



Healthcare Market Survey and
Outlook

2018 Health Care Industry Trends



Disclosure

I have no relevant financial relationships or affiliations with commercial interests to disclose

- 1 Payment Reform
- 2 Provider Market
- 3 Purchaser Behavior
- 4 Provider Selection



Payment Reform

- Value-Based Purchasing Program
- Bundled Payments
- Accountable Care Organizations
- Policy Landscape

An Increasingly Attractive Set of Alternative Options

Continuum of Medicare Risk Models



Pay-for-Performance

- Hospital VBP Program
- Hospital Readmissions Reduction Program
- HAC Reduction Program
- Merit-Based Incentive Payment System



Bundled Payments

- Bundled Payments for Care Improvement Initiative (BPCI)
- Comprehensive Care for Joint Replacement (CJR) Model
- Episode Payment Models



Shared Savings

- MSSP Track 1 (50% sharing)



Shared Risk

- MSSP Track 1+¹
- MSSP Track 2 (60% sharing)
- MSSP Track 3 (up to 75% sharing)
- Next Generation ACO Model (80-85% shared savings option)



Full Risk

- Next Generation ACO Model (full risk option)
- Medicare Advantage (provider-sponsored)

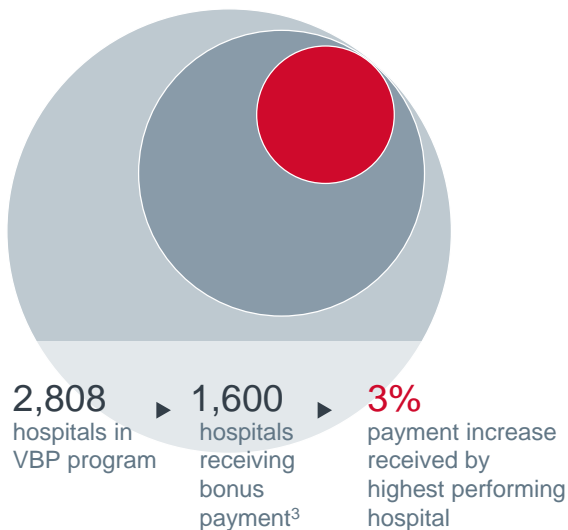
Increasing Financial Risk

1) Anticipated to open for participation in 2018.

2018 Sees More Positive Adjustments than Decreases

Despite Lower Participation in VBP, a Greater Portion Receive Bonuses

More Hospitals Receiving VBP¹ Bonuses than Penalties



Hospital Performance in P4P² Programs, FY 2018

57%

Hospitals receiving a net bonus

43%

Hospitals facing reductions

-5%

Reduction in hospital participation 2017-2018

1) The Hospital Value-Based Purchasing (VBP) Program.

2) Pay-for-Performance.

3) Approximate.

Future of Bundled Payments in Question

CMS Poised to Iterate on Voluntary Programs, Scale Back Mandatory Ones



Cardiac EPMS¹ Cancelled

- **Mandatory** bundling for CABG² and AMI², originally slated to go into effect July 2017
- Final rule released on November 30th cancels both programs



CJR³ Scaled Back

- **Mandatory** bundling for hip and knee replacements, originally in 67 markets
- Final rule makes participation in 33 markets voluntary, cancels planned expansion to SHFFT⁴



What's Next for BPCI⁵?

- **Optional** bundling program; providers may opt into any of 48 different conditions across four risk models
- Current Models 2, 3, and 4 extended through September 30th, 2018

“

CMS Committed to Exploring New Bundled Payment Programs

“We [at CMS] believe the best way to drive health system change while [reducing] burden & maintaining access to care is **through developing different bundled payment models & engaging more providers**”

Seema Verma, CMS Administrator, November 30th 2017

1) Episode Payment Models.

2) Coronary artery bypass graft and acute myocardial infarction; MS-DRGs: 280-282; 246-251; 231-236

3) Comprehensive Joint Replacement.

4) Surgical hip/femur fracture treatment; MS-DRGs: 480-482.

5) Bundled Payments for Care Improvement.

Plenty of Open Policy Questions

What to Watch: 2017 and Beyond



1

Will President Trump use additional **executive actions and regulations** to advance the GOP's health reform agenda?



Leading Indicators:

- Issued 49 executive orders to-date; very first executive order was focused on health care
- Has issued several health-care related actions since FY2017 legislative effort stalled



2

Will the administration use **waivers** to enable broad flexibility or to double-down on core conservative principles?



Leading Indicators:

- Inconsistent in speed, criteria for approving 1332 waivers
- Pending 1115 waivers could enact broad Medicaid changes



3

Will Congress hold off on **legislation** until 2019 or revisit it in 2018 (e.g., either through tax reform or bipartisan effort)?



Leading Indicators:

- 2018 budget resolution focused on tax reform
- Sens. Lamar Alexander (R-Tenn.) and Patty Murray (D-Wash.) leading bipartisan stabilization efforts

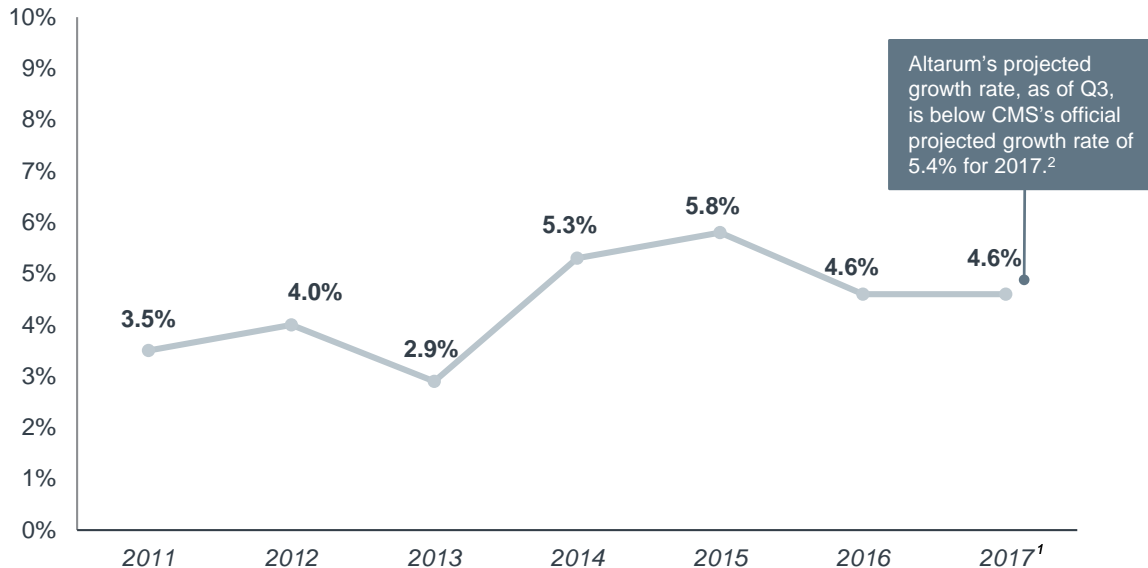


Provider Market

- Finances
- Volume Performance
- Mergers and Acquisitions
- Physician Supply
- Imaging Centers, ASCs, PCPs, Telehealth

Low Growth in National Health Spending

Annual Percent Growth in National Health Expenditures 2010-2017



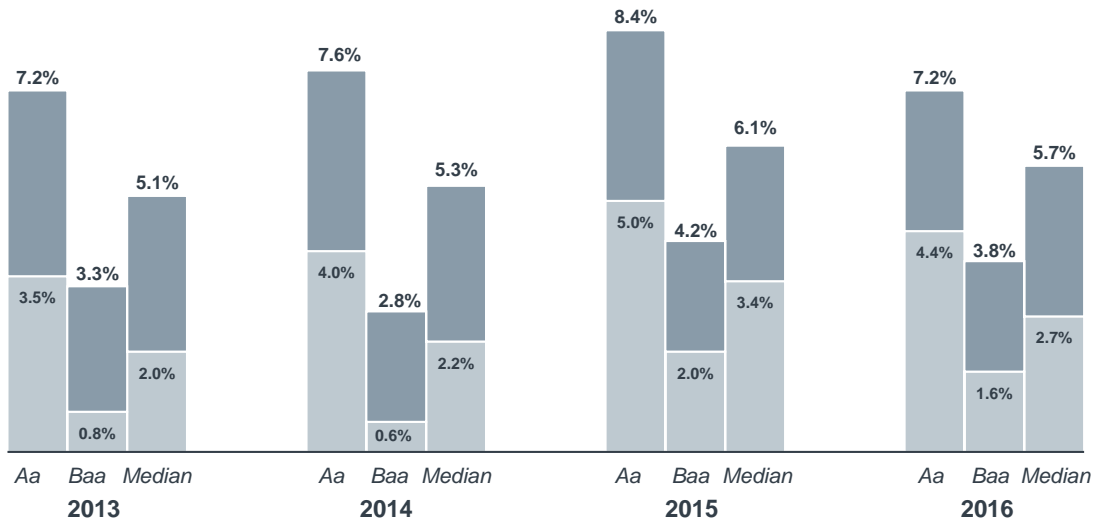
1) Projected health spending growth for 2017, as of November, 2017.

2) CMS's projection was made in 2015.

Source: Altarum, "Health Spending Report," August, 2017; Altarum "Health Spending Report," November 2017; CMS, "Table 1: National Health Expenditures and Selected Economic Indicators, Levels and Annual Percent Change: Calendar Years 2009-2025," 2015, available at www.cms.gov; Market Innovation Center interviews and analysis.

Margin Deterioration Occurring for Many Providers

Excess Margin¹ Medians of Freestanding Hospitals, Single-State & Multi-State Healthcare Systems, by Broad Rating Category

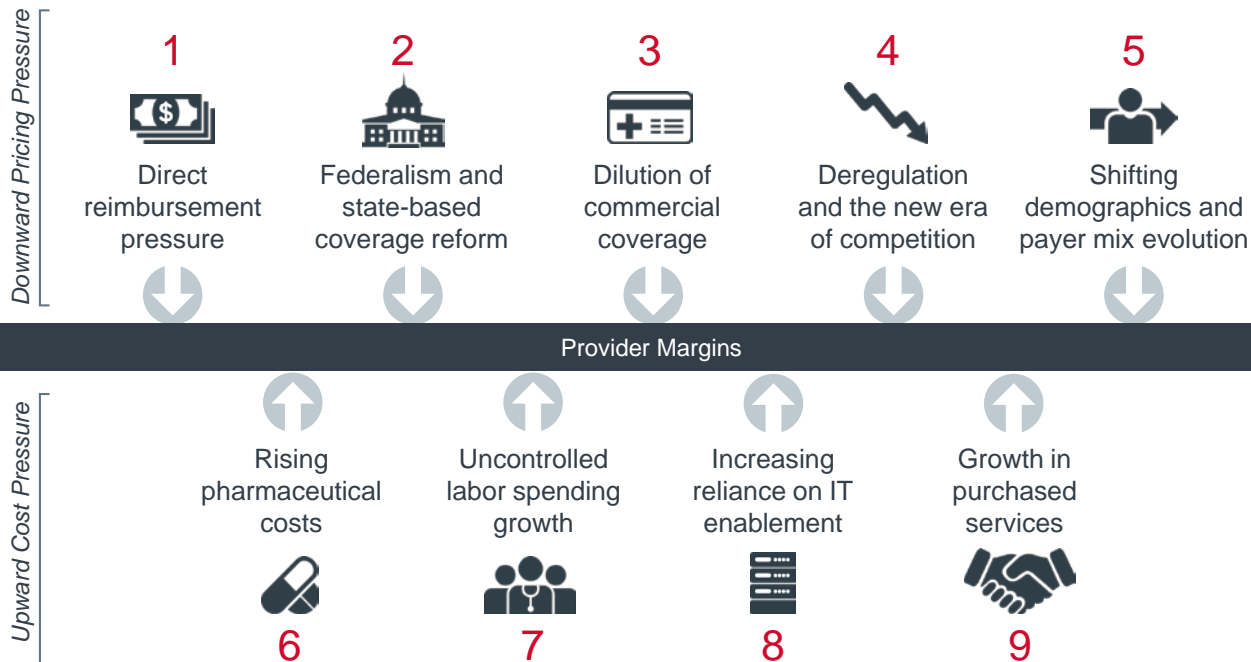


■ Operating margin²

1) Excess margin= (total operating revenue- total operating expense + non operating revenue)/ (total operating revenue + non-operating revenue) *100.

2) Operating margin= (total operating revenue- total operating expense)/ total operating revenue*100.

Nine Price and Cost Pressures Squeezing Margins

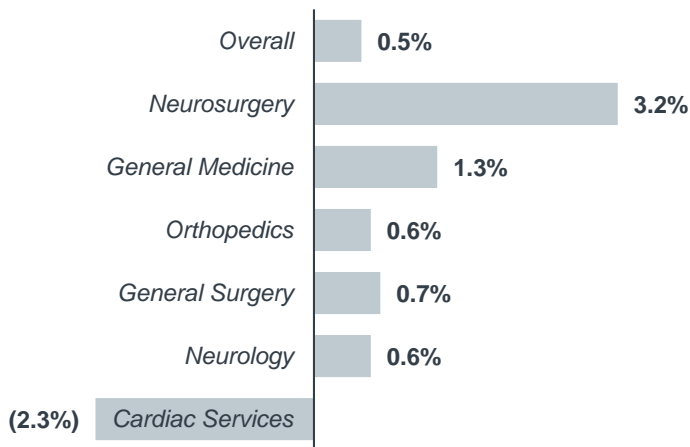


Volume Performance Projections Remain Modest

Inpatient and Hospital Based Outpatient Volume Projections

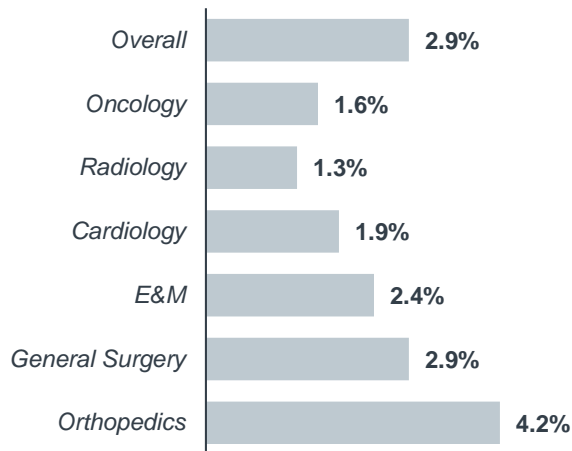
Inpatient Volume, CAGR¹

2016-2021



Hospital-Based Outpatient Volume, CAGR

2016-2021

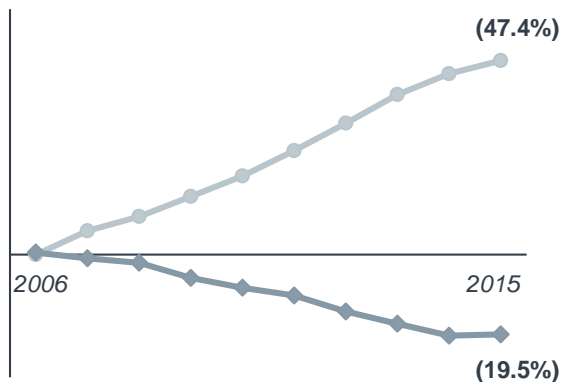


1) Compound Annual Growth Rate

Volumes Continuing to Shift Outpatient

Medicare Volume Growth

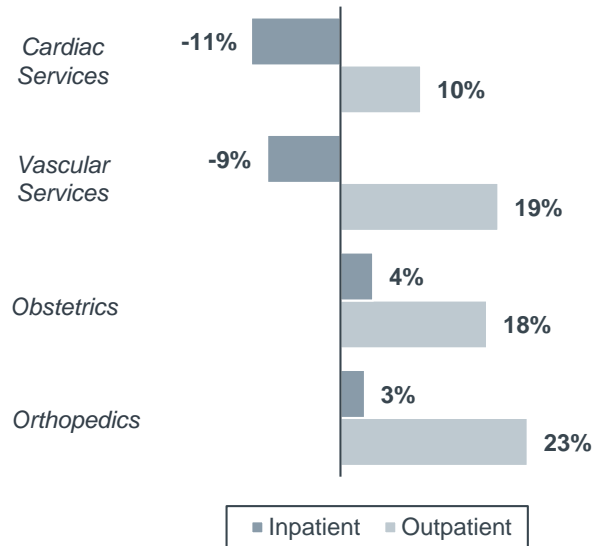
Cumulative Percent Change



● Outpatient Services per FFS Part B Beneficiary
◆ Inpatient Discharges per FFS Part A Beneficiary

All Payer Volume Growth Projections¹

2016-2021



■ Inpatient ■ Outpatient

1) Outpatient services represent entire market regardless of site of service (includes hospital-based settings, ASCs, other freestanding providers and physician offices)

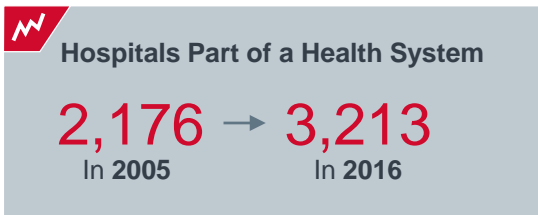
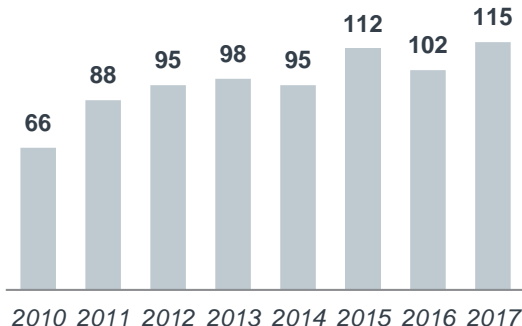
Source: "Report to the Congress: Medicare Payment Policy," MedPAC, March 2017, available at: www.medpac.gov; Advisory Board Company Market Scenario Planner; Market Innovation Center interviews and analysis.

M&A Activity Continues at a Steady Clip

...But Consolidation Drives Price Advantage, Not Cost Advantage

Hospital M&A Activity

Total Deal Volume



Hospital, Physician Integration Correlated with Increased Price

Hospital Prices Increase with Reduced Competition

\$2,000

Per-admission price differential between markets with one hospital and markets with four or more hospitals

Physicians Practice Prices Increase After Health System Acquisition



12%

Average price increase by primary care physicians



34%

Average price increase by specialists (e.g. cardiologists)

Source: Kaufmann Hall, "2017 in Review: The Year M&A Shook the Healthcare Landscape," January 2018; Evans, M., "Data suggest hospital consolidation drives higher prices for privately insured," *Modern Healthcare*, Dec. 15, 2015; AHIP, "Data Brief: Impact of Hospital Consolidation on Health Insurance Premiums," June 2015; Neprash, H. et al., "Association of Financial Integration Between Physicians and Hospitals With Commercial Health Care Prices," *JAMA Internal Medicine*, Dec. 2015; Kaufmann Hall, *Hospital Merger and Acquisition Activity Continues Upward Momentum, According to Kaufmann Hall Analysis*; American Hospital Association, "2018 Edition, AHA Hospital Statistics;" Health Care Advisory Board interviews and analysis.

MACRA Creating a Land Grab for Physicians

MACRA Potentially Accelerating End of Independent Physician Practice

Clinicians Already Seek Hospital Employment

86%

Increase in hospital ownership of physician practices from 2012-2015

50%

Increase in physicians employed by hospitals from 2012-2015

38%

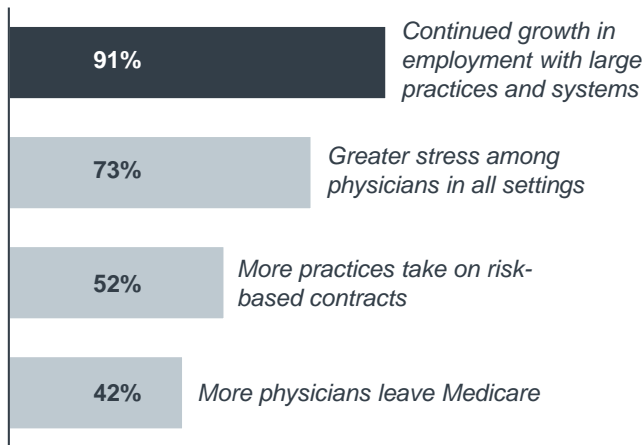
Of U.S. physicians are employed by a hospital or health system

MACRA Potentially Accelerating Current Trend

Modern Healthcare CEO Survey

n = 106

Due to the Requirements of MACRA, over the next few years we are likely to see:



Source: Whitman, E. "CEO Power Panel: Are your physicians ready for reform?" *Modern Healthcare*, September 2016. ; Castellucci, M. "Hospital ownership of medical practices grows by 86% in three years." *Modern Healthcare*, September 2016; Health Care Advisory Board interviews and analysis.

Inpatient Imaging Utilization Decline Continues

Factors Discouraging Inpatient Growth



Length of stay scrutiny



Alternative payment models



Readmissions penalties

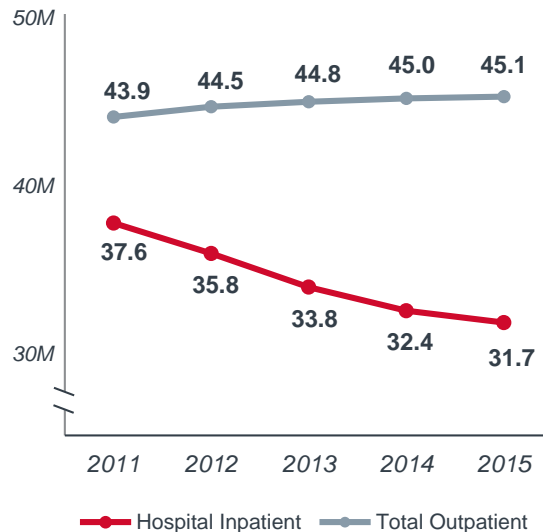


Payment transition to DRG¹

Total Imaging Procedures

Hospital Inpatient Versus Total Outpatient

Medicare Fee-for-Service, 2011-2015



1) Diagnosis-Related Group.

Modest Outpatient Imaging Opportunities

Imaging Volumes Mostly Outpatient

National Outpatient Radiology Market Projections

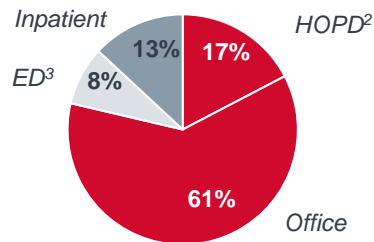
Estimated Volumes, 2016-2021

Modality	Five-Year Projected Growth
US ¹	20%
PET	8%
CT	8%
MRI	6%
X-Ray	4%
Mammo	(3%)
Nuc med	(6%)
Overall	7%

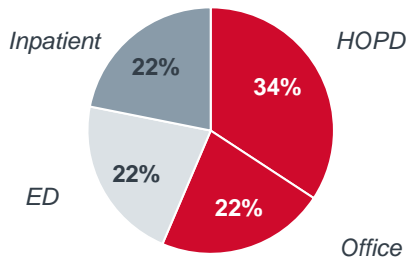
Imaging Procedures by Care Setting

Medicare Part B, 2014

All Imaging Procedures



Advanced Imaging Procedures⁴



1) Ultrasound.

2) Hospital Outpatient Department.

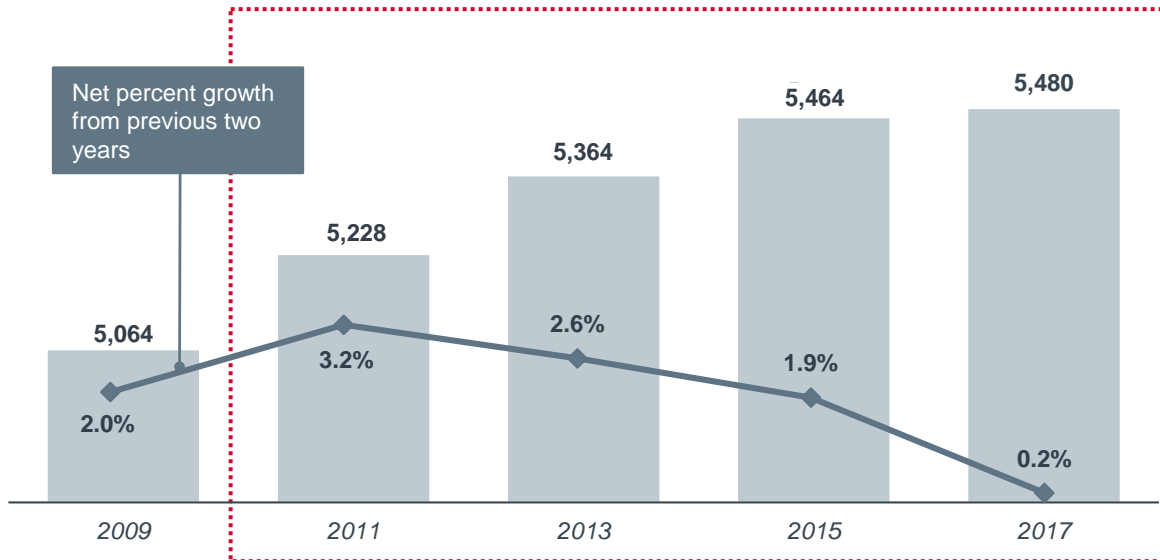
3) Emergency Department.

4) Advanced imaging includes CT, MRI, PET, nuclear medicine.

Source: CMS Physician/Supplier Procedure Summary Master File; Neiman Health Policy Institute; Market Scenario Planner, Advisory Board, 2017; Imaging Performance Partnership interviews and analysis.

The ASC Build Boom Has Subsided

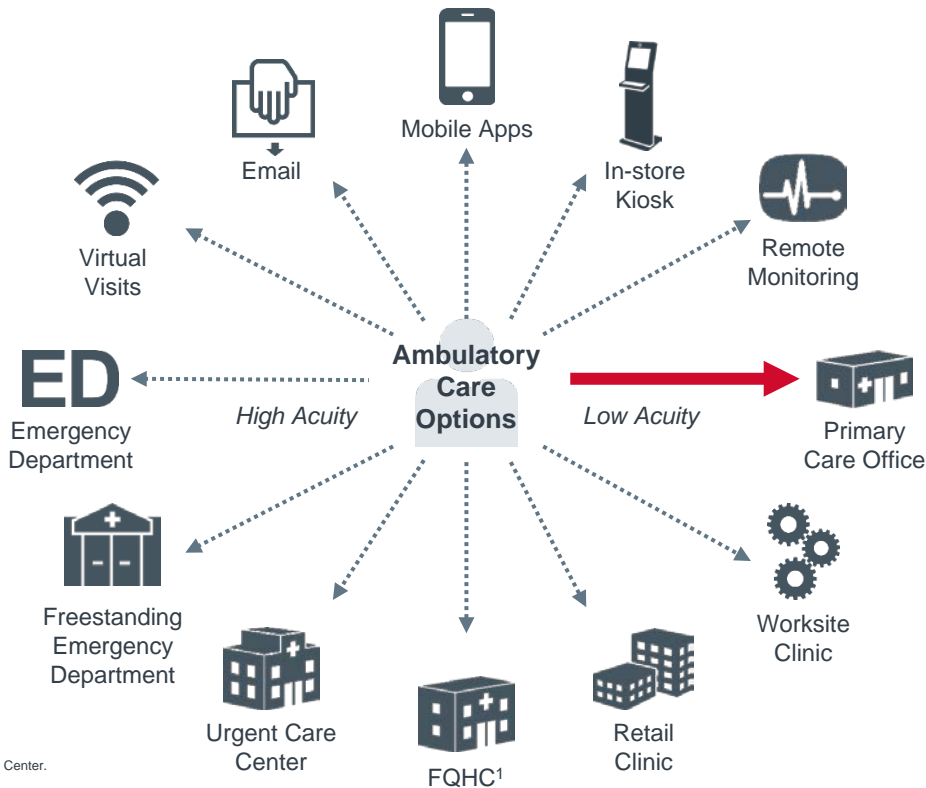
Total Number of Medicare-Certified ASCs



Source: "Number of ASCs per State," Advancing Surgical Care, June 2016; "Report to the Congress: Medicare Payment Policy," MedPAC, March 2015; ASC Association, Beckers, "51 Things to Know About the ASC Industry," Beckers ASC Review, 2017; Market Innovation Center interviews and analysis.

Expanding Network of Options Available

Providers Competing to Draw Patients Upstream



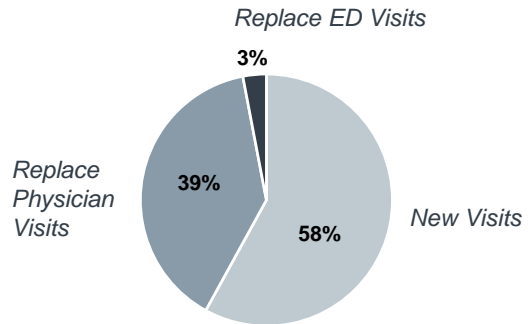
1) Federally Qualified Health Center.

Retail Clinics Expected to Continue Growing

Clinics Drive Utilization, but Minimally Offset ED Utilization



Increased Utilization in Health Care Clinics Offsets Savings



Retailer



Operational
Retail Clinics

1,105

400+

213

91

75³

Source: Accenture, "Number of US Retail Clinics Will Surpass 2800 by 2017," 2015; Drug Channels Institute, "The 2017 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers," 2017; RAND Corporation, "The Evolving Role of Retail Clinics," 2016; Scott Ashwood et al., "Retail Clinic Visits for Low-Acuity Conditions Increase Utilization and Spending," 2016, Health Affairs; Walgreens, "Clinic Locations," 2017; Market Innovation Center interviews and analysis.

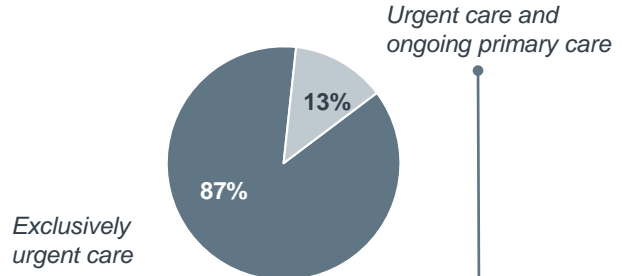
1) Forecasted number of retail clinics in 2017, as of 2015.

2) Includes partner clinics operated in Walgreens' stores.

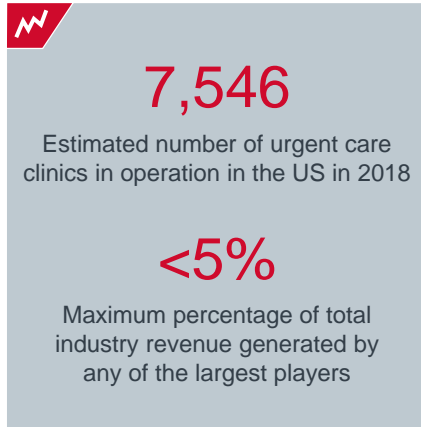
3) Includes 18 Walmart Care Clinics and 57 independently owned and operated Clinic at Walmart locations.

Urgent Care Ripe for Consolidation and Diversification

Urgent Care Beginning to Offer Ongoing Primary Care Services¹




Continued growth likely in urgent care centers offering ongoing primary care to bolster referrals, relieve primary care offices, and manage population health



Operator

Concentra

MedExpress
URGENT CARE Great Care Fast.

 Dignity Health

U.S. HealthWorks
MEDICAL GROUP

Doctors Express
URGENT CARE

NextCare
URGENT CARE

Operational
Urgent Care
Centers²

300+

180

174

163

137

Source: IBISWorld, "IBISWorld Industry Report OD5458: Urgent Care Centers in the US," February 2017; Merchant Medicine, "The ConvUrgentCare Report," Vol. 8, No. 7, July 2015; Health Data Management, "30 Top Urgent Care Center Chains," 2017; UCAOA, "2014 Urgent Care Benchmarking Survey Report"; UCAOA, "Benchmarking Report Summary," 2016; Market Innovation Center interviews and analysis.

1) As of January 2016.

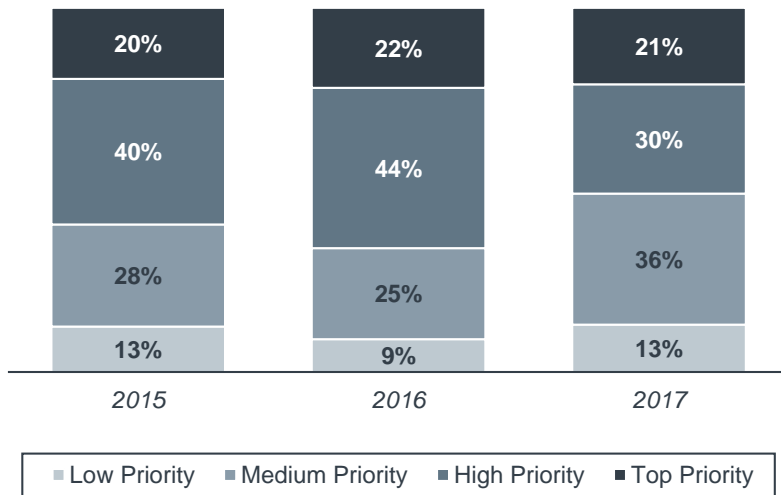
2) As of February 2017.

Provider Interest in Telehealth Continues to Grow

Telemedicine as a Strategic Priority

REACH Health, "2017 U.S. Telemedicine Industry Benchmark Survey"

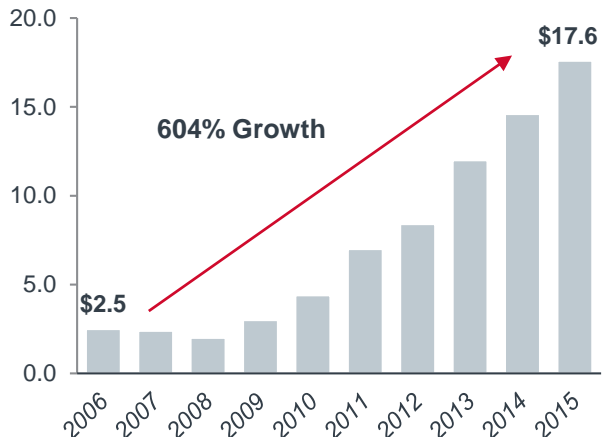
n=436



Reimbursement Shows No Sign of Slowing

Year-Over-Year Medicare Reimbursement for Telehealth Services¹

In millions of dollars



33%

Increase in Medicare telehealth claims from 2015 to 2016

28%

Increase in Medicare telehealth payments between 2015 and 2016

1) CMS data.
2) 2015 HIS Analytics report.

Sources: Pittman D, "Medicare telemedicine spending jumped 28% last year" *Politico Pro*, August 9, 2017; Gooch K, "Medicare telehealth spending rose nearly 30% in 2016: 4 things to know" *Beckers Hospital Review*, August 29, 2017; Service Line Strategy Advisor research and analysis.



Purchaser Behavior

- Health Plan Exchanges
- Employers
- Medicare & Medicaid

Political Rollback on Exchanges

CMS Emphasizes Greater State Flexibility in 2019 Proposal

Administration's Short-Term Actions:



Halve open enrollment period



Reduce navigator funding



Scale back advertising



Close website on Sundays for maintenance

CMS' Proposal for 2019:

Key Elements of CMS' Proposal for 2019 Enrollment Period

- Allow states to set Essential Health Benefits benchmarks annually
- Ease medical-loss-ratio requirements
- Expand navigator types
- Eliminate the SHOP online tool in favor of direct enrollment through insurer or broker

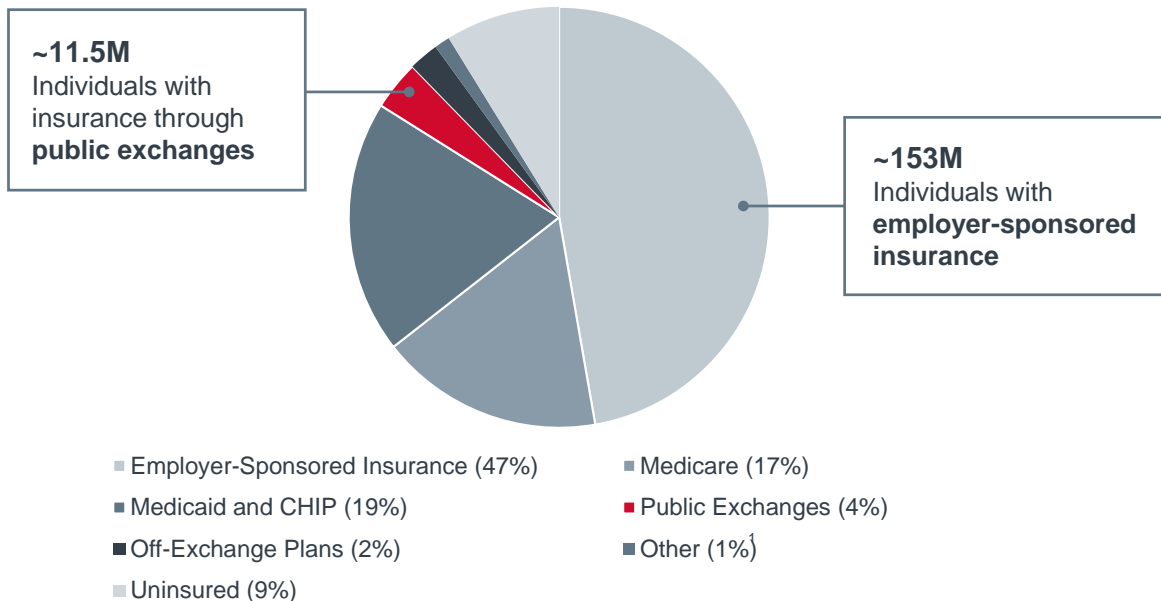
Source: "Industry stakeholders weigh in on CMS' proposed rule for 2019 federal exchange plans" *Advisory Board*, November 29, 2017; Dolan, M., "Judge refuses to block Trump's order to end Obamacare subsidies," *LA Times*, October 25, 2017; Jost, T., "Administration's Ending Of Cost-Sharing Reduction Payments Likely to Roll Individual Markets," *Health Affairs Blog*, Oct. 2017 Health Care Advisory Board interviews and analysis.

For Providers, a Relatively Limited Impact

Despite Political Significance, Exchanges Only a Small Segment of Market

Approximate Coverage of US Population by Payer Sector

As of March 2016



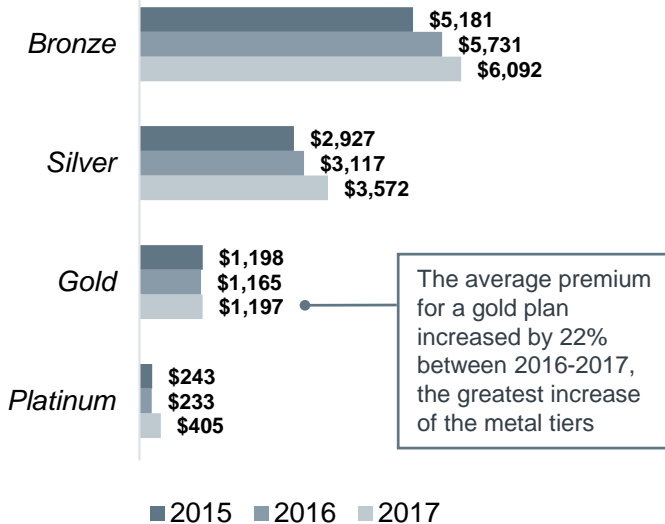
1) Student, IHS, CH+.

Source: Gaba, C., "Healthcare Coverage Breakout for the Entire U.S. Population in 1 Chart," ACASignups.net, March 28, 2016, available at: <http://acasignups.net/16/04/18/show-your-work-healthcare-coverage-breakout-entire-us-population-1-chart>; Health Care Advisory Board interviews and analysis.

Consumers Trade Low Premiums for High Deductibles

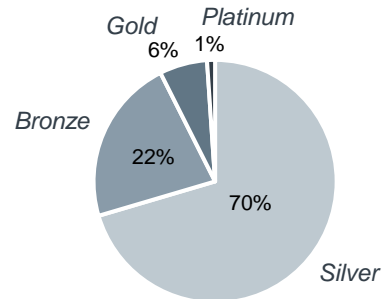
Average Deductible for Exchange-Sold Health Plans

2015-2017



Exchange Enrollment, by Metal Tier

2016

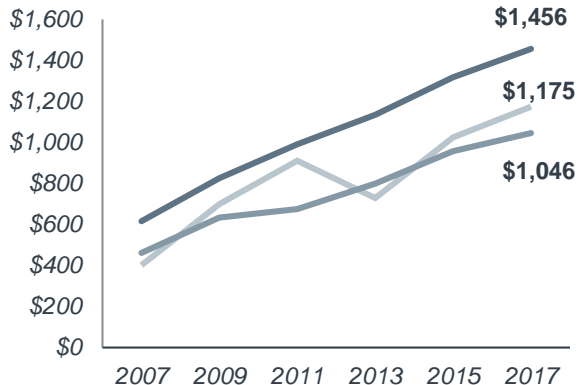


92% of exchange enrollees are in bronze or silver plans

Employers Continue to Grow HDHP Offerings

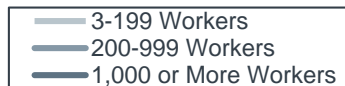
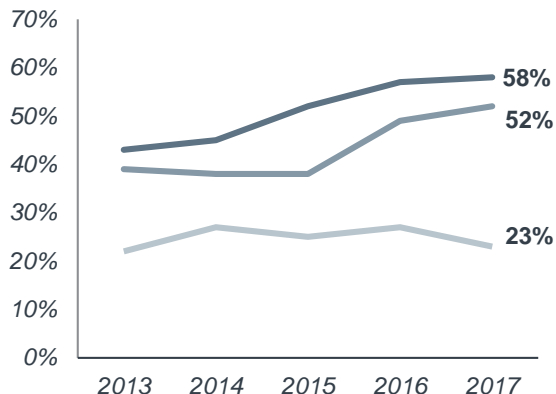
ESI Average Deductible for Single Coverage¹

By Plan Type, 2007-2017



Percentage of Firms Offering an High Deductible Health Plans³

By Firm Size, 2013-2017



1) Among covered workers with a general annual health plan deductible.

2) Includes health plans with savings options.

3) High deductible health plans with a deductible of at least \$1,000 for single coverage and \$2,000 for family coverage

Price-Exposed Workers Sway the Demand Economy

The Near-Term and Long-Term Impact of Increased Employer Cost-Shifting

Near-Term Volume Impact

1 Decreased Demand

Large out-of-pocket obligation leading to deferral of care across all services

2 Extreme Seasonality

Delaying high-acuity elective care until out-of-maximum achieved, accentuating volume shifts to the end of the year

Near-Term Pricing Impact

3 Reduced Collections

Inability to pay out-of-pocket obligation leading to decline in patient collections

Long-Term Market Share Impact

4 Increased Shopping

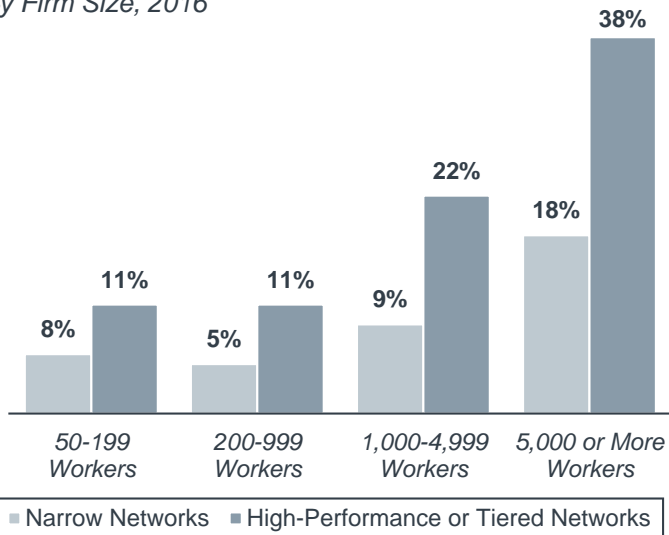
Growth of transparency apps facilitating price comparisons, shifting preference to lower-priced providers

Many Employers Curating Through Network Design

High-Performing Networks Most Prevalent Among Large Employers

Percentage of Firms With Health Plans Offering a Narrow Network, High-Performance Network, or Tiered Network

By Firm Size, 2016



Even More Companies Poised to Join the Trend

46%

Of employers surveyed¹ in Q1 2016 were considering implementing value-based plan designs or high-performance networks in 2017

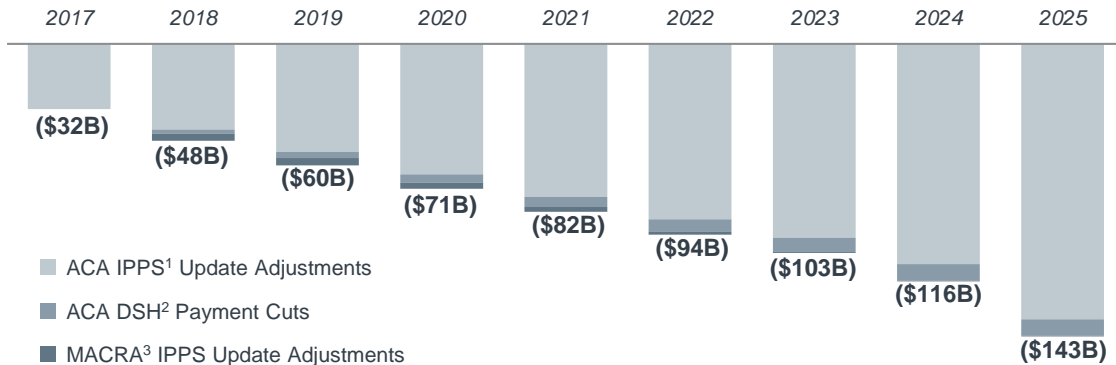
1) PwC's 2016 Health and Well-being Touchstone Survey; includes 1,100 employers from 37 industries across the US.

Source: Murphy, B., "PwC: 46% of employers consider move to high-performance networks," *Beckers*, June 21, 2016; Hall, M. et al., "Narrow Provider Networks for Employer Plans," *Employee Benefit Research Institute*, Dec. 14, 2016; Health Care Advisory Board interviews and analysis.

Kicking the Legs Out From Under Hospital FFS

Medicare Payment Cuts for FFS Models Encourage Migration to Risk

“Productivity” Adjustments and Other Cuts



\$14.6B

Cuts to teaching hospitals
and GME payments



\$30.8B

Reduction in Medicare
bad debt payments

1) Inpatient Prospective Payment System
 2) Disproportionate Share Hospital
 3) Medicare Access and CHIP Reauthorization Act

Source: CBO, “Letter to the Honorable John Boehner Providing an Estimate for H.R. 6079, The Repeal of Obamacare Act,” July 24, 2012; CBO, “Cost Estimate and Supplemental Analyses for H.R. 2, the Medicare Access and CHIP Reauthorization Act of 2015; The Daily Briefing, “How to Understand Last Week’s Big Budget Deal,” November 2, 2015; Budget of the United States Government (Proposed) FY 2016; Pham H, et al., “Medicare’s Vision for Delivery-System Reform – The Role of ACOs,” *New England Journal of Medicine*, September 10, 2015; Health Care Advisory Board interviews and analysis.

Site-Neutral Payments Now Taking Effect

Hospital Sites Meeting Three Criteria...

- 1 Hospital-owned, designated as “off-campus, provider-based sites”
- 2 Located more than 250 yards from hospital’s campus
- 3 Acquired, opened, or built after November 1, 2015

...Receive 40% of HOPPS¹ payment in 2018



Reimbursed for all services on site-specific MPFS rate set at 40% of HOPPS¹ payment, down from 50% in 2017



1 in 4 Imaging Performance Partnership members own an impacted site

Ways to Lose Ability to Bill on HOPPS:

- Facility relocation²
- Site acquisition
- Office expansion

Further Reductions on the Horizon



In 2019, claims data from impacted sites will be used to help determine new rates

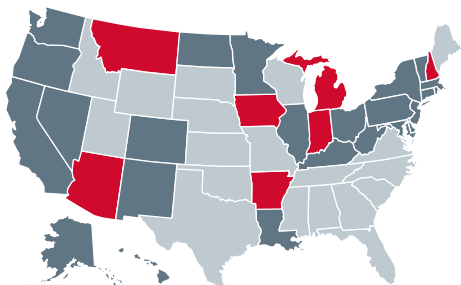


CMS exploring a full transition of impacted sites to MPFS claims

Federal Medicaid Funding Set to Phase Down

31 States and DC Have Approved Expansion

As of October 2017



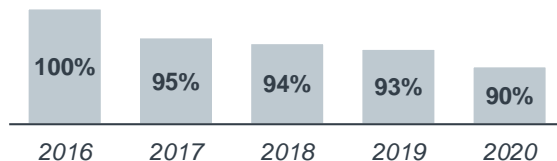
■ Participating ■ Expansion by Waiver ■ Not Currently Participating

\$68B Federal spending on Medicaid expansion population, FY2015

\$4.3B State spending on Medicaid expansion population, FY2015

Impending Federal Cuts to Safety Net Spending Threaten Stability

Federal Matching Rate for Expansion Population



\$43B Cut to federal Medicaid DSH payments, 2018-2026

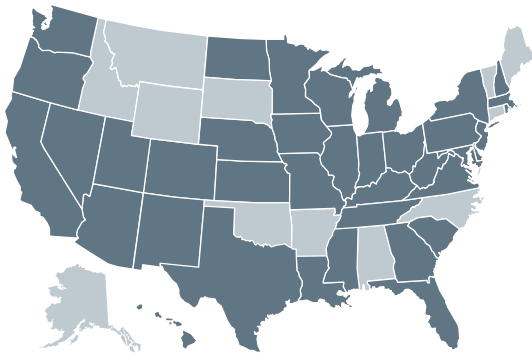
31 States face revenue shortfalls, Jan. 2017

“Medicaid could make up close to half of Louisiana's state budget”
 “We can't control our costs. We're growing out of control,” said state Rep. John Schroder, R-Covington.”

Medicaid Managed Care Reaching Its Limits

39 States and DC Have At Least One Medicaid Managed Care Organization

As of September 2016



■ MCOs¹

■ No MCOs¹

58% Increase in MCO enrollment in 19 expansion states, Dec. 2013-Sep. 2016

Implications of Medicaid Managed Care for Providers



Continued payment rate cuts



Increased opportunity for provider-sponsored health plans



[The number of Medicaid beneficiaries covered by insurers] is staggering. It's nearly a quarter of the population, [but] **the easy growth is over.**"

*Ari Gottlieb,
Director Health Industries Payer
Strategy, PwC Advisory*

¹) Capitated Medicaid managed care organizations.

Waivers Offer Opportunity for Funding and Innovation

States Using Waivers to Drive Three Major Types of Medicaid Reform



1 Payer-Led Managed Care

- Section 1932 and 1915 waivers, some 1115
- Implemented in 39 states
- Controls state spending by shifting beneficiaries to managed care with per-capita spending limits and/or home-based care alternatives



2 Consumer-Driven Insurance Design

- Section 1115 waivers
- Implemented in 7 states
- Allows states to change Medicaid coverage and eligibility options, often implementing more conservative features (e.g. beneficiary cost-sharing requirements)



3 Provider-Focused Delivery Reform

- Section 1115 waivers, notably DSRIP¹ waivers
- Implemented in 16 states
- States receive federal dollars upfront; commit to delivery and/or payment reform that will save federal government money in long-term

1) Delivery System Reform Incentive Payment.



Provider Selection

- Independent Physicians
- Consumers

Large Opportunity in Enhancing Physician Loyalty

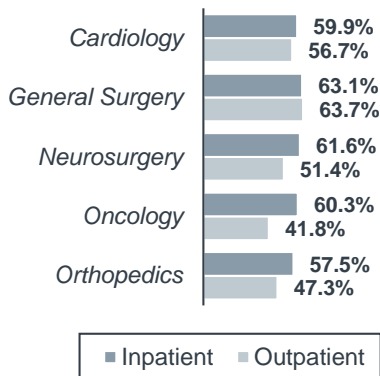
PCP Referral Integrity

Advisory Board CMA Members (n=284)

Employed PCP Overall Loyalty

53%

Employed PCP Loyalty by Specialty



Optimized Loyalty Scenario

Scenario: Raise in-network PCP referral integrity from 54% to 80%

Practical Maximum Referral Loyalty 80%

Downstream Care Delivery Revenue \$80.7M

Total Increase in System Revenue 7.1%

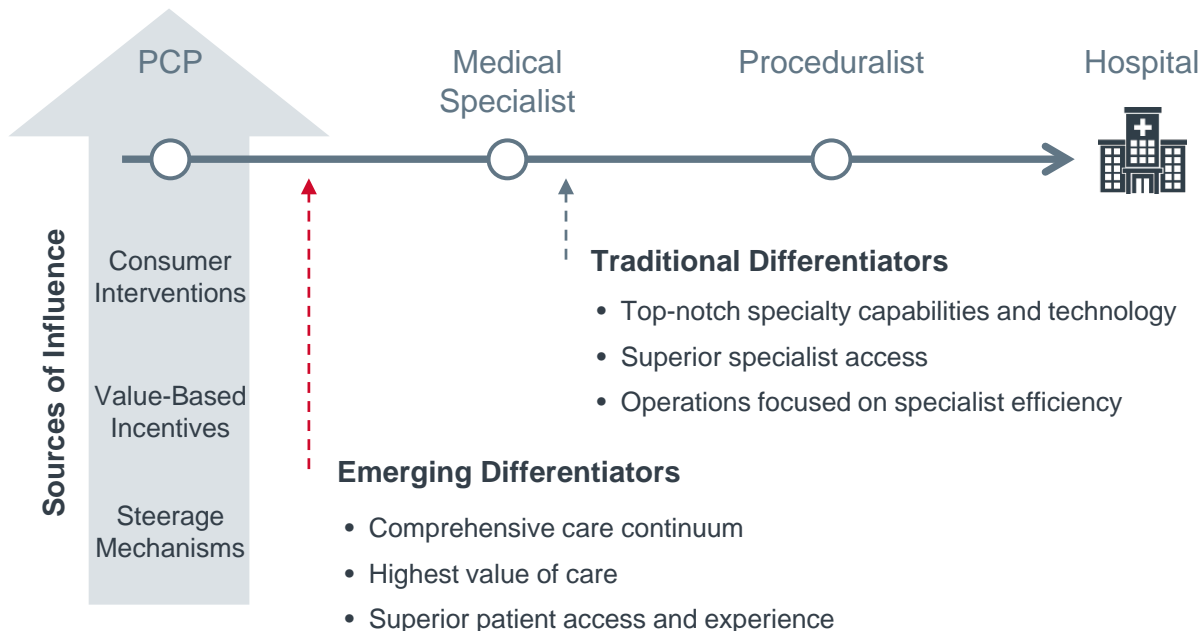
Major Assumptions of Scenario:

- Sample health system has baseline revenue of \$1.1B; 54% of PCP referrals are in-network
- 34% of specialist visits are from self-referrals
- Hospital occupancy can fill by 20%
- Convenient care referral integrity does not increase

Referral Choice Criteria Different for PCPs, Specialists

Emerging and Traditional Differentiators for Physicians

The Extended Service Line Referral Pathway



Drivers of Point-of-Care Consumerism

Market Shift



Consumers adopt greater financial responsibility

- Prevalence of HDHPS increasing
- Magnitude of OOP responsibility continues to grow

Effect on Market

- Price sensitivity
- Shopping behavior



Emergence of meaningful alternatives

- New market entrants providing attractive alternatives

- Competition
- More (and better) choices for consumers



Greater transparency

- Proliferation of third party transparency vendors continues
- Providers' improved communications on value

- More information to make educated decisions about care and providers



Weakening of physician recommendations

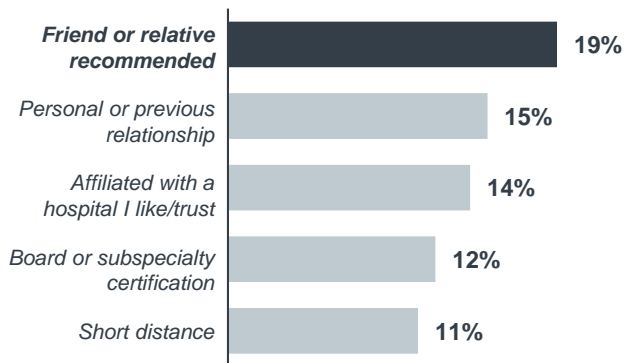
- Growth of new primary care options, transparency could undermine traditional PCP relationships

- Increase in self-referrals
- More steering of provider referrals

Recommendation Is Top Driver for Specialist

Top Drivers of Consumer Choice

Percentage of Respondents Citing Driver as #1 Influence in Decision for Specialist



60% of adults turn to family and friends for information or support on health issues



72% of internet users look online for health information



75% of self-referrers consult at least one source when finding a specialist



>80% of Millennials have smartphones, and 25% read online reviews before looking for a provider

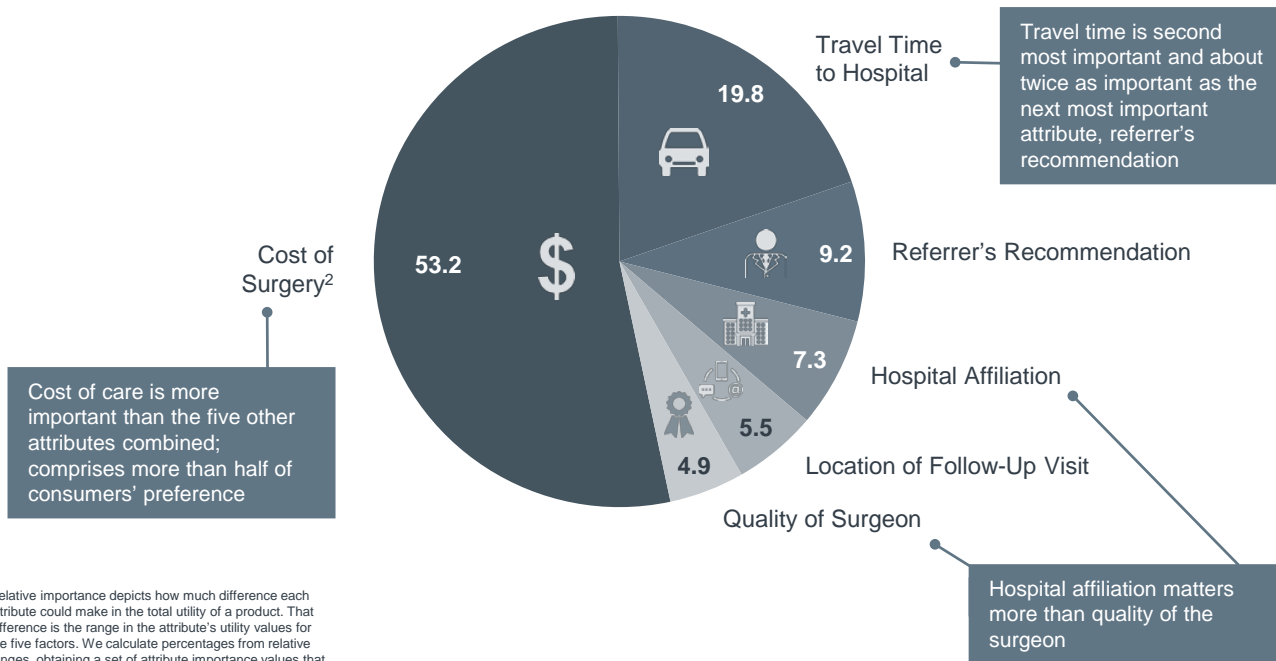


35% of adults go online to figure out their medical condition

Source: Fox S and Duggan M, "Health Online 2013," Pew Research Center, <http://www.pewinternet.org/2013/01/15/health-online-2013/>; "2016 Report to the Nation," Healthgrades, October 2015, <https://www.healthgrades.com/quality/healthgrades-2016-report-to-the-nation>; "What Do Consumers Want from Specialty Care?" Market Innovation Center, 2015; Market Innovation Center interviews and analysis.

Price, Travel Time Are Top Surgical Care Priorities

Average Relative Importance¹ of Six Surgical Care Attributes



- 1) Relative importance depicts how much difference each attribute could make in the total utility of a product. That difference is the range in the attribute's utility values for the five factors. We calculate percentages from relative ranges, obtaining a set of attribute importance values that add to 100 percent.
- 2) Includes cost of care and travel

Most Patients Are Not Loyal to PCP

Percent of Consumers Highly Loyal in Each of Three Loyalty Measures

If your primary care moved to another clinic or practice, how likely are you to **follow** him/her to another clinic or practice?

(On a scale of 0 to 10, with 0 being "definitely would not follow" and 10 being "definitely follow")



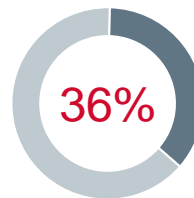
How likely are you to **stay** with your primary care physician over the next 12 months?

(On a scale of 0 to 10, with 0 being "definitely not staying" and 10 being "definitely staying")



How likely are you to **recommend** your primary care physician to friends or family members?

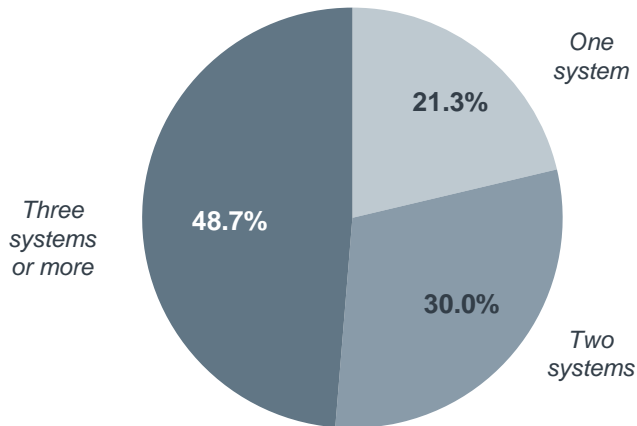
(On a scale of 0 to 10, with 0 being "not at all likely" and 10 being "extremely likely")



Nearly 80% of Consumers Using Multiple Systems

Average Patient Visits More Than Two Systems in Five Years

Percentage of Consumers Using:
Across Five Years



2.8

Average number of systems
used by the most loyalty-
predisposed population