Mergers & Acquisitions

with John Shumate, CEO of ValuLogik
## Professional Background

<table>
<thead>
<tr>
<th>Role</th>
<th>Experience</th>
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<tbody>
<tr>
<td><strong>CEO of Valulogik</strong></td>
<td>Offers a diverse portfolio of services to private equity firms, venture capital groups, legal teams, asset management groups and their client companies</td>
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<tr>
<td><strong>VP of Private Equity</strong></td>
<td>Investing in growth capital and business expertise in enterprises with solid development potential. Served as CFO/COO of BellaNovus, early-stage medical device development company focused on cosmetic surgery and pain alleviation devices</td>
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<tr>
<td><strong>Senior Associate</strong></td>
<td>Responsible for leading business incubator and venture financial service’s analytics, valuation and financial modeling efforts. Member of deal team that performed a variety of capital raises and executed numerous buy- and sell-side M&amp;A transactions</td>
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<tr>
<td><strong>Equity Research Analyst</strong></td>
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<tr>
<td><strong>Transactional and corporate finance experience</strong></td>
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<td><strong>BS in Economics</strong></td>
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Financial State of the Healthcare Industry

Sector wide trends and their effect on M&A

- Small vulnerable hospitals and systems band together
- Flight to Quality
- National systems continued market share expansion
- Non-Control Collaboration
- Outpatient Services
- Preventive Medicine
- Prevalence of IPO’s chipping into M&A market
- Inversion acquisitions
Safety in numbers

• M&A to support thin margins
  • Especially in the case of nonprofits and rural independent systems
• Catalyst for previous decade’s M&A
  • Poor economic conditions
  • Legislation calling for an industry overhaul
    • Implementation of the Affordable Care Act
    • Removing the old reimbursement fee-to-service system
Safety in numbers cont.

• Between 2005 and 2012 ~8% of rural hospitals had undergone some sort of M&A
  • Vast majority from a less than flattering position
    • Low operating margins
    • High debt burdens
    • Fewer full-time equivalent employees per bed
• Going forward
  • 15% of hospitals projected to close by 2020
  • Hospitals must continue to leverage simple economies of scale to continue to compete
Flight to quality

• Troubled sales no longer dominate the M&A market
  • Much less sales from a desperate position ("troubled sales") that previously plagued the industry
• Today’s hospital systems M&A reality
  • Toting strong market positions
  • Stable financials and balance sheet
  • Desirable to a much broader range of potential acquirers
    • Where the trend used to be take-unders by regional networks
• Premium for patient satisfaction, quality ratings and market share has widened dramatically
Flight to quality - Valuation

- Quality Trend has benefited valuation multiples
  - 2007-2012 median Implied Enterprise Value / TTM EBITDA multiple of 9.5x
  - 2012-Present TTM EBITDA of 11.0x
    - See chart below

![Healthcare Facilities Transaction Multiples](chart.jpg)
Bigger is better

- Consolidation trend extends past the small/medium scale
- Large health systems looking at their neighbors for synergies
- Particular focus on
  - Expanding regional market share
  - Enhancing coverage depth
  - Diversifying revenue mix
- Acquisition heavy and friendly rate environment have helped create 1,000 lb gorilla systems, especially in major metro areas
- Benefits
  - Opportunity to rapidly grow ACO network
  - Scale based supply sourcing and operational benefits
  - Negotiating leverage with insurers
  - Deals beget more deals
Bigger is better cont.

- Advocate Heath Care and NorthShore University Health System merger
  - $7bn, 16 hospital, academic-suburban regional system
  - Covering 3 million patients in the Chicago area
- Prime example of financially stable healthcare organizations realigning themselves in the face of sweeping changes
- Controversial
  - Advocate-NorthShore will have local advantages
    - Negotiating payer contracts
    - Operational synergies
  - Force smaller systems and independents to follow suit or be left behind
- Arguments are not isolated solely to Advocate-NorthShore
Bigger is better cont.

- Unique benefits
  - NorthShore
    - Primary teaching hospital for the University of Chicago Pritzker School of Medicine
    - Strong research base and over 800 employed physicians
  - Advocate
    - Integrated system of over 4,000 physicians
    - Leader in population health management,
      - inked one of the earliest and largest ACOs with Blue Cross Blue Shield in 2010
  - Complementary footprint
    - Advocate - metropolitan and surrounding area
    - NorthShore - Northwest suburbs
Forgoing M&A for collaborative structures

- Alternative mechanics for collaboration becoming more prevalent
  - Shared services agreements
  - Joint ventures
  - Affiliates
  - Many other contractual agreements
- Benefits vs full blown acquisition
  - Cost
  - Flexibility
  - Maintain expertise, education, and program development benefits
  - Avoid antitrust concerns
  - Retain independence (nonprofit, religion)
- Mayo and Cleveland Clinic have followed this model allowing smaller hospitals access to their resources and expertise without relinquishing control
Forgoing M&A for collaborative structures cont.

- Mayo Clinic Care Network Advantages
  - eConsult
    - Allows patients to meet with Mayo specialists without making the trip to Rochester, MN
    - Delivers best practices across the country rather than concentrating in a single local
  - Partnership validates the affiliate’s practice
    - Mayo conducts a rigorous two year qualification process for potential network affiliates
  - Drives traffic for affiliate
  - Provides out of region referral business for Mayo
If you like it then you should’ve put a ring on it

- Potential Drawbacks of non-control collaboration
  - Scale based synergies are lacking
    - No sourcing benefits
    - Dependent exclusively on process, reputation and knowledge
  - Loose partnerships have difficulty making critical decisions
    - Wade in vs jump in approach
    - Management cooperation dependent
Outpatient care

• “You don’t have to go home but you can’t stay here.”
• Fee-for-service system roll off
  • Inpatient procedures will be much less desirable
    • Margin no longer justified
    • Transforms into a cost and liability
  • Incentive for In-and-Out developing
• Hotel like model, filling beds, not ideal
• Potential services which could benefit from increased outpatient utilization
  • Wellness and Prevention
  • Diagnosis
  • Treatment
  • Rehabilitation
Outpatient care cont.

- Can be extended further to home health
  - Payment models shift and lowest cost, quality care becomes the top priority
  - Benefits
    - Less expensive
      - For the patient
      - For the wellness provider
    - Convenience
    - Equally skilled nursing or hospice personnel
- Traditional facilities looking for new, growing offerings
- Home health has become a popular target
  - ie. Kindred Healthcare’s acquisition of Gentiva Health Services
Kindred Healthcare acquisition of Gentiva

- On October 9, 2014 Kindred Healthcare, Inc (NYSE:KND) entered into a definitive agreement to acquire all outstanding shares of Gentiva Health Services (NASDAQ:GTIV) in a combination of cash and stock
- Valued at $1.8 billion (including the assumption of debt)
- Combined results
  - Further enhance Kindred’s industry leading position as the Nation’s premier post-acute and rehabilitation services provider
  - Make Kindred at Home the largest and most geographically diversified Home Health and Hospice organization in the United States
- Cost synergies of $70m
  - Combining information technology functions
  - Merging supply chain
  - Eliminating redundant public company expenses
- Revenue synergies of $60m
  - Improved patient care transitions and choice
  - Drive volume growth as a result of cross-selling across the combined service platform
Kindred Healthcare acquisition of Gentiva cont

- Prior GTIV trading levels
  - EV = $1.38bn
  - EV/Rev = 0.7x
  - EV/EBITDA = 9.7x
- Strategic acquisition resulted in a three turn multiple expansion
- Prime example
  - Diversification
  - Expansion of market share
  - Offsite expansion by a national facility system

<table>
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<tr>
<th>GTIV Acquisition Metrics</th>
<th>LTM</th>
<th>NTM</th>
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<tbody>
<tr>
<td>Revenue ($mm)</td>
<td>1,882</td>
<td>2,015</td>
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<tr>
<td>EBITDA ($mm)</td>
<td>142</td>
<td>199</td>
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<tr>
<td>Implied EV/Revenue</td>
<td>1.0x</td>
<td>0.9x</td>
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<tr>
<td>Implied EV/EBITDA</td>
<td>12.7x</td>
<td>9.1x</td>
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<tr>
<td>GTIV shares (mm)</td>
<td>37</td>
<td></td>
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<tr>
<td>Share Price</td>
<td>19.39</td>
<td></td>
</tr>
<tr>
<td>MktCap ($mm)</td>
<td>716</td>
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<tr>
<td>Net Debt ($mm)</td>
<td>1,059</td>
<td></td>
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<tr>
<td>Enterprise Value ($mm)</td>
<td>1,775</td>
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</tr>
<tr>
<td>Premium from Pre-Offer</td>
<td>128%</td>
<td></td>
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</tbody>
</table>
Preventive medicine

• Best Offense is a good Defense
• Focus shift
  • Away with maximizing quality and service at a cost
  • To minimizing need for service for a much reduced cost
• Excellent in theory
  • Estimated that 75% of healthcare spending in the US is due to preventable chronic illnesses such as Type 2 diabetes and heart disease
• Savings are dependent on execution
  • Widespread overspending in the name of prevention does little
Preventive medicine cont.

• Forms of Preventive Care
  • Laboratory testing
  • Autonomic testing
  • Gene testing
  • Vaccinations
• Public and private interest in organizations which offer low cost screening
  • Purpose is not a shotgun approach but a preemptive surgical strike
IPO impact on M&A

- Once an industry heavily reliant on VC and corporate cash injections
- The public market’s open arms have cut into potential M&A
  - IPOs recently exploded on the scene
  - Much younger stage companies than in the past
    - In 2013, 8 Phase-1 and even 1 Pre-clinical stage Biopharma tapped into the public markets

Exhibit 18: Biopharma: Big Exit M&A and VC-Backed IPOs by Stage and Year

Source: Investment bank reports, press releases and SVB proprietary data
IPO impact on M&A cont.

- Have reduced total M&A deals
- Still benefited the organizations that have chosen the traditional strategic or financial partner versus the public
  - IPO market strength has improved industry valuations across the group
  - Because of necessary SEC regulations more organizations are publicly disclosing financials, projections and financing terms
  - Improving industry clarity and minimizing uncertainty discounts on valuations
    - Prior to 2012 the median Biotech multiple was 16.1x LTM EBITDA
    - Since then the industry has received 20.3x LTM EBITDA multiple
• Ultragenyx (NASDAQ: RARE) is a Bay Area, development-stage biotechnology company focused on identification, acquisition, development and commercialization of various products for the treatment of rare and ultra-rare diseases

• Highly anticipated IPO
  • Barometer for the public market’s appetite for a Phase I/II portfolio of small batch biopharma
  • Barometer for biopharma going into 2014

• On January 30, 2014 Ultragenyx was offered at $21/share, a ~$650m valuation
  • RARE close that afternoon up over 100% at $42.25, valuing the firm at over $1.3bn

• Even though sell-side estimates have RARE not reaching the commercial stage for any product until the fourth quarter of 2017

• Public markets have resoundingly supported the continued R&D in what has become a darling sector
Tax Inversion M&A

• Tax inversion acquisitions have become the new flavor of the month for many US domiciled, global organizations
• The United States boasts one of the highest corporate tax rates in the world at a top marginal rate of 39%
• Compared to an inversion favorite, Ireland, at 12.5%
• Structure in simplest terms
  • Domestic entity acquires a foreign organization
  • Reincorporates in the foreign country
• Eligible Revenues
  • Sales which take place outside the US
• Results in a consolidated realized tax rate
Tax Inversion M&A cont.

- United States pushback
  - Obama had initially attempted to shame the domestic jumpers as Un-Patriotic
  - Congress currently cryogenically frozen
  - Jacob Lew and the US Treasury Department have been the first to begin inking regulation to make the transition more difficult
- In time the inversion loophole will be closed, current legislative motions may not prevent pending acquisitions, but their glacial pace will eventually catch up

### Inversion Decade

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. company</th>
<th>Foreign acquisition target</th>
<th>New incorporation</th>
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<tbody>
<tr>
<td>2014</td>
<td>Horizon Pharma</td>
<td>Vidara Therapeutics</td>
<td>Ireland</td>
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<tr>
<td>2014</td>
<td>Theravance Biopharma</td>
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<td>Cayman Islands</td>
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<td>2014</td>
<td>Endo International</td>
<td>Paladin Labs</td>
<td>Ireland</td>
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<td>2013</td>
<td>Perrigo</td>
<td>Elan</td>
<td>Ireland</td>
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<tr>
<td>2013</td>
<td>Actavis</td>
<td>Warner Chilcott</td>
<td>Ireland</td>
</tr>
<tr>
<td>2013</td>
<td>Liberty Global</td>
<td>Virgin Media</td>
<td>England</td>
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<tr>
<td>2013</td>
<td>Tower Group</td>
<td>Canopus Holdings Bermuda</td>
<td>Bermuda</td>
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<td>2012</td>
<td>Stratasys</td>
<td>Objet Geometries</td>
<td>Israel</td>
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<td>2012</td>
<td>Eaton</td>
<td>Cooper Industries</td>
<td>Ireland</td>
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<td>2012</td>
<td>DE Master Blenders 1753</td>
<td>-</td>
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<td>2012</td>
<td>Tronox</td>
<td>Exxaro Resources</td>
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<td>Rowan</td>
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<td>2012</td>
<td>Aon</td>
<td>-</td>
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<td>2012</td>
<td>Jazz Pharmaceuticals</td>
<td>Azur Pharma</td>
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<td>2011</td>
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<td>Elan Drug Technologies</td>
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<td>Valeant</td>
<td>Biovail</td>
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<td>Luxembourg</td>
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<td>Hungarian Telephone</td>
<td>-</td>
<td>Denmark</td>
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<td>Ensco</td>
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<td>2009</td>
<td>Tim Hortons</td>
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<td>Canada</td>
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<td>2007</td>
<td>Western Goldfields</td>
<td>-</td>
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<td>Argonaut Group</td>
<td>PXRe</td>
<td>Bermuda</td>
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<td>2005</td>
<td>Lazard</td>
<td>-</td>
<td>Bermuda</td>
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Tax Inversion M&A cont.

- Domestic reaction
  - Closing window
  - Tax inversion volumes have skyrocketed
- Scale
  - In the first three quarters of 2014 13 deals have been proposed
    - To the tune of $315.3bn
    - Represents approximately a third of the total US M&A market
    - Versus $71.7bn over the same period in 2013
- It seems the risk of upsetting elected officials is far outweighed by the financial benefits
Tax Inversion M&A cont.

- Healthcare has been by far the largest contributor
  - Valeant led the way in 2010
  - 9 of the 13 2014 acquisitions are within the healthcare industry, including the largest three
    - Pfizer's $122.6bn proposed acquisition of AstraZeneca
    - AbbVie's pending $56.1bn acquisition of the U.K.'s Shire
    - Valeant Pharmaceuticals International's $54.7bn pending acquisition of Allergan account for 74% of the 2014 volume
  - Face pushback not only from the regulators but from targets
    - At this point, Pfizer has been turned down multiple times
    - AbbVie has now withdrawn their offer
    - Valeant has faced a brick wall of opposition from Allergan
What happens once the door is shut?

- These major players are dependent on M&A for growth
- M&A sights will return to the neighbors in the domestic market
- Financing
  - Large portion of inversion acquisitions are fueled by offshore cash hordes and debt
  - Returning domestic deals will be much smaller than inversion scales
    - Smaller keg of dry powder
- Still not shabby
  - Assuming even a quarter of the proposed transactions return onshore would represent 55% of the entire 2013 healthcare M&A market
Inversion M&A Example

- Pfizer’s $122.6bn acquisition of AstraZeneca
  - Largest proposed in inversion
  - Largest financial impact
- If at first you don’t succeed
  - Pfizer’s previous “final” bid was rejected
  - Expected to raise on November 26, 2014 when eligible
- Financial Impact
  - Reducing the firm’s realized tax rate from 28% to 22%
    - To put the 6% into perspective, Pfizer is projected to earn just under $17bn in EBT (earnings before taxes) in 2015
  - Domiciling across the pond will save them approximately $1bn annually
Healthcare Industry M&A at a Glance

- Facility and Service transactions on the rise
  - Organizations look for strategic partners to defend themselves from looming regulation
  - 2014 on pace to match if not exceed near term highs in deal flow

Total Annual Healthcare Transactions by Industry

* 2014 numbers YTD as of Oct 20, 2014
Pharmaceuticals

- Number of transactions up slightly
- Size of the acquisitions has grown significantly
- 2014 headlines have been dominated by M&A mega-deals
  - Actavis’ (NYSE:ACT) $25.5bn acquisition of Forest Labs
  - Bayer’s (DB:BAYN) $14.2bn acquisition of Merck Consumer Care
  - Activist driven $63.2bn bid by Valeant Pharma (TSX:VRX) for Allergan (NYSE:AGN)
Pharmaceuticals cont.

• What is driving current M&A exuberance?

![Graph showing factors motivating M&A activity in the pharmaceutical sector](graph.png)

- Portfolio diversification
  • Classic de-risking mechanism in any portfolio
- Patent Expirations close second
  • as a factor that motivated recent M&A activity followed closely by patient expiration and competitive pressures

Source: Economist Intelligence Unit survey, March 2014
• Patent Expirations are a close second
  • Not so much a trend as constant
    • Will always be a part of the industry
  • However, 2015 especially painful
    • With ~$10bn in additional sales at risk

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<tr>
<td>Total sales at risk</td>
<td>32.6</td>
<td>54.7</td>
<td>34.3</td>
<td>38.7</td>
<td>47.5</td>
<td>38.8</td>
<td>32.6</td>
<td>35.8</td>
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<tr>
<td>Actual sales lost or</td>
<td>17</td>
<td>38.2</td>
<td>29.1</td>
<td>24</td>
<td>17</td>
<td>15.6</td>
<td>17.4</td>
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<td>forecast to be lost</td>
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<td>Sales replaced</td>
<td>36</td>
<td>47</td>
<td>26.8</td>
<td>54.2</td>
<td>58.4</td>
<td>60.4</td>
<td>62.9</td>
<td>58.6</td>
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<tr>
<td>Total Worldwide</td>
<td>763.5</td>
<td>751.1</td>
<td>753</td>
<td>785.5</td>
<td>827</td>
<td>872.5</td>
<td>918.6</td>
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<tr>
<td>Rx &amp; OTC sales</td>
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Source: EvaluatePharma
Biotech

- Number of transactions stable
- Transaction value always chunky
- Recap
  - earlier-stage firms rejecting strategic and financial offers to order to pursue IPOs on the public market
  - Multiples have expanded
Healthcare Facilities

- M&A activity explosion
  - +25% between 2010 and 2013 vs three years
  - Expected to continue
- More deals
- Quality has improved
- Evidenced by the growth in transaction multiples
  - Recent consolidation of high quality operators
  - Troubled sales are no longer the only game in town
Healthcare Services and Managed Healthcare

- Number of deals have seen a slight downturn in deals the past few years
  - Formation of non-control collaborations
    - Cut into the need to execute binding M&A
    - Will continue in the near term
  - Benefits are still significant
  - However, environment and technology allowing knowledge and processes to be easily/more willingly shared through affiliation and contracting
Healthcare Equipment and Supplies

- Demand for deals struggling
  - Causes
    - more rigorous regulations on the medical technology industry
    - VC investments to be skittish during a critical time for innovation
Healthcare Technology

• Technology needs
  • Structure and analyze data
  • Engage with patients
  • Share critical and sensitive information
• It is believed that tech, much like equipment and supplies suffered from unknowns surrounding new legislation
• Electronic Medical Records (EMR) are a massive cost
  • Investment and innovation being delayed by regulation uncertainties
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