2018 Health Care Industry Trends
Disclosure

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

Provider Market

Purchaser Behavior

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

<table>
<thead>
<tr>
<th>Pay-for-Performance</th>
<th>Bundled Payments</th>
<th>Shared Savings</th>
<th>Shared Risk</th>
<th>Full Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital VBP Program</td>
<td>Bundled Payments for Care Improvement Initiative (BPCI)</td>
<td>MSSP Track 1 (50% sharing)</td>
<td>MSSP Track 1+1</td>
<td>Next Generation ACO Model (full risk option)</td>
</tr>
<tr>
<td>Hospital Readmissions Reduction Program</td>
<td>Comprehensive Care for Joint Replacement (CJR) Model</td>
<td>MSSP Track 2 (60% sharing)</td>
<td>MSSP Track 2 (up to 75% sharing)</td>
<td>Medicare Advantage (provider-sponsored)</td>
</tr>
<tr>
<td>HAC Reduction Program</td>
<td>Episode Payment Models</td>
<td>MSSP Track 3</td>
<td>Next Generation ACO Model (80-85% shared savings option)</td>
<td></td>
</tr>
<tr>
<td>Merit-Based Incentive Payment System</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Increasing Financial Risk

1) Anticipated to open for participation in 2018.

Source: Health Care Advisory Board interviews and analysis.
2018 Sees More Positive Adjustments than Decreases

Despite Lower Participation in VBP, a Greater Portion Receive Bonuses

More Hospitals Receiving VBP\(^1\) Bonuses than Penalties

- **2,808** hospitals in VBP program
- **1,600** hospitals receiving bonus payment\(^3\)
- **3\%** payment increase received by highest performing hospital

Hospital Performance in P4P\(^2\) 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 EPMs\(^1\) Cancelled
• **Mandatory** bundling for CABG\(^2\) and AMI\(^2\), originally slated to go into effect July 2017
• Final rule released on November 30\(^{th}\) cancels both programs

CJR\(^3\) 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 SHFFT\(^4\)

What’s Next for BPCI\(^5\)?
• **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 30\(^{th}\), 2018

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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 30\(^{th}\) 2017

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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

Source: Health Care Advisory Board interviews and analysis.
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

2) CMS’s projection was made in 2015.

Altarum’s projected growth rate, as of Q3, is below CMS’s official projected growth rate of 5.4% for 2017.2

Margin Deterioration Occurring for Many Providers

Excess Margin\(^1\) Medians of Freestanding Hospitals, Single-State & Multi-State Healthcare Systems, by Broad Rating Category

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

2) Operating margin = (total operating revenue - total operating expense) / total operating revenue \(^\times 100\).

Nine Price and Cost Pressures Squeezing Margins

**Downward Pricing Pressure**
1. Direct reimbursement pressure
2. Federalism and state-based coverage reform
3. Dilution of commercial coverage
4. Deregulation and the new era of competition
5. Shifting demographics and payer mix evolution

**Upward Cost Pressure**
6. Rising pharmaceutical costs
7. Uncontrolled labor spending growth
8. Increasing reliance on IT enablement
9. Growth in purchased services

Source: Health Care Advisory Board interviews and analysis.
Volume Performance Projections Remain Modest

Inpatient and Hospital Based Outpatient Volume Projections

<table>
<thead>
<tr>
<th>Inpatient Volume, CAGR(^1)</th>
<th>Hospital-Based Outpatient Volume, CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-2021</td>
<td>2016-2021</td>
</tr>
<tr>
<td>Overall</td>
<td>Overall</td>
</tr>
<tr>
<td>0.5%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>Oncology</td>
</tr>
<tr>
<td>3.2%</td>
<td>1.6%</td>
</tr>
<tr>
<td>General Medicine</td>
<td>Radiology</td>
</tr>
<tr>
<td>1.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>Cardiology</td>
</tr>
<tr>
<td>0.6%</td>
<td>1.9%</td>
</tr>
<tr>
<td>General Surgery</td>
<td>E&amp;M</td>
</tr>
<tr>
<td>0.7%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Neurology</td>
<td>General Surgery</td>
</tr>
<tr>
<td>0.6%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Cardiac Services</td>
<td>Orthopedics</td>
</tr>
<tr>
<td>(2.3%)</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

1) Compound Annual Growth Rate

Source: Advisory Board Market Scenario Planner; Advisory Board research and analysis.
# Volumes Continuing to Shift Outpatient

## Medicare Volume Growth

*Cumulative Percent Change*

<table>
<thead>
<tr>
<th>Year</th>
<th>Outpatient Services per FFS Part B Beneficiary</th>
<th>Inpatient Discharges per FFS Part A Beneficiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>(47.4%)</td>
<td>(19.5%)</td>
</tr>
</tbody>
</table>

## All Payer Volume Growth Projections

### 2016-2021

<table>
<thead>
<tr>
<th>Service</th>
<th>Inpatient</th>
<th>Outpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac Services</td>
<td>10%</td>
<td>-11%</td>
</tr>
<tr>
<td>Vascular Services</td>
<td>19%</td>
<td>-9%</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>18%</td>
<td>4%</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>23%</td>
<td>3%</td>
</tr>
</tbody>
</table>

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

M&A Activity Continues at a Steady Clip

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

Hospital M&A Activity

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Deal Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>66</td>
</tr>
<tr>
<td>2011</td>
<td>88</td>
</tr>
<tr>
<td>2012</td>
<td>95</td>
</tr>
<tr>
<td>2013</td>
<td>98</td>
</tr>
<tr>
<td>2014</td>
<td>95</td>
</tr>
<tr>
<td>2015</td>
<td>112</td>
</tr>
<tr>
<td>2016</td>
<td>102</td>
</tr>
<tr>
<td>2017</td>
<td>115</td>
</tr>
</tbody>
</table>

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)

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:

- **91%**: Continued growth in employment with large practices and systems
- **73%**: Greater stress among physicians in all settings
- **52%**: More practices take on risk-based contracts
- **42%**: More physicians leave Medicare

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital Inpatient</th>
<th>Total Outpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>37.6</td>
<td>43.9</td>
</tr>
<tr>
<td>2012</td>
<td>35.8</td>
<td>44.5</td>
</tr>
<tr>
<td>2013</td>
<td>33.8</td>
<td>44.8</td>
</tr>
<tr>
<td>2014</td>
<td>32.4</td>
<td>45.0</td>
</tr>
<tr>
<td>2015</td>
<td>31.7</td>
<td>45.1</td>
</tr>
</tbody>
</table>

Source: CMS Physician/Supplier Procedure Summary Master File; Neiman Health Policy Institute; Imaging Performance Partnership interviews and analysis.

¹) Diagnosis-Related Group.
# Modest Outpatient Imaging Opportunities

## Imaging Volumes Mostly Outpatient

### National Outpatient Radiology Market Projections

*Estimated Volumes, 2016-2021*

<table>
<thead>
<tr>
<th>Modality</th>
<th>Five-Year Projected Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>US¹</td>
<td>20%</td>
</tr>
<tr>
<td>PET</td>
<td>8%</td>
</tr>
<tr>
<td>CT</td>
<td>8%</td>
</tr>
<tr>
<td>MRI</td>
<td>6%</td>
</tr>
<tr>
<td>X-Ray</td>
<td>4%</td>
</tr>
<tr>
<td>Mammo</td>
<td>(3%)</td>
</tr>
<tr>
<td>Nuc med</td>
<td>(6%)</td>
</tr>
<tr>
<td>Overall</td>
<td>7%</td>
</tr>
</tbody>
</table>

### Imaging Procedures by Care Setting

**Medicare Part B, 2014**

**All Imaging Procedures**

- **Inpatient**: 17%
- **HOPD²**: 13%
- **Office**: 61%
- **ED³**: 8%

**Advanced Imaging Procedures⁴**

- **Inpatient**: 22%
- **HOPD**: 34%
- **ED**: 22%
- **Office**: 22%

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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

- 2009: 5,064 (2.0% growth)
- 2011: 5,228 (3.2% growth)
- 2013: 5,364 (2.6% growth)
- 2015: 5,464 (1.9% growth)
- 2017: 5,480 (0.2% growth)

Expanding Network of Options Available

Providers Competing to Draw Patients Upstream

1) Federally Qualified Health Center.

Source: Market Innovation Center interviews and analysis.
Retail Clinics Expected to Continue Growing

Clinics Drive Utilization, but Minimally Offset ED Utilization

2800
Estimated total number of retail clinics in the US.

2X
There are approximately double the number of retail clinics as there were in 2012.

Increased Utilization in Health Care Clinics
Offsets Savings

Replace ED Visits

Replace Physician Visits

New Visits


Retailer

minuteclinic

1,105

Walgreens healthcare clinic

400+

The Little Clinic

213

RediClinic

91

Walmart

75

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

**7,546**

Estimated number of urgent care clinics in operation in the US in 2018

<5%

Maximum percentage of total industry revenue generated by any of the largest players

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**Urgent Care Beginning to Offer Ongoing Primary Care Services**

- **Exclusively urgent care**: 87%
- **Urgent care and ongoing primary care**: 13%

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

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<table>
<thead>
<tr>
<th>Operator</th>
<th>300+</th>
<th>180</th>
<th>174</th>
<th>163</th>
<th>137</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentra</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>MedExpress</td>
<td></td>
<td></td>
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<tr>
<td>Dignity Health</td>
<td></td>
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<tr>
<td>Doctors Express</td>
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<tr>
<td>U.S. HealthWorks</td>
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<tr>
<td>NextCare</td>
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</tr>
</tbody>
</table>

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1) As of January 2016.
2) As of February 2017.

Provider Interest in Telehealth Continues to Grow

Telemedicine as a Strategic Priority


n=436

<table>
<thead>
<tr>
<th>Year</th>
<th>Low Priority</th>
<th>Medium Priority</th>
<th>High Priority</th>
<th>Top Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>20% 40% 28% 13%</td>
<td>22% 44% 25% 9%</td>
<td>21% 30% 36% 13%</td>
<td></td>
</tr>
</tbody>
</table>

Respondents identifying telemedicine as a “top” or “high” priority at their organization in 2017

Reimbursement Shows No Sign of Slowing

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.

**Year-Over-Year Medicare Reimbursement for Telehealth Services**

*In millions of dollars*

- **2006** $2.5
- **2007**
- **2008**
- **2009**
- **2010**
- **2011**
- **2012**
- **2013**
- **2014**
- **2015** $17.6

**604% Growth**

**33%**

Increase in Medicare telehealth claims from 2015 to 2016

**28%**

Increase in Medicare telehealth payments between 2015 and 2016

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

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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


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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

~153M Individuals with employer-sponsored insurance

~11.5M Individuals with insurance through public exchanges

- Employer-Sponsored Insurance (47%)
- Medicare (17%)
- Medicaid and CHIP (19%)
- Public Exchanges (4%)
- Off-Exchange Plans (2%)
- Other (1%)
- Uninsured (9%)

Consumers Trade Low Premiums for High Deductibles

Average Deductible for Exchange-Sold Health Plans

<table>
<thead>
<tr>
<th>Metal Tier</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronze</td>
<td>$5,181</td>
<td>$5,731</td>
<td>$6,092</td>
</tr>
<tr>
<td>Silver</td>
<td>$2,927</td>
<td>$3,117</td>
<td>$3,572</td>
</tr>
<tr>
<td>Gold</td>
<td>$1,198</td>
<td>$1,165</td>
<td>$1,197</td>
</tr>
<tr>
<td>Platinum</td>
<td>$243</td>
<td>$233</td>
<td>$405</td>
</tr>
</tbody>
</table>

The average premium for a gold plan increased by 22% between 2016-2017, the greatest increase of the metal tiers.

Exchange Enrollment, by Metal Tier

2016

- Gold: 6%
- Platinum: 1%
- Bronze: 22%
- Silver: 70%

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

<table>
<thead>
<tr>
<th>Year</th>
<th>HMO</th>
<th>PPO</th>
<th>All Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>$1,046</td>
<td>$1,175</td>
<td>$1,175</td>
</tr>
<tr>
<td>2009</td>
<td>$1,046</td>
<td>$1,456</td>
<td>$1,456</td>
</tr>
<tr>
<td>2011</td>
<td>$1,456</td>
<td>$1,456</td>
<td>$1,456</td>
</tr>
<tr>
<td>2013</td>
<td>$1,456</td>
<td>$1,456</td>
<td>$1,456</td>
</tr>
<tr>
<td>2015</td>
<td>$1,456</td>
<td>$1,456</td>
<td>$1,456</td>
</tr>
<tr>
<td>2017</td>
<td>$1,456</td>
<td>$1,456</td>
<td>$1,456</td>
</tr>
</tbody>
</table>

Percentage of Firms Offering an High Deductible Health Plans³
By Firm Size, 2013-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>3-199 Workers</th>
<th>200-999 Workers</th>
<th>1,000 or More Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>58%</td>
<td>52%</td>
<td>23%</td>
</tr>
<tr>
<td>2014</td>
<td>58%</td>
<td>52%</td>
<td>23%</td>
</tr>
<tr>
<td>2015</td>
<td>58%</td>
<td>52%</td>
<td>23%</td>
</tr>
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<td>2016</td>
<td>58%</td>
<td>52%</td>
<td>23%</td>
</tr>
<tr>
<td>2017</td>
<td>58%</td>
<td>52%</td>
<td>23%</td>
</tr>
</tbody>
</table>


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

Source: Health Care Advisory Board interviews and analysis.
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*

<table>
<thead>
<tr>
<th>Firm Size</th>
<th>Narrow Networks</th>
<th>High-Performance or Tiered Networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-199 Workers</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>200-999 Workers</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>1,000-4,999 Workers</td>
<td>9%</td>
<td>22%</td>
</tr>
<tr>
<td>5,000 or More Workers</td>
<td>18%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Even More Companies Poised to Join the Trend

46%

Of employers surveyed 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.
Medicare Payment Cuts for FFS Models Encourage Migration to Risk

“Productivity” Adjustments and Other Cuts

<table>
<thead>
<tr>
<th>Year</th>
<th>ACA IPPS Update Adjustments</th>
<th>ACA DSH Payment Cuts</th>
<th>MACRA IPPS Update Adjustments</th>
<th>Total Cuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>($32B)</td>
<td></td>
<td></td>
<td>$14.6B</td>
</tr>
<tr>
<td>2018</td>
<td>($48B)</td>
<td></td>
<td></td>
<td>$30.8B</td>
</tr>
<tr>
<td>2019</td>
<td>($60B)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>($71B)</td>
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<td>2021</td>
<td>($82B)</td>
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<td>2022</td>
<td>($94B)</td>
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<td>2023</td>
<td>($103B)</td>
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<td>2024</td>
<td>($116B)</td>
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<td>2025</td>
<td>($143B)</td>
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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 HOPPS\(^1\) payment in 2018

Reimbursed for all services on site-specific MPFS rate set at 40% of HOPPS\(^1\) payment, down from 50% in 2017

Further Reductions on the Horizon

1 in 4 Imaging Performance Partnership members own an impacted site

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

Ways to Lose Ability to Bill on HOPPS:

- Facility relocation\(^2\)
- Site acquisition
- Office expansion

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1) Hospital Outpatient Prospective Payment System.
2) Facilities relocated for extraordinary events, e.g. natural disasters, public safety events, etc. may continue billing on HOPPS.

Source: Centers for Medicare and Medicaid Services, CMS.gov; Imaging Performance Partnership interviews and analysis.
Federal Medicaid Funding Set to Phase Down

31 States and DC Have Approved Expansion
As of October 2017

- Federal spending on Medicaid expansion population, FY2015: $68B
- State spending on Medicaid expansion population, FY2015: $4.3B

Impending Federal Cuts to Safety Net Spending Threaten Stability

- Cut to federal Medicaid DSH payments, 2018-2026: $43B
- States face revenue shortfalls, Jan. 2017: 31

“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

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.
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

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Source: Kaiser Family Foundation, “Medicaid Enrollment in Managed Care by Plan Type,” 2014; Medicaid.gov, “State Waiver List,” Health Care Advisory Board interviews and analysis.

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

Employed PCP Loyalty by Specialty

- Cardiology: 59.9% Inpatient, 56.7% Outpatient
- General Surgery: 63.1% Inpatient, 63.7% Outpatient
- Neurosurgery: 61.6% Inpatient, 51.4% Outpatient
- Oncology: 60.3% Inpatient, 41.8% Outpatient
- Orthopedics: 57.5% Inpatient, 47.3% Outpatient

53%

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

Source: Health Care Advisory Board interviews and analysis.
Referral Choice Criteria Different for PCPs, Specialists

Emerging and Traditional Differentiators for Physicians

The Extended Service Line Referral Pathway

PCP → Medical Specialist → Proceduralist → Hospital

Traditional Differentiators
- Top-notch specialty capabilities and technology
- Superior specialist access
- Operations focused on specialist efficiency

Emerging Differentiators
- Comprehensive care continuum
- Highest value of care
- Superior patient access and experience

Sources of Influence
- Consumer Interventions
- Value-Based Incentives
- Steerage Mechanisms

Source: Service Line Strategy Advisor interviews and analysis.
## Drivers of Point-of-Care Consumerism

<table>
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<tr>
<th>Market Shift</th>
<th>Why Is This Changing?</th>
<th>Effect on Market</th>
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| Consumers adopt greater financial responsibility | • Prevalence of HDHPS increasing  
• Magnitude of OOP responsibility continues to grow | • 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 steerage 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

- **Friend or relative recommended**: 19%
- **Personal or previous relationship**: 15%
- **Affiliated with a hospital I like/trust**: 14%
- **Board or subspecialty certification**: 12%
- **Short distance**: 11%

- **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

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Cost of care is more important than the five other attributes combined; comprises more than half of consumers’ preference.

Cost of Surgery

Travel Time to Hospital

Travel time is second most important and about twice as important as the next most important attribute, referrer’s recommendation.

Referrer’s Recommendation

Hospital Affiliation

Location of Follow-Up Visit

Quality of Surgeon

Hospital affiliation matters more than quality of the surgeon.

Average Relative Importance of Six Surgical Care Attributes

Cost of care is more important than the five other attributes combined; comprises more than half of consumers’ preference.

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”)

9%

53%

36%

Source: 2015 Primary Care Physician Consumer Loyalty Survey, Market Innovation Center interviews and analysis.
Nearly 80% of Consumers Using Multiple Systems

Average Patient Visits More Than Two Systems in Five Years

Percentage of Consumers Using:
Across Five Years

- One system: 21.3%
- Two systems: 30.0%
- Three systems or more: 48.7%

Average number of systems used by the most loyalty-predisposed population: 2.8

Source: Market Innovation Center interviews and analysis.