



Health Care Industry Economic Analysis

February 02, 2008

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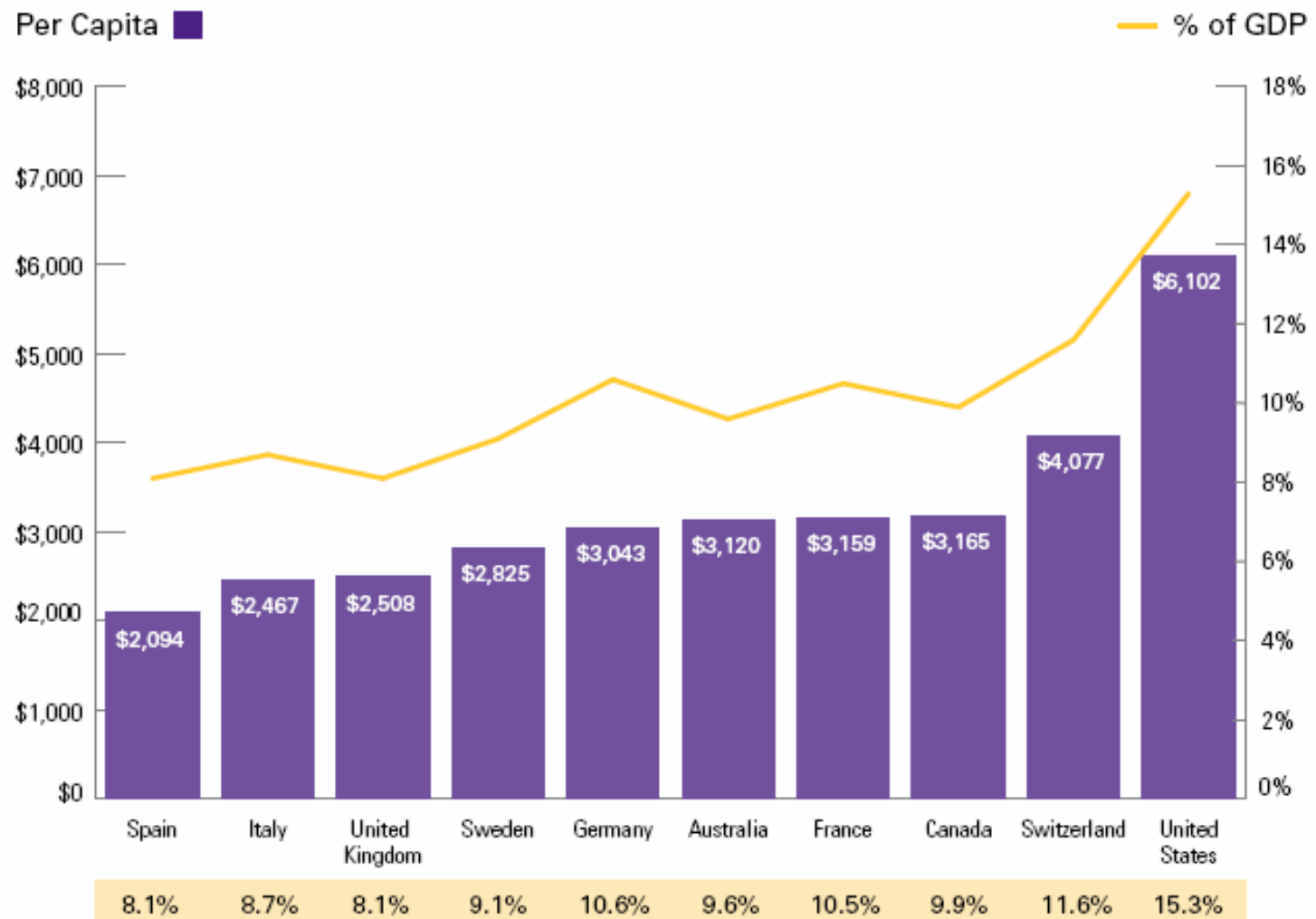


Opening scene...



"My doctor told me to avoid any unnecessary stress, so I didn't open his bill."

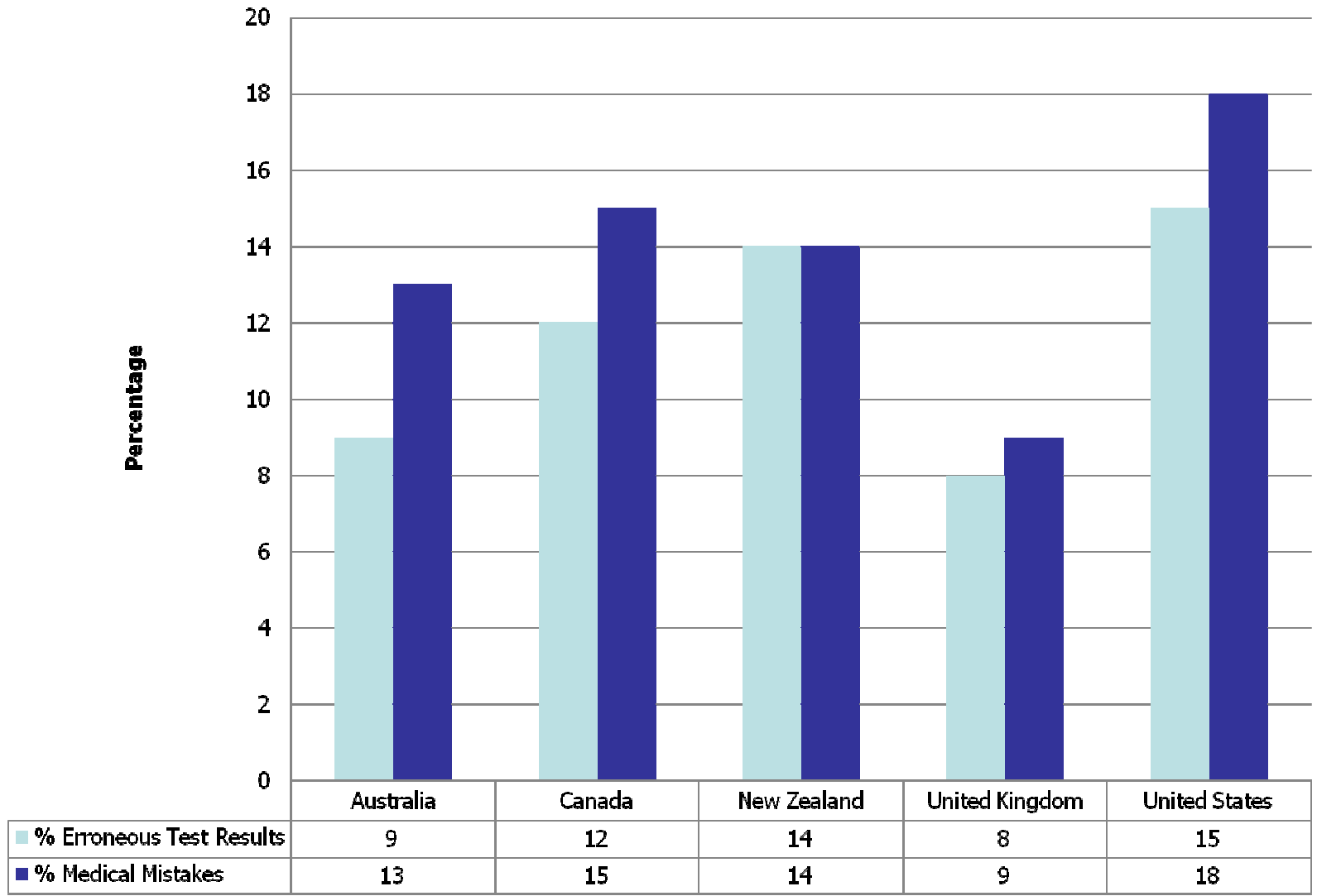
Americans spend the most on healthcare....



Source: California HealthCare Foundation, 2007

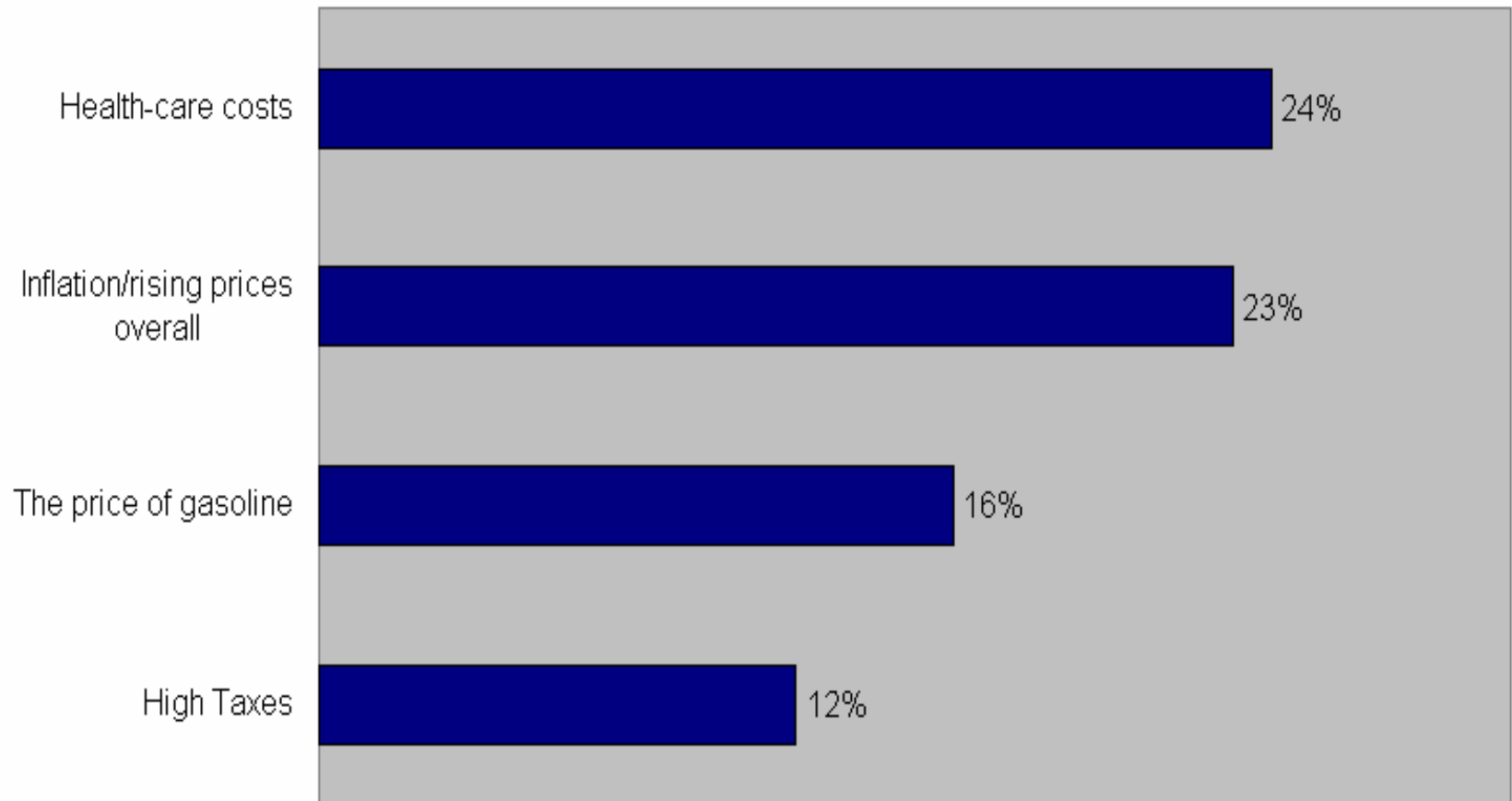
But Receive the Lowest Quality of Care

Percentage of Adults Experiencing Errors & Mistakes



Health Care Cost Affects the Consumer

Which of these is the single most important economic issues facing you and your family?



Source: The Washington Post-ABC News Poll, Jan. 9-12, 2008



... And the Economy

Moody's says spending threatens US rating

By Francesco Guerrera, Aline van Duyn and Daniel Pimlott in New York
Published: January 10 2008

The US is at risk of losing its top-notch triple-A credit rating within a decade unless it takes radical action to curb soaring **healthcare** and social security spending, Moody's, the credit rating agency.

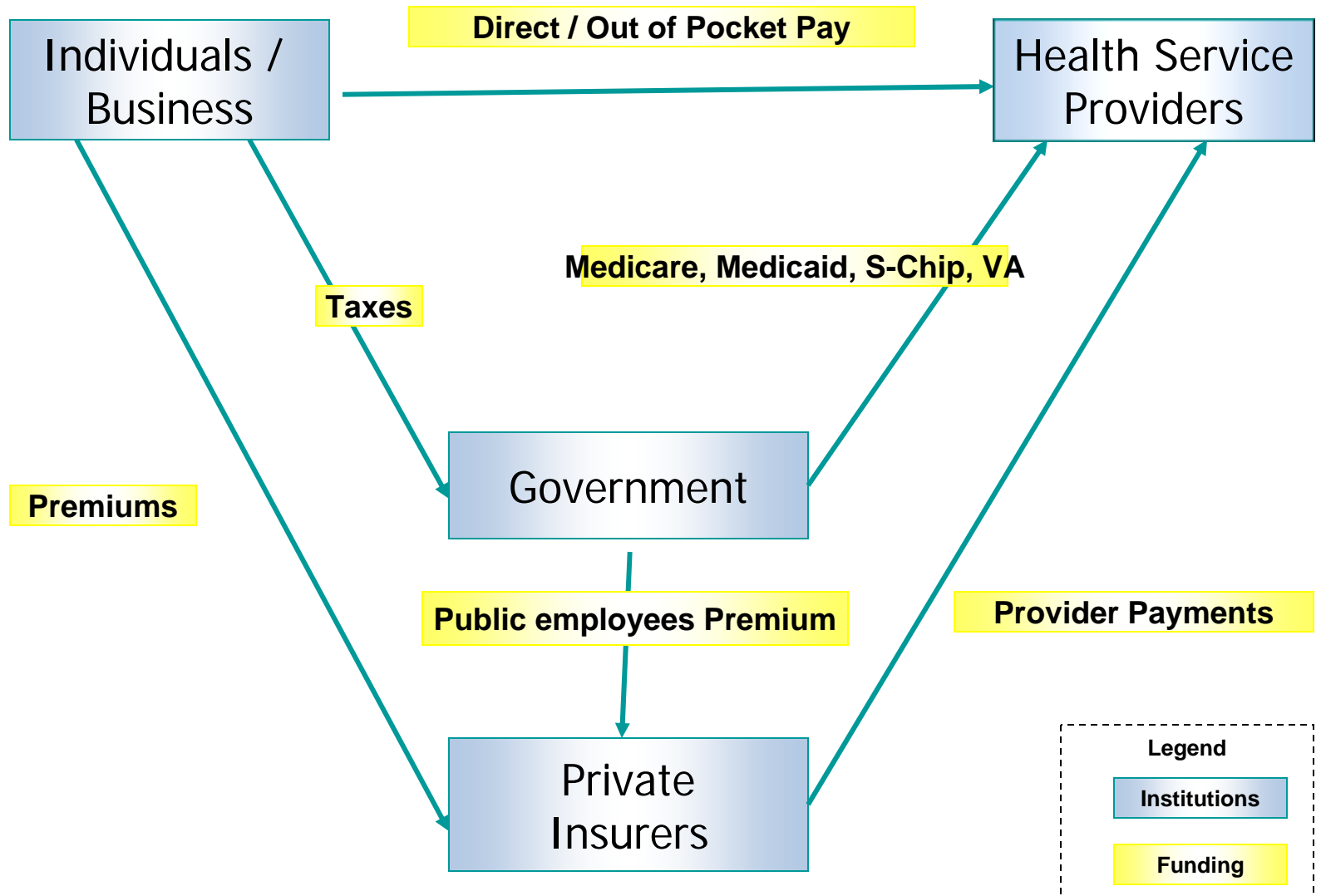
Health Care Industry Analysis



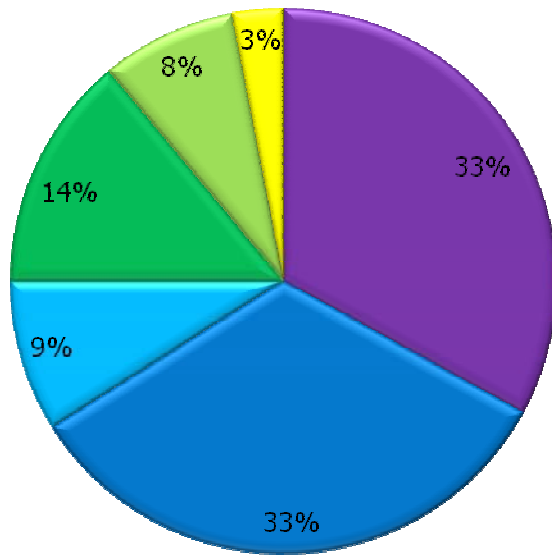
- Structure – fragmented
- Size – largest industry
- Demand – growing
- Supply – in question
- Production – decreasing efficiency
- Costs - skyrocketing

Health Care Industry

We all pay for health care...



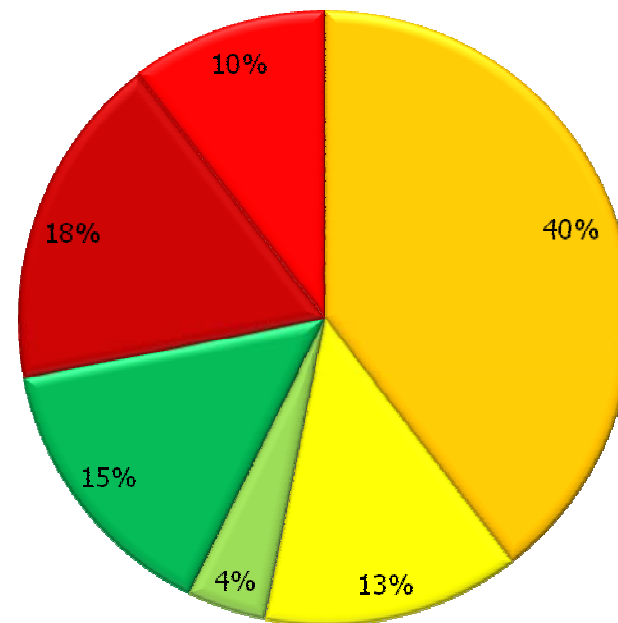
Health Care Industry



- Hospital Care
- Professional Services
- Nursing & Home Health
- Retail Outlet Sales of Medical Products
- Government Administration & Net Cost of private health insurance
- Government Public Health Activities

**2005 Health Care Expenditures:
Where the Money Went**

**2005 Health Care Expenditures:
Where the Money Came From**



- Private Health Insurance
- Private Out-of-Pocket
- Other Private Spending
- Medicare
- Medicaid
- Other Public Spending



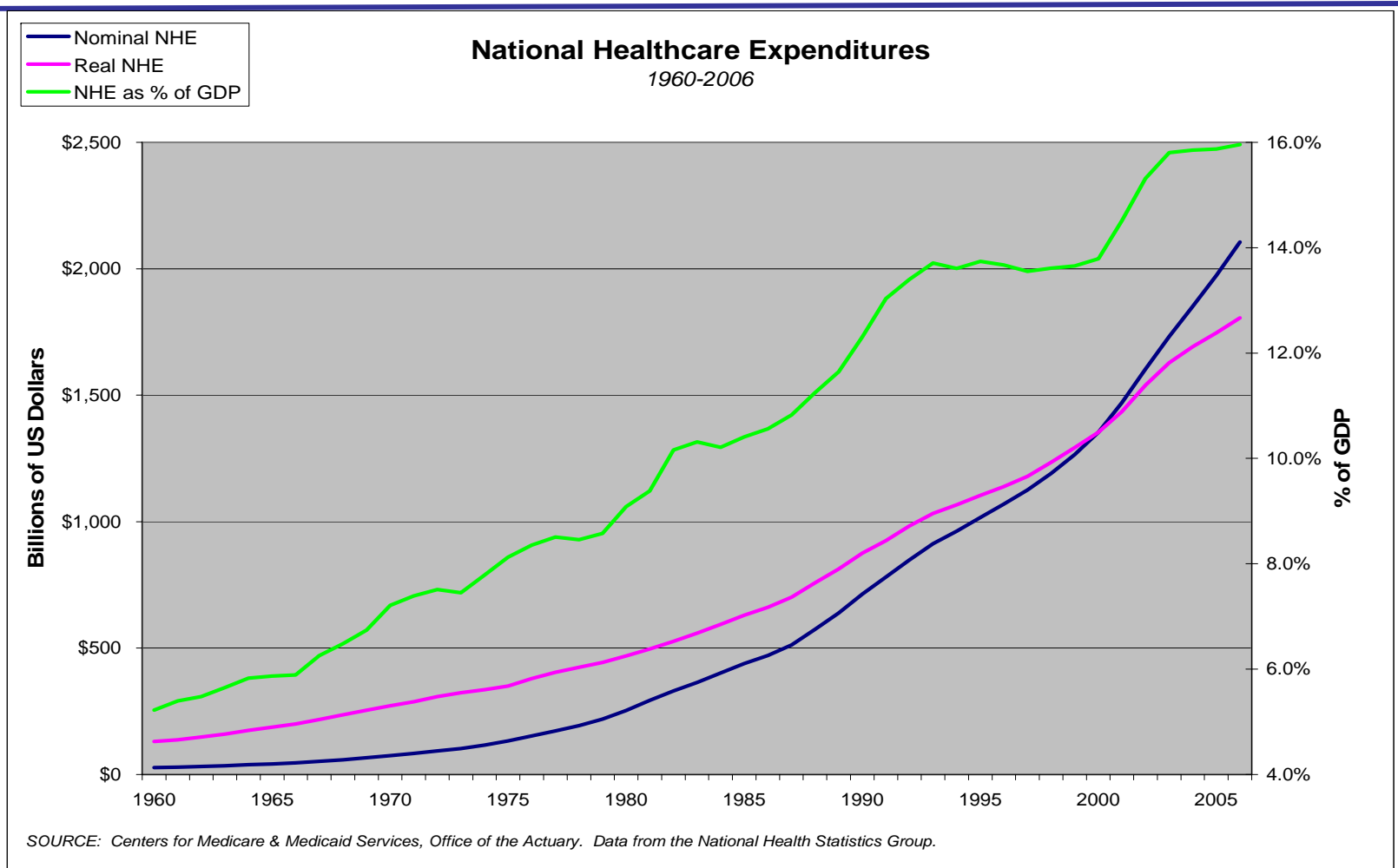
Structure of the Health Care Industry

Industry	Sector	Subsector
Health Care	Equipment	Medical Equipment
		Medical Supplies
	Services	Hospitals
		Nursing facilities
		Dentists/Physicians
		Outpatient Care
	Pharmaceuticals & Biotech	Biotechnology
		Pharmaceuticals

- 580,000 establishments provide services
- 77% of health care establishments are offices of physicians, dentists & other health care practitioners
- While hospitals constitutes 1% of establishments, they employ 35% of workers



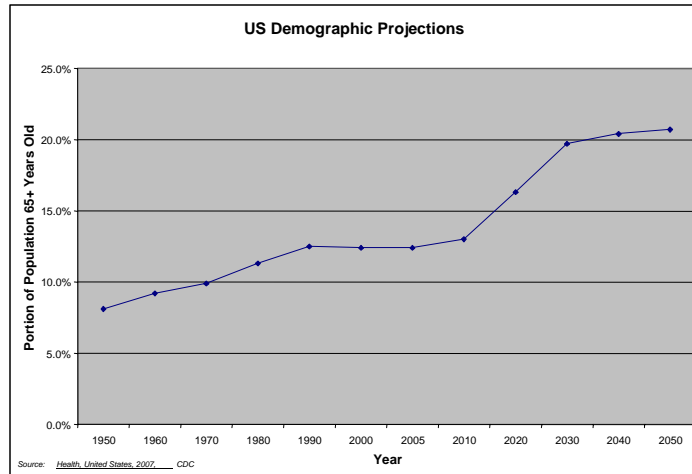
Size of the Health Care Industry



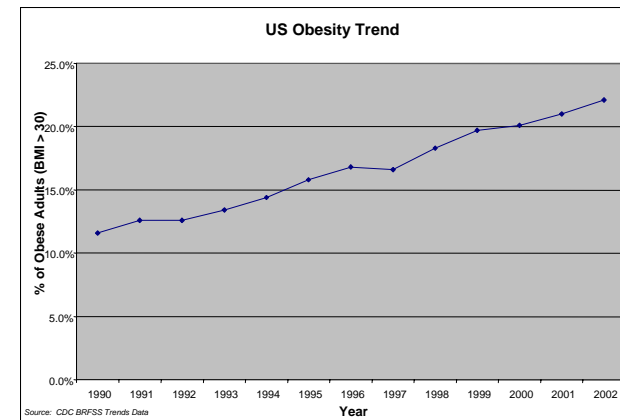
- Largest industry in 2006 and provided 14 million jobs.
- In 2005 total national health expenditures rose 6.9% - two times the rate of inflation.

Source: US Department of Labor

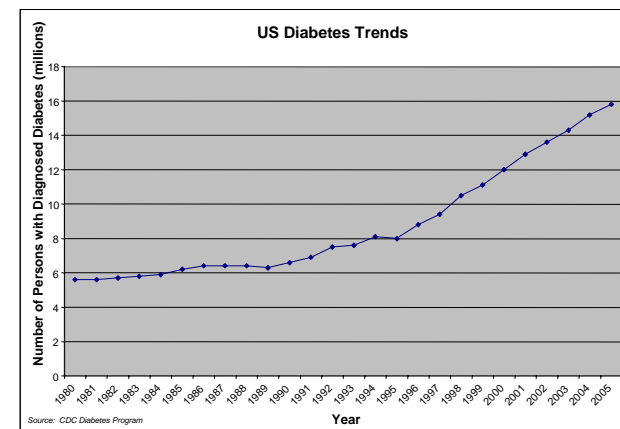
Demand for Health Care Services



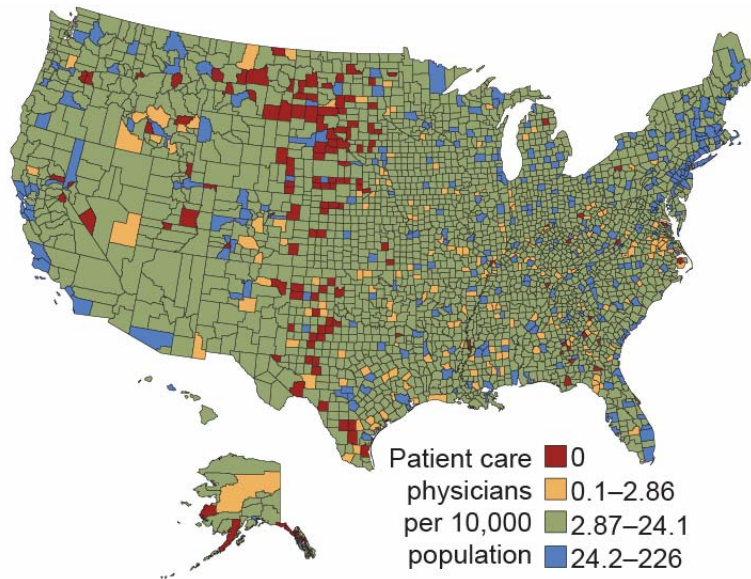
The United States population is aging, requiring more health care.



The United States population is suffering from chronic disease, such as diabetes, heart disease, and obesity, requiring more care.

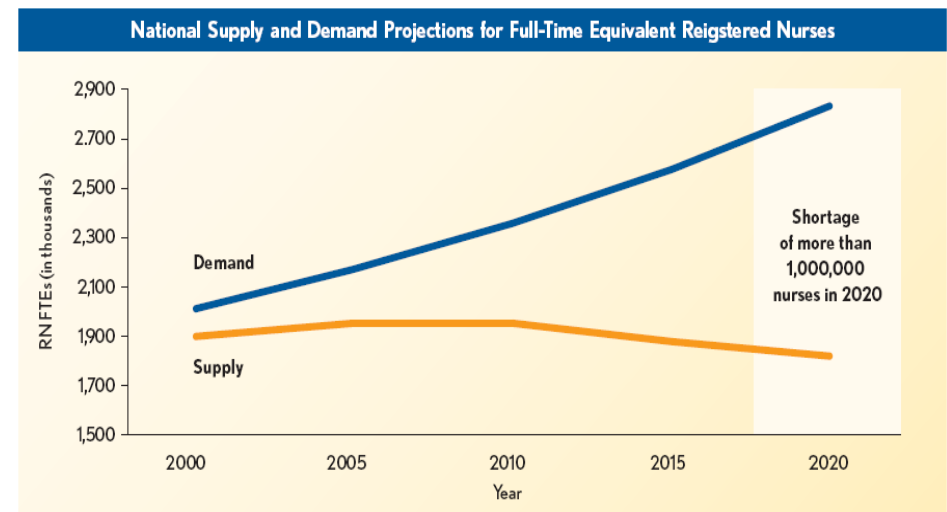


Supply of Health Care Providers



While the number of physicians is adequate... source CDC 2007

There is a shortage of nurses.



Source: National Center For Health Workforce Analysis, Bureau of Health Professions, Health Resources and Services Administration, 2004. Used with permission.

The Escalating Cost of Health Care

➤ Malpractice litigation

➤ Uninsured

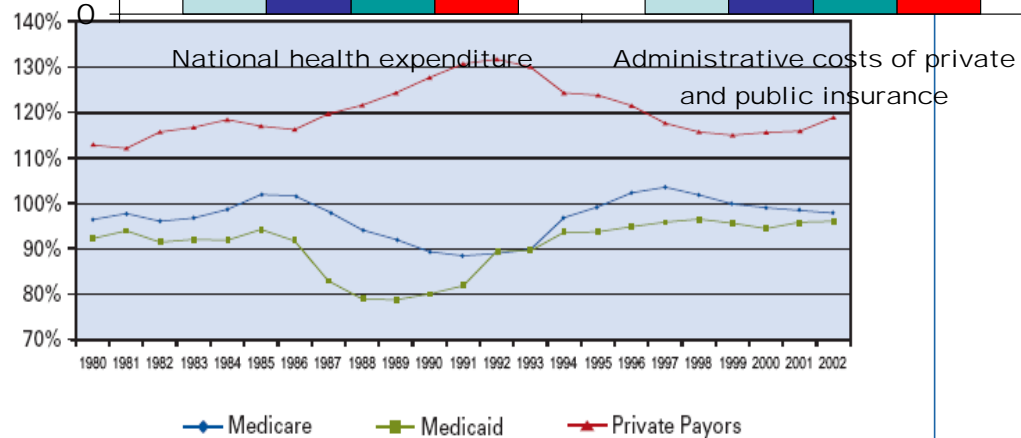
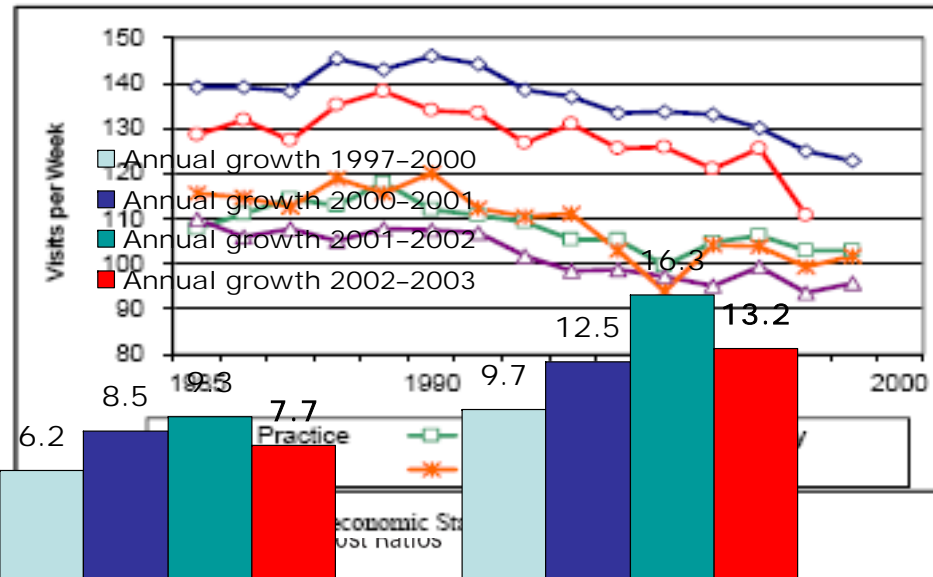
➤ Government

➤ Decreasing

➤ System

➤ And more

Exhibit 6. Average Total Visits per Week

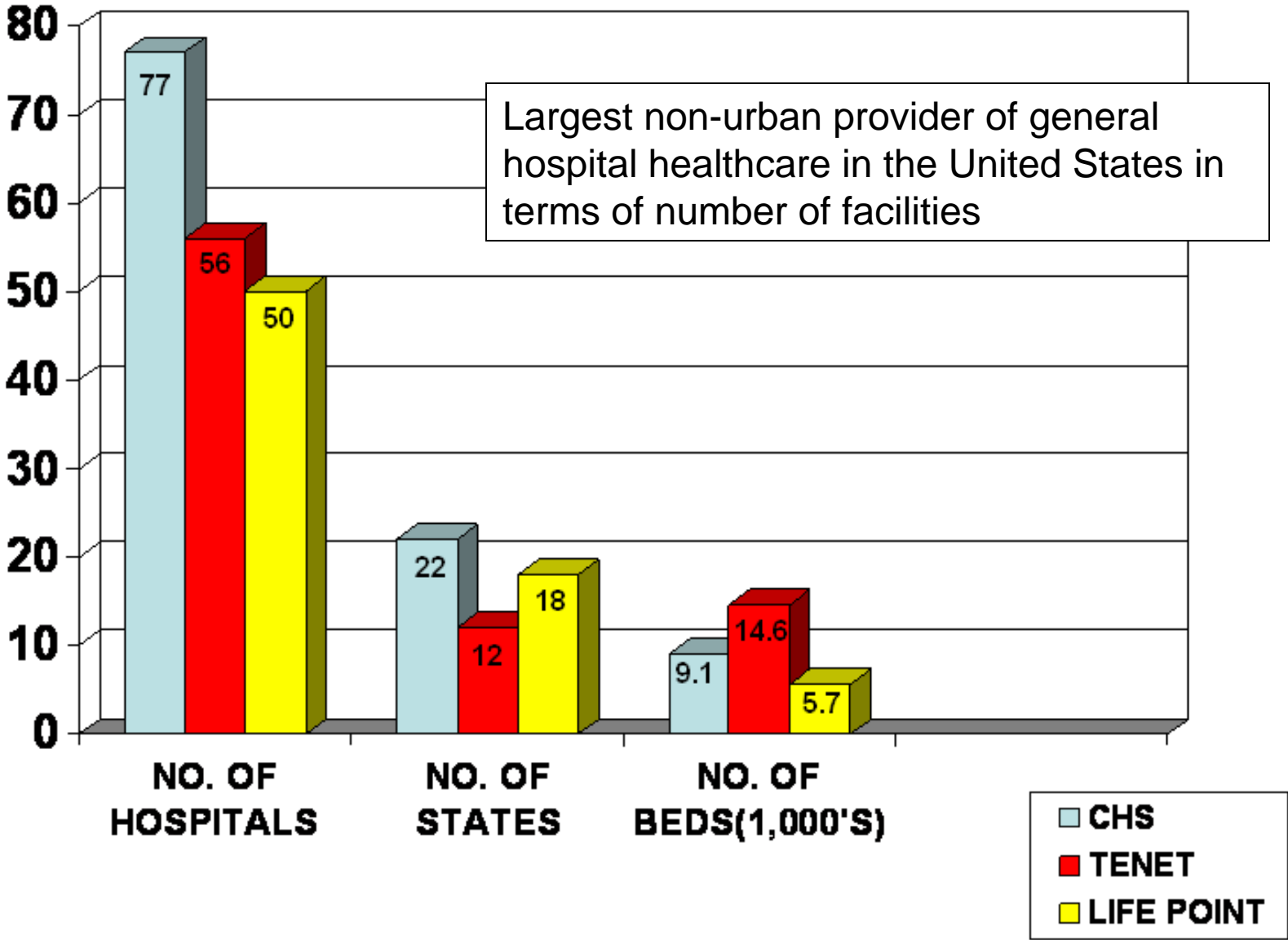


Firm Analysis



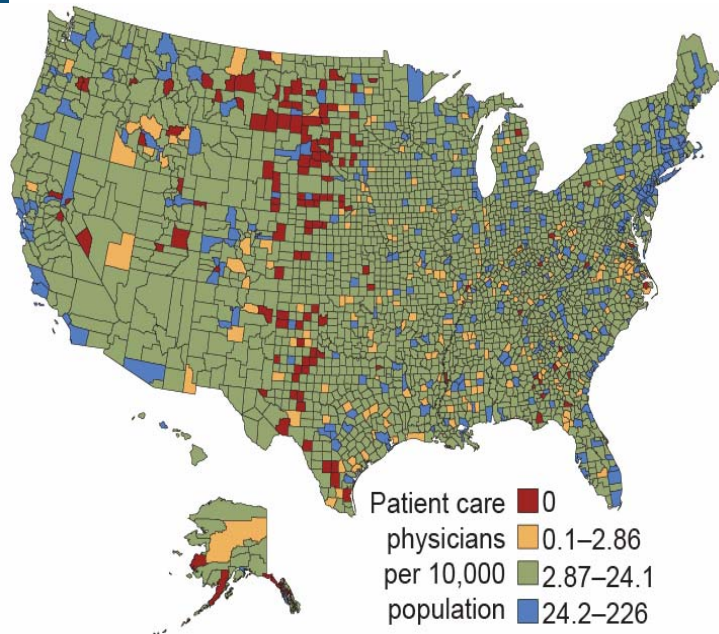
- Operates non-urban hospitals – less competitive market
- Growth by acquisition
- Success due to improved efficiency/quality of care and cost control.

Community Health Systems



Community Health Systems (CHS)

Back to the issue of supply...



- CHS targets hospitals in non-urban markets for acquisition
- Non-urban markets have a smaller supply of hospitals and physicians
- Smaller populations support less direct competition for hospital services
- Non-urban communities view the local hospital as an integral part of the community.

Community Health Systems

KEY ELEMENTS OF SUCCESS

- Increase Revenue at the Company's Facilities:
 - CHS seeks to increase revenue at its facilities by providing a broader range of services in a more attractive care setting, as well as by recruiting physicians

- Grow Through Selective Acquisitions
 - Each year the Company intends to acquire, on a selective basis, three to four hospitals that fit CHS' acquisition criteria
 - There are approximately 400 hospitals that meet CHS' acquisition criteria
 - These hospitals are primarily not-for-profit or municipally owned

- Improve Profitability
 - To improve efficiencies and increase operating margins, CHS implements cost containment programs and adheres to operating philosophies

- Improve Quality
 - CHS implements new programs to improve the quality of care provided
 - These include training programs, sharing of best practices, assistance in complying with regulatory requirements, standardized accreditation documentation, and patient, physician, and staff satisfaction surveys

CHS – Financial Comparison

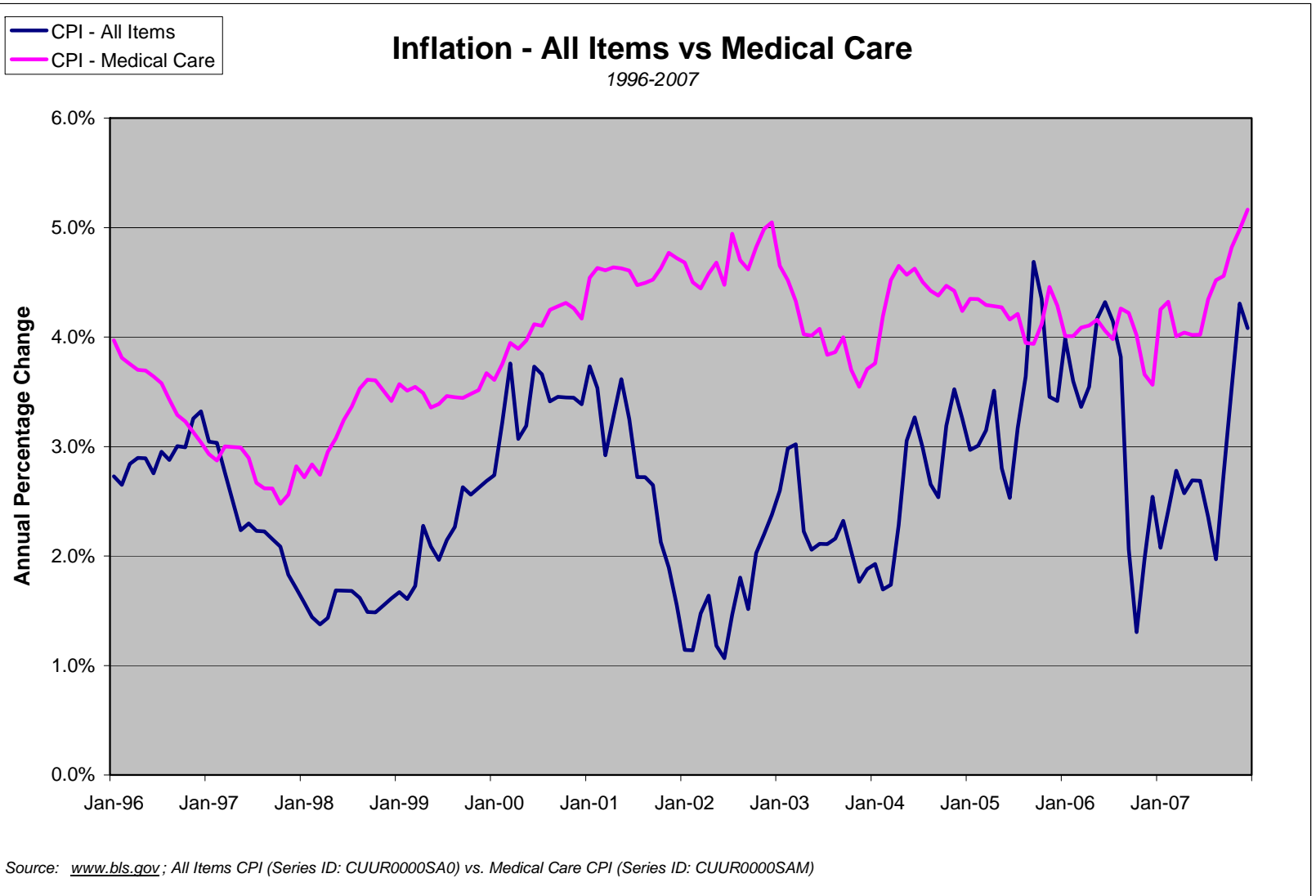
	Community Health Systems	Tenet Healthcare	LifePoint
2006 Revenues	\$4.4B	\$8.7B	\$2.4B
Employees	27,000	68,952	21,000
Net Income	\$168.3M	(\$871M)	\$142.2M
Avg Licensed Beds	9,117	16,310	5,485
Charity / Uncompensated Care	\$222.9M	\$625M	\$117.7M

Source: Firm web sites

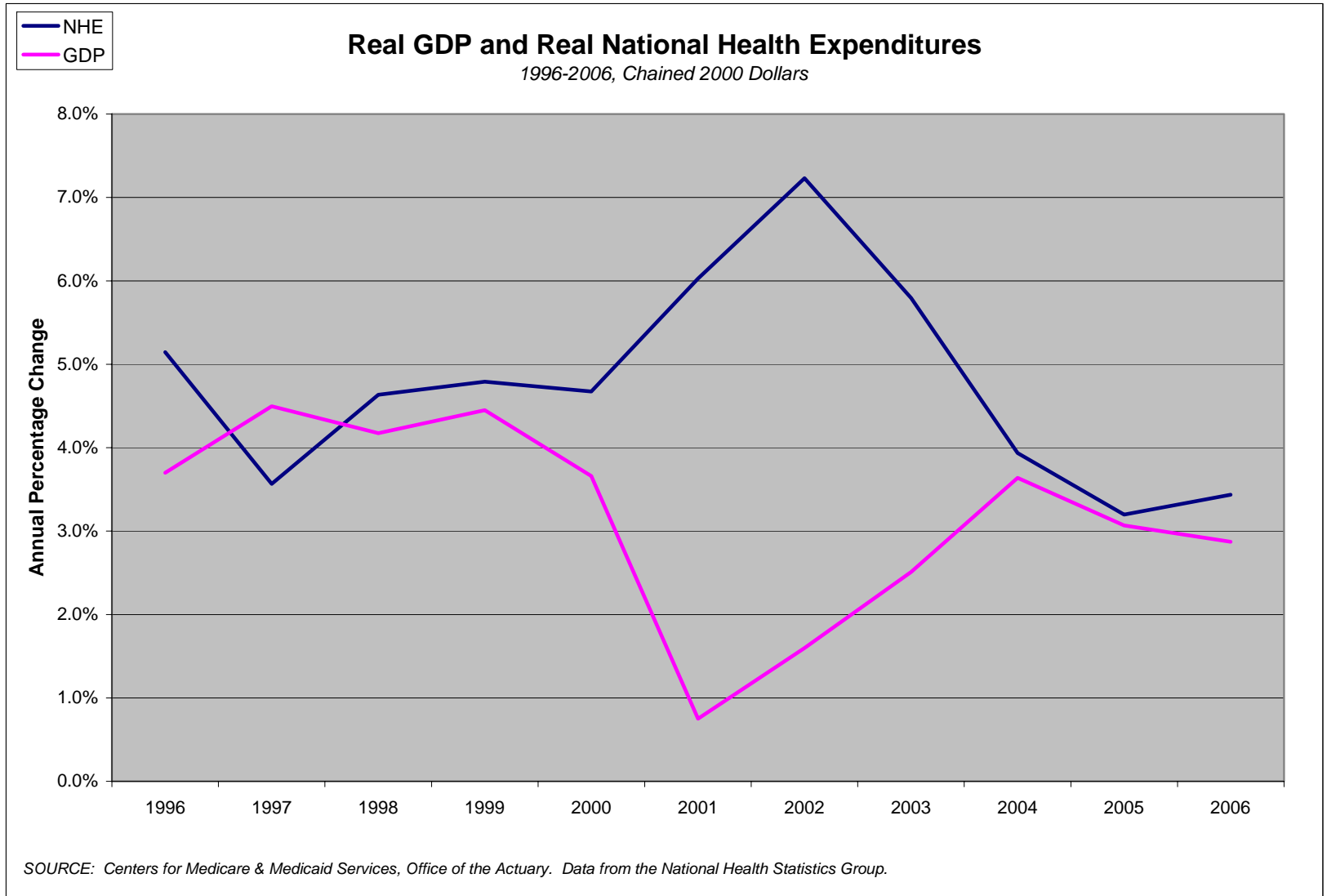
Economic Environment



Economic Environment



Economic Environment

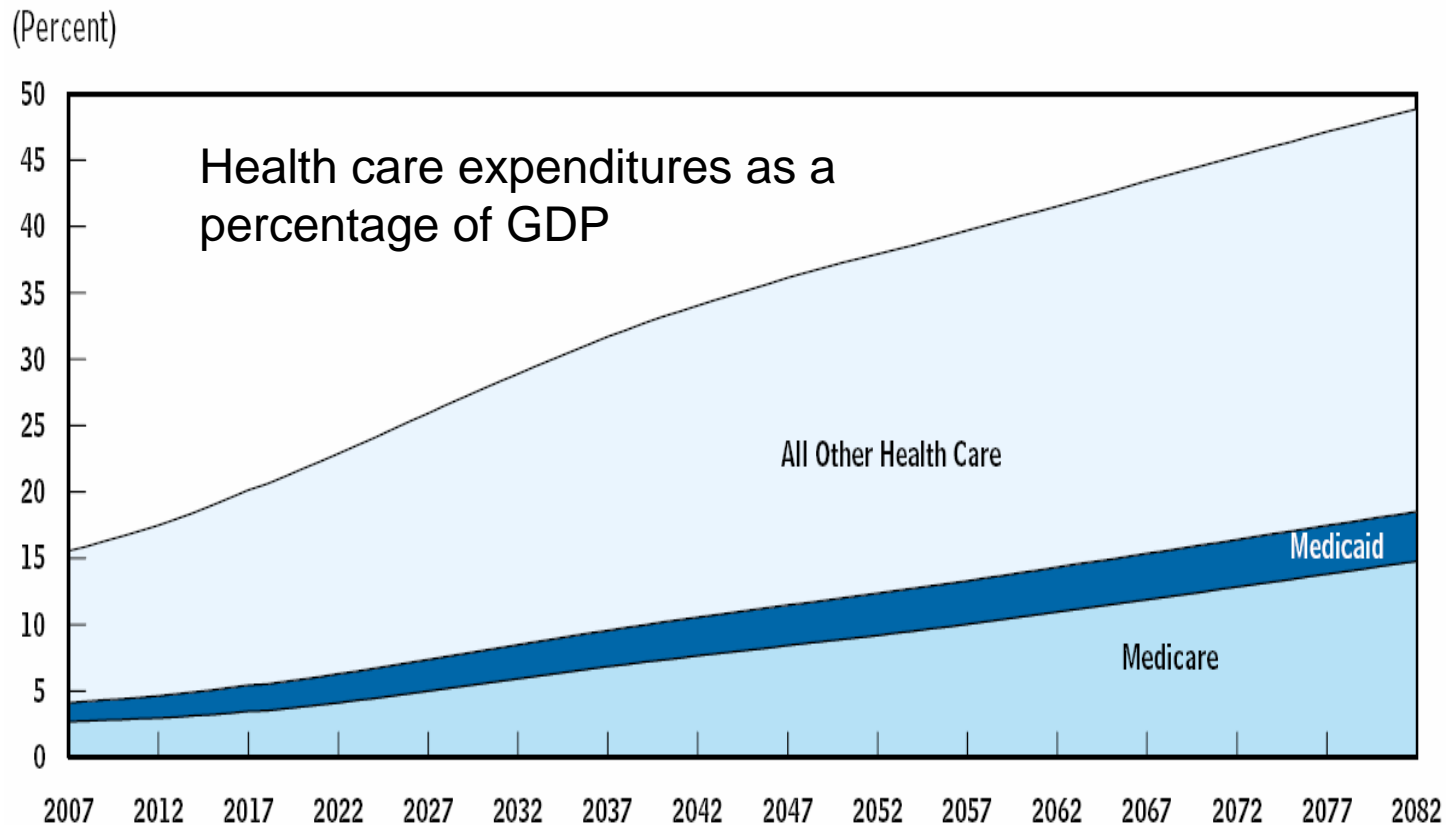


Forecast



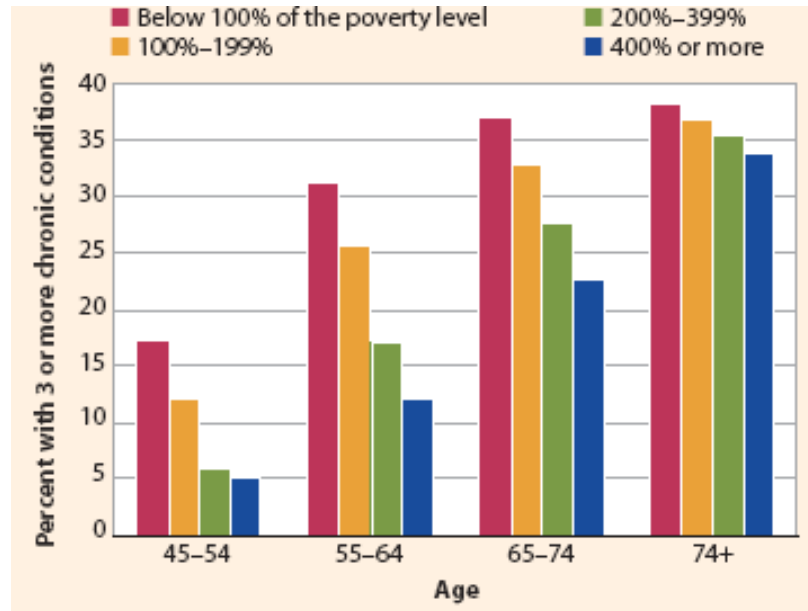
- Expenditures will increase (cost & price).
- Demand will grow
- Jobs will be created
- There will be a shortage of trained professionals

Expenditures will Grow



- Health care expenditures are expected to continue to grow dramatically.
- Expenditures are expected to reach \$2.9 trillion in 2009.
- Expenditures are expected to reach \$4 trillion or 20% of GDP in 2015.

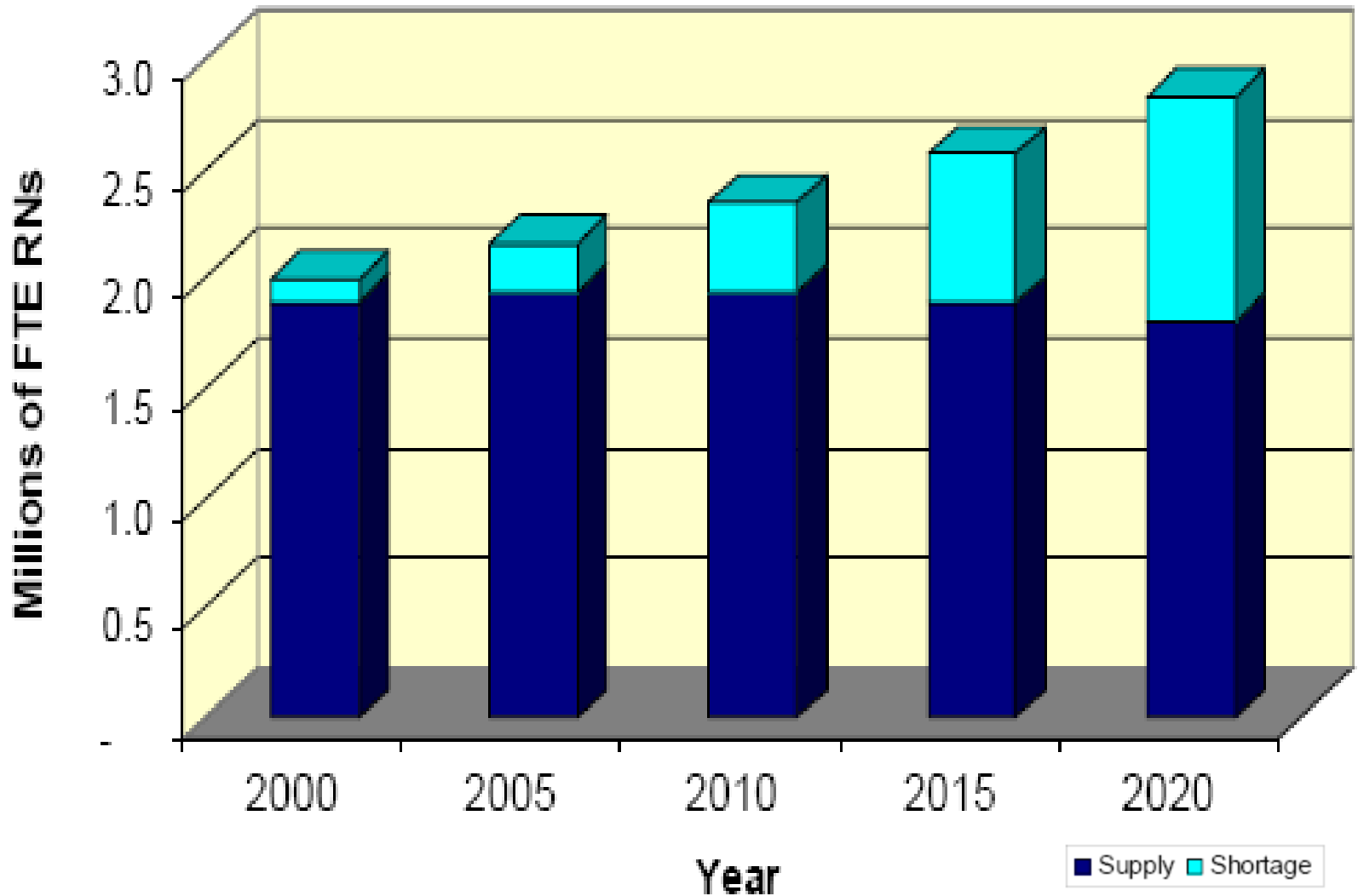
Demand will increase ...



... as the population ages and patterns of disease change.



Supply is likely to decrease...



Source US Dept Health & Human Services, Bureau of Health Professions, Sept. 2004

Recommendations



Look to successful firms such as Community Health Systems to identify solutions to the health care industry's problems...

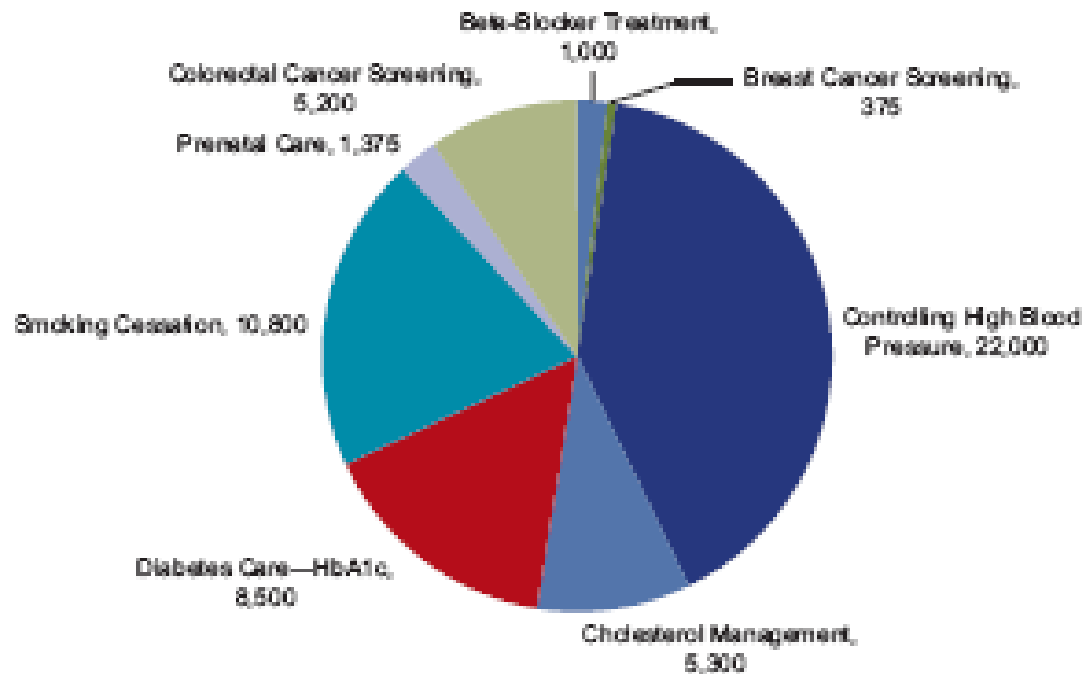
- Improve Quality of Care
- Use electronic medical records
- Reform malpractice litigation

Recommendations for the firm

- Continue to refine core competencies in identifying acquisition targets.
- Evaluate portable electronic medical record allowing patient to use at various providers
- Partner with colleges in service area to produce qualified RN and other clinical worker
- Standardize CHS IT network

Improve Quality of Care

Avoidable Deaths Due to Unexplained Variations in Care

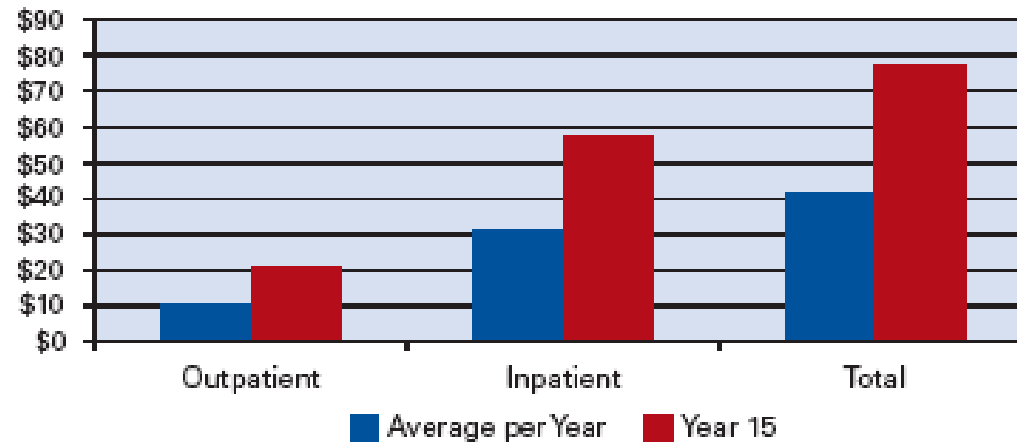


Source KPMG Healthcare Industry Report 2006

- Total national costs (lost income, lost household functioning, disability and health care costs) due to medical errors are estimated to be \$35 billion a year
 - 100,000 patients die in hospitals each year due to medical errors
- Practice evidence based medicine

Use Electronic Medical Records

Potential Efficiency Savings with 90% Adoption of EMR Systems (in Billions)



- Efficiency in record availability
- Reduction in cost of duplicating services
- Reducing error in billing & claims processing

Reform Malpractice Litigation

Ritter's Widow Talks "Sad" Truth About Death



Yasbeck settled with Providence St. Joseph Medical Center for \$9.4 million

She received more than \$4 million from other civil-suit targets.

Yasbeck is going after the radiologist and cardiologist for more than \$67 million in damages.

Other Recommendations we considered



“Damn it Jim, I’m a doctor,
not an economist.”

Dual Licensing for
Veterinarians so they can
treat animals and people.



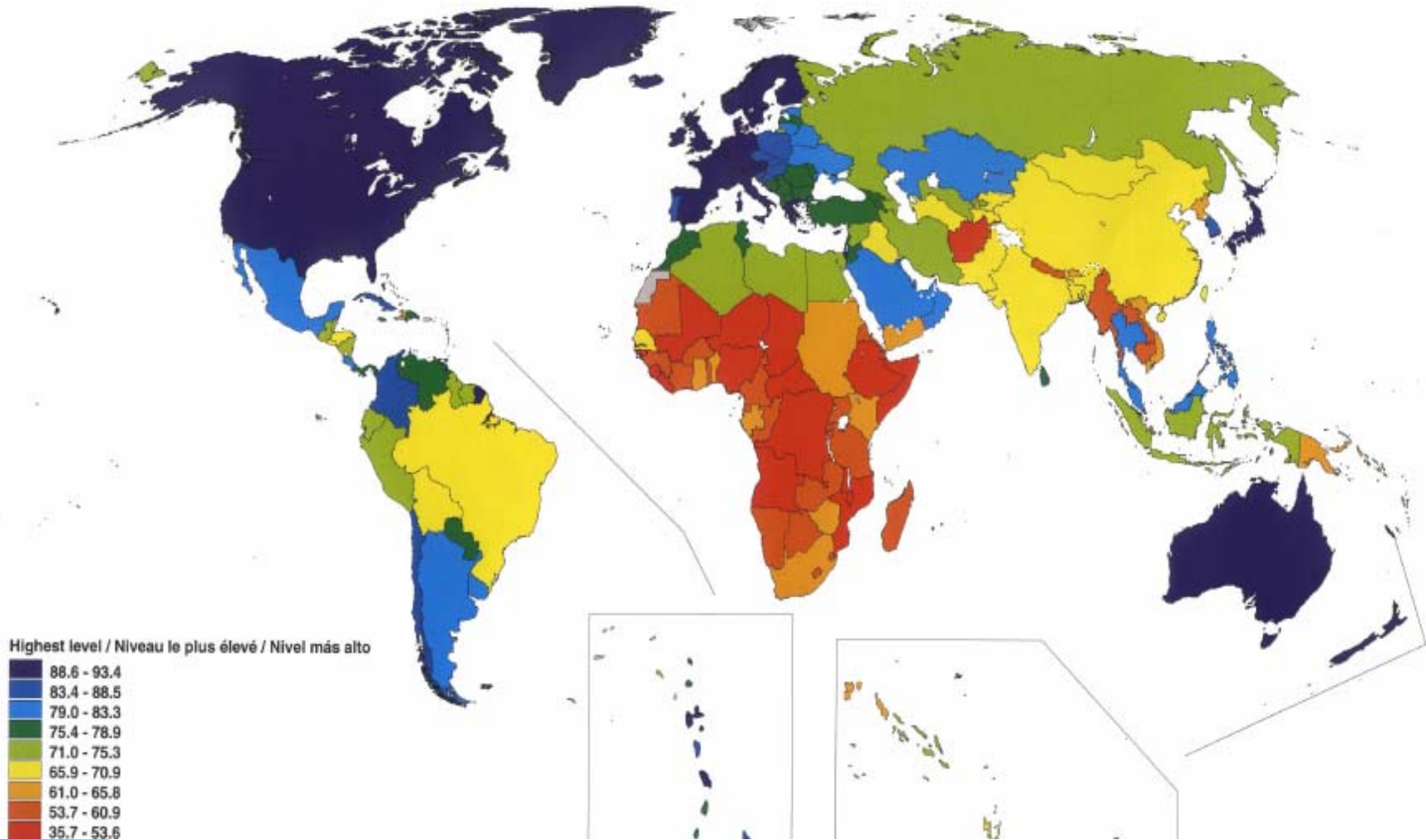
Appendix

Health Care Contribution?

Overall health system attainment

Niveau global de résultat du système de santé

Nivel general de logro de resultados por el sistema de salud



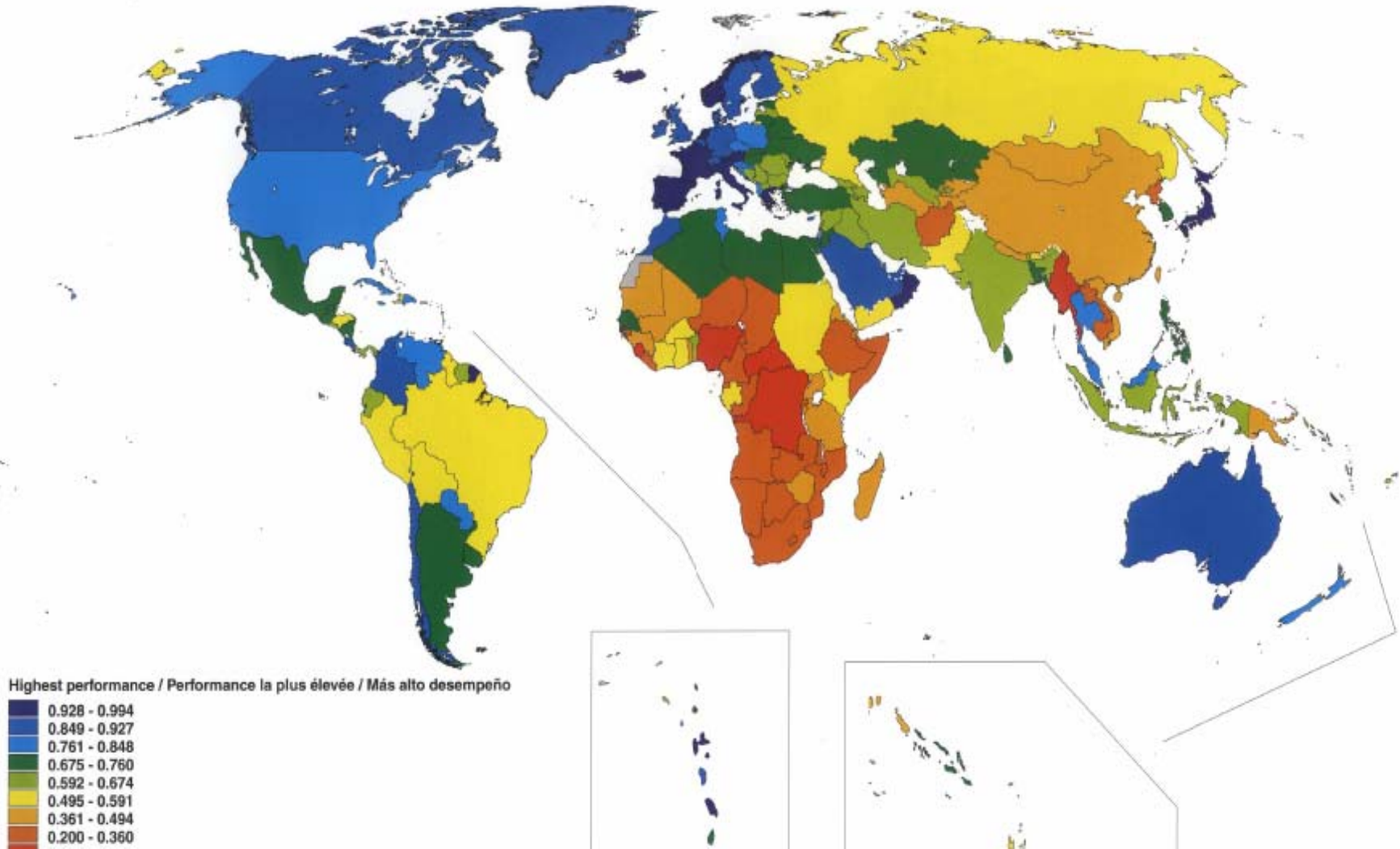
Source: World Health Organization

Health Care Performance

Overall performance
of health systems

Performance globale
des systèmes de santé

Desempeño general
de los sistemas de salud

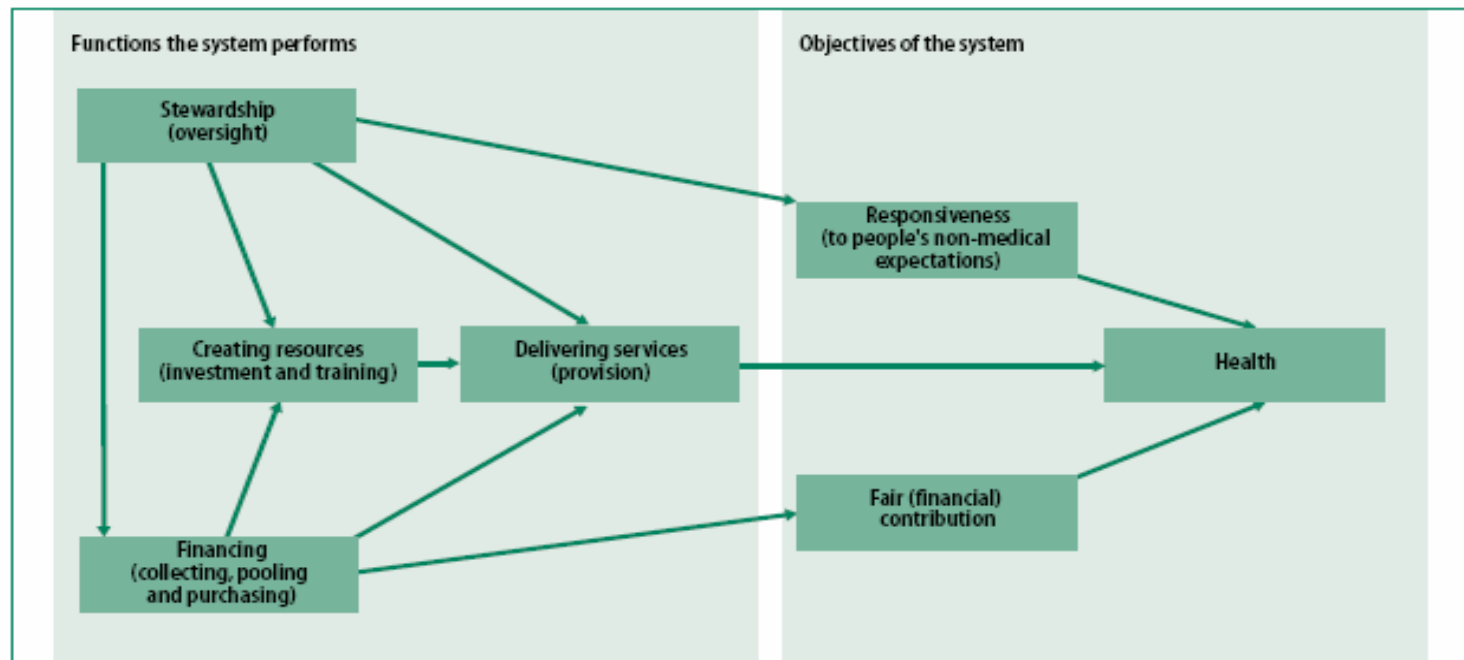


Source: World Health Organization

Market Structure

INDUSTRY	SECTOR	SUBSECTOR
HEALTH CARE	Health Care Equipment & Services	Health Care Providers
		Medical Equipment
		Medical Supplies
	Pharmaceuticals & Biotechnology	Biotechnology
		Pharmaceuticals

Figure 2.1 Relations between functions and objectives of a health system



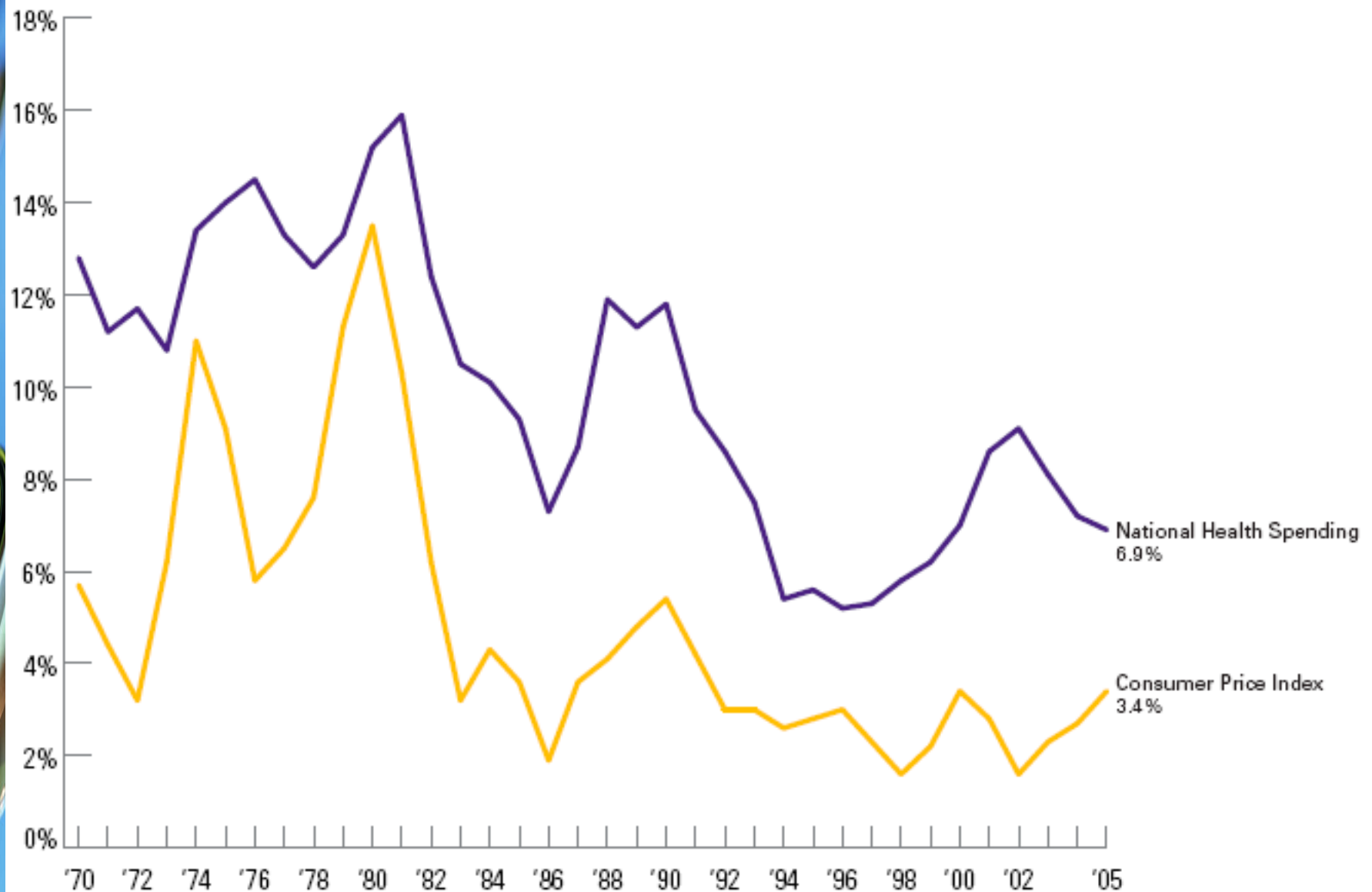
Source: Industry Classification Benchmark (www.icbenchmark.com)

Employment Numbers – In 2006

Industry segment	Employment	Establishments
Ambulatory health care services	42.2	87.1
Offices of physicians	17.1	36.7
Home health care services	6.9	3.3
Offices of dentists	6.3	20.7
Offices of other health practitioners	4.6	19.3
Outpatient care centers	3.9	3.4
Other ambulatory health care services	1.7	1.4
Medical and diagnostic laboratories	1.6	2.3
Hospitals	34.8	1.3
General medical and surgical hospitals	32.8	1.0
Other hospitals	1.3	0.2
Psychiatric and substance abuse hospitals	0.8	0.1
Nursing and residential care facilities	23.0	11.5
Nursing care facilities	12.6	2.8
Community care facilities for the elderly	5.0	3.4
Residential mental health facilities	4.0	4.1
Other residential care facilities	1.3	1.1
Total	100.0	100.0

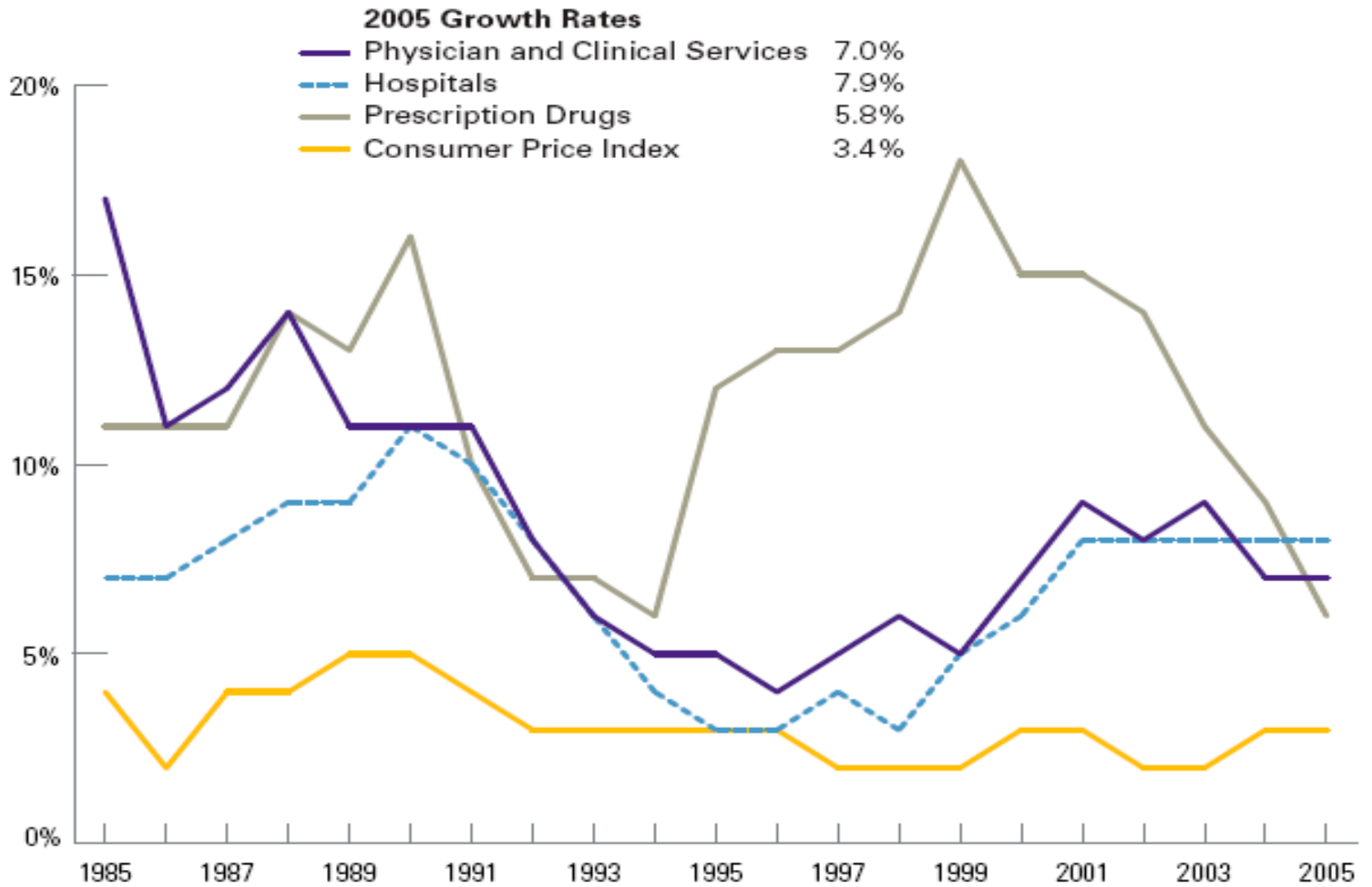
Source: Source dept of labor

Annual Growth Rate – Spending Vs Inflation



Source: California HealthCare Foundation, 2007

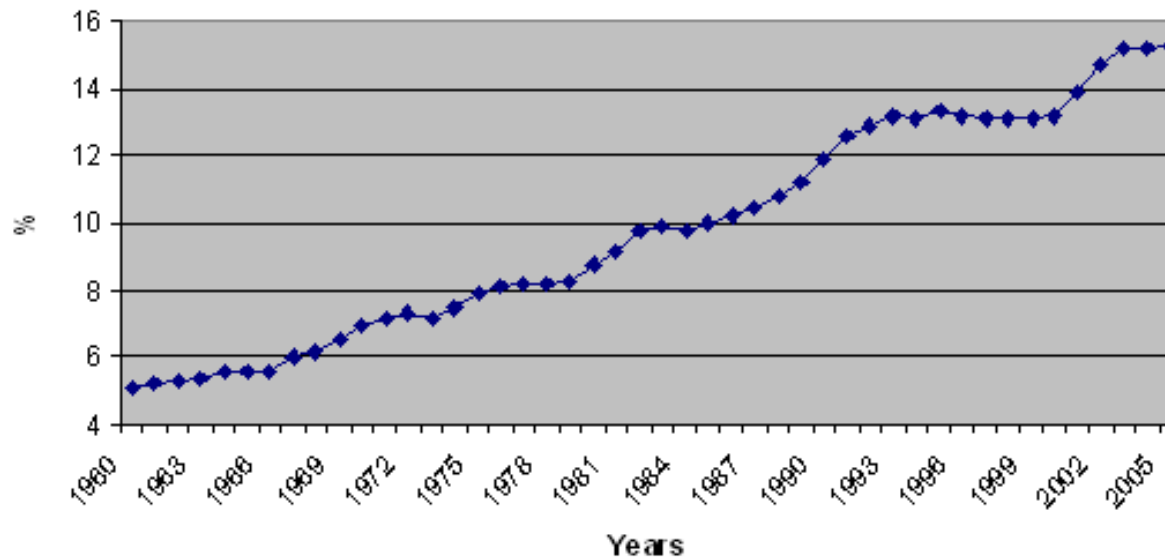
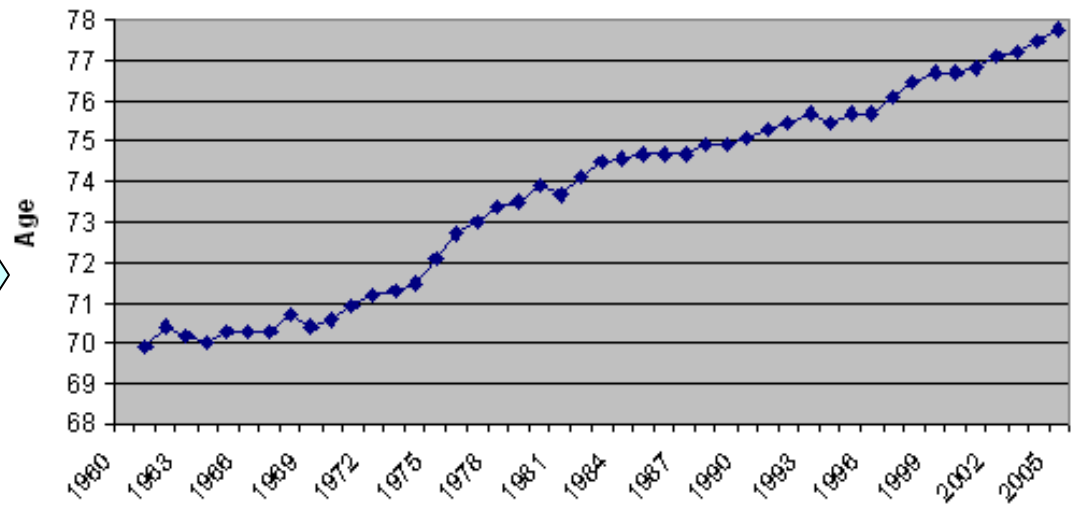
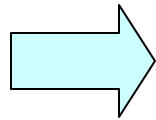
Growth Rate by Spending Categories



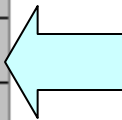
Source: California HealthCare Foundation, 2007

HC might have Increasing Demand

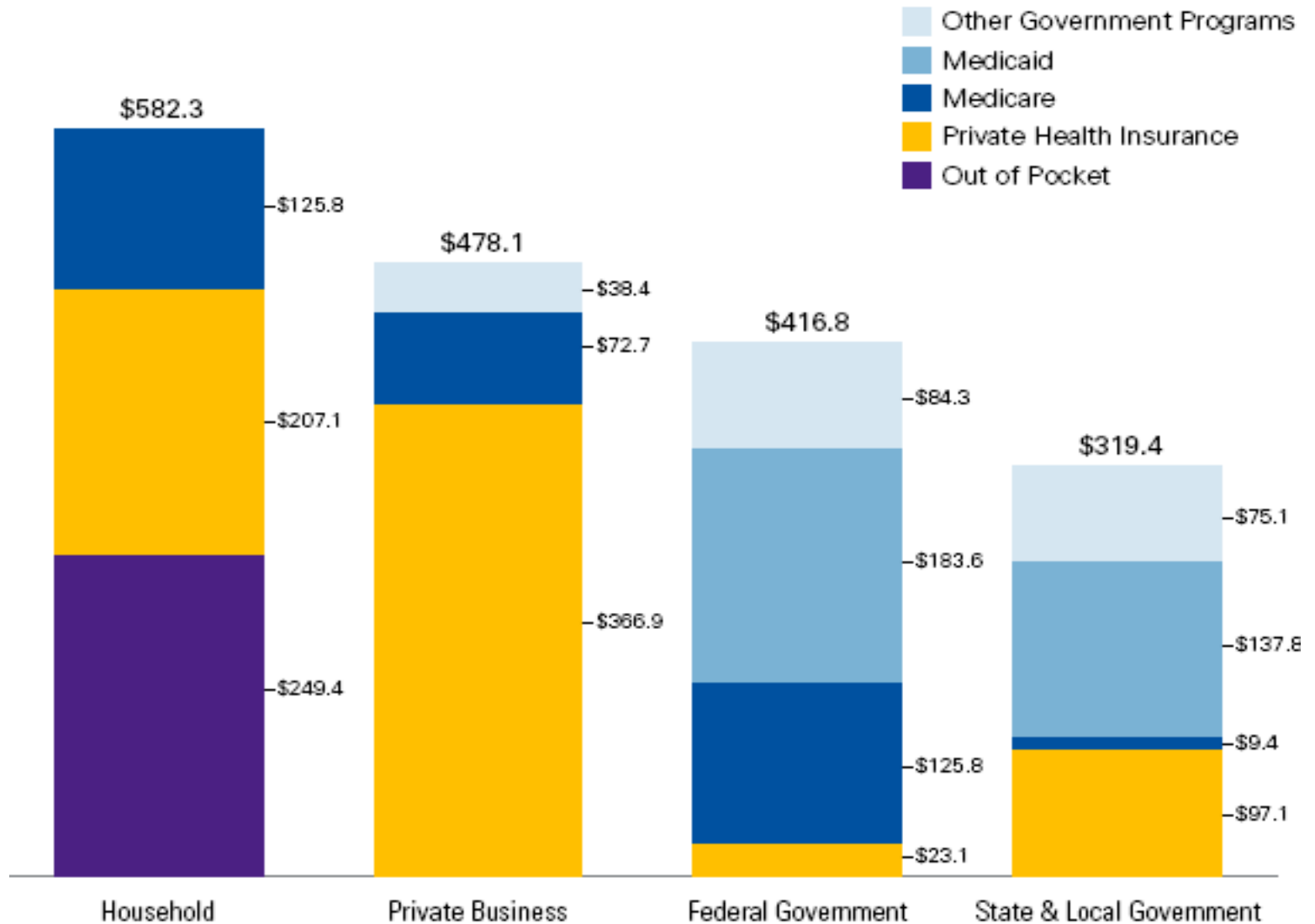
Life Expectancy
of American
population
increasing



Health care
% in GDP
growing
every year in
America

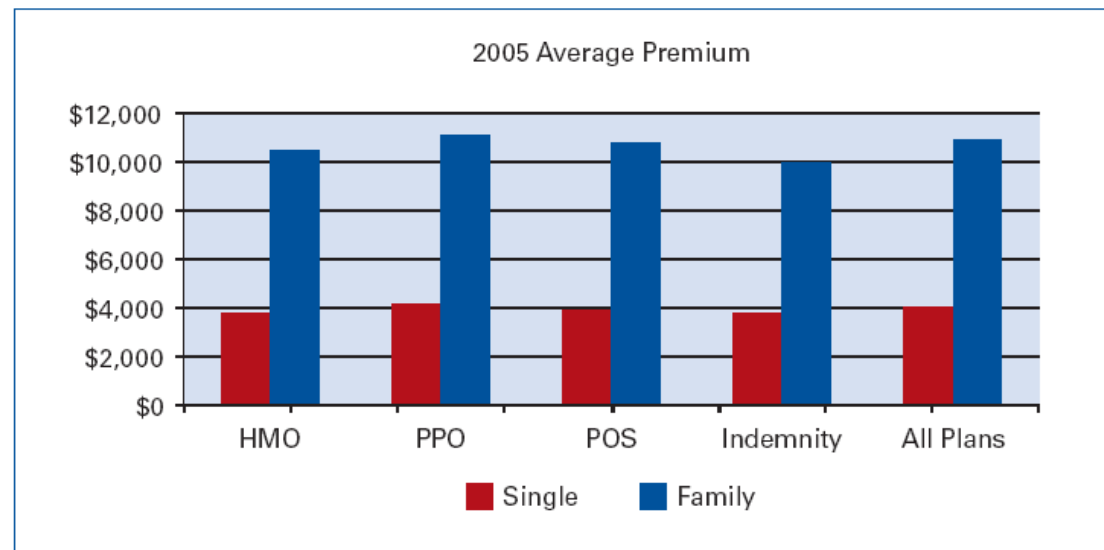
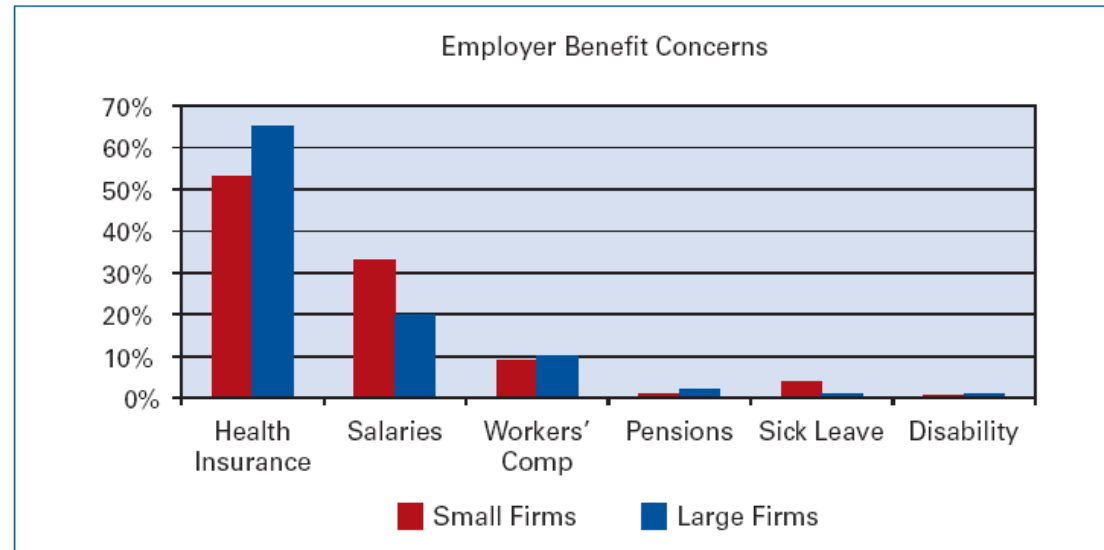


Health Care Spending in 2005

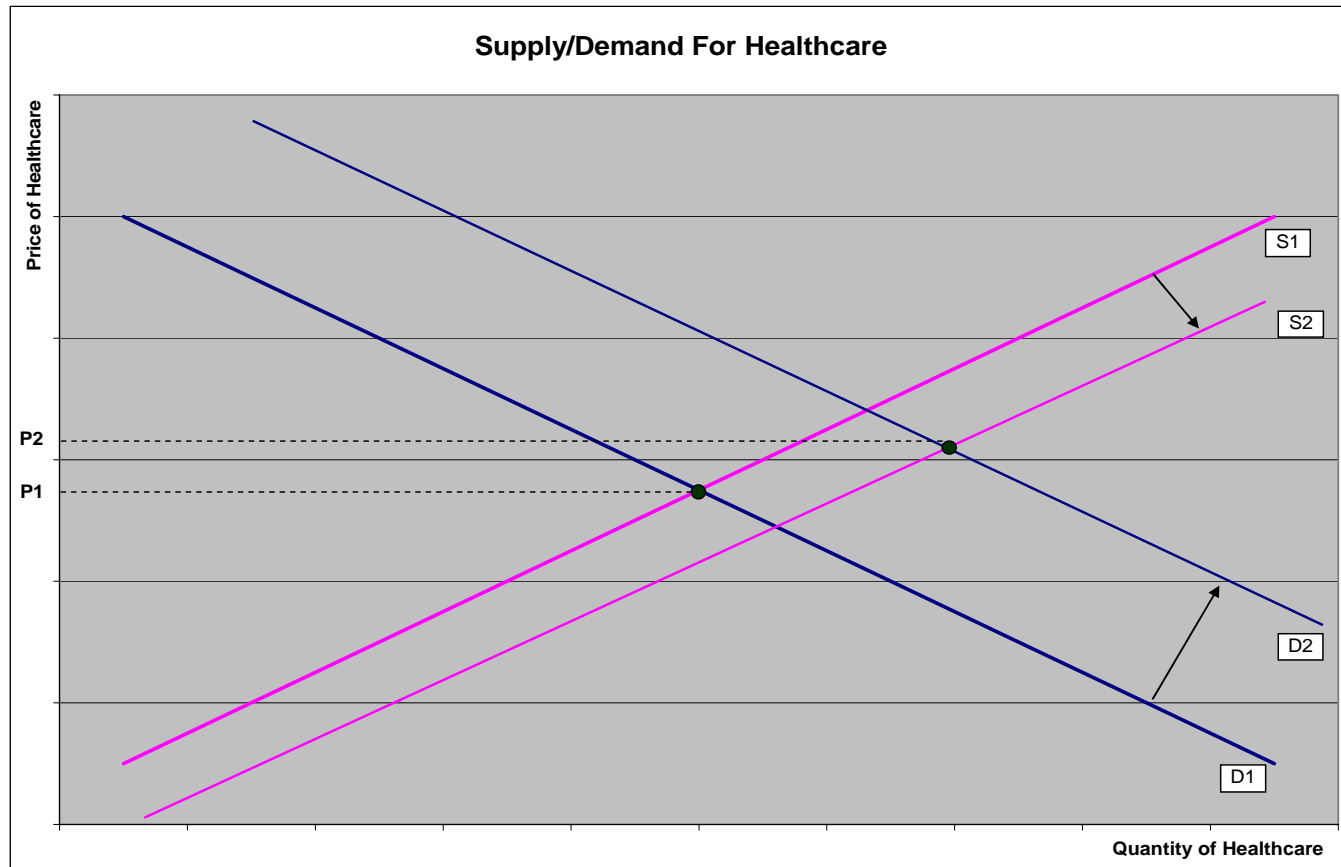


Source: California HealthCare Foundation, 2007

HC Spending issues – Employers Cost



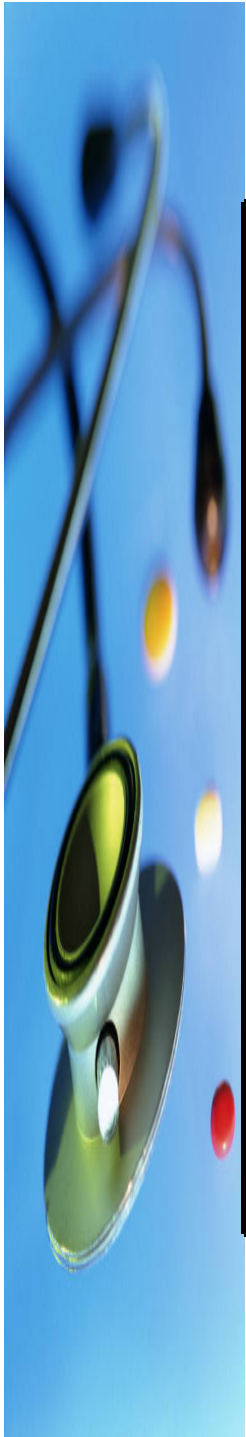
Health Care Industry



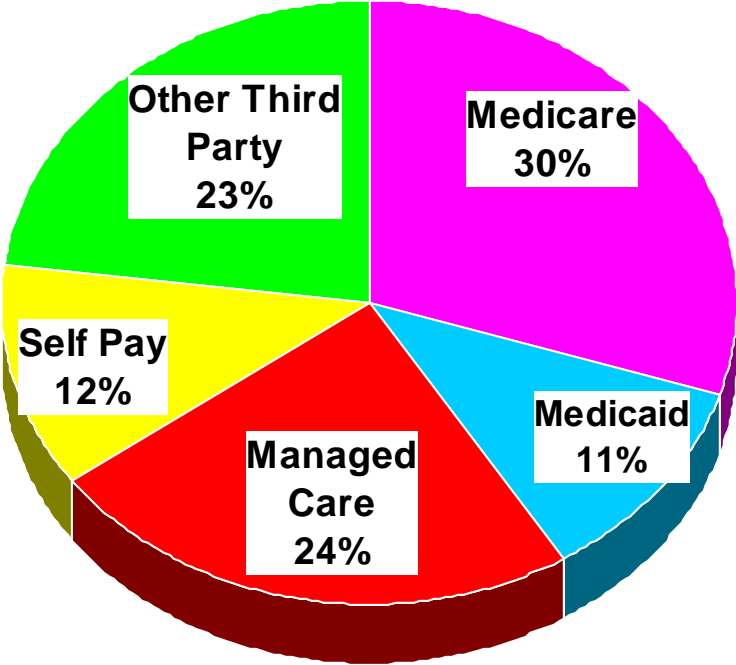
Economic forces such as supply, demand and production costs are not able to shape health care into a perfectly competitive or free market because government and third party payers are involved in setting standards, setting prices and determining the number of doctors trained . Demand will likely continue to increase. Supply is fragmented. The consumer does not influence price due to third party payers. Price equilibrium will likely never be reached leading to an inefficient market.

Structure - Sampling of Healthcare Companies

Company	Product/Service	Market Cap
Johnson & Johnson	Consumer/pharmaceuticals /equipment	\$195B
Pfizer	Major drugs	\$164B
Medtronic	Equipment	\$56B
Quest Diagnostics	Laboratory services	\$10.4B
Community Health Systems	Hospitals	\$3.41B
Lincare Holdings	Respiratory oxygen	\$2.8B
CryoLife	Biomaterials and human tissues	\$220M



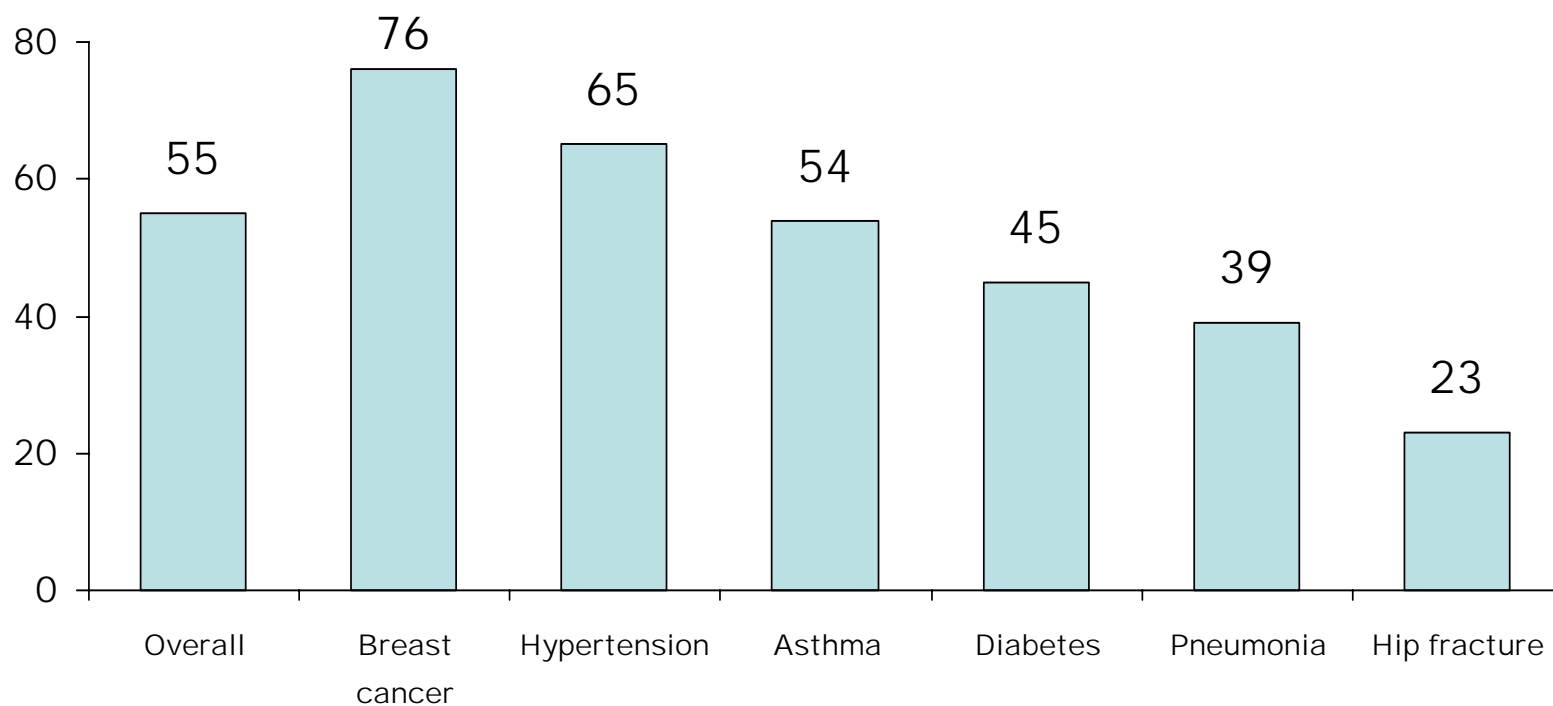
CHS – Diversified Payer Mix, 2006



Source: <http://www.chs.net/>

U.S. Adults Receive Half of Recommended Care

Percent of recommended care received

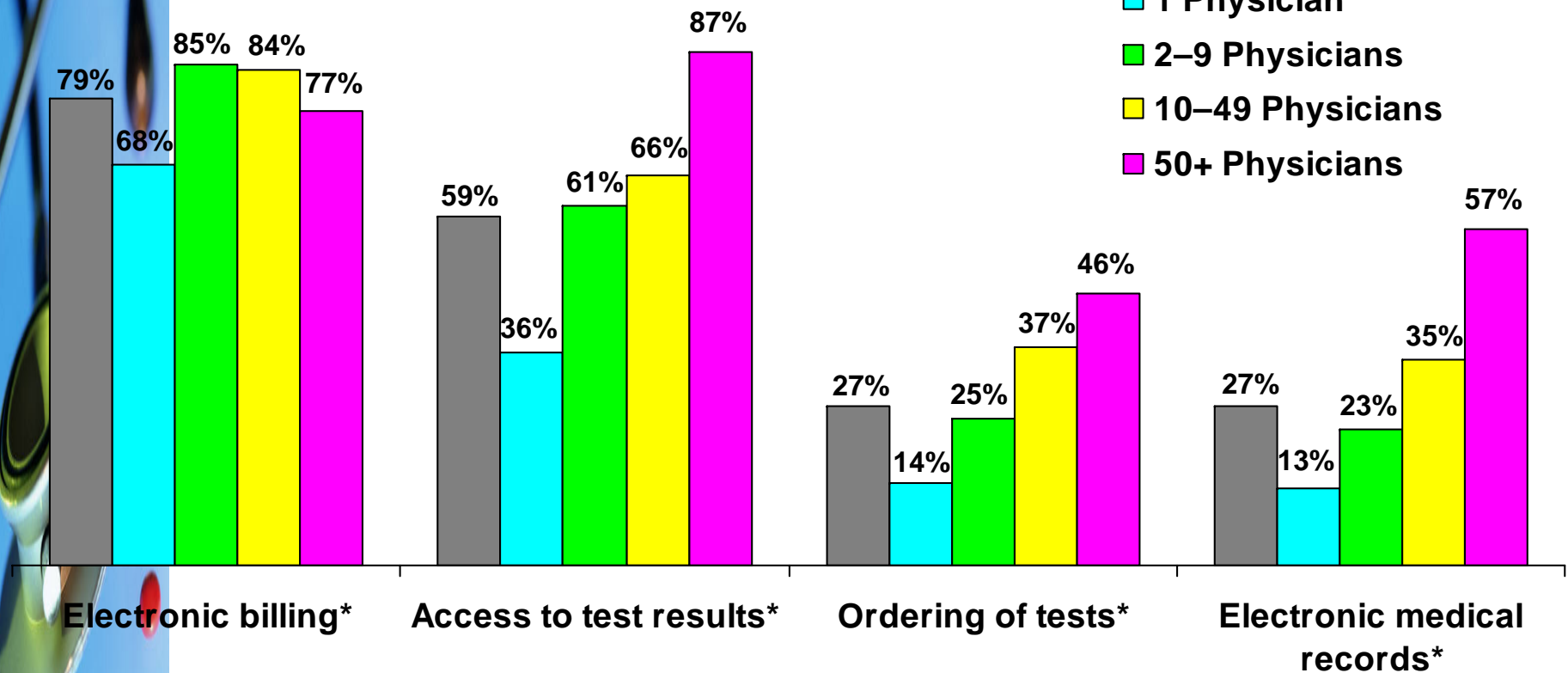


Source: E. McGlynn et al., "The Quality of Health Care Delivered to Adults in the United States," *The New England Journal of Medicine* (June 26, 2003): 2635–2645.

Chart II-11. Physician Use of Electronic Technology Could Be Expanded

Percent indicating "routine/occasional" use

- All Physicians
- 1 Physician
- 2–9 Physicians
- 10–49 Physicians
- 50+ Physicians

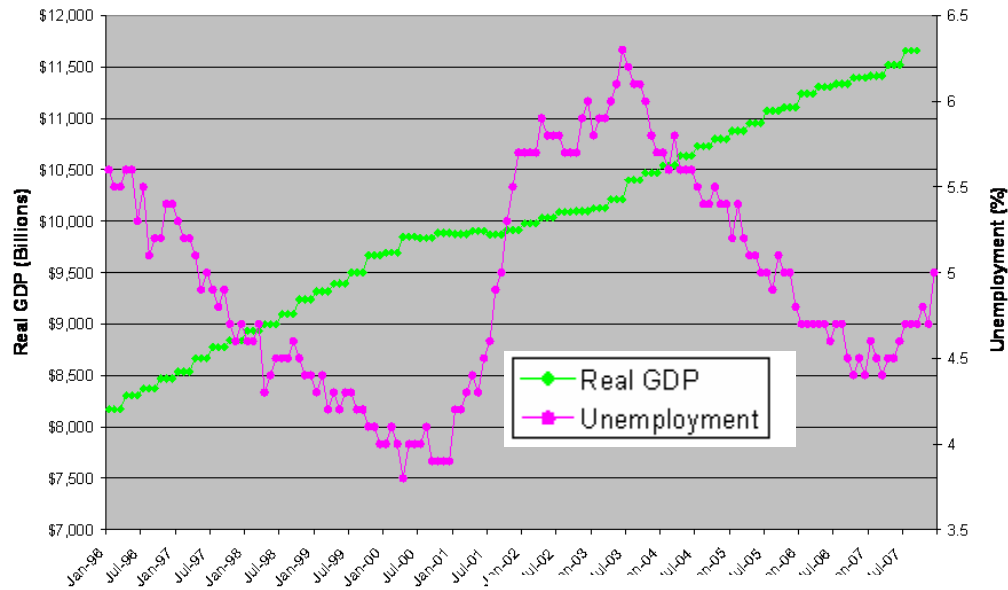


* $p < .01$, Cuzick's test for trend

Base: All respondents (N=1837)

Source: Commonwealth Fund 2003 National Survey of Physicians and Quality of Care.

Macroeconomic Environment



GDP Vs.
Unemployment
1996-2007

CPI (1996-2007)

