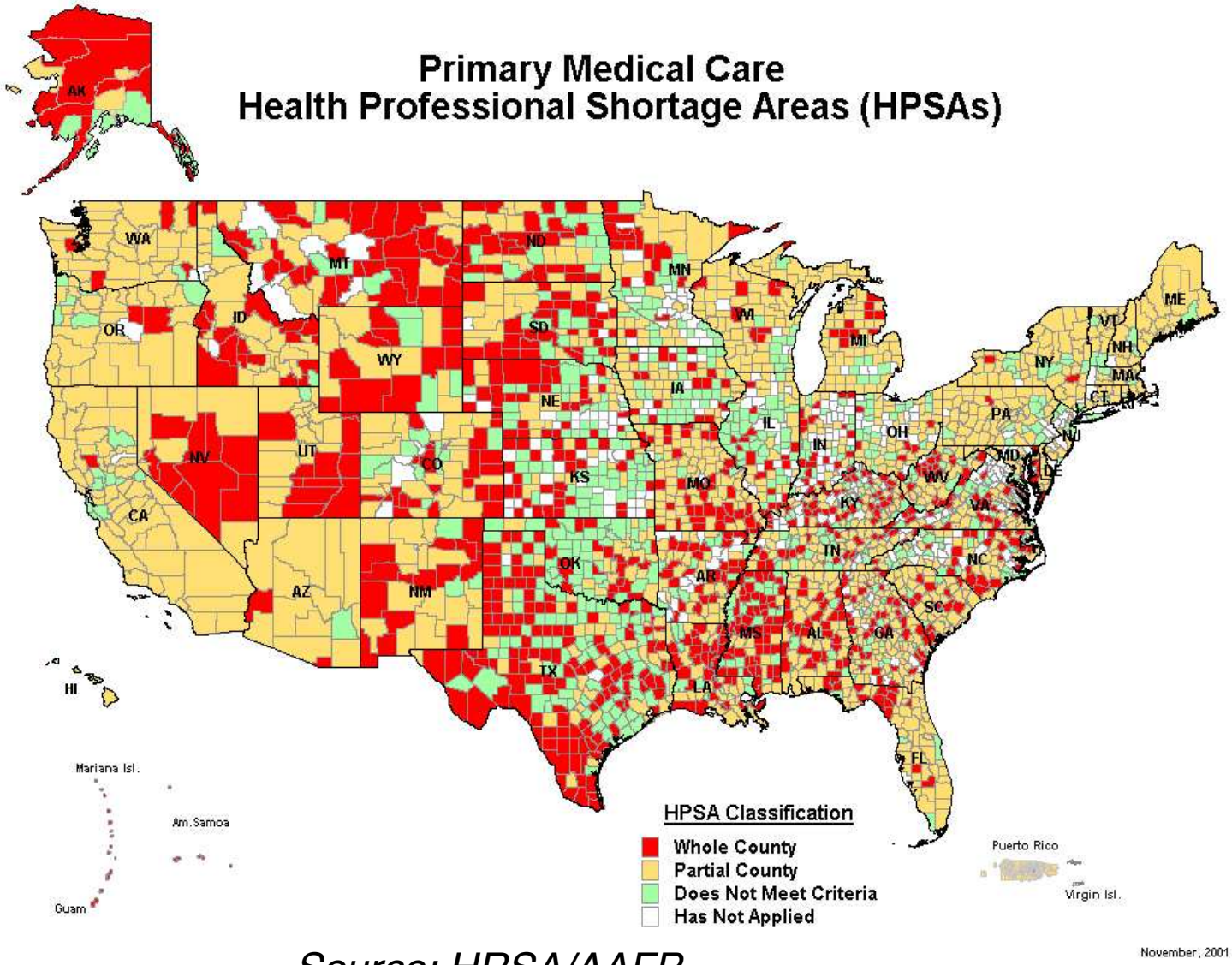
Unmet Need Already Exists--30 million people



Source: HRSA/AAFP

Recent State Studies with Findings of Shortages

- **California**, 2004
- **Mississippi**, 2004
- **North Carolina**, 2004
- **Texas**, 2002
- **Wisconsin**, 2004
- **Arizona**, 2005
- **Georgia**, 2005
- **Kentucky**, 2005
- **Massachusetts**, 2005
- **Michigan**, 2005
- **Oregon**, 2005

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Recent Specialty Specific Studies with Findings of Shortages

- Critical Care, 2000
- Pediatric Subspecialties, 2000
- Endocrinology, 2002
- Geriatric Medicine, 2003
- Neurosurgery, 2003
- Psychiatry, 2003
- Allergy and Immunology, 2004
- Cardiology, 2004
- Dermatology, 2004
- Medical Genetics, 2004
- Radiology, 2004

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Part II

Medical School Enrollment: Challenges to Expansion

Results of the 2004 and 2005 AAMC Surveys of US Medical School Plans

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Strategies to Increase the Supply of Physicians

1. Increase US medical school enrollment and graduations
   - Expand existing schools add new ones
   - Support a more diverse physician workforce
   - Address barriers to expansion
2. Increase number of IMGs entering training
   - Growing concern over brain-drain
3. Retain active physicians longer
4. Increase productivity effectiveness

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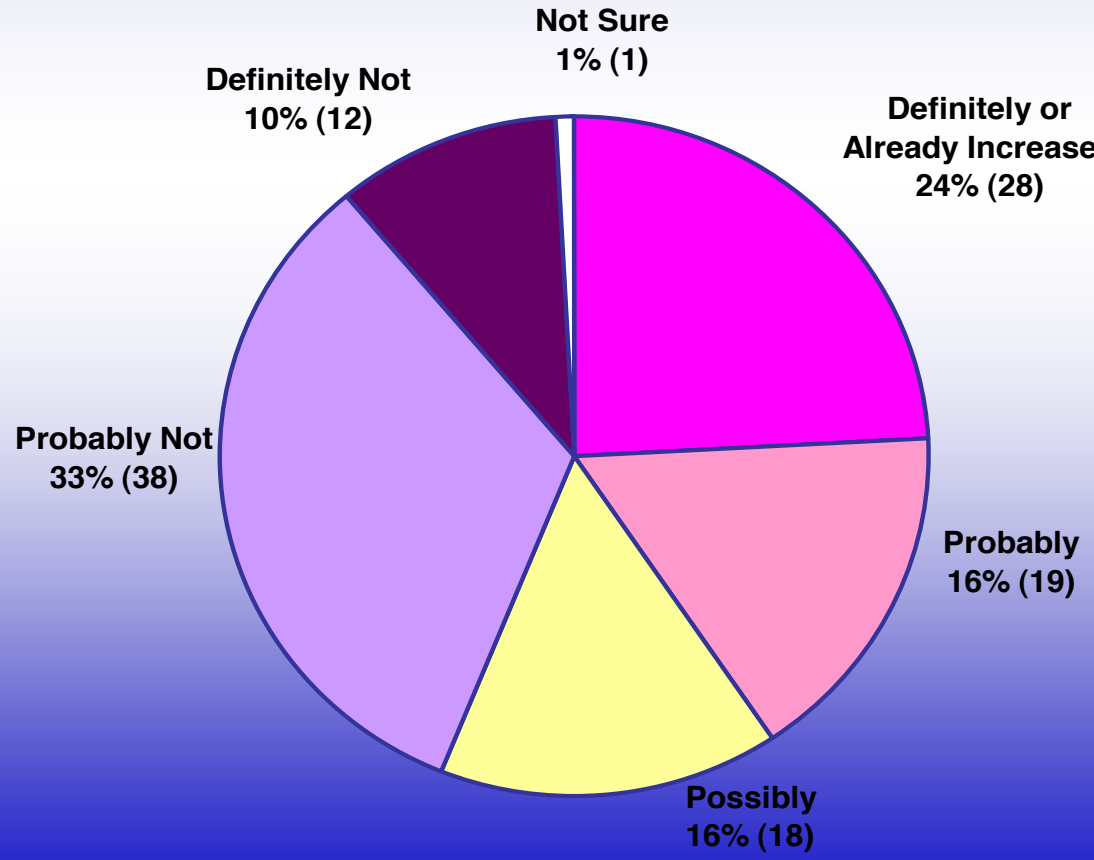
Allopathic Schools 2005 Plans to Increase First- ear Enrollment etween 2005 and 2011

(116 of 125 schools)



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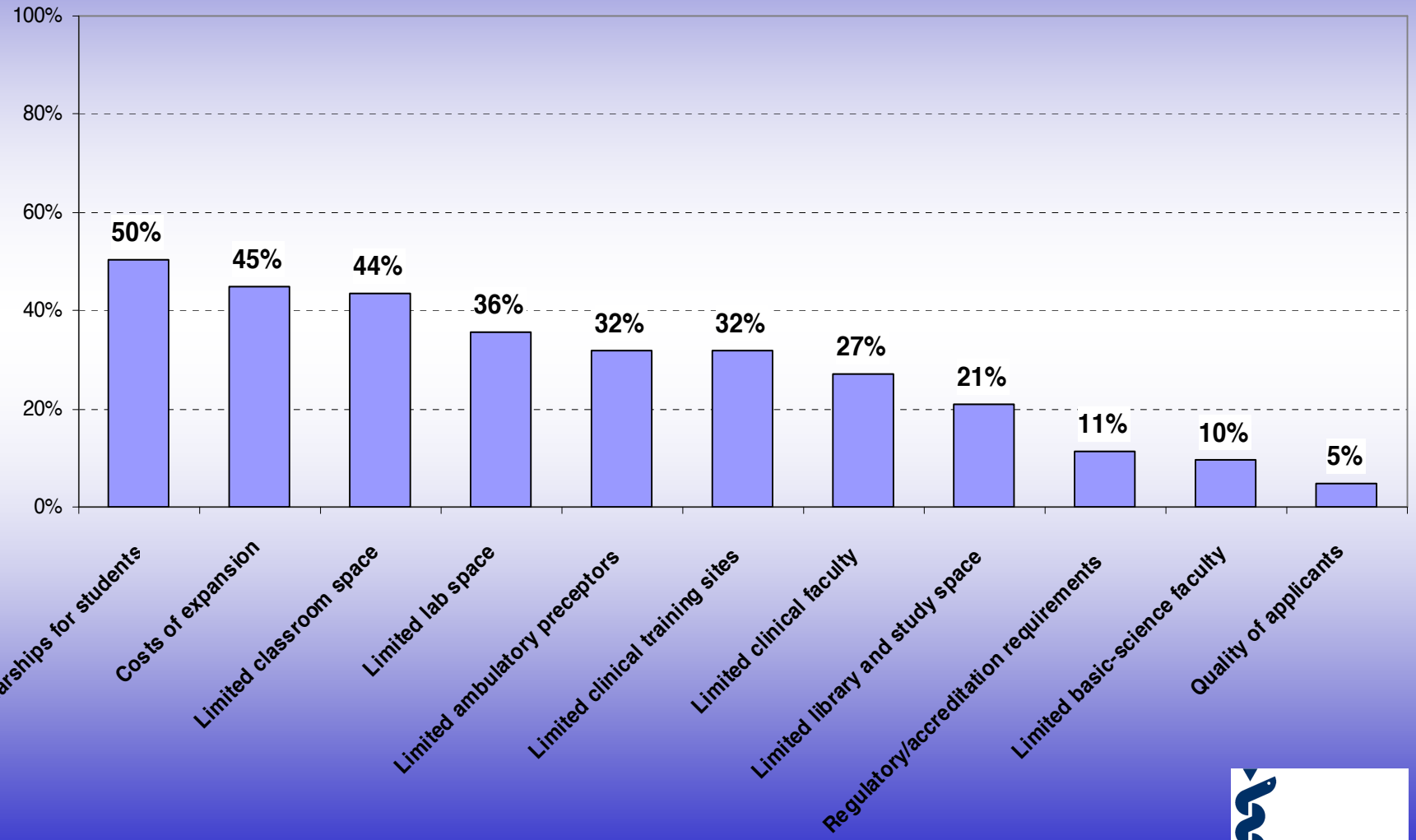
Potential arriers to Enrollment Expansion: % of Respondents with Ma or or Very Significant Problem, 2005-06



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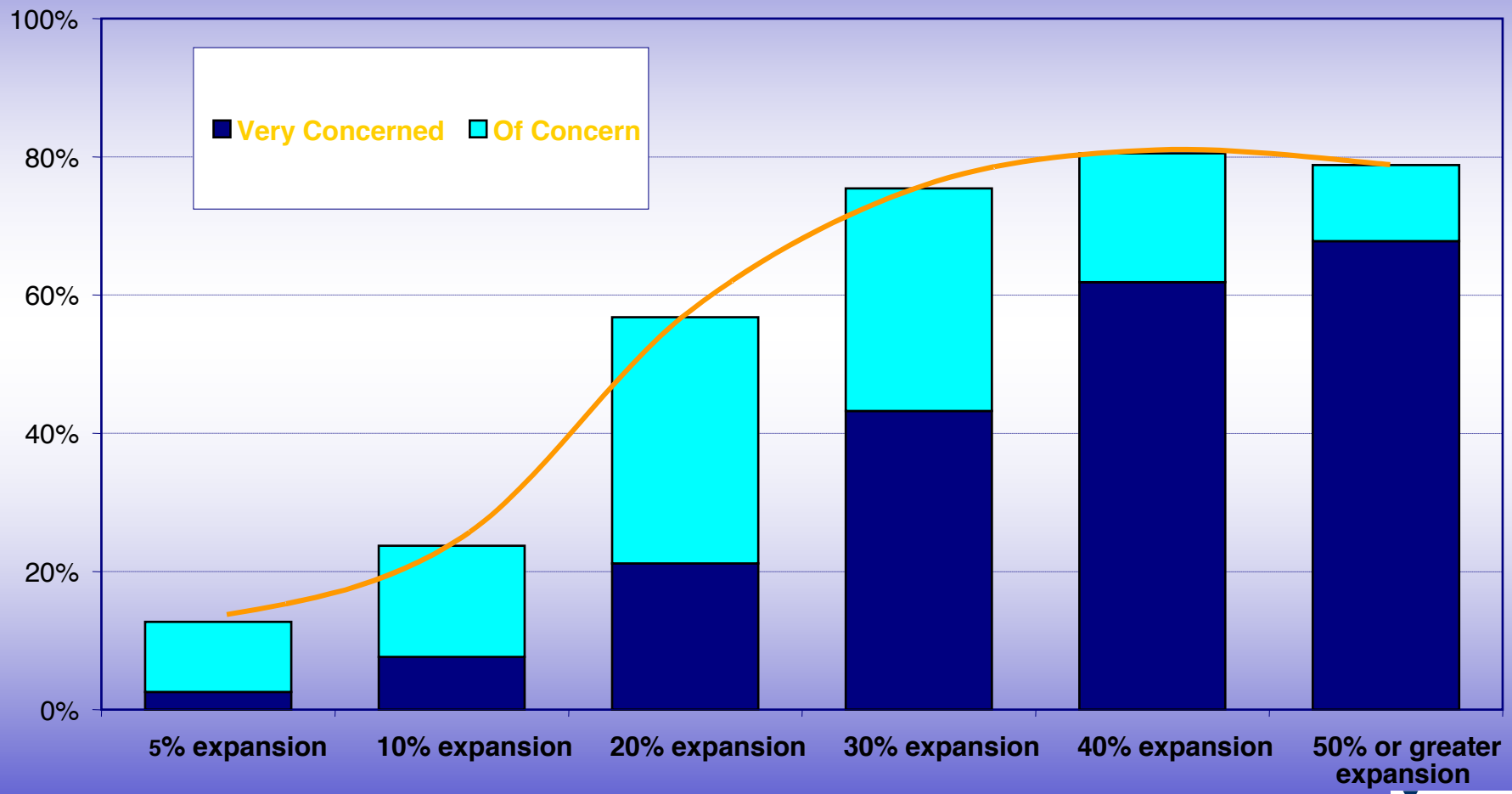
Extent of Concern With Ade uacy of Applicant Pool by Size of Enrollment Expansion

(n 118 out of 125 Allopathic Schools)



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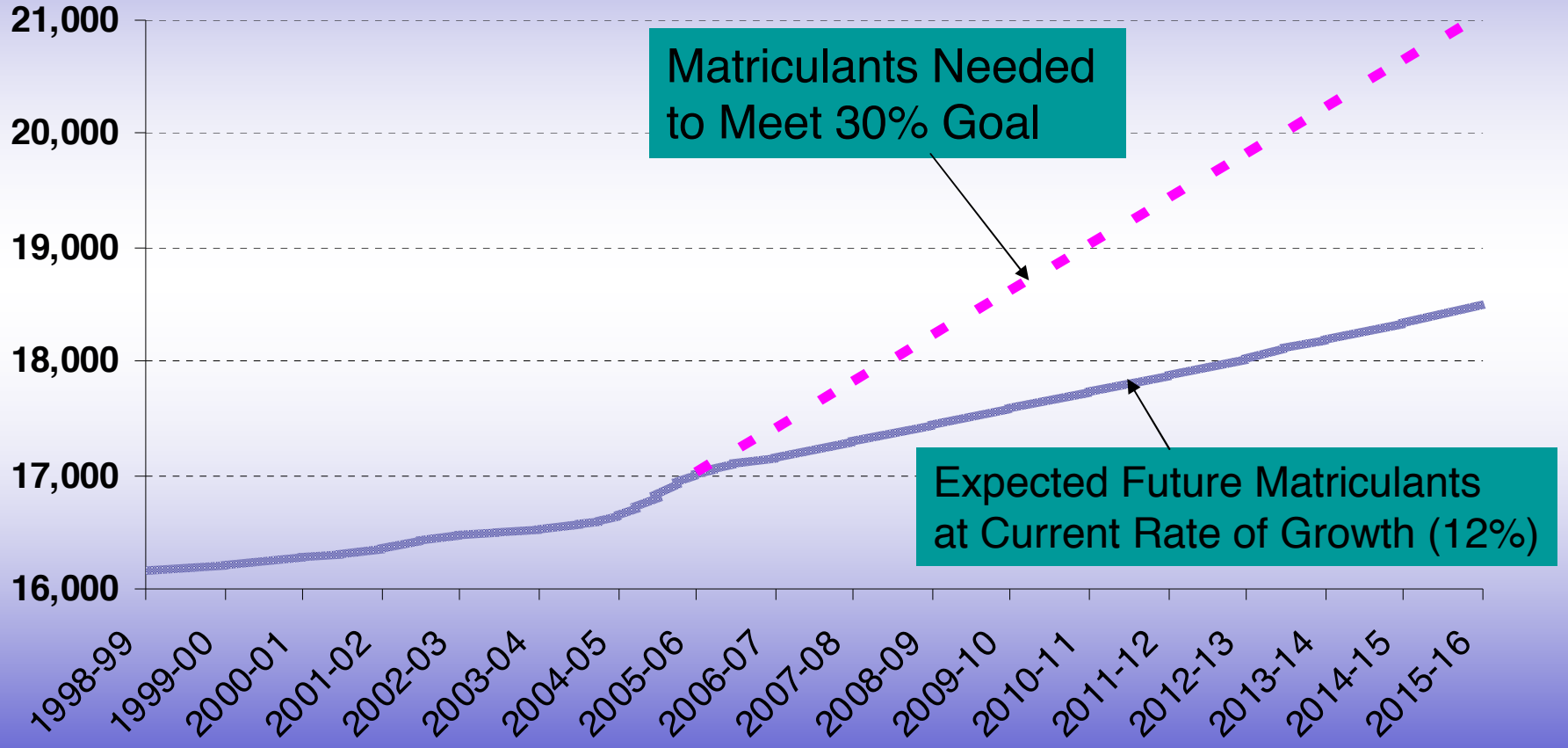
30% Growth Re uires An Additional 4,000 Allopathic Matriculants by 2015



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Methods for achieving the increase:

- Increase class size – Texas A&M
- New sites– Nevada; New Mexico
- New schools - Florida

Other Difficulties

- Money
- Space
- Faculty

Potential Solutions

- Money
  - New state support
  - New federal support?
- Space
  - Construction
  - Use of newer teaching methods
    - Web-based education
    - Simulators
- Faculty
  - Expansion beyond traditional faculty
    - Large community hospital
    - Sometime small ones (Harvard experiment)

But...

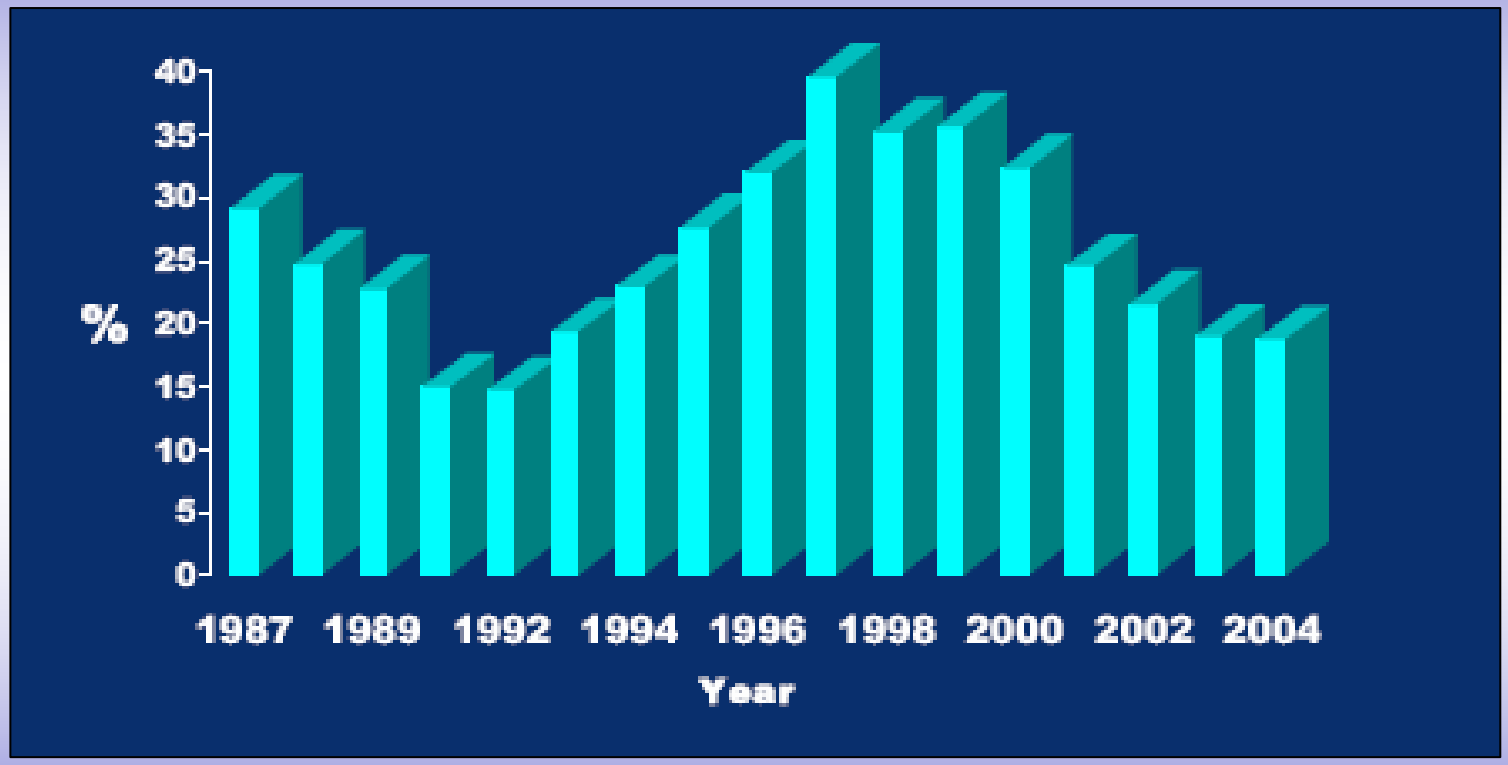
Just training more doctors is not enough...

We need different doctors...

Diversity

Source: Cohen, J: 21st Century Challenges for Medical Education; 9th International Medical Workforce Conference; Melbourne, Australia; November 2005

Student Interest in Generalism



Family Practice, General Internal Medicine, or General Pediatrics
AAMC Medical School Graduation Questionnaire

Source: Cohen, J: 21st Century Challenges for Medical Education; 9th International Medical Workforce Conference; Melbourne, Australia; November 2005

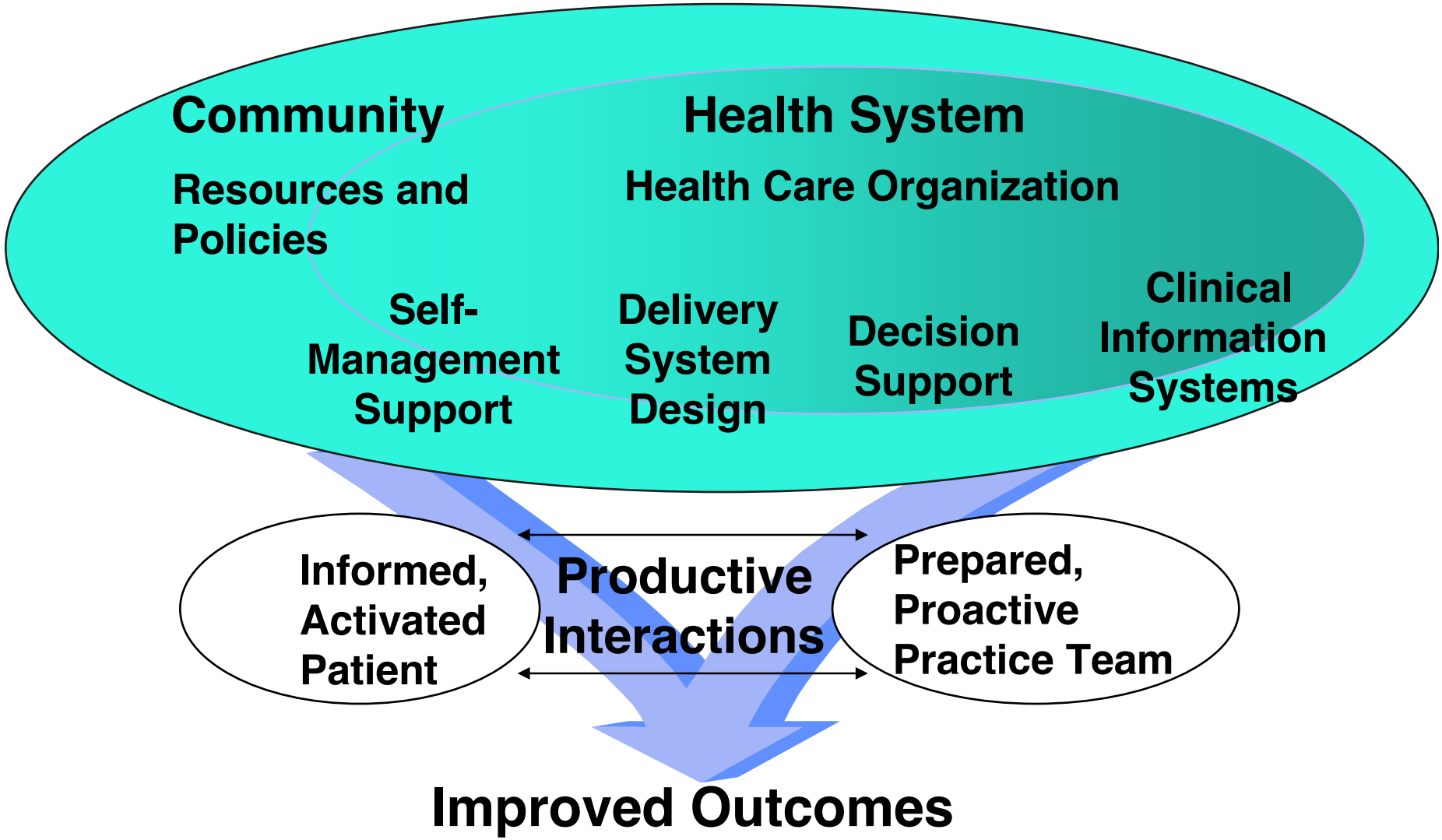
Part III
New Paradigms of Care

Source: Cohen, J: 21st Century Challenges for Medical Education; 9th International Medical Workforce Conference; Melbourne, Australia; November 2005

New Models of Care

Source: Cohen, J: 21st Century Challenges for Medical Education; 9th International Medical Workforce Conference; Melbourne, Australia; November 2005

Wagner Chronic Care Model



Time for Care

Current		Minimal time clinical guidelines*	
Type of visit	Hours per day	Type of visit	Hours per day
Acute	4.3	Acute	4.3
Chronic	2.8	Chronic	10.6
Preventive	1.2	Preventive	7.4
Total	8.3	Total	22.3

*Panel of 2,500 patients with age, sex, and disease rates of the U.S. population

New Models of Primary Care

Old

FPs

New