Hospital Tax Status and HIT Buying Patterns

A research study conducted by:

The Dorenfest Institute

HIMSS Analytics

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Uncovering the healthcare information technology (HIT) buying patterns of U.S. hospitals is of value to an array of HIT stakeholders. Yet, aggregated buying patterns have limited applicability. U.S. hospitals are too varied to allow for the imputation of aggregate level findings to sub-segments of the market. Aggregate level findings therefore must be analyzed by known hospital segments in order to increase the utility of purchasing behavior data.

As part of its ongoing mission to help meet the academic and global demand for healthcare information technology data to improve patients care, the Dorenfest Institute partnered with HIMSS Analytics to explore HIT purchasing behaviors amongst sub-segments of the U.S. hospital market.

**Hospital Tax Status**

One of the most basic ways to segment U.S. hospitals is to differentiate by an organization’s tax status. All U.S. hospitals operate under one of three basic tax structures:

1. Governmental agency
2. Not-For-Profit organization
3. Investor owned (For-Profit) entity.

Tax status is thought to be significant in segmenting buying behaviors because managerial decisions (to include HIT purchases) can be influenced by the organizational priority placed on profitability.

**Methodology**

To analyze the impact of hospital tax status on HIT purchasing behaviors, HIMSS Analytics analyzed the HIT acquisition and implementation patterns of the three segments of U.S. hospitals leveraging the Dorenfest Institute databases for the years 2010 – 2012, and the 2013 year-end HIMSS Analytics® Database. These databases contain the annual HIT inventory and buying plans of all U.S. hospitals related to 100+ HIT applications monitored by HIMSS Analytics.

Buying behaviors were identified by isolating all records where a hospital reported any one application as “To be replaced” and “Contracted not yet installed” or “Installation in process”.

Only four years of data were used for this analysis since tax status was not introduced into the HIMSS Analytics database until 2010.

**Summary Findings**

Evidence reveals that HIT buying behaviors do vary by hospital tax. While Governmental and Not-For-Profit entities share several purchasing similarities, For-Profit entities are notably different. More specifically, the pattern assumed by For-Profit entities appears to have experienced a remarkable shift in 2012. These findings suggest For-Profit providers have a different equation surrounding the value of HIT.
During the past four years the U.S. hospital market has consistently presented as an active environment for HIT vendors. While the percentage of hospitals acquiring or installing at least one HIT solution decreased slightly in 2013, the majority of the market (roughly 60 percent) has been involved in HIT purchases.

The attractiveness of the U.S. hospital market is elevated when analyzing the number of applications acquired or installed during any one year. In each of the past four years, approximately one-quarter of all U.S. hospitals have consistently been involved in acquiring or installing four or more HIT applications.

**Figure 1: Number of HIT Applications Acquired - All U.S. Hospitals (2010 – 2013)**
Hospitals and tax status

All U.S. hospitals operate under one of three basic organizational tax structures:

1. Governmental agencies
2. Not-for-profit organizations
3. Investor owned entities

Hospitals with a Not-For-Profit (NFP) tax status compose the majority of U.S. hospitals (approximately 55 percent). Governmental (non-federal) hospitals and investor owned, For-Profit (FP) hospitals are fairly evenly split the remaining 45 percent of the market.

Figure 2: Tax Status of U.S. Hospitals (2010 – 2013)
The buying behavior of For-Profit hospitals is notably different compared to other types of hospitals.

Tax status and IT buying patterns

Not-For-Profit Hospitals

Not-For-Profit hospitals (Figure 3) generally present as the most attractive segment of the hospital market for HIT vendors. During the past four years, Not-For-Profits:

- Composed the largest segment of the hospital market (market size).
- Were proportionately more active in acquiring/installing HIT solutions (buying pattern) than any other hospital type:
  - ~67 percent were HIT buyers each year
  - ~30 percent purchased four or more HIT applications during each of the last four years

Governmental Hospitals

The buying pattern of Governmental hospitals (Figure 4) is similar to the NFP market, although comparatively muted. During the past four years:

- ~55 percent of governmental providers purchased at least one HIT application each year
- ~20 percent purchased four or more HIT applications each year

For-Profit Hospitals

For-Profit hospitals (Figure 5) reflect an HIT buying pattern unlike the other two segments of the market. While the percentage of For-Profit hospitals actively involved in buying at least one HIT solution steadily grew during the past four years (+10 percent), the percentage of For-Profit hospitals acquiring multiple solutions (four or more applications) dramatically decreased in 2012. The sudden shift in purchasing behavior suggests some type of disruptive event was introduced into the market in 2012 (e.g. health reform) which had a particular impact on For-Profit organizations.
Figure 3: Number of HIT Applications Acquired – Not-For-Profit Hospitals (2010 – 2013)

Figure 4: Number of HIT Applications Acquired – Governmental Hospitals (2010 – 2013)

Figure 5: Number of HIT Applications Acquired – For-Profit Hospitals (2010 – 2013)
Differences in the buying patterns are also evident when analyzing the top electronic medical record (EMR) applications acquired/installed during the past four years (Table 1). Although there is a great degree of consistency in the top two applications acquired/installed by all hospitals (CPOE and Physician documentation), For-Profit providers diverge from the rest of the market by placing a higher priority on Physician Portals (Rank = 3) than NFPs and Governmental providers (Rank = 6).

Table 1: Top EMR Applications Acquired (2010 – 2013)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Not-For-Profits</th>
<th>Government</th>
<th>For-Profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Computerized Practitioner Order Entry (CPOE)</td>
<td>Computerized Practitioner Order Entry (CPOE)</td>
<td>Computerized Practitioner Order Entry (CPOE)</td>
</tr>
<tr>
<td>2</td>
<td>Physician Documentation</td>
<td>Physician Documentation</td>
<td>Physician Documentation</td>
</tr>
<tr>
<td>3</td>
<td>Order Entry (Includes Order Communications)</td>
<td>Clinical Decision Support System (CDSS)</td>
<td><strong>Physician Portal</strong></td>
</tr>
<tr>
<td>4</td>
<td>Clinical Data Repository</td>
<td>Order Entry (Includes Order Communications)</td>
<td>Clinical Decision Support System (CDSS)</td>
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<td><strong>Physician Portal</strong></td>
<td>Order Entry (Includes Order Communications)</td>
</tr>
<tr>
<td>7</td>
<td>Patient Portal</td>
<td>Patient Portal</td>
<td>Patient Portal</td>
</tr>
</tbody>
</table>
Conclusions

- The U.S. hospital market has consistently presented as an active and attractive environment for HIT vendors.
- HIT buying behaviors do vary by hospital tax status with For-Profit entities reflecting a purchasing pattern notably different from Governmental and Not-For-Profits hospitals.
- The HIT purchasing behaviors of For-Profit hospitals have been particularly impacted by the introduction of some kind of “disruptive event” in 2012 (e.g. Healthcare reform).

Implications

- The HIT purchasing behaviors of hospital segments are subject to disruptions.
- Efforts to impact the HIT purchasing behaviors of hospitals need to account for the priority placed on organizational profitability.
About Dorenfest Institute

The Dorenfest Institute for Health Information is an innovative online resource that helps meet the academic and global demand for healthcare information technology data to improve patients care. The Dorenfest Institute provides free historical data, reports, white papers and other tools regarding the use of IT in hospitals and integrated healthcare delivery networks. The institute was created thanks to a generous donation from Sheldon I. Dorenfest, President and CEO of The Dorenfest Group in Chicago, Illinois. The Dorenfest Institute also maintains a database (acquired by HIMSS Analytics) that provides valuable data in healthcare IT. Visit http://apps.himss.org/foundation/histdata.asp for more information.

About HIMSS Analytics

HIMSS Analytics is a wholly owned not-for-profit subsidiary of the Healthcare Information and Management Systems Society (HIMSS) – a nonprofit driving the change toward a smarter, more efficient healthcare system through the adoption of health IT. The company collects and analyzes healthcare data related to IT processes and environments, products, IS department composition and costs, IS department management metrics, healthcare trends and purchase-related decisions. HIMSS Analytics delivers high quality data and analytical expertise to healthcare delivery organizations, healthcare IT companies, state governments, financial companies, pharmaceutical companies, and consulting firms. Visit www.himssanalytics.org for more information.