Hospital Consolidation & Integration and the Impact on Medical Supply Markets

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Vice President Operations, BioTronics Inc.

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HMMC’s Manufacturers Executive Conference
An Introduction to UPMC
UPMC’s mission is to provide outstanding patient care and to shape tomorrow’s health system through:

- Clinical innovation
- Biomedical and health services research
- Education
• In 25 years UPMC has gone from a three-hospital system to a $10B Integrated Delivery and Finance System (IDFS)

• In last 8 years, Supply Chain has integrated 5 large hospitals into system
  – Passavant, Children’s, Mercy, Hamot and now Altoona

• We also built 2 new hospitals
A Strong Network of Hospitals, Outpatient Care, Pre- and Post-Acute Care, Home Care, and Rehabilitation Services

- 21 Hospitals with 5000+ beds
- 9 UPMC Urgent Care locations and 3 Children’s Express Care centers
- UPMC Centers for Rehab Services with 51 outpatient sites
- UPMC Home Care 483,000 visits
- 5,000+ Credentialed MDs
- UPMC Senior Communities 18 facilities with 2,400+ beds/units
- 10,300 STAT MedEvac transports
Where We Are Today: The Big Stats

- Largest employer in Pennsylvania, with nearly 60,000 employees
- More than 3,300 employed physicians
- More than 13,000 nurses & 1,600 residents
- 21 academic, community, and specialty hospitals and 400 outpatient sites
- Ongoing strategic affiliation with the University of Pittsburgh
  - Ranked among the top 10 recipients of NIH funding
Where We Are Today: A Leader in Health Care IT

- 2013: Ranked #1 in InformationWeek 500 – top innovative companies

- Pioneer in developing and adopting technology to improve quality, safety, and efficiency

- $1.5 billion investment over the past five years to support clinical excellence and create new models of care
  - Turning unstructured data into actionable information
  - Bringing personalized medicine to each patient
Where We are Today: Revenue Growth

- Over $10B Revenue
  - UPMC’s operating revenue has increased by 36% since 2009
  - 8% compound annual growth rate allows UPMC to pursue various growth and community initiatives

![Revenue Growth Chart]

- 2009: $7,514
- 2010: $7,812
- 2011: $8,803
- 2012: $9,637
- 2013: $10,188
UPMC Supply Chain Transformation
“8 Years In, Almost There”
• Top Down Approach driven by Senior Leadership
• Standardization of systems and business processes
  – Quickly integrate merged hospitals / business groups to recognize economies of scale – systems and processes/policies.
• Corporate Services structure with centralized operations and support (IT, Finance, HR, Legal, Supply Chain, etc.)
  – Quickly merge similar operations into their respective corporate group/business.
“We must continually challenge existing paradigms and create new ways of delivering value in an ever changing healthcare landscape.”

J. Szilagy
UPMC SCM Transformation: Imperatives

• Moved resources to more strategic activity
  – Automated transaction activity
  – Deployed “one place to buy” strategy
• Upgraded talent and improve skill sets
• Internalized Strategic Sourcing…GPO as a resource, not strategy
• Increased influence on non-traditional / new spend categories
• Deployed processes to manage new technology introduction
• Strong evidence & returns required for premium pricing
• Optimized the entire supply chain organization

2006 TO 2013
UPMC Supply Chain Environment: Recent Recognition

IDN Summit 2011 National Award Winner(s) for Efficiency & Innovation

2012 SCM Dept of Year

UPMC Supply Chain Environment: Recent Recognition

The Award for Healthcare Supply Chain Innovation 2012

AHRMM Association for Healthcare Resource & Materials Management of the American Hospital Association

Advancing the Healthcare Supply Chain

Best Hospitals US News Honor Roll 2011-12

Gartner Supply Chain Top 25

Supply Chain Excellence in Action

Healthcare Purchasing News 2012 SCM Dept of Year
UPMC Supply Chain Environment: At-A-Glance

Materials Management
750+ PAR Carts

UPMC Biotronics
165,000+ devices

UPMC Consolidated Service Center
~4,000 SKUs & $300M Turnover
~7,600 Delivery Locations

UPMC eMarketplace
~6,000 requestors + ~3,000 approvers

Employee Transit
5,800 employees / day
**UPMC Supply Chain Environment: At-A-Glance**

- **Significant Spend**
  - >$2B Spend under control

- **Self-Contracted**
  - ~85% under local agreements

- **Self Distributed**
  - **Consolidated Service Center**
    - 150k sq ft distribution facility
  - **HC Pharmacy**
    - Regional GPO
    - UPMC and Affiliated Hospitals
    - Outpatient Pharmacies
    - Cancer Centers

- **High Volume Shop**
  - 74,000+ invoices per month
  - 9,000+ purchase reqs/week

- **Technology Driven Automation**
  - ProdigoMarketplace
  - ProdigoXchange
  - Voice Directed Picking
  - PeopleSoft & Oracle WMS

- **Fully Integrated Shared Services**
  - Single point of contact for SCM
  - Evaluate, Contract, Purchase, Pay, Distribute, Repair, Replace
# UPMC Supply Chain Environment: Services

<table>
<thead>
<tr>
<th>Name</th>
<th>Service</th>
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<tbody>
<tr>
<td>BioTronics Inc.</td>
<td>Clinical Engineering</td>
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<tr>
<td>Prodigo Solutions</td>
<td>SCM Technology</td>
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<td>Affiliation Program</td>
<td>Support of Non-UPMC Entities</td>
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<tr>
<td>HC Pharmacy</td>
<td>Pharmacy SCM Services</td>
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<tr>
<td>CPAK</td>
<td>Pharmacy Packaging Services</td>
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<tr>
<td>Pharmacy Operations</td>
<td>Robotic Packaging</td>
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<tr>
<td>Clinical Equipment</td>
<td>Specialty Bed &amp; Equipment Distribution</td>
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<tr>
<td>Employee Transit</td>
<td>Transportation Services</td>
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<tr>
<td>Moving &amp; Storage</td>
<td>Asset Optimization</td>
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<td>Materials Management</td>
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<tr>
<td>Distribution</td>
<td>Warehouse Services</td>
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<tr>
<td>Sourcing &amp; Contracting</td>
<td>Cost &amp; Risk Management</td>
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<tr>
<td>Buying</td>
<td>Product &amp; Service Acquisition</td>
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<tr>
<td>Consulting</td>
<td>Project Management</td>
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<td>Systems Support</td>
<td>PeopleSoft Support</td>
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<td>Accounts Payable</td>
<td>Funds Disbursement</td>
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<tr>
<td>Supplier Relations</td>
<td>Diversity &amp; Local Growth</td>
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<tr>
<td>Value Analysis</td>
<td>Evaluate Clinical Efficacy w/ Costs</td>
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</table>
UPMC’s Supply Chain Environment: FTE Distribution

- Distribution & Logistics: 52%
- Clinical Engineering: 24%
- Value Analysis: 1%
- Sourcing: 5%
- Accounts Payable: 3%
- Content & Consulting Services: 3%
- Senior Leadership & Admin: 2%
- Pharmacy Operations: 4%

$n=607$
Reinvent Value Analysis

• Hired Clinicians to Manage Process
• Established Executive Oversight
• Mission is preservation and improvement of the quality of patient care while controlling costs and risks

Key Tenets of Program

– “Balancing Consensus with Speed of Decision”
– “Balancing Clinical Efficacy with Cost”
– “Products Should Meet the Needs of the System, but Not Exceed The Needs”
Internalize Strategic Sourcing

- Use Automation to move FTEs from tactical to strategic work
- Best ROI comes from Sourcing…10:1
- UPMC locally contracts for *all* strategic PPI categories using our paper
- Supports Value Analysis program
- Category plans document current/future sourcing strategy…UPMC’s strategy.
- Self-Contracting drives more value than self-distribution; both drive compliance.
SELF-CONTRACTING = LOWER COSTS

- Critical Clauses/Sections Include:
  - Affiliate
  - Market Competition
  - Best Price
  - New Product Introduction / New Releases – Clinical
  - E-Commerce Business Process Requirements

- Recent Examples:
  - Orthopaedic Revisions – Entirely New Strategy
  - Cardiac Rhythm Management – New Product Introduction
  - Drug Eluting Stents – Best Price & Market Competition
  - Blood Products – Unprecedented “shared risk” contract
SELF-CONTRACTING = LOWER RISK

• Critical Clauses/Sections Include:
  • Unavailable Product(s)/Cost to Cover
  • Criminal Background Check; Drug Testing
  • Product Recalls
  • Right to Reject
  • Right to Audit

• Recent Examples:
  • Non-performing Sterilizer – Right to Reject
  • Abdominal Binder – Cost to Cover
  • Transportation Supplier – Right to Audit
Price Focused GPO Contracts are Fine for Some Areas

- GPO contracts broadly do not address risk mitigation
- GPO contracts do deliver a “good” price on many products
- GPO’s deliver value to **Supplier** when restrict Provider’s choice
- GPO’s deliver value to **Provider** when allow freedom of choice
- Who’s strategy are you implementing with GPO contracts?

Self Contracting is Resource Intensive

- Sufficient staff to cover largest / most critical spend
- Contract Agent = 2x-3x Salary of tactical Buyer
- Standardized and pre-approved clause library
- Integration into financial and reporting systems
- Months to negotiate a local; minutes to use GPO
UPMC’s Supply Chain Transformation: Self-Distribution

$10M On Hand Inventory
148,000 Square Feet
24 x 5 Operation
3,700+ SKUS
16 Turns
94%+ Fill Rate
All LUM to Dept
Full Cross-docking
Voice-directed picking
Supports ~750 PAR locations
Self-Distribution Drives Savings

- Increases service capacity
- Supports future demand
- Supports affiliate / growth strategy
- Removes 3rd party costs
- Reduces waste
- Increases compliance
- Over $1.1M annual net savings
UPMC’s Supply Chain Transformation: Self-Distribution

Self-Distribution Drives Compliance

No Compliance = No Savings
Many Reasons to Drive Self Distribution
- Lower Costs
- Satisfy Power / Ego
- Risk Mitigation / Continuity of Supply

Self Distribution is Resource Intense
- Significant start up costs (capital & labor)
- Outside area of expertise for most Providers
- Need for ROI varies with reason behind decision

Self-Contracting eases Self Distribution; Not Required
- Local contracts more often contain distribution friendly terms (fill rate, rebate structure, fast pay discounts, etc) not contained in GPO contracts
- Can still do self-distribution with many GPO contracts
• If Self Contracting and Self Distribution add so much value, then why isn’t everyone doing it?
  – GPO’s do add value.
  – Distributors do add value.
  – Many providers are not big enough to drive proportional benefit.
  – Self-Contracting & Self-Distribution both require a certain size, resource commitment and element of supply chain sophistication to be successful. Not every Provider has this combination of abilities.

• However, Provider consolidation and need to further reduce costs may accelerate movement towards self-contracting and self-distribution…. 
UPMC’s Supply Chain Transformation: Self Reflection
UPMC SCM Transformation: The Path Forward

- Optimize the entire value chain
- Automate transaction activity to deliver more value with less resources
- Product selections no longer based on Physician preference
- Increasingly fund SCM with external revenue sources
- Support Non-UPMC healthcare providers (Affiliations)
- Significantly limit the introduction of new technologies

- Fewer total suppliers – Choose winners & losers
- Fewer total product options; Drive spend to products that deliver superior outcomes at same or lower cost; eliminate unnecessary waste
- Engage in strategic and collaborative relationships with a few suppliers
- Reduce practice variation/consumption by service line
Hospital Consolidation & Integration and the Impact on Medical Supply Markets
“Only 13% of hospitals surveyed in 2012 intend to maintain independence from alignment with other hospitals or systems.”

Strafford presentation that contains data from: Media Intelligence, M&A: Hospitals Take Hold, January 2012
Rate of Provider Consolidation is Increasing

A Wave of Hospital Mergers

Over the last four years, there has been a surge in the number of hospital mergers. In 2012, the number of deals was more than twice what it was in 2009 — and each of those deals may involve multiple hospitals. Related Article »
# Provider Consolidation Has Many Faces

<table>
<thead>
<tr>
<th>AFFILIATIONS</th>
<th>JOINT VENTURE</th>
<th>JOINT OPERATING AGREEMENT</th>
<th>MERGER</th>
<th>ACQUISITION</th>
</tr>
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<tbody>
<tr>
<td>• Most flexible form of consolidation, though option of a weak vs. strong affiliation exists</td>
<td>• A mildly flexible arrangement</td>
<td>• Virtual Mergers, where assets may separate but services are coordinated</td>
<td>• Mutual decision of two companies to combine</td>
<td>• Purchase of one hospital by another</td>
</tr>
<tr>
<td>• Utilized to increase footprint, gain economy of scale, create referrals, supplement an already successful set of services, exchange best practices</td>
<td>• Used to create something new (limited inpatient or outpatient activity, service, purpose) that may be overwhelming to do solo</td>
<td>• New overarching governing board is created but hospitals maintain independent boards as well</td>
<td>• Leadership may be a combination of the two hospitals or from an outside source</td>
<td>• Usually smaller acquired by larger, but not always</td>
</tr>
<tr>
<td>• Do not necessarily change management or governance</td>
<td>• Shared governance between two hospitals</td>
<td>• May borrow for capital investments as one organization</td>
<td>• Hospital’s absorb each other’s assets and debts</td>
<td>• Goals: increase market share, footprint, acquire additional services, financial stability</td>
</tr>
<tr>
<td></td>
<td>• Contains some form of profit/risk sharing.</td>
<td>• Similar to a joint venture, but larger. Extends past just a specific service or activity</td>
<td>• Goal is to increase economy of scale, improve quality, increase market share</td>
<td>• Hospitals may continue to function semi-independently or make transformational changes to match buying hospital</td>
</tr>
</tbody>
</table>

Source: “What Hospital Executives Should be Considering in Hospital Mergers and Acquisitions”
DHG Healthcare Winter 2013
Rate of Provider Consolidation is Increasing

• Why is Provider consolidation occurring at an increasing rate?

• Analysts say will be only [XXX] mega-IDNs in the future. How many? What’s the number you heard? Why?

• How does this affect you, the healthcare supplier? Is it better for you to have fewer larger customers or worse? What does it do to your costs (SG&A) of sale?
How do IDNs and Future Mega IDNs Drive Compliance?

• Today pricing is driven by volume and contractual commitment (compliance/market share).
• How do today’s current mega-systems like Acension, UHS, Kaiser, Tenent, Scott&White/Baylor drive compliance today?
• Do they all do it the same way? Do they all have same results? Who does it best? Why?
• Supply Strategies for Provider Consolidation/Integration
  – “Populist / Defeatist Just Let the Docs Win” Strategy
  – “You People Must Comply” Strategy
  – “If It’s Contracted, It’s Good” Strategy
  – “My GPO is My Strategy” Strategy
  – “The bottom 2/3rds make the Top 1/3rd Possible” non-strategy
Integration Drives Compliance. What are some ways you can tell if a given large IDN or new mega-system is integrated or not? Can deliver market share to you or not?

- Single ERP system / buying platform?
- Single SCM organization?
- Self distributed?
- Self contracted?
- More than one GPO?
- More than one contract connection per spend category?
- What did they do with the last couple facilities they integrated? Did any products convert?
One reason for UPMC’s success in driving compliance is our close proximity to our key stakeholders/clinicians.

UPMC has 61% market share in Allegheny County. We primarily serve only Western Pennsylvania. But what if…?

The further dispersed geographically an IDN’s facilities are, the less likely they are to implement self-distribution. Self-contracting is unrelated to geography.

As IDN’s grow beyond their home region, will they be able to support the same compliance levels as today?
GPO Power is waning /diminishing.

- GPO power has risen and fallen over last decade or so.
- IDN self contracting, self distribution, and regional purchasing coalitions have all hurt their ability to drive change/drive market share...but hasn’t necessarily driven down the admin fees that they collect.

What is a GPO’s Value Proposition to YOU?

- GPOs no longer able to give Providers a guarantee of the “best price” from their suppliers because they let hospitals self contract (directly or through a regional consortium)

What happens to the GPO power as providers continue to consolidate, will it increase or decrease?
Hospitals self contract because WHERE they deliver compliance (market share) to the suppliers they deserve to be incented/rewarded

Question is, should you support local contracting or should you support the GPOs?
   – Hint: GPO’s don’t actually buy anything

What does it take to drive compliance?
   – Geographic region might matter
   – Physician relationship with administration matters
   – Aptitude/skill/maturity of IDN supply chain absolutely matters
   – Teeth matter...you will be challenged, how will you respond?
World of GPO’s is Changing Fast…for the Better?

• **Emergence of Payer owned GPOs**
  - Dignity Heath + UnitedHealthcare = SharedClarity
  - Highmark + Allegheny Health Network = Provider Supply Chain Partners
  - How does Provider Value Analysis balance with direct Payer/Supplier relationships? Impact on formularies?

• **What happens when (if) the GAO pulls the Safe Harbor provision from GPOs?**
  - What is the Safe Harbor and what does it do for you? Here’s what could happen…
  - Chaos will reign briefly depending on runway given
  - Providers will consolidate further, and in new ways
  - GPO will retrench and add value like any consultant should
  - Buyers will get bigger and buyer/supplier balance is restored
What does the future with supplier and provider consolidation hold for distributors?

- Distributors have it tough. They are battered from all sides.
- Distributors have to be friends with EVERYONE and meet everyone’s needs but:
  - **Distributor as a Distributor** puts them at odds with IDN desire to self distribute
  - **Distributor as a manufacturer** (private label) puts them at odds with the same device manufacturers that are their bread & butter
  - **Distributor as Salesperson** (selling GPO or OEM products) might put them at odds with IDN that wants them to be strictly a service provider
  - So where do distributors go to NOT be in trouble with someone?
    - **Distributor as 3PL to an OEM**
    - **Distributor being purchased by or purchasing a GPO**
    - **Consolidate w/other distributors and try to regain control**
Standardization increases risk and increases costs in the long term. Right?

• What if all the mega-IDNs of the future control 80% of the beds in the US?

• What if majority standardize to the same supplier for a given product. What does this do to the other couple suppliers?
  • Increases risk of supply continuity failure (recall)
  • Short Term Failure to supply = loss of revenue on both parties
  • Long Term Failure to supply = reduced patient outcomes / death?

• To be successful in long-term, Providers need to create and support a competitive landscape in their supply categories
Compliance & Volume Stifles Innovation?

• How many big companies *continually* drive innovation?

• Sustained competition drives marketplace innovation and lowers costs to the consumer.

• But what are we headed for in healthcare?
  – How many of our supply markets are already an oligopoly?
  – How many of those markets are trending towards fewer competitors rather than more?
Dual Source Strategy Drives Innovation?

- Large IDNs will get larger
- Large IDNs will drive more standardization
- Large IDNs will use ever fewer suppliers

- A few suppliers will get larger and take more market share
- Once a supplier captures 40-50% market share they start to exhibit “bad supplier” behaviors:
  - forcing price increases, raising margins, innovating less, consuming smaller competitors, getting lazy, getting arrogant, etc.

- To drive competition and innovation, large IDNs should dual-source …but suppliers penalize providers who do this
- **Sole Source/High Compliance strategy is BAD long term for our industry and for patients**. Stifles innovation raises costs
The decline of Physician Influence on Product Selection?
Unprecedented need to reduce costs = new conversations between administration and physicians = more open to change
  – Pedicle Screws
  – CRM Devices
  – Emergence of generic implant companies
  – Hospitals going into manufacturing

Agnostic Data Systems are Required (big Data)
• Requirement of dual-source categories; need increasing
• Agnostic data drives better outcomes analysis
• Better outcomes analysis drives more business your way?
Customer Segmentation Practices Will be Challenged
- Mega-IDNs will bring atypical ownership structures which will challenge current pricing practices.
- Affiliates, non-owned facilities, hybrids, acute care, primary care, alternative care, etc. Class of trade issues, etc.
- They won’t care. One price. Same or better service.

Supplier Staffing Models Will be Challenged
- What is role of “salesperson” in a mega-IDN?
- Where does “sale” occur?
- OEM discussions on reducing costs by reducing sales reps

Unprecedented Requests to Cancel Contracts
Suppliers Will Go “At Risk” Frequently & Substantially

• **Move from “OR” to “AND”** – Must reduce costs and improve outcomes and increase patient satisfaction

• **No Evidence = No evaluation.**

• As mega-IDNs emerge, grow, and standardize, barriers to change increase dramatically.

• Will need mega savings and mega improvements in patient care for anyone to change. **Bigger players=Bigger game**

• Suppliers can **reduce barriers to change by going “At Risk”:**
  – Performance Outcomes
  – Conversion Costs / Trial Costs
  – Guarantee Reduced Utilization, etc.
Does Provider Consolidation & Integration Drive Value?

• UPMC Mission of Value Analysis is to “ensure the preservation and improvement of the quality of patient care while controlling costs and risks related to the purchase and use of products and services.”

• We intend to focus on Cost, Quality and Outcomes.
  – Does consolidation and integration help improve Costs?
  – Does consolidation and integration help improve Quality?
  – Does consolidation and integration help improve Outcomes?

What are you doing to prepare for further consolidation? Is it enough?
THANK YOU