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The New Performance Standard

Responding to the Reimbursement and Demand Changes Reshaping Health System Economics

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Road Map

1 **Health Care on a Budget**

2 Four Forces Shaping Future Margins

3 Running on Medicare Margins

Meet Your Newest Medicare Beneficiaries

Happy 65th Birthday!

Donald Trump

Cher

Sylvester Stallone

Liza Minnelli

Dolly Parton

Pat Sajak

Source: Health Care Advisory Board interviews and analysis.

Universal Access: The Boomers' American Dream

Baby Boomers Redefining American Industries

Transformative at All Stages of Life

"Baby boomers didn't just eat food; they transformed the snack, restaurant and supermarket industries. They didn't just wear clothes; they transformed the fashion industry. They didn't just buy cars; they transformed the auto industry. They didn't just date; they transformed sex roles and practices. They didn't just go to work; they transformed the workplace. They didn't just get married; they transformed relationships and the institution of the family. They didn't just borrow money; they transformed the debt market. They didn't just go to the doctor; they transformed health care. They didn't just use computers; they transformed technology. They didn't just invest in stocks; they transformed the investment marketplace."

Ken Dychtwald
Gerontologist

From Opportunity to Entitlement?

1960s

Education

- Expansion of public university systems

1970s

Employment

- Greater integration of women into workforce
- Rise of part-time employment

1980s

Homeownership

- Mortgage interest deductions
- Homeowner subsidies

2010s

Health Care

- *How will Medicare balance entitlement with solvency?*
- *Will choice, access be preserved?*

Zinkewicz P, "Baby Boomers 'boom' their way toward golden years," available at: http://www.roughnotes.com/rnmagazine/2005/july05/07p106.htm, accessed September 23, 2011; Health Care Advisory Board interviews and analysis.

An Industry Preparing For Fundamental Change

Coverage Expansion, Payment Reform Reshaping Health Care

Timeline of Health Reform Developments

IMAGE CREDIT: SHUTTERSTOCK.

- Patient Protection and Affordable Care Act (PPACA) passes House of Representatives
- VA Attorney General files first lawsuit against individual mandate
- HHS releases Meaningful Use regulations
- CMS releases proposed rule for Medicare Shared Savings Program
- President Obama repeals 1099 reporting requirement from PPACA
- HHS releases Medicare Value-Based Purchasing Program final rule
- CMS issues provisions to Hospital Readmissions Reduction Program

Source: Health Care Advisory Board interviews and analysis.

Getting Paid Less to Do Less

New Payment Models Calling Old Imperatives Into Question

Accountable Payment Models

Performance Risk	Utilization Risk

Cost of Care | Quality of Care | Volume of Care

Bundled Pricing

- Bundled Payments for Care Improvement program
- Commercial bundled contracts

Pay-for-Performance

- Value-Based Purchasing
- Readmissions penalties
- Quality-based commercial contracts

Shared Savings

- Medicare Shared Savings Program
- Pioneer ACO Program
- Commercial ACO contracts

Source: Health Care Advisory Board interviews and analysis.

Health Care's Identity Crisis

Health Systems Defining an Expanded Value Proposition

Three Strategic Identities

System as Preferred Network

Redesigning benefit plans to create a closed network

System as Service Provider

Marketing value-added services to capture new opportunities

System as Population Health Manager

Contracting directly to share actuarial risk

Source: Health Care Advisory Board interviews and analysis.

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Four Forces Shaping Future Margins

Financial, Clinical Profiles Shifting Dramatically

Decelerating Price Growth

- Federal, state budget pressures constraining public payer price growth
- Payments subject to quality, cost-based risks
- Commercial cost shifting stretched to the limit

Continuing Cost Pressure

- No sign of slower cost growth ahead
- Drivers of new cost growth largely non-accretive

Shifting Payer Mix

- Baby Boomers entering Medicare rolls
- Coverage expansion boosting Medicaid eligibility
- Most demand growth over the next decade comes from publicly insured patients

Deteriorating Case Mix

- Medical demand from aging population threatens to crowd out profitable procedures
- Incidence of chronic disease, multiple comorbidities rising

Source: Health Care Advisory Board interviews and analysis.

New Baseline Already Challenging

Affordable Care Act Significantly Reduces Public Payments

$110 B

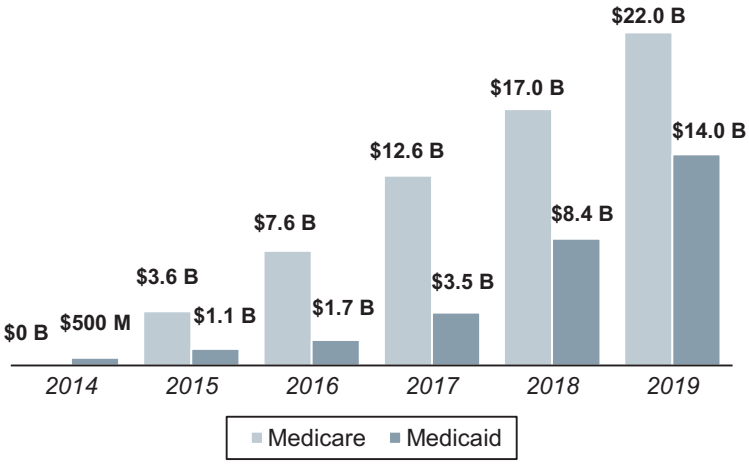
Cuts to Medicare Fee-For-Service rates

$36 B

Cuts to Disproportionate Share Hospital (DSH) payments

Impact of Affordable Care Act on Provider Rates

Cumulative Federal Revenue from Decreased Medicare and Medicaid DSH Payments

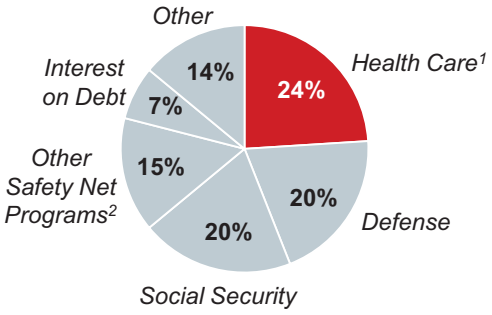


Source: US House of Representatives, "Amendment in the Nature of a Substitute to H.R. 4872, as Reported," accessed March 18, 2010; US Senate, The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act," accessed December 24, 2009; Health Care Advisory Board interviews and analysis.

Health Care Likely On the Chopping Block (Again)

But Little Agreement on How

Distribution of Spending in 2011 Budget Proposal



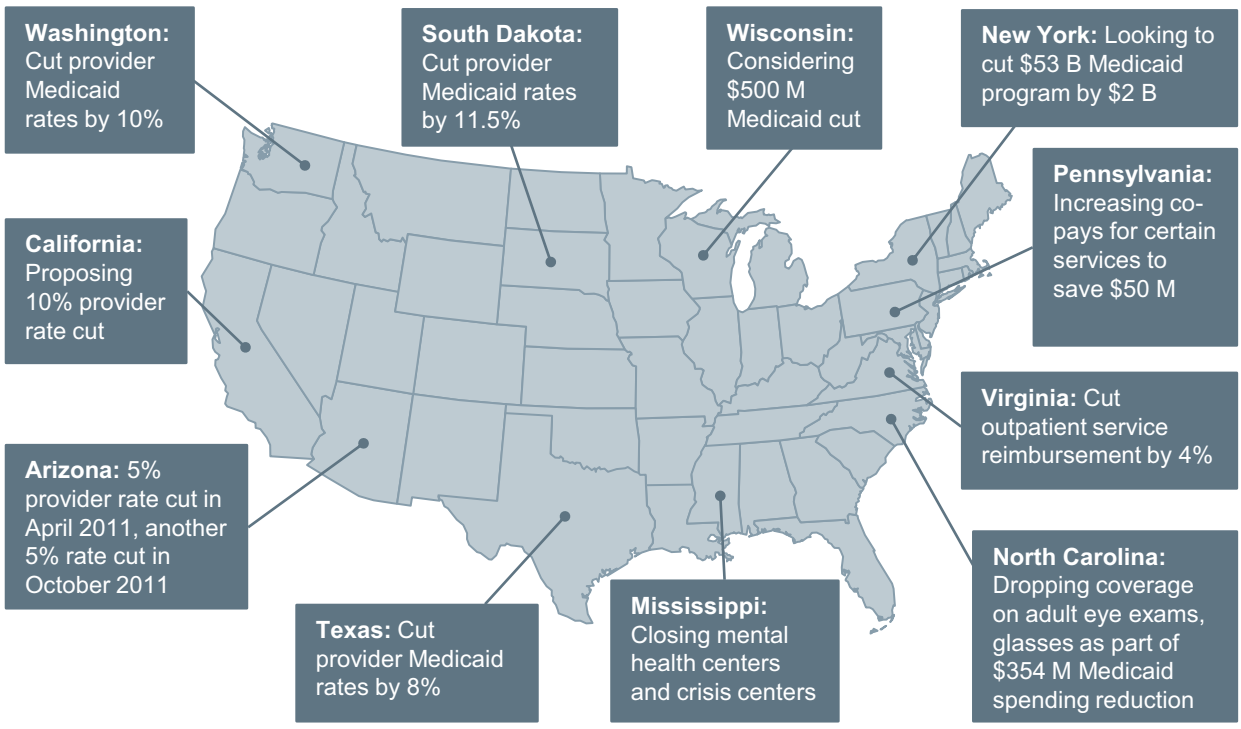
Possible Approaches to Reducing Health Care Spending

1) Includes spending for Medicare, Medicaid, CHIP, substance abuse and mental health services, National Institutes of Health, and Food and Drug Administration.
2) Includes spending for unemployment insurance programs, food stamps, military and federal civilian employee retirement and disability, and Temporary Assistance for Needy Families (TANF) program.

Source: New York Times, available at: http://www.nytimes.com/interactive/2010/02/01/us/budget.html, accessed September 17, 2011; Health Care Advisory Board interviews and analysis.

Medicaid Payment Cuts Across the Country

Budget Shortfalls, Declining Federal Funding Common Concerns



Source: Health Care Advisory Board interviews and analysis.

Future Payments Depend on Performance

Upside Opportunity Available, But Downside Risk Prevails

Prominent Pay-for-Performance Programs

Payment Driver	Description	Payment Reduction Timeline
Value-Based Purchasing Program	• Mandatory pay-for-performance program • Percentage of hospital inpatient payments withheld, earned back based on quality performance	• Withholds begin at 1% in 2013, grow to 2% by 2017
Hospital Readmissions Reduction Program	• Hospitals with greater than expected readmission rate subject to financial penalty • Performance based on 30-day readmission metrics for three conditions in 2013, expanding in 2015 to include four others	• Penalties capped at 1% of total DRG[1] payments in 2013, 2% in 2014, and not to exceed 3% in 2015 and beyond
Hospital-Acquired Condition (HAC) Penalty	• Hospitals in top quartile of national, risk-adjusted HAC rates subject to financial penalty	• 1% penalty deducted from DRG payment starting in 2015

1) Diagnosis-Related Group.

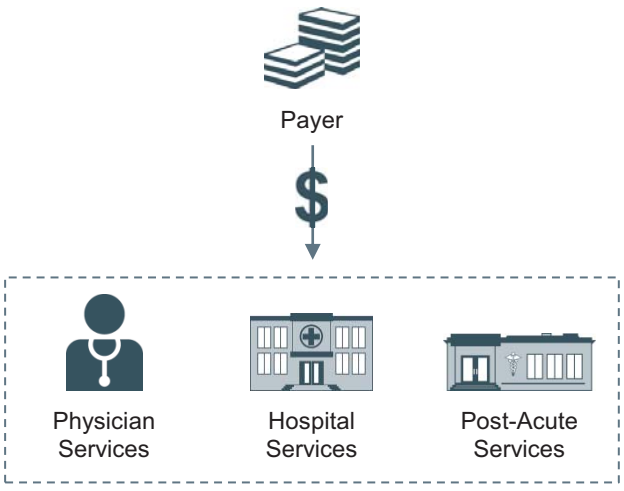
Source: US Senate, "The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act," February 19, 2010; Health Care Advisory Board interviews and analysis.

Redefining the Acute Care Episode

Bundled Payments Drive Delivery System Integration

Bundled Payment Framework

Lump Sum Payments Drive Integration Through Shared Accountability



Program in Brief: Medicare's Bundled Payments for Care Improvement

- Program seeking voluntary participation in four bundled payment models
- Models 1-3 provide retrospective reimbursement; Models 2 and 3 include post-episode reconciliation; Model 4 offers single prospective payment
- Acute care hospitals, physician groups, health systems eligible for all models; post-acute facilities may participate without hospitals in Model 3
- Physicians eligible for gainsharing bonuses up to 50 percent of traditional fee schedule
- For all models, applicants must propose quality measures, which CMS will use to develop set of standardized metrics

Source: Centers for Medicare and Medicaid Services; Health Care Advisory Board interviews and analysis.

Shared Savings Options Taking Shape

Choices Cater To Varying Appetites For Risk

Medicare Shared Savings Program

- First ACO contracts to begin April 2012; contracts to last minimum of three years
- Final rule issued October 20, 2011
  - Physician groups and hospitals eligible to participate, but primary care physicians must be included in any ACO group
  - Participating ACOs must serve at least 5,000 Medicare beneficiaries
  - Bonus potential to depend on Medicare cost savings, quality metrics
  - Two options available:
    - No downside risk, lower bonus payment
    - Downside risk, higher bonus payment

Pioneer ACO Model

- Accelerated pathway to ACO formation designed for organizations able to assume utilization risk immediately
- Participating providers must serve at least 15,000 Medicare beneficiaries
- Offers higher risk, higher reward model; providers can obtain rewards ranging from 50-75% of Medicare savings achieved
- Providers can choose retrospective or prospective patient assignment methodology
- Quality measures to match those in final rule for Medicare Shared Savings Program
- Deadline to apply was in August 2011; CMS expected to select Pioneer ACOs by January 2012

Source: Health Care Advisory Board interviews and analysis.

CMS Re-Calibrates SSP in Response to Providers

Changes in Final Rule Increase Attractiveness of SSP Participation

Critical Improvements Included in Final Rule

- Greater reward, lower-risk financials
- Simplified quality requirements
- Decreased barriers to entry

Broadening Participation Options

"Today's menu of ACO options allows America's hospitals to create new models of accountable care organizations on which the transformation of health care delivery is so dependent."

Richard Umbdenstock, President and CEO
American Hospital Association

A More Attractive Financial Model

"We are very pleased that this rule allows ACOs to share in every dollar of cost savings and includes an option that limits financial risk, which is important for many physician practices."

Peter Carmel, MD, President
American Medical Association

Source: American Hospital Association, "Statement on Final ACO Rule," available at: http://www.aha.org/presscenter/pressrel/2011/111020-st-acorule.pdf, accessed October 24, 2011; Herman B, "10 Healthcare Leaders Share Thoughts on Final ACO Rule," Becker's Hospital Review, available at: http://www.beckershospitalreview.com/hospital-physician-relationships/10-healthcare-leaders-share-thoughts-on-final-aco-rule.html, accessed October 24, 2011; Health Care Advisory Board interviews and analysis.

Rule Update Warrants a Second Look

Program Changes and Implications

Initial Concern	Change in Rule	Implications
Insufficient capital to fund transition	• Upfront payments to capitalize physician-only ACOs, others • Meaningful use no longer a prerequisite for participation	• Smaller providers face lower financial hurdles to participation • Advance Payment ACO Model smoothes cash flow concerns
Resistance from key stakeholders	• Meaningful use no longer a prerequisite for participation • Elimination of mandatory anti-trust review • Lessened quality reporting, performance burden	• Relaxed requirements attractive to physician stakeholders • With structural hurdles lowered, provider focus can shift to financial, strategic considerations
Unfavorable risk/reward calibration	• First-dollar savings, elimination of downside risk from Track 1 • Benchmark calculation more sensitive to patient mix	• Creation of relative "shallow end" minimizes risk of slower transition • Still, program designed for organizations already working to manage utilization risk
Patient assignment method	• Retrospective attribution supplemented with prospective patient information	• ACOs benefit from ongoing insight into panel composition • ACO panel still comprises only patients served by ACO
Overwhelming quality performance, reporting burden	• Fewer quality measures • Slower transition to pay-for-performance • Technical changes to bonus calculation method	• Less burdensome reporting requirements • Underperformance on any given measure less harmful
Onerous program design prescriptions	• Elimination of mandatory anti-trust review • Relaxed governance prescriptions, leadership requirements • Extended waivers for Stark, anti-kickback	• For ACOs confident in anti-trust compliance, formal review hurdle eliminated • Clarity around permissible activities with ACO participants, professionals

Source: Health Care Advisory Board interviews and analysis.

Reality Check: Success Remains a Heavy Lift

Key Determinants of Successful SSP Participation

Manage Utilization Risk

- Drive care to ambulatory medical network
- Reduce preventable acute care episodes

Maintain Exceptional Quality

- Meet high standards for care quality across multiple dimensions
- Demonstrate care coordination across sites of care, over time

Operate Under Elevated Transparency

- Provide all necessary documentation, data to CMS
- Manage communication to key stakeholders

Source: Health Care Advisory Board interviews and analysis.

Implications for Organizations Considering the SSP

Eliminating Downside Risk from Track 1 Creates a Relative "Shallow End" for Prospective ACOs

- The elimination of any formal downside risk and the promise of first-dollar savings mean the one-sided model is now a much more attractive option for wary ACO prospects hoping to remain in the shallow end of the pool for the time being.

With Greater Risk in Track 2 Comes Greater (and Greater) Reward

- The higher basic sharing rate (60%, as compared to 50% in the one-sided model) along with a fixed MSR (2%, compared to a sliding scale in the one-sided model) offers higher upside to successful ACOs. Of course, that potential reward comes with the risk of having to repay losses, so those considering the two-sided model will need to feel very prepared to perform well from the beginning of the program.

No Changes to the Criteria for Success as a Medicare ACO

- Managing utilization risk, delivering exceptional quality and operating under intense transparency from day one are all critical factors for succeeding in the Shared Savings Program. Although the structural barriers are far lower, the fundamental strategic imperative to develop an integrated care enterprise capable of managing population health across the care continuum remains the baseline for success as an ACO.

SSP Provides New Potential Upside—with Low-Risk—for Additional Return on Investments

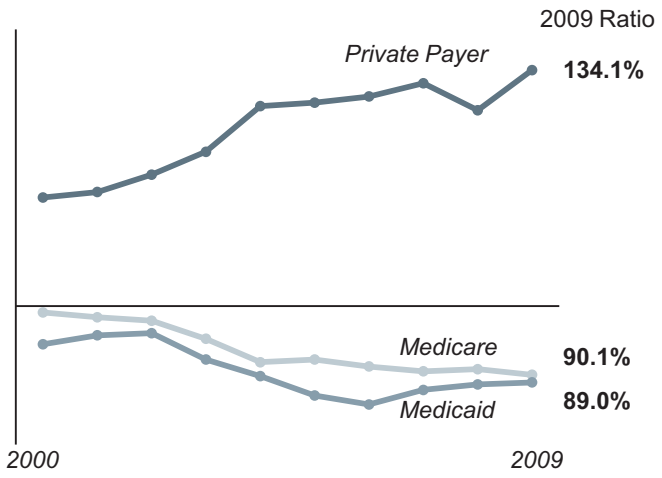
- Whether in anticipation of accountable payment, in preparation for the challenges of an aging and chronically ill patient population, or simply for reasons of clinical mission, many providers are building care management infrastructure that can be leveraged to reduce the total cost of care. The Shared Savings Program, especially the low-risk one-sided model, is a chance to convert a substantial portion of a provider's book of business to a payment model that rewards, rather than penalizes, this clinical improvement.

Source: Health Care Advisory Board interviews and analysis.

Cost-Shifting Possible, But For How Long?

Commercial Subsidy Under Ever-Greater Pressure

Payment-to-Cost Ratios, by Payer[1]



Running on Empty

"If we could squeeze more out of our payers, we would. But I don't think there's much left to squeeze."

CEO

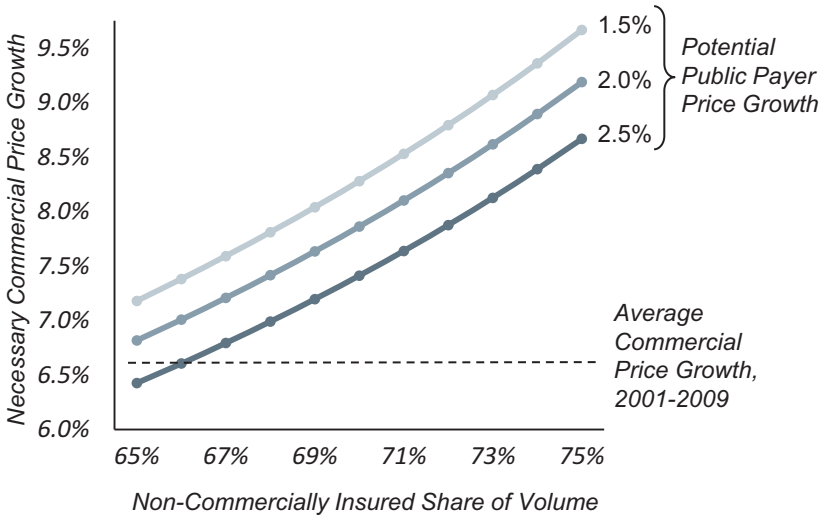
1) Includes Medicaid Disproportionate Share Hospital payments.

Source: American Hospital Association Chartbook, available at: http://www.aha.org/aha/research-and-trends/chartbook/index.html, accessed April 26, 2011; Health Care Advisory Board interviews and analysis.

Burden on Commercial Pricing Unsustainable

Required Commercial Price Growth Unrealistic

Commercial Price Growth Needed to Maintain 2.5% Operating Margin



6-8%

Historical annual growth in commercial payer prices over last decade

3.5%

Advisory Board estimate of annualized commercial price growth, 2011-2021

Source: American Hospital Association Chartbook, available at: http://www.aha.org/aha/research-and-trends/chartbook/index.html, accessed April 26, 2011; Health Care Advisory Board interviews and analysis.

Deceleration in Private Payer Pricing Likely

Pressures on Commercial Pricing

1. Regulatory scrutiny of premium increases intensifying
2. Exchange-based coverage diluting average commercial price
3. Employers increasingly willing to restrict choice
4. Quality performance risk increasingly prevalent
5. New payment models demanding utilization management

Source: Health Care Advisory Board interviews and analysis.

Force #1: Decelerating Price Growth

Key Takeaways

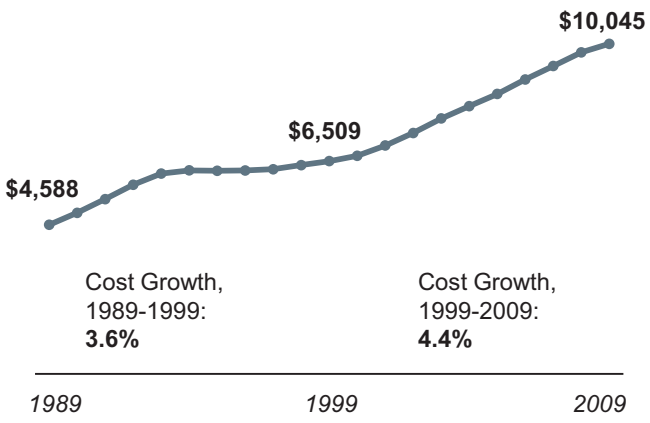
1. Budget constraints on federal, state governments raise prospects of substantial cuts to Medicare, Medicaid pricing
2. Commercial pricing subject to multiple downward pressures; projected growth insufficient to maintain traditional cross-subsidization dynamics
3. Revenue from all payers subject to intensifying performance risk
4. Accountable payment models beginning to impose utilization risk

Source: Health Care Advisory Board interviews and analysis.

Long-Term Cost Growth Continuing

Market, Regulatory, Demographic Pressures Mounting

Expenses per Adjusted Admission



Drivers of Continued Cost Growth:

- Market pressures pushing up unit costs of labor, other inputs
- Overhead expenses swelling as new IT mandates take hold
- Aging, sicker population requiring increasingly complex, costly care pathways

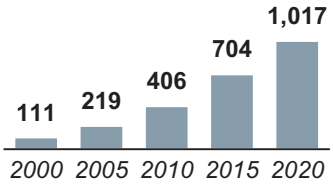
Source: American Hospital Association Chartbook, available at: http://www.aha.org/aha/research-and-trends/chartbook/index.html, accessed April 29, 2011; Health Care Advisory Board interviews and analysis.

No Relief in Sight for Labor Costs

Wages, Benefits, Utilization All on the Rise

Nursing Shortage

Projected Shortage of RN FTEs, in Thousands



Union Pressure

33%

Proportion of contract negotiations involving explicit strike threats, 2009-2010

Persistent Labor Cost Concerns

Wages must rise to compete for scarce labor

Staffing ratios mandated by unions, law

Health benefit packages difficult to pare back

Source: American Hospital Association Chartbook, available at: http://www.aha.org/aha/research-and-trends/chartbook/index.html; Labor Notes, available at: labornotes.org, accessed on May 1, 2011; Health Care Advisory Board interviews and analysis.

IT Costs Draining Capital Budgets

Meaningful Use Demands Major Investments

Timeline of Meaningful Use Requirements

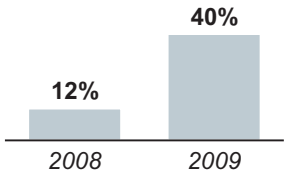
2011: Stage 1
Data Capture & Sharing
Electronic capture of health information in a structured format

2013: Stage 2
Advanced Clinical Processes
Quality improvement at the point of care and electronic exchange of information

2015: Stage 3
Improved Outcomes
Improvements in quality, safety, clinical decision support, and patient self-management tools

Hospital IT and Meaningful Use Costs

IT as a Percentage of Total Capital Spending



$20-34 M

Estimated cost of meeting Meaningful Use requirements

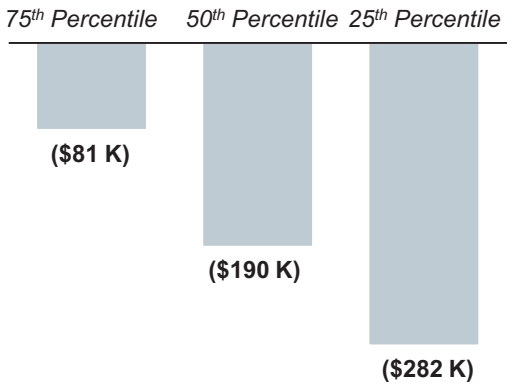
Source: CMS, available at: https://www.cms.gov, accessed on September 13, 2011; Moody's Preliminary Medians for Not-for-Profit Hospitals; Health Care Advisory Board interviews and analysis.

Maintaining Market Advantage Costly

Physician Acquisition, Clinical Technology Races Continue

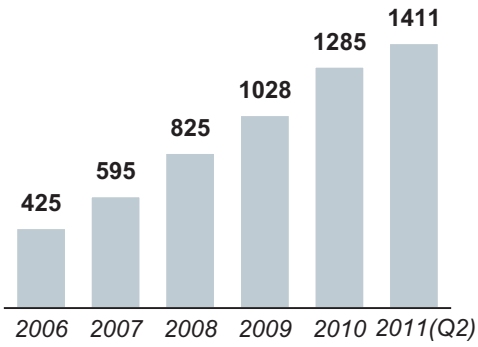
Clinical Alignment Never Cheap

Net Loss per Employed Physician, 2010



Clinical Innovation Never Complete

Total da Vinci Robot Installations

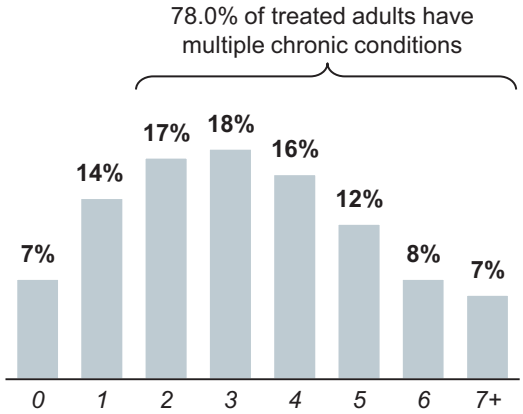


Source: Medical Group Management Association, Cost Survey for Multispecialty Practices, 2011; Intuitive Surgical (Sunnyvale, CA); Health Care Advisory Board interviews and analysis.

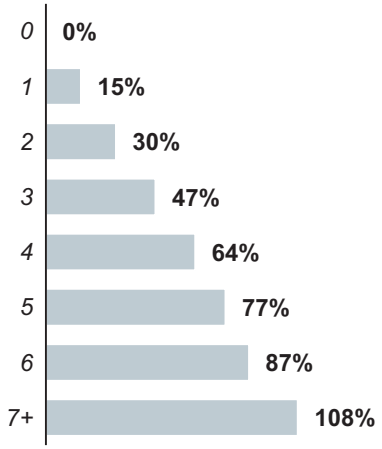
Primary Diagnosis Rarely the Only Problem

Increasing Complexity of Care Driving Up Cost of Care

Distribution of Total Discharges, by Number of Chronic Conditions[1]



Percent Increase in Cost per Case, by Number of Chronic Conditions[2]



1) Does not include maternity-related principal diagnoses.
2) Relative to patients with no chronic conditions.

Source: Friedman B, et al., "Hospital Inpatient Costs for Adults with Multiple Chronic Conditions," *Medical Care Research and Review*, 2006, 63: 327-346; Health Care Advisory Board interviews and analysis.

Force #2: Continuing Cost Pressure

Key Takeaways

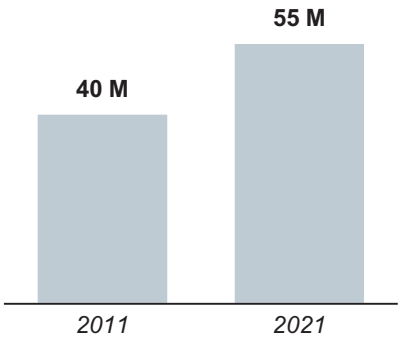
1. Historical cost growth outpacing projected pricing growth
2. Cost pressures derive from long-term, systemic factors; one-off cost cutting campaigns will not suffice to alter overall trends
3. Strategically attractive—or even mandatory—investments in technology, physician practices consume significant shares of overall resources

Source: Health Care Advisory Board interviews and analysis.

Demographics, Policy Reshaping Payer Mix

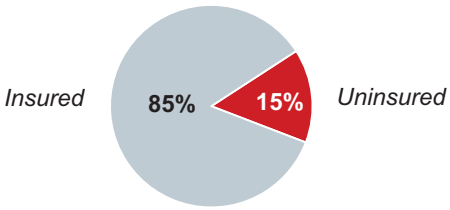
Aging of Population

Medicare-Eligible Population

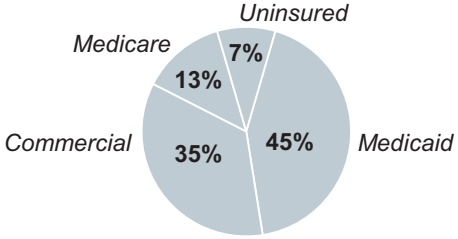


Coverage Expansion

Insurance Status of Population, 2011



Projected Status of Previously Uninsured Population, 2021

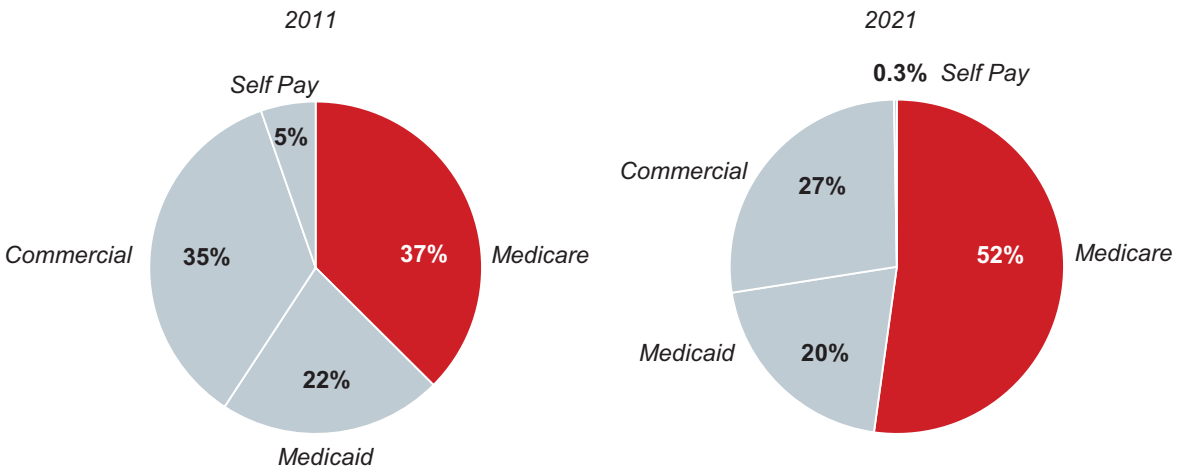


Source: U.S. Census Bureau, available at: http://www.census.gov, accessed April 26, 2011; Health Care Advisory Board interviews and analysis.

Moving Ever Closer to Single Payer

Medicare to Constitute Majority of Discharges by 2021

Inpatient Volume by Payer Class



Source: Health Care Advisory Board interviews and analysis.

Payer Mix Shift a Mixed Blessing

Demand Growth, Reduced Bad Debt May Balance Medicare Shift

Price, Demand Impacts of Payer Mix Shifts

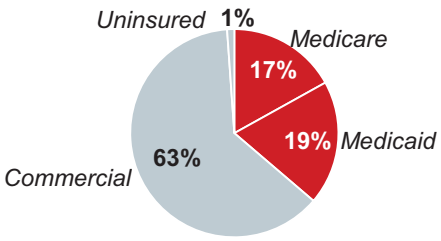
Payer Mix Shift	Impact on Average Price	Impact on Demand
Aging: All Payers to Medicare	↓↓↓	↑↑↑
Coverage Expansion: Self-Pay to Medicaid	↑	↑
Coverage Expansion: Self-Pay to Commercial	↑↑	↑

Source: Health Care Advisory Board interviews and analysis.

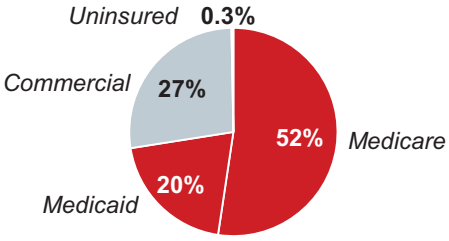
Older Also Means Sicker

Medicare Population Much More Frequent Health Care Consumers

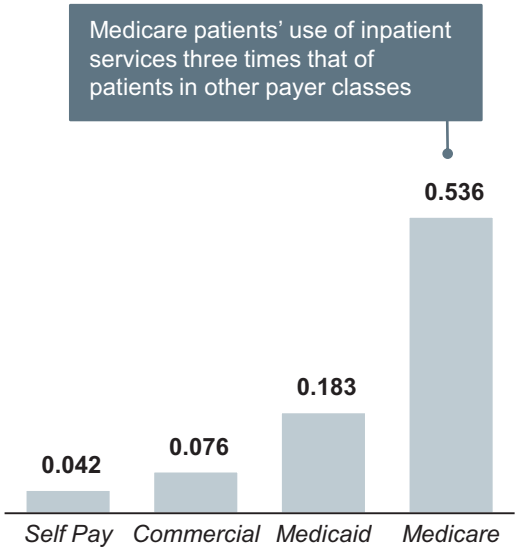
Population by Primary Source of Coverage, 2021



Discharges By Payer, 2021



Projected Annual Discharges per Capita, by Payer, 2021

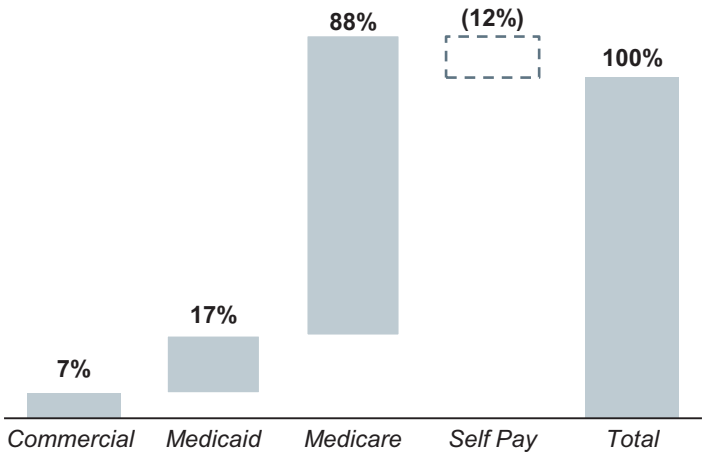


Source: Health Care Advisory Board interviews and analysis.

Virtually All New Volumes Publicly Insured

Sources of Inpatient Volume Growth

2011-2021



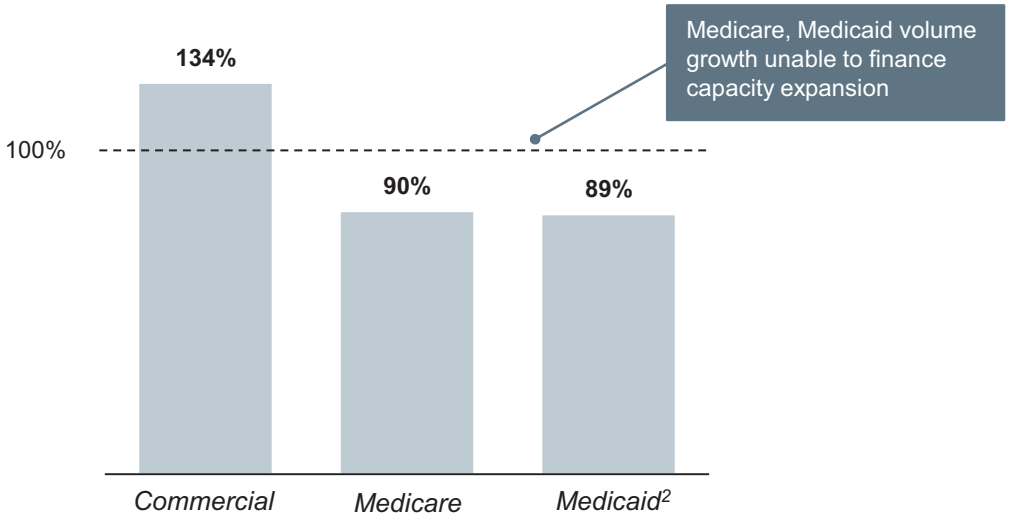
Source: Health Care Advisory Board interviews and analysis.

Future Demand Will Not Fund Capacity Expansion

Even at Current Prices, Public Payments Fail to Cover Total Costs

Average Payment Relative To Cost[1]

By Payer



1) Fully-allocated costs.
2) Includes Medicaid Disproportionate Share Hospital payments.

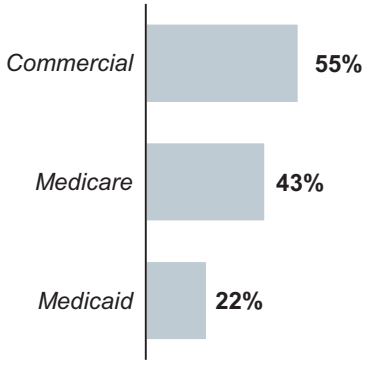
Source: American Hospital Association Chartbook, available at http://www.aha.org/aha/research-and-trends/chartbook/index.html, accessed April 26, 2011; Health Care Advisory Board interviews and analysis.

All Growth Is Good Growth

(As Long as You Have a Place for It)

Contribution Profit per Case

By Payer



Effect of Demand Growth Without Capacity Constraints

Hospital significantly below maximum occupancy; able to absorb all new demand

Volume growth mitigates negative impact of worsening case mix

Impact of Fully Captured Demand

(3%)	38%	33%
Change in inpatient revenue per case	Change in inpatient volume	Change in total inpatient revenue

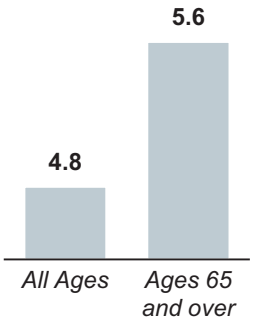
Source: Health Care Advisory Board interviews and analysis.

Upward Pressure on Length of Stay

Older Patients Require Longer Courses of Care

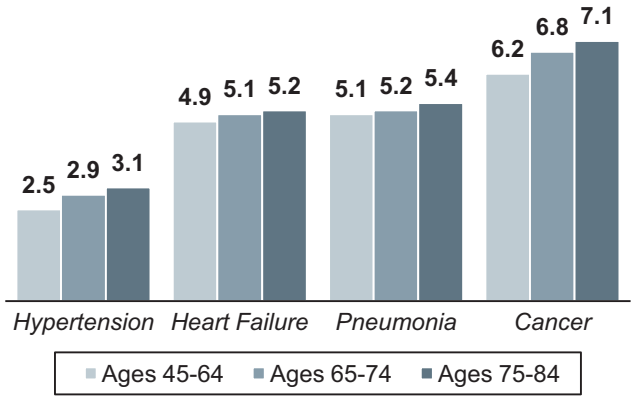
Average Length of Stay

In Days, 2007



Average Length of Stay for Selected Conditions

In Days, 2007



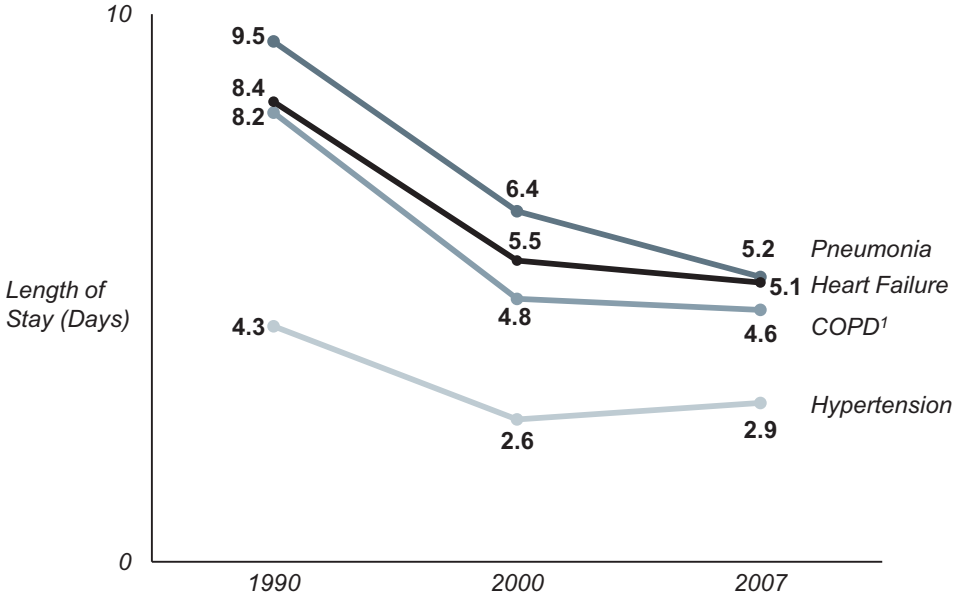
Source: Center for Disease Control, available at: http://www.cdc.gov/nchs/data/hus/hus10.pdf, accessed May 28, 2011; Health Care Advisory Board interviews and analysis.

Reaching the Limit of Inpatient Efficiency?

Length of Stay Improvements Slowing Over Past Decade

Average Length of Stay for Common Medical Conditions

Patients Aged 65-74, 1990-2007



Source: Center for Disease Control, available at: http://www.cdc.gov/nchs/data/hus/ hus10.pdf#102, accessed May 28, 2011; Health Care Advisory Board interviews and analysis.

1) Chronic Obstructive Pulmonary Disease.

Force #3: Shifting Payer Mix

Key Takeaways

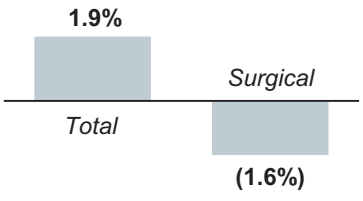
1. Retirement of Baby Boomers, implementation of coverage expansion poised to reshape hospital payer mixes
2. Decline in average price per case potentially offset by increased demand—perhaps enough to create long-run capacity shortages
3. Vast majority of volume growth expected to be publically insured; revenue from these cases too low to finance additional physical capacity

Source: Health Care Advisory Board interviews and analysis.

Payer Mix Not the Only Thing Shifting

Deteriorating Case Mix at HCA Cutting Into Profits

Annual Change in Admissions at HCA



(1.3%)
Change in revenue per Medicare admission

Case in Brief: HCA Healthcare

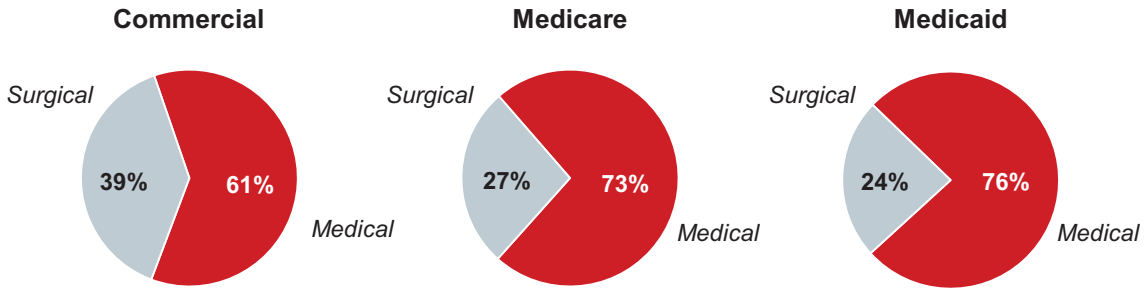
- 164-hospital for-profit system in 20 states
- ~5 percent of national discharges occur at HCA facilities
- Recent earnings call reported shift in service mix from more complex surgical cases to less acute medical cases, particularly among Medicare beneficiaries
- Company did not report significant market share losses during same period
- Case mix shift regarded as factor in 22 percent drop in Q2 profit, year-over-year

Source: HCA Healthcare, available at: www.hcahealthcare.com, accessed on September 15, 2011; Seeking Alpha, available at: http://seekingalpha.com, accessed on September 16, 2011; Health Care Advisory Board interviews and analysis.

More Medicine On the Horizon

Public Payer Volumes Composed of Predominantly Medical Cases

Medical and Surgical Shares of Volume, by Payer

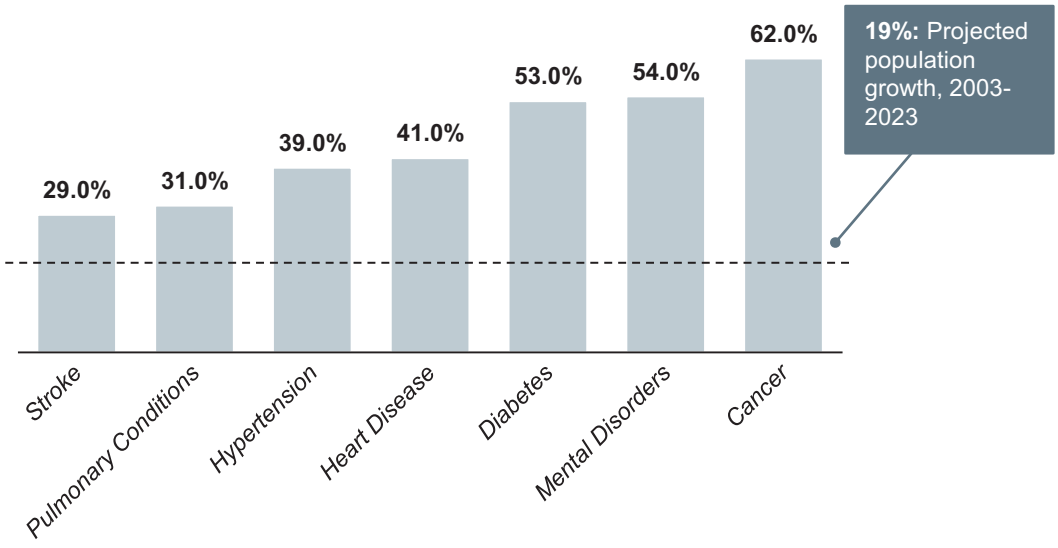


Source: Health Care Advisory Board interviews and analysis.

Chronic Disease Growth Outpacing Population Growth

Projected Increase in Chronic Disease Cases

2003-2023



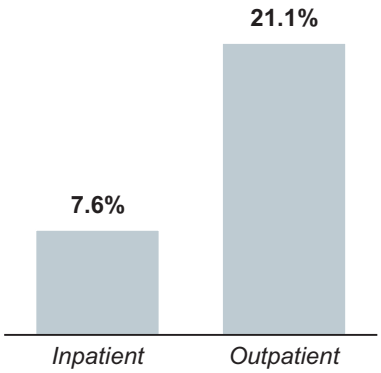
Source: Milken Institute, available at: http://www.milkeninstitute.org/pdf/chronic_disease_report.pdf, accessed April 27, 2011; Health Care Advisory Board interviews and analysis.

Surgical Growth Headed Elsewhere

Financial, Technological Factors Driving Surgeries to Outpatient Settings

Growth in Surgical Volume

2010-2020



Drivers of Outpatient Surgical Growth

- Reimbursement gap closing between comparable inpatient and outpatient services
- Technological innovation allowing safe, efficient care in outpatient settings
- Outpatient service convenience improves patient experience

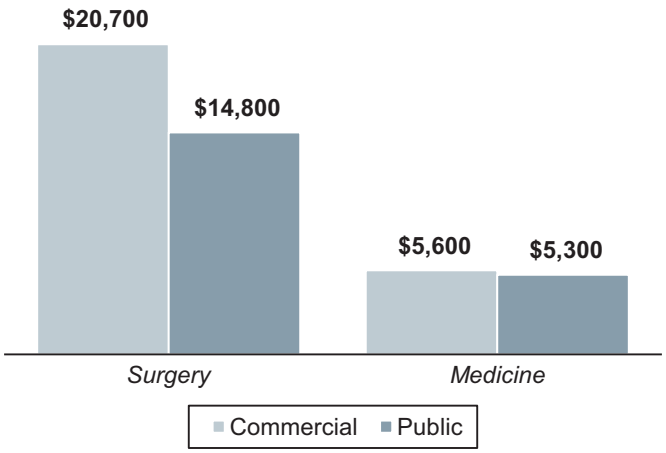
Source: Health Care Advisory Board interviews and analysis.

Twin Threats to Inpatient Economics

Anticipating Pain of Unfavorable Payer, Case Mix Shifts

Average Collections per Case

Typical Payment Rates



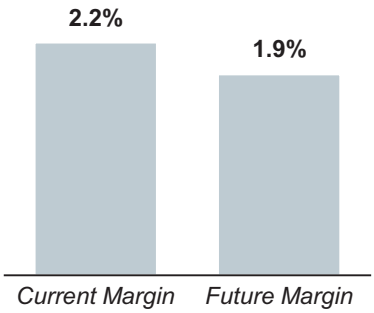
Source: Health Care Advisory Board interviews and analysis.

Patient Mix Problem Bigger than Payer Mix Problem

All Else Equal, Case Mix Deterioration Hurts More than Payer Shift

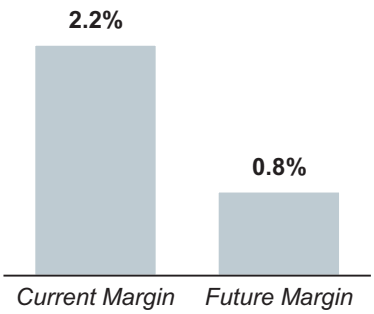
Margin Impact of Potential Payer Mix Shift

Typical 300-bed Hospital



Margin Impact of Potential Case Mix Shift[1]

Typical 300-bed Hospital



1) Based on five percentage point reduction in surgical share of inpatient volume.

Source: Health Care Advisory Board interviews and analysis.

Force #4: Deteriorating Case Mix

Key Takeaways

1. Aging of patient base expected to lead to deterioration in medical/surgical case mix
2. Medical volume growth also driven by rising incidence of chronic disease across all payer classes
3. Surgical growth not absent, but concentrated in outpatient arena
4. Case mix deterioration combined with inpatient capacity constraints poses powerful threat to operating margins

Source: Health Care Advisory Board interviews and analysis.

Road Map

1 Health Care on a Budget

2 Four Forces Shaping Future Margins

3 **Running on Medicare Margins**

Welcome to Pleasantville

Average Care for Average People

Key Characteristics

300	2.2%	73%
Number of beds	Operating margin	Medical share of case mix

Case in Brief: Pleasantville Hospital

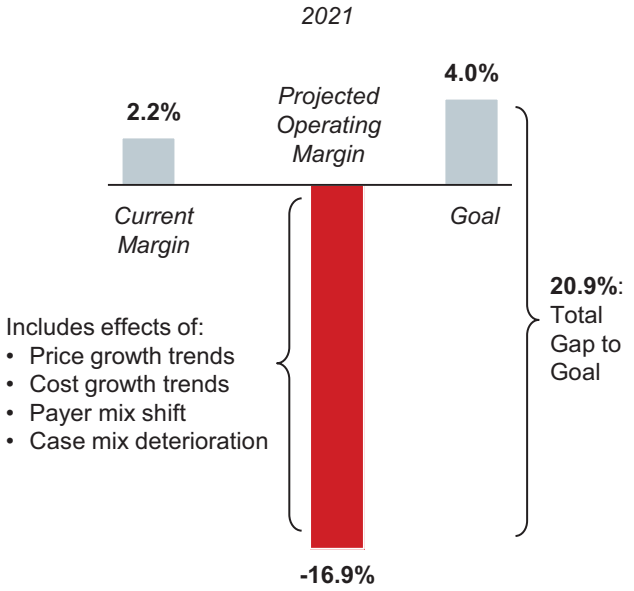
- Health Care Advisory Board model hospital
- Revenue, cost, and operational inputs based on national averages
- Inputs adjusted to forecast impact on future financial performance
- Offers insight into relative opportunity of pulling various margin improvement levers

Source: Health Care Advisory Board interviews and analysis.

2021 Not So Pleasant

Future State Untenable Without Major Improvement

Overall Impact of Market Forces at Pleasantville



The 4.0% Margin Imperative

- Significant long-term capital needs across the board
- Tax-exempt debt unsuitable for financing IT, physician integration investments
- Retained earnings required to fund greater portion of capital
- Financial volatility demands higher margin to compensate for increased risk

Source: Health Care Advisory Board interviews and analysis.

Achieving The New Performance Standard

Inaction Not an Option

Nine Imperatives for Achieving the New Performance Standard

1. Maximize Revenue Capture
2. Excel Under Performance Risk
3. Bend Labor Cost Curves
4. Standardize Clinical Care Pathways
5. Redesign Inpatient Care Models
6. Build Effective Capacity
7. Reassess Supply of Less Profitable Services
8. Deflect Demand of Less Profitable Services
9. Secure Surgical Market Share

Source: Health Care Advisory Board interviews and analysis.

Letting Nothing Slip Through the Cracks

Accurate Documentation Ensures Appropriate Reimbursement

Blueprint for Implementing Best-In-Class Clinical Documentation

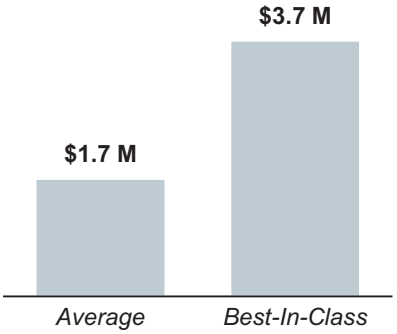
- Make Clinical Documentation Improvement a Finance Priority
- Invest in Adequate Staffing
- Focus on Accurate DRG[1] Assignments
- Prioritize Chart Reviews for Maximum Impact
- Develop Robust Tracking Capabilities
- Hold Staff Accountable for Productivity and Accuracy
- Emphasize Query Compliance
- Leverage Electronic Medical Records

Best-in-Class Clinical Documentation Improvement Programs

- Financial Leadership Council study
- Eight tactics for maximizing performance on Clinical Documentation Improvement programs and financial returns

Potential Revenue Benefit of Clinical Documentation Improvement

Typical 300-Bed Hospital



1) Diagnosis-Related Group.

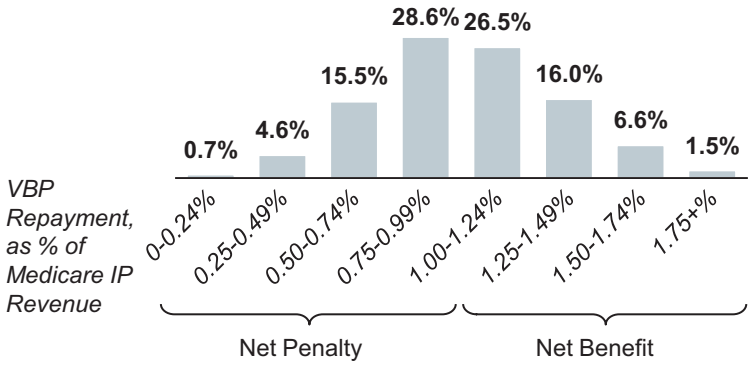
Source: Health Care Advisory Board interviews and analysis.

Quality Pays

Best-Performing Hospitals Will Benefit from VBP Incentives

Expected Distribution of Value-Based Purchasing (VBP) Incentives

2013 (1% Withhold)



50.6%

Proportion of hospitals expected to benefit from VBP incentives

0.58%

Net increase in Medicare inpatient revenue, 95th percentile

Tool in Brief: Value-Based Purchasing Impact Assessment

- Calculates institution-specific estimate of Value-Based Purchasing program withholds, repayments
- Available at www.advisory.com/HCAB

Source: Health Care Advisory Board interviews and analysis.

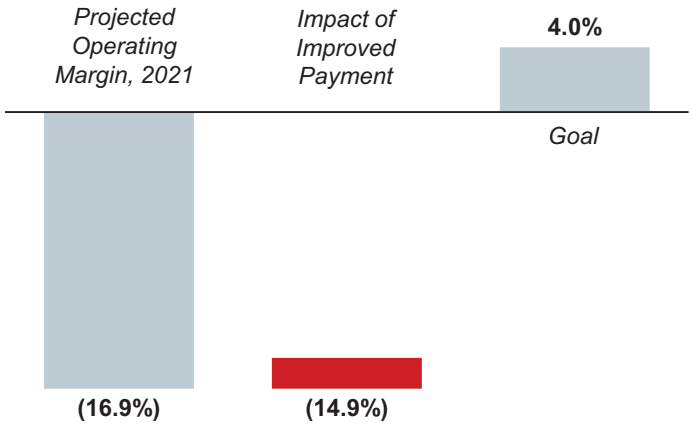
Payment Measures Only the Beginning

No Saving the Commercial Cross-Subsidy

Impact of Improved Payment at Pleasantville

Pricing Improvement

- New average annual Medicare pricing growth: 2.75% (up from 2.37%)
  - Improved documentation
  - Superior VBP[1] performance



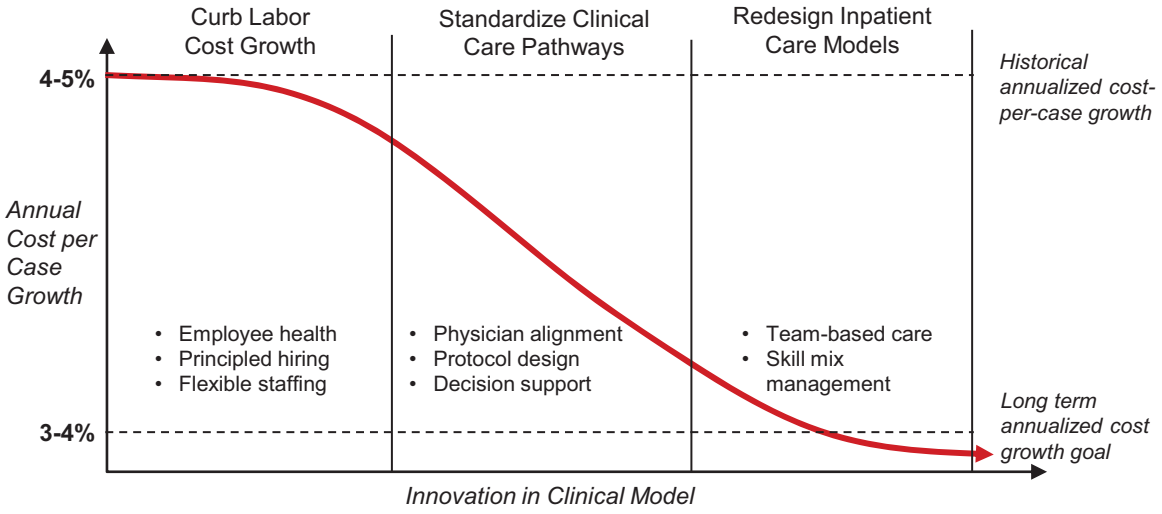
1) Value-Based Purchasing.

Source: Health Care Advisory Board interviews and analysis.

Cut Cost Growth, Not Just Costs

Lower Trend More Important than Initial Rebasing

Outlook for Cost Growth Control



Source: Health Care Advisory Board interviews and analysis.

Moving Beyond the Cost Campaign Mentality

Contingency Plans Not Designed for Long-Run Success

Evolution of Labor Cost Management Strategies

Labor Cost Driver	Old Paradigm: Targeted Campaign	New Paradigm: Sustainable Improvement
Wages and Salaries	• Across-the-board wage freezes	• Flexible clinical staff reduces need for overtime, agency labor premia • Skill mix management better aligns labor expenses to clinical needs
Staffing Levels	• Large-scale layoffs • Campaigns to reduce clinical staffing targets	• Principled hiring counters FTE creep • Unnecessary positions eliminated through attrition • Core staffing model minimizes potential for overstaffed nursing units, improves ability to meet HPPD[1] targets
Benefit Costs	• Forced conversion to CDHP[2] benefit design	• Close engagement with employees' health curbs utilization of existing benefits • Healthier workforce also more productive

1 Hours per patient day.
2 Consumer-driven health plan.

Source: Health Care Advisory Board interviews and analysis.

Standardization Not Just About Setting Rules

Physician Engagement, Leadership Must Be Major Foci

Three Elements of Clinical Standardization Processes

Building a Platform for Alignment

- Identify physicians with shared strategic vision
- Formalize shared control in governance, management
- Include performance-based incentives in compensation models

Standardizing Protocols Around Best Practice

- Establish consensus on best clinical practices
- Ensure continuous feedback, review of standards
- Proactively mitigate physician, staff resistance

Supporting Principled Decision-Making

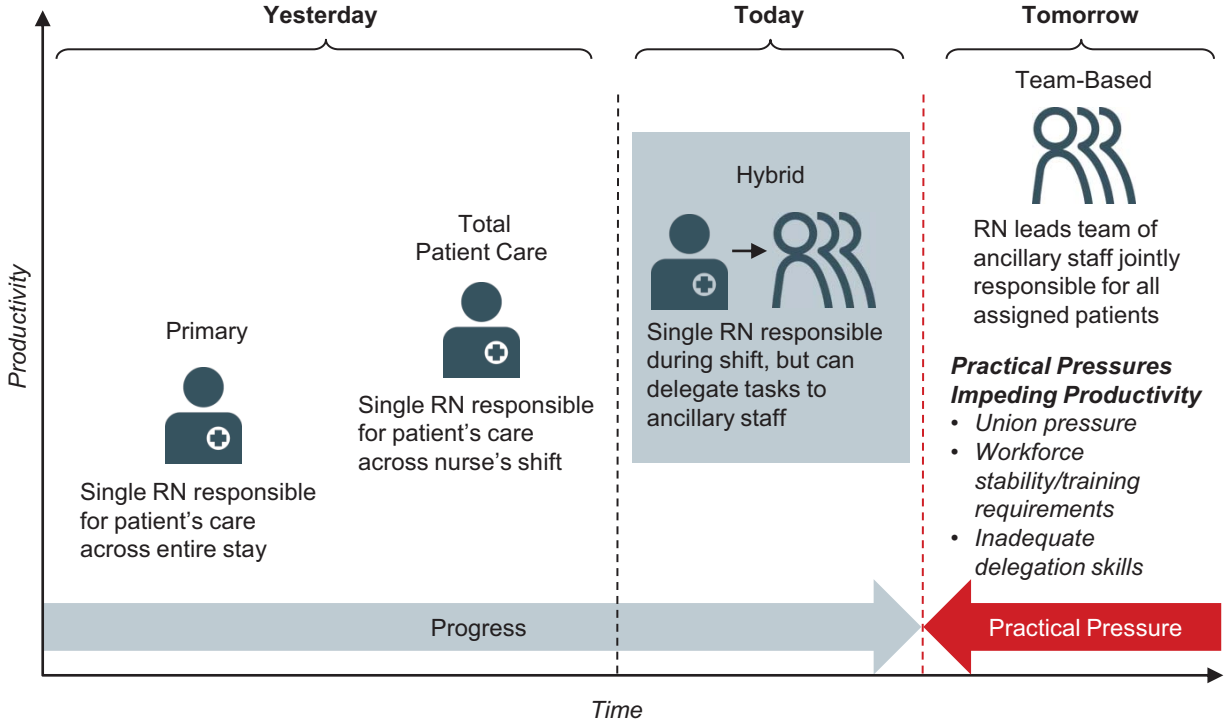
- Expand, refine CDSS[1] to support care standardization
- Prioritize tools for cross-continuum data aggregation
- Escalate incentives from rewards to mandates

1) Clinical decision support systems.

Source: Health Care Advisory Board interviews and analysis.

Migrating Toward Top-of-License Inpatient Care

Progress Must Continue Even in the Face of Practical Pressures



Source: Health Care Advisory Board interviews and analysis.

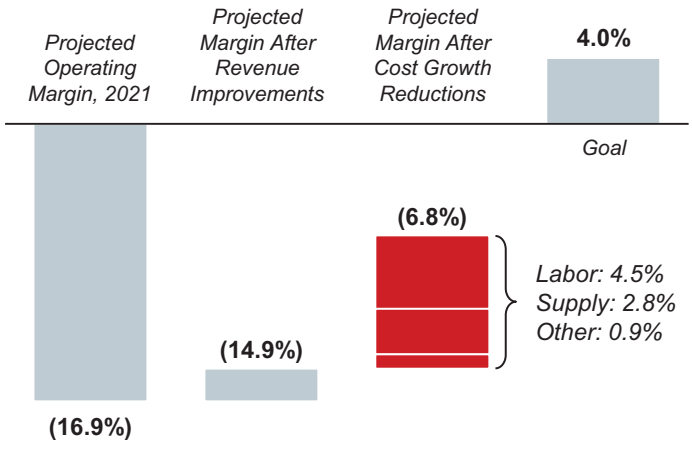
Breakeven Not Only a Cost Challenge

Cost Growth Control Indispensable, Insufficient

Impact of Best-in-Class Cost Control at Pleasantville

Cost Growth Reductions

- Annual average wage, salary, benefit growth reduced one-half percentage point
- One half-hour reduction in HPPD[1] from better matching to staffing targets
- Five percentage point reduction in non-clinical FTE/bed ratio
- Supply cost/case growth reduced one percentage point
- Annual IT, clinical equipment cost growth reduced one-half percentage point



1) Hours per patient day.

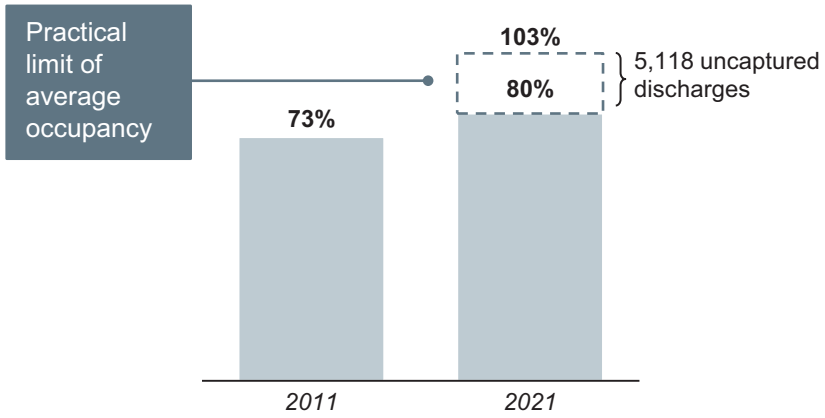
Source: Health Care Advisory Board interviews and analysis.

Demand Growth to Outpace Physical Capacity?

Long-term Capacity Constraints In Play as Demand Grows

Capacity Crunch at Pleasantville

Projected Occupancy Without Capacity Expansion



Source: Health Care Advisory Board interviews and analysis.

Making Room for Growth

Improved Throughput Most Feasible Way to Capture Excess Demand

Pleasantville Capacity Crunch

Staffed Beds: 300
Average LOS: 4.8 days
Average Occupancy Limit: 80%
Excess Demand: 5,118 discharges

Option 1: Constructing New Facilities

Action: Build 85 New Beds

- Incurs significant capital expense
- Future prices less able to pay fixed costs
- Extra beds must be staffed, supplied

Option 2: Overloading Current Resources

Action: Operate at 103% Average Occupancy

- No space for above-average census days
- Raises serious patient safety concerns
- Generates unsustainable workload

Option 3: Expediting Patient Throughput

Action: Lower Average LOS to 3.7 Days

- Creates capacity for more discharges without raising number of patient days
- Requires investment in better care pathways, but does not explicitly raise fixed, variable costs

Source: Health Care Advisory Board interviews and analysis.

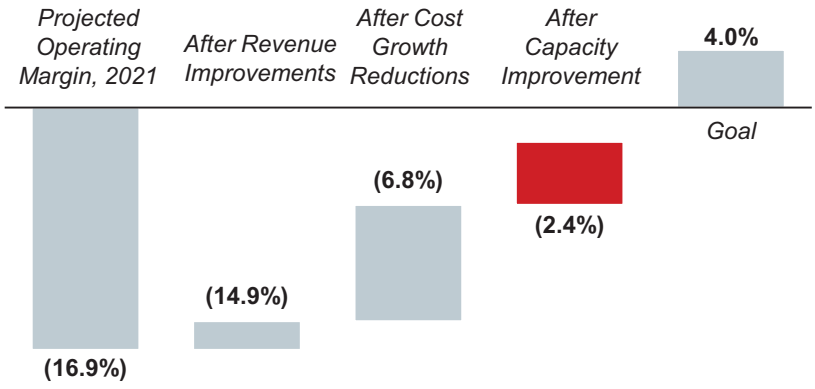
Growth Still Our Friend

Capturing Demand Generated by New Payer Mix Necessary to Profit

Impact of Capacity Improvement at Pleasantville

Effective Capacity Expansion

- 0.3 day reduction in average length of stay
- 20% outpatient capacity expansion



Source: Health Care Advisory Board interviews and analysis.

Service Offerings Not on a Lightswitch

Community Pressures, Core Business Restrict Supply-Side Options

Community Obligation

If Not Us, Then Whom?

"We have to have some unprofitable services because we're a public hospital and there is no one else who wants to offer them. You can divest from services if you're in a market where there is someone else to offer them, but we don't have that luxury."

CFO

Diffuse Responsibility

Q: If you wanted to avoid treating diabetic complications, what service line would you cut?

Inpatient Medicine?

Emergency Department?

General Surgery?

Hospitalist Program?

- Non-negotiable services
- Not specific to diabetes

Source: Health Care Advisory Board interviews and analysis.

Unnecessarily Crowded

Many Medical Admissions Preventable

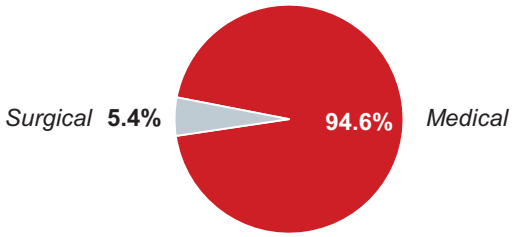
An Ounce of Prevention…

"It's a lot easier to prevent people from needing a service than it is to eliminate the service once you offer it."

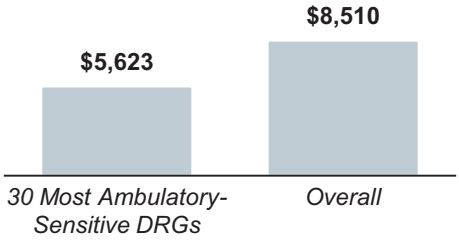
CFO

17% Percent of Medicare discharges considered sensitive to better ambulatory care

Ambulatory-Sensitive[1] Inpatient Admissions



Medicare Revenue per Case



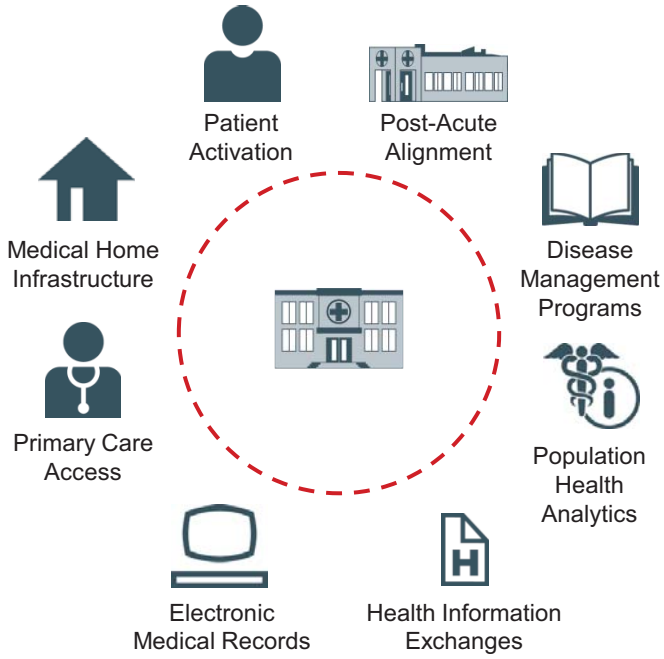
1) Inpatient admissions associated with Agency for Healthcare Research and Quality (AHRQ) Preventable Quality Indicator conditions.

Source: MedPAR FY2009; Health Care Advisory Board interviews and analysis.

Establishing the Medical Perimeter

Extensive Ambulatory Care Network Addresses Medical Demand

Medical Management Investments



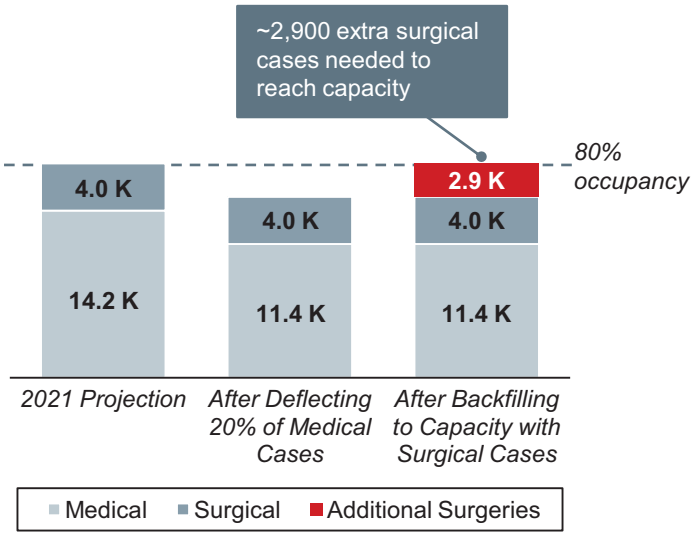
Source: Health Care Advisory Board interviews and analysis.

Promotion After Prevention

Backfill Avoidable Medical Cases with Profitable Surgical Ones

Medical Deflection, Surgical Backfill

Pleasantville Inpatient Volume Scenario



Key Imperatives for Attracting Surgical Volume

- Strengthen strategic, financial alignment with key proceduralists
- Secure robust referral networks
- Offer attractive IT, clinical technology environment
- Establish brand of high-quality care

Source: Health Care Advisory Board interviews and analysis.

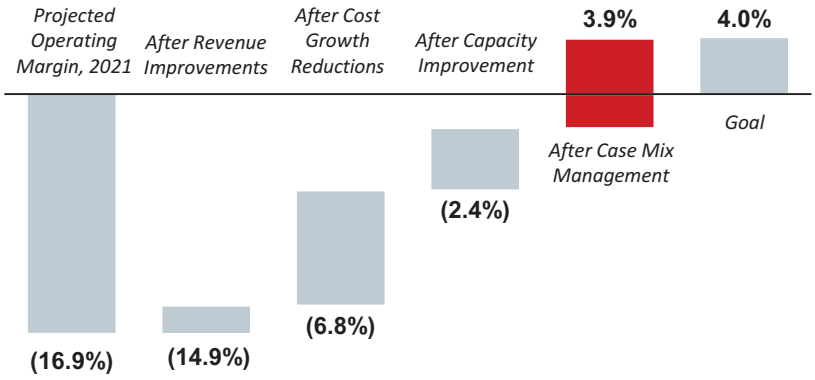
Case Mix Management Closing the Gap

Restoring Profitability with Aggressive Medical Management

Impact of Case Mix Improvement at Pleasantville

Case Mix Management

- Less profitable medical admissions prevented
- Care management boosts outpatient volume
- Inpatient space backfilled with high-value surgeries
- New medical share of inpatient volume: 55%



Source: Health Care Advisory Board interviews and analysis.

Support on All Fronts

Selected Advisory Board Resources

Imperative	Health Care Advisory Board Resources	Other Advisory Board Resources
Maximize Revenue Capture	• Medicare Payment Update Modeler • *Maximizing Revenue Capture*	• Payment Integrity Compass • *Best-in-Class Clinical Documentation Improvement Programs*
Excel Under Performance Risk	• *Succeeding Under Bundled Payments* • Value-Based Purchasing Impact Assessment • Customized Readmissions Penalty Estimator	• Crimson Clinical Advantage • *Preventing Unnecessary Readmissions*
Bend Labor Cost Curves	• *Hardwiring Operating Efficiency*	• *Holding the Line on Labor Costs* • *Labor Savings Playbook*
Standardize Clinical Care Pathways	• *The Accountable Physician Enterprise* • *The New IT Strategy Map*	• *The New Quality Compact*
Redesign Inpatient Care Models	• Medical Home Health Coach Practice Impact Calculator	• *Staffing Considerations in the Era of Accountable Care*
Build Effective Capacity	• *Ambulatory Facility of the Future* • *Webconference: Elevating Patient Throughput*	• Inpatient Throughput Self Assessment Toolkit • *Next-Generation Capacity Management* • *The High Performance ED*
Reassess Supply of Less Profitable Services	• Service Line Prioritization Toolkit	• *Blueprint for Service Line Transformation*
Deflect Demand of Less Profitable Services	• The Medical Home Project • *Playbook for Accountable Care* • *Transforming Primary Care*	• Southwind • Crimson Population Risk Management
Secure Surgical Market Share	• *The 100-Day Volume Campaign*	• Crimson Market Advantage

Source: Health Care Advisory Board interviews and analysis.