The Evolving Health Care Ecosystem

*Where to Find Profitable Growth*

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Where to Find Profitable Growth

Key Trends (in 6 Slides)
Translating Trends to Demand
The Rate of Change is Driven by New Contracts...

- **High**
  - Incremental Risk
  - Population-Based Risk
  - Insurance product
  - Global capitation
  - ACO (2-sided risk)
  - ACO (1-sided risk)
  - Mandatory bundled episodes
  - Bundled episodes (pre- and postcare included)
  - Bundled episodes (inpatient only)
  - P4P/value-based purchasing

**Note:** Bubble sizes represent number of participating acute care hospitals. ACO = accountable care organization; P4P = pay-for-performance.
... and Even Election Results

**FEDERAL**

**EXECUTIVE BRANCH**
- President: Trump
- Vice President: Pence

**LEGISLATIVE BRANCH**
- House: 237 R, 193 D
  (5 Vacant)
- Senate: 52 R, 48 D

**JUDICIAL BRANCH**
- Supreme Court: 9 seats: 5 R, 4 D

**STATE**
- Governors: 33 R, 16 D, 1 I

D = Democrat; I = Independent; R = Republican.
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What to Do #1 – Refocus on Cost Control Across the System of CARE

Fiscally conservative policies have the potential to create enormous margin pressure for providers.

- Retreat on coverage expansion may exacerbate bad debt.
- Don’t expect a rollback of stingy payment updates.
- Private plan alternatives to Medicaid and Medicare enable lawmakers to delegate politically untenable cost-containment decisions to subcontractors.

Market-driven health care economy relies on care redesign aimed at:
1. Reducing clinical variation
2. Improving workforce productivity
3. Managing total cost of care
What to Do #2 – Understand Nexus of Control is Shifting More Local

- Public-private support for models that shift accountability to providers and consumers will lead to a pivot in leadership from a federal-driven to a market-driven health care reform.
  - Workforce shortages and an untenable rise in health care costs will continue to drive need for reform in how health care is delivered and who delivers it.
  - The pace of change and prioritization will vary across states and local markets.

Decentralized health care reform will reward providers that:
1. Embrace innovation and technology to stay nimble
2. Develop competencies in risk contracting
3. Look to lessons from Managed Medicaid and Medicare Advantage
What to Do #3 – Sharpen Tools for Consumerism

- Uptick in uninsured/underinsured numbers, further diffusion of high-deductible plans, stiff copays and/or a longer-term move to defined contribution in place of guaranteed benefits will make stellar consumer strategy even more essential.
  - Health savings accounts and price transparency are central to ACA replacement plans.
  - As proliferation of high-deductible plans continues and the deductible threshold rises, will there be a “Black Friday” for health care?

**Consumer-centric health care will accelerate need for:**
1. Strategic pricing for price-sensitive services
2. Inclusion in narrow networks
3. Revenue cycle management
How Do You Ensure Market Relevance? An Effective System of CARE

1. Size your local market and inventory your System of CARE

2. Build the right System of CARE to meet the needs of your market

3. Align System of CARE access channels to meet patients on their terms

How Do You Ensure Market Relevance?

- Ambulatory Procedure Center
- Hospital
- Inpatient Rehab
- Skilled Nursing Facility
- Outpatient Rehab
- Home Care
- Retail Pharmacy
- Urgent Care Center
- Diagnostic Imaging Center
- Physician Clinic
- Wellness and Fitness Center
- E-visits
- Home
Where to Find Profitable Growth

Key Trends (in 6 Slides)

Translating Trends to Demand
Sg2’s Impact of Change Forecasts

Sg2 IoC Forecasts
- Days, LOS, Volumes
- System of CARE

Sg2 Impact Factors

Sg2 Impact Factors

- Population
- Epidemiology
- Economics
- Policy
- Innovation & Technology
- Systems of CARE

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Forecasting Requires Thinking a Generation Ahead

Projected Population by Generation

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2026</th>
<th>2036</th>
<th>2050</th>
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<td>75+ Millennial</td>
<td>65</td>
<td>67</td>
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<tr>
<td>Millennial</td>
<td>75</td>
<td>60</td>
<td>74</td>
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76% | 60% | 74%

17% of all E&M visits expected to be virtual in 2026

Note: Millennials refers to the population ages 18 to 34 as of 2015. E&M = evaluation and management.


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Sg2 Defines Virtual Health Very Broadly

Virtual Health
Connected care services—including clinician-to-clinician, provider-to-patient and consumer-driven interactions—across a spectrum of electronically enabled consultative, direct patient care, educational and self-management services; encompasses a range of different terminologies, including telemedicine, telehealth, e-health and mobile health
Consumers Want Virtual Health

70% of patients report being comfortable communicating with physicians via text, email or video.

Sg2 forecasts that by 2024, 15% of all US evaluation and management visits will occur virtually.

Healthcare organizations are moving fast to embrace mobile apps.

- 33% Achieving positive ROI from mobile app investments already
- 82% Implementing a mobile strategy

What consumers believe results in best remote diagnosis:

- HD Video 63%
- Telephone 30%
- Email 7%

...How Will You Deliver It?
Virtual Health Deeper Dive – Scope and Expertise Vary Across Different Markets

- Virtual conferencing*
- Clinical mobile apps
  - Data integration
  - Peripherals
  - Medication management
- eED
- Virtual reality care
- Business model innovation
- Disaster monitoring
- ePharmacy
- Virtual pain management
- Virtual multispecialty clinic
- International offerings (pre- and postprocedure)

*Virtual conferencing is defined as clinician-to-clinician consults, whereas virtual consults are provider-to-patient consults.

Source: Sg2 Analysis, 2016.
Consumerism Will Impact Growth

**Delay (Time)**
- Bariatric surgery
- Spinal fusion
- Joint replacement
- Hysterectomy
- Skin lesion excision
- Allergy testing

**Divert (Site)**
- Urgent ED visits
- Imaging
- Colonoscopy
- Scheduled surgeries

**Reduce (Care)**
- Psychotherapy visits
- OP rehab visits
- Follow-up specialist visits

*Note: Based on Sg2's Impact of Change Procedure definitions.*
Large, self-insured employer switched employees from an insurance plan that provided free health care to a high-deductible health plan (HDHP).

**RESULTS**

Before vs After Deductible:

- **SPENDING REDUCTION**
  - 12%–14% Overall
  - 5%–8% Preventable Health

- **UTILIZATION REDUCTION**
  - 26% Screening Colonoscopies
  - 18% Imaging

**KEY FINDINGS**

- **Consumers did not learn to price shop after 2 years in HDHP.**
- Almost all spending reductions were from quantity reductions.
- Spending reductions occurred in both valuable and wasteful care.

Multimarket studies show consistent findings:

- **25%** Decrease in PAAs
- **25%** Decrease in ED Visits

**LONG-TERM**

**Adult Forecast**
US Market, 2016–2026

- **25%** PAA
- **−26%** ED Urgent Visits
- **−4%**

**Sg2 IP Forecast**
**Population-Based Forecast**

**Note:** Forecast excludes 0–17 age group. PAA = potentially avoidable admission.

**Sources:**
Utilization Shifts Redefine Growth Opportunities

**Adult Inpatient Forecast**
US Market, 2016–2026

<table>
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<th>Year</th>
<th>Discharges</th>
<th>5-Year</th>
<th>10-Year</th>
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<tbody>
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<td>2016</td>
<td>25</td>
<td>-3%</td>
<td>-3%</td>
</tr>
<tr>
<td>2021</td>
<td>30</td>
<td>+7%</td>
<td>-3%</td>
</tr>
<tr>
<td>2026</td>
<td>35</td>
<td>+15%</td>
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**Adult Outpatient Forecast**
US Market, 2016–2026

<table>
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<tr>
<th>Year</th>
<th>Volumes</th>
<th>5-Year</th>
<th>10-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>3.5</td>
<td>+8%</td>
<td>+16%</td>
</tr>
<tr>
<td>2026</td>
<td>4.0</td>
<td>+7%</td>
<td>+14%</td>
</tr>
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Note: Forecast excludes 0–17 age group.
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**2016 Site of Care Volumes and 5-Year Forecast, Adults**

US Market, 2016–2021

**Volume in 2021**

- **Office/Clinic**
  - Volume: 2B
  - +5%

- **Urgent/Retail Care**
  - Volume: 5.5M
  - +6%

- **Hospital OP/ASC**
  - Volume: 489M
  - +7%

- **SNF**
  - Volume: 3.3M
  - +13%

- **Home**
  - Volume: 238M
  - +12%

- **Inpatient**
  - Volume: 30M
  - -3%

- **ED**
  - Volume: 97M
  - +0%

**Note:** Analysis excludes 0–17 age group. Other sites not listed, including nonhospital locations such as OP rehab facilities, psychiatric centers, hospice centers, Federally Qualified Health Centers and assisted living facilities, represent 8% growth from 2016-2021 and a baseline volume of 206 million. ASC = ambulatory surgery center; CARE = Clinical Alignment and Resource Effectiveness; E&M = evaluation and management; SNF = skilled nursing facility. **Sources:** Impact of Change® v16.0; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP), 2013. Agency for Healthcare Research and Quality, Rockville, MD; OptumInsight, 2014; The following 2014 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; The Nielsen Company, LLC, 2016; Sg2 Analysis, 2016.

In 2021, 8% of all E&M visits will be delivered in a virtual care setting.
Service Lines Also Yield Distinctly Different Opportunities (and Risks?)

Inpatient Service Line Growth Rates
US Market, 2016–2026

Orthopedics and Spine
-12%
Neurosciences
-6%
Cancer
-7%
Gynecology
-15%
Pediatrics
-12%
Med/Surg
16%
Cardiovascular
21%

Outpatient Service Line Growth Rates
US Market, 2016–2026

Orthopedics and Spine
14%
Neurosciences
16%
Cancer
23%
Gynecology
5%
Pediatrics
7%
Med/Surg
16%
Cardiovascular
22%


Sg2 ANALYTICS

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CARDIOVASCULAR TRENDS

1. Medical admissions decline due to better OP disease management.
2. CV surgical admissions grow, driven by growth in heart valve, CABG, EP and vascular procedures.
3. Transcatheter valve therapies drive robust valve growth, expanding treatment to broader patient populations.
4. Diagnostic cath volumes decline due to epidemiology factors, appropriate use criteria and select replacement with advanced imaging.
5. PCI volumes plateau, due to epidemiology factors and appropriate use scrutiny.

**Cardiovascular Inpatient Discharges**
US Market, 2016–2026

<table>
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<tr>
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<th>5-Year</th>
<th>10-Year</th>
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<tr>
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**Cardiovascular Outpatient Volumes**
US Market, 2016–2026

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<td>+22%</td>
</tr>
<tr>
<td></td>
<td>+12%</td>
<td>+20%</td>
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Note: Analysis excludes 0–17 age group. EP = electrophysiology; PCI = percutaneous coronary intervention; CABG = coronary artery bypass graft.

Story #2 – E&M Visits Will Serve as the Cornerstone for Improving Disease Management

Evaluation and Management Visit Forecast
US Market, 2016–2026

<table>
<thead>
<tr>
<th>Volumes</th>
<th>5-Year</th>
<th>10-Year</th>
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<tbody>
<tr>
<td>Billions</td>
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<tr>
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<td>+10%</td>
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<td></td>
<td>+14%</td>
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By 2026, 17% of all E&M visits will be performed in a virtual setting.

E&M VISITS
As a means to improve disease management, growth in E&M visits will be enabled by:
- New work staff
- Improved workflow
- New and evolving sites of care

Note: Forecast excludes 0–17 age group. Sources: Impact of Change® v16.0; OptumInsight, 2014; The following 2014 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; The Nielsen Company, LLC, 2016; Sg2 Analysis, 2016.
Primary Care Success Will Be Realized Through Comprehensive Redesign

Do more—and do it better—with less.

**Workforce:** Adopt team-based approaches that expand roles and deepen collaboration.

**Workflow:** Expand primary care models that promote increased access, patient convenience and care coordination across sites and providers.

**Workplace:** Use space, layout and traffic patterns to enhance teamwork and the patient experience.
PCPs Will Require the Support of PCTs (Primary Care Teams)

The primary care team will see you now...

- RN Care Coordinators
- Behavioral Health Specialists
- Community Health Workers
- Clinical Pharmacists
- Select Specialists
- Advanced Practitioners

PCP = primary care physician.
PCMHs Are Here to Stay and Represent a Long-term Investment

PCMH principles are universally applicable to primary care:

- **Team-based care**: New staff empowered in new roles
- **Enhanced access** via electronic communication and extended hours
- **Comprehensive care**, from prevention to acute and chronic issues
- **Coordination** across providers and sites in the continuum
- **Skillful use of data** for patient management and follow-up care
- **Evidence-based guidelines** and protocols
- **Reduced costs** for patients, organizations and the overall health system

PCMH = patient-centered medical home.
Align Primary Care Space With New Care Teams and Care Models

“We started paying more attention to primary care when we realized we were focusing all our resources on our hospital settings that most of our customers never experienced.”

—VP of Design

Core Design Principles

- Reimagine the “waiting” room as the “transition of care” area.
- Create flexible rooms that can serve for group visits, patient education or community events.
- Differentiate staff and patient care areas.
Final Note – It’s All Local and the Pace of Change is Uneven

Market Readiness Segment by HRR
2016 Sg2 Accountability Readiness Model

Sources: Sg2 Accountability Readiness Model, 2016; Tableau v10.1; Sg2 Analysis, 2016. Confidential and Proprietary © 2017 Sg2
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Our analytics and expertise help hospitals and health systems achieve sustainable growth and ensure ongoing market relevance through the development of an effective System of CARE.

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