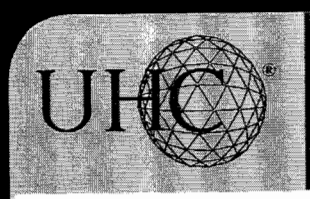

University HealthSystem Consortium

Academic Medical Centers in the Turbulent Health Care Delivery System

University of Iowa
Hospitals & Clinics
Board of Trustees

December 15, 2003

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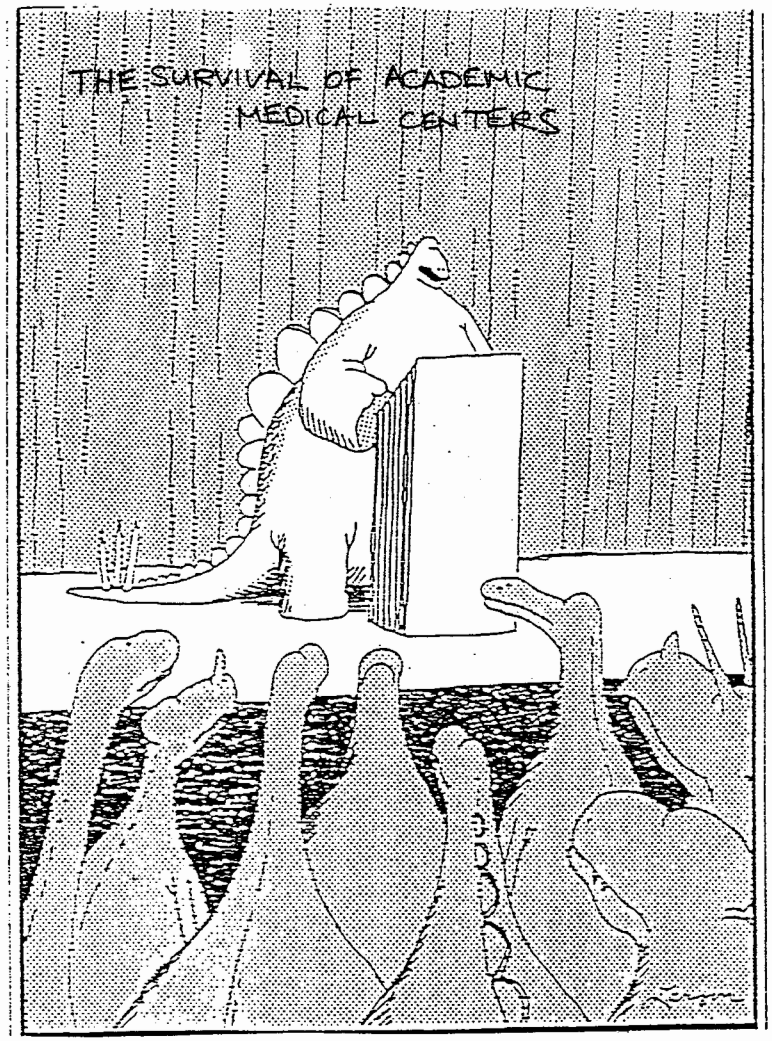

"The picture is pretty bleak, ladies and gentlemen…The healthcare climate is changing; costs are up, revenue is down; and, we all have a brain that functions like a committee."

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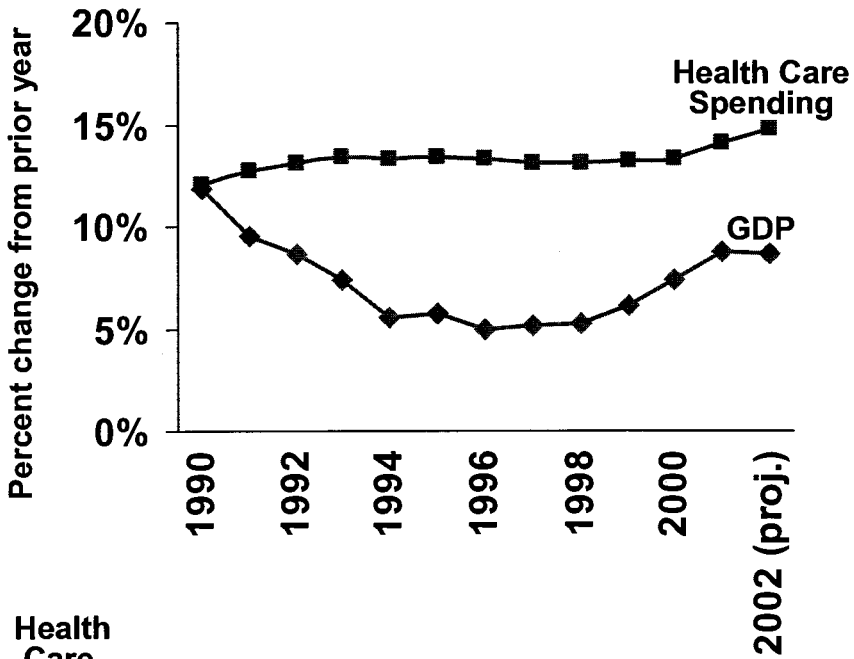
Economy, Security Costs Plunge Federal Budget Into Deficit

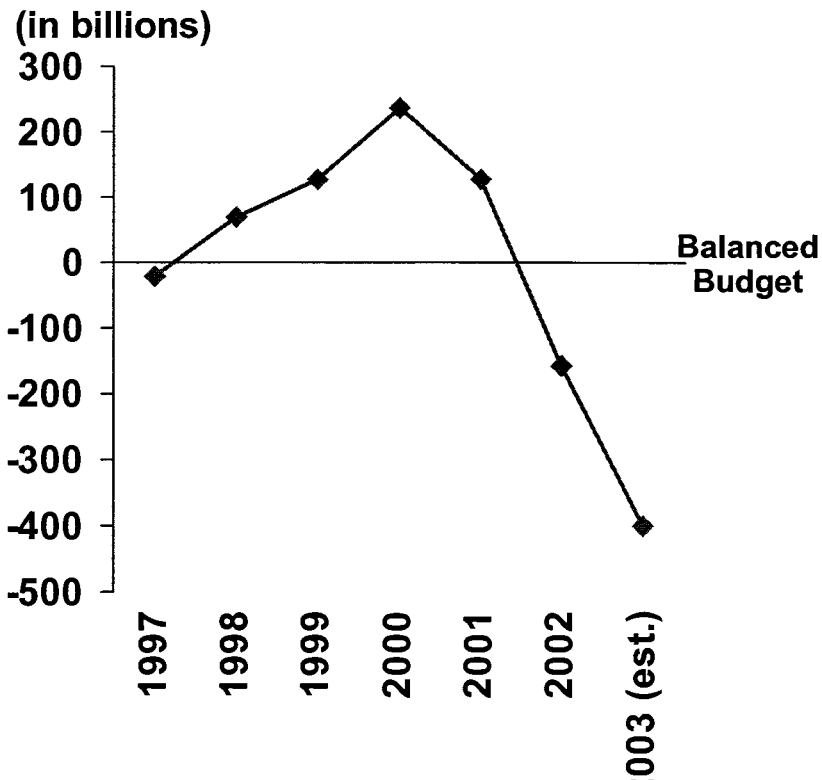
Annual Percent Change, GDP vs. Health Care Spending



Health Care Spending As % Of GDP: 12.0% 13.3% 13.1% 14.8%

Source: CMS

Federal Budget Surplus/Deficit (1997 - 2003 (est))



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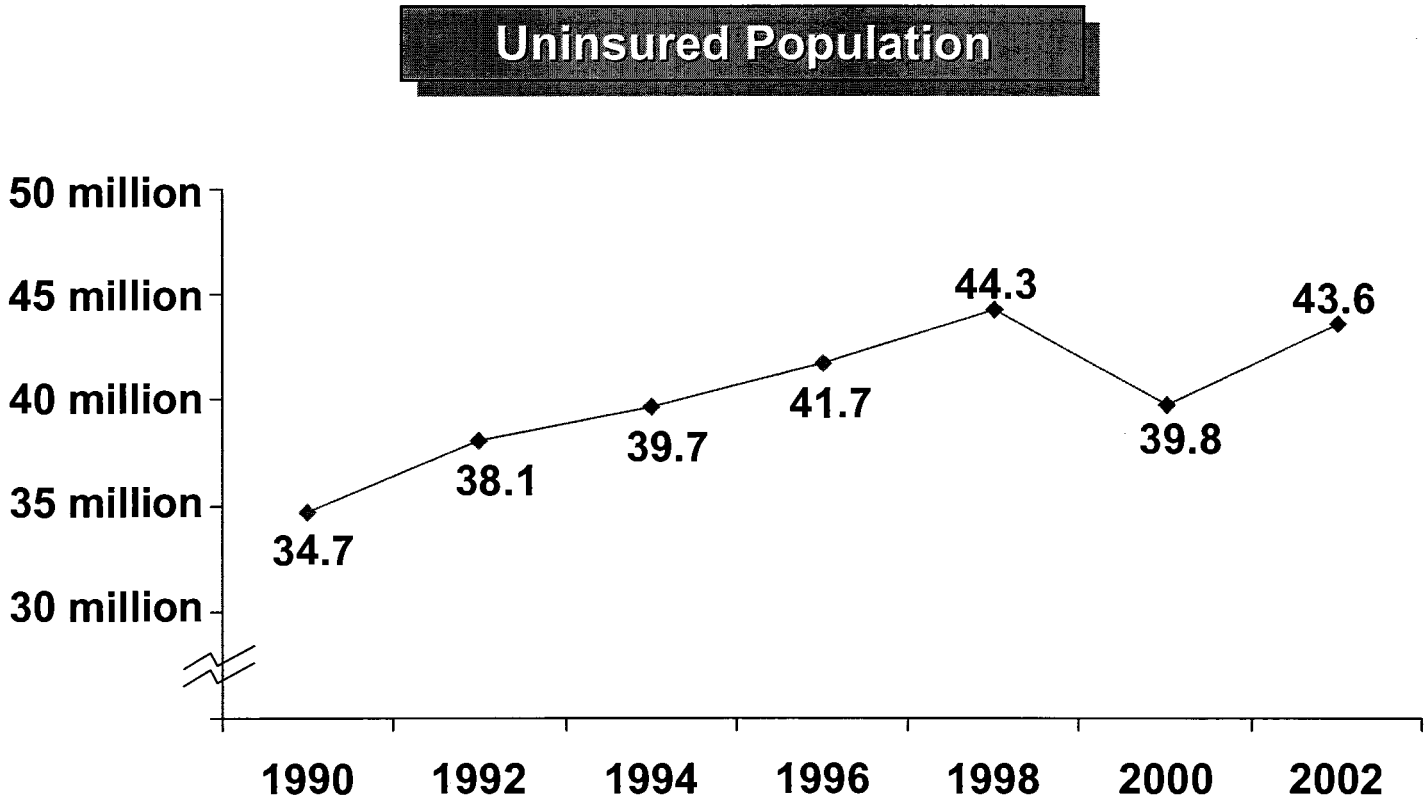
Economic Downturn Rekindles Uninsured Growth Rate



Sources: U.S. Census Bureau; U.S. Department of Labor - Bureau of Labor Statistics

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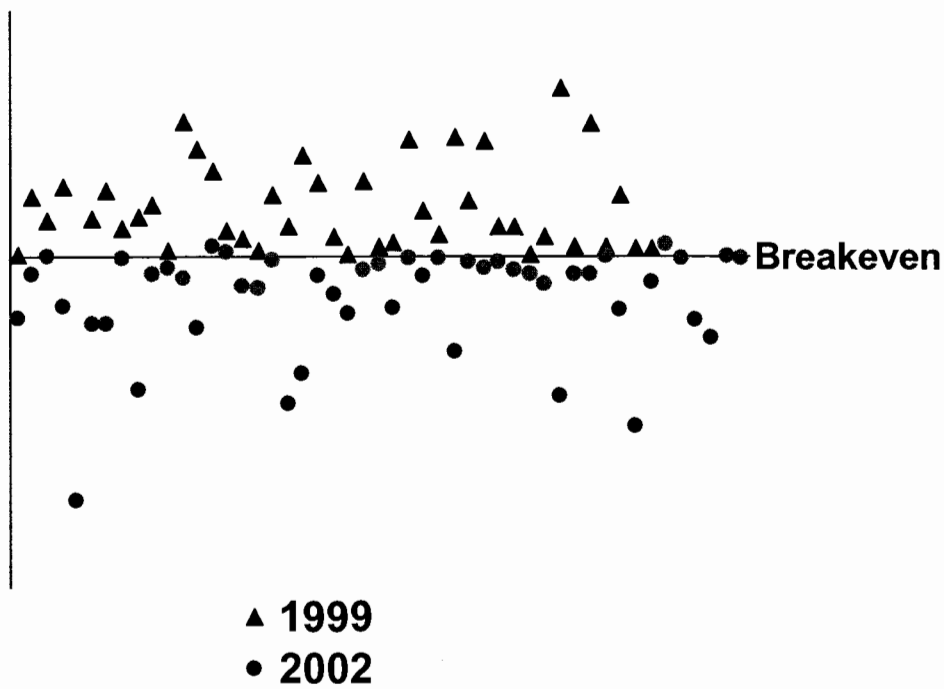
Recession Saddles States With Crippling Deficits

Distribution of State Surpluses/Deficits



- Median state deficit in 2002 = $408 million
- Aggregate state budget deficits in 2002 total $37 billion (estimated at nearly $90 billion for 2004)
- Average state budget deficit represents 20% of that state's total Medicaid spending
- 19 states reduced direct support for higher education in 2002 compared to zero in 1999

Sources: The Fiscal Survey of States, November 2002, National Governors Association; Center on Budget and Policy Priorities

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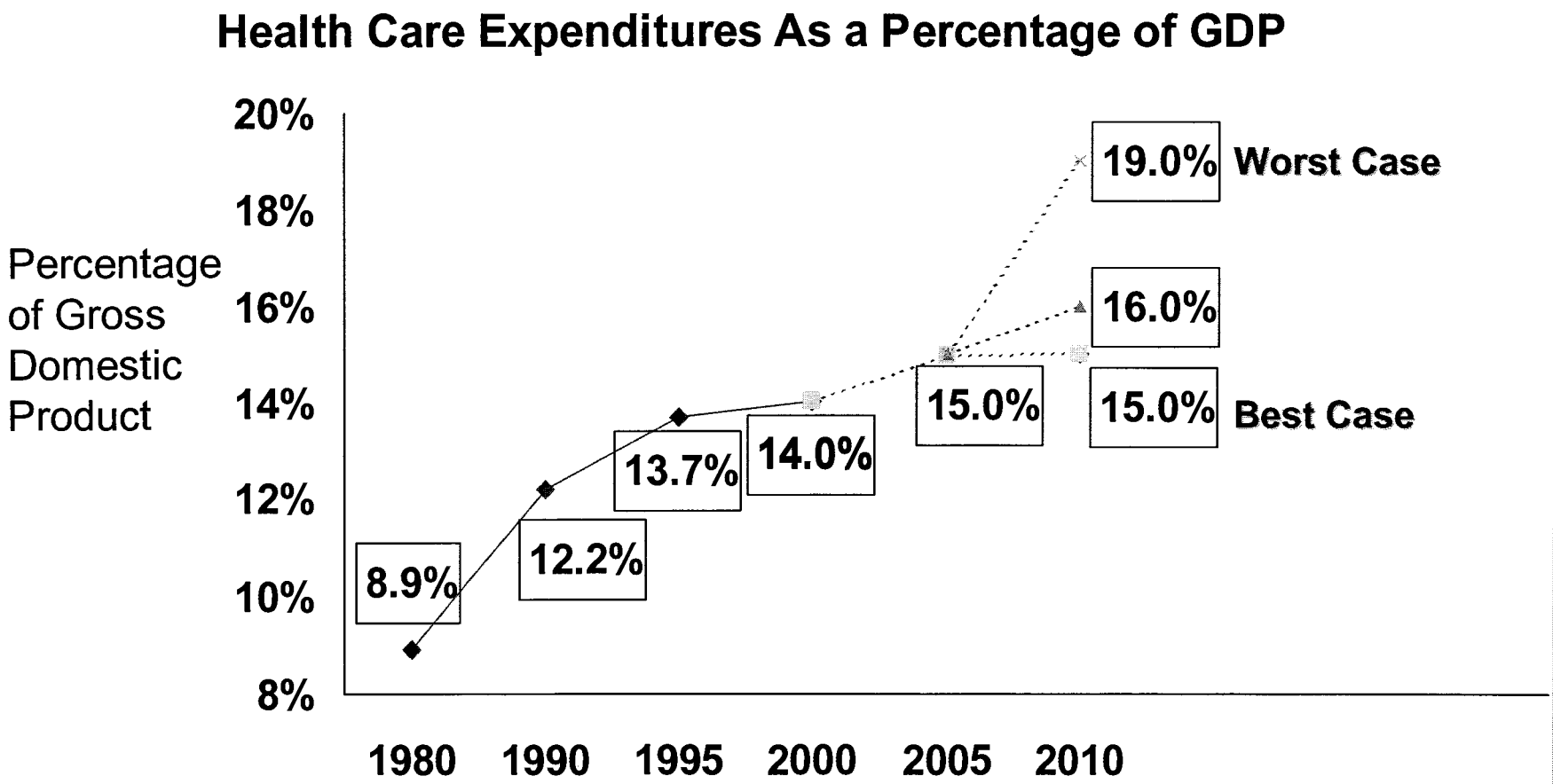
Institute for the Future: Scenario Forecasts



Source: Institute for the Future Robert Wood Johnson Foundation Funded

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Institute for the Future Worst Case Scenarios

Primary Driving Forces in 2010	Current Impact
Managed care programs fail to contain costs	Medical costs up 10%
Consumer backlash against managed care	Consumers demand choice. Out of network access required for successful plans. Health plans stop physician utilization review
Large employers unable to get price breaks	Premium hike triple CPI
Small employers drop health benefits	Trend continues
Uninsured increasing	44 million uninsured: Increasing 1 million/year

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Institute for the Future Worst Case Scenarios

Primary Driving Forces in 2010	Current Impact
Legislation passed -Mandatory Length of Stay -Staffing ratios -Any willing provider laws	Many states pass Length of Stay laws California passes minimum nurse staffing ratios Most managed care plans widen provider network voluntarily
Pharmaceutical "direct to consumer" advertising increases drug costs	Significant impact on patient requested drugs. Physicians grant request 70% of the time. Prescription drug costs up 15%
Costly medical technologies continue unabated	Technology development continues at aggressive pace
Information technologies ineffective	Continued poor performance

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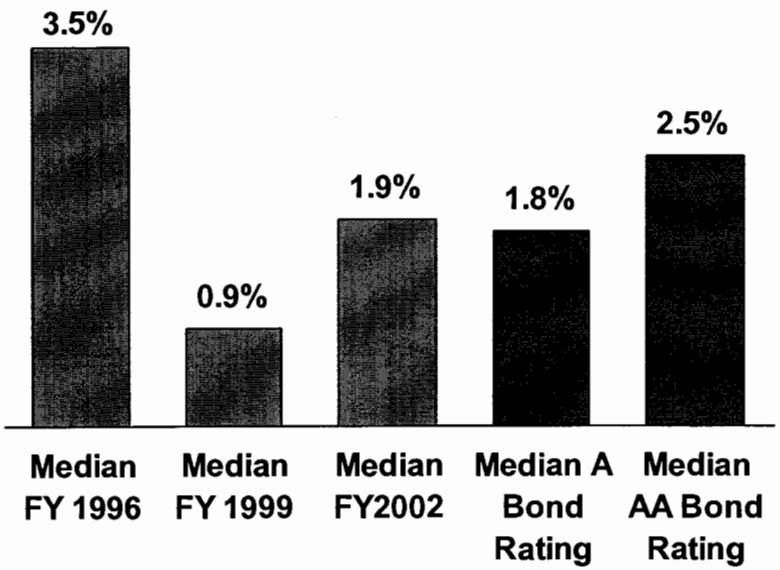
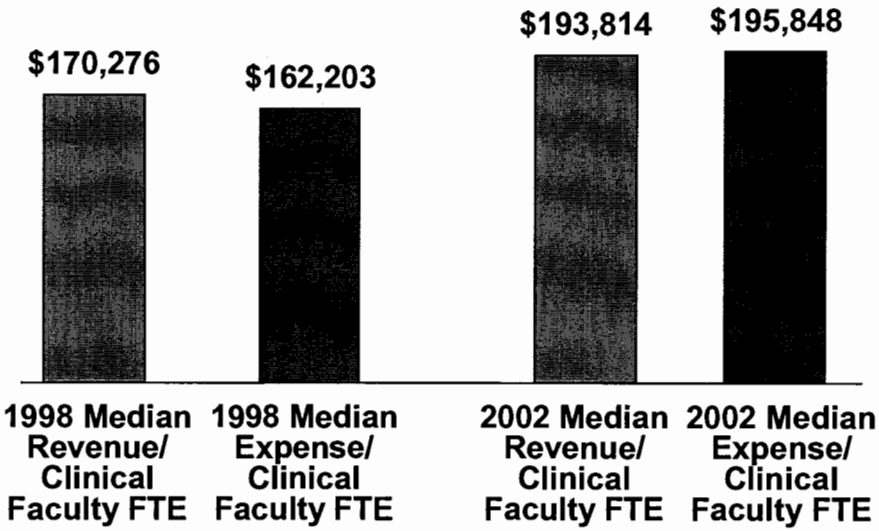
AHC Operating Margins Razor Thin

COTH Hospital Operating Margins



Median Revenue vs. Expense per Clinical Faculty FTE



Generating strategic capital requires applying thinner margins to higher revenues – top line growth is essential

Sources: AAMC; UHC Funds Flow engagements; UHC Faculty Practice Solutions Center; HFMA "Financing The Future" Report 1, 2003

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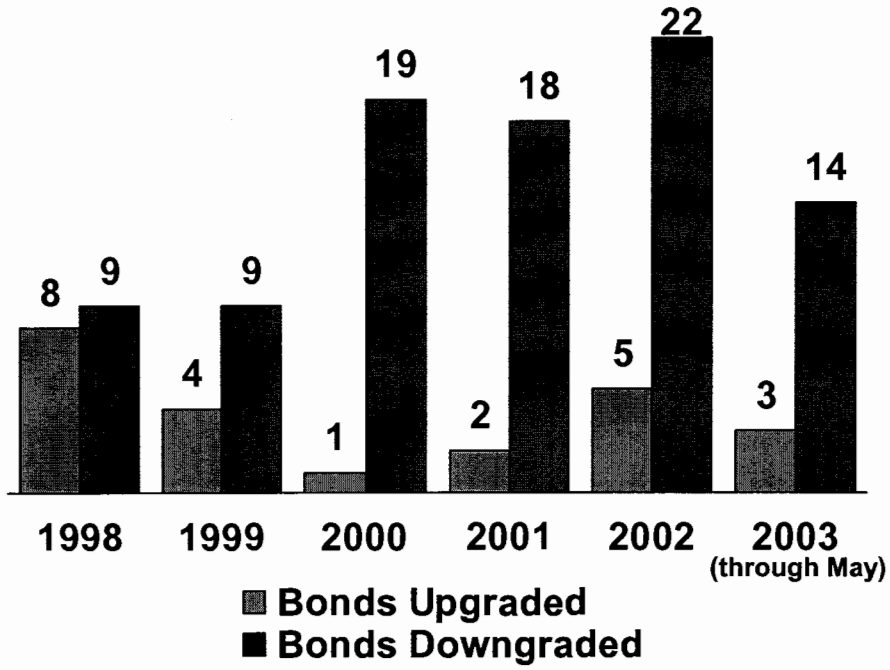
Downgrades Outnumber Upgrades In Hospital Bond Market

COTH Hospital Operating Margins



- Hospital operating margins were flat in 2002, for the third year in a row
- Median operating margin in 2002 was 1.5%, the same as in 2001
- Median debt service coverage, at 2.7 times, was the lowest since 1994
- Liquidity declined and capital needs increased

"There are no AAA bonds in the healthcare market that are based on the financial viability of the hospital...many hospitals have debt insurance...a AAA bond rating is based on the 'creditworthiness' of the insurance company..." - Kellogg School of Management Bond Newsletter

Sources: Fitch Ratings, Kellogg School of Management

Understanding the Academic Medical Center Hospital

- Tripartite mission
- Specialty/subspecialty orientation
- Closed medical staff
- Referral hospitals
- Quality of clinical care
  - Team orientation
  - Teaching environment
- Medical Care for the uninsured

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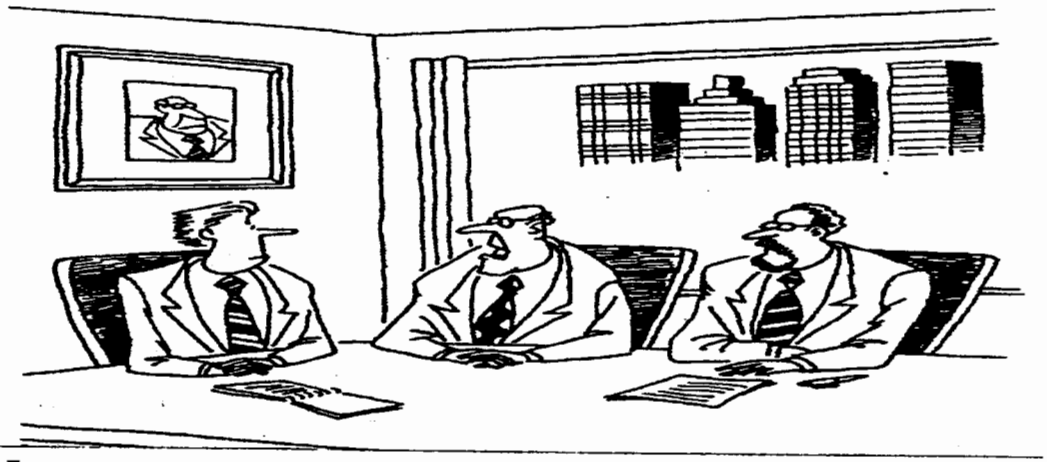

"Newgate, you'll report to Cunningham, who'll report to me. I, in one of those unexplainable paradoxes of the business world, will report to you."

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Understanding the Academic Medical Center Hospital

- Managerial complexity
- "Federated" medical staff
- Cost of clinical care
- Balancing teaching and research with clinical care

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Unique Pressures on Academic Medical Center

- Two standards of health care
  - Increased uninsured
  - Increased underinsured
  - Increased bad debts
- Reduced university hospital state fund support
- Reduced hospital ability to support educational and research mission

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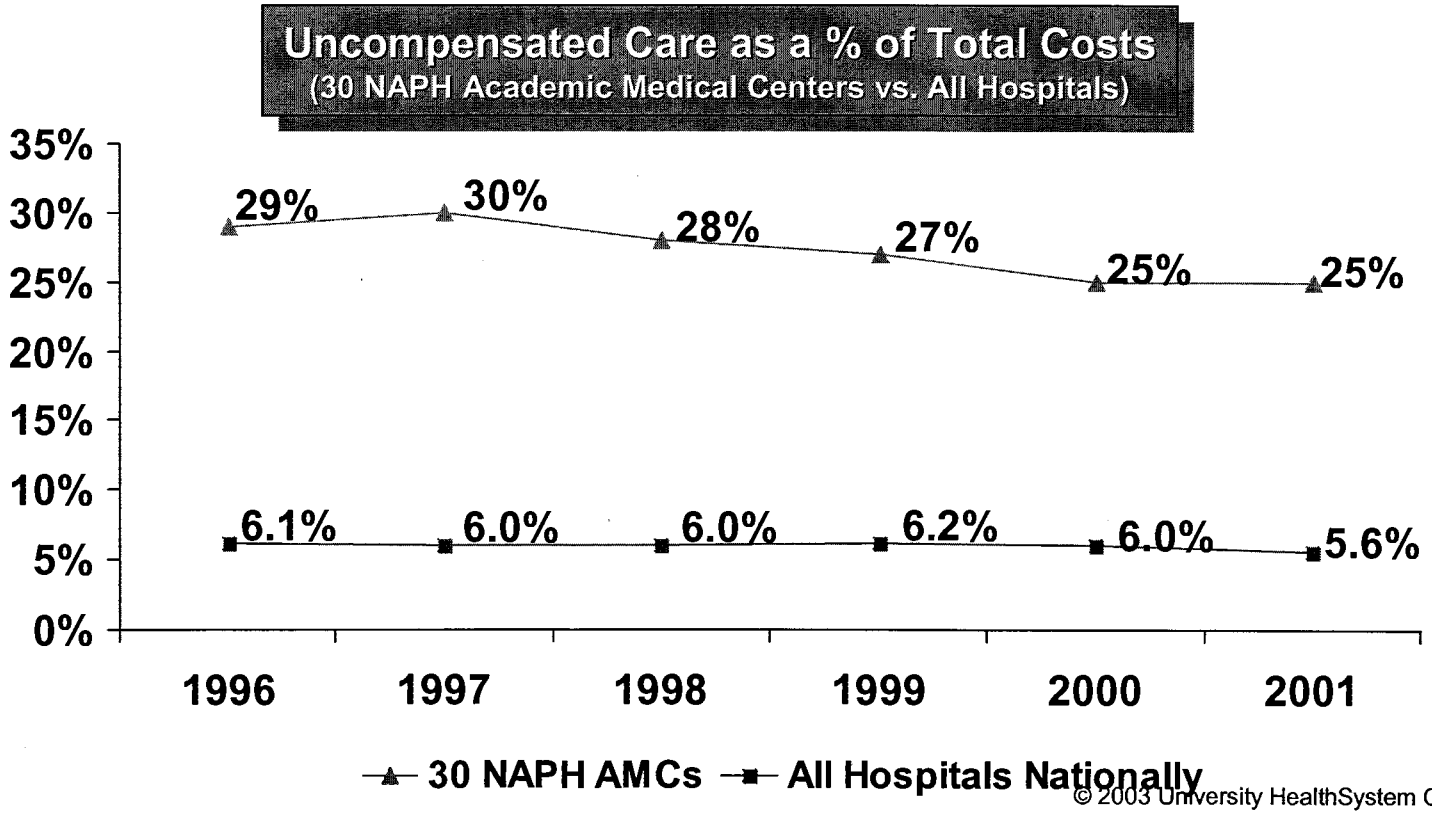
Teaching Hospitals Shoulder Disproportionate Burden Of Uncompensated Care



Sources: AHA; BC/BS Document

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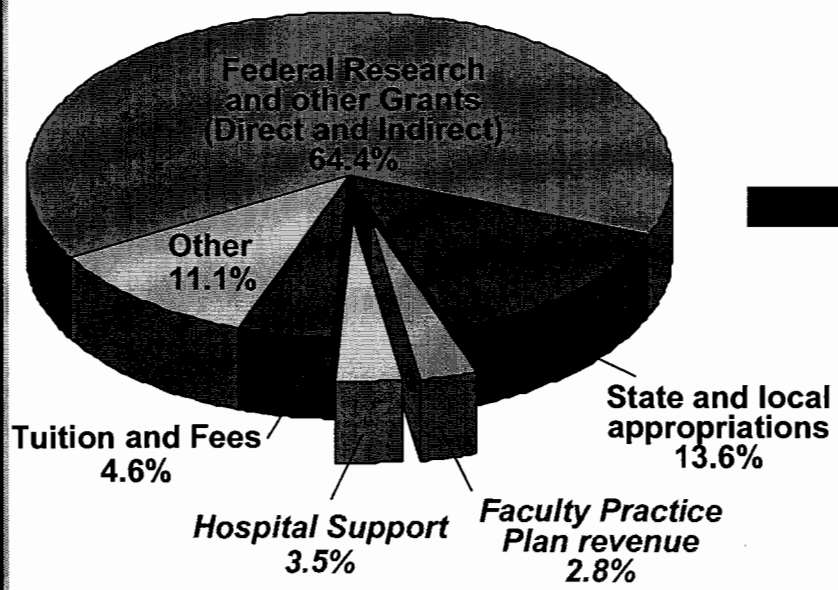
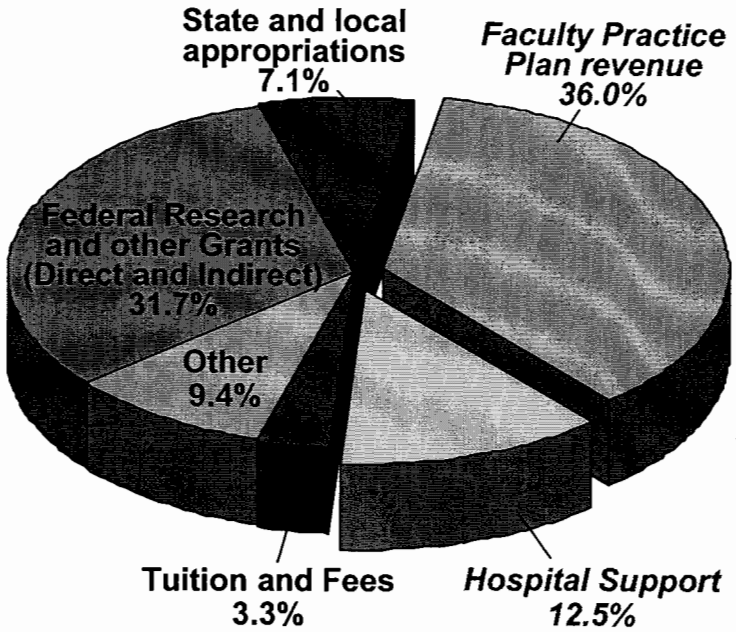
Academic Mission Growing Reliance On Clinical Income



1965-1966



2001-2002

Source: AAMC Institutional Profile System

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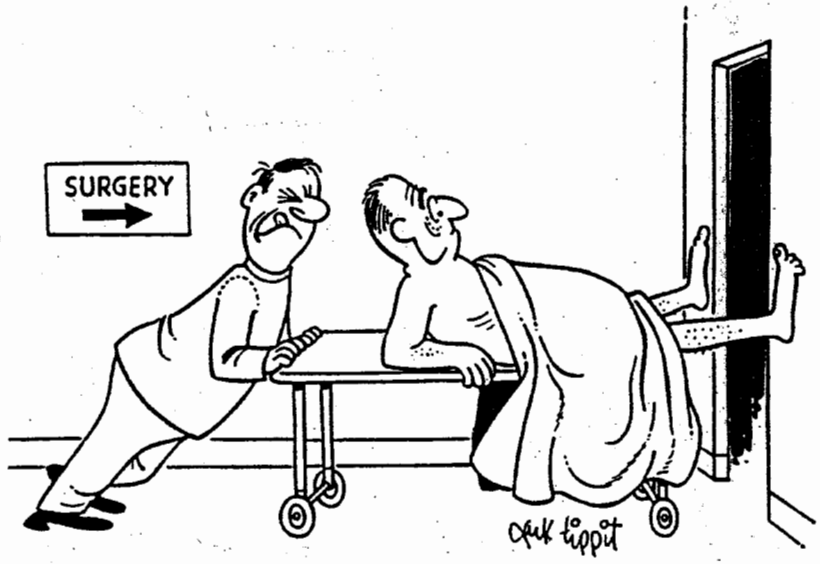

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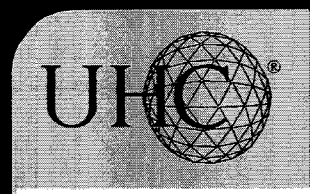

University HealthSystem Consortium

The New Agenda for Health Care Quality and Safety: Role of Senior Leadership and the Board

University of Iowa
Hospitals and Clinics

Board of Trustees
December 15, 2003

THE POWER OF COLLABORATION

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The "Old" Agenda for University Health Systems

- Efficiency
  - Resource use (Length of stay, cost)
- Quality Assurance
  - Compliance (Joint Commission on Accreditation of Hospitals)

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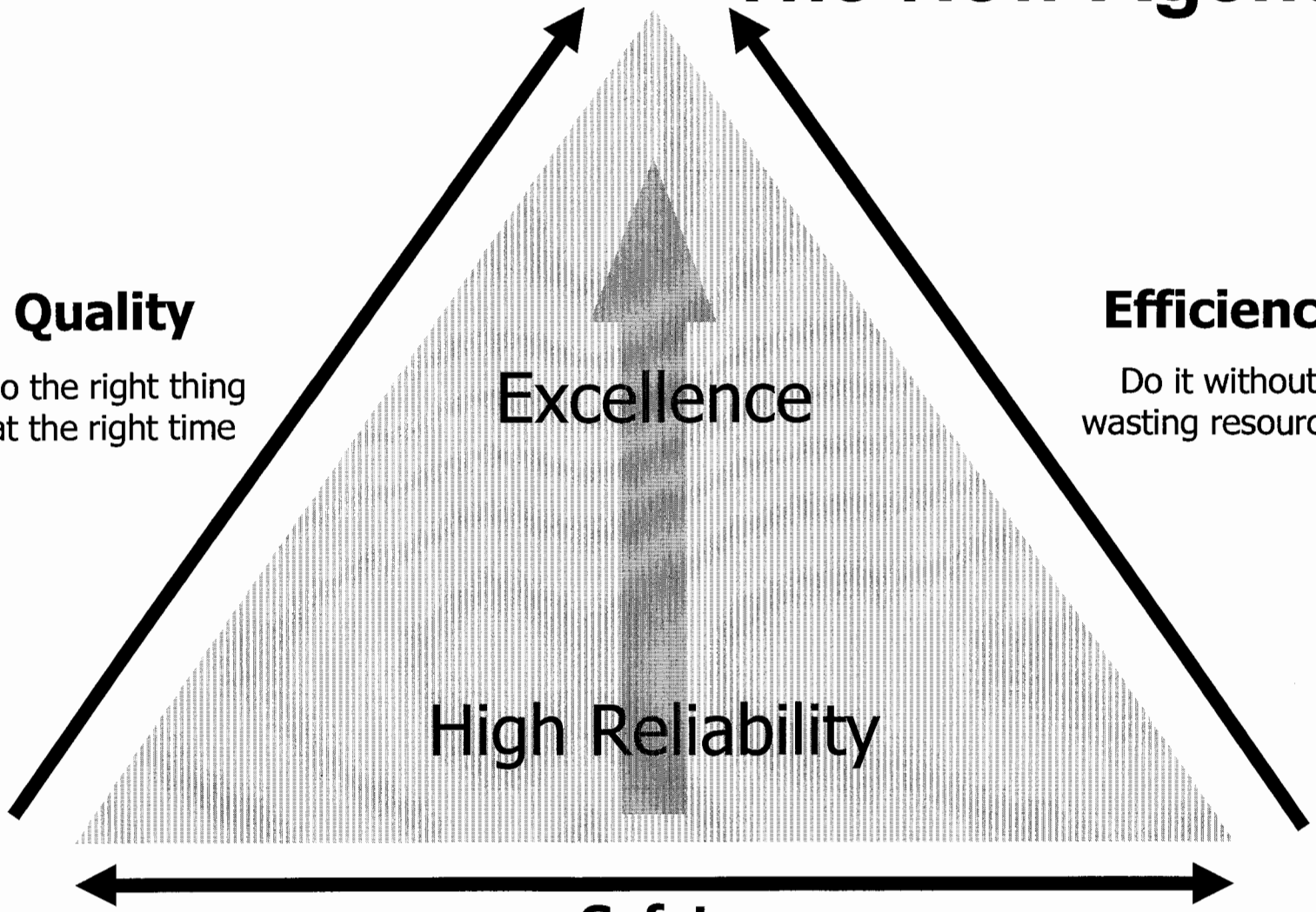
The New Agenda



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Evolution of the New Agenda

- Isolated reports in the medical literature describing adverse event occurrence.
- Highlighted by Institute of Medicine Report: *To Err is Human: Building a Safe Health System* (November, 1999)
- Amplified by second IOM Report: *Crossing the Quality Chasm (2001)*
- Fueling perception of purchasers that they were paying for a "broken system"
- Meeting a growing "Consumerism" movement
- Reinforced by governmental, regulatory and health care purchasing organizations.

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The Evolution of the Patient Safety Movement

- The Harvard Study – 1991
  - 6.7% error/accident rate
  - 3.1% of patients experience an adverse drug event (ADE)
  - 13% fatal
  - 72% avoidable
  - 120,000 deaths in US hospitals annually
  - $4,700 add to cost of care with ADE

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Institute of Medicine National Roundtable on Health Care Quality

"...Serious and widespread quality problems exist throughout American medicine. These problems....occur in small and large communities alike, in all parts of the country, and with approximately equal frequency in managed care and fee-for-service systems of care. Very large numbers of Americans are harmed as a direct result...." *JAMA 1998*

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To Err is Human: Building a Safe Health System

Institute of Medicine Report, November 1999

Medical Mistakes Leading Cause of Death in the United States

Deaths/Year	Cause
44,000 – 98,000	Medical Accident
43,458	Motor Vehicle Accidents
42,297	Breast Cancer
16,516	AIDS

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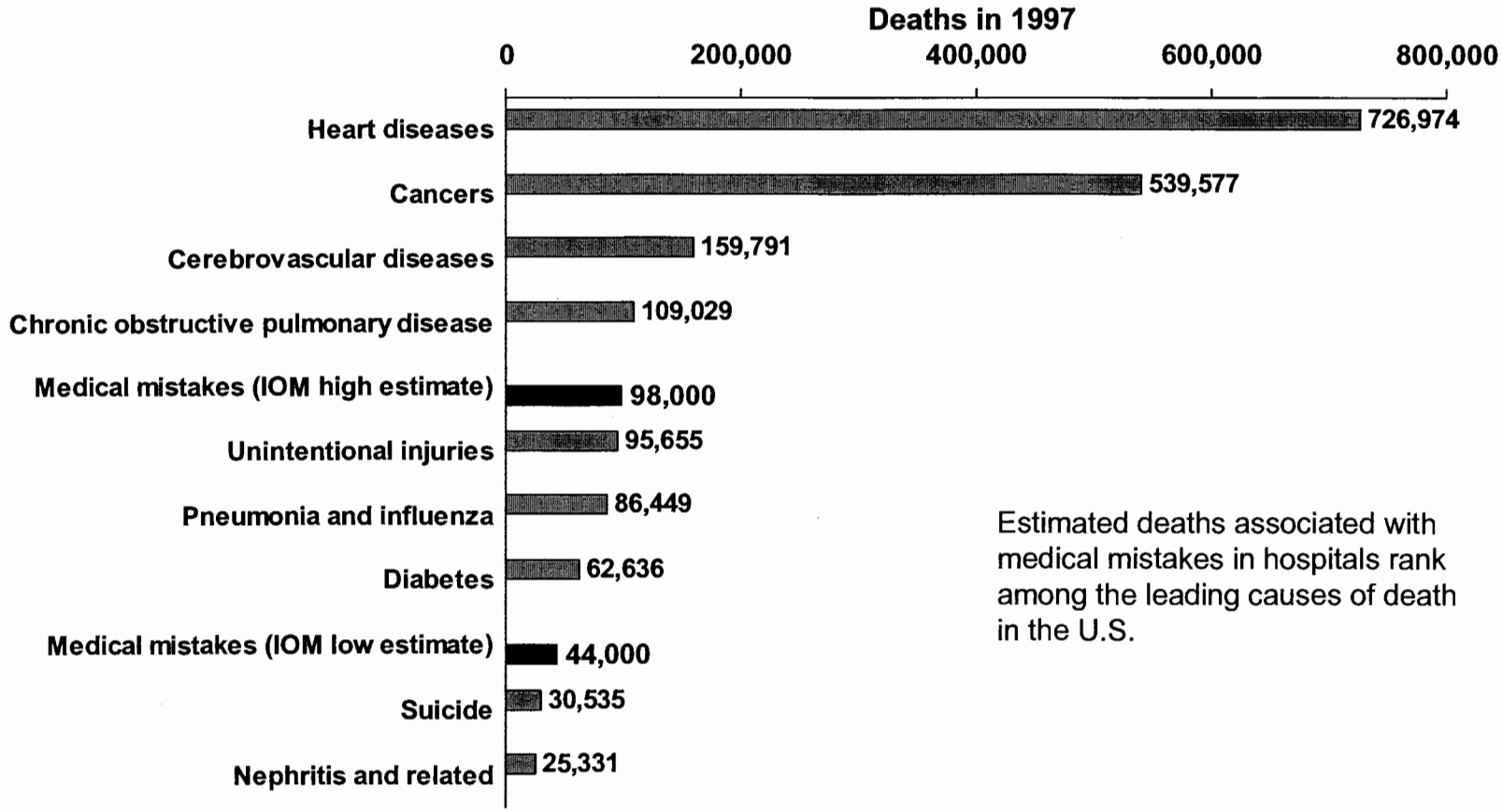
Estimated Deaths Associated with Medical Mistakes Compared to the Leading Causes of Death in the U.S.



Estimated deaths associated with medical mistakes in hospitals rank among the leading causes of death in the U.S.

Source: IOM 2000; Karamerow et al, 19999 (deaths).

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Leatherman & McCarthy, *Quality of Health Care in the United States: A Chartbook*, 2002-Patient Safety

Health Care Consumerism Adds Fuel to the Fire

- Baby boom becomes elder boom
- Increased longevity
- Increased chronic conditions
- Cross-industry experience
- Patient safety concerns
- The Internet

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Even so, Consumers Are Confused

U.S.News & WORLD REPORT

America's Best Hospitals 2002

Neurology and Neurosurgery

Rank	Hospital	U.S. News Index	Reputational score	Mortality ratio
1	Mayo Clinic, Rochester, Minn.	100	65.60%	0.89
2	Massachusetts General Hospital, Boston	83.2	52.10%	0.95
3	Johns Hopkins Hospital, Baltimore	78.9	47.40%	0.81
4	New York Presbyterian Hospital	72.9	42.30%	1.01
5	Cleveland Clinic	56.2	23.80%	0.6
6	University of California, San Francisco Medical Center	51.5	26.70%	0.96
7	Barnes-Jewish Hospital, St. Louis	44.8	14.60%	0.89
8	UCLA Medical Center, Los Angeles	41.3	12.10%	0.77
9	Hospital of the University of Pennsylvania, Philadelphia	36.9	12.20%	1.05
10	Methodist Hospital, Houston	36.2	9.60%	0.85
11	Duke University Medical Center, Durham, N.C.	33.8	7:50%	1
12	Henry Ford Hospital, Detroit	32.4	1.90%	0.7
13	Brigham and Women's Hospital, Boston	32	8.70%	1.06
14	University of Virginia Health Sciences Center, Charlottesville	31.9	3.60%	0.89
15	Florida Hospital Medical Center, Orlando, Fla.	31.5	0.00%	0.81
16	Clarian Health Partners (IU and Methodist Hospitals), Indianapolis	31.5	0.90%	0.8
17	Shands Hospital at the University of Florida, Gainesville	31.3	3.80%	0.78
18	University Medical Center, Tucson, Ariz.	31	0.90%	0.55
19	Mount Sinai Medical Center, New York	30.9	4.00%	0.92
20	Denver Health and Hospitals	30.8	0.40%	0.03
21	St. Joseph's Hospital and Medical Center, Phoenix	30.7	6.00%	0.96
22	Northwestern Memorial Hospital, Chicago	30.6	2.10%	0.78
23	Georgetown University Hospital, Washington, D.C.	30.5	0.90%	0.42
24	William Beaumont Hospital, Royal Oak, Mich.	30.5	0.00%	0.87
25	University of Illinois Hospital and Clinics, Chicago	30.5	1.30%	0.54

HEALTHGRADES®
THE HEALTHCARE QUALITY EXPERTS®

2003 Analysis (3 years ending 2001)
Back and Neck Surgery (Except Spinal Fusion)
Current Year's Ratings

Hospital	City State	# of Medicare Cases	Major Complications
St Agnes Hospital	Baltimore MD	314	★★★★★
Anne Arundel Medical Center	Annapolis MD	240	★★★★★
Washington County Hospital	Hagerstown MD	161	★★★★★
Franklin Square Hospital	Baltimore MD	85	★★★★★
Sinai Hospital	Baltimore MD	264	★★★
Greater Baltimore Medical Center	Baltimore MD	240	★★★
Frederick Memorial Hospital	Frederick MD	185	★★★
North Arundel Hospital	Glen Burnie MD	138	★★★
Union Memorial Hospital	Baltimore MD	85	★★★
Mercy Medical Center Inc	Baltimore MD	72	★★★
Carroll County General Hospital	Westminster MD	68	★★★
Memorial Hospital And Medical Center O	Cumberland MD	68	★★★
Maryland General Hospital	Baltimore MD	47	★★★
Johns Hopkins Hospital	Baltimore MD	307	★
St Joseph Hospital	Baltimore MD	222	★
University Of Maryland Medical Systm	Baltimore MD	107	★
Good Samaritan Hospital	Baltimore MD	95	★
Sacred Heart Hospital	Cumberland MD	54	★
Howard County General Hospital	Columbia MD	51	★

s ending 2001)
(Spinal Fusion)
Ratings

y te	# of Medicare Cases	Major Complications
more D	291	★★★
polis D	188	★★★
more D	94	★★★
rick D	93	★★★
more D	65	★★★
more D	64	★★★
more D	56	★★★
urnie D	51	★★★
stown MD	49	★★★
Johns Hopkins Hospital	Baltimore MD	357	★
University Of Maryland Medical Systm	Baltimore MD	63	★

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Purchaser (Employer) Activism is Driven by:

- Institute of Medicine Reports
- Recognition that overall health status is declining as health care costs are rising
- Growing understanding that health care quality can be:
  - Accurately measured
  - Routinely assessed
  - Systematically improved

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Health Care Through a Six Sigma Lens

Statistically
Six Sigma refers to a process that produces only 3.4 defects per million opportunities (DPMO)

Sigma	DPMO	
2	308,537	
3	66,807	*Most U.S. Businesses*
4	6,210	
5	233	
6	3.4	*Goal*

Business Strategy An overall strategy that encompasses your business' quality philosophy. It sets the vision for achieving Six Sigma levels of quality in key processes and services.

Tools and Tactics A set of statistical tools and a disciplined methodology used by specially trained individuals to improve processes by reducing variation and defects.

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Sigma Level Comparisons

Service	Sigma	DPMO
• IRS tax advice (phone-in)	1	690,000
• Mammography screening	2	308,537
• Inpatient medication accuracy and airline baggage handling	3	66,807
• 44,000 – 98,000 preventable hospital deaths	4	6,210
• Anesthesia during surgery	5+	233-
• Domestic airline flight fatality rate	6+	3.4-

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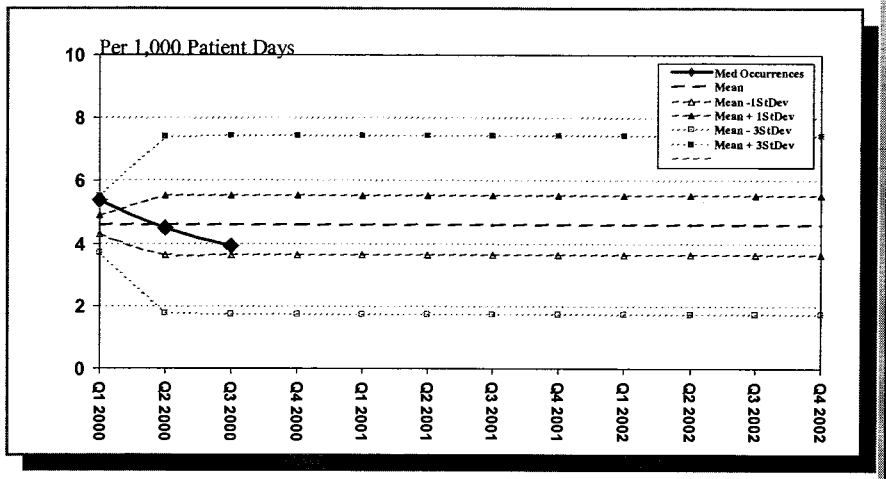
Sample Quality Indicator Summary

Medication Occurrence Rate

Number of Reported Inpatient Medication Occurrences in time period (per 1,000 patient days).

Benchmark

Comments: Source: Occurrence Reporting System
Definition of Medication Occurrence: any lapse that occurs in the process of prescribing, transcribing, dispensing, or administering a drug or IV fluid to a patient, whether or not there are any adverse consequences.

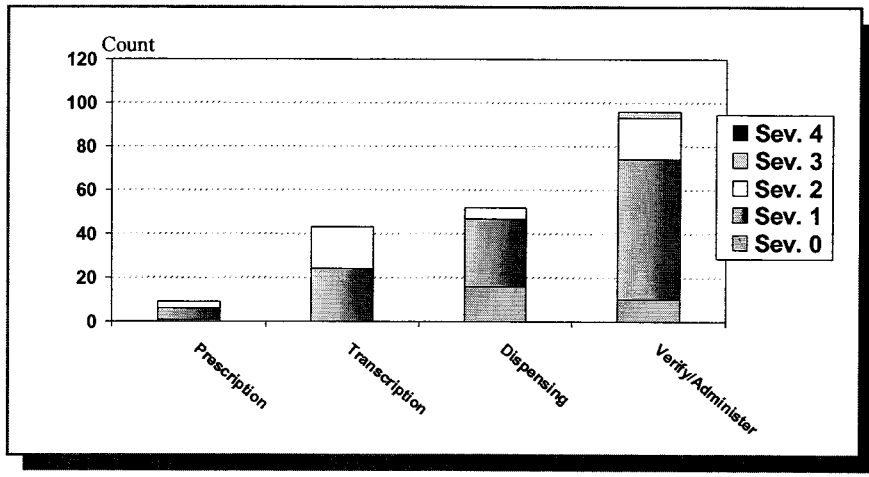


Medication Occurrences by Contributing Factor & Severity Level[10]

Number of Inpatient Medication Occurrence by Contributing Factor and Severity Level for the current quarter.

Benchmark

Comments: **DATA FOR Q3 FY2000**
Source: Occurrence Reporting System



[10] Severity Level Scale: (0) Did not reach patient; (1) No injury to patient; (2) Minor injury and/or temporary functional impairment to patient; (3) Major injury and/or temporary functional impairment to patient; (4) Permanent injury and/or impairment to patient.

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Performance Measurement

15 metrics in two categories:, quality & efficiency and customer service & access

OSUHS's Quality Scorecard is reviewed monthly; indicators are derived directly from the health system's strategic performance objectives

Balanced Scorecard

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THE OHIO STATE UNIVERSITY
UNIVERSITY MEDICAL CENTER

Summary of Health System Indicators

September 16, 2003

Quality

INDICATOR	TREND (Past 12 Months)	COMPARISON TO EXPECTED/TARGET	
		Most Recent Month	Year To Date
Quality and Efficiency			
1. 31 Day Readmission	↓	↓	↓
2. 48 Hour Unplanned/Related ED Returns	↓	↓	↓
3. Reported Medication Errors			
4. Inpatient Mortality	↓	↓	↓
5. Adequacy of Pain Management	↑	↓	↓
6. LOS Efficiency	↑	↓	↓
7. ICU Appropriateness	↓	↓	↓
8. Inappropriate Blood Utilization	↓	↓	↓
Customer Service and Access			
9. Overall Patient Satisfaction	↑	↑	↑
10. Customer Service Issues	↓	↓	↓
11. ED Wait Time to See Physician	↓	↑	↑
12. Time to Bed Assignment for Transfer Pts.	↓	↑	↑
13. Radiology Turn Around Time	↑	↑	↑
14. Appointment Availability	↓	↑	↑
15. Referring Physician Satisfaction	↓	↓	↓

Each indicator is color coded to flag performance as favorable or unfavorable

Note: Actual data for this chart have been replaced with mock figures and do not reflect actual performance

= favorable = unfavorable

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Regulation and Accreditation

- Quality assurance and performance improvement programs made a Medicare and Medicaid condition of participation
- Office of Inspector General and Department of Justice make quality of care a top priority under the False Claims Act
- Medicare recommends linking hospital payment to quality of care (2003)
- State regulations (e.g., CA nurse-patient ratios)
- Joint Commission Patient Safety goals

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Institute of Medicine Recommendation for Establishment of Hospital Safety Programs

- Establish patient safety programs with defined executive responsibilities that are clearly focused on patient safety
- Implement non-punitive systems for reporting and analyzing medical errors
- Incorporate well-understood safety principles
- Establish interdisciplinary team training for providers of patient care which incorporates proven methods of team training

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The Joint Commission Reaction: *New* Standards *Specific* for Patient Safety

- One set of standards relates to the involvement of leadership in creating an organizational culture of safety
- The second theme relates to the need for mandatory reporting of error and the development of a policy of open disclosure

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Joint Commission Emphasizing Leadership's Role

- The majority of JCAHO standards relate in some manner to *improving patient safety* and *reducing risk.*
- Emphasis is on accomplishing these activities thru an integrated and coordinated approach
- Hospital leaders are charged with responsibility of an organization-wide safety program encompassing all safety related activities such as:
  - Performance Improvement
  - Environmental Safety
  - Risk Management

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Joint Commission Emphasizing Leadership's Role

2004 Leadership & PI Standards

- Doesn't require new org structure or office
- Integrate all patient safety functions – new and existing
- Accountability focused on org leadership
- Focus on processes and systems minimizing individual blame
- Creation of environment that encourages recognition and acknowledgement of risk to patient safety and med/health errors – *A Culture of Quality and Safety*

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Emphasizing Leadership's Role

- Leaders are responsible for fostering such an environment
  - Establishing mechanisms that:
    - ✓ Support effective responses to actual events
    - ✓ Ongoing proactive reduction in medical/health care errors
    - ✓ Integration of patient safety priorities into the new design of all relevant organization processes, functions, services

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A Health Care Culture of Quality and Safety

- Continuous learning and process redesign
- Errors readily identified and evaluated
- Knowledge and skills actively managed
- Performance and outcomes continuously measured and evaluated
- Collaboration and teamwork is the norm
- Care is highly coordinated and needs are anticipated
- Consistent and predictable performance

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Medicare – New Conditions of Participation in 2003

Quality Assessment and Performance Improvement

- Section 482.21(e) – The fifth standard, executive responsibilities, clarifies the intent of Medicare:
  - To hold the hospital's leadership responsible and accountable for quality and process improvement activities
  - Further the standard requires that the hospital's governing body provide strong, clear, and visible attention to setting expectations for *safety* and for allocating adequate resources for measuring, assessing, improving, and sustaining the hospital's performance and for *reducing risks to patients.*

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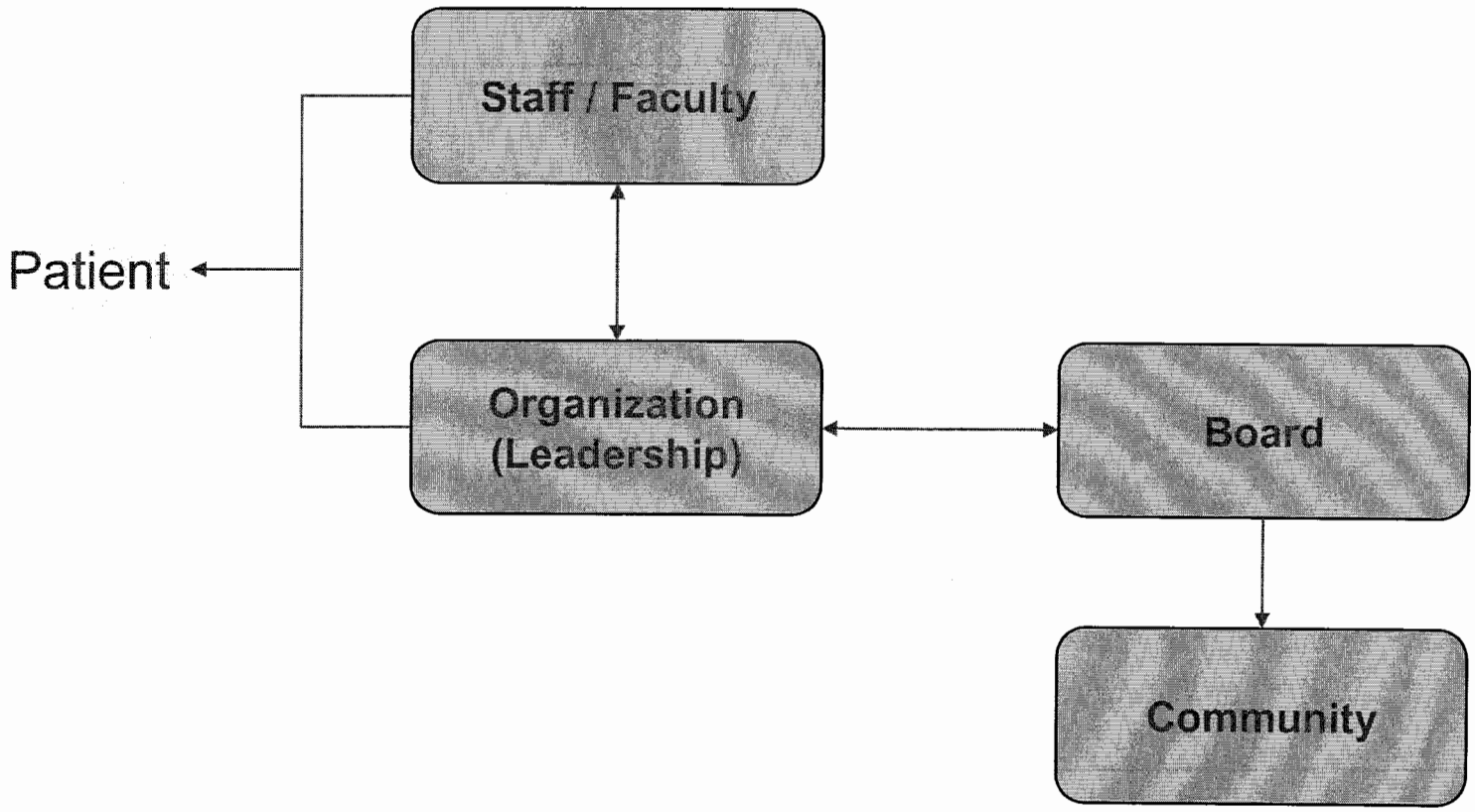
Chain of Accountability



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Three Levels of Formal Accountability

I

Accountable for day to day care of individual patients

Patient

Attending physician
Consulting physician(s)
Nurse(s)
House-staff

II

Accountable for processes of care and outcomes within departments, sections, care units

Department Chair
Section Head(s)
Care Unit Director(s)

III

Accountable for high-level processes of care and aggregate outcomes in organization

Board

Senior Leadership (both hospital and School)
Department Chairs
Faculty members

All faculty members are expected to participate in quality improvement efforts. The Board holds the senior leadership accountable for performance and reciprocates by actively reviewing strategic plan.

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The Board's Role in Promoting Accountability

- Best practice integration of quality and strategy
  - On an annual basis, the Board should participate in a quality planning process that is integrated with the strategic planning and budget processes.
  - Effective boards question, learn, and challenge the organization to continually excel.
  - In more than one health system, the board's quality committee has pushed the system to come up with measures of care that will compel the system to improve and to perform better against industry standards.

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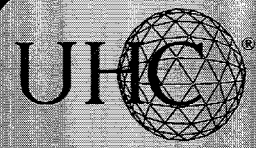

University HealthSystem Consortium

Academic Medical Centers in the Turbulent Health Care Delivery System

University of Iowa
Hospitals & Clinics
Board of Trustees

December 15, 2003

THE POWER OF COLLABORATION

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Ownership Structure: Assessment of Possible Structural Impediments

- Diverse mission/focus
- Human resources
  - Civil service rules
  - Wage and benefit inflexibility
- Political interference
- Access to capital markets

Continued

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Ownership Structure: Assessment of Possible Structural Impediments

- Legal limitations
  - Purchasing
  - Architectural/construction restraints
- Flexibility in responding to market pressures
  - Fair market value contracting
- Decision support systems
- Philanthropy

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State AMC Hospitals that Separated

- Florida
- Colorado
- Maryland
- Arizona
- Wisconsin
- Minnesota
- Georgia
- Tennessee
- Massachusetts
- Virginia Commonwealth
- Oregon
- Cincinnati
- Nebraska
- Kansas
- South Carolina
- Oklahoma
- Indiana
- Penn State
- West Virginia

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Effective Governance Requirements

- Understanding of health care market pressures
- Free of conflict of interest
  - Political
  - Representational
  - Business
- Empowerment of leaders
- Understanding of strategies
- Change orientation
- Risk tolerant

Continued

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Effective Governance Requirements

- Time and attention
- Accountability
- Commitment
- Stature to add value to external relationships
- Business skills
- Finance skills

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Conclusions

- Consumers demand focus on quality and safety
- Health care delivery system under pressure
- University hospitals must adapt quickly to changing reimbursement and market demands
- Effective governance essential for long term success

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Policy Considerations for the University of Iowa Hospitals and Clinics

1. How should the hospital and clinics address the growing cost of providing unreimbursed care as state fund support continues to decline?

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Policy Considerations for the University of Iowa Hospitals & Clinics

2. Should the hospital and clinic be restructuring under a public authority?
3. How should the governing body be structured to provide effective governance?

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"Today loving change, tumult, even chaos is a prerequisite for survival"

Tom Peters

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"Somebody has to do something, and it's just incredibly pathetic that it has to be us."

Jerry Garcia of the Grateful Dead

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