Hospitals Succeeding in the New Era

Fall Summit

Learning Objectives

1. Understand the business model change from fee-for-service to fee-for-value.

2. Learn the pro-competitive pressures on healthcare providers that are emanating from rapid business model changes.

3. Understand the dramatic changes in Chicago area hospital utilization that are a direct result of structural changes to the underlying business model.
Progress Toward a Reformed American Healthcare System

**Bending the Cost Curve**

- Overall, U.S. spending for healthcare in 2011 grew only 3.9%. This was the third consecutive year of slower growth, down from rates as high as 11% in 1990 and 7.6% in 2007.¹

- Medicare spending grew at a rate of 1.7% annually from 2010 to 2012,² down from growth of 4.5% between 2008 and 2009.³

- Prices for personal consumption of healthcare rose just 1.1% over the 12 months ending in May 2013, the slowest rate of price growth in nearly 50 years.⁴

- Medicare readmissions declined in 2012 from 19% of admissions to 18.4%. This represented a decline of 70,000 readmissions.⁵

**Improved National Quality**

- Between 2008 and 2011, central line infections decreased 41% and surgical site infections decreased 17%.⁶

- Pre-term births declined for the fifth straight year in 2011. Births of less than 37 weeks declined from 12.8% in 2006 to 11.7% in 2011. Pre-term infants born to black women were at 16.8%, the lowest figure in 30 years.⁷

- The rate of adult obesity ticked up slightly in 2012 by .2%. This increase was the slowest rise in adult obesity since 2003.⁸

- Soda consumption in the United States is at its lowest level in 26 years.⁹

Sources appear at end of presentation.
Events of the past five years have given the healthcare industry “permission” to change... and now change and disruption are coming from every direction.
It Starts and Ends with the Business Model

Pre-Reform Business Model

Hospitals

Doctors

Patients

Fee-for-Service Model
It Starts and Ends with the Business Model

The Post Post-Reform Business Model

Employers

Patients

Medicare and Medicaid

Who Is This?

Content of Care

Hospital

Doctors

Outpatient Services

Continuum of Care

Fee-for-Value Model

Select Contract(?)

• Commodity
• Make vs. buy
• Low-cost provider
• Contract to specifications

Source: Kaufman, Hall & Associates, Inc.
This business model change is driving remarkable contextual change in both operations and strategy.
Contextual Change

Disruptive Contextual Change Encourages the Entry and Aggressive Expansion of A-traditional Competitors

Walgreens

DaVita /

HealthCare Partners

Medical Group and Affiliated Physicians
Contextual Change

Moving from a Wholesale Business to a Retail Business

New points of competition
- Brand
- Access
- Convenience
- Customer satisfaction
- IT connectivity
- Apps and wireless
- Consistent quality
- “Service”
- Price
Contextual Change

An Unprecedented Need to Lower the Cost Structure of the Industry

“I am assuming that the future value of our existing cost structure is currently greater than the future value of our expected revenue stream.”

John Oliverio
President
Wheaton-Franciscan Healthcare
Contextual Change

Corporate America’s Determination to Drive Down the Cost of Healthcare

☑ Walgreens: Placing 160,000 employees into a private exchange and offering 25 separate health plans within the private exchange. Employees will receive a stipend to purchase a plan of the employee’s choice. Walgreens’ expectation is that competition among insurers will reduce premium costs.

☑ General Electric: Has set a goal to keep its healthcare spending growth below 3% per year. So far, it has met this goal. GE is using many techniques, including assigning employees to medical homes run by primary care physicians. An initial trial in Cincinnati appears to have reduced Emergency Room visits by 3.5% and hospital admissions by 14% over a four-year trial period.

The persistent effort by employers to transform their health plans from defined-benefit plans to defined-contribution plans appears to be driving dramatic changes for both price and utilization.

From 2007-2012, the percentage of insured employees with high-deductible insurance plans has increased from 5% to 19%.

Source: Kaiser Family Foundation: Employer Health Benefits – 2012 Summary of Findings
These Business Model Disruptions Combine to Cause Major Marketplace Changes for Providers

Proof of Concept

The Chicago Market Utilization Case Study
Geographic Area/ The Chicago Metroplex

Seven Counties in Illinois

[Map of the Chicago Metroplex showing seven counties in Illinois]
Population Covered

- 8.5 million lives
- 66 percent of Illinois population of 12.9 million
- 970,000 hospital discharges

Utilization Declined by 47K between 2010 and 2012
Declines Were Across All Age Groups

Inpatient Utilization Rates per 1,000
% Change by Age Group

- Total: (-5%)
- 0-14: (-6%)
- 15-44: (-5%)
- 45-64: (-5%)
- 65-74: (-9%)
- 75+: (-8%)

Note: Excludes MS-DRG 795 Normal Newborns
Source: Proprietary market and client data; U.S. Census Bureau Population
Use Rate Change by Service Line: 2010-2012

Median use rate drop was 5%.
Drops in cardiology (including interventional), medical GI, general medicine, deliveries, and psychiatry accounted for more than 60 percent of the total volume decline.

Note: Excludes MS-DRG 795 Normal Newborns; Services with discharges less than 5,500 in the market are not shown. Labels less than 2% not shown.
Source: Proprietary market and client data; U.S. Census Bureau Population.
Research Questions of Interest

1. Is the economy having an impact on reduced utilization?
2. What is the impact of increased observation stays?
3. Is improved patient management driving the reduction in inpatient care?
4. What is the preliminary impact on admissions from accountable care-style care?
5. Is reduced utilization a function of a changing delivery system?
What the Data Demonstrate
Is the Economy Having an Impact?

- Look at services historically sensitive to recessions
- Elective procedures declined across all adult age groups, effectively cancelling out any increase in volume due to aging/population growth

### Inpatient Utilization Rates per 1,000
% Change by Adult Age Group, 2010-2012

<table>
<thead>
<tr>
<th>Service Line</th>
<th>15-44</th>
<th>45-64</th>
<th>65-74</th>
<th>75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV Surgery</td>
<td>-14%</td>
<td>-8%</td>
<td>-12%</td>
<td>-6%</td>
</tr>
<tr>
<td>Spines/ Back</td>
<td>-6%</td>
<td>-4%</td>
<td>-3%</td>
<td>-11%</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>-5%</td>
<td>-3%</td>
<td>-4%</td>
<td>-7%</td>
</tr>
<tr>
<td>Urology</td>
<td>-8%</td>
<td>-10%</td>
<td>-19%</td>
<td>-16%</td>
</tr>
</tbody>
</table>
Do “Observation Stays” and Increased Use of Outpatient Settings for What Used to Be a One-Day Stay Account for a Large Portion of the Utilization Drop?

- Drops in one-day LOS patients between 2010 and 2012 accounted for only 9 percent of the total drop in medical/ surgical volume

<table>
<thead>
<tr>
<th>1-Day LOS Cases</th>
<th>Total # of Cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-3,434)</td>
<td>(-36,690)</td>
<td>(-9.4)</td>
</tr>
</tbody>
</table>
Are We Starting to See Improvements in Patient Care Management?

- Look at “Ambulatory Care Sensitive Admissions” (ACSAs)
- These are patient admissions which could have been prevented with good outpatient care related to underlying chronic conditions, such as:
  - Adult asthma
  - Diabetes
  - Congestive heart failure
- Sixteen Ambulatory Care Sensitive Conditions (ACSCs) have been defined by the Agency for Healthcare Research and Quality (AHRQ)

Are We Starting to See Improvements in Patient Care Management?

Hypothesis:

• A reduction in ambulatory care sensitive admissions would suggest that providers are doing a better job of managing patients’ chronic conditions, keeping these patients out of hospitals

Results:

• Early care management efforts are lowering ambulatory care sensitive admissions in the greater Chicago market
ACSAs Are Dropping Faster than Non-ACSA Cases in Many Service Lines, Often Twice as Fast

### 2010-2012 Change ACSAs Utilization Drops vs. All Other Cases

<table>
<thead>
<tr>
<th>Service Line</th>
<th>% ACSAs</th>
<th>% All Other Cases in the Service Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiology Interventional</td>
<td>(23.5%)</td>
<td>(12.7%)</td>
</tr>
<tr>
<td>General Medicine</td>
<td>(13.6%)</td>
<td>(5.7%)</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>(12.8%)</td>
<td>(6.2%)</td>
</tr>
<tr>
<td>Endocrine</td>
<td>(12.0%)</td>
<td>(1.4%)</td>
</tr>
<tr>
<td>Thoracic Surgery</td>
<td>(11.1%)</td>
<td>(9.0%)</td>
</tr>
<tr>
<td>Neurology</td>
<td>(7.8%)</td>
<td>(5.6%)</td>
</tr>
<tr>
<td>General Surgery</td>
<td>(6.8%)</td>
<td>(3.2%)</td>
</tr>
<tr>
<td>Pulmonary</td>
<td>(2.4%)</td>
<td>0.3%</td>
</tr>
<tr>
<td>Cardiology</td>
<td>(10.2%)</td>
<td>(11.5%)</td>
</tr>
<tr>
<td>Vascular Surgery</td>
<td>(5.8%)</td>
<td>(9.3%)</td>
</tr>
<tr>
<td>Urology</td>
<td>(3.8%)</td>
<td>(12.1%)</td>
</tr>
</tbody>
</table>

**Note:** ACSA categories from AHRQ applied using primary diagnosis code.
Source: Proprietary market and client data.
Are Organizations Providing Care Under an Accountable Care Model Achieving Better Results than Those Using Traditional Care Models?

- Yes, an ACO-style model is reducing ambulatory care sensitive admissions and length of stay faster than traditional care models.
ACO-Style Care Outperformed the Market in Reducing Ambulatory Sensitive Admissions and Lengths of Stay

### 2010-2012 Change: ACSAs Utilization Drops

<table>
<thead>
<tr>
<th></th>
<th>Using Traditional Care Model</th>
<th>Using ACO-Style Care Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Discharges with ACSCs</td>
<td>(3.8%)</td>
<td>(6.3%)</td>
</tr>
<tr>
<td>Length of Stay</td>
<td>(2.4%)</td>
<td>(3.9%)</td>
</tr>
</tbody>
</table>

Note: Diabetes includes Long Term, Short Term, and uncontrollable. Kidney Failure includes Kidney Failure, Renal Failure, and Dehydration. All Other includes Angina, Cystic Fibrosis, and Sickle Cell. ACSA categories from AHRQ applied using primary diagnosis. Code. ACO data based on Mapping of Medicare national provider ID to attending/admitting physicians. Source: Proprietary market and client data.
What Is the Mathematical Impact of the Described Multiple Trends
The Accelerated Inpatient Use Rates Drops Are Continuing in 2013; Since 2007 Cook County and The Chicago Metroplex Have Decreased by 14% and 13% respectively

Inpatient Use Rate Trends (per 1K population)

- Cook County
- Chicago Metroplex

<table>
<thead>
<tr>
<th>Year</th>
<th>Cook County</th>
<th>Chicago Metroplex</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>140</td>
<td>127</td>
</tr>
<tr>
<td>2008</td>
<td>140</td>
<td>127</td>
</tr>
<tr>
<td>2009</td>
<td>135</td>
<td>122</td>
</tr>
<tr>
<td>2010</td>
<td>133</td>
<td>120</td>
</tr>
<tr>
<td>2011</td>
<td>128</td>
<td>117</td>
</tr>
<tr>
<td>2012</td>
<td>124</td>
<td>114</td>
</tr>
<tr>
<td>2013*</td>
<td>120</td>
<td>111</td>
</tr>
</tbody>
</table>

% Change In Use Rates

- 07-13*: -14%
- 13%

Note: Excludes MS-DRG 795 Normal Newborns.
*2013 annualized based on 1st Quarter 2013 data.
Source: Proprietary market and client data; U.S. Census Bureau Population.
The Inpatient Utilization Market Continues to Contract...

<table>
<thead>
<tr>
<th>Year</th>
<th>Cook County</th>
<th>Chicago Metroplex</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>722,159</td>
<td>1,055,601</td>
</tr>
<tr>
<td>2008</td>
<td>724,960</td>
<td>1,058,005</td>
</tr>
<tr>
<td>2009</td>
<td>698,955</td>
<td>1,028,368</td>
</tr>
<tr>
<td>2010</td>
<td>689,031</td>
<td>1,015,929</td>
</tr>
<tr>
<td>2011</td>
<td>667,029</td>
<td>989,544</td>
</tr>
<tr>
<td>2012</td>
<td>649,416</td>
<td>968,746</td>
</tr>
<tr>
<td>2013*</td>
<td>630,752</td>
<td>942,800</td>
</tr>
</tbody>
</table>

Chg. 13*-07  
-91,407        
-112,801

% Chg. 13*-07  
-13%           
-10.7%

- The Chicago Metroplex inpatient discharge market has decreased by 113K discharges (11%) since 2007
- Using the ALOS for the market of 4.9, this translates to a market ADC demand reduction of approximately 1,500 beds

Note: Excludes MS-DRG 795 Normal Newborns.
*2013 annualized based on 1st Quarter 2013 data.
Source: Proprietary market and client data; U.S. Census Bureau Population.
The Pace Has Accelerated Over the Past Years

<table>
<thead>
<tr>
<th>Period</th>
<th>Cook County</th>
<th>Chicago Metroplex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change 07-08</td>
<td>0.2%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Change 08-09</td>
<td>-4.0%</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Change 09-10</td>
<td>-1.8%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Change 10-11</td>
<td>-3.5%</td>
<td>-2.9%</td>
</tr>
<tr>
<td>Change 11-12</td>
<td>-3.0%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Change 12-13</td>
<td>-3.2%</td>
<td>-3.0%</td>
</tr>
</tbody>
</table>

Note: Excludes MS-DRG 795 Normal Newborns.
*2013 annualized based on 1st Quarter 2013 data.
Source: Proprietary market and client data; U.S. Census Bureau Population.
Just the Beginning?
What Could Still Be Coming?

- The use rate in the Chicago Metroplex market is on pace to drop from 114 per 1,000 population in 2012 to 111 per 1,000 population by the end of 2013.

- This translates to another 3% drop in the market even after adjusting for population growth and aging.

- Conversations with some of the largest providers and analysis of early 2013 data indicate that inpatient volumes are already down 3% to 8%.
What’s Next?

More importantly, the Chicago regional market still includes a significant portion of admissions that are vulnerable:

• What is the impact on the market of losing these cases?

<table>
<thead>
<tr>
<th></th>
<th>Discharges</th>
<th>Average Daily Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 Base</td>
<td>968,746</td>
<td>12,987</td>
</tr>
<tr>
<td><strong>Ambulatory Sensitive Cases</strong></td>
<td>(-138,576)</td>
<td>(-1,651)</td>
</tr>
<tr>
<td><strong>Med/ Surg Cases with 1-Day LOS</strong></td>
<td>(-96,280)</td>
<td>(-264)</td>
</tr>
<tr>
<td><strong>Market Impact</strong></td>
<td><strong>733,980 (-24%)</strong></td>
<td><strong>11,072 (-15%)</strong></td>
</tr>
</tbody>
</table>
Problems and Prescriptions
The Special Challenges of the Reform Agenda for Hospital Provider Organizations

✓ Cost of care (too high)
✓ Ease of access (too little)
✓ Size of the geographic footprint (not large enough)
✓ Transitioning from an inpatient-dominated model to a super-outpatient model
The Core Competencies that Support Population Health Management and the Reform Agenda

✓ A culture that can embrace change
✓ A clinical delivery system that has care coordination at its center
✓ A very sophisticated information technology platform
✓ A cost structure that can cope with an unpredictable revenue platform
✓ Capability to take risk all the way to full capitation
✓ A physician alignment strategy that supports all of the above

A Set of Changing Competencies that Are a Further Challenge
# The Leadership Roadmap 2.0

1. Reject the “sickcare model” and accept the “healthcare model”

2. Start putting the principles of population health management into your organization

3. Convert fee-for-service contracts to value-based contracts/ get ready to take risk

4. Understand you will need to compete on price going forward

5. Make plans for a much lower organizational cost structure

6. Re-tool your strategic direction toward super-outpatient care and away from inpatient care

7. Embrace care coordination and care management

8. Begin to create the “sticky tactics” that connect patients to your organization

9. Ensure a culture that allows for all of the above
“... although we cannot forecast the exact progress of disruption in (any) industry, we can say with utter confidence that whatever its pace, some incumbents will be caught by surprise. The temptation for market leaders to view the advent of new competitors with a mixture of disdain, denial, and rationalization is nearly irresistible. U.S. Steel posted record profit margins in the years prior to its unseating by the minimills; in many ways it was blind to its disruption. As we and others have observed, there may be nothing as vulnerable as entrenched success.”

Clayton M. Christensen
Kim B. Clark Professor of Business Administration
Harvard Business School
Success is a result of consistent practice of winning skills and actions. There is nothing miraculous about the process. There is no luck involved. Amateurs hope, professionals work.

Bill Russell

*NCAA Champion, Olympic Champion, 11-time NBA Champion*
Sources (slide 1):


(3) Hartman, M., Martin, A.B., et. al. (2013)


(7) Child Trends Data Bank: Preterm Births: Indicators on Children and Youth. Updated July 2013


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