Snapshot – Hospital Purchasing Trends and the Impact on MedTech M&A

October 30, 2015

The materials contained in this document are intended to supplement a discussion between MassMEDIC and L.E.K. Consulting on October 30, 2015. These perspectives are confidential and will only be meaningful to those in attendance.
We have combined our expertise and experience across the healthcare industry ...

... with our tradition of providing insights that keep our clients consistently ahead ...

... to bring you the Strategic Hospital Priorities Study

- In-depth review of U.S. hospital strategic priorities and purchasing trends, as reported by hospital decision-makers themselves
- First conducted in late 2009 and published in January 2010
- Fifth consecutive year of publishing the study
- Internet survey of ~150 U.S. hospital CEOs, CFOs, COOs, materials directors and purchasing directors
## What is the 2015 L.E.K. Strategic Healthcare Provider Priorities Study?

<table>
<thead>
<tr>
<th>Facts and information …</th>
<th>… leading to actionable insights</th>
</tr>
</thead>
<tbody>
<tr>
<td>● An internet survey of ~150 U.S. hospital decision-makers</td>
<td>● A tool for understanding hospital strategies and priorities in light of healthcare reform</td>
</tr>
<tr>
<td>● A compilation of selected U.S. economic data</td>
<td>● A compendium of macroeconomic trends providing context for U.S. hospitals and the healthcare market</td>
</tr>
<tr>
<td>● An annual benchmark study, first conducted in 2009</td>
<td>● A guide for understanding hospital needs from MedTech suppliers</td>
</tr>
<tr>
<td>● An evidence-based scorecard, with facts, figures and interpretation</td>
<td>● A free resource for healthcare industry executives, investors, policymakers and others</td>
</tr>
<tr>
<td>● A complimentary report, exclusively offered by L.E.K. Consulting, with details available upon request</td>
<td></td>
</tr>
</tbody>
</table>
“Progressives” represent almost 50% of hospital spend and are expected to grow the most in the future (as local traditionalists are consolidated)

Source: L.E.K. research and analysis and the L.E.K. 2015 Strategic Healthcare Provider Priorities Study

<table>
<thead>
<tr>
<th>Hospital Aggregate</th>
<th>Survey sample size</th>
<th>Avg. # hospitals in system</th>
<th>Avg. # total beds in system</th>
<th>Avg. # other care sites in system</th>
<th>Representative systems</th>
</tr>
</thead>
</table>
| Progressive consolidator | 30 | 5-50 | 1,000-10,000 | 10-150 | - Catholic Health Initiatives  
- Kaiser Foundation Hospitals |
| Local progressive | 54 | <10 | <3,000 | <10 | - Yale New Haven Health System  
- Northwestern Medicine |
| Hospital aggregator | 23 | 5-50 | 500-5,000 | 5-50 | - HCA  
- Intermountain Healthcare, Inc. |
| Local traditionalist | 45 | <5 | <1,000 | <5 | - USMD Health System  
- Emerus Emergency Hospitals |

Estimated share of total current healthcare provider spend (2013)

Characteristics of healthcare provider survey respondent segments (2015) (N=152)
L.E.K. has identified key trends that are impacting MedTechs and other healthcare providers suppliers:

<table>
<thead>
<tr>
<th></th>
<th>Hospital purchasing trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shifting patient mix from inpatient to outpatient</td>
</tr>
<tr>
<td>2</td>
<td>Hospital consolidation</td>
</tr>
<tr>
<td>3</td>
<td>Hospital accountability and integration</td>
</tr>
<tr>
<td>4</td>
<td>Increasing centralization of hospital purchasing</td>
</tr>
<tr>
<td>5</td>
<td>Increasing emphasis on economic value</td>
</tr>
<tr>
<td>6</td>
<td>Convergence of physical with digital products</td>
</tr>
<tr>
<td>7</td>
<td>Increasing demand for solutions versus stand-alone products</td>
</tr>
</tbody>
</table>

- **Technologies**: (e.g., MIS and remote monitoring) and reimbursement promoting lower acuity settings
- **Providers & payers**: needing support to manage care continuum
- **Growing criticality of systems**
- **Gradual improvement in provider finances**: (as struggling “stand-alones” are subsumed)
- **Growing importance of performance metrics tied to reimbursement**
- **Opportunities to support providers**: extending care continuum, managing populations
- **Increased focus on the patient / consumer, and patient satisfaction**
- **Need to attract and retain clinicians within context of shifting model**
- **Shifts to fewer decision makers**
- **More standardization and “winner take all”**
- **Increasing importance of administrators & economic buyers**
- **Need for major clinical innovation if weak economic value**
- **Increasing need for capabilities to support data connectivity**
- **Growing barriers to entry, but also opportunities for disruption**
- **Growing provider desire for fewer, deeper partnerships**
- **Increasing provider receptivity to efficient outsourced options**
Hospitals and hospital systems are continuing to consolidate; as a result, the top 100 systems represent a growing majority of hospital spend

- Over half of the L.E.K. 2015 Strategic Healthcare Provider Priorities Study respondents plan to expand through the acquisition of other hospitals
  - Despite survey respondents’ intent to perform acquisitions of their own, few respondents plan to be acquired by another hospital or hospital system

- Consolidation allows hospitals to increase the size of their catchment area and obtain more favorable reimbursement
  
  “… In the next year, healthcare consolidation is on a lot of peoples’ mind. There’s a lot of leverage with the insurers …”
  
  Chair of Emergency Medicine and Board of Trustees Member, Princeton HCS

- Provider consolidation can result in organizational and coordination challenges that mitigate the benefits of hospital mergers and acquisitions
  
  “… Hospital networks are springing up everywhere, but many of them have difficulty managing and aligning their hospitals. As a result, few of them can take advantage of their scale. The size of a hospital network is only relevant if you can properly leverage it …”
  
  COO, Novant Health Shared Services

Total hospital spend by top 100 systems vs. other systems (2008–20F)

Source: AHA, CMS National Health Expenditure Projections, Avalere Health, Dixon Hughes Goodman, L.E.K. interviews and analysis

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Providers are increasing their level of financial accountability


<table>
<thead>
<tr>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

- Providers and payers are creating different mechanisms that shift more financial risk of patient care to providers
  - “… There is now more collaboration between payers and providers than ever, and the federal government is forcing those stakeholders to move towards more partnership. The government wants them to be working toward mutual goals …”
    - Chair of Emergency Medicine, and Board of Trustees Member, Princeton HCS
  - “… We’re seeing risk sharing agreements between hospitals and insurers in which hospitals receive additional funding if they improve patient health. With hospital margins declining and increased quality of care expectations being placed on them by health plans, I do think that the trend of integration between hospitals and health plans will continue …”
    - Senior Performance Partner, Premier

Note: *Please rate the extent to which you agree or disagree with the following statements regarding your hospital’s planned activities over the last 5 years and the next 5 years: “We have significantly expanded our level of accountability as part of our reimbursement methods (i.e., less fee for service), “We will significantly expand our level of accountability as part of our reimbursement methods (i.e., less fee for service)”; **Respondents who answered “Do not know” were removed.

Source: the L.E.K. 2015 Strategic Healthcare Provider Priorities Study
To support growing accountability, providers are further integrating (e.g., with primary care and specialty offices); “progressives” are integrating the most

Integration with alternate sites of care, most likely strategies* (2015) (N=153)**
Mean score (1-7)

Despite the large number of PCP practice acquisitions that have occurred in recent years, respondents believe that more will occur

“… A lot of folks think that getting more specialists in the network is the way to drive volume, but we think primary care is the key to everything. All patients start with the PCP …”

COO, Novant Health Shared Services

Note: *How likely is your hospital to pursue integration with these types of other sites of care in the next 5 years? **Respondents who answered “Do not know” were removed
Source: L.E.K. interviews and the L.E.K. 2015 Strategic Healthcare Provider Priorities Study
As accountability increases, providers are increasingly working with outside partners to address needs in hospital and patient functions (1 of 2)

Likelihood of working with outside partners to address top urgent needs* (2015) (n=153)**

Percent of respondents

Note: *With respect to addressing your hospital’s top urgent needs, how likely are you to work with outside service providers / partners?; **Respondents who answered “Do not know” were removed

Source: The L.E.K. 2015 Strategic Healthcare Provider Priorities Study
As accountability increases, providers are increasingly working with outside partners to address needs in hospital and patient functions (2 of 2)

Outsourcing of services currently and in the next 5 years* (2015) (n=153)
Percent of respondents

Note: *For the following services, please indicate what your current status for outsourcing is and how you expect this to change or stay the same in the next 5 years.
Source: The L.E.K. 2015 Strategic Healthcare Provider Priorities Study
Hospitals, particularly “Progressives”, are increasingly turning to outside service providers, reflecting a growing desire for fewer, deeper partnerships

Key activities aimed at addressing hospital needs*
Percent of respondents, indexed relative to 2011

Likelihood of working with outside service providers to address needs *
(2015) (n=153)
Percent of respondents

*How are you addressing the most pressing needs that you identified for your hospital?
Source: The L.E.K. 2015 Strategic Healthcare Provider Priorities Study

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Providers, particularly progressives, value additional services that medtech companies are strongly positioned to support

Hospital perceived value of potential medtech services* (2015) (N=153)

Average score

Note: “How valuable are each of the following services that medtech companies could provide in addition to their products? Please rate each service on a scale of 1 to 7 in which ‘1’ means “not at all valuable” and ‘7’ means “very valuable”

Source: The L.E.K. 2015 Strategic Healthcare Provider Priorities Study
Medtechs can provide further value to hospitals by adding a range of services to complement their products and strengths.

## Categories of Service Needed by Hospitals

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product related</strong></td>
<td>- Medtronic acquires Cardiocom, augments heart failure devices with monitoring services</td>
</tr>
<tr>
<td><strong>Operations efficiency</strong></td>
<td>- GE Centricity Business offers revenue cycle management, including billing and reimbursement</td>
</tr>
<tr>
<td><strong>Clinical care delivery</strong></td>
<td>- Medtronic begins to run over 40 catheter labs in Europe</td>
</tr>
<tr>
<td><strong>Hospital Strategy</strong></td>
<td>- Marshall Steele, a hospital improvement consulting firm, joins “Stryker Solutions”</td>
</tr>
</tbody>
</table>

### Product related
- Directly related to managing or using equipment and devices

### Operations efficiency
- Enabling reduced administrative and operational costs

### Clinical care delivery
- Enabling outsourced data, analytics and/or clinical support

### Hospital Strategy
- Supporting revenue, expansion or strategic initiatives

**Select examples**
- Marshall Steele, a hospital improvement consulting firm, joins “Stryker Solutions”
- GE Centricity Business offers revenue cycle management, including billing and reimbursement
- Medtronic acquires Cardiocom, augments heart failure devices with monitoring services
- Medtronic begins to run over 40 catheter labs in Europe
In the near term, we expect service-oriented offerings to provide greater differentiation and appeal in the eyes of “progressives”

**Desired focus of MedTech companies** (2015) (n=153)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Local traditionalist</th>
<th>Hospital aggregator</th>
<th>Local progressive</th>
<th>Progressive consolidator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower cost / less innovative products</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Lower priced products with reduced support services</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Innovative technologies to drive improved patient outcomes</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Solutions to improve operating efficiencies / costs</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Expanded services to complement existing products</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Deep partnerships with risk-sharing to improve outcomes and lower operating costs</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>

Note: *Overall, how would you like MedTech companies to focus their efforts? Please allocate 100 points across areas in which you would like to see focus, where more points indicates a higher interest in the area.

Source: The L.E.K. 2015 Strategic Healthcare Provider Priorities Study
Medtech M&A activity has reached back pre-2008 crisis level, with continued deal-making to consolidate and capture emerging opportunities.

**Medtech M&A Volume (2010-15*)**
Number of deals

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>68</td>
<td>82</td>
<td>72</td>
<td>20</td>
<td>28</td>
<td>46</td>
<td>23</td>
<td>27</td>
<td>98</td>
<td>81</td>
</tr>
</tbody>
</table>

**Medtech M&A Value (2010-15*)**
Billions of dollars

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public buys public</td>
<td>$1,190</td>
<td>$723</td>
<td>n/a</td>
<td>$828</td>
<td>$828</td>
<td>$55</td>
<td>$578</td>
<td>$336</td>
<td>$9,329</td>
<td>$1,118</td>
</tr>
<tr>
<td>Public buys private</td>
<td>$473</td>
<td>$666</td>
<td>$887</td>
<td>$347</td>
<td>$347</td>
<td>$575</td>
<td>$217</td>
<td>$378</td>
<td>$451</td>
<td>$922</td>
</tr>
</tbody>
</table>

Includes Medtronic / Covidien deal of ~$50B

Note: * Full year estimated from annualized year-to-date data in mid October; ** Value of deals where a value was reported
Source: Strategic Transaction Database (STDB), L.E.K. analysis
Service-oriented deals are a small and growing portion of deal volumes and values

**Medtech M&A Volume (2010-15*)**

- Number of deals
- Percent

**Medtech M&A Value (2010-15*)**

- Billions of dollars
- Percent

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$514</td>
<td>$615</td>
<td>$672</td>
<td>$239</td>
<td>$375</td>
<td>$585</td>
<td>$233</td>
<td>$332</td>
<td>$1,142</td>
<td>$878</td>
</tr>
<tr>
<td>Service oriented</td>
<td>$496</td>
<td>$474</td>
<td>$631</td>
<td>$624</td>
<td>$150</td>
<td>$620</td>
<td>$547</td>
<td>$885</td>
<td>$1,736</td>
<td>$1,441</td>
</tr>
</tbody>
</table>

Note: * Full year estimated from annualized year-to-date data in mid October; ** Value of deals where a value was reported
Source: Strategic Transaction Database (STDB), L.E.K. analysis

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In light of industry trends, leading players are consolidating and strengthening their ability to deliver broader solutions

<table>
<thead>
<tr>
<th>MedTech leader</th>
<th>Major and Strategic Acquisitions</th>
<th>Implications</th>
</tr>
</thead>
</table>
| **Medtronic**  | [Images of Medtronic, Covidien, Cardiocom] | - Increased scale and presence in hospitals  
- Major entry into non-procedure specific products  
- Ability to offer broader solutions (e.g., cath lab, remote monitoring) |
| **BD**         | [Images of CareFusion, Kiestra, Cato] | - Increased scale and presence in hospitals  
- Ability to offer broader solutions (e.g., pharmacy, lab, infection prevention) |
| **Stryker**    | [Images of Ascent, Marshall, Steele] | - Ability to offer broader solutions (e.g., OR) |
| **Baxter**     | [Images of Gambro, Baxa] | - Ability to offer broader solutions (e.g., renal, pharmacy) |
| **GE Healthcare** | [Image of GE Healthcare] | - Ability to offer broader solutions (e.g., lean consulting) |
| **Pfizer**     | [Images of Hospira, f] | - Expansion into generics & biosimilars  
- Likely further consolidation for infusion products and solutions |

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