A Closer Look at Radiology’s Role in Corporate Healthcare

Mark D. Jensen, CEO, Charlotte Radiology
Charlotte Radiology... 

*Serving Mecklenburg & surrounding counties since 1967.*

90+ Subspecialized Radiologists. *experts in imaging*

One of the nation’s largest private radiology groups.

Read approximately 1.5 million studies annually.

Own & Operate OR Contracted to Read for…

- 14 hospitals
- 7 hospital-based outpatient imaging centers
- 8 freestanding outpatient imaging centers
- 13 breast centers
- 3 vascular and interventional clinics
Concerns over healthcare…

➤ Costs continue to grow
Concerns over healthcare...

High-deductible plans continue to grow.

Growth of HSA-Qualified High-Deductible Health Plan Enrollment, Covered Lives (Millions), March 2005 to January 2013

- March 2005: 1.0
- January 2006: 3.2
- January 2007: 4.5
- January 2008: 6.1
- January 2009: 8.0
- January 2010: 10.0
- January 2011: 11.4
- January 2012: 13.5
- January 2013: 15.5

Sources: AHIP Center for Policy and Research, 2005 – 2013 HSA/HDHP Census Reports.
Notes: For this census, companies reported enrollment in the large- and small-group markets according to their internal reporting standards, or by state-specific requirements for each state. The “Other Group” category contains enrollment for companies that could not break down their group membership into large- and small-group categories within the deadline for reporting. The “Uncategorized” category was necessary to accommodate companies that were able to provide information on the total number of people covered by HSA/HDHP policies, but did not provide a breakdown by market category within the deadline for reporting. HSAs were authorized in 2003 and entered the market in January 2004.
Concerns over healthcare...

- Both employers and employees are shouldering more financial burden as costs rapidly rise.

<table>
<thead>
<tr>
<th>Year</th>
<th>Employer Costs</th>
<th>Employee Costs</th>
<th>Total Cost</th>
</tr>
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<tbody>
<tr>
<td>2007</td>
<td>$6,620</td>
<td>$1,977</td>
<td>$8,597</td>
</tr>
<tr>
<td>2008</td>
<td>$7,017</td>
<td>$2,216</td>
<td>$9,233</td>
</tr>
<tr>
<td>2009</td>
<td>$7,508</td>
<td>$2,268</td>
<td>$9,776</td>
</tr>
<tr>
<td>2010</td>
<td>$8,008</td>
<td>$2,379</td>
<td>$10,387</td>
</tr>
<tr>
<td>2011</td>
<td>$8,453</td>
<td>$2,529</td>
<td>$10,982</td>
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<tr>
<td>2012</td>
<td>$8,900</td>
<td>$2,764</td>
<td>$11,664</td>
</tr>
</tbody>
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Source: TW/NBGH Value Purchasing Survey 1 - As of March 11
By Janet Loehrke, USA TODAY
Why focus on Imaging…

- One of healthcare’s largest cost contributors.
- Focal point for insurance companies.

CT and MRI volume growth has been exceptional

~200% growth in 10 years in CT and MRI
Doctors outside radiology are performing imaging studies:

- Qualifications to read?
- Outdated equipment?
- Repeat studies needed?
“The Government Accountability Office (GAO) estimates that in 2010, providers who self-referred ordered 400,000 more exams than providers who did not. According to the GAO’s report, many of these exams are unnecessary.” – Healthcare Advisory Board
Efforts to reduce spending include…

- Widespread implementation of pre-approvals for imaging
- Increased financial responsibility for patients
- Reimbursement reductions for physicians & hospitals
- Changing public perceptions of radiation
- Narrow networks (exchanges)
- Pricing transparency programs
Background on Imaging...

And it’s working, as \textit{growth has slowed}...

\textbf{FIGURE 1.}
Changes in Rates of Imaging Utilization by Members* of Blue Cross and Blue Shield of North Carolina, 2006–2013

\begin{itemize}
\item Recession
\item Choosing Wisely campaign
\item Implementation of RBM program
\end{itemize}

\textit{Note.} RBM, radiology benefit management.
*Only includes members enrolled in nongovernment health plans.

\ldots but is \textit{quality patient care} still a focal point?
Recapping Radiology…

• Costs are rising.
• Insurers and employers are responding.

… but what is radiology doing and how do we ensure quality?

“You see, Ms. Jenkins, by doubling up on patients in the MRI, we’re able to cut costs in half, thereby passing the savings on to you.”
How we are responding...

- Educating Doctors
  - Clinical Decision Support App
  - Help referring doctors order the right study the first time
How we are responding…

➢ Educating Our Community

• Web site resources at www.charlotteradiology.com
• Social media
• Public awareness events & promotions
• Free educational materials
• Reminder programs
• Pricing hot line
Pricing isn’t so transparent.

- Global price vs technical & professional prices
- Freestanding sites vs. hospital sites
- Complexity of imaging codes (CPT codes)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>CPT Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT ABD &amp; PELVIS W&amp;W/O CONTRAST</td>
<td>74178</td>
</tr>
<tr>
<td>CT ABD &amp; PELVIS W/O CONTRAST</td>
<td>74176</td>
</tr>
<tr>
<td>CT ABD &amp; PELVIS WITH CONTRAST</td>
<td>74177</td>
</tr>
<tr>
<td>CT ABDOMEN W</td>
<td>74160</td>
</tr>
<tr>
<td>CT ABDOMEN W &amp; W/O</td>
<td>74170</td>
</tr>
<tr>
<td>CT ABDOMEN W/O</td>
<td>74150</td>
</tr>
</tbody>
</table>

- Adding services in at the time of visit
  - Contrast vs. no contrast
  - Additional views

How we are responding...

➤ Educating Our Community
How we are responding…

➢ Educating Our Community

Pricing isn’t so transparent.

Pricing calculators can be risky!

• Call the Insurance Provider to get a price.
  • Is it accurate and up to date?
  • Global and technical fees?
• Confirm price with Radiology Provider.
How we are responding...

➢ Educating Employees

By *partnering with employers* to help employees:

- Supporting corporate on-site health clinics
- Executive health screening programs
- Employee Screening programs
- Health Fairs
- Free materials & risk assessments
- Online investment in educational info on web site
- Free Lunch and Learns
  - Focused Health Topics
  - “Radiology 101: Asking the right questions”
How we are responding...

Educating Employees via Lunch & Learns

“Radiology 101: Asking the right questions”

- Ensuring the right exam at the right time
- Importance of a radiologist AND sub-specialty training
- Equipment & radiation dose matter
- Check with insurance web site for pricing guidance and call provider for specific price
- Pick an American College of Radiology Accredited site (list at [www.acr.org/quality-safety/accreditation/accredited-facility-search](http://www.acr.org/quality-safety/accreditation/accredited-facility-search))
Recapping how we are responding…

• Education is key for everyone!

• Support your employees with:
  • Educational opportunities
  • Materials and risk assessments
  • Screening programs…

…but how do you size up a screening program to assess the real value?
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Assessing value of a screening program:

• Determine number of at-risk employees.

• Assess cost to screen.

• Compare cost to screen to cost of treating disease at later stage.
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3 Easy-to-implement, Value-proven Screening Programs:

- Mammography
- Calcium Scorings
- CT Lung Cancer Screenings

Screening programs increase employee engagement & advocacy!
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Screening Mammography:

• Women, ages 40+, annually
• Physician order NOT required
• Insurance covered service
• Mobile Mammography comes to you!

Government-tracked screening – have you checked your employees’ compliance?
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Mammography:

Random studies & media attention have created controversy about when to start and how often.

• What the American Cancer Society says:
  • **Annually starting at age 40!**
  • Aggressive cancers found more often in ages 40-50.
  • Our local data shows that 20% of cancers diagnosed during screening mammogram were in ages 40-50.
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Insurance recommendations vs. requirements:

Insurance checklist says one thing, but the fine print in the benefits guide indicates annual coverage at 40.

ACA requires coverage annually at 40.

Preventive Checklist for Women

✓ **Flu shot** – Annually if you are age 50 or older or have a chronic condition.

✓ **Stroke prevention** – Daily aspirin is recommended for some women at risk for stroke. Talk with your health care provider before taking aspirin for stroke prevention.

✓ **Breast cancer screening** – New guidelines suggest mammograms every 2 years starting at age 50, or more often if recommended by your health care provider. If you are under age 50, talk to your health care provider to determine if you should have a mammogram.

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Easy to implement with Mobile Mammography:

- #1 reason working women delay mammograms is because they do not want to take time off from work.

- Improvements in technology
- Increases compliance (ACA)
- Increased employee engagement and satisfaction
- Mobile provides convenient, low-cost wellness initiative
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Mobile Mammography:

- Average cost of a screening mammogram = $300
- Early detection = Life Years + Dollars Saved
- Reduced absenteeism
- Returning to work sooner = higher productivity


<table>
<thead>
<tr>
<th>Stages of Breast Cancer</th>
<th>5 year survival rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>93%</td>
</tr>
<tr>
<td>Stage I</td>
<td>88%</td>
</tr>
<tr>
<td>Stage II</td>
<td>81%</td>
</tr>
<tr>
<td>Stage III</td>
<td>67%</td>
</tr>
<tr>
<td>Stage IV</td>
<td>15%</td>
</tr>
</tbody>
</table>

- Treatment approx. $20K*
- Treatment approx. $100K*
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Charlotte Radiology stats for Mobile Mammography:

• 40-50% of patients are new to mammography or are past due for their exams.

• In 2013, 71 corporations benefited from Charlotte Radiology’s mobile mammography program.

• Patient satisfaction scores remain above 98% for the overall experience since program launch.
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BELK Case Study

• Technology has allowed us to travel.
• Consistency in program & patient care across large geographical area (NC, SC, VA, TN, FL, GA, & AL).
• Diagnosed 22 patients in the first year of service!

Tim Belk, Chairman and Chief Executive – “We know we can save lives by increasing awareness for this disease that affects so many of our associate and customer families.”
CT Calcium Scoring:

- Every 33 seconds someone in the US dies from cardiovascular disease.**
- In 2012, in NC, heart disease was the contributing factor in 20.1% of all deaths of those between 35-65.

**http://www.theheartfoundation.org/heart-disease-facts/heart-disease-statistics/
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What is CT Calcium Scoring:

- Simple, fast, low-dose CT
- Physician order may be required
- Must have study at an imaging center
- Low-cost exam ranges from $99-$200 typically
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CT Calcium Scoring Recommendations:

- Men 40+, Women 45+
- High cholesterol
- History of smoking
- High blood pressure
- Family history of heart disease
- High stress levels
- Sedentary lifestyle
- Diabetes
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CT Calcium Scoring Background:

Why should employers care?

• Heart disease and stroke are among the nation’s leading causes of death and disability and the most expensive medical conditions for businesses.

• In 2013, employers paid an average of ~$23K per employee (who experienced a cardiac event) for all costs related to health and lost productivity due to cardiovascular disease-related conditions.*

A 2009 study** showed worksite health interventions decreased total health risk and markedly decreased medical claim costs within 12 months.

*For every dollar invested in worksite intervention, $6 was realized in health care savings.*

**American Journal of Cardiology, 2009 104:1389-1392
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Calcium Scoring

CASE STUDY – Davidson Fire Dept.

• Heart disease is the #1 killer of firefighters
• 300% increased risk for cardiac disease
• Early detection is key!
• A heart disease event can cost on avg. $180-$250k

pulled from article by Keith Padgett, Aug. 2009 issue of FireRescue
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CT Lung Cancer Screening:

- Lung cancer accounts for 1 out of 3 cancer deaths.
- Smoking is a key risk factor; only 21% of lung cancer patients are current smokers, while 61% are former smokers.
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What is CT Lung Cancer Screening:

• Physician order may be required
• Simple, fast, low-dose CT
• Must have study at an imaging center
• Could tie in nicely to a smoking cessation program (ACA)
• Low-cost exam typically an average of $250 covered by employer or employee
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CT Lung Cancer Screening Recommendations:

• Smokers/former smokers ages 55-75 with 30 pack-year smoking history (1 pack a day for 30 yrs., 2 packs for 15 yrs., etc.)

or

• Patients ages 50-75 with a 20+ pack-year history & one additional risk factor, including but not limited to:
  • Exposure to asbestos
  • COPD (chronic obstructive pulmonary disorder)
  • Family history of lung cancer
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CT Lung Cancer Screening Background:

- 2011 study – National Lung Screening Trial
- Showed 20% reduced mortality in a heavy smoking population with CT lung screening when compared with chest x-rays

Mortality & Survival Rates:

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CT Lung Cancer Screening: Assessing Value

Cost vary by extent of treatment needed
Annual treatment approx. $111K

- Assuming $250 per CT Lung Cancer Screening
- Charlotte Radiology spent over $350k for 1 employee’s treatment for a later staged cancer.

<table>
<thead>
<tr>
<th>Lung Cancer Diagnosis</th>
<th>5 Year Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Stage (0-1 or 2)</td>
<td>25-52%</td>
</tr>
<tr>
<td>Late Stage (3-4)</td>
<td>4-20%</td>
</tr>
</tbody>
</table>
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What employers are saying?

“The on-site van made it easy for the employees to have access, and they were away from work for less time. We’re definitely going to do it again!”

“Our employees raved about the ease and convenience of the mobile breast center. They were in and out in about 30 minutes and received their results in the mail. They also commented on how comfortable they felt and how friendly the staff was.”

“The best part for the leadership team was that Charlotte Radiology took care of almost everything which required very little effort on our part.”
Takeaways

1. When your employees need imaging, be sure they ask the right question about price AND quality.

2. Radiology can be included in your corporate health programs via employee screenings:
   - Easy to implement
   - Reduced time away from work
   - Reduced long-term healthcare costs
Questions?

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