Discussion Topics

1. Health Care – Inflection Point 2.0
2. Rating Agency Dynamics
3. Implications for Treasury
1. Health Care – Inflection Point 2.0

Macro View: Health Care Has Experienced Two Inflection Points

**Inflection Point 1.0**
- Began in earnest following the financial crisis of 2007-2009
- Driven by escalating federal and state fiscal problems and unsupportable health care costs
- Accelerated by provider innovation and successful experiments with a new/different value-based business model
- Advanced through concepts and principles rooted in the Affordable Care Act

**Inflection Point 2.0**
1. Employer/Insurance Market Transformation
2. Health Care as a Retail Transaction
3. Flat to Declining Utilization
4. The Changing Healthcare Business Model
5. Large-System Formation Occurring in Various Ways
6. New Competitors Emerging
1. Employer/ Insurance Market Transformation

Private Exchanges are Beginning to Hit the Market

As the commercial insurance market continues to move from defined benefit to defined contribution plans, employers will seek new benefit models to maximize or cap the value of their health care benefit subsidies.

- **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.

2. Health Care as a Retail Transaction

<table>
<thead>
<tr>
<th>Wholesale Construct</th>
<th>Retail Construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer selects a health plan from an insurer that has contracts with a broad spectrum of providers</td>
<td>Employers and governmental payers define a fixed dollar benefit per employee/family/individual</td>
</tr>
<tr>
<td>Medicare and Medicaid establish a benefit plan and set payment rates for providers</td>
<td>Individuals select a health plan on a private or public exchange and bear the cost over the fixed dollar benefit</td>
</tr>
<tr>
<td>Individuals have limited plan choices but can access most providers for the same cost to the individual</td>
<td>Individuals have broader health plan choices, but in most cases more limited provider access and/or economic consequences for going out of network</td>
</tr>
</tbody>
</table>
3. Flat to Declining Utilization
Shift in risk to providers incents elimination of unneeded and low-value care

Weighted Average Change in Inpatient Use Rates per 1,000, 2006-2011

<table>
<thead>
<tr>
<th>Age Group</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17</td>
<td>-7.1%</td>
</tr>
<tr>
<td>18-44</td>
<td>-8.0%</td>
</tr>
<tr>
<td>45-64</td>
<td>-5.4%</td>
</tr>
<tr>
<td>65-84</td>
<td>-12.1%</td>
</tr>
<tr>
<td>85+</td>
<td>-8.9%</td>
</tr>
</tbody>
</table>

Notes: *Weighting based on state population as % of total sample size population. Discharges exclude normal newborns (DRG 391, MS-DRG 795).

4. The Changing Healthcare Business Model

Historically, hospitals generally attracted patients through physicians and their referrals, with some patients making a choice based on the hospital itself.

A new model is emerging wherein patients will chose a company that organizes the care for them; Healthcare Companies may be health systems, plans, IPAs or another entity.
5. Large-System Formation Occurring in Various Ways

Full Integration

Partial Integration – “Rise of the Alliances/ Collaboratives”

Number of Transactions With “Targets” of More Than $1B in Revenue

6. New Competitors Emerging

The Environment in Which You Must Compete

1. Provider revenues will be under severe pressure as payment mechanisms migrate toward value-based approaches – need to do less with less
2. Continuing to compete on volumes and rate will be a riskier strategy than shifting to value-based reimbursement – being a rate taker in a shrinking market is not a viable strategy
3. A new set of core competencies will be required for provider success
4. Inpatient and outpatient use rates will decline
5. Providers will consolidate at an accelerated pace – horizontally and vertically
6. The competitive landscape will be reshaped by existing competitors and by new competitors
7. Regardless of what happens at any regulatory level, improving quality and efficiency is the right thing to do
8. Providers will need to determine how they will participate in the future healthcare delivery system, then they need to prepare for that transformation

The Need for an Attitude Adjustment

• We are having a “railroad” moment in healthcare right now
• Don’t be a railroad – railroads went out of business because they thought they were in the railroad business instead of recognizing they were in the transportation business
• You are not in the hospital business anymore – you are in the healthcare business
• Think of your hospital as a “healthcare” organization, not a “sickcare” organization
• Give up on the inpatient model – inpatient care will soon be a cost center as part of a much larger healthcare enterprise
What Does This Mean for Hospitals and Health Systems?

• Business as usual is out the window – and new problems must be solved – learning to manage population health and justify your prices

• More, bigger and different kinds of consolidation are transforming the landscape to assemble the intellectual, clinical and financial capital required to succeed and absorb and manage risk

• Many organizations will attempt to position themselves closer to the premium dollar

• Big investments in IT and care management will be essential

• Core competencies will need to evolve, for example:
  – Physician alignment evolving to full clinical and economic integration
  – Cost transformation evolving to process redesign and service distribution

2. Rating Agency Dynamics
Negative Outlooks Reflect Accelerating Industry Pressures

“Our sector outlook for not-for-profit hospitals remains negative reflecting the challenging operating landscape over the next 12-18 months as patient volumes shrink and revenue growth slows”

Moody’s

November 25, 2013

“The negative outlook is due to a multitude of factors, including: top line revenue constraints, the impact of health care reform readiness activities, soft demand, and emerging changes to the payment environment”

Standard & Poor’s

December 10, 2013

“...negative sector outlook reflects the forces of pressure weighing on the sector (lower reimbursement, suppressed inpatient volumes, higher deductible plans and additional spending cuts) as it enters this potentially historic period of change”

Fitch Ratings

December 11, 2013

Rating Agency Perspective: Key Drivers

- **Economy**: unemployment, state budgets, healthcare funding
- **Utilization**: flat to declining industry-wide
- **Reimbursement**: pressure on rates and what’s reimbursed
- **Expenses**: vs. revenue growth, continued reduction efforts
- **Payer mix**: government, commercial, cost shifting
- **Physician alignment**: investment and operating losses
- **Healthcare reform**: uncertainty and bi-modal transition period
- **New market entrants**: private equity, for-profits, insurers, retail,
- **Consolidation**: search for scale leading to rapid consolidation
Credit Ratings Are Influenced by Range of Factors

- Financial performance, trends, and expectations
- Strategic and financial planning
- Governance/management
- Market position
- Payor mix
- Physician relations
- Debt and capitalization position
- Size and critical mass which mitigate risk
- Number of physical locations for diversification
- Industry trends and external perception of risk

Moody’s Updated Rating Methodology: 5 Key Factors

<table>
<thead>
<tr>
<th>Weighting</th>
<th>Asa</th>
<th>As</th>
<th>A</th>
<th>Baa</th>
<th>SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Market Position (45%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total Revenue</td>
<td>25%</td>
<td>above $6.0B</td>
<td>$1.0 - $6.0B</td>
<td>$300M - $1.0B</td>
<td>$150M - $300M</td>
</tr>
<tr>
<td>3y Revenue CAGR</td>
<td>10%</td>
<td>above 14%</td>
<td>8% - 14%</td>
<td>5% - 8%</td>
<td>2% - 5%</td>
</tr>
<tr>
<td>Medicare, % Gross Revenues</td>
<td>5%</td>
<td>below 20%</td>
<td>20% - 35%</td>
<td>35% - 45%</td>
<td>45% - 55%</td>
</tr>
<tr>
<td>Medicaid, % Gross Revenues</td>
<td>5%</td>
<td>below 2%</td>
<td>2% - 5%</td>
<td>5% - 12%</td>
<td>12% - 20%</td>
</tr>
<tr>
<td>2: Operating Performance (30%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Cash Flow Margin</td>
<td>10%</td>
<td>above 16%</td>
<td>12% - 16%</td>
<td>8% - 12%</td>
<td>6% - 8%</td>
</tr>
<tr>
<td>Debt to Cash Flow</td>
<td>10%</td>
<td>below 1.5x</td>
<td>1.5x - 3.0x</td>
<td>3.0x - 5.0x</td>
<td>5.0x - 8.0x</td>
</tr>
<tr>
<td>MADS Coverage</td>
<td>10%</td>
<td>above 8.0x</td>
<td>5.5x - 8.0x</td>
<td>3.5x - 5.5x</td>
<td>1.5x - 3.5x</td>
</tr>
<tr>
<td>3: Balance Sheet and Capital Plan (25%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days Cash on Hand</td>
<td>10%</td>
<td>above 300 d</td>
<td>200 - 300 d</td>
<td>130 - 200 d</td>
<td>60 - 130 d</td>
</tr>
<tr>
<td>Cash to Debt</td>
<td>10%</td>
<td>above 300%</td>
<td>180% - 300%</td>
<td>100% - 180%</td>
<td>50% - 100%</td>
</tr>
<tr>
<td>Monthly Liquidity to Demand Debt</td>
<td>5%</td>
<td>above 600%</td>
<td>300% - 600%</td>
<td>200% - 300%</td>
<td>100% - 200%</td>
</tr>
</tbody>
</table>

- Factor 4 (Governance & Management) and Factor 5 (Debt Structure) do not have specific weightings but can move rating up/down
- In 2013 Moody’s began tracking new key ratios and statistics
  - Unique patients, Medicare readmission rates, readmission rate, total case mix index, # of employed physicians, Worked RVUs for employed physicians, active medical staff (independent & employed)
  - Each indicator is meant to give insight to the organizations ability to succeed in a new value based/post reform healthcare environment
Standard and Poor’s Updated Rating Methodology

“The criteria establishes a formal framework for performing credit analysis using the same elements that have long been a part of our analysis and that are routinely discussed in our rating committees.” – Standard & Poor’s, December 5, 2013

• Basic framework uses a weighted average of an enterprise and financial profile score
  • Financial Profile
    – 40%: Financial Performance
    – 30%: Liquidity & Financial Flexibility
    – 30%: Debt & Contingent Liabilities
  • Enterprise Profile
    – 20%: Industry Risk
    – 20%: Economic Fundamentals
    – 50%: Market Position
    – 10%: Management & Governance

• After these scores are accumulated, certain positive and negative factors outside the outlined framework are assessed
  – Management strength, close affiliation with strong organizations (ex. AMC with a University), specialty designations, etc.

Preliminary S&P Rating Analysis: Indicative Rating

<table>
<thead>
<tr>
<th>Financial Profile</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AAA</td>
<td>AA+</td>
<td>AA-</td>
<td>A-</td>
<td>BBB+/BBB</td>
<td>BB+/BB</td>
</tr>
<tr>
<td>2</td>
<td>AA+</td>
<td>AA/AA-</td>
<td>A+</td>
<td>A-</td>
<td>BBB/BBB-</td>
<td>BB/BB-</td>
</tr>
<tr>
<td>3</td>
<td>AA-</td>
<td>A+</td>
<td>A</td>
<td>BBB+/BBB</td>
<td>BBB-/B+</td>
<td>BB-</td>
</tr>
<tr>
<td>4</td>
<td>A</td>
<td>A/A-</td>
<td>A-/BBB+</td>
<td>BBB/BBB-</td>
<td>BB</td>
<td>B+</td>
</tr>
<tr>
<td>5</td>
<td>BBB+</td>
<td>BBB/BBB-</td>
<td>BBB-/B+</td>
<td>BB</td>
<td>BB-</td>
<td>B</td>
</tr>
<tr>
<td>6</td>
<td>BBB-</td>
<td>BB</td>
<td>BB-</td>
<td>B+</td>
<td>B</td>
<td>B-</td>
</tr>
</tbody>
</table>
Rating Agency Dynamics: Key Takeaways

• All three rating agencies have **negative outlooks for healthcare sector**
  - Key factors include: challenging operating landscape, shrinking volumes and top-line revenue, emerging changes to payment environment

• Trend towards more objective rating methodology, **explicitly favoring scale and market position**
  - **Moody's**: already released and use rating methodology, combining market position, operating performance, balance sheet, governance and debt structure
  - **S&P**: has solicited comments on its draft methodology for stand-alone hospitals; updated methodology for system credits is expected
  - **Fitch**: have not detailed their rating methodology

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Given depth and breadth of transition from volume to value, NFP hospitals and health systems should be proactively telling their ‘credit story’ to rating agencies

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3. Implications for Treasury
Payment Structure Changes Favor Altered Healthcare Business Model and Prompts Treasury Management Facilitation Role

<table>
<thead>
<tr>
<th>Business Model</th>
<th>Payment Structure</th>
<th>Operational Risk</th>
<th>Treasury Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1946-Today</strong></td>
<td>Fee For Service</td>
<td>Driven mainly through volume shifts</td>
<td>Transactional Funding, Segregation of purpose and objective, Outsource expertise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Utilization risk burden of payers</td>
<td></td>
</tr>
<tr>
<td><strong>Tomorrow</strong></td>
<td>“Fee for Value”, Population Health Management</td>
<td>Management of care settings Utilization risk burden of “Healthcare Company”</td>
<td>Where does Treasury need to go?</td>
</tr>
</tbody>
</table>

Providers Challenged to Adopt a New Set of Core Competencies

<table>
<thead>
<tr>
<th>1946 - Today</th>
<th>Tomorrow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician Integration</td>
<td>Network Strength</td>
</tr>
<tr>
<td>Care Coordination/ Management</td>
<td>Quality and Care Management</td>
</tr>
<tr>
<td>Information System Sophistication</td>
<td>Clinical and Business Intelligence</td>
</tr>
<tr>
<td>Service Distribution System</td>
<td>Clinical Alignment</td>
</tr>
<tr>
<td>Cost Management/ Cost Structure</td>
<td>Operational Efficiency</td>
</tr>
<tr>
<td>Brand Identification</td>
<td>Brand Strength</td>
</tr>
<tr>
<td>Payer Relationships Contracts</td>
<td>Purchaser Relationships</td>
</tr>
<tr>
<td>Financial Strength/ Capital Capacity</td>
<td>Financial Strength</td>
</tr>
<tr>
<td>Risk Absorption/ Management</td>
<td>Leadership and Governance</td>
</tr>
<tr>
<td>Scale/ Essentiality</td>
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</tbody>
</table>
Impact to Treasury Function: Strategic Decision Point

**Without Proactive Strategic Direction**
- Changing business model, cost cutting and clinical transformation will overshadow other initiatives/priorities
- Treasury may be marginalized
- Liability portfolio relegated to raising of funds and reduction of risk vs. critical component of optimizing surplus return
  - Surplus return only considered on invested asset side, if at all
- Significant opportunities missed to add to success of organization through better integration of treasury and use of treasury's unique core competencies
- With consolidation and cost cutting, less treasury staff

**With Proactive Strategic Direction**
- Broader more integrated role
- Bigger more sophisticated treasury team
- Significantly better methodologies and tools
- Higher accountability for production and risk management
- More ownership and control

How Are Our Clients Responding?
- In light of the current industry, business and capital markets environment, Kaufman Hall clients are working diligently to:
  - Incorporate strategic and financial planning efforts into better capital structure decision making processes
  - Effectively manage and hedge corporate risk in operations and balance sheet
  - Access new types of capital for funding IT and physician strategies
  - Increase issuance of variable rate debt due to prepayment flexibility and low interest rate environment
  - Stagger credit and bank renewals to minimize risk
  - Redesign MTI for maximum future flexibility
  - Remove restrictions against merger, sale, etc. in new borrowing agreements
  - Enhance investor, rating agency, and capital markets relations functions
Define the organizational role of balance sheet resources – specifically cash

Operational risks outweigh all other risks and treasury should structure liquidity reserves and capital access with this in mind

Corporate Risk Framework: Driving to Risk-Based Asset Allocation

**Component Steps and Purpose**

1. Establish a Corporate Risk Foundation
   • Define the organizational role of balance sheet resources – specifically cash
   • Establish a corporate volatility tolerance/ budget

2. Catalogue of Risk Pools Risk Map
   • Assessment of operations, capital spending, liabilities and invested assets
   • Risk map that reflects major sources of risk and hedges

3. Establish Core Corporate Risk Framework
   • Single, horizontal and deterministic risk assessment
   • Allocate risks/ resources to specific tiers
   • Derive risk-based asset allocation, consistent with allocation and risk parameters

4. Vertical Risk Analytics (Surplus Return)
   • Understand the net potential balance sheet return and related volatility
   • Test and potentially enhance risk-based asset allocation

5. Operationalizing the Analysis
   • Establish on-going policies, procedures and reporting
   • Identify update frequency – routine vs. shifting return expectations or rebalancing requirements