



The Financial Meltdown: Spotlight on Supply Costs and Materials Management Expenses

Implications for Hospital Economics

Financial Leadership Council

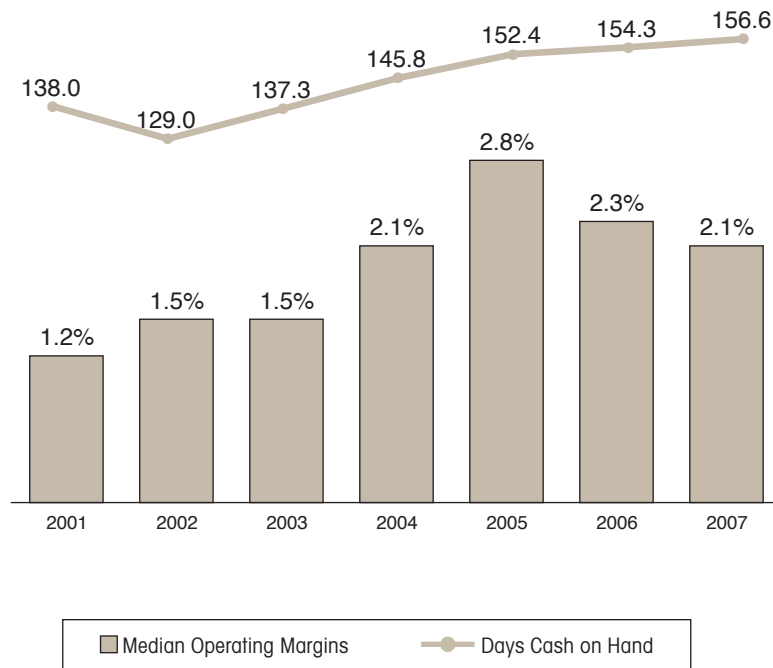
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Roadmap for Discussion

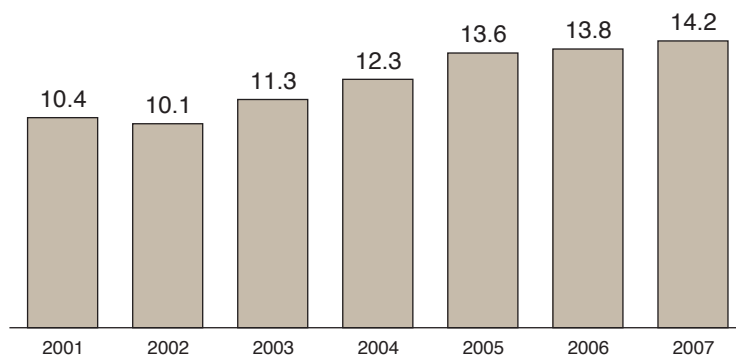


Hospitals Bolstered by Solid Underlying Financials

Operating Margin and Days Cash-On-Hand



Cushion Ratio¹

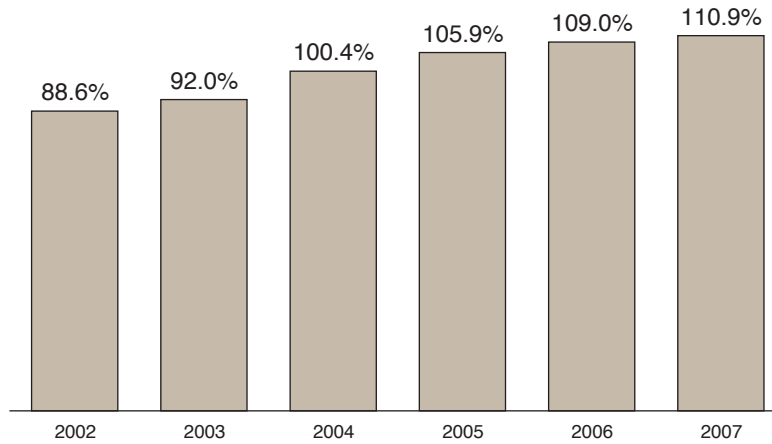


¹ Total unrestricted cash and investments divided by estimated future peak debt service.

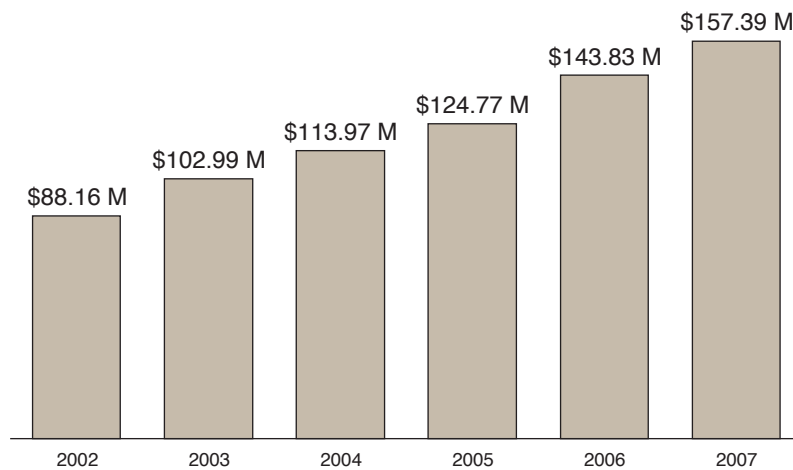
Source: "Fiscal Year 2007 Not-for-Profit Health Care Medians," *Moody's Investors Service*, August 2008.

Banking More Cash Than Debt

Median Cash to Debt Ratio



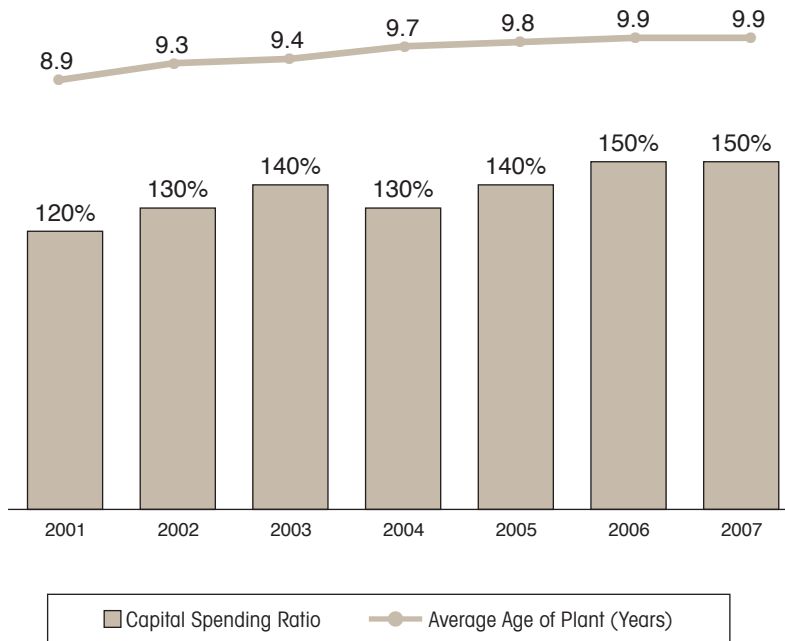
Unrestricted Cash and Investments



Source: "Fiscal Year 2007 Not-for-Profit Health Care Medians,"
Moody's Investors Service, August 2008.

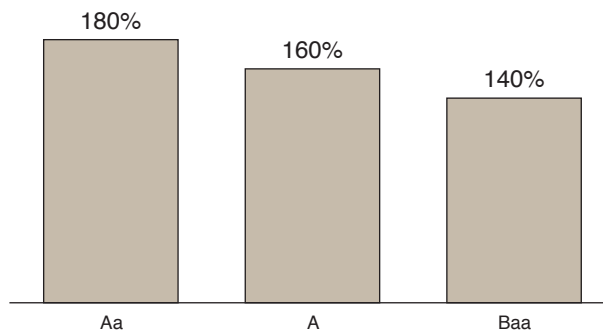
Spending “Cheap” Capital with a Free Hand

Average Age of Plant¹ and Median Capital Spending Ratio²



Median Capital Spending Ratios

By Ratings Category, 2007



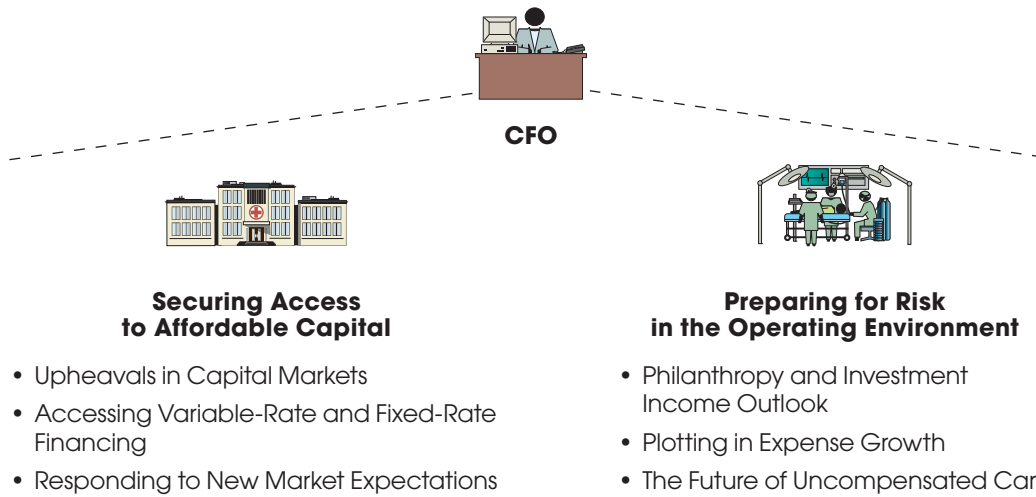
¹ Accumulated depreciation divided by annual depreciation expense.

² Annual capital expenditures as a percentage of depreciation expense.

Source: “Fiscal Year 2007 Not-for-Profit Health Care Medians,”
Moody’s Investors Service, August 2008.

Facing Heavy Financial Headwinds

Accessing Affordable Capital, Funding Future Growth



Source: Financial Leadership Council interviews and analysis.

Capital Markets Plunge into the Ice Age

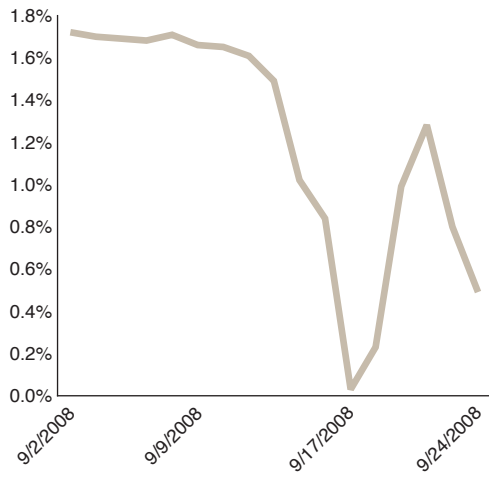
Massive Undercapitalization Revealed, Traditional Lending Channels Freeze



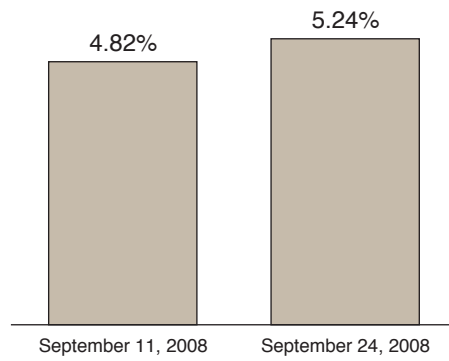
Unprecedented Deleveraging Forces Flight to Quality

September Tumult on Wall Street

Yield, Three
Month Treasury Bill



Average Yield,
30-Year Municipal Bond

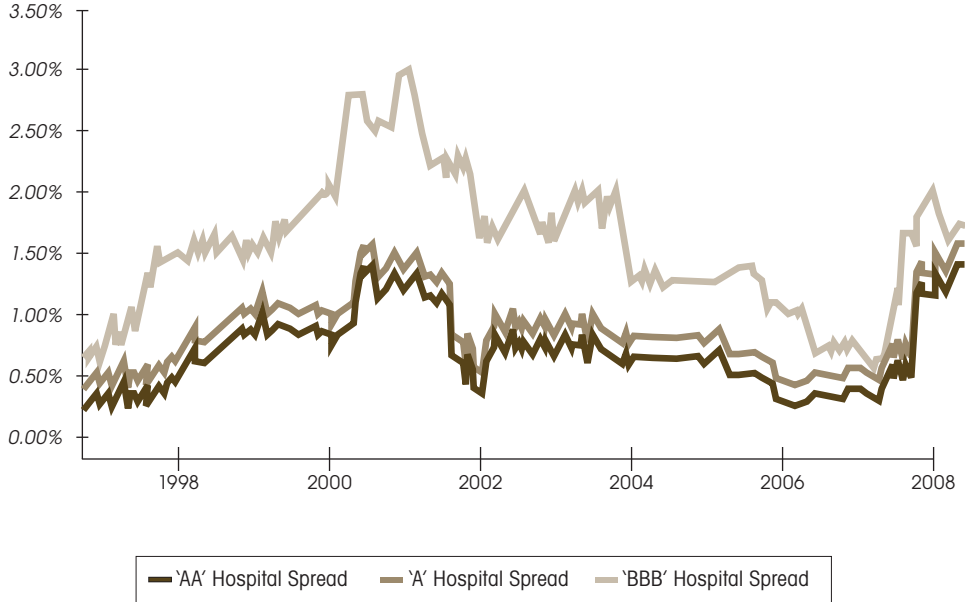


Source: Daily Treasury Yield Curve Rates, United States Department of the Treasury; "Healthcare Holds on Tight," *Modern Healthcare*, September 22, 2008; Financial Leadership Council interviews and analysis.

Pain Felt Acutely by Providers

The Riskiest of Municipal Bonds

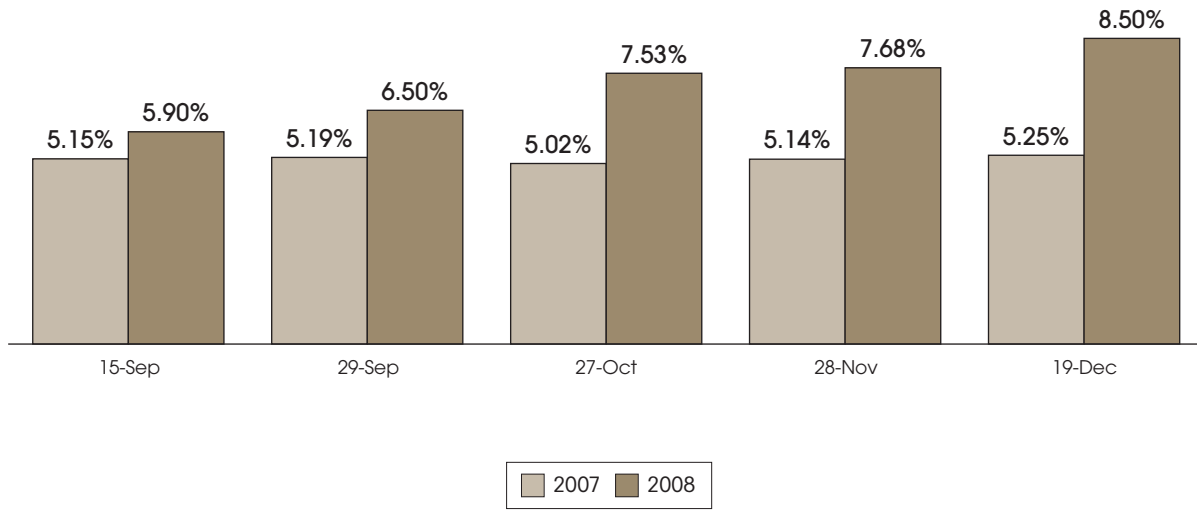
Health Care Credit Spreads over Lehman Brothers MMD AAA Index



Source: Majka AJ, "Hedging Your Bets: What's New with Debt and Swap Products," presented at: HFMA's 2008 Healthcare Finance Conference, June 23-26, Las Vegas, NV; Lehman Brothers; Goodman P, "Worried Banks Sharply Reduce Business Loans," *New York Times*, July 28, 2008.

Bond Yields Reflecting Investor Flight

Yield, A-Rated Tax Exempt Hospital Bonds (30 Years to Maturity)

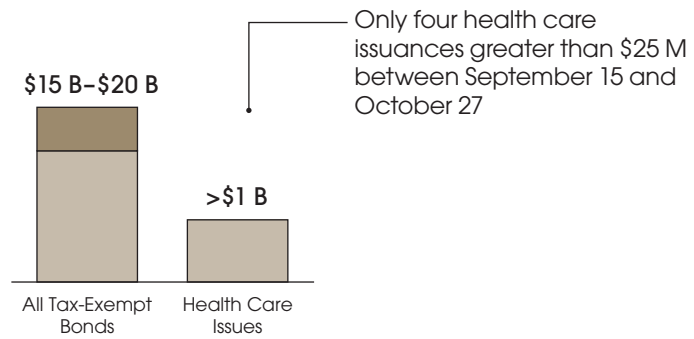


Working Through the Backlog

New-Issuance Supply Likely to Keep Rates Above Average

New Bond Issuance Backlog

October 2008

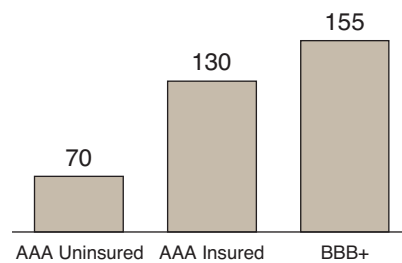


Medium-Term Factors Affecting Rates

Municipal Interest Rate Market Vector	Impact on Rates
Lack of capital availability	↑↑↑
Decline of credit enhancement tools	↑↑
Increase in supply of restructured municipal bonds	↑
General market anxiety	↔
Investor risk aversion	↓
Low Federal Reserve interest rates	↓
Generally solid underlying borrower fundamentals	↓↓

Increases in Average 30-Year Fixed-Interest Rates

February 2007–July 2008, bps



Source: Cain Brothers; Financial Leadership Council interviews and analysis.

Responding to the Capital-Market Fallout

Six Lessons for the Next 12 Months

Weathering the Storm

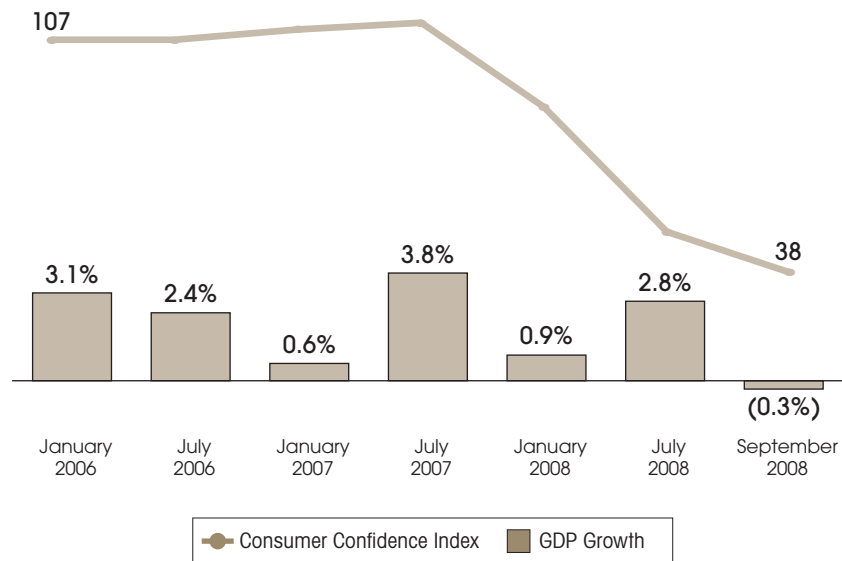
- ① A hospital or health system's credit rating is significantly more important than it has been for the past three years.
- ② More scrutiny from raters, lenders, investors will require greater marketing and disclosure.
- ③ More and greater collateralization will be required with new issuances of debt.
- ④ Uncertainty surrounding financial institutions necessitates greater due diligence on credit enhancers.
- ⑤ Hospitals must diversify capital structure not only by type of debt, but also credit enhancer and lender.
- ⑥ Maintaining cash revenues will be essential to not only preserving capital access, but also funding pension liabilities.

Source: Financial Leadership Council interviews and analysis.

A “Mental Recession” No More

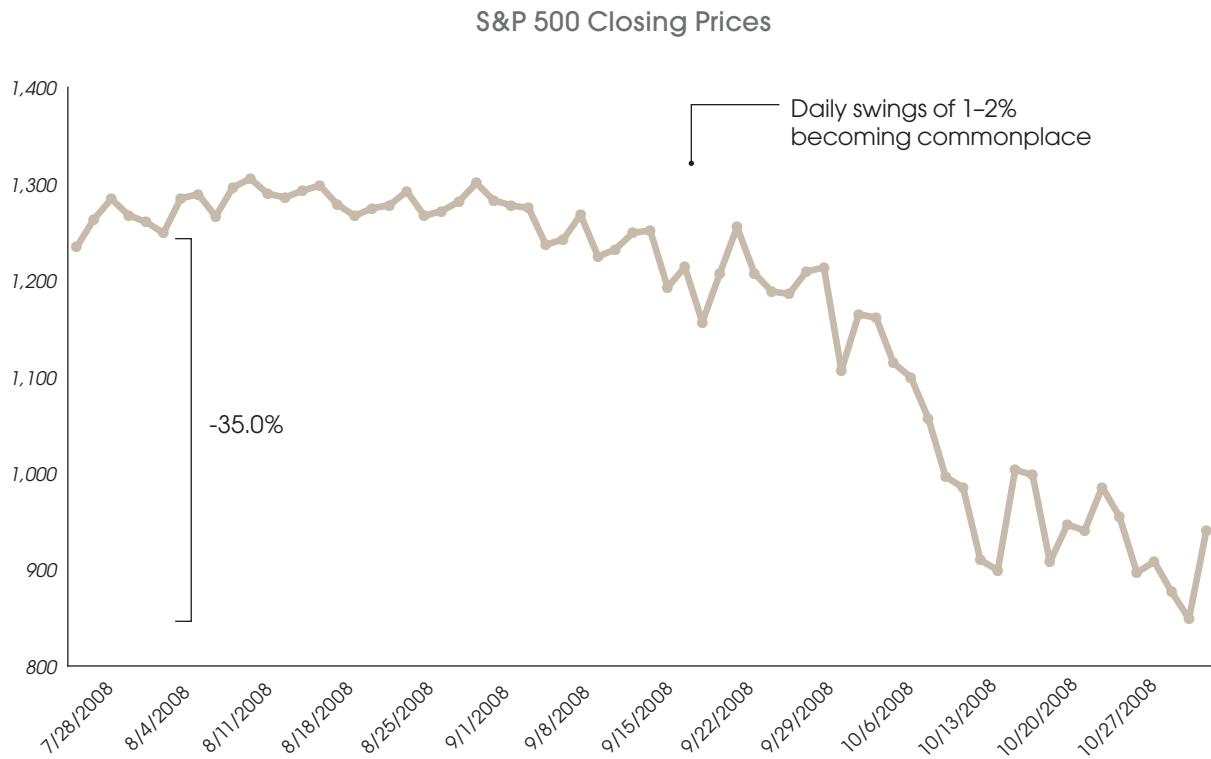
Consumer Confidence Eroding Significantly

Consumer Confidence Index and Economic Growth



Source: "Economic Outlook," available at: <http://www.pollingreport.com/consumer.htm>, accessed July 2008.

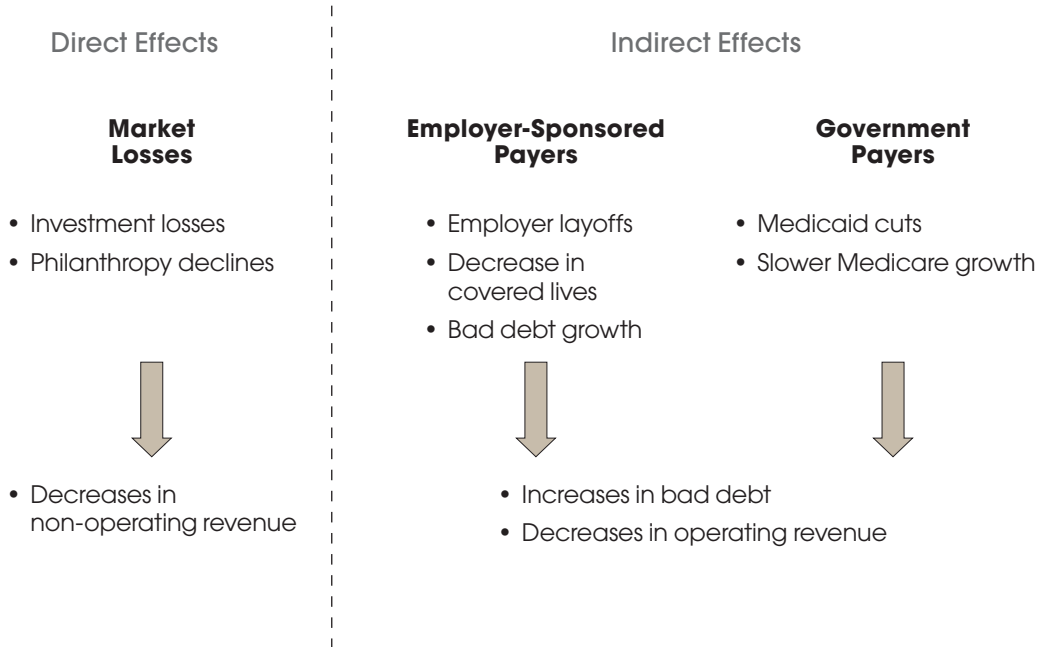
Financial Crisis Spurs Extreme Market Volatility



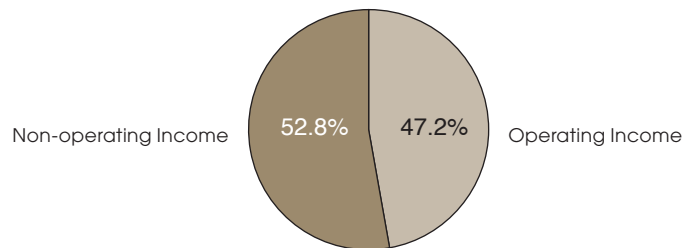
Source: "S&P 500 Historical Quotes," available at: <http://money.cnn.com/quote/historical.html?symb=SPX>, accessed October 2008.

Feeling the Economy's Pain on a Curve

Typical Effects of Economic Downturns in Health Care



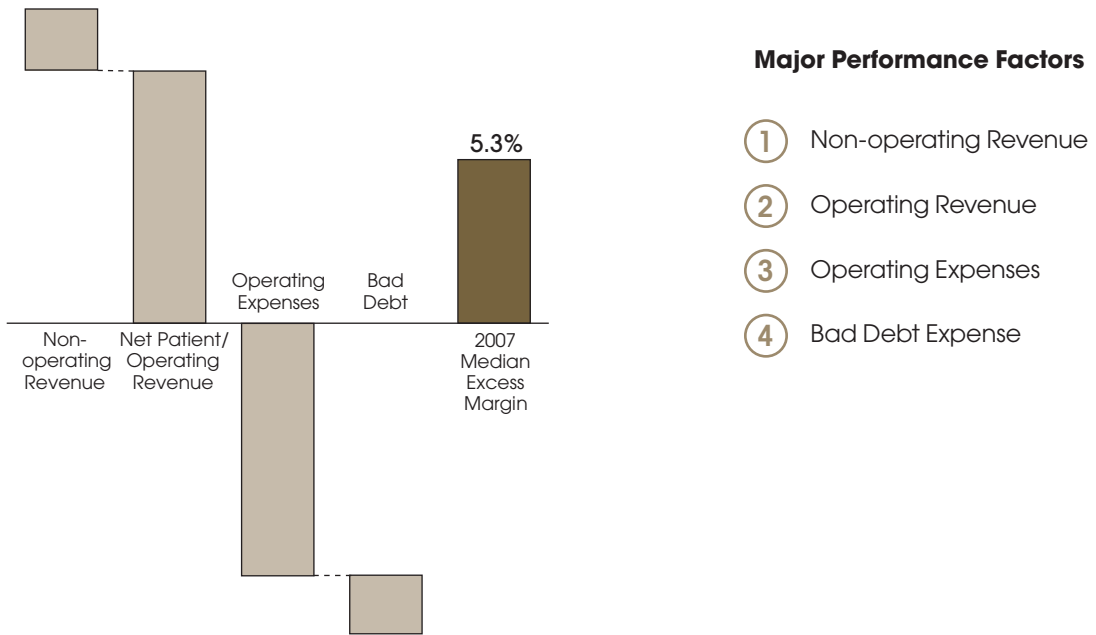
Excess Margin Breakdown
2007



Source: "Fiscal Year 2007 Not-for-Profit Health Care Medians," *Moody's Investors Service*, August 2008 Financial Leadership Council interviews and analysis.

Early Warning System for Hospital Finance

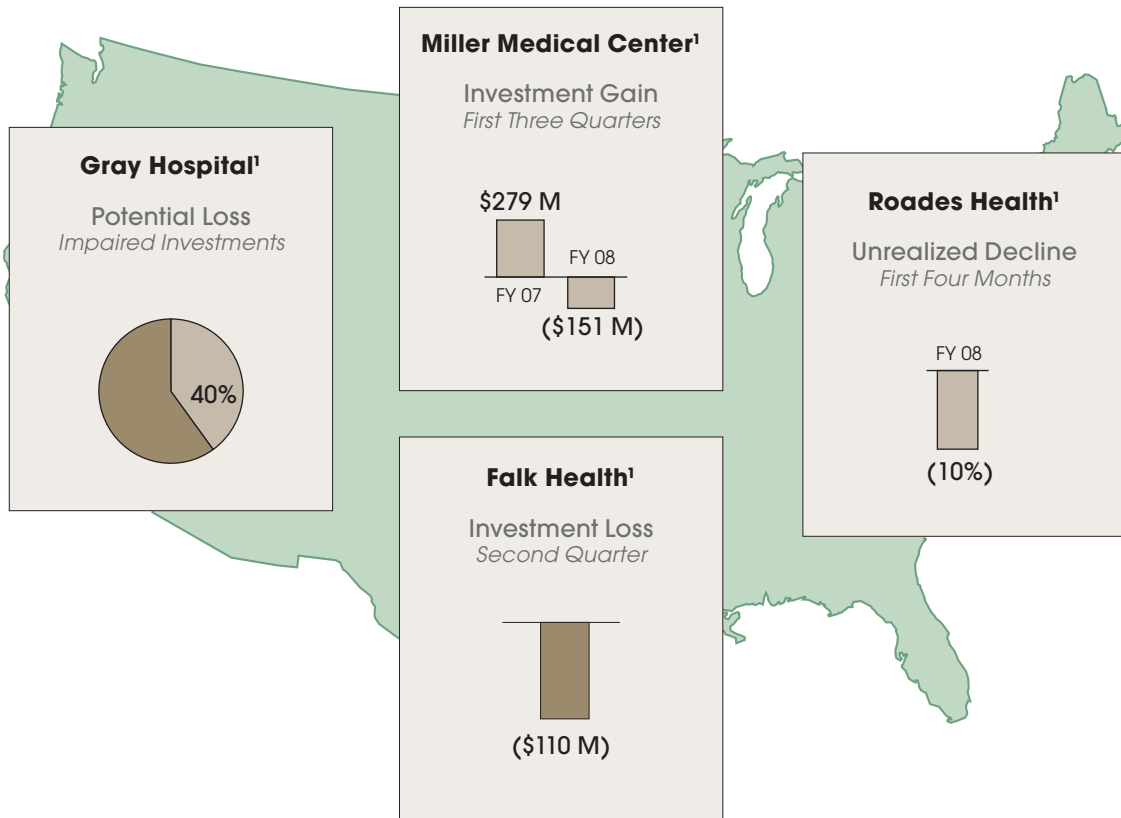
Major Components of Excess Margin



¹ Based on Moody's 2007 Preliminary Medians.

Source: "Preliminary Medians 2007," *Moody's Investors Service*, February 2008.

Stung by Declining Portfolio Values



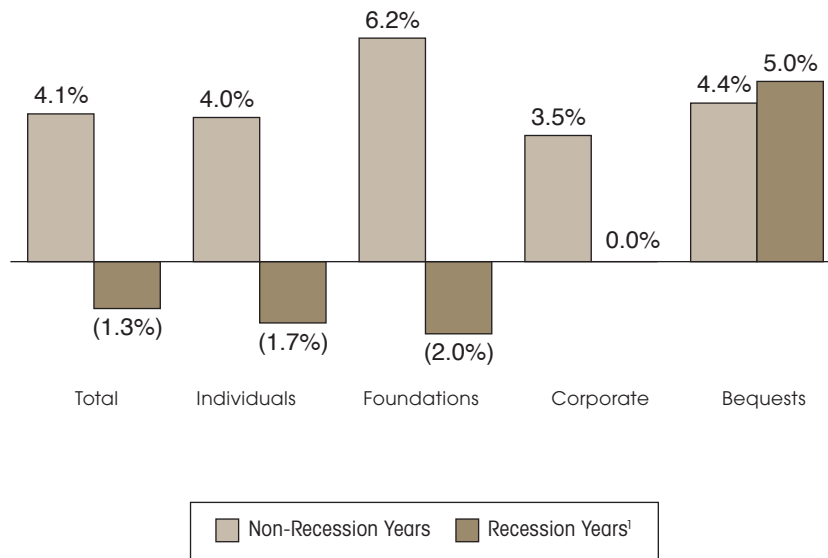
¹ Pseudonym.

Source: Financial Leadership Council interviews and analysis.

A Challenging Picture for Development

Average Annual Growth Rates

By Source of Giving, 1966–2006



¹ Recession years include 1973–1975, 1980, 1981–1982, 1990–1991, and 2001.

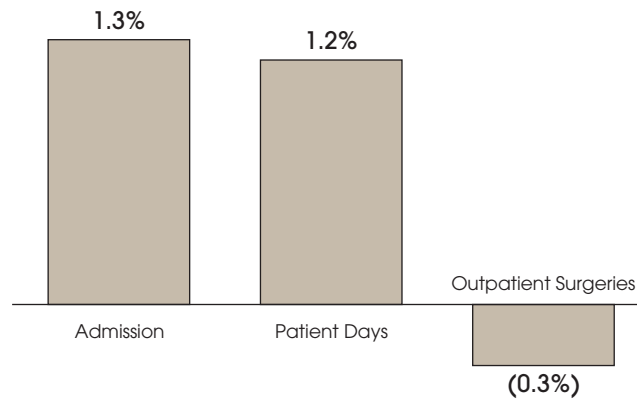
Source: Giving USA Foundation, Press Release, "Charitable Giving during Recessions Doesn't Keep Up with Inflation," February 28, 2008; Philanthropy Leadership Council analysis.

Moderate Volume Growth Outlook

Diagnostic and Elective Volumes Vulnerable to Economic Downturn

Median Growth Rates, 2006–2007

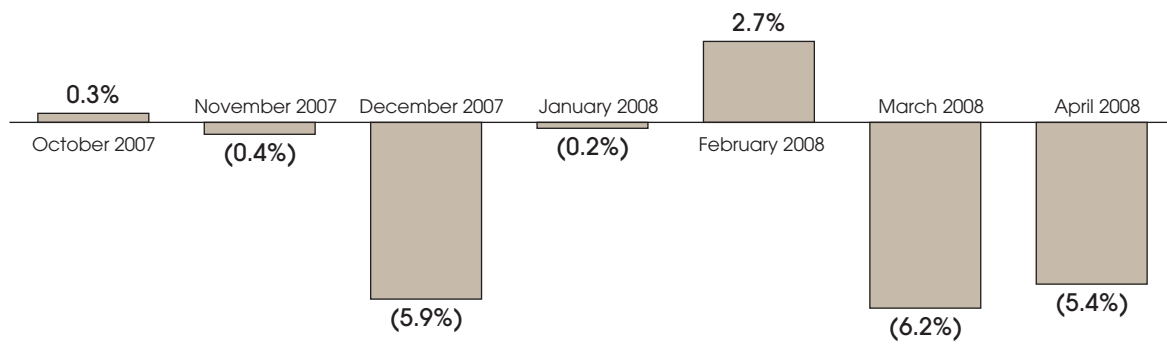
Moody's Preliminary Medians



Source: "Fiscal Year 2007 Not-for-Profit Health Care Medians," *Moody's Investors Service*, August 2008; Deutsche Bank, "Acute Care Hospitals 1Q Wrap-up," May 8, 2008.

Feeling the Pain

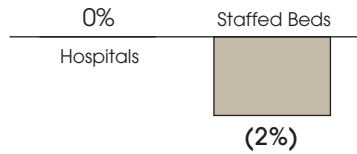
Ambulatory Surgery Volume 2007-2008



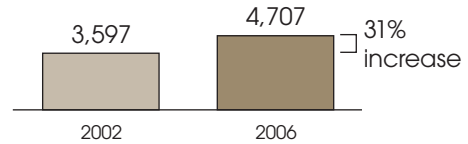
Source: "Fiscal Year 2007 Not-for-Profit Health Care Medians," *Moody's Investors Service*, August 2008; Deutsche Bank, "Acute Care Hospitals 1Q Wrap-up," May 8, 2008.

Payers Pushing Care Toward Lower Cost Settings

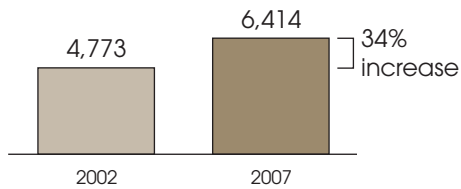
Hospitals and Staffed Beds
Percent Change, 2002-2006



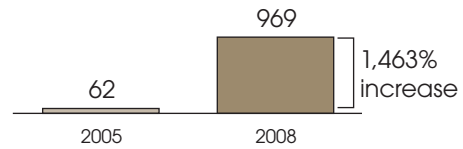
Medicare-Certified ASCs



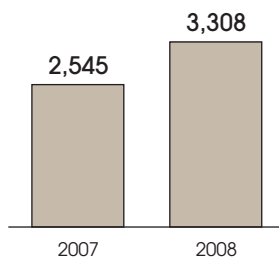
Diagnostic Imaging Centers



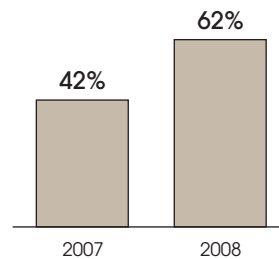
Retail Clinics



Procedures Covered in ASCs
Medicare



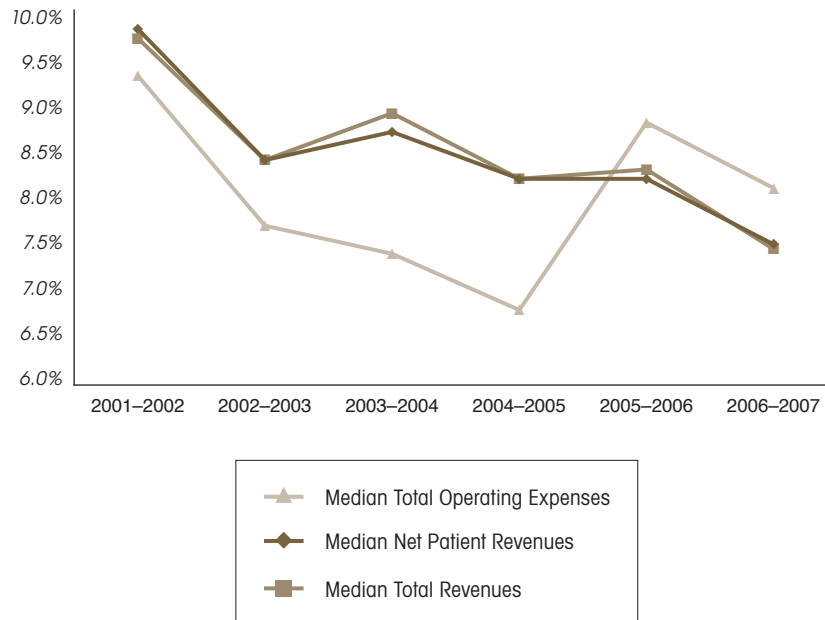
Insurance Coverage for Retail Visits
Percentage of Plans Offering Network Coverage



Source: Federal Register, Department of Health and Human Services, April 30, 2008, available at: <http://edocket.access.gpo.gov/2008/pdf/08-1135.pdf>; Centers for Medicare and Medicaid Services, available at: www.cms.hhs.gov, accessed July 17, 2007; United States Department of Health and Human Services, "Final Report to the Congress and Strategic Implementation Plan Required Under Section 5006 of the Deficit Reduction Act of 2005" August 08, 2006; American Hospital Association; Financial Leadership Council interviews and analysis.. AHA, Trendwatch Chartbook 2008, Table 2.1 and 2.2.; American Association of Ambulatory Surgery Centers, ASC Ownership Survey, February 2004; MedPac 2007 Fact Book.; Merchant Medicine, "Convenience Care in the United States", <http://www.merchantmedicine.com/Home.cfm> (accessed July 7, 2008).; Scott & Company, "Retail Clinics - The Care and Business Model, Players and the Future," presented at a Federal Trade Commission Hearing, April 24th.; Verispan, 2007 Diagnostic Imaging Center Market Report".

Expense Growth Outpacing Revenue Growth

Median Patient Revenue Growth and Expense Growth

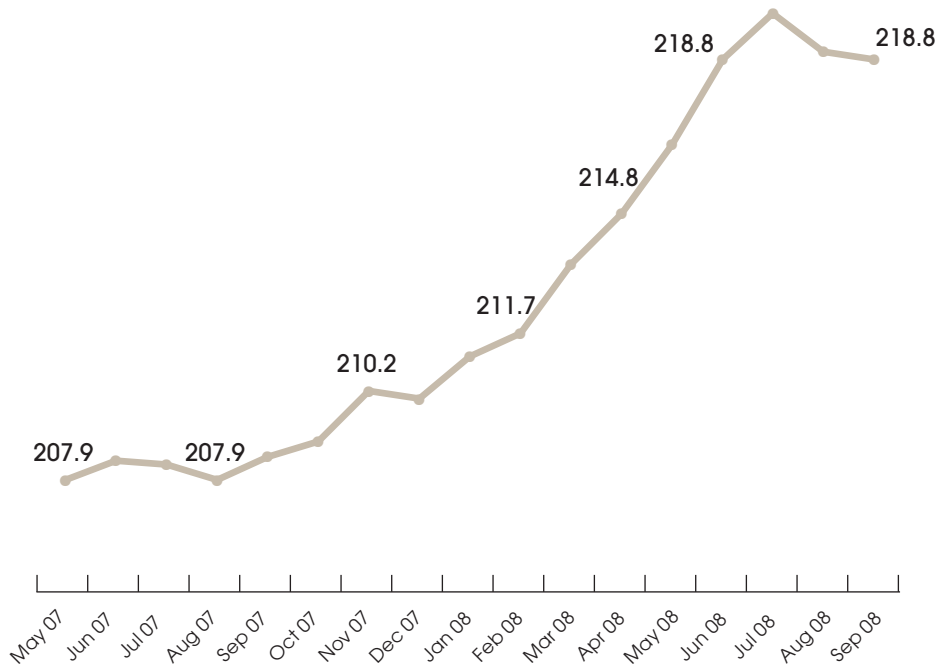


Source: "Not-for-Profit Healthcare Sector: 2008 Industry Outlook," *Moody's Investors Service*, January 2008.

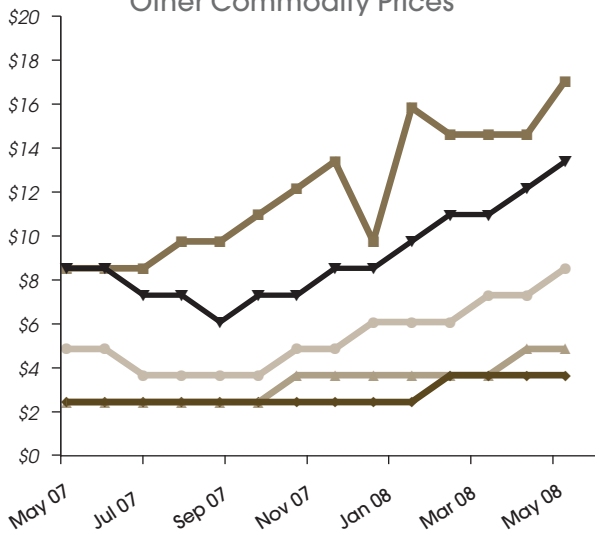
Is Inflation Back or Not?

Consumer Price Index, U.S. City Average

1982-1984=\$100

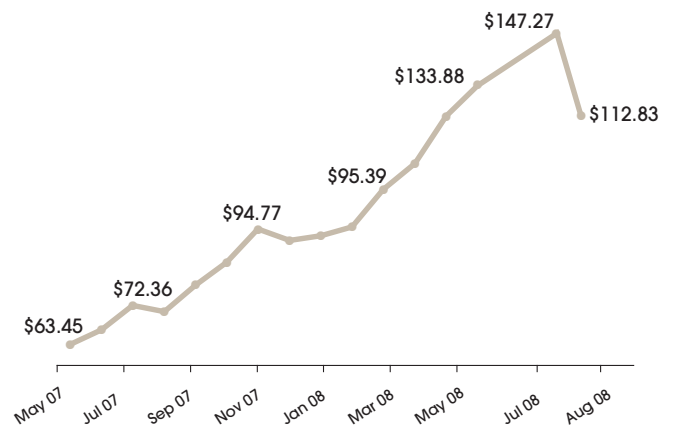


Other Commodity Prices



Crude Oil Prices

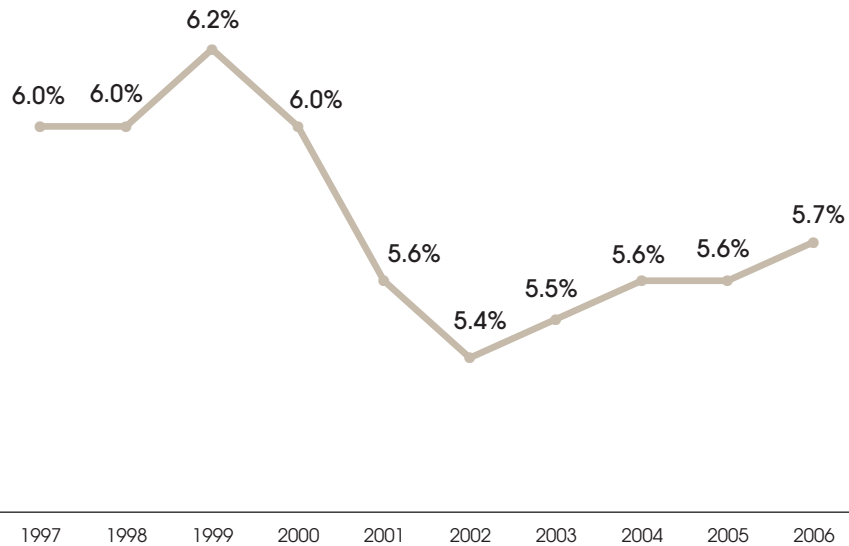
Price per Barrel



Source: "Consumer Price Index," Bureau of Labor Statistics, available at: <http://www.bls.gov>, accessed July 16, 2008; "Commodity Indices," Global Financial Data, available at: <http://www.globalfinancialdata.com>, accessed July 16, 2008.

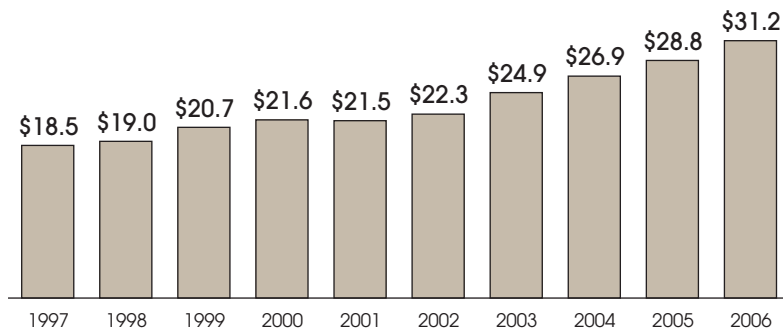
Increased Pressure from Uncompensated Care

Uncompensated Care Costs as a Percentage of Total Hospital Expenses



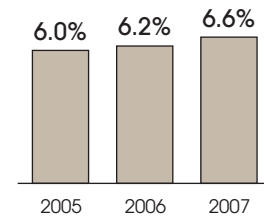
National Uncompensated Care Costs

Billions of Dollars



Hospital Bad Debt

Percentage of Net Patient Revenue

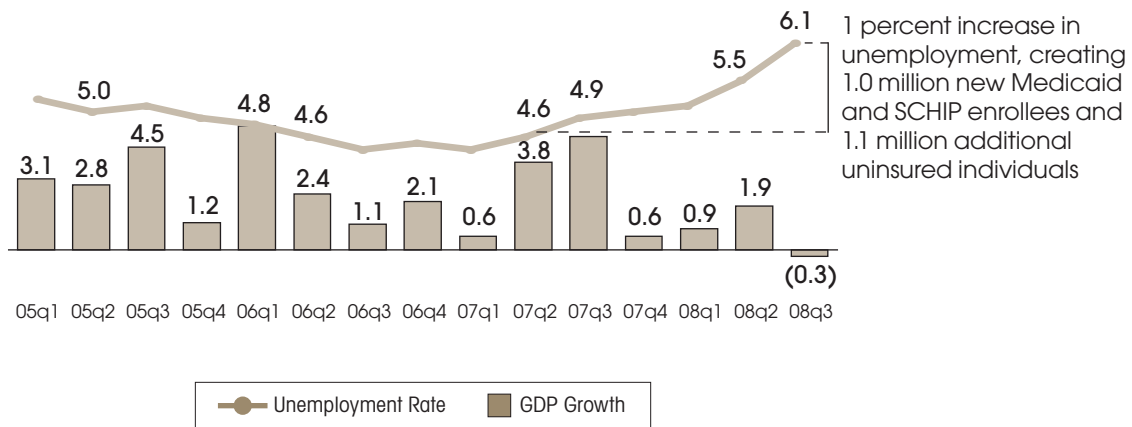


¹ Preliminary median.

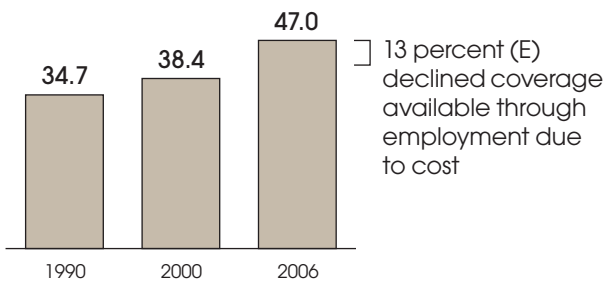
Source: American Hospital Association, "Uncompensated Hospital Care Cost Fact Sheet," October 2007; "Moody's Preliminary FY 2007 Medians for Not-for-Profit Hospitals," *Moody's US Public Finance*, March 2008.

Stagnant Economy Making Matters Worse

Quarterly GDP Growth Rate and Monthly Unemployment Rate
Percentages



Number of Uninsured, U.S.
1990-2006 (millions)

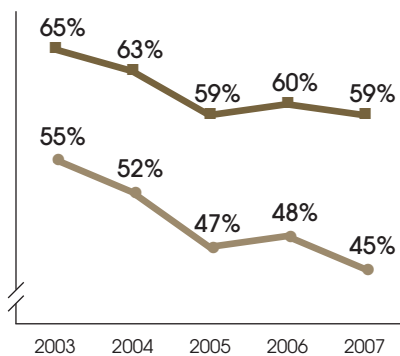


Source: Bureau of Economic Analysis, available at, <http://www.bea.gov/national/index.htm#gdp>, accessed June 8, 2009; Bureau of Labor Statistics, available at, http://data.bls.gov/PDQ/servlet/SurveyOutputServlet?data_tool=latest_numbers&series_id=LNS1400000, accessed June 11, 2008; Kaiser Family Foundation; available at, <http://www.kaiserfamilyfoundation.org/charts/042808.htm>, accessed July 12, 2008; Means, C. "Senators Prioritize Universal HealthCare Coverage," Healthcare Finance News, available at www.healthcarefinancialnews.com; Financial Leadership Council interviews and analysis.

An Intensifying Access Crunch

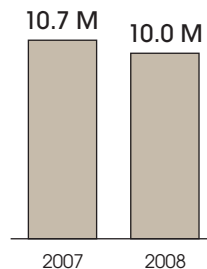
Our Citizens Priced Out of the Market

Percentage of Private Sector
Workers with Employer Health Benefits
2003-2007



■ All Firms with <200 workers
■ Firms with 3-9 workers

Total UnitedHealth
Care Membership



Insurers Not Planning to Concede

Protecting Their Margins

“We continue to protect our margins...we are committed to sustaining a quality business without taking shortsighted pricing positions.”

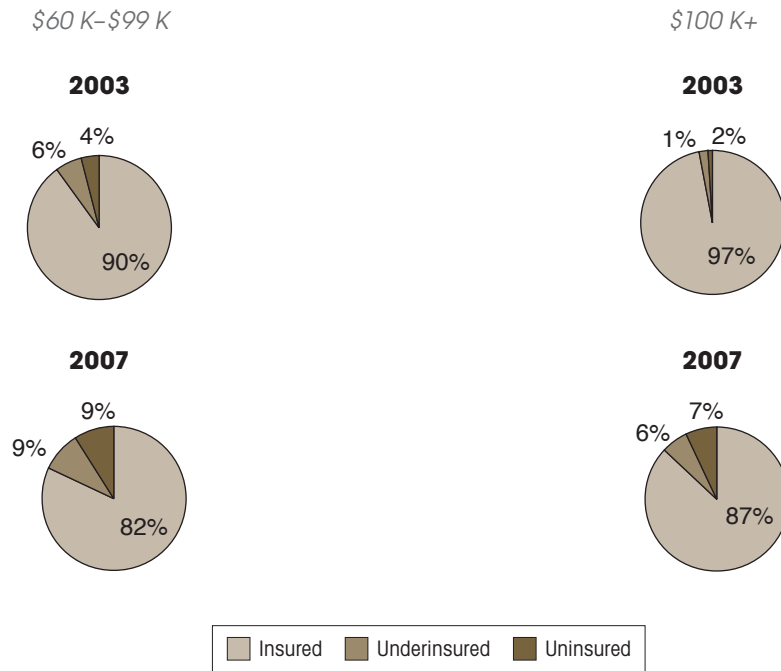
Stephen Hemsley
CEO, UnitedHealth

Source: “Employer Health Benefits Annual Survey: 2007,” The Kaiser Family Foundation and Health Research and Education Trust, September 2007; Schoen C, Collins S, Kriss J, Doty M, “How Many Are Underinsured? Trends Among US Adults,” *Health Affairs*, 2008, 4.

Insurance a Concern Regardless of Income

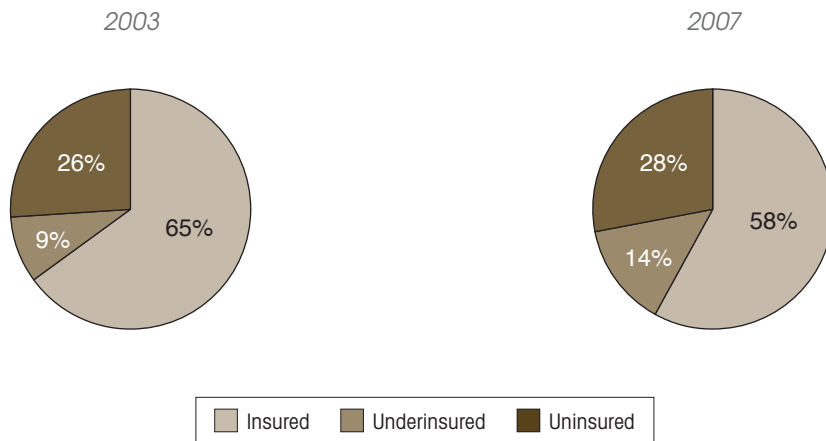
Coverage Concerns for \$60,000+ Households

Insurance Coverage by Income



Uninsured and Underinsured, Swelling over Time

Percentage of Americans



Source: Schoen C, Collins S, Kriss J, Doty M, "How Many Are Underinsured? Trends Among US Adults," *Health Affairs*, 2008: 4.

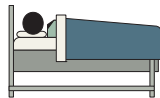
Already Facing Reimbursement Challenges

Medicare



Value-Based Purchasing

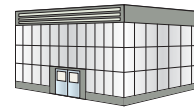
CMS increasing the list of payment reductions for hospital-acquired conditions not present on admission



Recovery Audit Contractors

RAC program deemed to be extremely successful; rollout slated for all 50 states in 2010

Managed Care



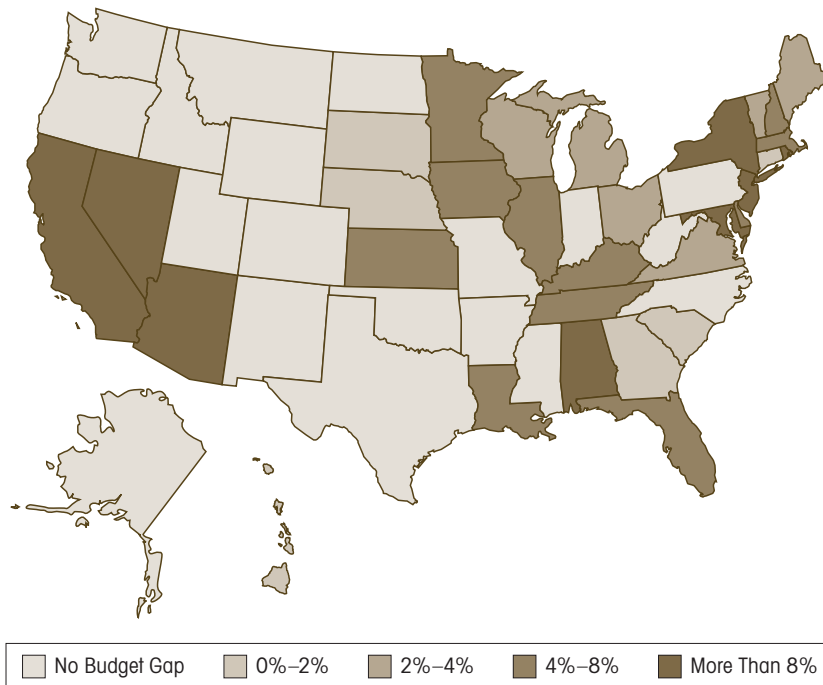
Commercial Payer Pricing

Hospitals reporting markedly tougher negotiations with payers as managed-care profitability leads to steep earnings declines

Problems Closer to Home

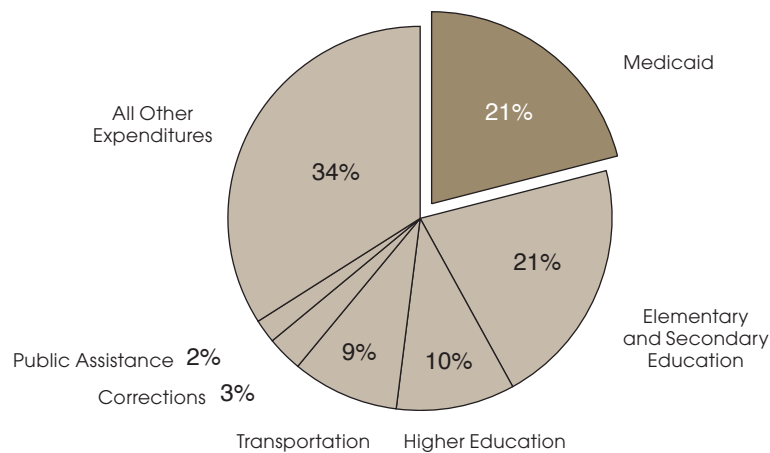
State Revenues Decline

States Facing Budget Gaps, Fiscal Year 2008



Potential Budget Cuts in State Medicaid Funding

Medicaid, Largest Percentage of Aggregate State Budgets

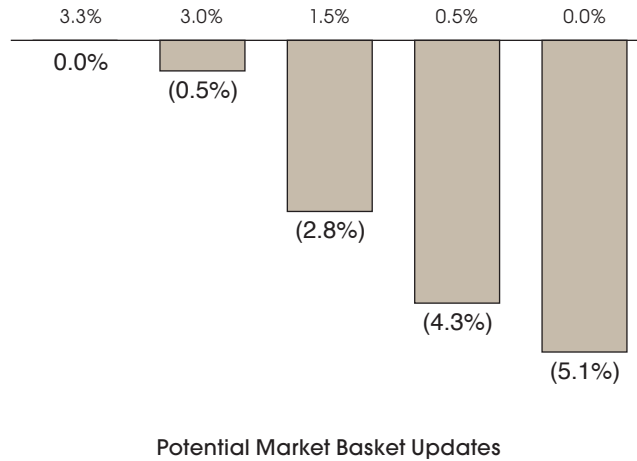


Source: "State Budget Update: June 2008," *National Conference of State Legislatures*, available at: <http://www.ncsl.org>, accessed July 2008.

Still Sweating a Potential BBA Sequel

Scenario Planning for Shortfalls in Medicare Revenue





Percentage Medicare Revenue Shortfall from Different Update Cuts



Source: MEDPAR; Financial Leadership Council interviews and analysis.

Overall Outlook for Operating Performance

Indicators Pointing to Medium-Term Margin Contraction

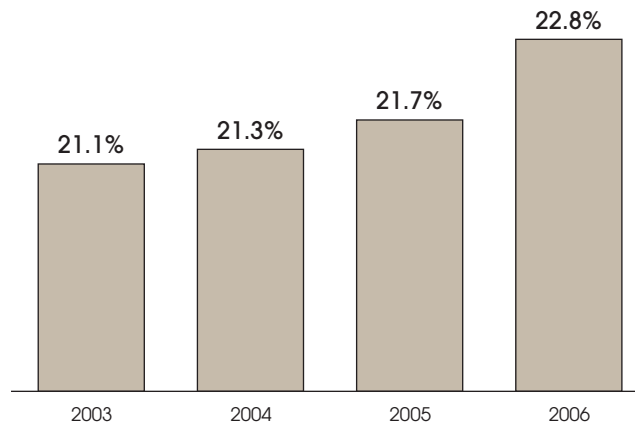
Performance Indicator	Market Vectors	Change in Growth Outlook
Non-operating revenue	Disruptions in the capital markets and overall declines in equities could potentially lead to significant declines in both investment income and philanthropic giving	
Operating revenue	Although volume growth is in line with long-term historical averages, hospitals likely to see not only moderately increased competition in some key service lines, but also reimbursement challenges from public payers	
Operating expenses	Expense growth remains well above inflation, and is likely to be higher than revenue growth in 2008-2009, but remains moderate relative to the past five years	
Bad debt	Economic challenges are likely to generate increases in unemployment, a reduction in covered lives, and a thinning of worker benefits, leading to overall increases in bad debt expense	

The Inevitable Fruits of Our Labor

Supply Costs a Growing Concern

Percentage of Hospital Operating Expenses Attributable to Supplies¹

n=543



- While supply costs continue to steadily increase, it would be disingenuous not to mention the significant impact high-cost devices and clinical technology have had on this figure
- Still, while the production costs of supplies is significant, the impact of our fragmented purchasing and distribution system has also played a role in driving up supply expenditures
- Predictions of future supply costs vary widely, though all are increasing; internal analysis by Research Optimization and Innovation (ROI) predicts that supply costs will surpass labor as a percent of hospital expenditure by 2020

¹ Community hospitals surveyed.

Source: Hahn J, et al., "Rising Costs Sharpen Focus on Supply Chain Management at Not-For-Profit Hospitals," Moody's Investor Services, August 2006; Cardiovascular Roundtable research and analysis.

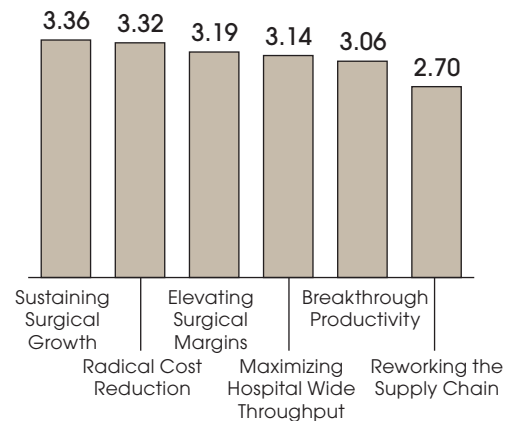
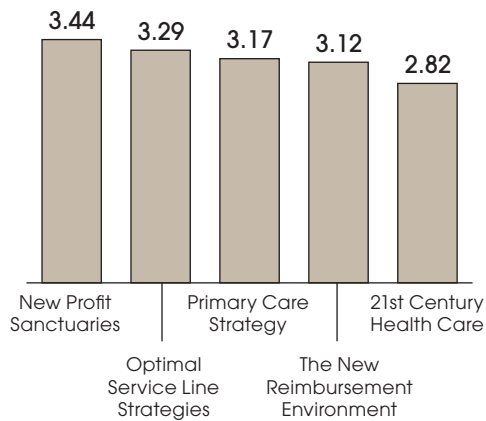
Not Registering on the Executive's Agenda

Supply chain not top strategic concern...

...or prioritized mechanism for cost-savings

Topic GPA, Setting Hospital and System Strategy, 2008

Topic GPA, Creating a More Cost-Effective and Efficient Health System, 2008

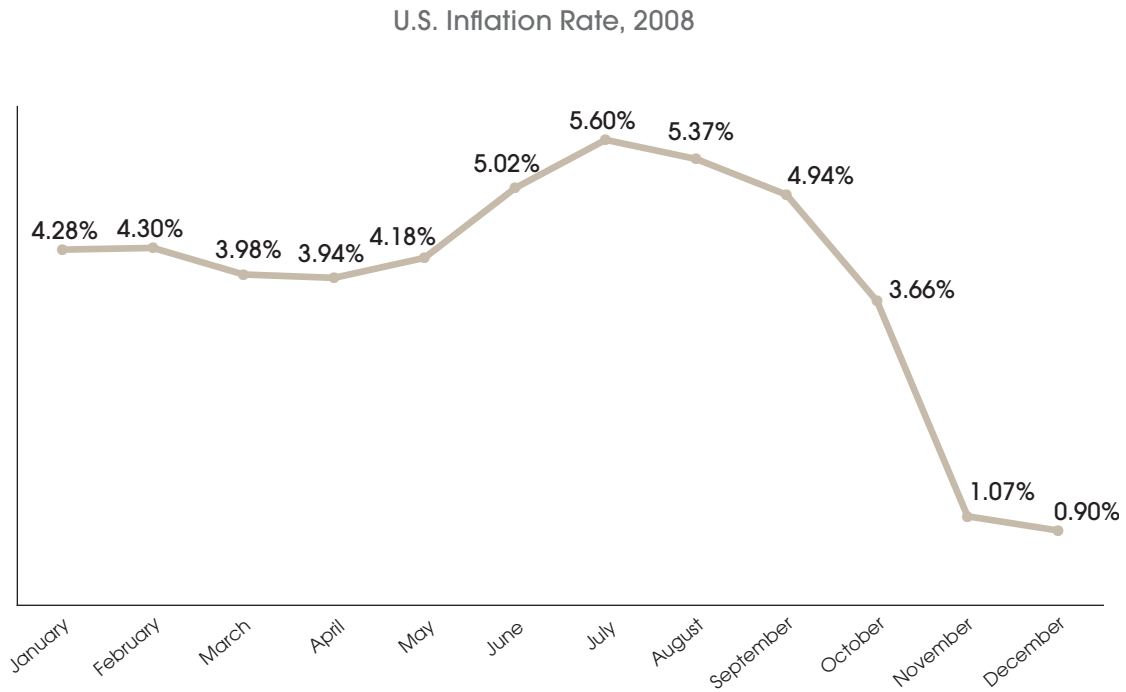


The supply chain has not traditionally been an area of executive focus; while the exact reasons for this are somewhat unclear, the long-standing presence of intermediaries has enabled a continued outsourcing of expertise.

¹ GPA score on scale of 0 through 4.0.

Source: "Understanding the Chief Executive's Agenda," The Advisory Board Company, 2008.

Current Stability Belied by Inflation Uncertainty¹
Commodity Price Level Proportional to Inflation



¹ Some economists theorize that significant increases in government expenditure resulting in an expanded money supply cause overall increases in the price level.

Source: U.S. Bureau of Labor and Statistics; "Rising Medical Supply Costs Squeeze Hospitals," *The Chicago Tribune*, July 22, 2008; Financial Leadership Council interviews and analysis.

Oil's Compounded Effect—A Factor of Production and Means of Delivery

Temporary Moderation In Prices Relief for Commodity Costs

Average Price Per Gallon of Gasoline, 2008



Widespread Use in Commodities

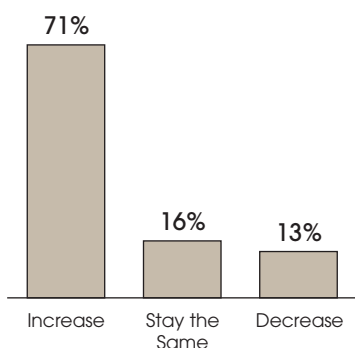
Goods that use oil as an ingredient in their manufacture are particularly hard hit. For example, at Walgreen Co. stores, a box containing 120 store-brand latex gloves is now \$7.99 when it's on sale, while customers could get two boxes for \$9.99 a year ago. Countless other products, including plastic bed pans, blood bags, tubing and syringes also use oil in their production.

Source: U.S. Department of Energy; "Rising Medical Supply Costs Squeeze Hospitals," *Fierce Health Finance*, July 22, 2008; Financial Leadership Council interviews and analysis.

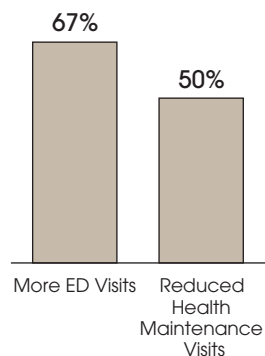
Commodity Demand Largely Insulated from Price

*Steady Inpatient Admissions Yield Level
Demand for Disposable Medical Supplies*

Percentage of CXOs Anticipating
Change in Inpatient Volumes



Percentage of CXOs Anticipating
Change in ED Utilization



Benefiting from the Inelasticity of Demand

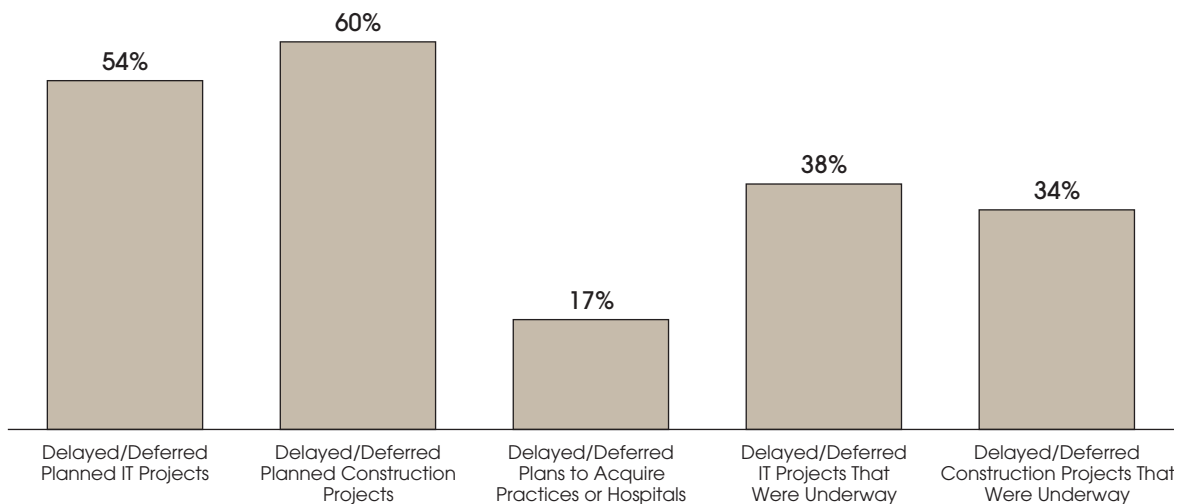
"With the delay in hospital capital spending, we expect softness in our capital equipment sales to continue in the second half of the fiscal year. It is important to note that more than 40% of our clinical and medical products business comes from the sale of disposable products and remains stable."

Dave Shlotterbeck
CEO, Clinical and Medical Products, Cardinal Health

Source: Cardinal Health Press Release, January 8, 2009; "Results from the Economic Impact Survey," *Nobilis Health Innovation*, January 2009; "Treatment Plan: Hospitals Respond to the Economic Crisis," *CSC Consulting*, November 2008; Financial Leadership Council interviews and analysis.

All Signs Point to Declining Demand

Anticipated Changes in Capital Expenditures
Percentage of CFOs Responding in the Affirmative



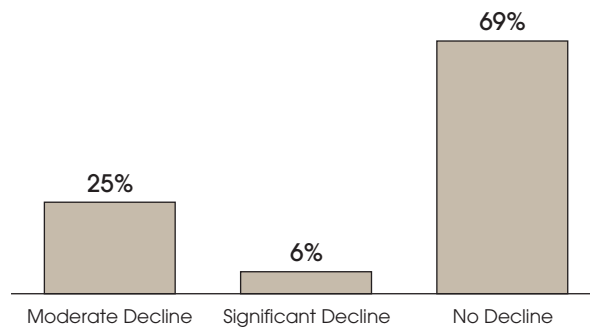
Source: "Finance Industry Survey", *Health Leaders Media*, 2009; "Results from the Economic Impact Survey", *Nobilis Health Innovation*, January 2009; Financial Leadership Council interviews and analysis.

Anticipating a Decline in Elective Procedures

Patients Likely to Forgo Non-Essential Services

Decline in Elective Procedures

Percentage of Hospitals Reporting a Decline in Elective Procedures



Source: "Finance Industry Survey", *Health Leaders Media*, 2009; "Results from the Economic Impact Survey", *Nobilis Health Innovation*, January 2009; "Report on the Economic Crisis," Economic Impact on Hospitals; Financial Leadership Council interviews and analysis.

Emerging Indicators of Flattening Device Sales

Evidence from the Equity Markets

Victim to Moderate Demand Elasticity

"Given these constraints, which could last through most of 2009, we favor companies whose products are lower tech and in constant demand, regardless of the economy, such as point-of-care diagnostics, minimally invasive surgical instruments and general care products such as syringes, catheters, sutures, blood products, etc... higher tech devices...should experience flat to modest growth."

John Putnam
 "2009 Outlook for Medical Device Stocks"
 Seeking Alpha, January 16, 2009

Medtronic Stock Price



Stryker Stock Price



Sales Intertwined with Elective Procedure Volume

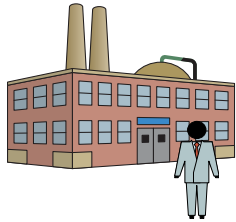
"I don't foresee a massive contraction in sales, but likely sales growth will slow considerably from what Stryker has achieved during the past 3-5 years... Elective surgeries, in my opinion, are something that I anticipate people putting off for 6-18 months and this has the potential to negatively impact smaller medical device/supply companies over the interim."

Brad Ferris
 "Steering Clear of Stryker"
 Seeking Alpha, January 20, 2009

Source: "Steering Clear of Stryker" *Seeking Alpha*, January 20, 2009; "2009 Outlook for Medical Device Stocks." *Seeking Alpha*, January 26, 2009; Financial Leadership Council Interviews and analysis.

Whither Price?

Competing Effects Introduce Uncertainty into Price Behavior



Vendors keen to compensate for declining volumes with higher prices

Highly competitive product category



Price ineffective lever to increase revenue due to potential for product substitution

Limited competition

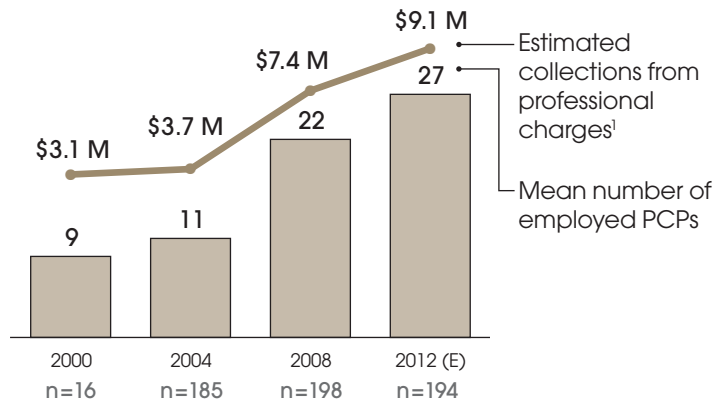


Price hikes can be used to compensate for falling demand, but may exacerbate relationships with increasingly cash strapped hospitals

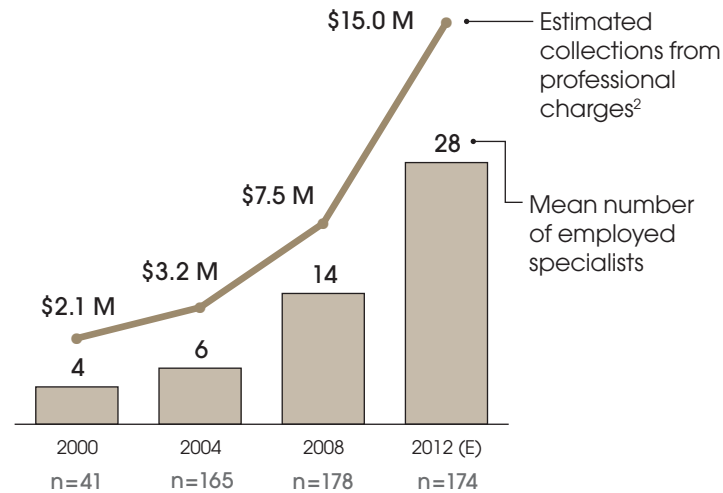
Hospitals Facing “Moment of Truth” on Physician Alignment

Surge in Employment Presents Opportunity for Enfranchisement in Product Selection

Mean Number of Employed PCPs and Estimated Professional Revenue Contribution by Hospital



Mean Number of Employed Specialists and Estimated Professional Revenue Contribution by Hospital



¹ Mean collections from professional charges (technical component/nonphysician providers excluded) for hospital-owned physicians practicing family practice (w/o OB), general internal medicine, and general pediatrics multiplied by mean number of employed PCPs.

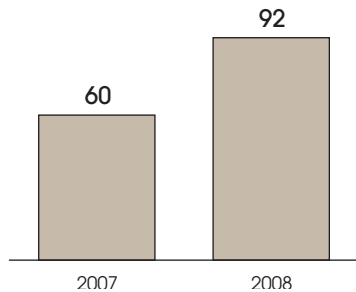
² Mean collections from professional charges (technical component/nonphysician providers excluded) for hospital-owned physicians practicing anesthesiology, invasive and noninvasive cardiology, dermatology, gastroenterology, hematology/oncology, neurology, general OB/GYN, orthopedic surgery, general pediatrics, pulmonary medicine, diagnostic invasive and noninvasive radiology, and urology multiplied by mean number of employed specialists.

Source: Medical Group Management Association (MGMA), “Physician Compensation and Production Survey,” Englewood, CO: MGMA, 2007; Advisory Board 2008 Survey on Physician Employment Trends; Financial Leadership Council interviews and analysis.

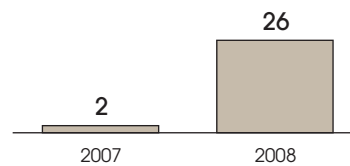
Increasing Utilization of Ancillary GPO Services

Emerging Evidence in Capital Asset Purchases

Hospitals Participating in Novation Imaging Equipment Buying Event



Novation Member Hospitals Utilizing Financing Options for Capital Purchases



Serving a Decision Support Function

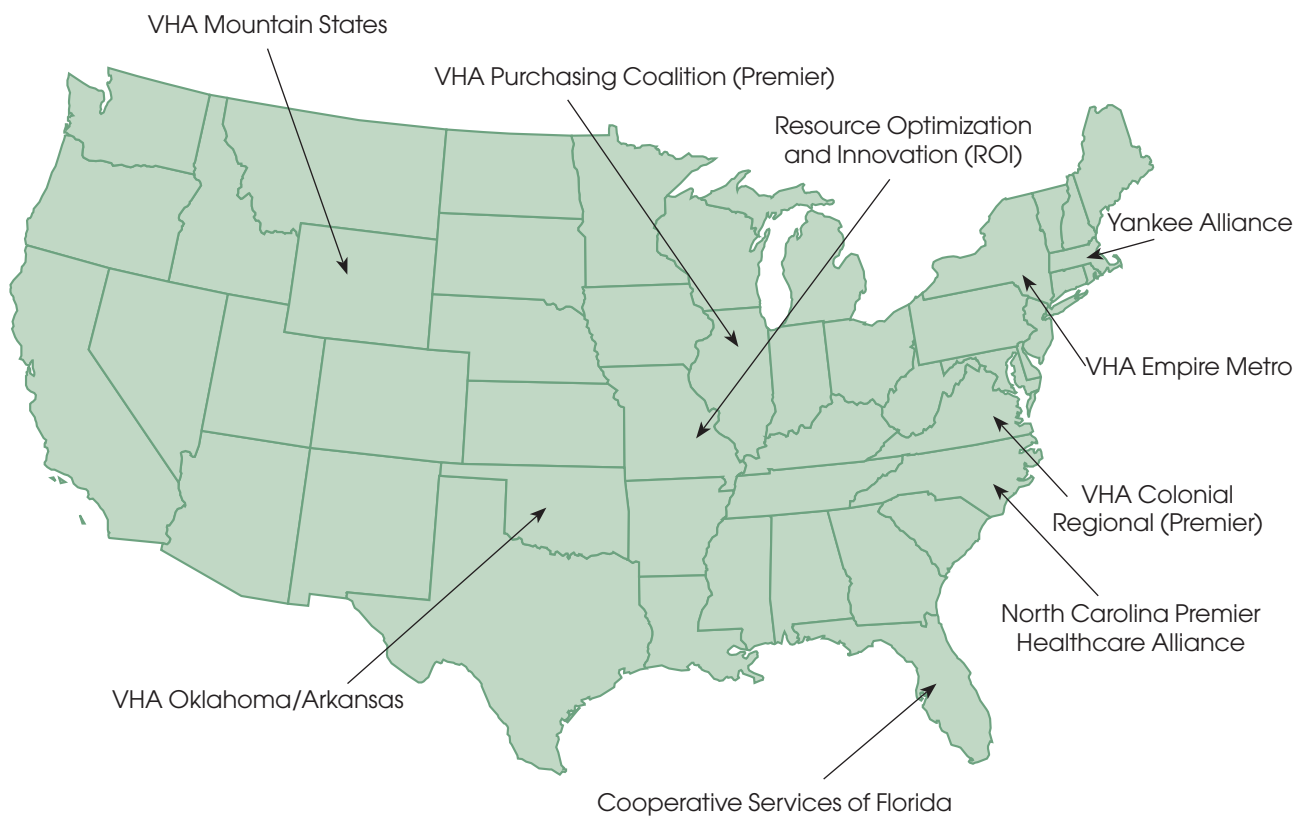
"Hospitals are relying more and more on their GPOs to research the market and help make decisions about capital purchases, because they're more challenged in these economic times to have the money to send out employees to research and look at the equipment."

Eric Shrader
Senior Director, Program Services
Novation

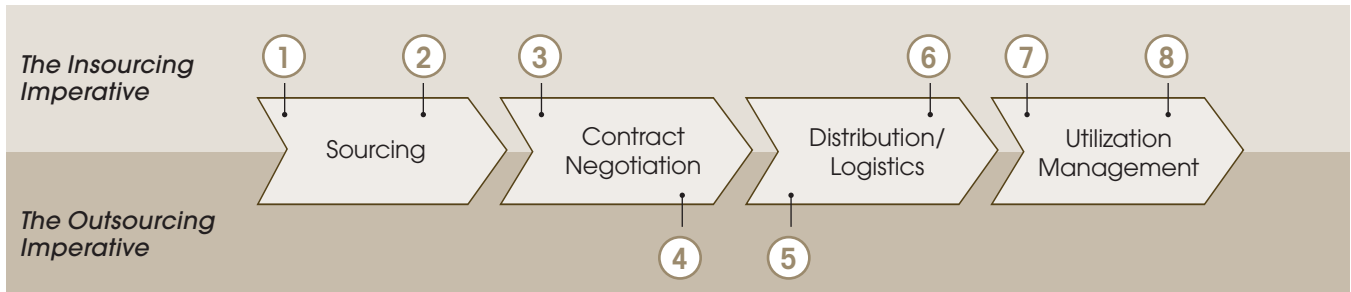
Source: "GPO Guidance Playing Bigger Role in Tech Purchases," *Modern Healthcare*, December 8, 2008; Financial Leadership Council interviews and analysis.

Pursuing Alternate Paths to Lowest Price

*Recent Proliferation of Regional
GPOs and Consolidated Service Centers*



Imperatives for Optimizing Supply Chain Intermediaries



- ① Dedicated value analysis team composed of clinicians coordinates sourcing and product comparison discussions with stakeholder clinicians, building trust among staff through consecutive product selection cycles
- ② Sourcing and consensus building should never be outsourced; meaningful clinician commitment to product selection decisions driven by trust in sourcing team that can only be built through long-standing working relationships not offered by temporary consulting engagements
- ③ High-cost, high-preference items remain a local market, limiting benefit of GPO partner; all institutions should dedicate staff members with negotiating experience on value analysis team to these items so clinician consensus can be effectively leveraged during negotiations
- ④ GPO value proposition still relevant for commodity items for almost all institutions; all institutions should dedicate at least one FTE to monitor GPO contracts and identify cost-savings opportunities for utilization commitments
- ⑤ Commercial distribution financially beneficial for majority of institutions for transporting products from vendors to the hospital loading dock; distribution costs for products bought off-contract should be closely monitored and analyzed for cost reduction opportunities
- ⑥ Internal distribution (loading dock to patient bedside) should be performed exclusively by employees familiar with hospital operations as poorly run internal distribution and inventory management can impact clinical quality and patient safety
- ⑦ Value analysis team entirely responsible for monitoring and reporting on utilization; ROi's approach of developing corrective action plans in concert with stakeholder clinicians and closely monitoring subsequent compliance recommended for all institutions
- ⑧ Utilization management requires trust between staff monitoring compliance and clinicians; this process should never be outsourced

- Regardless of whether a function is insourced or outsourced, supply chain managers bear responsibility to ensure that certain imperatives are fulfilled at each stage in the supply chain
- The decision whether to outsource or insource depends primarily on inherent institutional characteristics and secondarily on executive support for substantial supply chain reform
- Future research efforts from the Financial Leadership Council will match these imperatives to operational best practice, adjusted for institution size, alignment and infrastructure



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