

***The Physician Workforce Research  
Agenda: Expanding the Science,  
Enhancing the Impact***

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Presentation to:

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# *Overview of Presentation*

- A. Goals of Physician Workforce Planning
- B. Why the Concern? Why the Urgency Now?
- C. Strategies to balance supply and demand and to assure access to needed services
- D. Key Physician Workforce Policy Questions
- E. Next Steps: Moving Toward the Goal

# *The Primary Goal of Physician Workforce Planning*

To assure an adequate supply of well-trained physicians distributed geographically and by specialty consistent with population health needs and used in an efficient and effective manner

# *Other Physician Workforce Planning Goals*

Physician workforce planning should support efforts/programs/policies to:

- Increase access
- Improve quality
- Contain costs and
- Increase efficiency

It should do so in a fair, equitable and ethical manner

# *Challenges to Effective Physician Workforce Planning*

- Very long time frames to change supply or distribution
- Great uncertainties on impact of new medical developments and interventions
- Great uncertainties regarding future delivery system and financing and reimbursement policies
- Differences (and confusion) between demand and need
- Lack of good or consistent data
- Lack of resources for data collection, analysis and studies
- Lack of structure or organization or responsibility for physician workforce planning

# *Physician Workforce Planning in the US*

- Extensive public support for medical education and GME
- No national or state level planning system
  - Resistance to central control
    - Limited federal guidelines
    - Limited use of fiscal incentives
    - Limited role for states in planning
- Market driven: More than 23,000 new physicians each year distributed across more than 150 specialties/sub-specialties and 50 states

# *Cycles and Shifts in US Physician Workforce Concerns and Policies*

- 1945 – late 1970s: Concern with physician shortages; federal policies to stimulate increased supply
- 1980 – 2000: Concern with potential surpluses and primary care/specialist mix; federal guidelines and encouragement to limit growth
- 2000 - 2004: Growing concern with potential shortages
- 2005: General consensus on likely shortages

# *The Track Record: What Can we Learn from the Past?*

- GMENAC
- COGME
- Pew Health Professions Commission
- Bureau of Labor Statistics



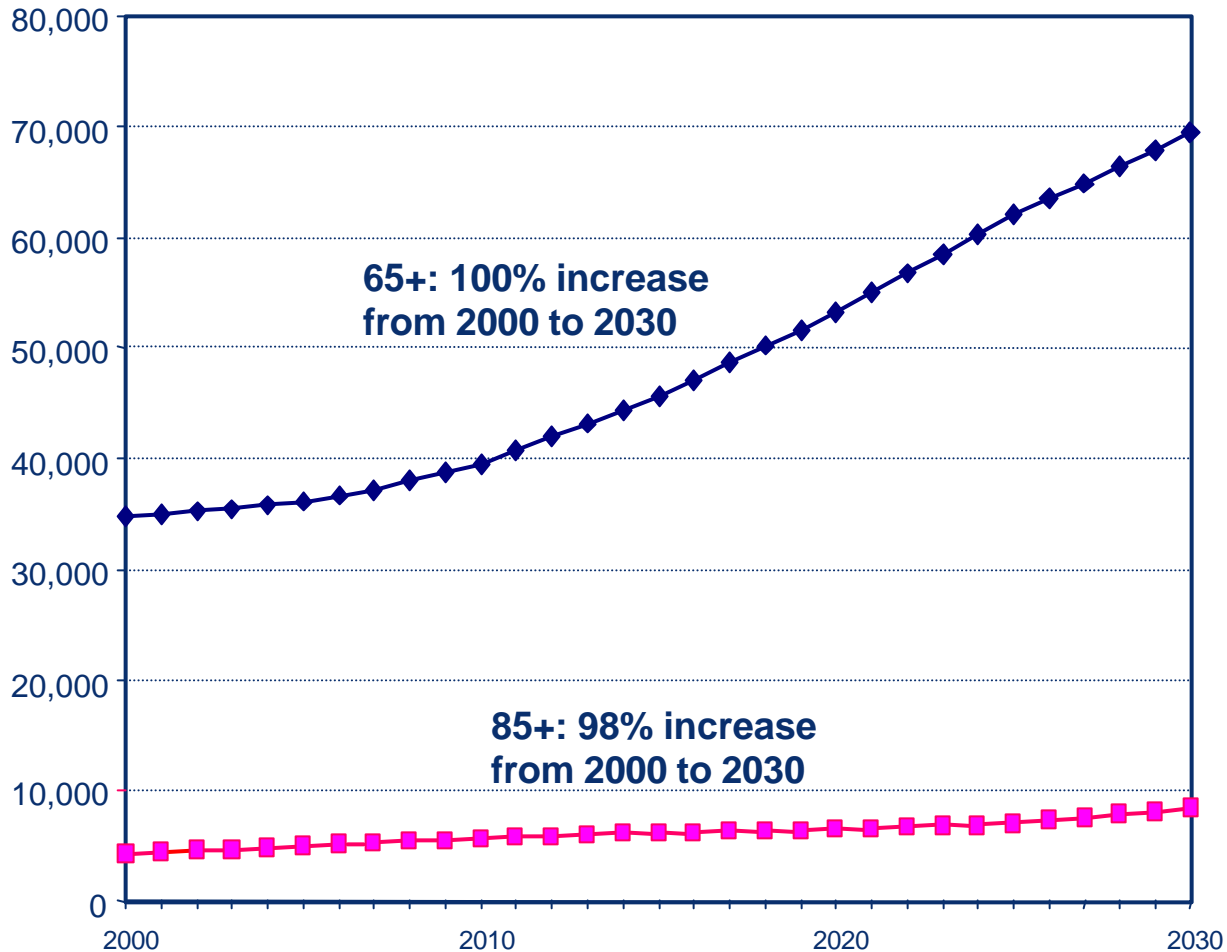
# *Why Now? Why the Urgency?*

- Demand for health services is likely to rise rapidly in coming decades
- Effective supply of physicians is likely to decrease
- After 50 years of steady increase, the physician-to-population ratio will begin to decrease in 2016 just as the baby boom generation begins to reach 70
- Continued underserved areas and increasing reports of shortages in specific areas and specialties
- Timeframes needed to change the physician workforce
- Growing international concern with migration of physicians from poor to rich countries

# *Key Factors Influencing Future Demand for Physician Services*

- Population growth?
- Aging of the population ?
- Increasing rates of utilization ?
- Economic growth of the nation ?
- National investment in health care interventions ?
- Advances in medicine leading to improved diagnosis and treatment ??
- Changes in delivery system, insurance and financing ? ?
- Efforts to weed out unnecessary/marginally beneficial services ?
- Cost containment efforts ?

# Number of Americans Over 65 will Grow by 35 Million Between 2000 - 2030



Source: U.S. Census; Prepared by NY Center for Health Workforce Studies

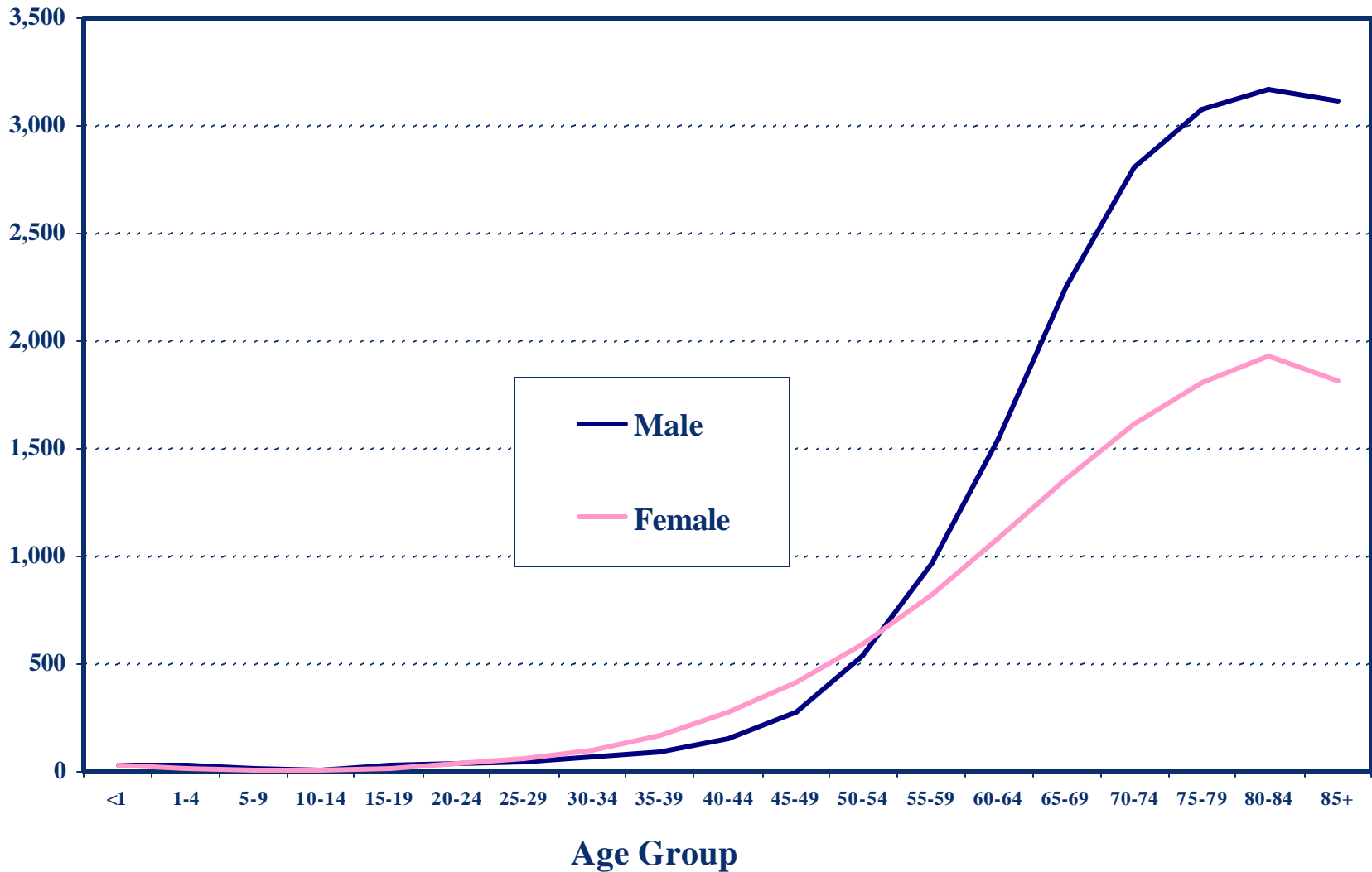
# *The Eleven Most Costly Medical Conditions Are Far More Prevalent Among the Elderly, US 2000*

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%
<b>Total</b>		<b>312,000</b>	<b>50%</b>

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



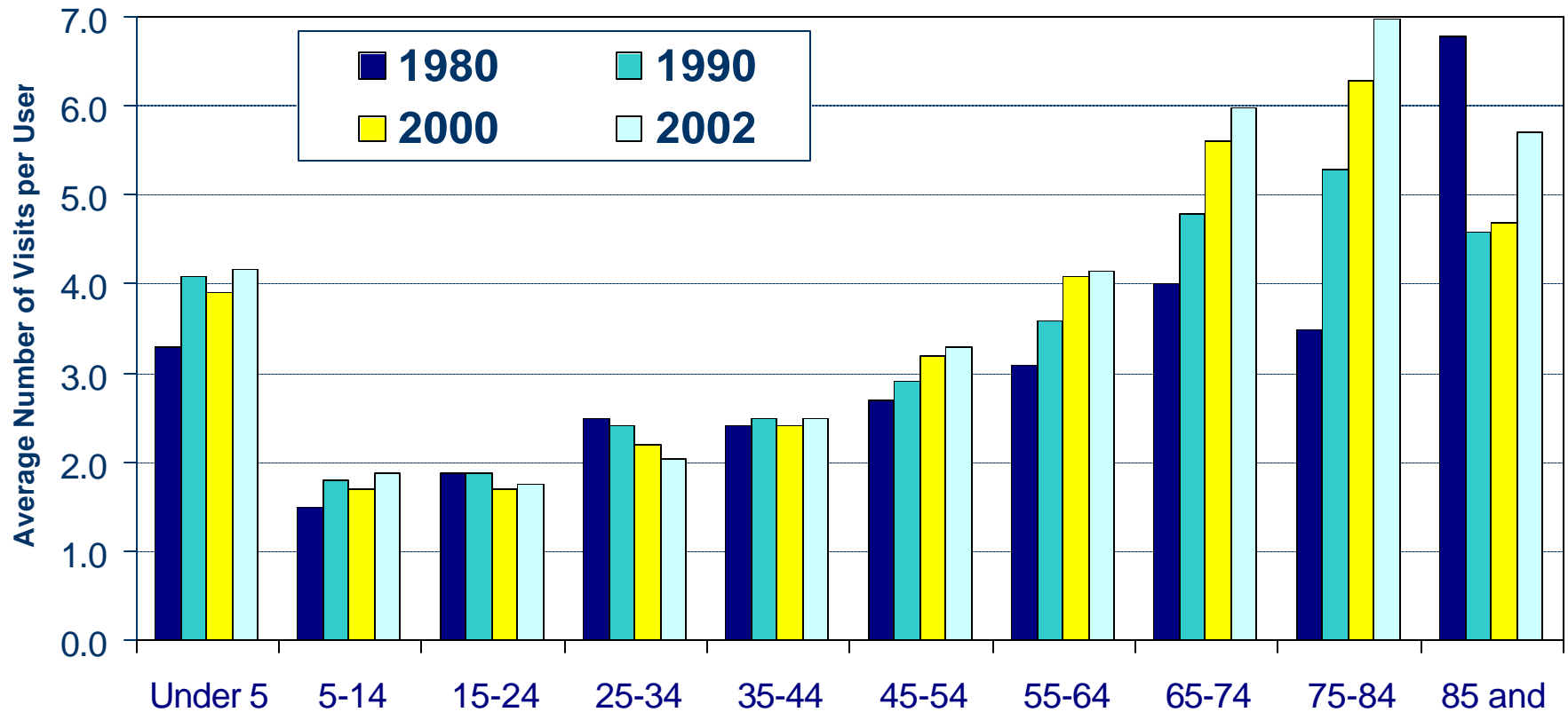
# Age-Specific Cancer Incidence Rates/100,000, 2000



Source: CDC, Age-Specific Invasive Cancer Incidence Rates by Primary Site and Race, United States (U.S. Cancer Statistics, 2000). Prepared by AAMC Center for Workforce Studies

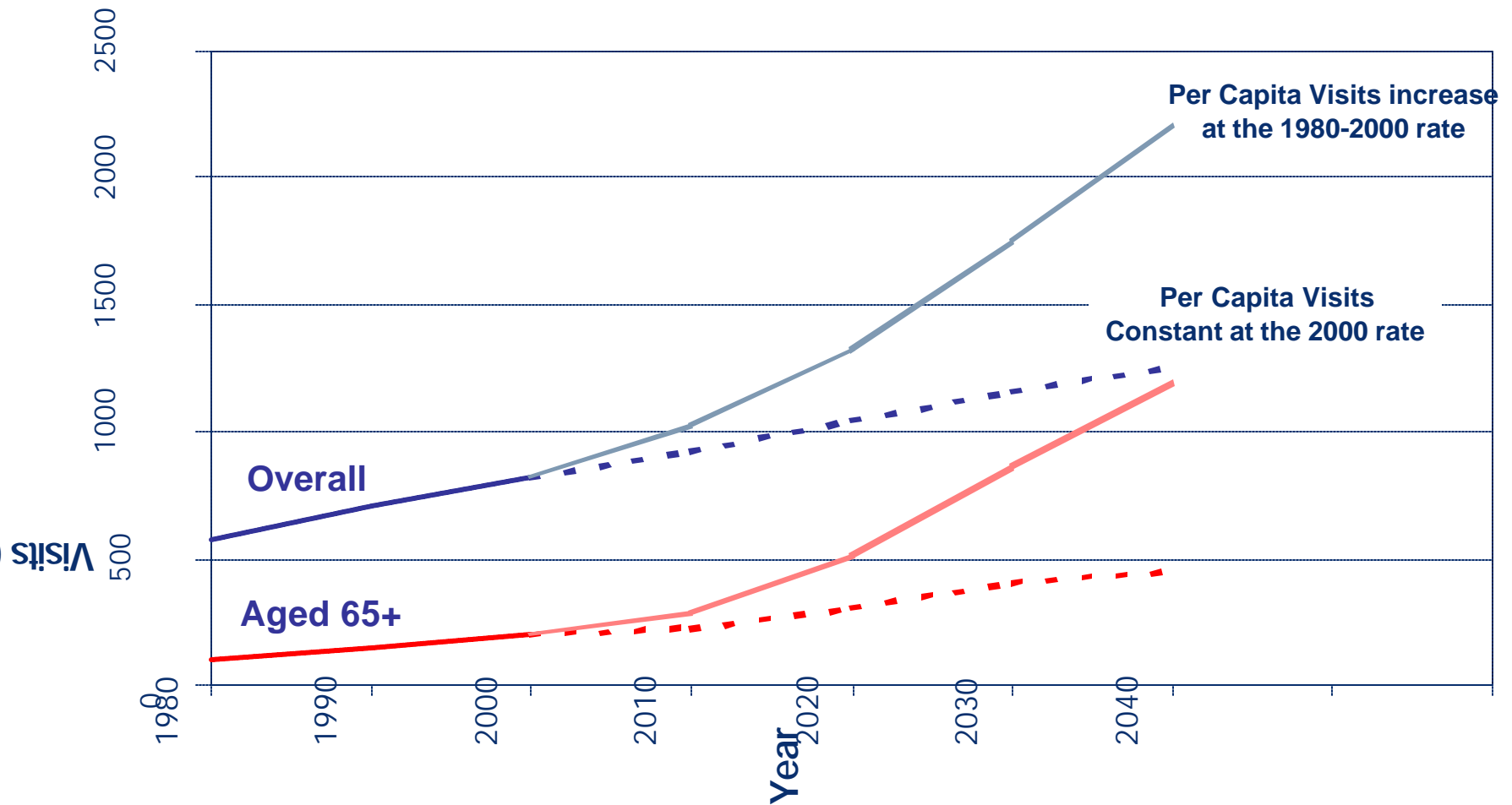
# Ambulatory Care Visits to Physician Offices and Clinics, 1980-2002

*Visit Rates are growing sharply for those over 45*



Source: NAMCS, 1980, 1990, 2002 & 2002  
Prepared by AAMC Center for Workforce Studies

# Ambulatory Care Visits to Physician Offices and Clinics 1980-2040



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

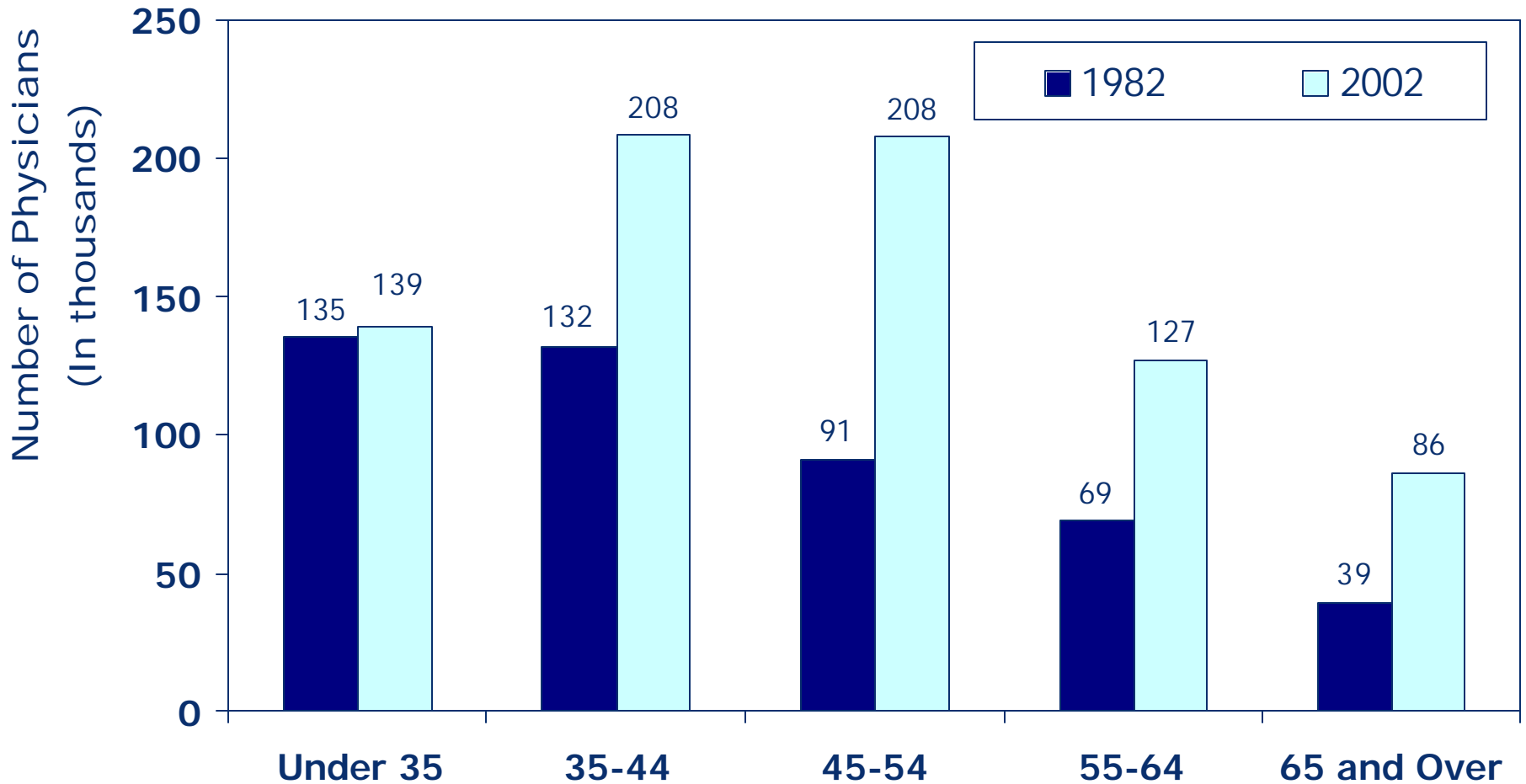


# *Key Factors Influencing the Future Supply of Physicians*

- Life style choices of physicians including hours of work?
- Aging of the physician workforce ?
- Steady level of production for more than 20 years ?
- Increase in non-patient care activities ?
- Retirement patterns ? ?
- Possible productivity gains including improvements from technology ?
- Increased use of NPs, PAs and other clinicians ?



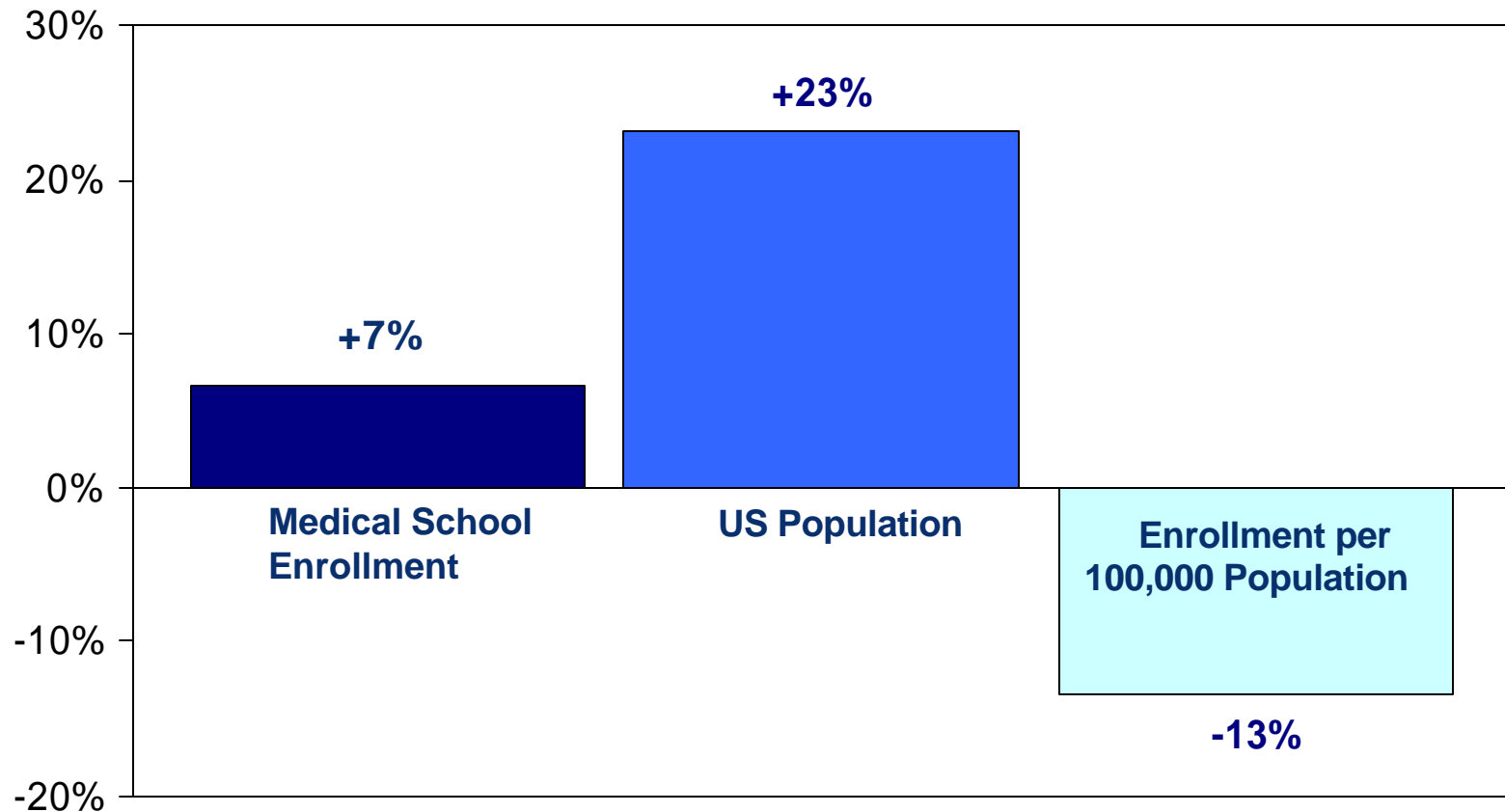
# Physician Age Distribution, 1982 and 2002



Source: AMA  
Prepared by NY Center for Health Workforce Studies

# Medical School Enrollment Has Not Kept Pace With the Growing Population

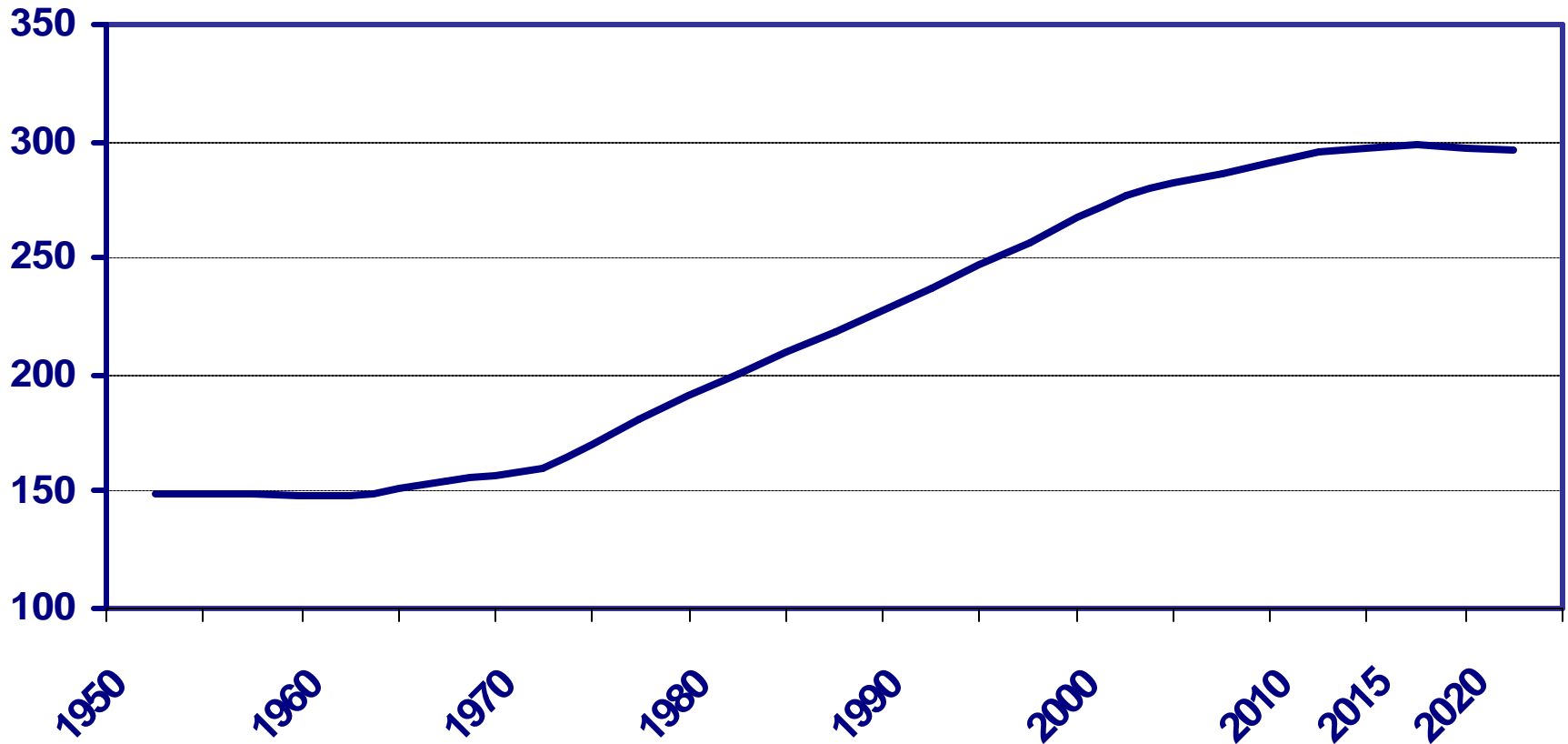
Percent Change in Medical School Enrollment, US Population & Students per 100,000 Population, U.S., 1982-2001



Sources: AAMC, AACOM, US Census Bureau

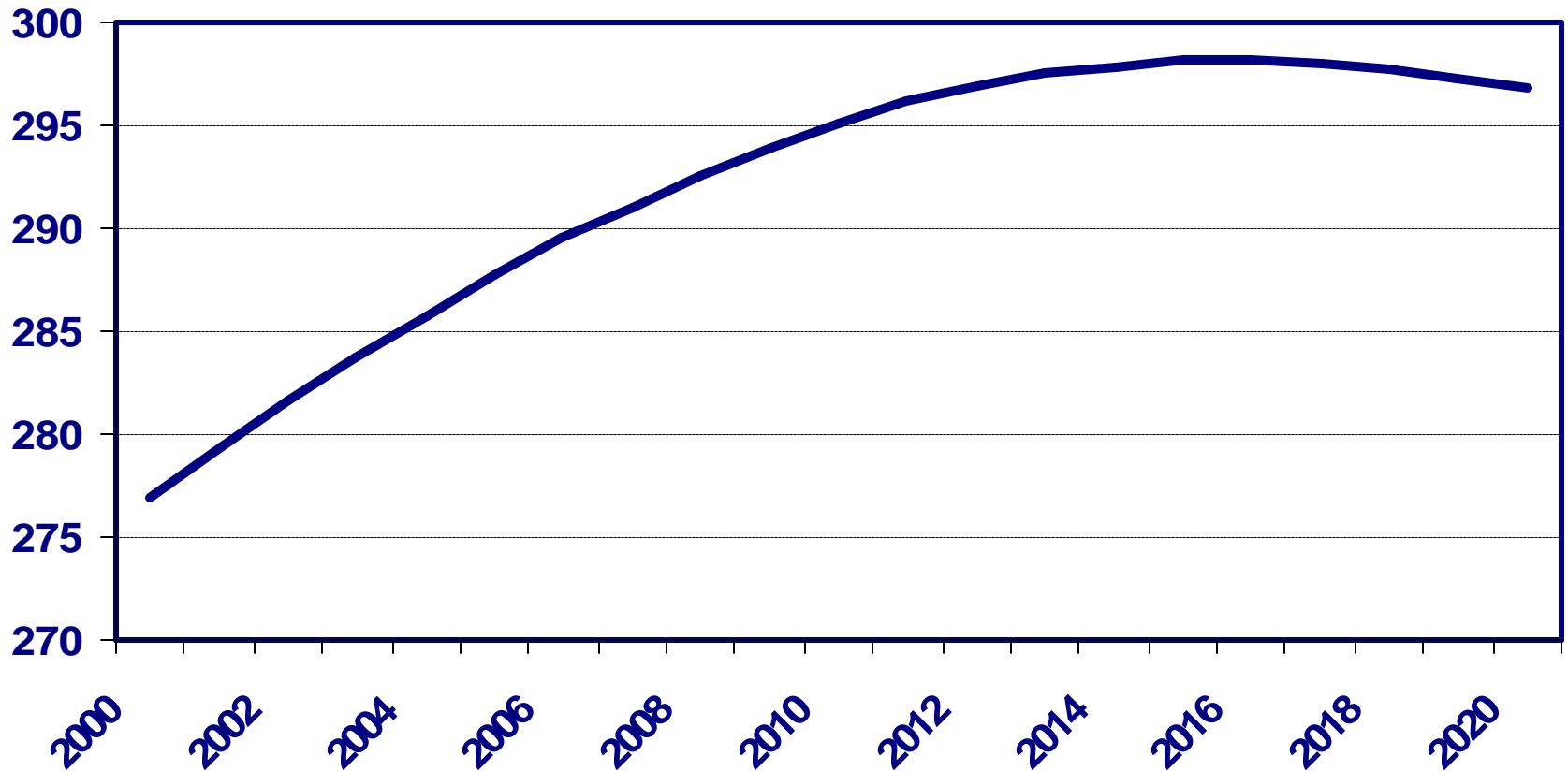
Prepared by NY Center for Health Workforce Studies

# *Number of Physicians per 100,000 Population in the US (1950-2020)*



Source: Physician data from COGME Third Report, 1992; Population data from Statistical Abstract of the United States

# *Number of Physicians per 100,000 Population in the US (2000-2020)*



Source: Physician Projections from COGME Report & Population from US Census updated on April 13, 2005

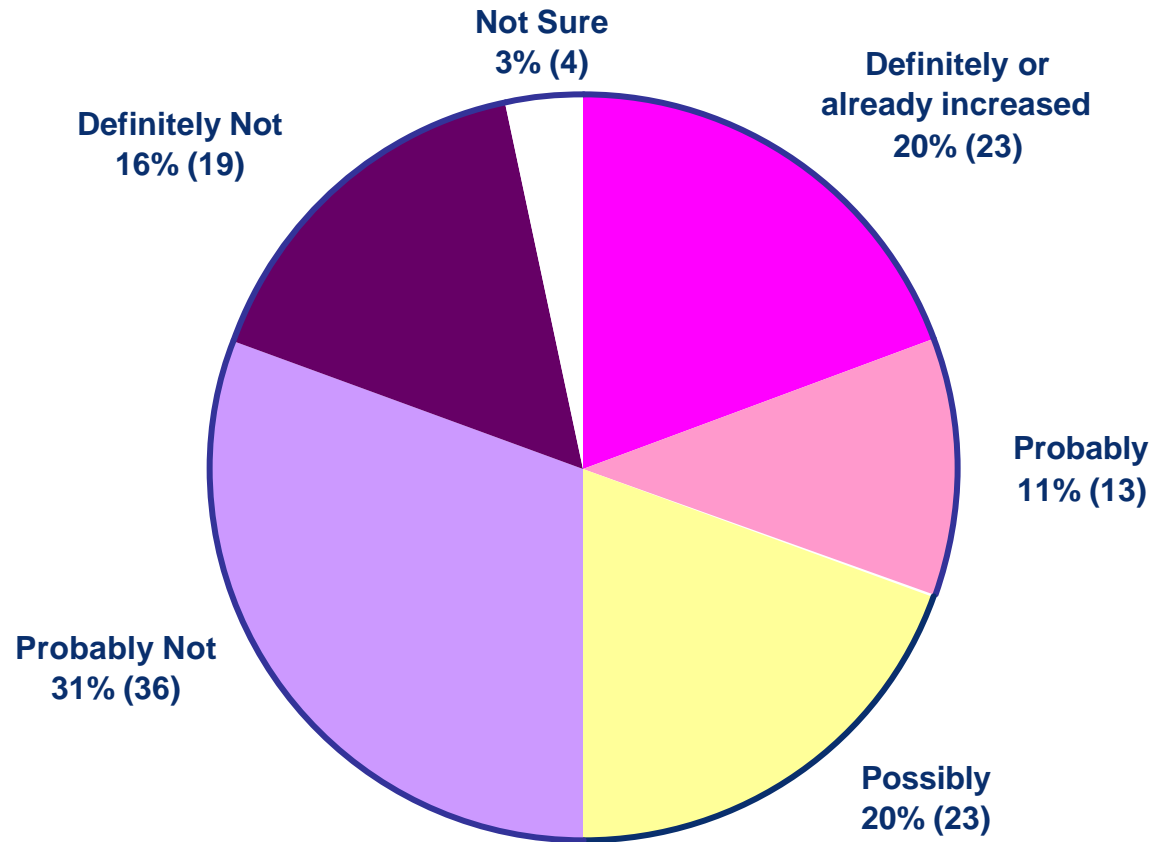
# *Strategies to Balance Future Supply and Demand and to Meet Future Needs*

- A. Increase the number of new physicians entering medicine
- B. Encourage physicians to continue to provide patient care services (retention)
- C. Make more effective use of physicians

# *AAMC's New Workforce Position*

- Expand medical school capacity by 15% in ten years
- Concentrate expansion in areas of population growth
- Expand GME positions to accommodate more US grads
- Lift Medicare's residency caps
- Leave specialty choice up to students (provide more info)
- Expand NHSC
- Increase the racial, ethnic, and geographic diversity
- Continue to monitor and study physician supply (e.g., retaining MDs in practice, increasing productivity)

# *Plans to Increase First-Year Enrollment Over the Next 6 years: Allopathic Schools (118 of 125)*



# *Estimate of Additional First Year Enrollment from Expansion of Existing Schools and New Schools in 2010*

	2003-04 First Year Enrollment	Enrollment Increase		Total First Year Enrollment Increase	% Increase from the 2003- 04 level
		Existing Schools	New Schools		
<b>Allopathic Schools</b>	16,538	650 – 900	100 – 500	<b>750 – 1,400</b>	<b>4.5 – 7.3</b>
<b>Osteopathic Schools</b>	3,079	450 – 900	150 – 450	<b>600 – 1,350</b>	<b>24.6 – 43.8</b>
<b>Total</b>	19,617	1,100 – 1,800	250 – 950	<b>1,350 – 2,750</b>	<b>6.9 – 14.0</b>



# *The Reality of the Physician Pipeline*

- 3 to 5 years to add medical education capacity
- 4 years of medical school
- 3 to 8 years of training

Total: 10 to 17 years before a small marginal increase in numbers

# *Impact of an Increase of 3,000 U.S. Medical Graduates Per Year by 2015*

- In the absence of an increase, likely to have about 972,000 active physicians in 2020.
- The increase in medical school graduates would add about 30,000 physicians by 2020 bring the total supply to 1,002,000.
- This is far less than the likely demand of between 1,027,000 and 1,240,000 physicians *if services in 2020 are delivered as they were in 2002.*

*Key Physician Workforce  
Policy and Research Questions*

# *1. How many physicians will the nation need to educate to meet its future health care needs?*

- How will the role of the physician change in the coming years? What are physicians uniquely qualified to do and what services can be done as effectively by non-physicians?
- What is the preferred mix of US and international medical school graduates? What are the costs and benefits of moving to “self sufficiency” and sharply reducing the number of IMGs?
- Do we need fiscal incentives to expand medical school capacity? Do we need to increase GME funding to accommodate the additional US graduates?

## *2. If additional US graduates are needed, how and where should they be educated?*

- How can additional physicians be educated and trained in an effective and efficient manner?
- Can we reduce the time and cost for medical education and training?
- How many more from existing schools and how many from new schools?
- What is the role of osteopathic schools compared to allopathic schools? Are there differences in cost and outcomes?
- What is the role of off-shore medical schools? Are there differences in cost and outcomes?
- What of the possibility of for-profit medical schools?

### *3. What is the preferred specialty mix?*

- What is the relationship between education and training and quality of care and outcomes?
- When is a primary care physician best qualified and when is a specialist appropriate?
- Should we continue to promote primary care? If so, how?
- How can we more effectively implement interdisciplinary teams?
- What are the pros and cons of “boutique” practices? Are they a return to the family physician of old?
- What is the effect of organizational structure on the preferred mix of specialties?

## *4. How Can Productivity and Efficiency be Increased?*

- What is the relationship between organization and productivity?
- What is the relationship between financing and productivity?
- Why has Kaiser been successful? What are the key lessons for the nation?
- Are there new models of care and modified roles and/or scope of practice of physicians that would increase productivity?
- What additional services under what conditions can be effectively provided by other health professionals?
- Will improved information systems lead to increased productivity? What variables impact effectiveness of IT? How can it be promoted?

## *5. How can we increase retention of physicians in medicine?*

What impact does the following have on retaining physicians in the workforce:

- The organization and financing of care?
- Flexible hours and scheduling?
- Working conditions?
- Malpractice issues?
- Income and benefits?
- Paperwork and administrative hassles?
- Support services?



## *6. How can we address mal-distribution and inadequate diversity?*

- How can we get more physicians into underserved areas and serving underserved populations?
- How can we better link specialties appropriately located in urban areas with populations outside of urban areas?
- How can we increase diversity of the physician workforce?
- What is the relationship of improved distribution and diversity on health outcomes?

## *7. What will be the impact of other factors on supply, demand and use of physicians?*

- Complimentary medicine?
- The increasing number of health professions moving to the doctorate?
- Educated and empowered consumers?
- The increasing percent of women in medicine?

## *8. What process for physician workforce planning?*

- What process for physician workforce planning is best for the nation? Who should do it and how?
- How can we improve the state of the art of physician workforce research?
- How can we coordinate our research efforts?
- What are the key indicators to inform trends in the supply and demand for physicians?
- What are the levers to bring need and demand closer together?
- What are the sources of funding to support physician workforce planning?
- What roles for the public and private sector?

***Promoting More Effective  
Physician Workforce Planning:  
Next Steps***

# *Next Steps*

- Improve physician workforce data
- Improve the analytical tools
- Increase and improve the research

## **To do this we need:**

- Increased funding
- Increased collaboration and coordination
- Creativity and commitment

# *Improve Data Collection: Who?*

- Associations representing physicians (AMA, AOA, Specialty Associations)
- Associations credentialing physicians (ECFMG, FSMB, ABMS)
- AAMC
- States
- Federal agencies (NCHS, CMS, HRSA, AHRQ, DOL, NIH, CDC, VA)
- Researchers

# *Improve Data Collection: What?*

- Standard definitions, terminology and methods
- Consistent collection methods and timeframes
- A method for comparing sharing and perhaps combining data
- A data repository or clearinghouse
- A national physician sample survey

# *Coalition Building for Physician Workforce Research*

- The research community
- Physician associations
- Provider organizations (hospitals, long term care facilities, ambulatory care facilities, the VA)
- States
- Consumer groups, including those concerned with access
- Foundations
- Other health professions organizations



# *Improving the Research*

- Annual AAMC Physician Workforce Conference
- ***Academic Medicine*** Physician Workforce Theme Issue
- Consider promoting Title VII Reauthorization with funding dedicated to physician workforce data collection and research

# *AAMC Activities and Next steps*

- Establishment of the Center for Workforce Studies
- The Annual Physician Workforce Research Conference
- The *Academic Medicine* workforce theme issue
- Establishment of a Physician Data Steering Committee
- Publication of a biennial report on the supply and demand for physicians

*“We must remain devoted to the canons of science that are so much a part of the practice of medicine and the practice of the allied arts. To do otherwise would be to build public policy on quicksand.”*

David Axelrod, M.D.



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