Health Care Information Technology: The Wall Street View

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Agenda

Industry Overview
HCIT Industry Fundamentals
Future HCIT Growth Segments
HCIT Financing Environment
Conclusions/ Opportunities
HCIT Market Overview

- Niche market
  - Revenue: $28 billion, $14 billion of which is spent by hospitals
  - Largest company (Cerner) represented 4% of HCIT spending
  - 2007 HIMSS conference had 700+ exhibitors

- Historical 8%-12% growth
  - Has been cyclical, recently becoming secular
    - Improvements in IT and health care create secularities
  - Prior cyclicality driven by IT (Y2K, HIPAA) and health care profitability trends
HCIT Spending Trends

Y2K Rebound to Steady, Near 10% Growth

Healthcare IT Spending

($ in billions)

Annual Year Over Year Growth Rate

Source: Sheldon I. Dorenfest and Associates, Ltd.
HCIT Spending Across Different Sectors

Non-Hospital Spending Likely to Grow Fastest

U.S. Market Forecast for HCIT Market

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital Systems</th>
<th>Office, Home Care, Nursing Homes, Hospice</th>
<th>Clinical Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>$8,000</td>
<td>$8,000</td>
<td>$0</td>
</tr>
<tr>
<td>2006</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$0</td>
</tr>
<tr>
<td>2011</td>
<td>$16,000</td>
<td>$16,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

($ in millions)

2007 HIMSS Themes – Cain Brothers’ View

1. Interoperability (Standards-based data sharing and integration)
   - IHE (Integrating the Healthcare Enterprise)

2. Increasing Presence of large IT companies
   - Moving further toward application domain

3. Increasing Presence of Medical Device companies (PACS, etc.)
   - More data to be integrated across healthcare continuum

4. Electronic Health Records / Personal Health Records
   - Setting the stage for increased clinical data integration utility
   - PHR: Clinician input vs. patient self-reported?

Focus on Standards Removes Historical HCIT Obstacles
HIMSS Vendor Market Comparisons

A Sampling of Top Vendors Counts by Product Category
(Based on self-reported vendor product category assessments)

- Wireless Technologies
- Web Portals
- Point-of-Care Information Systems
- Mobile Computing
- Information Security Solutions
- Handheld Technologies
- Enterprise-Wide Healthcare Systems
- EHR / EMR
- Data Management
- Clinical Documentation Systems
- Business Management Tools

HIMSS Vendor Market Comparisons

The Next Generation of “Connectivity”?  
(Based on self-reported vendor product category assessments)

Interoperability

Electronic Data Interchange (EDI)

Clearinghouse

HIMSS Vendor Market Comparisons

Evaluating the Maturity of Integrated Clinical Data Accessibility
(Based on self-reported vendor product category assessments)

Factors Impacting HCIT Adoption

Hospitals continue to report cost as greatest barrier to IT adoption

Percent of Hospitals Indicating Barrier is a “Significant Barrier” or “Somewhat of a Barrier”

<table>
<thead>
<tr>
<th>Factor</th>
<th>2006</th>
<th>2005</th>
<th>2006</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability of Technology to Meet Needs</td>
<td>11%</td>
<td>12%</td>
<td>51%</td>
<td>48%</td>
</tr>
<tr>
<td>Availability of Well Trained IT Staff</td>
<td>16%</td>
<td>15%</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Acceptance by Clinical Staff</td>
<td>23%</td>
<td>24%</td>
<td>59%</td>
<td>58%</td>
</tr>
<tr>
<td>Interoperability with Current System</td>
<td>27%</td>
<td>25%</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>Ongoing Costs</td>
<td>32%</td>
<td>33%</td>
<td>55%</td>
<td>54%</td>
</tr>
<tr>
<td>Initial Costs</td>
<td>54%</td>
<td>59%</td>
<td>40%</td>
<td>36%</td>
</tr>
</tbody>
</table>

IT Fragmentation Within the Hospital

- Dozens of significant applications
- Millions in capital investment
- Average task requires log-in and info from 6 disparate applications
- Further fragmentation related to in-house customization
### Historical Obstacles & Enablers to HCIT

#### The U.S. Banking System: Enablers of Electronic Evolution
- Industry-wide standards
- Single regulatory body (Federal Reserve)
- Modest consumer movement between banks
- Unique consumer identifier (account #)
- Limited relevant (objective) data
- All inclusive data repository
- Widespread access to data repositories
- Data security standards (PIN #)

#### The U.S. Health Care System: Obstacles to Electronic Evolution
- Minimal industry-wide standards
- Several regulatory bodies
- Constant consumer movement between providers
- No unique patient identifier
- Extensive relevant (subjective) information
- Incomplete data repository
- Limited access to data repositories
- Minimal data security standards

#### The U.S. Health Care System: Addressing the Obstacles
- HL7, HIPAA, IHE, DICOM
- NHIN – type projects, CCHIT
- Consumer-centric data rather than episodic
- Mapping systems / local storage and secure identifiers
- Expanded breadth of standards (e.g. MEDCIN®)
- Linkage within and across health networks – RHIOs
- Improved interoperability capabilities
- Single sign-on context management, Biometrics
Typical Evolution of IT in an Industry

Impact on operating efficiency increases as IT is used to Transform

Stage 1
Publish

Stage 2
Interact

Stage 3
Transact

Stage 4
Integrate

Stage 5
Transform

Value Curve

1990s 2007 2010+

Providers

Health Plans

Source: First Consulting Group.
2007 Top HCIT Trends

- Pay For Performance
- Disease Management
- EMRs
- PDAs
- Personal Health Records
- Vendor Consolidation
- Storage
- TeleHealth

• Patient-level data
• Interoperability
• Standards-based medicine

Source: Healthcare Informatics, February 2007
“Perfect Storm” Accelerates HCIT Opportunity

Government / Regulatory
- Leapfrog/IOM study started it all in 1999
- Increased Discussion across Capital Hill
- NHIN – Endorsing Interoperability
- CCHIT – establishing credibility

Health Care
- Focus on IT as a workflow enabler *
- EMR focus vs. upgrading clinical systems *
- Pay-for-performance incentivizes IT usage
  - Standards based medicine / outcomes

Technology
- HL7 / HIPAA / DICOM and other standards are creating a foundation for interoperability
  - Security cost/function improvements help overcome key barriers
  - Storage/processing cost reductions broaden HCIT accessibility
- Remote hosting and wireless IT enhance scale economies and enable necessary ubiquity

$2 Trillion Industry

Increased HCIT Demand

*Source: 2006 HIMSS Leadership Survey.
Tomorrow’s HCIT Focus

- Clinical information systems: CPOE to EHR / data warehousing
  - Department-specific apps (e.g. PACs, ICU, ER, OR, Cardiology)
  - Standards-based medicine and IT-based workflow management

- Interoperability/Connectivity – RHIOs and beyond
  - Workflow driven data integration

- Revenue cycle management (recapturing 25% of health care costs)
  - Many points in the cycle to be addressed with new approaches

- Payor information systems & services
  - Operations throughput / contract management
  - Consumer Directed Healthcare (CDHP)
  - Standardized-based medicine: DM, CM, UM, P4P

- Consumer-Driven Business models
  - Personal health management

Revenue Cycle Management Overview

- Historically centered around claims submission / EDI vendors

- Increasing complexity of payment and care models changes points of value add
  - Managed care rules
  - Government payors
  - HSAs / collections of patient co-pays

- Technology changing workflow enables major transformations
  - Charge capture and / or coding closer to the point of care
  - Modeling / understanding profitability pro-actively
# RCM Business Model Differentiators

## Target Customers
- Hospital
- Physician Group
- Payor

## Point of Entry in Revenue Cycle
- Charge capture at point of care
- Claim creation / coding
- Financial intermediary
- Payor receipt and analysis
- Collections Reconciliation

## Delivery Method
- Software / IT-based
- Web-based tool
- ASP hosted software
- Service / consulting based (workflow re-engineering)
- Software as a Service (SaaS)
Evolution of HCIT Connectivity

- Billing
- Episodic Clinicals
- Output to paper
- Best of Breed

- Interoperability Begins
- Best of Breed returns
- Multi-format data
  - Electronic
  - Scanned

1990

- Enterprise-wide
  - Single vendor
- EDI clearing house
  - Many to many
  - Electronic transmission

2000

- Patient centric
- More contextual integration
- Access to disparate data sources / formats

2010+

Cain Brothers
Improved Data Integration Expands Benefits

- Physician Claims
- Hospital Claims
- Pharmacy Claims
- Lab Results
- Images
- Transcribed Notes
- Patient Notes

Proprietary Integration Tools

- Disease Management (Clinical Protocols)
- RHIO (Multi-System Access)
- MA HCC Coding (Clinical Notes)
- Pay-for-Performance Platform (Structured Dictation Data Access)
- TPA Cost Containment (Doc-driven rules)
HCIT Stock Price Performance

Cain Brothers’ HCIT index has slightly under performed the Dow Jones and Russell 2000 over the last twelve months

Indexed to 100 as of March 5, 2006

Source: Capital IQ, as of March 5, 2007.
HCIT Financing Market

The financing market for HCIT transactions is showing signs of strength

- From 2001-2005, there were approximately 6 true HCIT IPOs
- There could be 4-6 HCIT IPOs over the next 12 months
- Companies meaningfully more seasoned than prior IPO “wave”

Recent HCIT IPOs

<table>
<thead>
<tr>
<th>Pricing Date</th>
<th>Issuer</th>
<th>Equity Market Cap ($ in mm)</th>
<th>% Change Current Price to Offer Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/13/06</td>
<td>MEDecision</td>
<td>$104.6</td>
<td>(30.0%)</td>
</tr>
<tr>
<td>04/05/06</td>
<td>Visicu Inc</td>
<td>233.8</td>
<td>(54.8%)</td>
</tr>
<tr>
<td>09/29/05</td>
<td>WebMD Health Corp</td>
<td>2,982.1</td>
<td>200.6%</td>
</tr>
<tr>
<td>02/09/05</td>
<td>Emageon Inc</td>
<td>238.8</td>
<td>(13.2%)</td>
</tr>
</tbody>
</table>

Source: IPO Monitor, as of March 5, 2007.
Venture Capital Investment in HCIT

Source: Venture Source as of January 1, 2007.
HCIT Venture Capital Market

Over the last 18 months approximately 40 venture capital deals done in HCIT, raising nearly $620 million

Investments by Segment

- Health Care Administration Software: 56%
- Decision Support Services: 18%
- Consumer Services: 10%
- Bio-Informatics Software: 3%
- Outcome Management Systems: 13%

Source: Venture Source as of March 5, 2007.
HCIT Venture Capital Market

Over the last 18 months approximately 40 venture capital deals done in HCIT, raising nearly $620 million

Investments by Stage of Development

- Product in Beta: 21%
- Product Development: 5%
- Product: 66%
- Shipping: 3%
- Profitable: 21%

Source: Venture Source as of March 5, 2007.
HCIT M&A Activity is Growing

- M&A activity rose significantly in 2005 and again in 2006
  - Nearly 60 transactions announced in 2006 vs. 34 in 2005 and 26 in 2004

- Notable transactions completed in the last 18 months:
  - McKesson / Per Se Technologies
  - Sage Software / Emdeon Practice Services
  - TriZetto / QCSI
  - DST Systems / Amisys Synertech
  - General Atlantic / Emdeon
  - McKesson / RelayHealth
  - Allscripts Healthcare Solution / A4 Health Systems
  - GE Healthcare / IDX Systems

Source: Capital IQ and company filings and press releases.
Conclusions

1. In case there was any question, Best Of Breed is here to stay
   - Best-in class, department level, category-specific applications
   - “spaghetti” diagram remains, functionally streamlined

2. The “New Connectivity” offers many new HCIT strategies
   - Standards pervasiveness enables data access, integration, and analysis leading to paradigm changing improvements in care cost and quality
     - Disease Management, Pay for Performance

3. Significant IT “gaps” across healthcare continuum remain
   - In part, this is driven by differing business priorities
Cain Brothers House Calls

Questions?

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