

Understanding and Responding to Health Workforce Shortages

Central New York Area Health Education Center

Board of Directors Meeting

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<http://chws.albany.edu>



Overview of Presentation

- Health workforce issues and concerns
- Factors influencing the supply of and demand for health workers
- Impact of the aging of the US population on the health workforce
- Strategies to assure an adequate supply of well-trained health workers for the future



The Center for Health Workforce Studies at the University at Albany

- Conducts studies of the supply, demand, use and education of the health workforce
- Committed to collecting and analyzing data to understand workforce dynamics and trends
- Goal to inform public policies, the health and education sectors and the public
- One of six regional centers with a cooperative agreement with HRSA/Bureau of Health Professions



Selected Recent Reports

- ***Health Care Employment Projections: An Analysis of Bureau of Labor Statistics Occupational Projections, 2004-2014,*** June 2006
- ***“The Health Care Workforce in New York State, 2004: Trends in the Supply and Demand for Health Workers.”*** Center for Health Workforce Studies, May 2005
- ***The Impact of An Aging America on the Supply and Demand for Health Professionals*** HRSA, March, 2006

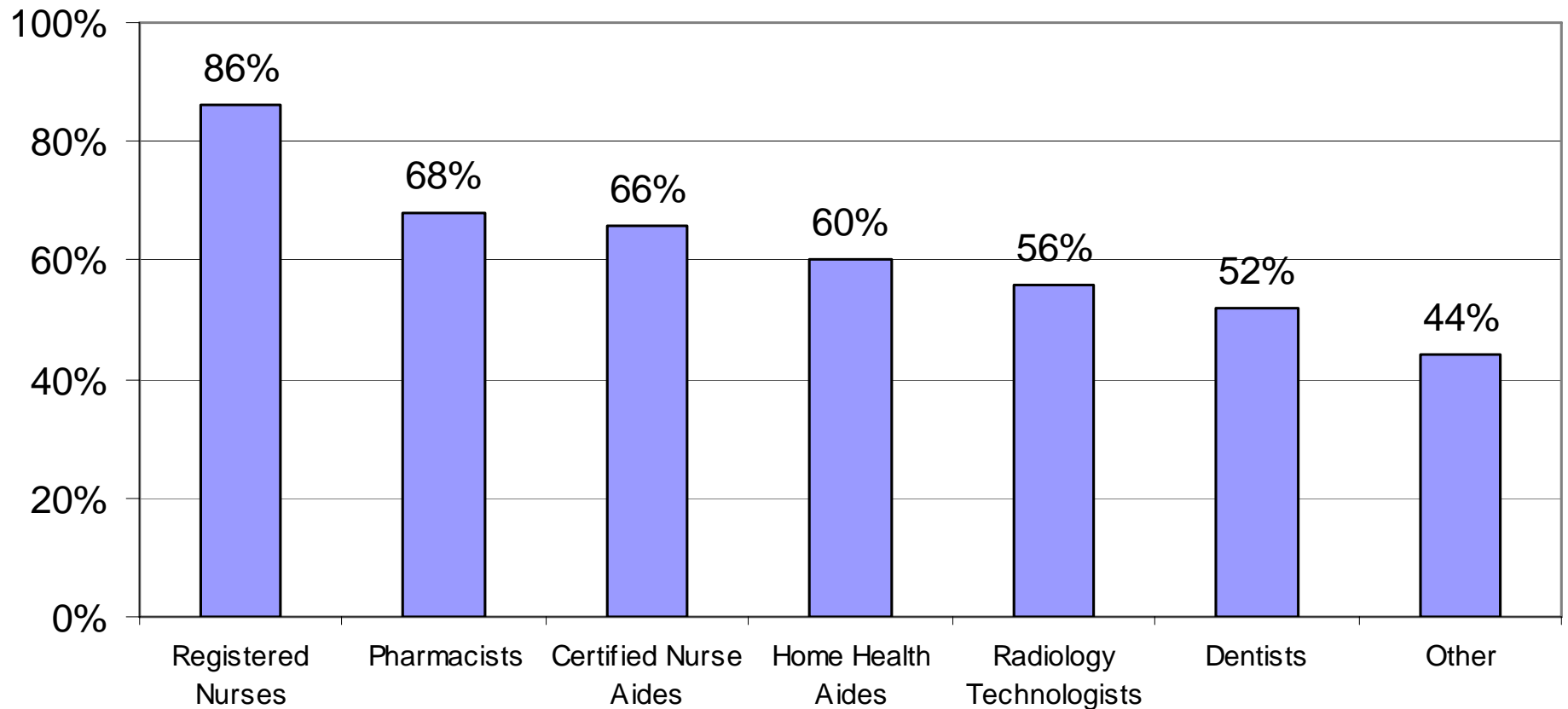


Current Health Workforce Issues

- Serious shortages in many professions
- The squeeze-few new dollars and the high cost of more workers-limit response options
- Concerns with medical errors and quality
- Worker and management dissatisfaction
- Frustration with paperwork and regulation
- Racial and ethnic imbalances in professions
- Lack of systematic data on the health workforce



Percent of States Indicating a Shortage in Selected Professions, 2002



Source: Center for Health Workforce Studies, 2002

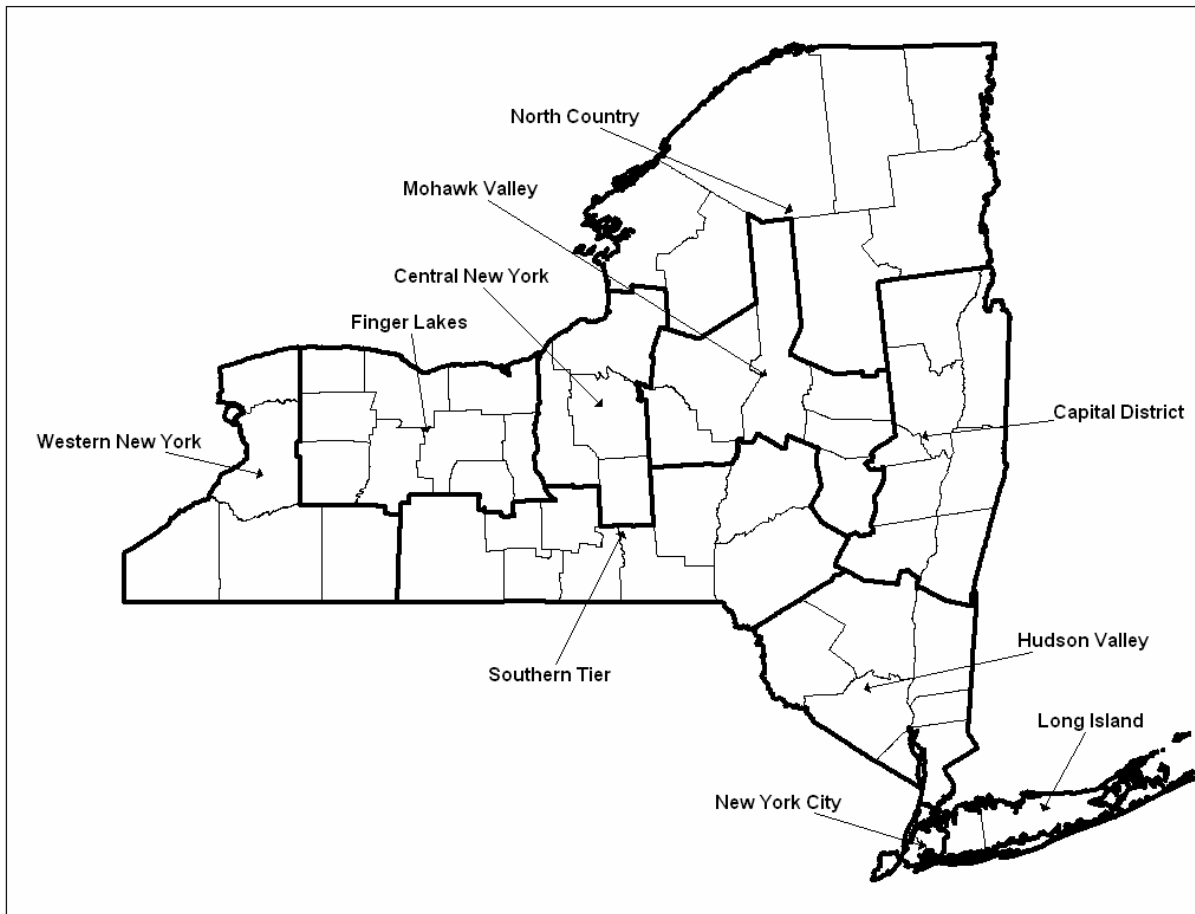


NY Health Workforce Issues: Trends in Supply and Demand, 2004

- Between 2002 and 2004:
 - # of licensed RNs grew 3.2% between 2002 and 2004
 - # of licensed LPNs declined 8.2% between 2002 and 2004
 - # of pharmacists grew by <1% supply
- NY hospitals reported problems recruiting experienced RNs, x-ray technicians and pharmacists
- NY nursing homes reported difficulty recruiting and retaining RNs and LPNs

NYS Health Workforce Issues: Physician Supply and Distribution

Per Capita FTE Physician Supply and Change 2000 – 2004



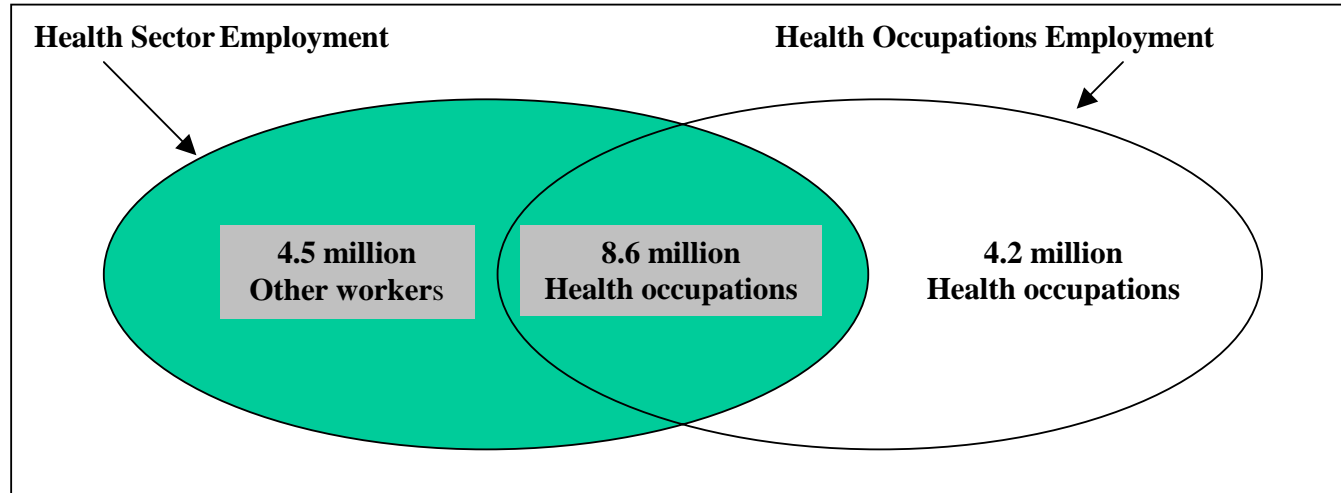
Region	Supply	Change
Capital District	249	17%
Central NY	232	8%
Finger Lakes	227	-8%
Hudson Valley	291	9%
Long Island	312	21%
Mohawk Valley	148	-3%
NYC	318	4%
North Country	166	1%
Southern Tier	248	4%
Western NY	207	-11%



The Health Workforce: The Basic Premise

- A health care system is only as good as its workforce
- The workforce directly impacts on:
 - Quality
 - Cost
 - Access

Health Care Employment Comprises a Growing Share of U.S. Jobs



	Number	Percent of Civilian Labor Workforce
Health occupations in the health sector	8,588,097	5.8%
Other occupations in the health sector	4,474,003	3.1%
Health occupations in other sectors	4,176,903	2.9%
U.S. Health Care Employment	17,239,003	11.8%
U.S. Civilian Labor Force Employment	145,615,332	100.0%

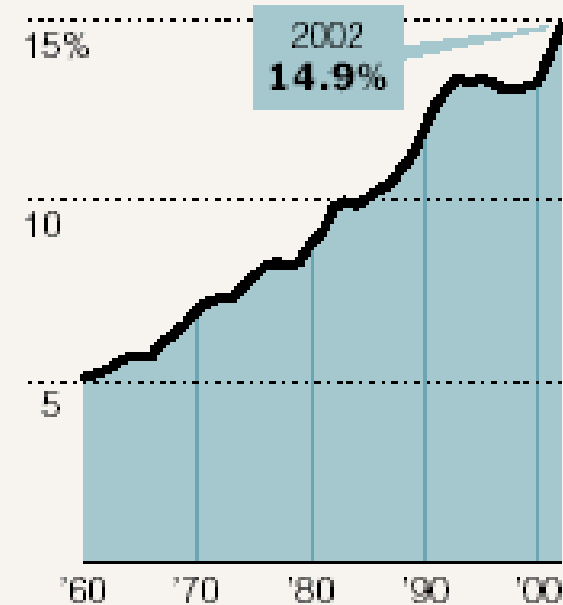
Health care spending accounts for nearly 15 percent of the nation's economy

On January 9, 2004, the NY Times reported:

The Department of Health and Human Services said that health care spending shot up 9.3 percent in 2002, the largest increase in 11 years, to a total of \$1.55 trillion. That represents an average of \$5,440 for each person in the United States.

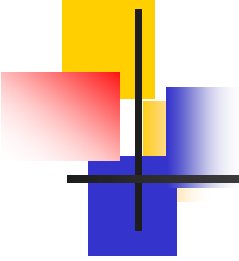
Hospital care and prescription drugs accounted for much of the overall increase, which outstripped the growth in the economy for the fourth year in a row.

National health spending as a share of G.D.P.



Source: Department of Health and Human Services

*What Contributes to Health
Workforce Shortages?*



The Causes of Health Worker Shortages

- The current shortages reflect both supply and demand factors
- There are short term, long term and workplace factors that contribute to shortages of health workers

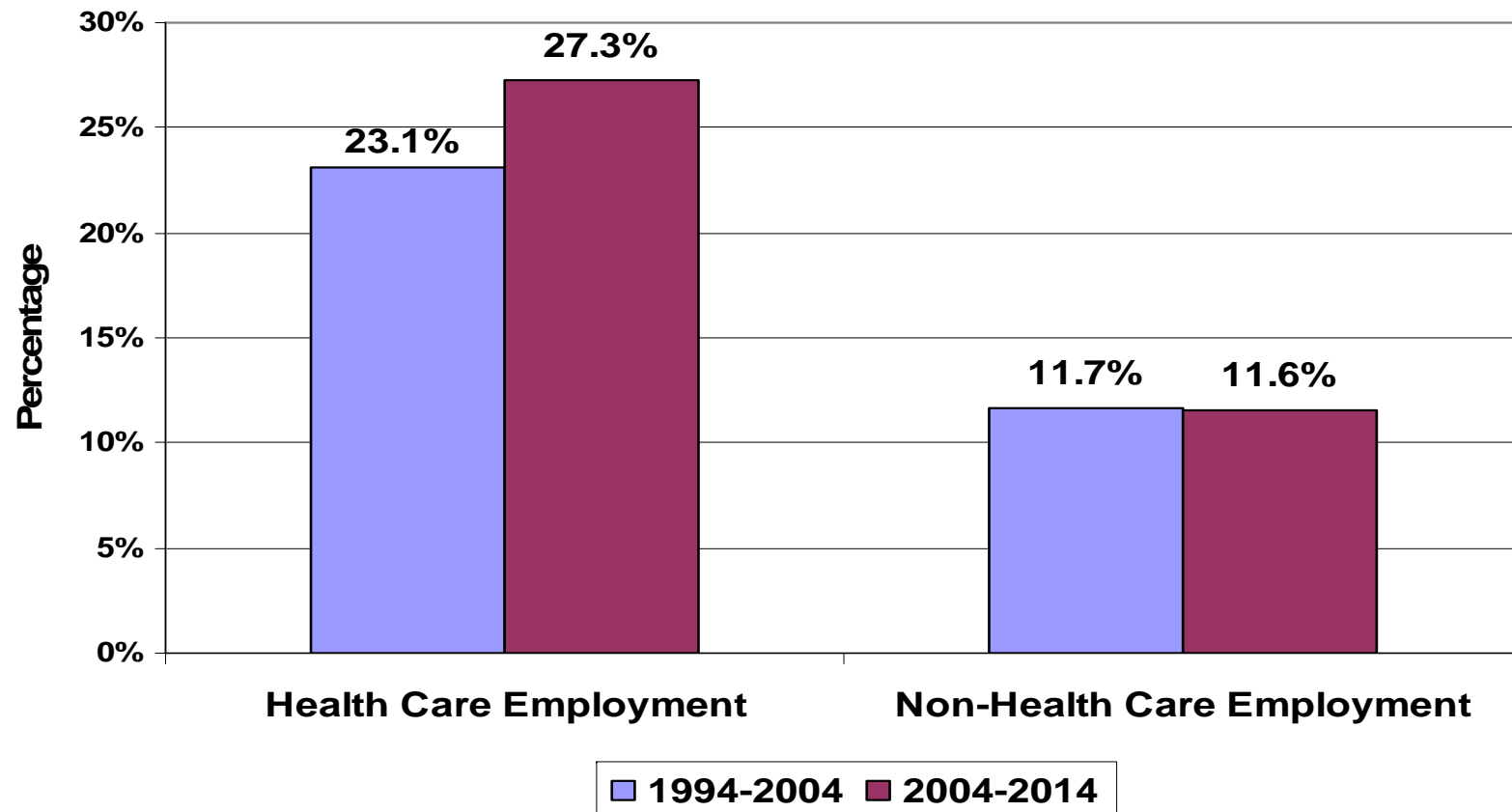


Factors Contributing to Health Workforce Shortages

- Short term factors
 - Competition for workers and the economy
 - Growing demand
 - Increased intensity and complexity of services
 - Educational system cycles and response lags and capacity limitations

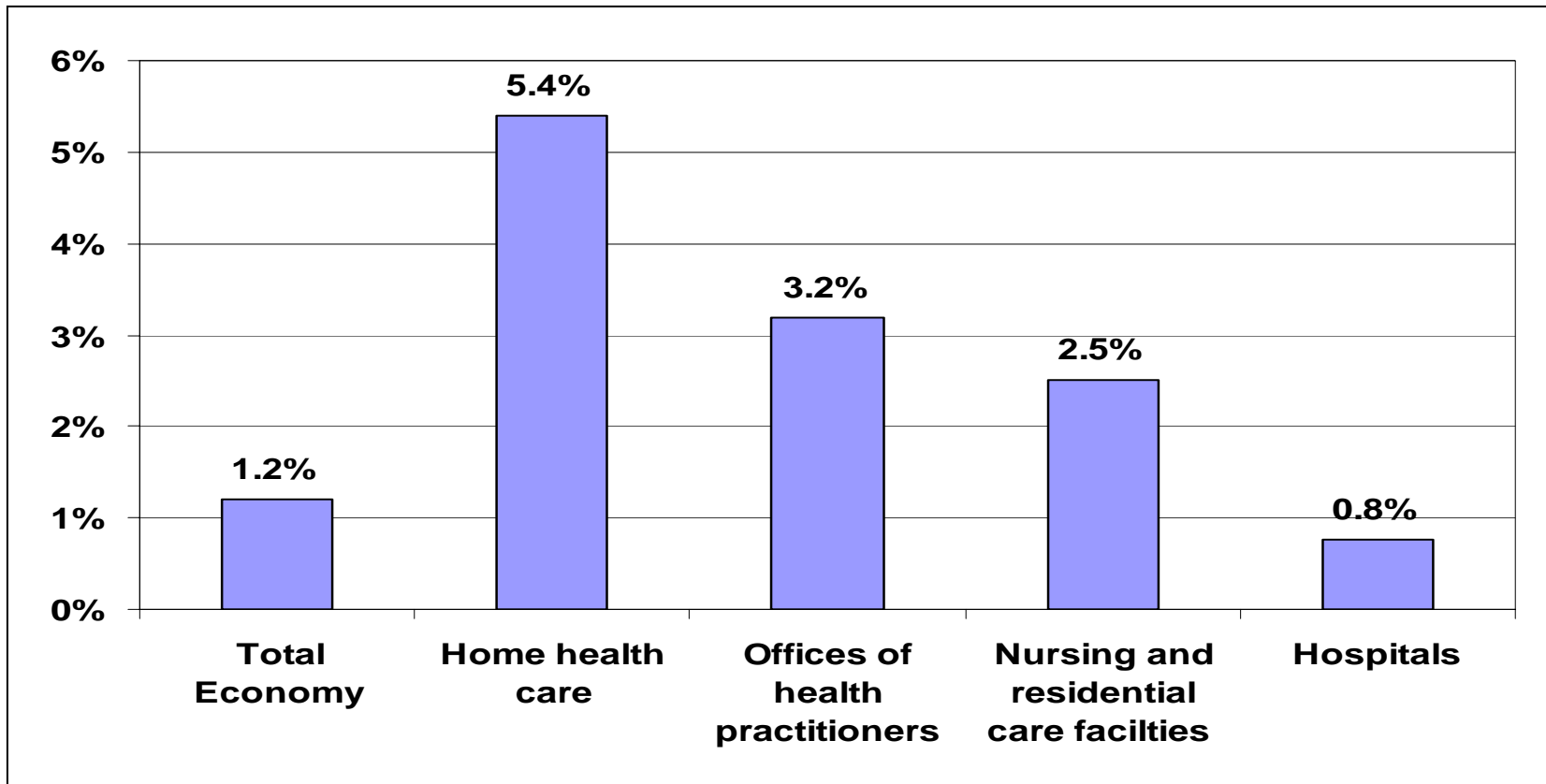
Health Sector Employment Continues to Be the Fastest Growing Employment Sector in the Country

Health Sector Job Growth Compared to All Other Employment Sectors 1994 – 2004 and Projected 2004 - 2014

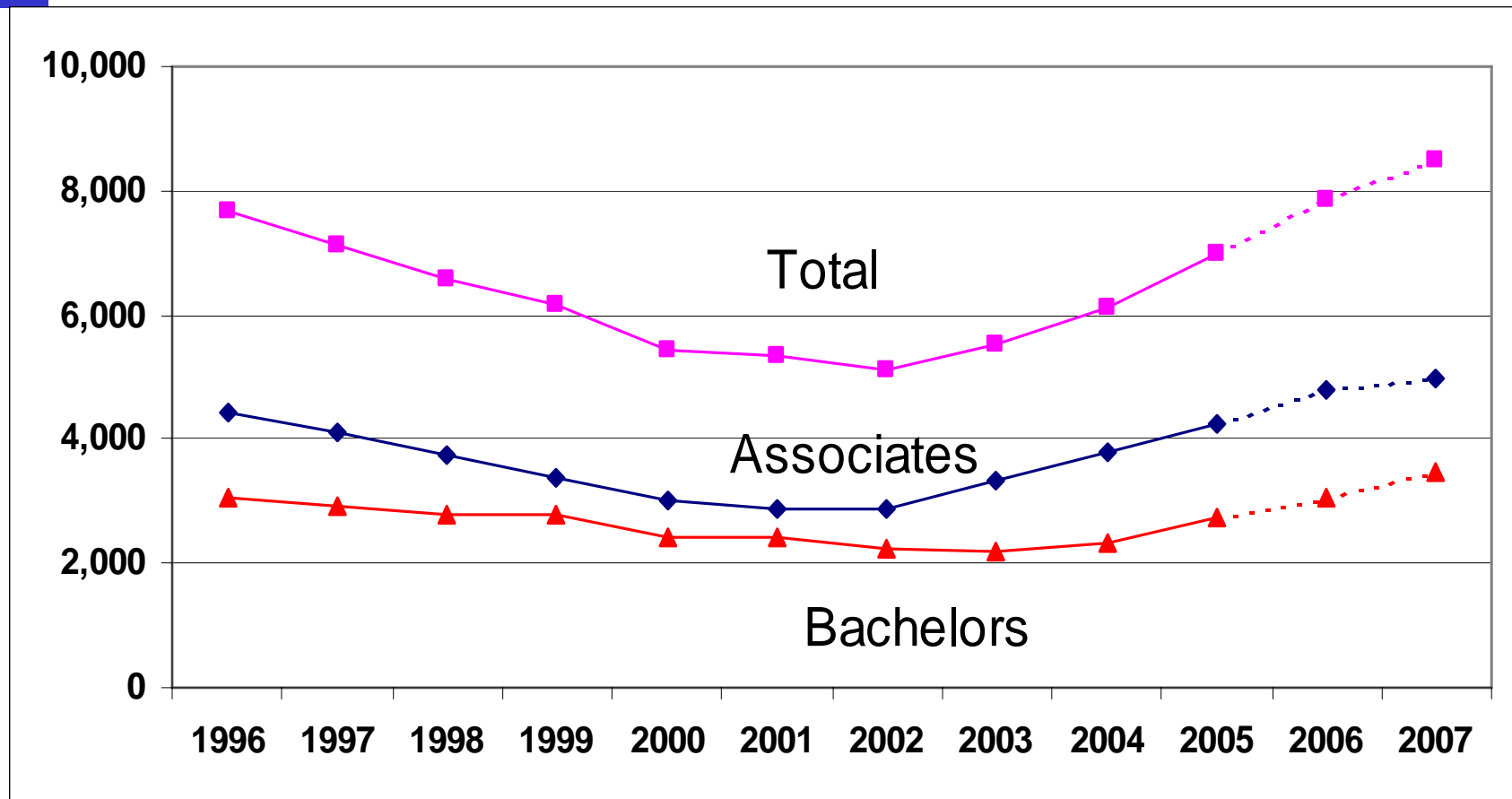


Jobs in Home Health Care and Offices of Health Practitioners Are Projected to Grow the Fastest

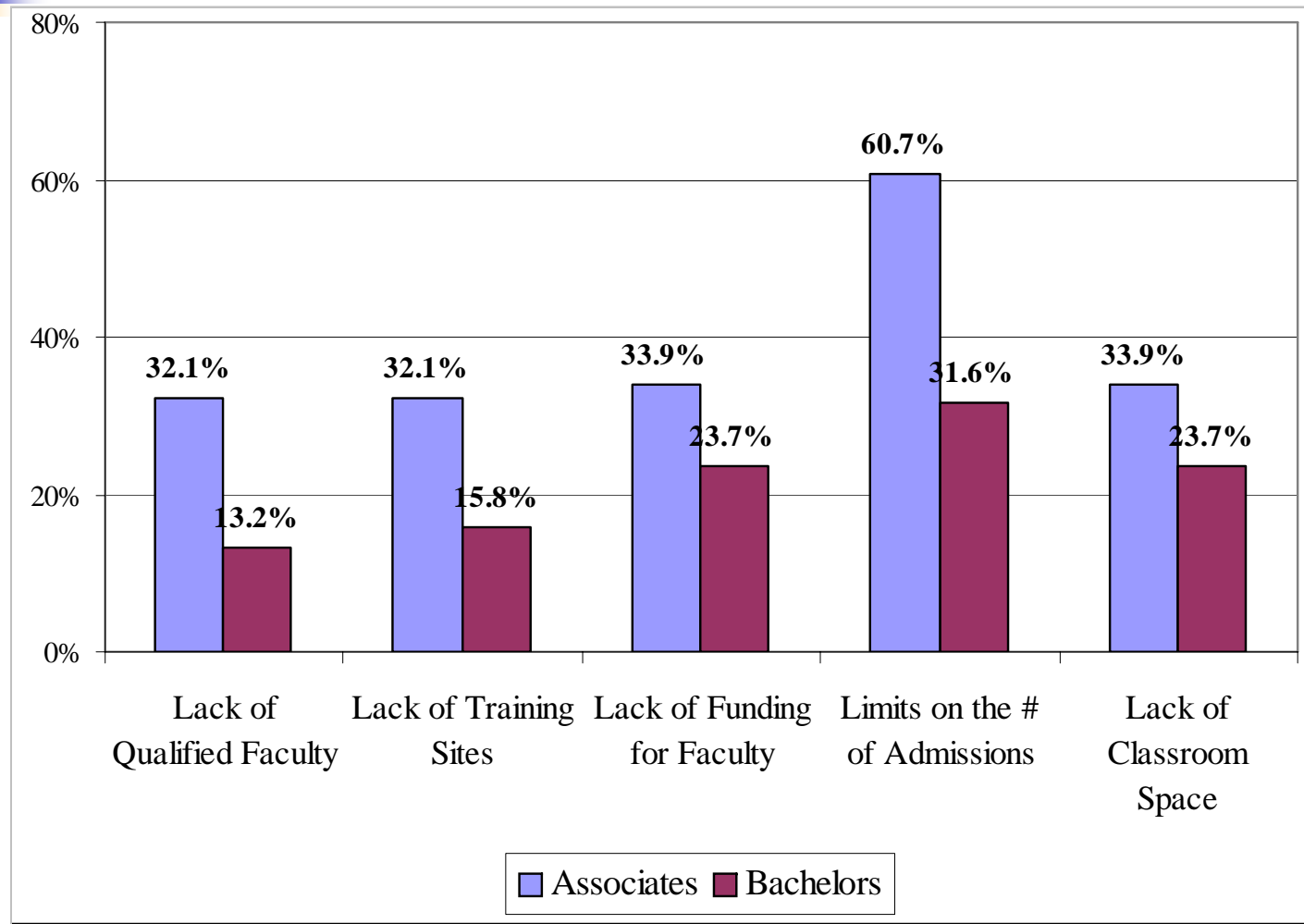
Average Annual Growth of Selected Occupational Settings with the Health Care Sector



RN Graduations in NYS Began Rising in 2003 and Will Continue to Rise Through 2007



Admissions Limits is the Primary Reason Cited for Turning Away Qualified Applicants





Factors Contributing to Health Workforce Shortages, continued

- Workplace factors
 - Physically and emotionally demanding work
 - Non-competitive wages and benefits
 - Job design and working conditions
 - Paperwork and lack of efficient information systems
 - Poorly trained managers



A Vicious Cycle

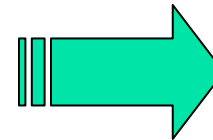
Community-wide Nurse Shortages



Facility Staffing Shortages



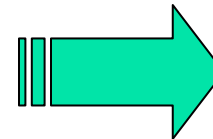
Understaffed Units



Poor Quality



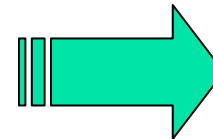
Nurse Burnout



Poor Quality



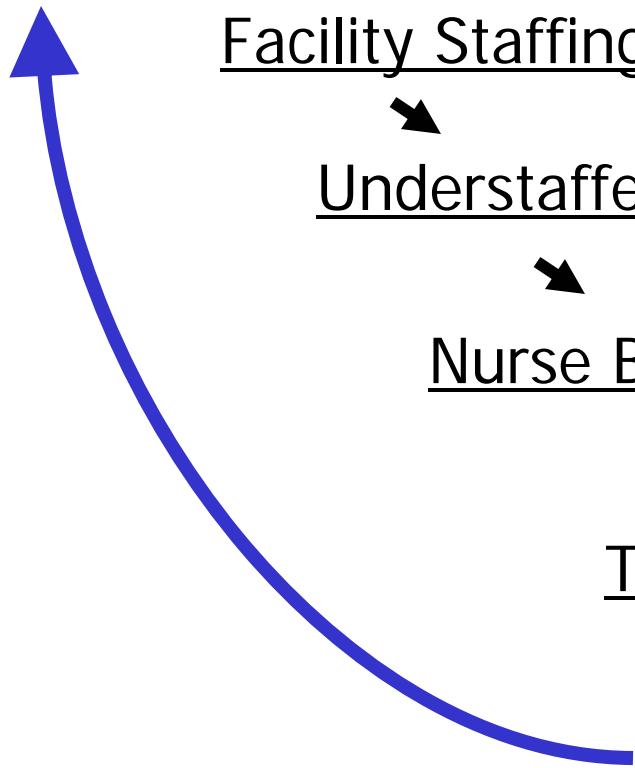
Turnover



Poor Quality



Growing Nursing Shortages





Factors Contributing to Health Workforce Shortages, continued

- Long term factors

- Changing racial/ethnic mix in the US
- Expanded career choices for women
- The economy and public expectations
- Increases in credential requirements
- The aging of America: increase in demand
- The aging of America: decrease in supply of health workers

*The Aging of America:
Impacts on Supply of Health Workers
and
Demand for Health Services*



A Study of the Impact of Aging on the Health Workforce in the US

- HRSA funded study
 - Aging: What do we know about this new cohort of aging Americans?
 - Profile of the Current Workforce
 - Over 20 Health Professions
 - Services to the Elderly
 - Training, Education, Credentials Related to Aging
 - Supply Trends/Demand Projections & Gap
 - Profession-Specific Issues

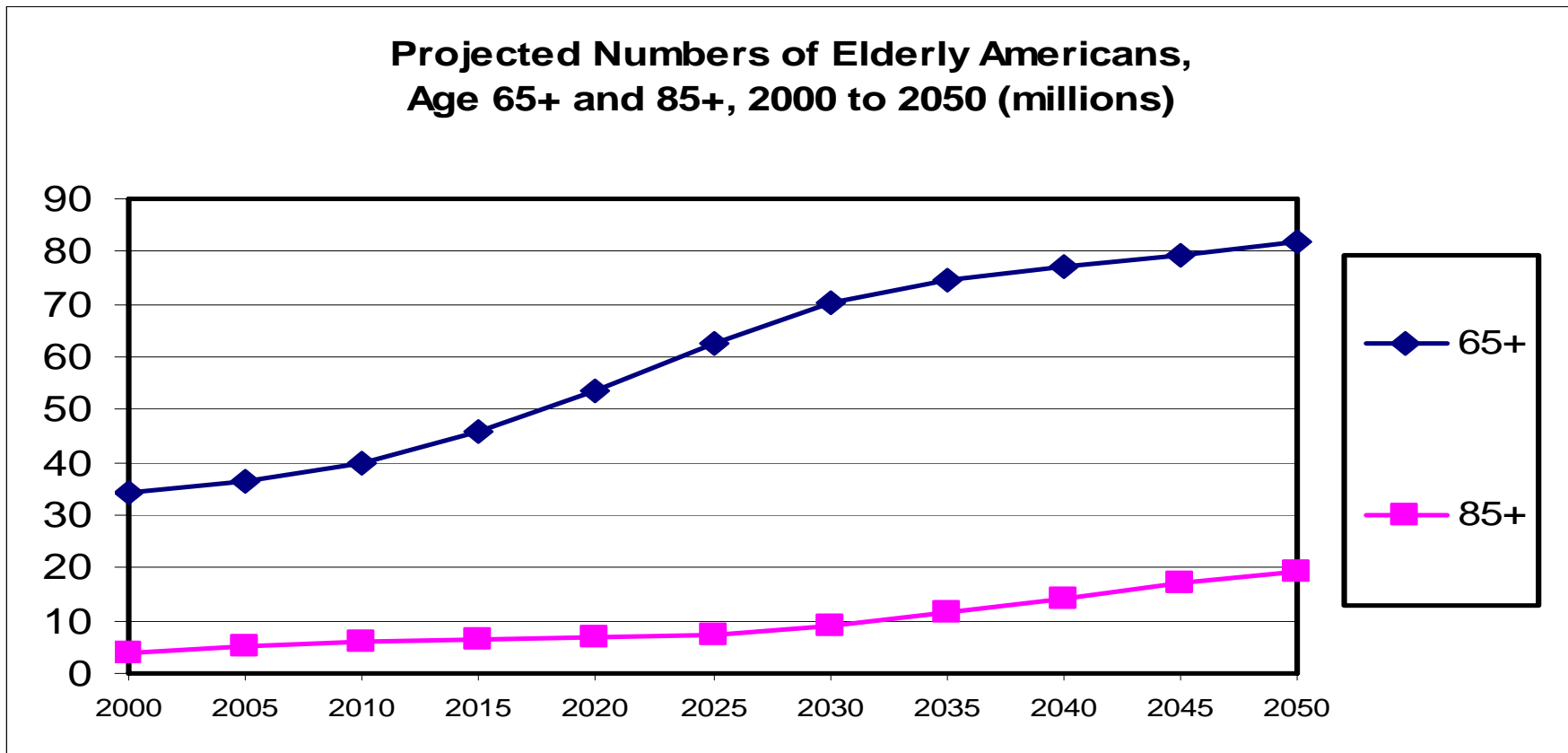


The Aging Report Studied a Wide Array of Health Professions/Occupations

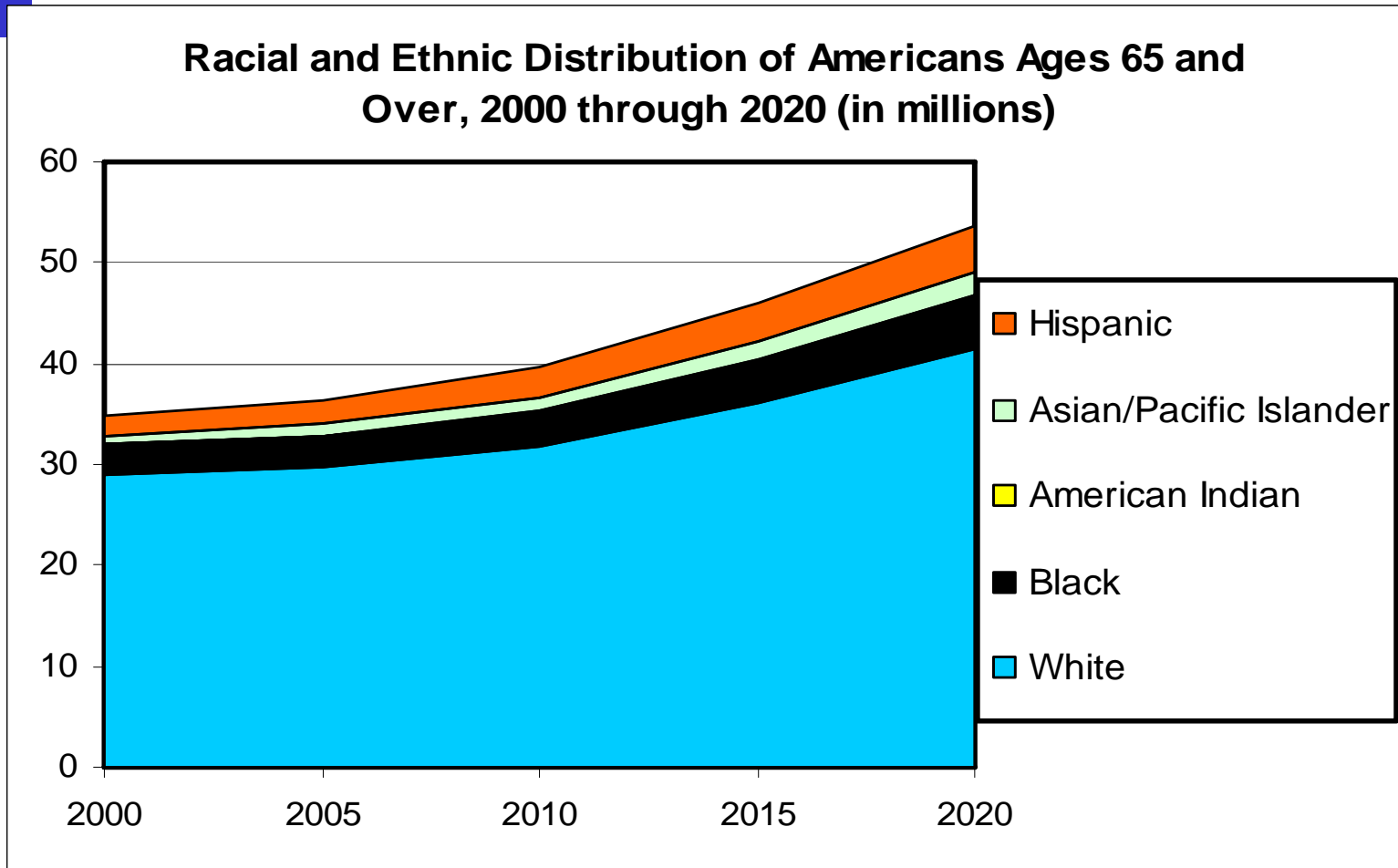
- Physicians
- PAs and NPs
- Nursing
- Oral Health Providers
- Chiropractors
- Podiatrists
- Therapy Professions
- Pharmacists
- Registered Dietitians
- Clinical Psychologists
- Social Workers
- Nursing Home Administrators
- Optometrists

The Population of Older Adults in the US Will Grow Dramatically Over the Next 50 Years

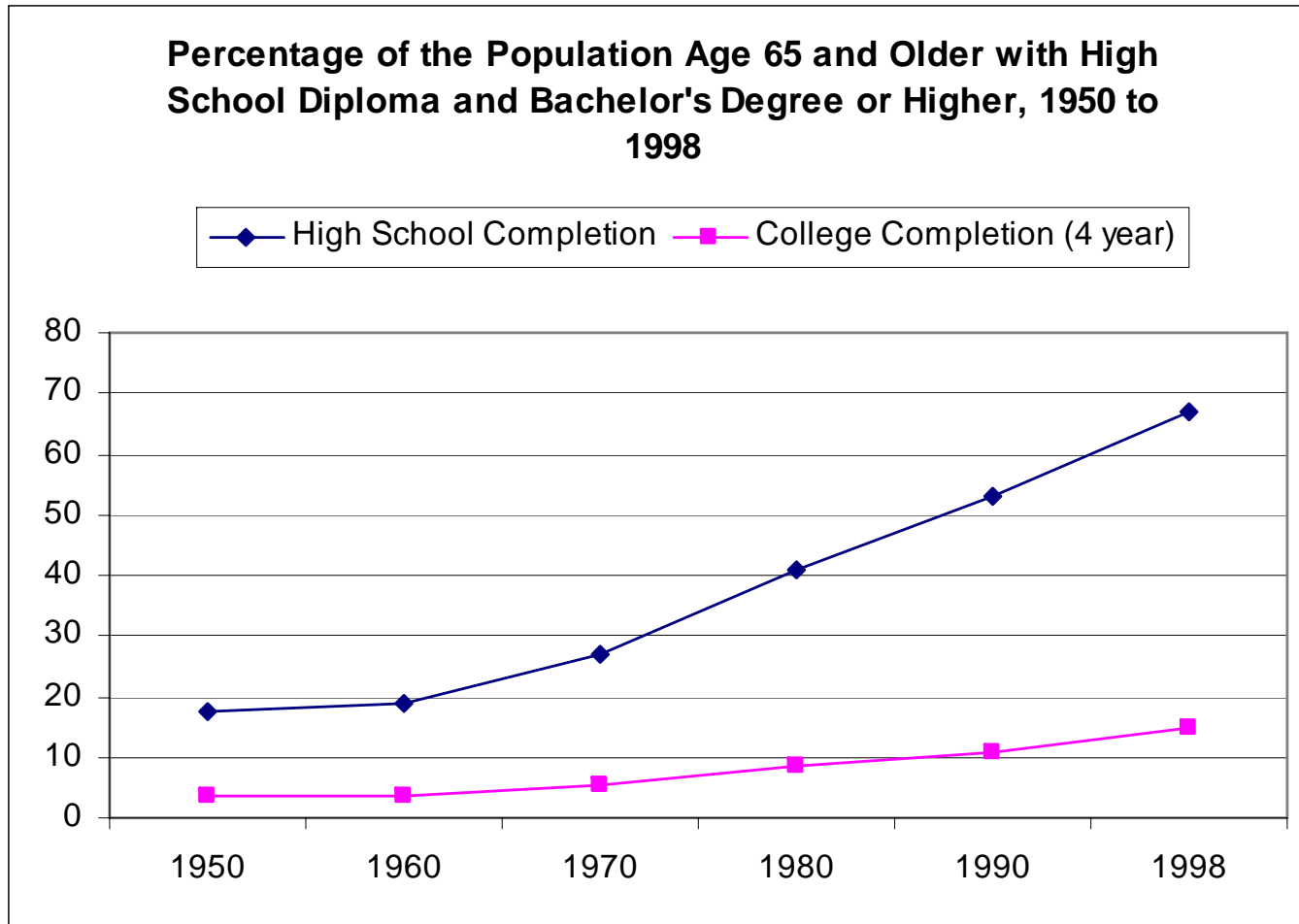
Baby Boomers begin to turn 65 in 2011



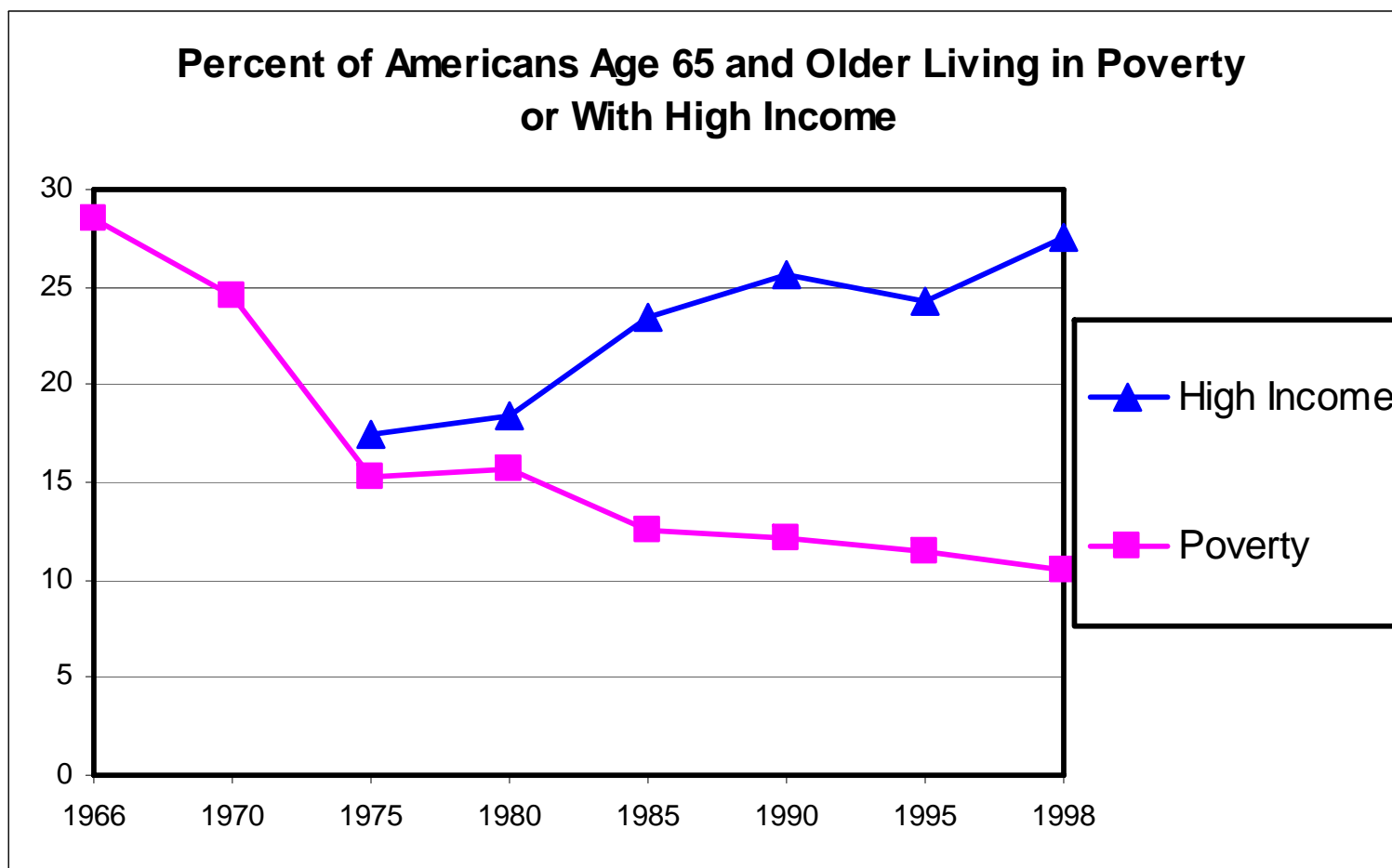
The Population of Older Adults in the US Will Grow Increasingly Diverse Over the Next 20 Years

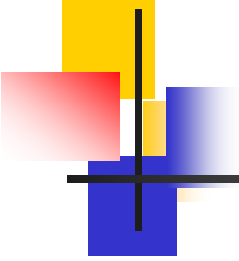


Older Adults Are Better Educated Than in the Past



Older Adults Are Less Likely to be Poor Than in the Past





The Growing Population of Older Adults Will Have a Small Pool of Potential Family Caregivers

- Compared to the current elderly, the growing cohort of aging Americans:
 - have had fewer children than their parents
 - are more likely to be divorced
 - are more likely to live alone as they enter old age.



Impact on Health Services Delivery System

- Older adults
 - consume more health care services than younger age groups
 - have different health care needs than younger age groups
 - will have a greater range of health care models to choose from than in the past
 - Will have greater access to care issues

Profession-Specific Findings

Pharmacists

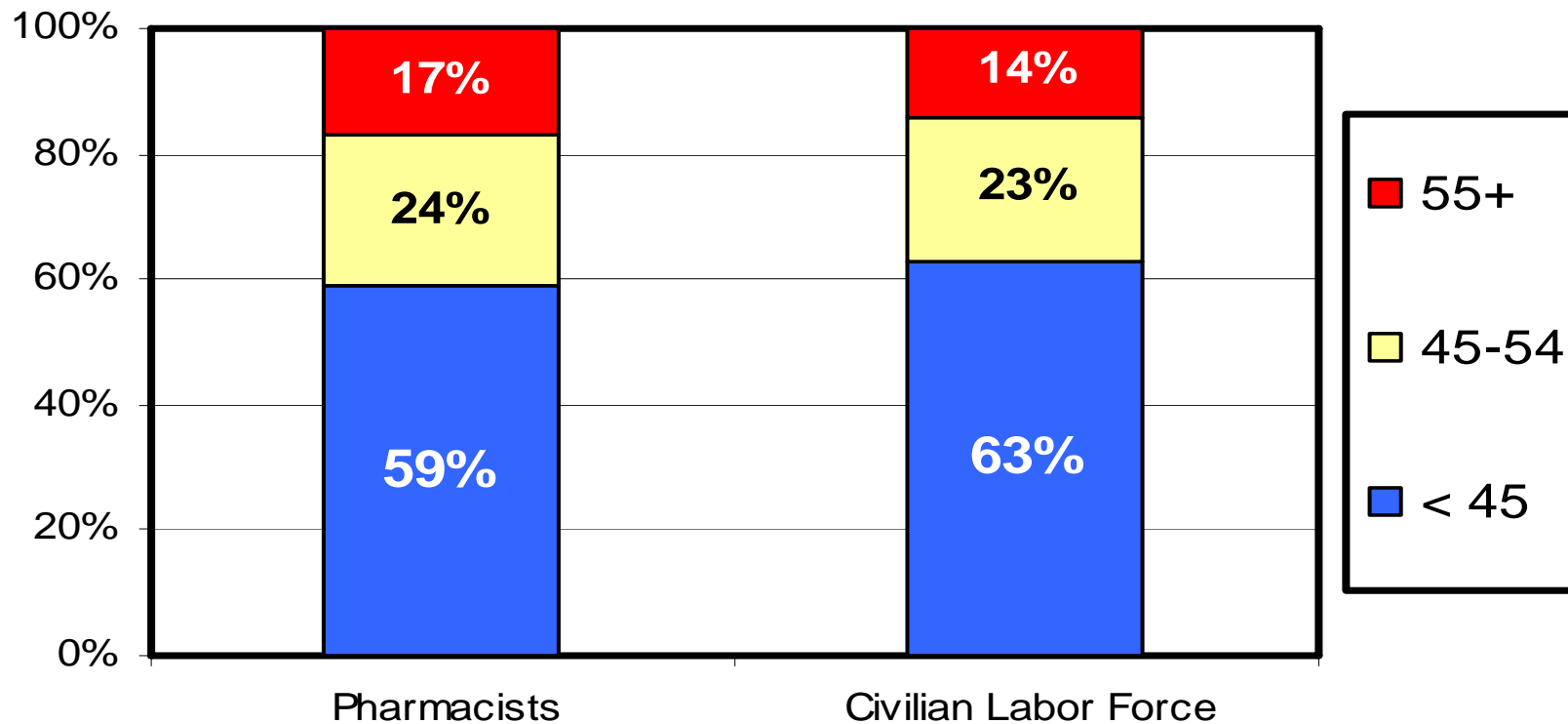


Pharmacists

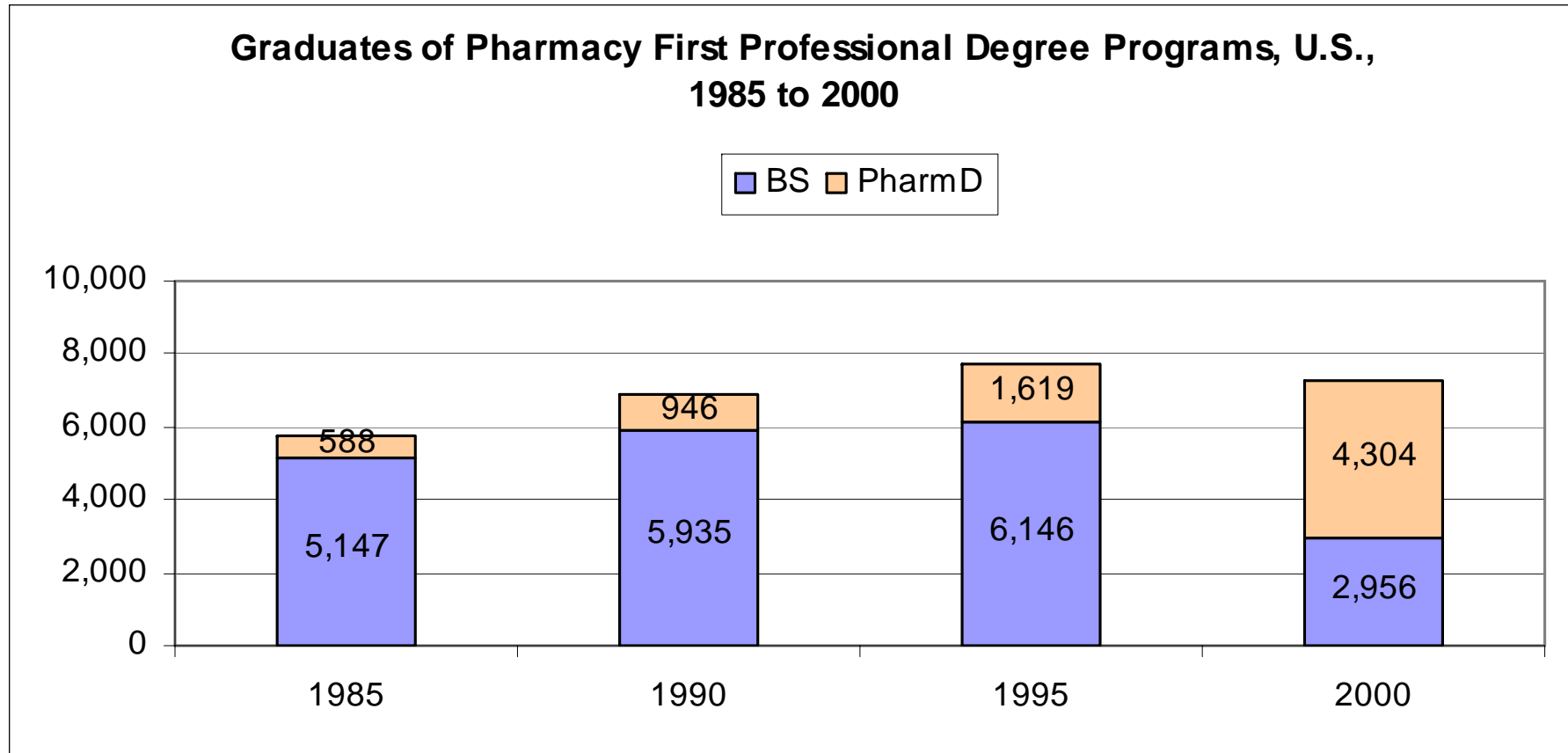
- The majority of pharmacists work in drug stores or other retail stores (62%) or hospitals (21%)
- In 1999, the elderly, who represented 12% of the U.S. population, used 34% of the prescriptions in the U.S.
- Pharmacists are an important provider of care to the elderly because of the need for medication management.
- Fewer than 1% of pharmacists hold a certification in geriatric pharmacy.

Pharmacists Are Older Than the Overall Civilian Labor Force

Figure 3. Age Distribution of U.S. Pharmacists, 2001



The Number of New Pharmacist Graduates Declined Between 1995 and 2000



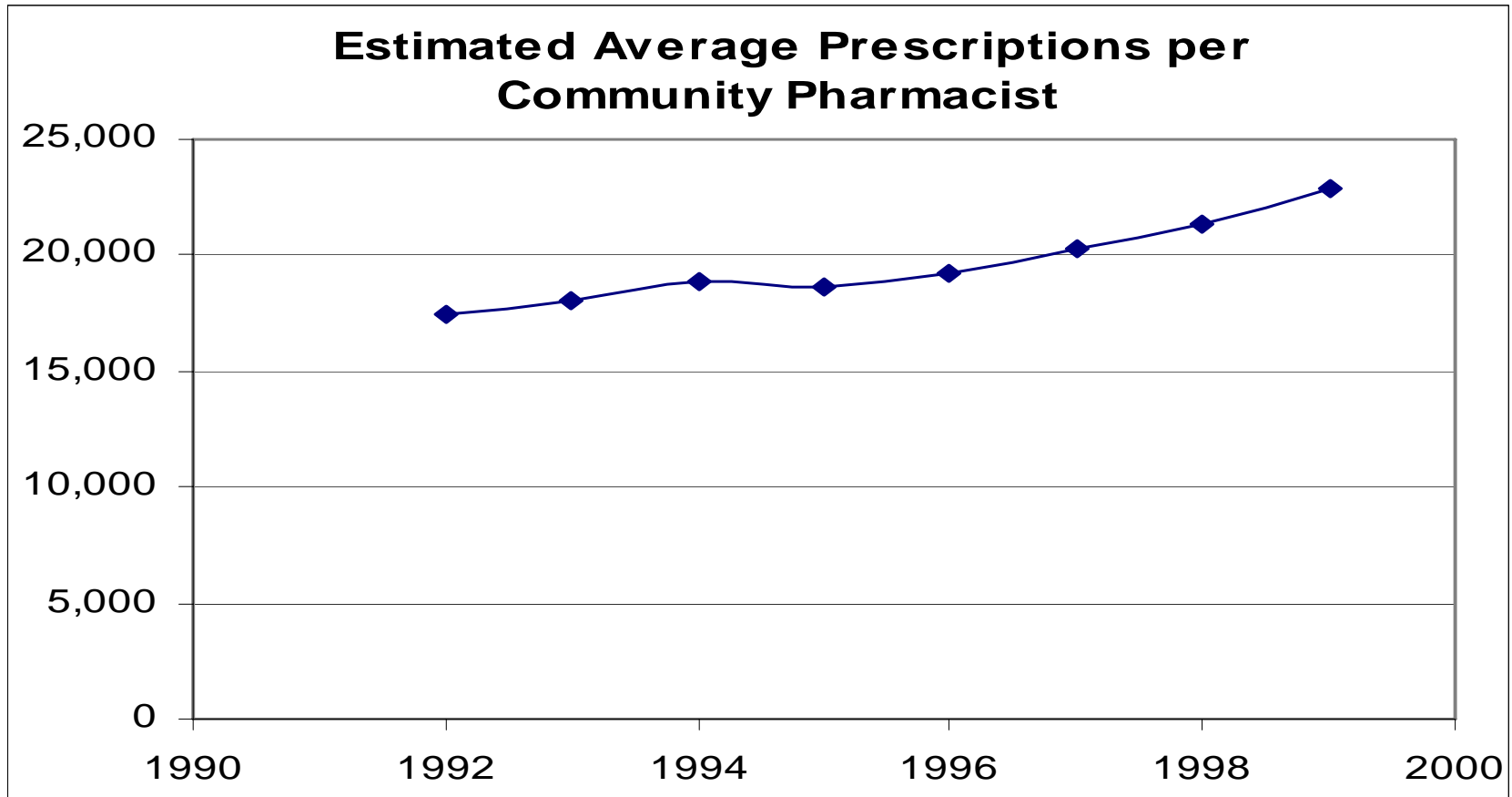
Source: AACP



Pharmacist Training Issues

- The BS in Pharmacy has been gradually replaced by the Doctor of Pharmacy as the entry level degree for pharmacists
- Most pharmacy programs include geriatric pharmacotherapy in their general curriculum
- About 25% of pharmacist education programs offer a specialization in geriatrics
- Only about 2% of new pharmacists complete a residency in geriatric care

From 1992 to 1999, the Number of Prescriptions Filled by Community Pharmacists Rose 31%



Source: HRSA, 2000



The Demand for Pharmacists Is Expected to Increase in the Coming Decade

- BLS projects 25% growth in total pharmacist positions between 2004 and 2014
- Over that time, there will be 57,000 new job openings
- In addition, there will be 44,000 job openings to replace pharmacists leaving the field



Will the Supply of Pharmacists Meet Future Demand for Them?

- Since 2000, pharmacy school enrollments have risen, but that may not be sufficient to meet future demand
- A shortage of pharmacists would substantially affect the elderly, given their higher prescription drug use and their need for medication management
- Currently, there are only 700 certified geriatric pharmacists to serve the elderly population in the country



Factors That Will Affect the Adequacy of Supply to Meet Demand for Pharmacists

- Availability of new drug therapies
- Aggressive marketing of prescription drugs
- Integration of pharmacists into care teams for the elderly
- Technology
- Pharmacist helper occupations
- Medicare prescription drug benefit

*General Findings
on the Health Professions*



Health Professionals Receive Limited Training on Care to the Elderly

- Many health professions and occupations do not offer formal credentials focused on the needs of the elderly
- When such a credential is offered, the number of workers with the credential is typically very small
- A majority of health care professionals in most settings deal with substantial numbers of elderly people whether or not they are specialists.

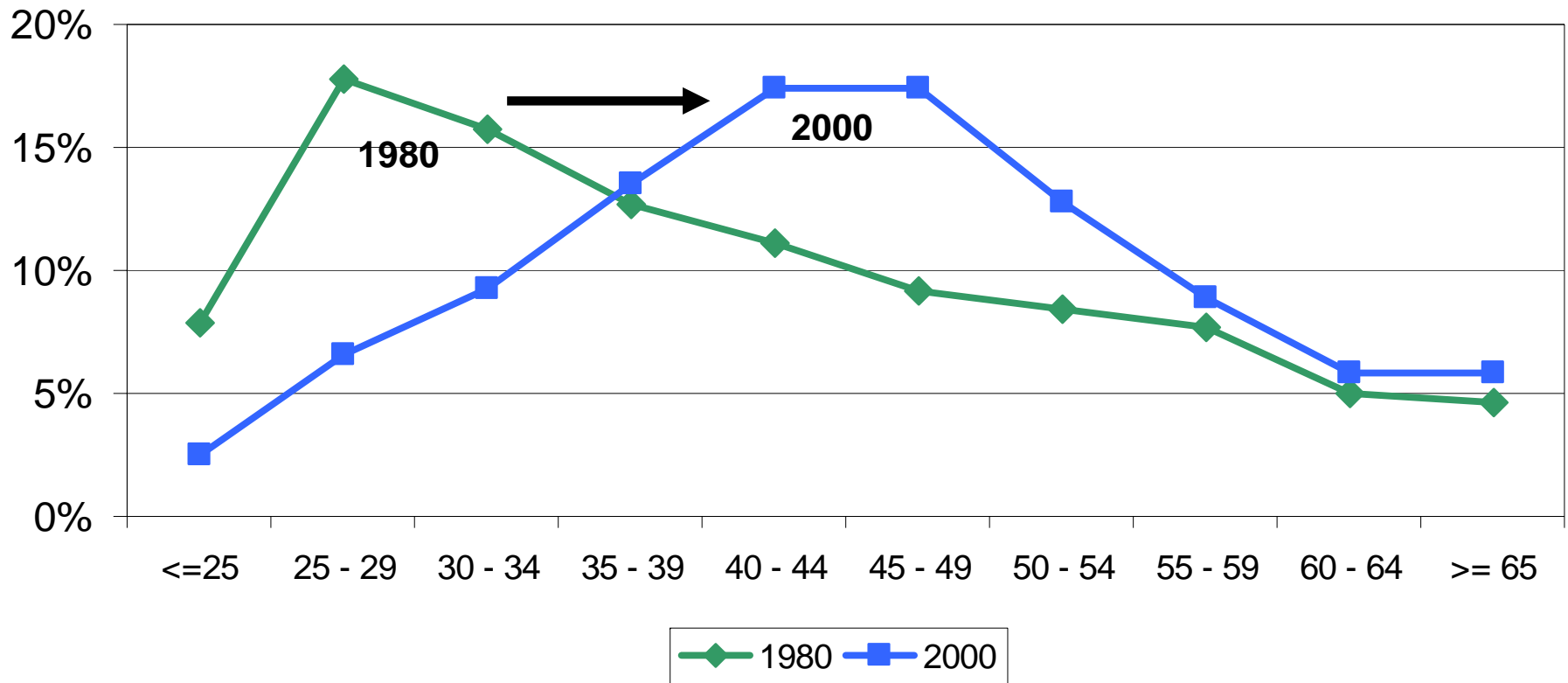


Many Health Professions Are Aging Rapidly

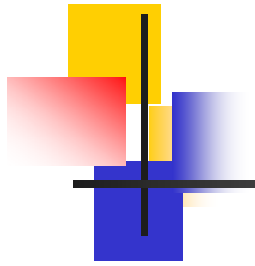
	1989	1999	Change 1989- 1999
Median age	35.7	38.7	+ 3.0
Dentists	40.7	44.0	+ 3.3
Dietitians	38.3	40.0	+ 1.7
Health records technologists	35.3	40.3	+ 5.0
Radiologic technicians	34.3	38.0	+ 3.7
Registered nurses	37.3	42.7	+ 5.4
Respiratory therapists	32.3	38.0	+ 5.7
Social workers	38.7	40.3	+ 1.7
Speech therapists	35.7	40.7	+ 5.0
Pharmacists	36.7	41.3	+ 4.6
Total civilian labor force	35.7	38.7	+ 3.0

Source: Bureau of Labor Statistics, Current Population Survey - Annual Demographic Supplement, 1988-2000.

Age Distribution of the Registered Nurse Population: 1980 and 2000



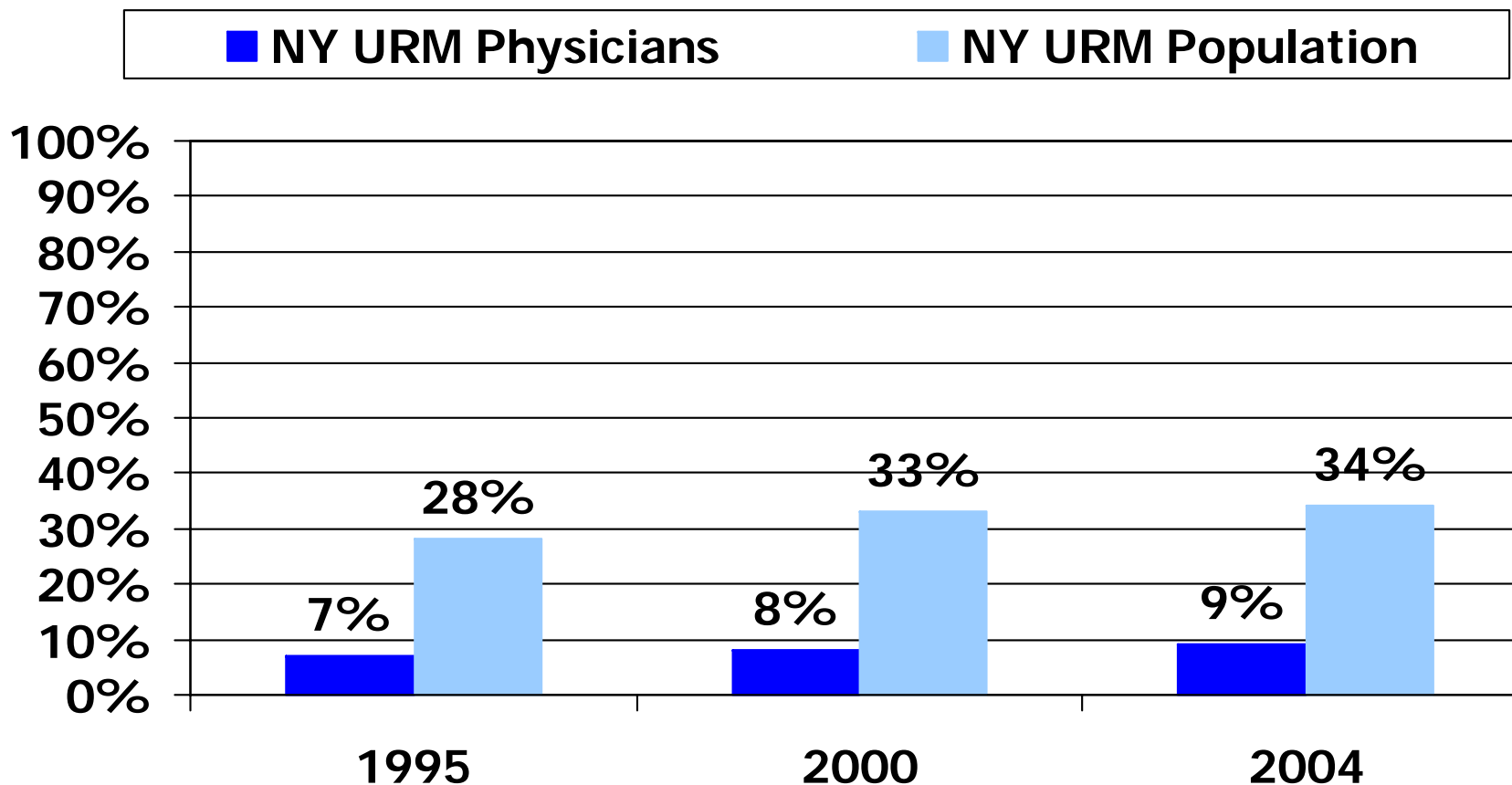
Many Health Professions Lack Diversity



	Non-Hispanic white	Non-Hispanic Black	Asian & Pacific Islander	Hispanic
Dental hygienists	92%	3%	1%	4%
Dentists	79%	5%	12%	4%
Dietitians	65%	21%	3%	11%
Occupational therapists	82%	5%	9%	4%
Registered nurses	79%	10%	7%	4%
Respiratory therapists	78%	12%	4%	6%
Social workers	66%	20%	3%	11%
Speech-language pathologists	92%	6%	0%	2%
Pharmacists	82%	3%	11%	4%
Total resident population	68%	12%	4%	14%

Sources: Bureau of Labor Statistics, Census Bureau. Current Population Survey, 2004;
Census Bureau, U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin, 2004;

New York's Physicians Are Not Representative of Its Population





Future Shortages?

Between 2004 & 2014, BLS projects need for an estimated:

- ❑ **1.2 million RNs** will be needed to fill new (703,000) and replacement (191,000) jobs
- ❑ **210,000 physicians** will be needed to fill new (136,000) and replacement (76,000) positions
- ❑ **46,000 dentists** will be needed to fill new (20,000) and replacement (26,000) positions
- ❑ **516,000 nurse aides** to fill new (325,000) and replacement (191,000) jobs
- ❑ **430,000 home health aides** to fill new (350,000) and replacement (81,000) jobs



Future Shortages?

Demand for health care professionals to serve the elderly will be affected by:

- Health insurance reimbursement policies
- Emerging technologies
- New models of care
- Changes in profession-specific scope of practice

*What Can We Do to Assure a Well-
trained and Adequate Health
Workforce
for the Future?*




Key Stakeholders

- Health facilities and associations
- Government (U.S., states and local)
- Health professions education programs
- Professional associations
- Unions representing health workers
- Consumers/patients



Attract New Recruits into Health Careers

- Increase the pipeline
 - Learn more about what attracts people into health care careers and develop marketing strategies
 - Develop career ladders into shortage occupations
 - Promote diversity in health professions
 - Address faculty shortages
- Target health professions that are older, in anticipation of retirements
- Provide incentives, such as scholarships or loan repayment, in return for service



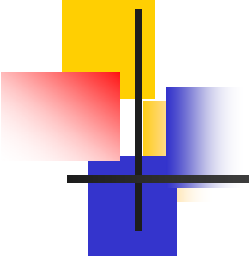
Improve the Retention of Health Workers

- Increase worker satisfaction
 - Better wages and benefits
 - Improve working conditions
 - Job re-design
 - Increase opportunities for professional development
 - Provide manager/supervisor training
 - Build organizational cultures that recognize and empower the health workforce



Reduce Demand for Workers

- Increase efficiency
- Adopt enabling technology
- Shift delivery site from inpatient to outpatient
- Changes in scope of practice
- Promote self care



Impact of Aging on the Health Professions: Possible Responses

- Provide better training on geriatric issues to health professionals
 - Basic curriculum
 - Specialty certification
 - Continuing education
- Help prepare health care workers for new roles in different settings
 - Chronic disease management
 - Interdisciplinary teams
 - Residential settings



Government Interventions

- Commissions and task forces
- Minimum staffing ratios
- Health services reimbursement policies
- Support for training and education
- Immigration policies
- Better data and information on the health workforce



An Industry Response: The AHA 2002 Commission Report

In Our Hands-How Hospital Leaders Can Build a Thriving Workforce

- 5 Sets of Recommendations:
 - Foster Meaningful Work
 - Improve the Workplace Partnership
 - Broaden the Base
 - Collaborate with Others
 - Build Societal Support



Planning for the Future

- Assure an adequate supply of health care workers
- Increase knowledge and awareness of the needs of older adults
- Promote the development of a more diverse and culturally competent health workforce
- Support the development of a more accessible, cost-effective health care delivery system