Reading the Tea Leaves – Assessing the Effects of Hospital Imaging Volume Declines

November 21, 2013

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Manager
VMG Health – Our Company

VMG Health performs **1,200 valuations** annually for hospitals, health systems, management companies, physician shareholders, and legal advisors for support of various regulatory and legal requirements.

Our Recent Work

- **Ardent Health Services**: joint ventured with BSA
  - VMG provided valuation and due diligence advisory services.
- **Health Management Associates**: joint ventured with Bayfront Medical Center
  - VMG provided fairness opinion.
- **Tenet**: joint ventured with John Muir Health
  - VMG provided fairness opinion.
- **LHP**: leased by Bay Medical Center
  - Sacred Heart Health System
  - VMG provided valuation and transaction advisory services.

VMG Health values over 80 imaging centers each year
Volume Trends

I. Overview of the U.S. Imaging Market
II. Public Data Trends
III. Internally Observed Data Trends
IV. Joint Ventures
V. The Future
VMG Health’s Data and Analysis

Our methodology in this Webinar

- Public Company filings and conference calls
- VMG Health Internal Data
  - VMG Health performs over 80 valuations of imaging centers each year, across the country

Why use internal data from valuations?

- Paints a more accurate picture of what is happening in the market
- Reimbursement and volume trends for HOPDs is limited
- Publicly available data has several limitations
Diagnostic Imaging Market Overview

Estimated Market Size: $100 billion

RDNT Revenue $673 million (<1.0% of total market)
<table>
<thead>
<tr>
<th>Imaging Center Chain</th>
<th>Headquarters</th>
<th>Centers 2013</th>
<th>Centers 2012</th>
<th>Change, 2012-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>RadNet Inc</td>
<td>Los Angeles, CA</td>
<td>219</td>
<td>220</td>
<td>(1)</td>
</tr>
<tr>
<td>Insight Imaging/CDI (combined)</td>
<td>Lake Forest, CA</td>
<td>100</td>
<td>101</td>
<td>(1)</td>
</tr>
<tr>
<td>HCA</td>
<td>Nashville, TN</td>
<td>98</td>
<td>100</td>
<td>(2)</td>
</tr>
<tr>
<td>Novant Health</td>
<td>Winston-Salem, NC</td>
<td>80</td>
<td>80</td>
<td>-</td>
</tr>
<tr>
<td>MedQuest Associates Inc</td>
<td>Alpharetta, GA</td>
<td>78</td>
<td>78</td>
<td>-</td>
</tr>
<tr>
<td>SimonMed Imaging LCC</td>
<td>Phoenix, AZ</td>
<td>56</td>
<td>56</td>
<td>-</td>
</tr>
<tr>
<td>Tenet Healthcare Corp</td>
<td>Dallas, TX</td>
<td>55</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>Dignity Health</td>
<td>San Francisco, CA</td>
<td>50</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Doshi Diagnostic Imaging Services</td>
<td>Hicksville, NY</td>
<td>35</td>
<td>36</td>
<td>(1)</td>
</tr>
<tr>
<td>Cleveland Clinic Health System</td>
<td>Independence, OH</td>
<td>35</td>
<td>35</td>
<td>-</td>
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<tr>
<td>Community Health Systems</td>
<td>Franklin, TN</td>
<td>34</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>Ascension Health</td>
<td>Saint Louis, MO</td>
<td>31</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>Tri State Imaging Consultants</td>
<td>Rockledge, PA</td>
<td>28</td>
<td>28</td>
<td>-</td>
</tr>
<tr>
<td>Catholic Health Initiatives</td>
<td>Englewood, CO</td>
<td>27</td>
<td>27</td>
<td>-</td>
</tr>
<tr>
<td>A1 Medical Imaging Diagnostic Centers</td>
<td>Sarasota, FL</td>
<td>25</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>ProScan Imaging World Headquarters</td>
<td>Cincinatti, OH</td>
<td>25</td>
<td>25</td>
<td>-</td>
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<tr>
<td>Outpatient Imaging Affiliates</td>
<td>Nashville, TN</td>
<td>23</td>
<td>23</td>
<td>-</td>
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<tr>
<td>South Texas Radiology Group/Imaging Centers</td>
<td>San Antonio, TX</td>
<td>22</td>
<td>22</td>
<td>-</td>
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<tr>
<td>Shields Health Care</td>
<td>Quincy, MA</td>
<td>22</td>
<td>22</td>
<td>-</td>
</tr>
<tr>
<td>Promedica</td>
<td>Toledo, OH</td>
<td>21</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1,064</strong></td>
<td><strong>1,048</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

*Source: Radiology Business Journal, August/September 2013*
Challenges in the Current Market

<table>
<thead>
<tr>
<th>Region</th>
<th>Centers, 2012</th>
<th>Centers, 2013</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England</td>
<td>353</td>
<td>344</td>
<td>-9</td>
</tr>
<tr>
<td>North Central</td>
<td>373</td>
<td>365</td>
<td>-8</td>
</tr>
<tr>
<td>South Central</td>
<td>362</td>
<td>354</td>
<td>-8</td>
</tr>
<tr>
<td>Rocky Mountain</td>
<td>460</td>
<td>434</td>
<td>-26</td>
</tr>
<tr>
<td>Southwest Central</td>
<td>812</td>
<td>764</td>
<td>-48</td>
</tr>
<tr>
<td>Pacific</td>
<td>961</td>
<td>925</td>
<td>-36</td>
</tr>
<tr>
<td>Great Lakes</td>
<td>1,019</td>
<td>969</td>
<td>-50</td>
</tr>
<tr>
<td>Mid-Atlantic</td>
<td>1,212</td>
<td>1,178</td>
<td>-34</td>
</tr>
<tr>
<td>Southeast</td>
<td>1,507</td>
<td>1,468</td>
<td>-39</td>
</tr>
<tr>
<td>Puerto Rico / Virgin Islands</td>
<td>15</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,074</strong></td>
<td><strong>6,816</strong></td>
<td><strong>-258</strong></td>
</tr>
</tbody>
</table>

*Source: Radiology Business Journal*
Challenges in the Current Market

Volume Trends, 2011

<table>
<thead>
<tr>
<th>Procedure</th>
<th>2011 Procedures</th>
<th>2016, Projected Procedures</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MRI Procedure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jnt of lwr extre w/o dye</td>
<td>4,472,626</td>
<td>$4,676,027</td>
<td>4.5%</td>
</tr>
<tr>
<td>lumbar spine w/o dye</td>
<td>4,324,184</td>
<td>4,605,189</td>
<td>6.5%</td>
</tr>
<tr>
<td>brain w/o and w/dye</td>
<td>3,445,611</td>
<td>3,656,524</td>
<td>6.1%</td>
</tr>
<tr>
<td>brain w/o and w/dye</td>
<td>3,445,611</td>
<td>3,656,524</td>
<td>6.1%</td>
</tr>
<tr>
<td>joint upr extrem w/o dye</td>
<td>2,371,297</td>
<td>2,506,431</td>
<td>5.7%</td>
</tr>
<tr>
<td>neck spine w/o dye</td>
<td>2,234,948</td>
<td>2,347,303</td>
<td>5.0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>25,936,154</strong></td>
<td><strong>27,461,579</strong></td>
<td><strong>5.9%</strong></td>
</tr>
<tr>
<td><strong>CT Procedure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pelvis w/dye</td>
<td>6,824,093</td>
<td>7,294,388</td>
<td>6.9%</td>
</tr>
<tr>
<td>head/brain w/o dye</td>
<td>6,113,815</td>
<td>6,663,475</td>
<td>9.0%</td>
</tr>
<tr>
<td>abdomen w/dye</td>
<td>5,837,120</td>
<td>6,237,498</td>
<td>6.9%</td>
</tr>
<tr>
<td>thorax w/dye</td>
<td>4,230,393</td>
<td>4,606,822</td>
<td>8.9%</td>
</tr>
<tr>
<td>abdomen w/o dye</td>
<td>3,635,351</td>
<td>3,891,031</td>
<td>7.0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>51,878,615</strong></td>
<td><strong>56,033,859</strong></td>
<td><strong>8.0%</strong></td>
</tr>
</tbody>
</table>
Challenges in the Current Market

<table>
<thead>
<tr>
<th>Hospital Outpatient</th>
<th>Freestanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Challenging Volumes</td>
<td>• Employed Physicians</td>
</tr>
<tr>
<td>• Consumer Price Sensitivity</td>
<td>• Market Restructuring</td>
</tr>
<tr>
<td>• Service Challenges</td>
<td>• Benefits for Consumer</td>
</tr>
<tr>
<td>• Equipment Upgrade Needs</td>
<td>• Coverage Denials</td>
</tr>
<tr>
<td>• Competition</td>
<td>• Limited Access to Capital</td>
</tr>
</tbody>
</table>
Public Company Performance

RadNet: Financial Summary

Price: (11/12/2013) $2.11
Market Cap $85
Plus Total Debt: (9/30/13) $585
Less Cash: (9/30/13) $0.3
Enterprise Value ("EV") $669

Pricing Multiples

Revenue (LTM as of 9/30/13) $684
EBITDA¹ (LTM as of 9/30/13) $96
EBITDA Margin 14.0%
EV / Revenue 0.98x
EV / EBITDA 6.97x

¹: EBITDA excludes minority interest income

All values in millions except multiples and stock price
Source: CapitalIQ as of 11/12/2013

11/11/13: RadNet posts earnings

Source: S&P Capital IQ
Quotes from the Industry Leaders – Hospitals

“In deductibles in our markets, with more growth in deductibles and co-pays, we had lower volume for more expensive outpatient procedures such as MRIs and CAT scans.”

[Larry Cash, CFO Community Health Systems, Q2 2013 Earnings Call]
“I believe that there will be an increasing participation and coordination with the payors to direct business away from hospitals as the increasing cost to the payors by the substantially higher cost of imaging in the hospital systems causes the payors to create healthcare plans.”

[Howard G. Berger, President and CEO, RadNet Q2 2013 Earnings Call]

“...many of the payors are beginning [to] reach out to freestanding multi-modality centers like us and starting to speak ore specifically about redirecting some of their business...”

[Howard G. Berger, President and CEO, RadNet Q2 3013 Earnings Call]
RadNet Volume Trends – Advanced Imaging

“Same-center procedure volume decreased 0.3% as compared to the second quarter in 2012.”
[Mark D. Stopler, CFO Radnet, Q2 2013 Earnings Call]

YTD as of: 6/30/2013
Research Note: The increase in procedural volumes above is mainly the result of acquisitions. Specifically, Lenox Hill Radiology was acquired on the last day of FY 2012

“[in Q3] same-center procedure volumes were flat.”
[Mark D. Stopler, CFO Radnet, Q3 2013 Earnings Call]
RadNet Volume Trends – Routine Imaging

“Same-center procedure volume decreased 0.3% as compared to the second quarter in 2012.”
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“[in Q3] same-center procedure volumes were flat.”
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Seasonality in Outpatient Services

“There has sort of been a new seasonality introduced into health care due to high deductible plans and insurance reengineering, where people tend to spend in Q1 and Q4. And I think we're seeing that again now.”

[Christopher A. Holden, CEO, AmSurg, Q2 2013 Earnings Call]

Can we say the same is true for HOPD Imaging Services?
VMG Health Volume Observations

Advanced Imaging –
- Freestanding: Slight increases
- HOPD: Moderate – Significant declines
- Freestanding centers close to hospitals benefiting from hospital volume declines

Routine Imaging –
- Freestanding: Flat / Slight declines
- HOPD: Moderate declines
VMG Health Volume Observations – MRI

Freestanding MRI Volumes: 2009-2013

HOPD MRI Volumes: 2009-2013
VMG Health Volume Observations – CT

**Freestanding CT Volumes: 2009-2013**

**HOPD CT Volumes: 2009-2013**
VMG Health Volume Observations – Routine Imaging

**Freestanding Routine Imaging Volumes: 2010-2013**

- 2009: -10%
- 2010: 10%
- 2011: 30%
- 2012: 50%
- 2013: 20%

**HOPD Routine Imaging Volumes: 2010-2013**

- 2009: -10%
- 2010: 10%
- 2011: 30%
- 2012: 10%
- 2013: -10%
VMG Health Reimbursement Observations – MRI

**Freestanding MRI Reimbursement: 2010 - 2013**

**HOPD MRI Reimbursement: 2010 - 2013**
VMG Health Reimbursement Observations – CT

**Freestanding CT Reimbursement: 2010 - 2013**

**HOPD CT Reimbursement: 2010 - 2013**
VMG Health Reimbursement Observations – Routine Imaging

Freestanding Routine Reimbursement: 2010 - 2013

HOPD Routine Pricing: 2010 - 2013
<table>
<thead>
<tr>
<th>Modality</th>
<th>Freestanding</th>
<th>HOPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRI</td>
<td>$450-$550</td>
<td>$1,000-$1,500</td>
</tr>
<tr>
<td>PET/CT</td>
<td>$250-$350</td>
<td>$750-$900</td>
</tr>
<tr>
<td>X-Ray</td>
<td>$45-$75</td>
<td>$80-$150</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>$75-$100</td>
<td>$200-$300</td>
</tr>
<tr>
<td>Mammography</td>
<td>$100-$125</td>
<td>$125-$150</td>
</tr>
<tr>
<td>DEXA</td>
<td>$50-$85</td>
<td>$75-$115</td>
</tr>
</tbody>
</table>
Capital Investment in Equipment

USD millions


Market Growth

Outpatient Imaging Paid 2.5% higher
Balanced Budget Act 2

BBA Increases Outpatient Technical Charges
Stark II Rules Limit Physician Ownership in Outpatient Imaging

CMS P4P Reduces Reimbursement for 83% of Hospitals

DRA
Bond crisis

Out of Hospital Imaging Growth

Economic Downturn

Economic Downturn

Signing Healthcare Reform

ACA Supreme Court; Elections

Fiscal cliff, Budget ceiling
Freestanding Center Observations

Public Company Data

Pricing

Volume

VMG Internal Data

25
### HOPD Observations

<table>
<thead>
<tr>
<th>Public Company Data</th>
<th>VMG Internal Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pricing</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>
“Well the direction over the last five or 10 years has been a movement of these procedures out of the hospitals and into freestanding imaging centers, both because of access and also because of cost...Now primarily because of the differential between what hospitals generally get reimbursed vs. what outpatient imaging centers.” [Howard G. Berger, CEO RadNet, Q2 2013 Earnings Call]
Hypothetical Transaction – Single Center JV

**HOSPITAL**
1. Brand
2. Location
3. Physician Base
4. Manufacturer Relationships
5. Radiologists

**JV Partner**
1. Expertise
2. Marketing
3. Billing
4. Radiologists
5. Efficiencies

**JV**
1. No Real Estate
2. All Equipment
3. Synergies
4. Market Expansion Opportunities

**Valuation Issues**
1. Level of Reimbursement
2. Risk of Future Volume
3. Staffing Levels
4. Management, Billing
5. Facility Lease Rates

**Legal Issues**
1. Contribution structure
2. JV structure / governance
3. Ancillary agreements
4. Licensure / reimbursement
Joint Venture Structures

- Imaging Mgmt. Co 49.9% Ownership
- Hospital 50.1% Ownership
- Imaging Management Company / Health System Joint Venture
- Center # 1: Physicians 49% 51%
- Center # 2: Physicians 49%
- Center # 3: Physicians 49%
- Hospital System Payor Contracts
Interrelation of Pre and Post Transaction Structure

Management Fee
- Local Only
- Segregated

Billing
- Hospital or On-Site
- Segregated

Managed Care
- Not Accounted For
- Segregated

Facility Lease
- May Not Be Accounted For
- Segregated

It is crucial to understand the level of cash flow being JV’d
Issues to Consider When Forming a Joint Venture

Issues to Consider

I. Reimbursement Impact
II. Branding
III. Management Expertise
IV. Cost Efficiencies
V. Pros and Cons of Joint Venturing
VI. Affects on Volume Trends
The Future – Shift to Consumer-Driven Care

Current Market: Consumer with $1,000 Deductible Health Plan

Observations:
- Consumer meets deductible in March
- Little / less price consciousness once deductible is reached
- Consumer has the ability to order advanced imaging services earlier in the calendar year
- Less preference for location / cost of services after deductible is met for services
The Future – Shift to Consumer-Driven Care

Future Market: Consumer with a $5,000 Deductible Health Plan

Observations:
- Consumer decisions based more on out-of-pocket Cost
- Consumers may purchase less costly services (if presented with the option or wait to fill deductible
- Consumers become more cost conscious in this model
Consumers will Demand Less from HOPD as Prices Increase

Trend: Higher deductibles & knowledgeable consumers create additional price sensitivity.

Impact:
- E1 → E2 movement: Lower overall industry volume
- HOPDs much more affected than freestanding operators

Key
D = Demand
S = Supply
E = Equilibrium
FS = Freestanding

Relative Values
HOPD 1 = 100
HOPD 2 = 80
FS 1 = 100
FS 2 = 95
Supply of HOPD Services May Decline

Response: HOPD’s move to Freestanding Rates (often through JVs)

**Impact:**
- E2 → E3 movement: Overall increased industry volume at lower price
- Increased supply of services at any given price level

**Key**
- D = Demand
- S = Supply
- E = Equilibrium
- FS = Freestanding

**Relative Values**
- HOPD 2 = 80
- HOPD 3 = 95
- FS 2 = 95
Questions?

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