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# Assessment of Physician Workforce Supply and Demand in the US

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# State Health Workforce Research and Planning

*Michael E. Samuels, Dr.P.H.*

**Distinguished Scholar and Endowed Chair in Rural Health Policy**

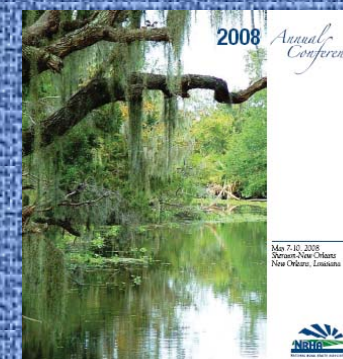


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**Concurrent Session  
10:15 – 11:30 A.M.  
Friday, May 9  
New Orleans, LA**



# “Assessment of Physician Workforce Supply and Demand in U.S.”

*Michael E. Samuels, Dr.P.H.*

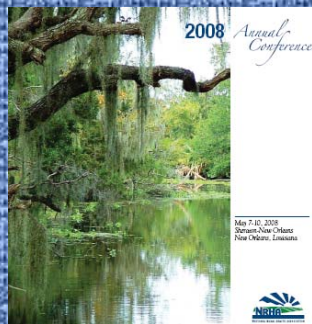
**Distinguished Scholar and Endowed Chair in Rural Health Policy**

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**Director of Research**



**University of Kentucky College of Medicine  
Office of Health Research and Development  
Lexington, KY**



**State Health Workforce Research and Planning  
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# Factors Influencing US Future Supply

Total  
Numbers

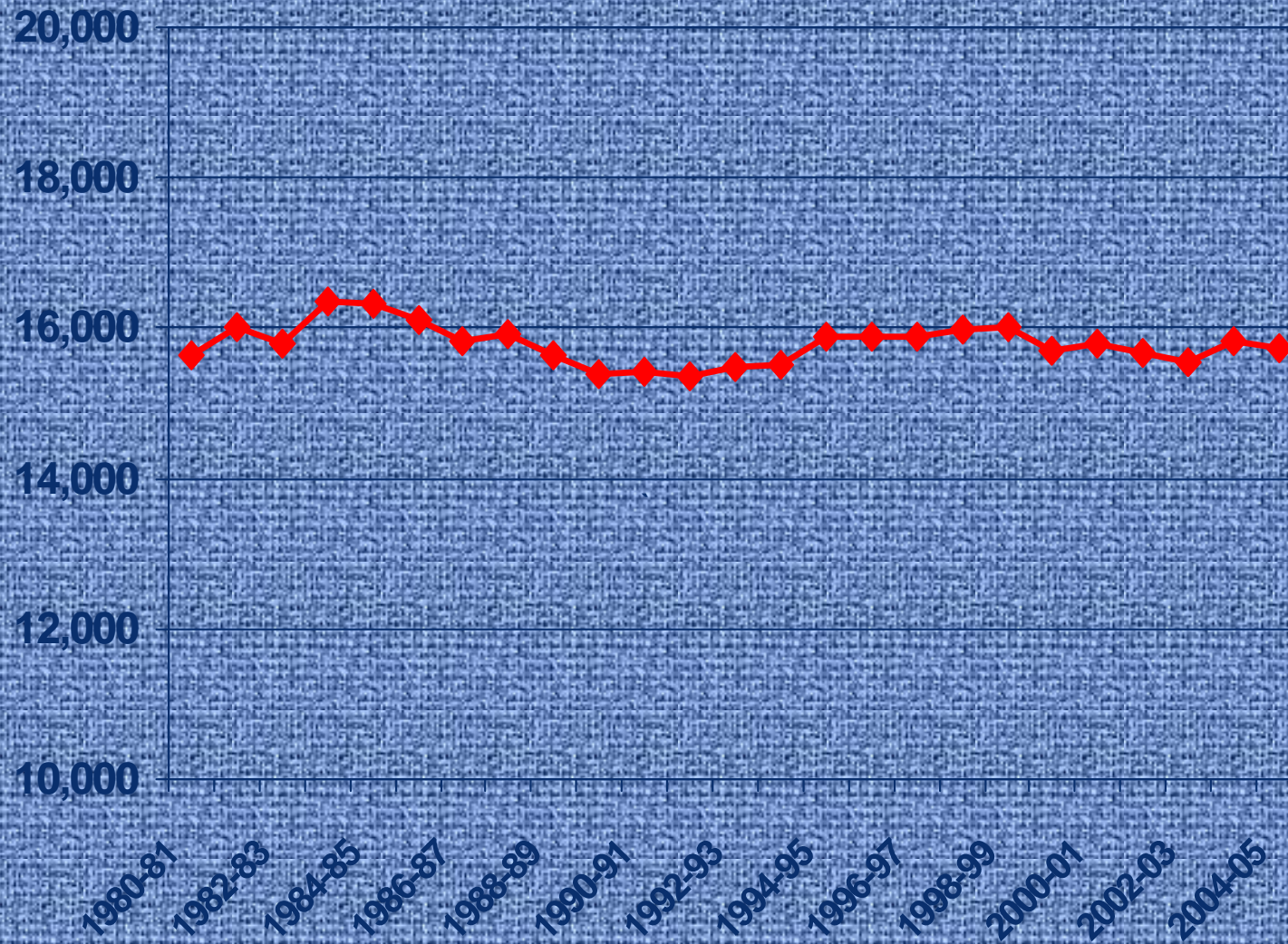
- Medical school production (MD, DO)
- International migration and IMG policies
- Aging of physician workforce & retirement

Impacts  
“effective”  
supply

- Gender and generational differences
- Lifestyle choices
- Changing practice patterns
- Productivity changes (i.e. NPs/PAs, IT)



# US Allopathic Graduation Trends

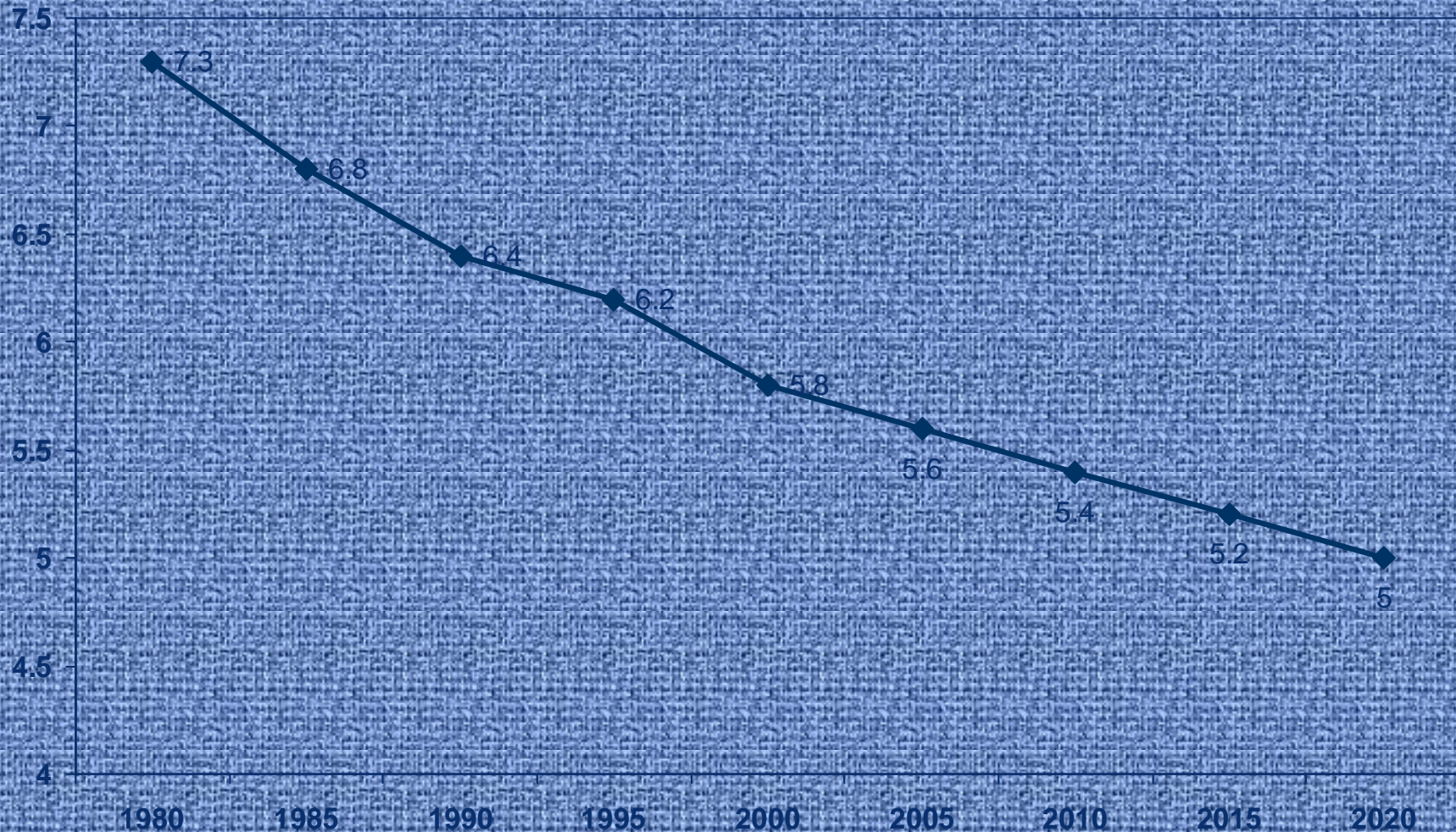


Source: AAMC Data Book, AAMC Facts

Prepared by AAMC, Center for Workforce Studies, Jan 2006

# US Per-Capita MD Enrollment Has Fallen Since 1980

First Year Enrollment per 100,000

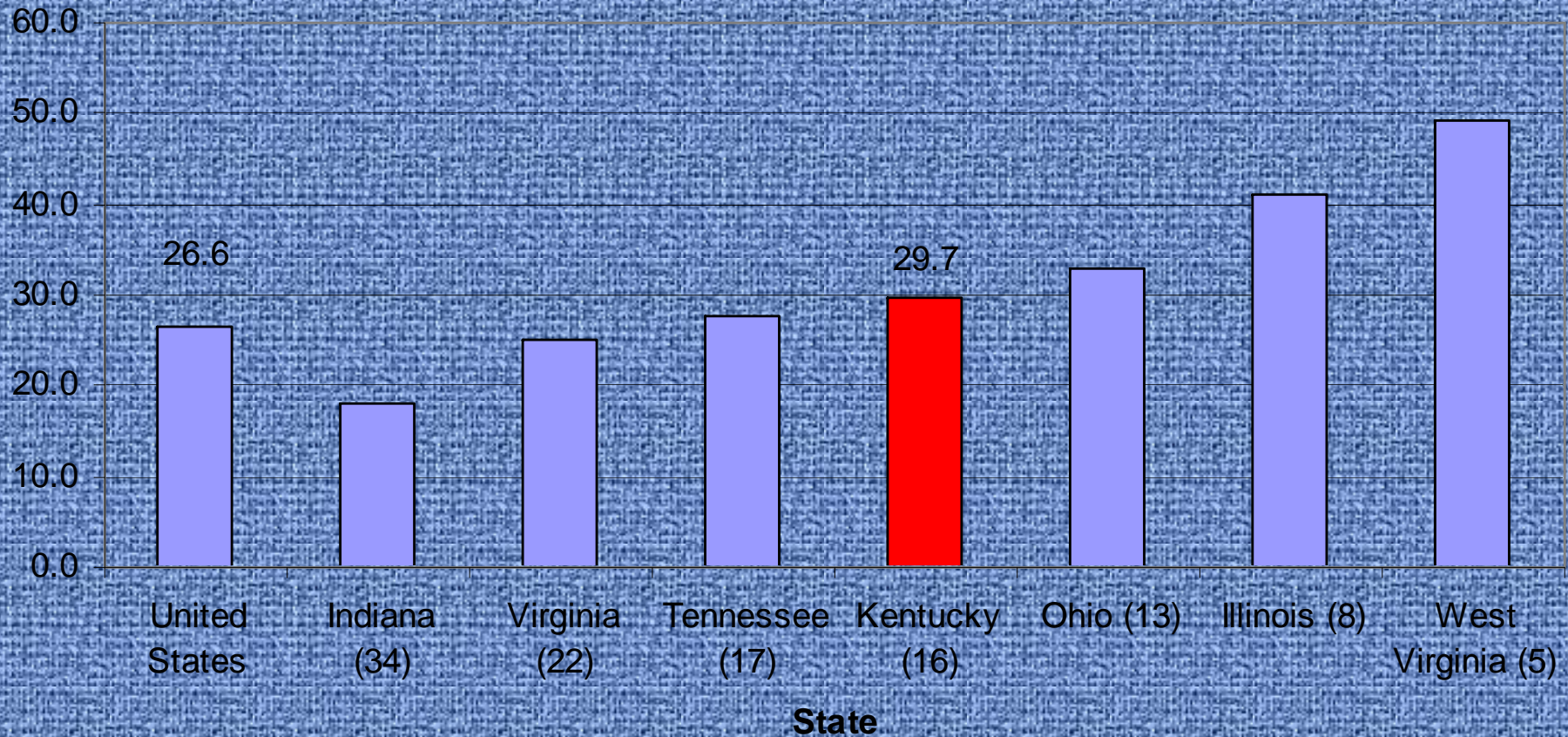


Source: AAMC Data Book; US Census Bureau.

Prepared by Center for Workforce Studies, AAMC, Feb 2006.

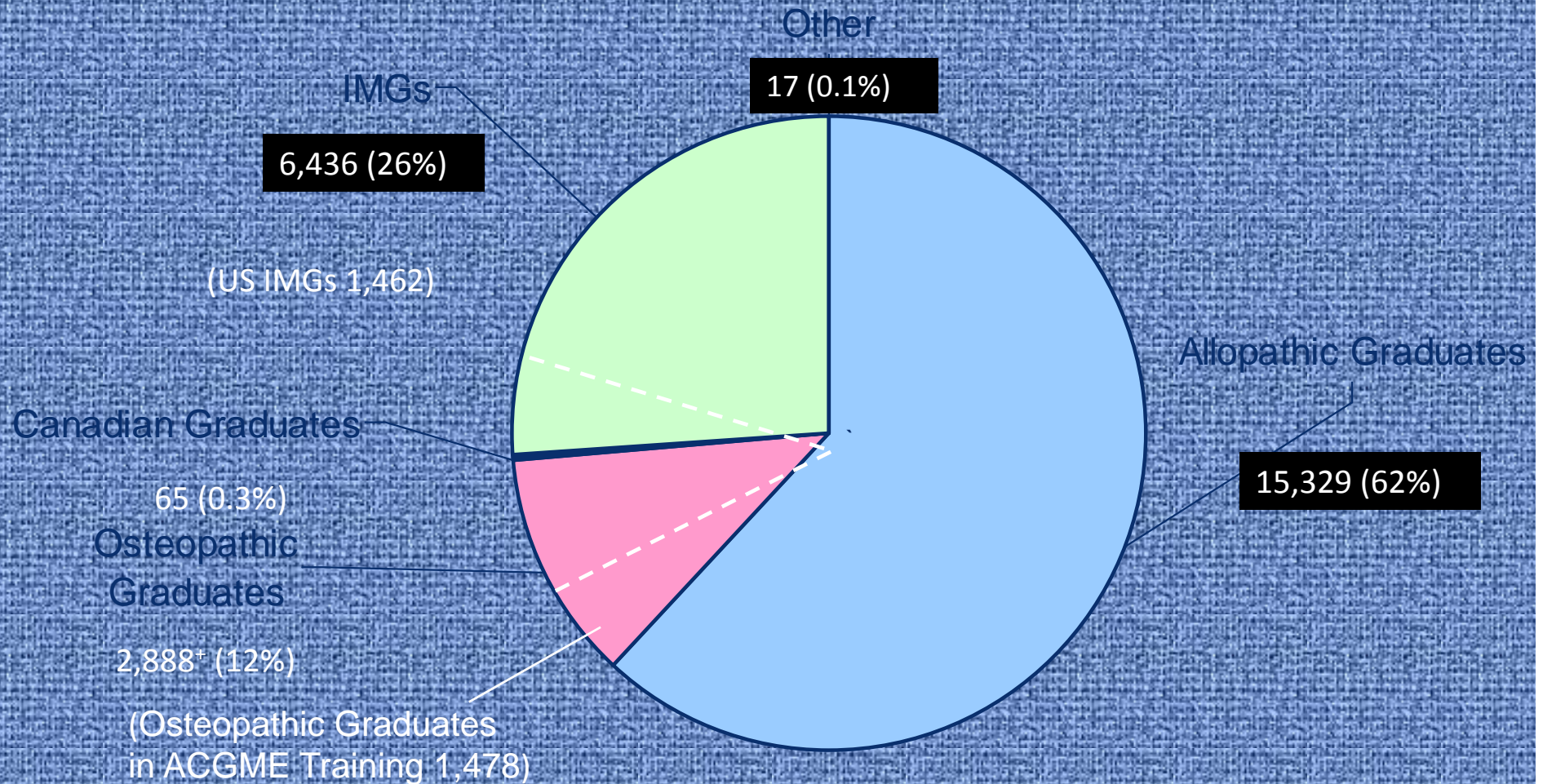
# MD & DO Enrollment per Capita (AAMC 2003)

## MD & DO Enrollment Per Capita



# US MDs Are Less Than 2/3 of Physicians Entering Graduate Medical Education, 2005

24,735\* entered in ACGME and AOA training in 2005:



\* Includes both allopathic and osteopathic residents.

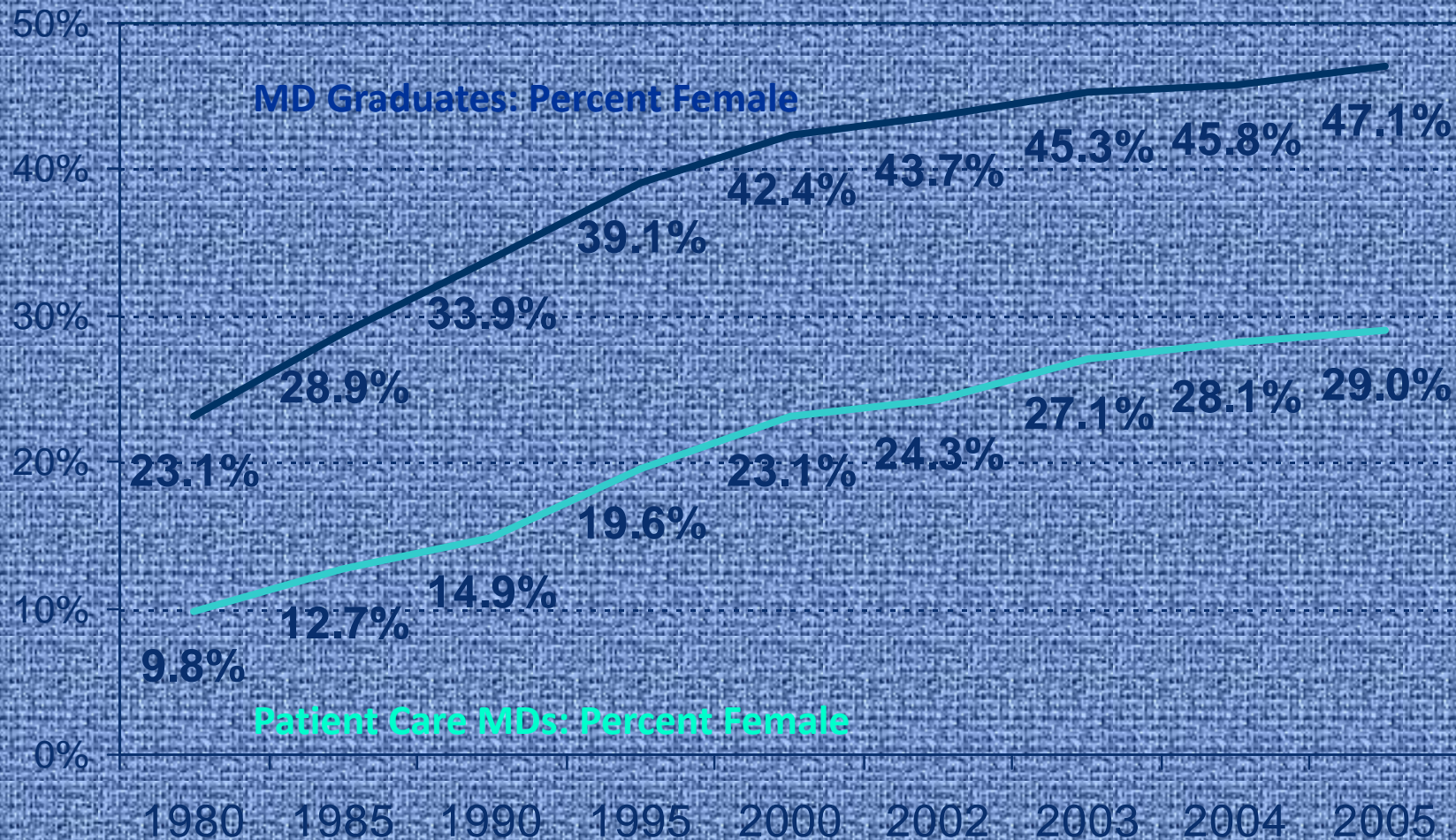
+ Number of DO graduates projected by AACOM. All the graduates are assumed to have entered ACGME or AOA GME.

Sources: AMA and AACOM, 2004 Annual Report on Osteopathic Medical Education

Prepared by the AAMC Center for Workforce Studies



# The Percent of US Physicians That are Female Is Rising Steadily



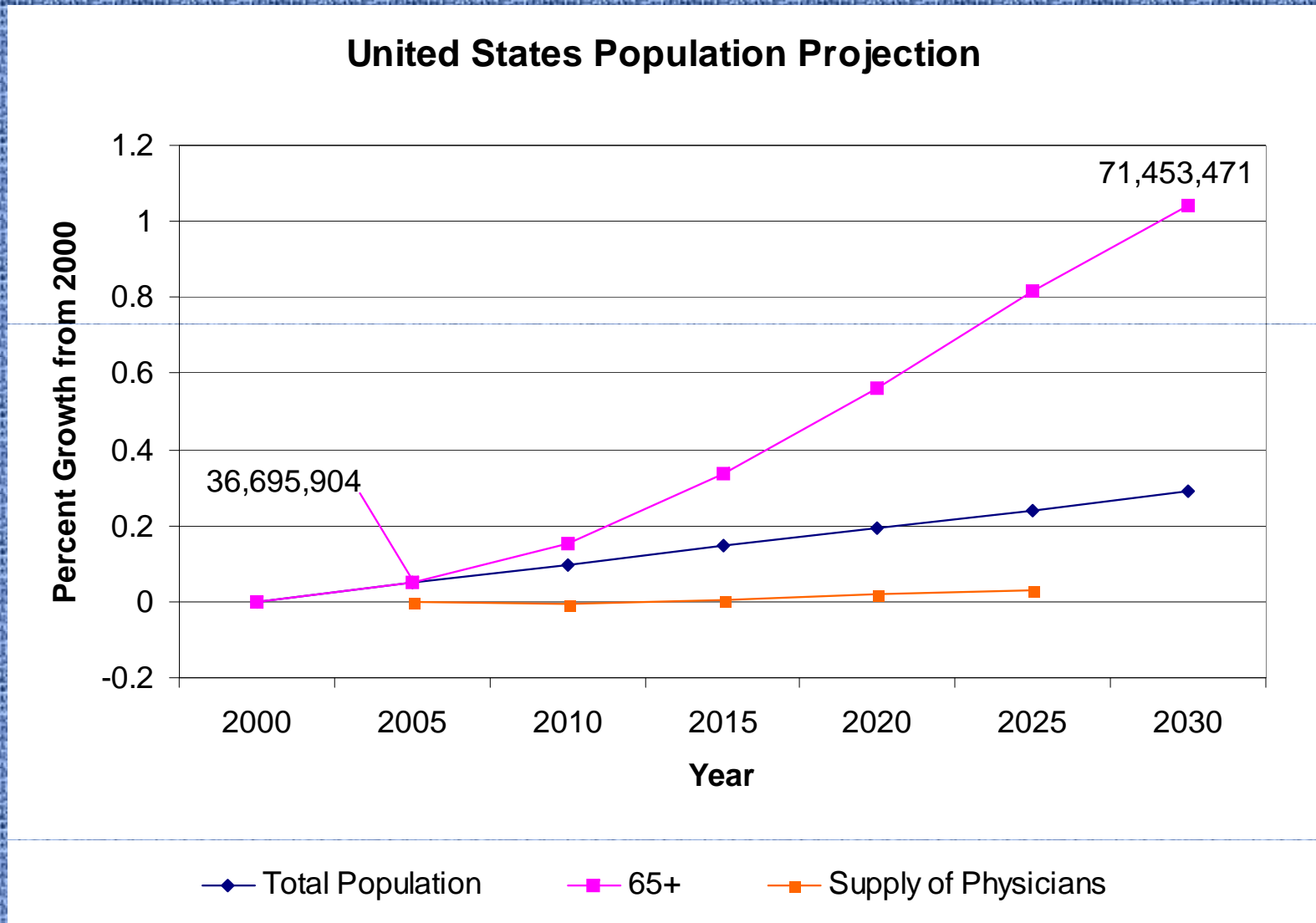
Source: AAMC Facts; AMA PCD 2006 Edition.

Prepared by AAMC Center for Workforce Studies, Jan 2006

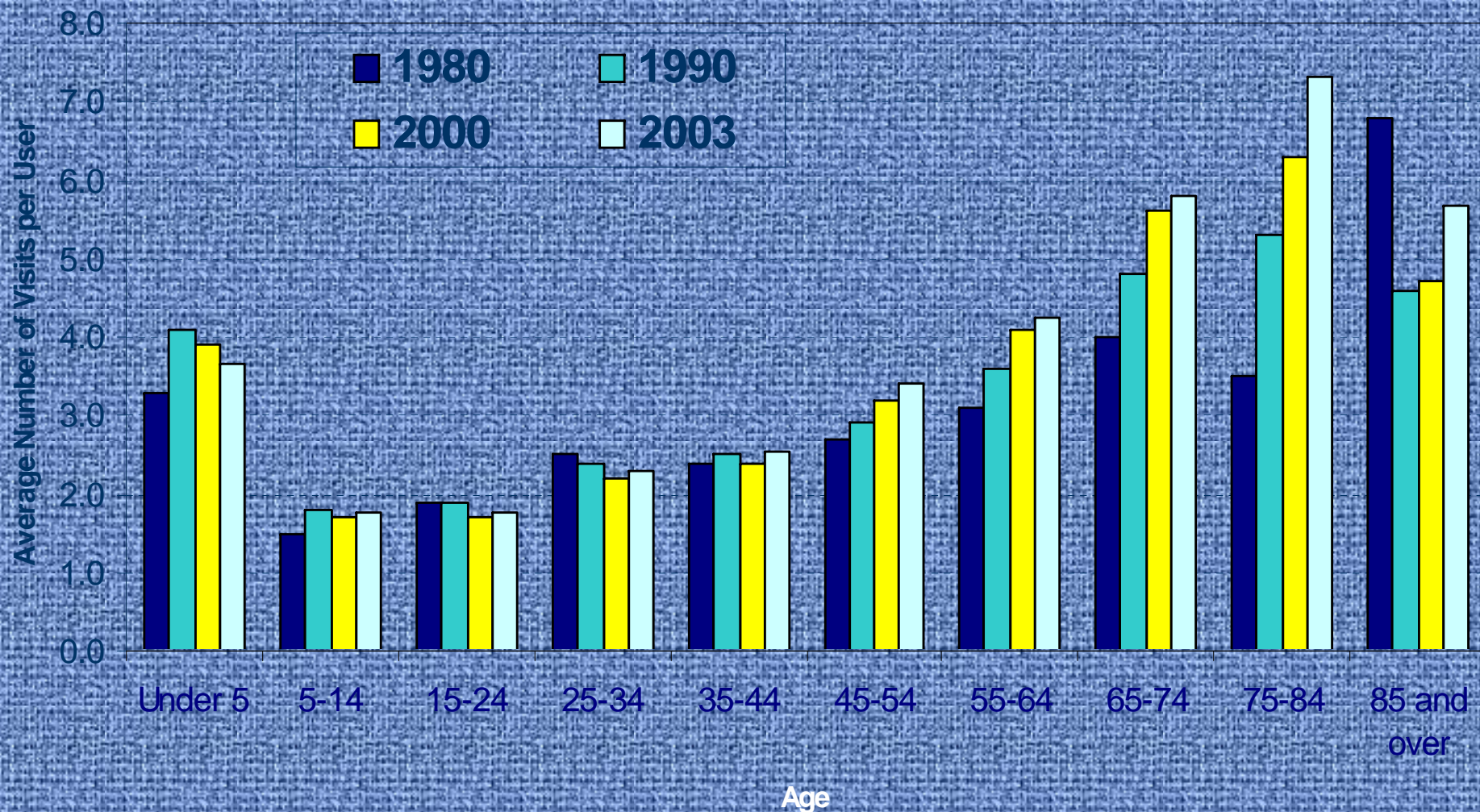
# Factors Affecting Demand for Physicians

- Aging & growth of population
- Wealth of the nation
- Public expectations
- Growth in non-physician clinicians
- New medical interventions
- Changing methods and systems of care
- Cost containment efforts

# US Population Over Age 65 Will Double by 2030



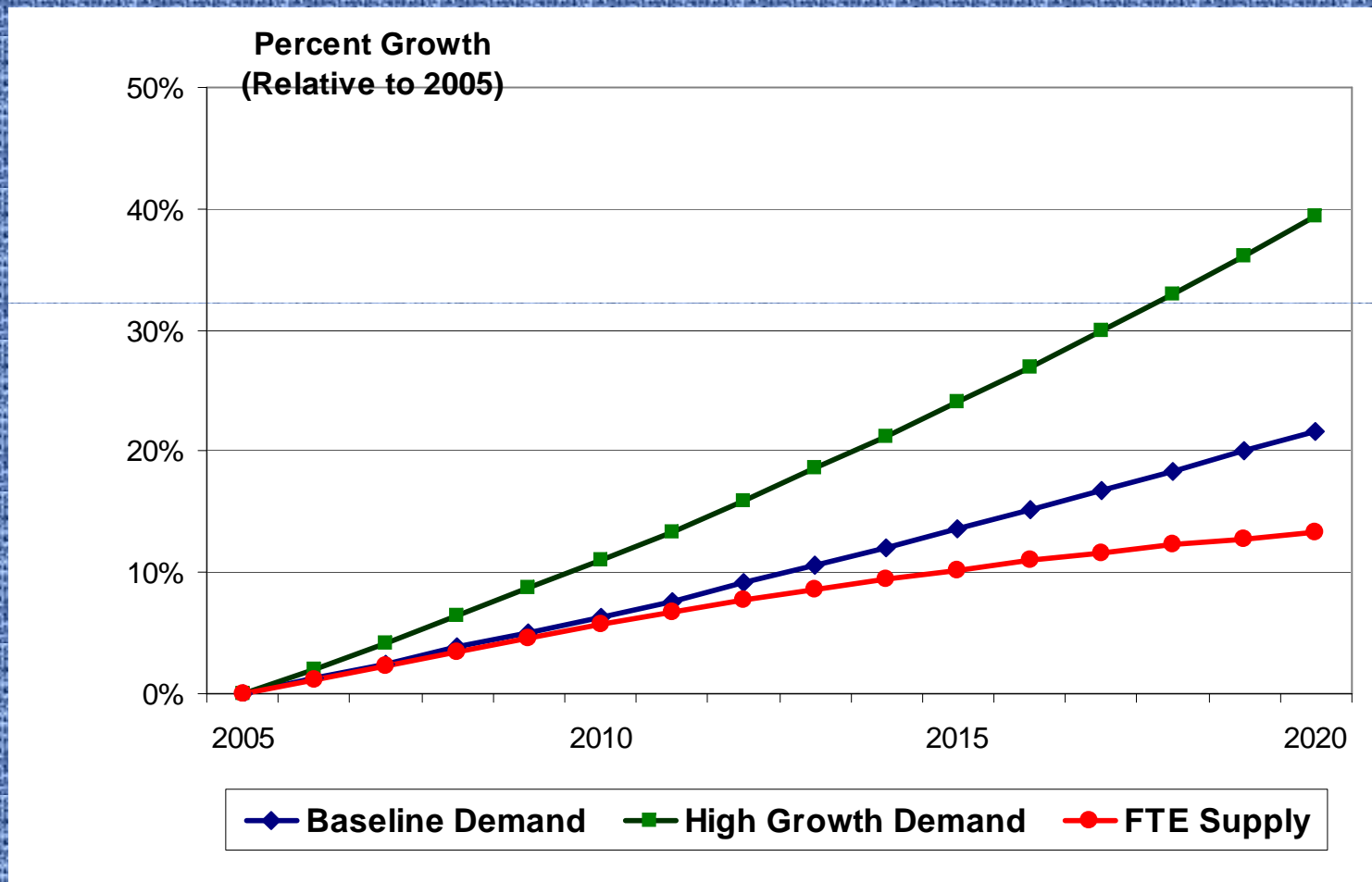
# Utilization of Services Rises with Age and Time



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



# HRSA Suggests a Shortage of at Least 55,000 Physicians by 2020

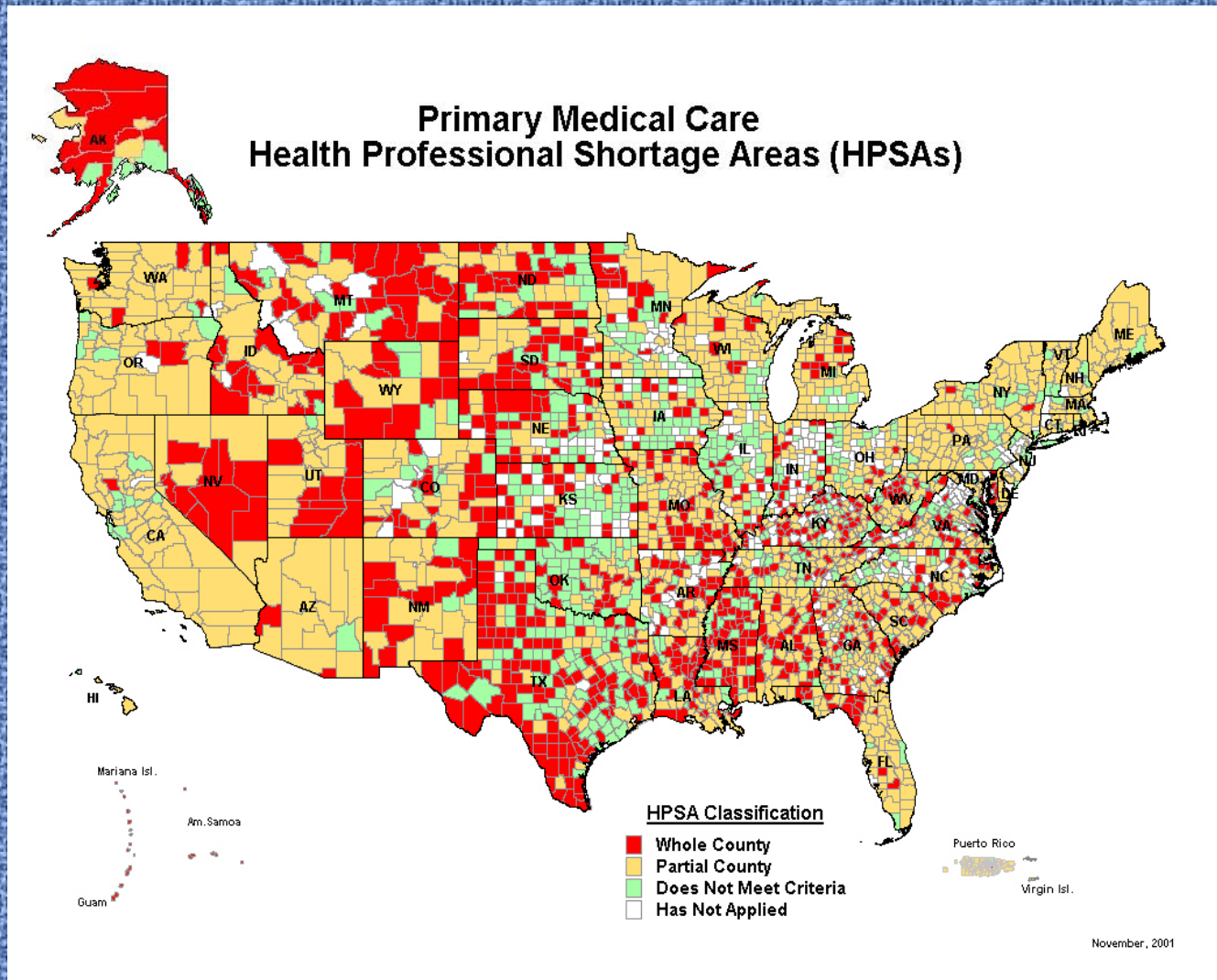


Source: Health Resources and Services Administration, DHHS 2006. "Physician Supply and Demand: Projections to 2020"



# Unmet Need

## 30 million People In HPSAs



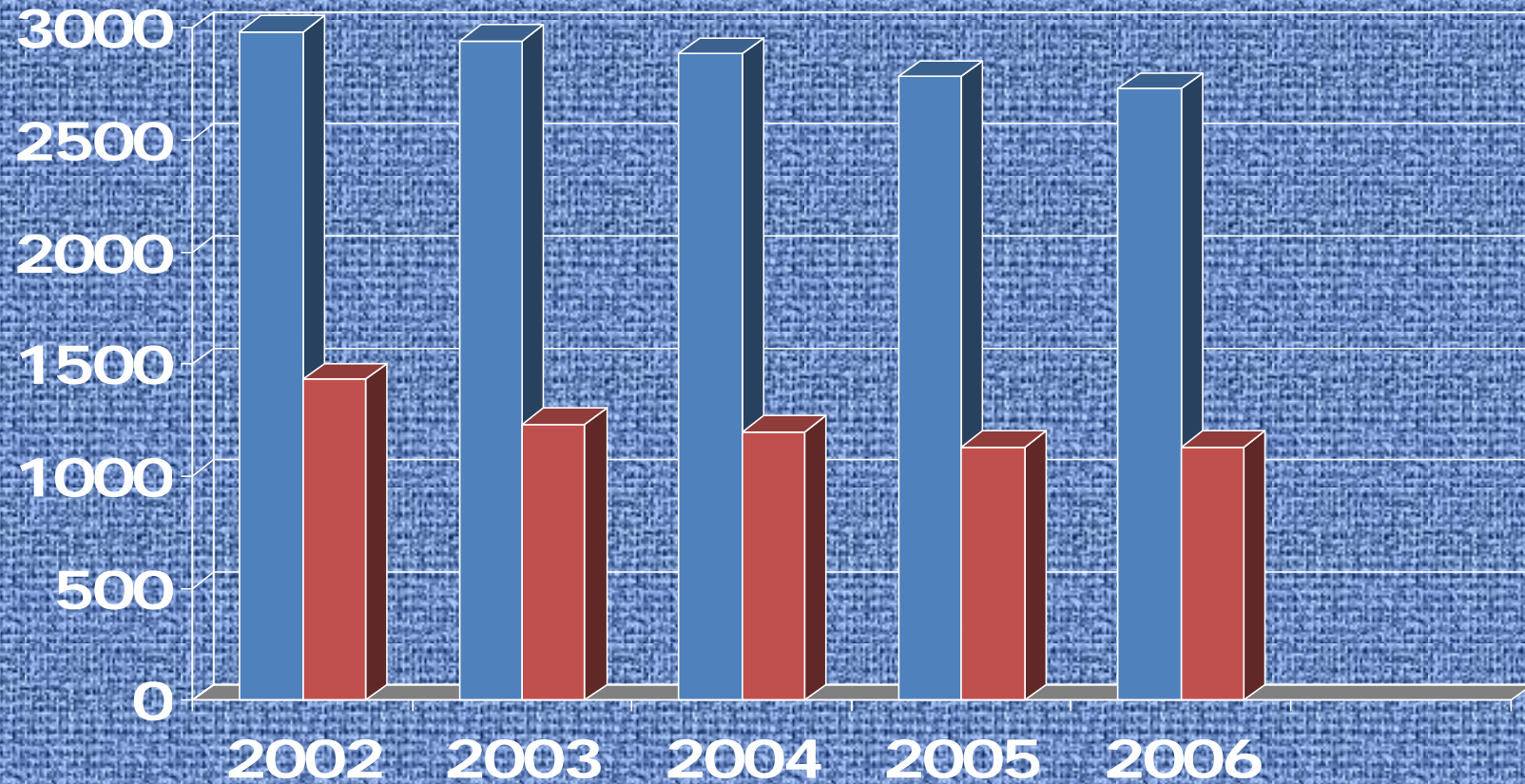
Source: HRSA/AAFP/AAMC

## Why Predict the Physician Workforce?

- Previous studies unpredictable
- COGME - Increase first year residency positions by 3,000 by 2015
- AAMC – Increase medical students 30K
- Impact on medical schools, GME
- Reduced interest in FM, primary care
- How will demographic changes affect Kentucky's physician workforce?



# 2006 NRMP Results for Family Medicine



■ Positions Offered ■ Filled with US Seniors

NRMP = National Resident Matching Program;  
<http://www.aafp.org/aafp/20050801/graham.html>



# Factors Influencing Future Physician Supply

- Physician age
- Retirement rate
- Gender
- Location
- Work ethic
- Type of practice



# Factors Influencing Future Need and Demand for Physicians

- Aging population
- Chronic diseases
  - Cardiovascular disease
  - Cancer
- Education
- Socio-economic level



# U.S. Recommendations



- **Strategies to increase supply of physicians**
  - Increase residency programs

- **Strategies to increase diversity**

- Encourage schools to increase URM among students and faculty



# Recommendations



- **Strategies to increase supply of physicians**
  - Provide incentives for physicians to practice in underserved areas
  - Support expansion of NHSC
  - Increase residency programs
  - Support non-physician collaboration (e.g. Rural Clinics)
  - Simplify reimbursement mechanisms



# Recommendations

- **Strategies to address maldistribution**
  - **Develop more community health centers**
  - **Promote higher physician reimbursement in shortage areas**



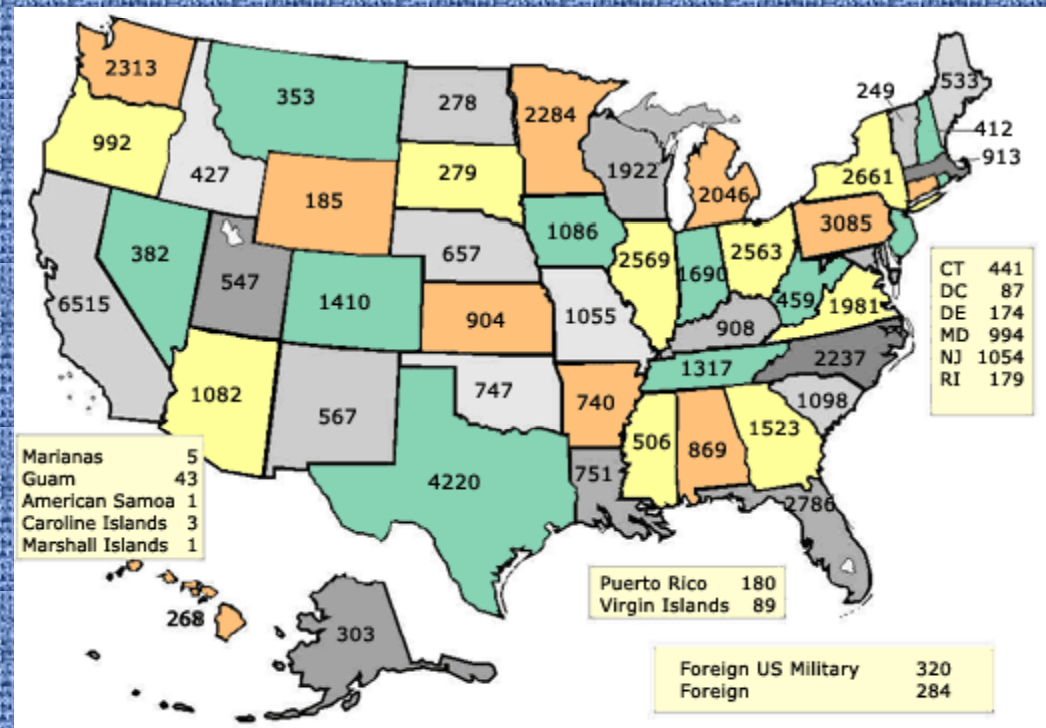
# Recommendations



- **Strategies to increase productivity**
  - Support develop better “systems” of care
  - Support enhanced patient care telecommunications
- **Strategies for more effective workforce planning**
  - Support state systems for ongoing physician workforce data collection and planning



# Planning for the Nation's Health



[http://www.unmc.edu/Community/ruralmeded/FM\\_distribution.htm](http://www.unmc.edu/Community/ruralmeded/FM_distribution.htm)

Thanks