Disclosure

Giles Boland, MBBS has the following financial interests in relation to this activity:
• Principal of the Radiology Consulting Group

Samir Patel, MD has the following financial interests in relation to this activity:
• Consultant to Mammography Reporting Systems, Inc. and Nuance Communications, Inc.
Five Themes

#1 Obamacare
#2 Precision Medicine
#3 Participatory Medicine
#4 Branding and New Markets
#5 IT Intelligence
Five Themes

1. Obamacare
2. Precision Medicine
3. Participatory Medicine
4. Branding and New Markets
5. IT Intelligence

Value and Outcomes
The Value-Added Matrix

What we’ll cover tonight:
• Imaging 3.0: What is it and why it matters?
• How Radiology Inc., with Memorial Hospital of South Bend and Elkhart General Hospital, developed an Imaging 3.0 scorecard to demonstrate value
• How you can make Imaging 3.0 work in your practice
What is Imaging 3.0?

“Our goal is to deliver all the imaging care that is beneficial and necessary and none that is not.”

Imaging 3.0 is a vision and game plan for providing optimal imaging care.
<table>
<thead>
<tr>
<th>Volume-based</th>
<th>Value-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactional</td>
<td>Consultative</td>
</tr>
<tr>
<td>Radiologist centered</td>
<td>Patient centered</td>
</tr>
<tr>
<td>Interpretation focused</td>
<td>Outcomes focused</td>
</tr>
<tr>
<td>Commoditized</td>
<td>Integral</td>
</tr>
<tr>
<td>Invisible</td>
<td>Accountable</td>
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</tbody>
</table>
A value chain is a chain of activities that an industry performs to deliver a valuable product or service (Michael Porter)
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What is Imaging 3.0?

3 Key Actions:

- Culture Change
- Portfolio of Tools
- Alignment of Incentives
The Value Management Program at Radiology Inc.

- Perform
- Quantify
- Present
# Database Entry Log

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Activity</th>
<th>Physician</th>
<th>Hours</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Samir Patel, MD
Radiology, Inc.
Radiology Inc., Value Management Program 2013

True North Categories: 9931.75 Hours

- Quality: 1316.3 Hours
- Service: 5239.47 Hours
- Utilization Management: 1381.05 Hours
- Professional Development: 1994.93 Hours

Samir Patel, MD
Radiology, Inc.
Radiology Value-Added Matrix

**Quality**
- Accreditation Requirement
- Adverse Event Analysis
- Conference
- Peer Review
- Physician Quality Reporting
- Protocol Management
- Radiation Dose Management
- Radiology-Pathology Correlation
- Structured Reporting
- Technologist/Staff Feedback

**Service**
- Committee
- Community Service
- Critical Test Result Management
- Customer Experience
- Marketing
- Patient Supervision & Monitoring
- Recruiting
- Referring Provider Communication
- Subspecialization
- Turnaround Time

**Resource Management**
- Outcomes Measurement
- Radiologist Scheduling
- Revenue Cycle Management
- Utilization Management
- Utilization Review
- Vendor Interaction

**Professional Development**
- Executive Meeting
- Leadership
- Leadership CME
- National/State Radiology
- Practice Improvement Project (MOC/A3)
- Presentation
- Publication
- Research
- Teaching
Radiology Inc., 2013, Citizenship Value

wRVU  VAU

Radiologist

Samir Patel, MD, Radiology, Inc.
### Value Management Program Annual Executive Summary: Hospital A

**Quality (Hours: 7)**
- List ACR accreditations
- List CMS PQRS initiatives
- [ ] of protocols developed/revise
- Individually patient safety metrics (e.g. procedure complications)
- Conference hours
- Exams with documented technologist feedback
- Radiology-Pathology correlations
- Peer-reviewed studies
- [ ] Peer-reviewed study agreement (e.g. ACR RADPEER, Score 1/Total # of scores)
- CMS EHR Incentive Program (Meaningful Use Stage 1) patient interactions
- List Hierarchy Designations (e.g. image Wisely, Choosing Wisely)
- Radiology department policies/procedures updated
- Structured reporting templates developed/revise
- List radiology dose reduction initiatives

**Service (Hours: 9)**
- List report turnaround time metrics
- Patient satisfaction survey results
- [ ] Hours of patient procedural supervision (e.g. MRI, conscious sedation)
- [ ] Hours of community support
- Referring provider communications
- Critical test results delivered
- [ ] Hours of recruiting
- [ ] Committee hours
- [ ] Study by sex [ ] Interpreted by subspecialty radiologist(s)
- Referring physician satisfaction survey results
- [ ] Clinician and patient interactions
- Turnaround of cancer results (e.g. time between screening and diagnostic mammogram)
- [ ] Exams provided through financial assistance programs
- [ ] Exams results given directly to patients
- [ ] Hours of marketing

**Utilization Management (Hours: 7)**
- List CMS Hospital Outpatient Quality Reporting Program Imaging Measure Data (http://www.med沧.gov/hospital大卫 пациен tsearch.html)
- [ ] Reports self-reviewed by radiologists
- List activities related to cost management and $5 saved and/or revenue enhancement
- List utilization reviewers with results
- List exam outcomes review with results
- List short-term follow-up exam data (e.g. % BI-RADS 3 mammography assessments)
- List mammography outcomes data
- List population health outcomes data (e.g. lung screening program)

**Professional Development (Hours: 9)**
- List leadership positions within hospital
- List national/regional positions (e.g. ACR Practice Guidelines/Standards and Appropriateness Criteria Joint Committee)
- List national-sponsored practice improvement projects with results (e.g. ACR Part IV MOC requirement)
- [ ] Hours of executive meetings
- [ ] Hours of leadership duties
- [ ] Hours of research
- [ ] Hours of teaching
- [ ] Leadership CME
- List published articles
- List lectures given
- List presentations given
- [ ] Hours of national/state radiology activities
Value Management Program Outcomes, 2013

Quality

- 104 National Accreditations & Designations
- 5 CMS PQRS Initiatives
- 1913 CMS EHR Incentive Program (Meaningful Use Stage 1) Patient Interactions
- 636.8 Hours of Conference Participation
- 307 Exams with Documented Feedback to Technologists
- 5,659 Peer-Reviewed Studies

Service

- 1,866 Hours of Community Support
- 2,103 Hours of Patient Procedural Direct Supervision (MRI Conscious Sedation)
- 11,550 Referring Provider Communications
- 3,230 Critical Test Results Delivered
- 215.82 Committee Hours
- 42.75 Hours Recruiting

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Value Management Program Outcomes, 2013

**Utilization Management**
- CMS Hospital Outpatient Quality Reporting Program Imaging Measure Data
- 85% Reports Self-Edited by Radiologists
- 8 Utilization Reviews & Outcomes Measurements
- Mammography Outcomes Data
- Population Health Outcomes Data (Lung Screening CT)

**Professional Development**
- 340.28 Executive Meeting Hours
- 1,091.57 Hours of Leadership Activities
- 50.08 Hours of Research
- 239.5 Hours of Teaching
- 225.25 Hours of Leadership Continuing Medical Education
- 5 Published Articles

Samir Patel, MD, Radiology, Inc.
Outcomes Measurements to Consider

- **CTPA for Pulmonary Embolism**
  - % of studies demonstrating PE
  - % of studies demonstrating non-PE acute significant findings
  - % of studies appropriate based on ACR Appropriateness Criteria
  - % of studies demonstrating acute or significant findings

- **Inpatient MRI**
  - % of CT A/P “Urolithiasis” examinations demonstrating Urologic abnormalities
  - % of CT A/P with IV contrast examinations demonstrating acute, significant, and no significant findings each

- **ED CT**
  - % of CT A/P “Urolithiasis” examinations demonstrating Urologic abnormalities
  - % of CT A/P with IV contrast examinations demonstrating acute, significant, and no significant findings each

Samir Patel, MD, Radiology, Inc.
### 2013 Appropriate Profit Enhancement for Elkhart General Hospital: $1,487,550

<table>
<thead>
<tr>
<th>“LEAN” Initiative</th>
<th>Profit Increase (Hospital)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in ED Oral Contrast Utilization (Black Belt A3)</td>
<td>$375,000</td>
</tr>
<tr>
<td>Transcriptionist Cost Savings with Radiologist Self-Editing of Reports</td>
<td>$100,000</td>
</tr>
<tr>
<td>CTA Chest Instead of CT Chest With Contrast Coding for PE and Trauma Indications</td>
<td>$98,000</td>
</tr>
<tr>
<td>Add-On Ultrasound Doppler Coding</td>
<td>$120,000</td>
</tr>
<tr>
<td>CT Intravenous Contrast Standardization</td>
<td>$175,000</td>
</tr>
<tr>
<td>Carotid CTA Structured Reporting (Green Belt A3)</td>
<td>$15,000</td>
</tr>
<tr>
<td>Contrast Enhanced CT Chest, Abdomen, Pelvis Contrast type and Amount Standardized Structured Reporting</td>
<td>$325,000</td>
</tr>
<tr>
<td>MRI Sedation Monitoring by Radiologists</td>
<td>$185,000</td>
</tr>
<tr>
<td>Prehydration Protocol Utilization to Decrease Incidence of CT Intravenous Contrast-Induced Acute Kidney Injury</td>
<td>$17,350</td>
</tr>
<tr>
<td>Premedication Protocol Utilization to Reduce Allergic Reaction to CT Intravenous Contrast</td>
<td>$18,200</td>
</tr>
<tr>
<td>Bone Densitometry (DXA) Appropriate Coding</td>
<td>$19,000</td>
</tr>
<tr>
<td>MRI Sedation Improvement with “Open 1.5T MRI”</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

Samir Patel, MD, Radiology, Inc.
## Radiology Group Practice Value-Added (non-wRVU) Profit Enhancement Opportunities

<table>
<thead>
<tr>
<th><strong>Medical Directorship</strong></th>
<th><strong>Image Interpretation</strong></th>
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</thead>
<tbody>
<tr>
<td>Facility/ Department Supervision</td>
<td>Overread Fees</td>
</tr>
<tr>
<td>Individual Radiologist Value-Added Activities</td>
<td>Per Click Primary Interpretation</td>
</tr>
</tbody>
</table>

### Quality Incentives

<table>
<thead>
<tr>
<th><strong>Client-Based</strong></th>
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<tbody>
<tr>
<td>National</td>
</tr>
<tr>
<td>PQRS</td>
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<tr>
<td>CMS Meaningful Use</td>
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<tr>
<td>Maintenance of Certification (MOC)</td>
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<table>
<thead>
<tr>
<th><strong>Malpractice Reduction</strong></th>
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<tbody>
<tr>
<td>CME</td>
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<tr>
<td>Critical Test Results</td>
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</tbody>
</table>

### Administrative

<table>
<thead>
<tr>
<th><strong>Medicolegal Consulting</strong></th>
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<tbody>
<tr>
<td><strong>Vendor Consulting</strong></td>
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<tr>
<td><strong>HR Services</strong></td>
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<tr>
<td><strong>Informatics Services</strong></td>
</tr>
<tr>
<td><strong>Speaking Fees</strong></td>
</tr>
</tbody>
</table>
Value-Added Matrix Recap

• **Culture**: What prompted the change in a 100-year-old practice?

• **Tools**: What were the obstacles to collecting the data and reporting it?

• **Incentive**: Has Radiology Inc., been able to translate the Value-Added Matrix into $$?
Discussion and Q&A