Quality, Cost and Clinical
TRANSFORMATION

VIVIAN S. LEE, M.D., Ph.D., M.B.A.
SENIOR VICE PRESIDENT, UNIVERSITY OF UTAH HEALTH SCIENCES
CEO, UNIVERSITY OF UTAH HEALTH CARE
DEAN, UNIVERSITY OF UTAH SCHOOL OF MEDICINE

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WELCOME TO SALT LAKE CITY!
1.7 MILLION
Patient Visits

$3.3 BILLION
Expense Budget FY16

50% GROWTH
IN 5 YEARS

ACCESS

$3.3 BILLION
Expense Budget FY16

4 Hospitals

11 Community Clinics

18 Regional Partners

>10% of the Continental U.S.

>1,600 Physicians

DISCOVERY

$270 Million+
Grants in FY2015

2,500
Peer-Reviewed Papers

810+
Grants Received 2015

1
NCI Comprehensive Cancer Center

EDUCATION

School of Medicine
College of Nursing
College of Pharmacy
College of Health
School of Dentistry

1.7 MILLION
Patient Visits

4 Hospitals

11 Community Clinics

18 Regional Partners

>10% of the Continental U.S.

>1,600 Physicians
WHAT DOES VALUE MEAN?

![Graph showing the relationship between healthiness and affordability by state.]

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The

HEALTH CARE

Crisis
The cost of health care in the past 50 years has risen more than 800%, almost 5x the rise in the gross domestic product and over 50x the increase in wages for the average American.

PRICE ≠ QUALITY

Health spending per capita for OECD nations

Health spending per capita

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PRICE ≠ QUALITY

Lower Life Expectancy Despite Higher Spending
PRICE ≠ QUALITY

Higher Spending with Lower Infant Survival

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Value-Based Payment Hits The Tipping Point

Feature Article | by McKesson Health Solutions | July 29, 2016

Dem Health Experts: Clinton Likely To Stick To CMS' Value-Based Pay Goals

July 29, 2016

Pay-for-Performance: Will the Models Provide Value?


UnitedHealth Pays $148M In Bonuses As Value-Based Care Tightens Grip

July 12, 2016

Obama signals 'full speed ahead' for value-based payments

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VALUE-DRIVEN

HEALTH CARE
THE TRANSFORMATION: FROM VOLUME TO VALUE

\[ V \text{ (VALUE)} = \frac{Q \text{ (QUALITY)} + S \text{ (SERVICE)}}{\$ \text{ (COST)}} \]
NATIONAL QUALITY RANKING FOR UNIVERSITY OF UTAH HEALTH CARE

Out of 117 academic medical centers and more than 331 of their affiliated hospitals

<table>
<thead>
<tr>
<th>Year</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>50</td>
</tr>
<tr>
<td>2009</td>
<td>31</td>
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<td>2010</td>
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<td>7</td>
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<td>2012</td>
<td>4</td>
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<td>2013</td>
<td>9</td>
</tr>
<tr>
<td>2014</td>
<td>6</td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: University HealthSystem Consortium, 2008–2015

© Vivian S. Lee, 2016
PATIENT SATISFACTION SCORES:
National benchmarks for University of Utah providers

10% new providers

44% of providers are in the top 10%

24% of providers are in the top 1%

Source: All Facilities Press Ganey Database includes the following: Number of Physicians: 142,411; Number of Patients: 2,783,597

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BENDING THE COST CURVE

BENCHMARKING AGAINST UHC PRINCIPAL MEMBERS:
Total Facility Expense per CMI Adjusted Discharge

- University HealthSystem Consortium
- University of Utah Health Care

ANNUAL GROWTH RATE
= 2.9%

ANNUAL GROWTH RATE
= -0.5%

Comparative analysis includes 10 U.S. University HealthSystem Consortium (UHC) principal members. UHC values represent means by FY based off of CMS cost reports 2552-10/2552-96 and the CMS Impact File Medicare patient Case Mix Index by fiscal year. The annual growth rate is the compound annual growth rate from FY2006 to FY2013.
VALUE

$\text{VALUE} = \text{TOP 10 QUALITY} + \text{NEARLY HALF OF OUR PROVIDERS ARE IN THE TOP 10\% SERVICE}$

$\text{AMONG THE LOWEST COST HEALTH CARE IN THE COUNTRY}$

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How Do We
TRANSFORM the System?
An Algorithm For Change

Case Study

TRANSPARENCY in Patient Satisfaction

COMMUNICATE
the need for change

DEVELOP
your teams

ESTABLISH
metrics

ENGAGE PATIENTS

TRANSPARENCY

ENGAGE
physicians, staff, trainees

EMPOWER
front lines

NURTURE
A culture of continuous innovation

© Vivian S. Lee, 2016
"MEDICAL CARE CAN ONLY BE TRULY GREAT,
IF THE PATIENT THINKS IT IS."

-A. Lorris Betz, MD, Ph.D
HOW WE MEASURE SATISFACTION

### CARE PROVIDER

During your visit, your care was provided primarily by a doctor, physician assistant (PA), nurse practitioner (NP), or midwife. Please answer the following questions with that health care provider in mind.

1) Friendliness/courtesy of the care provider
2) Explanations the care provider gave you about your problem or condition
3) Concern the care provider showed for your questions or worries
4) Care provider’s efforts to include you in decisions about your treatment
5) Information the care provider gave you about medications (if any)
6) Instructions the care provider gave you about follow-up care (if any)
7) Degree to which care provider talked with you using words you could understand
8) Amount of time the care provider spent with you
9) Your confidence in this care provider
10) Likelihood of you recommending this care provider to others
11) Comments (describe good or bad experience)

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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# HOW WE ENGAGE FACULTY WITH DATA

<table>
<thead>
<tr>
<th>MD - Cardiology</th>
<th>National Rank</th>
</tr>
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<tbody>
<tr>
<td>Care Provider Section</td>
<td>2011</td>
</tr>
<tr>
<td>Friendliness/courtesy of CP</td>
<td>28</td>
</tr>
<tr>
<td>CP explanations of prob/condition</td>
<td>29</td>
</tr>
<tr>
<td>CP concern for questions/worries</td>
<td>31</td>
</tr>
<tr>
<td>CP efforts to include in decisions</td>
<td>29</td>
</tr>
<tr>
<td>CP information about medications</td>
<td>28</td>
</tr>
<tr>
<td>CP instructions for follow-up care</td>
<td>24</td>
</tr>
<tr>
<td>CP spoke using clear language</td>
<td>29</td>
</tr>
<tr>
<td>Time CP spent with patient</td>
<td>21</td>
</tr>
<tr>
<td>Patients' confidence in CP</td>
<td>40</td>
</tr>
<tr>
<td>Likelihood of recommending CP</td>
<td>34</td>
</tr>
</tbody>
</table>
HOW WE ENGAGE FACULTY WITH DATA

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SERVICE

PATIENT SATISFACTION SCORES:
National benchmarks for University of Utah providers

SCORES GO ONLINE
DEC 1, 2012

44% OF PROVIDERS ARE IN THE TOP 10%

24% OF PROVIDERS ARE IN THE TOP 1%

Source: All Facilities Press Ganey Database includes the following: Number of Physicians: 142,411; Number of Patients: 2,783,597

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CONTRIBUTING TO A NATIONWIDE SOLUTION

2012 2013 2014 2015

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Why Doctors Shouldn’t Be Afraid of Online Reviews

by Vivian S. Lee

MARCH 09, 2016
THE TRANSFORMATION: FROM VOLUME TO VALUE

\[ V \text{ (VALUE)} = \frac{Q \text{ (QUALITY)} + S \text{ (SERVICE)}}{\$ \text{ (COST)}} \]
An Algorithm For Change

Case Study

VALUE-DRIVEN

Outcomes

COMMUNICATE the need for change
DEVELOP your teams
DATA

ESTABLISH metrics

ENGAGE physicians, staff, trainees

EMPOWER front lines

NURTURE A culture of continuous innovation

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“For a field in which high cost is an overarching problem, the absence of accurate cost information in health care is nothing short of astounding.”

You Don’t Want to Know

VALUE DRIVEN OUTCOMES

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VALUE DRIVEN OUTCOMES: APPENDECTOMY

10:54am – Day 1
Emergency Department
10:54am

Day 2
OR
SICU Surgical ICU
9:46 to 10:48
2:16am

Day 3
IMCU Intermediate Care Unit
1:30pm

Day 4
SSTU Surgical Specialty & Trans. Unit
1:45pm
3:25pm

Total Cost of Providing Patient Care

Emergency Department
Labor Supplies
Imaging
Pharmacy
Lab
Other Services

Operating Room
Labor Supplies
Other Services

Surgical ICU
Labor Supplies
Pharmacy
Lab

Step down and Floor Units
Labor Supplies
Other Services

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VALUE DRIVEN OUTCOMES: ALLOCATE EXPENSES

UNIVERSITY OF UTAH: AVERAGE COSTS OF CARE FOR TOTAL JOINT REPLACEMENT

Value-Driven Outcomes (VDO) Report
DRG 470 – Major joint replacement of the lower extremity

Source: Average hospital cost per visit, Discharges 2012–2014
DATA FOR A LEAN PROCESS

Use DATA

To identify OPPORTUNITY

Develop a HYPOTHESIS

CONTINUOUS IMPROVEMENT CYCLE

DO

PLAN

Monitor DATA

HARDWIRE RESULTS

ACT

STUDY

Design the appropriate ACTION

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QUALITY GOES UP AND COST GOES DOWN

CONFIDENTIAL
Until 9/13

Kawamoto K, et al JAMA
Sept 13, 2016

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SALT LAKE CITY — Only in the world of medicine would Dr. Vivian Lee’s question have seemed radical. She wanted to know: What do the goods and services provided by the hospital system where she is chief executive actually cost?

Most businesses know the cost of everything that goes into producing what they sell — essential information for setting prices. Medicine is different. Hospitals know what they are paid by insurers, but it bears little relationship to their costs.

No one on Dr. Lee’s staff at the University of Utah Health Care could say what a minute in an M.R.I. machine or an hour in the operating room actually costs. They chuckled
Value-Driven

RADIOLOGY?
IS IMAGING DRIVING HEALTH CARE COSTS?

“First we're going to run some tests to help pay off the machine.”

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phone: 216.371.8600 / email: ft@funnytimes.com
GROWTH OF IMAGING

IMAGING SPENDING AS A PERCENTAGE OF TOTAL US MEDICARE CARRIER PAID CLAIMS

THE TRANSFORMATION: FROM VOLUME TO VALUE

\[ V = \frac{Q + S}{\$} \]

(VALEU) (QUALITY) (SERVICE) (COST)
Physicians’ Views Of The Relative Importance Of Thirty Medical Innovations

A survey of leading general internists provides a useful consensus on the relative importance of innovations to their patients.

by Victor R. Fuchs and Harold C. Sox Jr.
# TOP MEDICAL INNOVATIONS IN 2000

<table>
<thead>
<tr>
<th>Rank</th>
<th>Innovation</th>
<th>Mean score</th>
<th>Most</th>
<th>Not most or least</th>
<th>Least</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MRI and CT scanning</td>
<td>0.878</td>
<td>75.6%</td>
<td>24.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>3</td>
<td>Balloon angioplasty</td>
<td>0.758</td>
<td>53.8%</td>
<td>44.0%</td>
<td>2.2%</td>
</tr>
<tr>
<td>4</td>
<td>Statins</td>
<td>0.736</td>
<td>48.0%</td>
<td>51.1%</td>
<td>0.9%</td>
</tr>
<tr>
<td>5</td>
<td>Mammography</td>
<td>0.733</td>
<td>47.6%</td>
<td>51.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>6</td>
<td>CABG</td>
<td>0.693</td>
<td>40.4%</td>
<td>57.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>7</td>
<td>Proton pump inhibitors and H2 blockers</td>
<td>0.687</td>
<td>40.0%</td>
<td>57.3%</td>
<td>2.7%</td>
</tr>
<tr>
<td>8</td>
<td>SSRIs and recent non-SSRI antidepressants</td>
<td>0.678</td>
<td>39.6%</td>
<td>56.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>9</td>
<td>Cataract extraction and lens implant</td>
<td>0.651</td>
<td>38.2%</td>
<td>53.8%</td>
<td>8.0%</td>
</tr>
<tr>
<td>10</td>
<td>Hip and knee replacement</td>
<td>0.649</td>
<td>31.6%</td>
<td>66.7%</td>
<td>1.8%</td>
</tr>
<tr>
<td>11</td>
<td>Ultrasonography</td>
<td>0.647</td>
<td>31.1%</td>
<td>67.1%</td>
<td>1.8%</td>
</tr>
<tr>
<td>12</td>
<td>Gastrointestinal endoscopy</td>
<td>0.624</td>
<td>28.0%</td>
<td>68.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>13</td>
<td>Inhaled steroids for asthma</td>
<td>0.591</td>
<td>23.6%</td>
<td>71.1%</td>
<td>5.3%</td>
</tr>
<tr>
<td>14</td>
<td>Laparoscopic surgery</td>
<td>0.558</td>
<td>20.9%</td>
<td>69.8%</td>
<td>9.3%</td>
</tr>
<tr>
<td>15</td>
<td>NSAIDs and Cox-2 inhibitors</td>
<td>0.531</td>
<td>14.2%</td>
<td>77.8%</td>
<td>8.0%</td>
</tr>
<tr>
<td>16</td>
<td>Cardiac enzymes</td>
<td>0.498</td>
<td>7.1%</td>
<td>85.3%</td>
<td>7.6%</td>
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<tr>
<td>17</td>
<td>Fluoroquinolones</td>
<td>0.487</td>
<td>6.7%</td>
<td>84.0%</td>
<td>9.3%</td>
</tr>
<tr>
<td>18</td>
<td>Recent hypoglycemic agents</td>
<td>0.478</td>
<td>12.9%</td>
<td>69.8%</td>
<td>17.3%</td>
</tr>
<tr>
<td>19</td>
<td>HIV testing and treatment</td>
<td>0.444</td>
<td>15.6%</td>
<td>57.8%</td>
<td>26.7%</td>
</tr>
<tr>
<td>20</td>
<td>Tamoxifen</td>
<td>0.440</td>
<td>3.1%</td>
<td>81.8%</td>
<td>15.1%</td>
</tr>
<tr>
<td>21</td>
<td>PSA testing</td>
<td>0.438</td>
<td>12.9%</td>
<td>61.8%</td>
<td>25.3%</td>
</tr>
<tr>
<td>22</td>
<td>Longacting and parenteral opioids</td>
<td>0.376</td>
<td>8.4%</td>
<td>58.2%</td>
<td>33.3%</td>
</tr>
<tr>
<td>23</td>
<td>H. Pylori testing and treatment</td>
<td>0.351</td>
<td>1.8%</td>
<td>66.7%</td>
<td>31.6%</td>
</tr>
<tr>
<td>24</td>
<td>Bone densitometry</td>
<td>0.344</td>
<td>4.0%</td>
<td>60.9%</td>
<td>35.1%</td>
</tr>
<tr>
<td>25</td>
<td>Third generation cephalosporins</td>
<td>0.329</td>
<td>1.8%</td>
<td>62.2%</td>
<td>36.0%</td>
</tr>
</tbody>
</table>
GROWTH OF IMAGING - RESEARCH

Courtesy of Dan Sodickson, NYU

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Doctors unveil "Choosing Wisely" campaign to cut unnecessary medical tests

By Ryan Jaslow  Topics Health Care, News, Research

(CBS News) Doctors from nine of the top medical societies in the country are warning patients and fellow doctors to choose wisely when it comes to 15 common
UNNECESSARY TESTS: CHOOSING WISELY

• Over half of the original recommendations (24/45) were recommendations AGAINST imaging

• Not one recommendation favored imaging over another approach

• American College of Physicians, 4/5 were recommendations AGAINST imaging
GROWTH OF IMAGING

IMAGING SPENDING AS A PERCENTAGE OF TOTAL US MEDICARE CARRIER PAID CLAIMS

Source: Medical Imaging and Medicare: Five Years Later. November 16, 2011. A Medical Imaging & Technology Alliance Report     Data Tabulation provided by Direct Research, LLC

@vivianleemd
Value-Driven

RADIOLOGY!
How do we think about imaging in a value-based world?
THE TRANSFORMATION: FROM VOLUME TO VALUE

\[ V = \frac{Q + S}{\$} \]

- \( V \) (VALUE)
- \( Q \) (QUALITY)
- \( S \) (SERVICE)
- \( \$ \) (COST)

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VALUE FOR WHOM?

VALUE

FOR SOCIETY
Are we proving our new methods are superior?

Once established, evidence-based medicine drives:

- Clinical Decision Making
- Decision Support Tools
- Clinical Reimbursement

New Tests
New Drugs
# Levels of Evidence for Evaluating Studies

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Quality</th>
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<tbody>
<tr>
<td>I</td>
<td>Highest Quality</td>
<td>I</td>
</tr>
<tr>
<td>II-1</td>
<td></td>
<td>II-1</td>
</tr>
<tr>
<td>II-2</td>
<td></td>
<td>II-2</td>
</tr>
<tr>
<td>II-3</td>
<td></td>
<td>II-3</td>
</tr>
<tr>
<td>III</td>
<td>Lowest Quality</td>
<td>III</td>
</tr>
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</table>


Courtesy of Pari Pandharipande, MGH
<table>
<thead>
<tr>
<th>Level</th>
<th>Study Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Randomized Controlled Trial (RCT)</td>
</tr>
<tr>
<td></td>
<td>Meta-Analysis of RCTs</td>
</tr>
<tr>
<td></td>
<td>Systematic Review of RCTs</td>
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</tbody>
</table>


Courtesy of Pari Pandharipande, MGH
Conclusions Rapid MRIs and radiographs resulted in nearly identical outcomes for primary care patients with low back pain. Although physicians and patients preferred the rapid MRI, substituting rapid MRI for radiographic evaluations in the primary care setting may offer little additional benefit to patients, and it may increase the costs of care because of the increased number of spine operations that patients are likely to undergo.

JAMA. 2003;289:2810-2818
## Levels of Evidence for Evaluating Studies

<table>
<thead>
<tr>
<th>Level</th>
<th>Observational Studies</th>
<th>Study Type</th>
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<tbody>
<tr>
<td>II-1</td>
<td>Control Trial, Not Randomized</td>
<td><strong>II-1</strong></td>
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<tr>
<td>II-2</td>
<td>Cohort Study Case-Control Study</td>
<td><strong>II-2</strong></td>
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<tr>
<td>II-3</td>
<td>Time-Series Study Uncontrolled Study, Significant Results</td>
<td><strong>II-3</strong></td>
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Courtesy of Pari Pandharipande, MGH
<table>
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<tr>
<td>III</td>
<td>Case Series</td>
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<tr>
<td></td>
<td>Expert Opinions</td>
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<tr>
<td></td>
<td>Committee/Organization Recommendations</td>
</tr>
</tbody>
</table>


Courtesy of Pari Pandharipande, MGH
PCORI FUNDING GROWTH

FY 2012: $150 M
FY 2013: $200 M
FY 2014: $528 M
FY 2015: $462.8 M

(PCORI, 2016)
ALIGNING EFFORTS

How do we match our research efforts to driving value in health care—improving clinical decision making?
## IOM 100 Priority Topics for CER

<table>
<thead>
<tr>
<th>Quartile</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top</td>
<td>Compare PET, MRI, CT in Cancer</td>
</tr>
<tr>
<td>2nd</td>
<td>Compare mammography vs mammography plus MR for breast cancer screening</td>
</tr>
<tr>
<td>3rd</td>
<td>Compare effectiveness of imaging when ordered for neurologic and orthopedic indications by primary care, ER, and specialists</td>
</tr>
<tr>
<td>4th</td>
<td>Compare effectiveness of CTA vs DSA for coronary artery stenosis and compare various treatment approaches in liver metastases, including image-guided ablative methods</td>
</tr>
</tbody>
</table>

- Pandharipande and Gazelle, Radiology, 2009.

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VALUE FOR WHOM?

VALUE

FOR CUSTOMER (REFERRER)
Standardized Reporting


N. Reed Dunnick, MD, Curtis P. Langlotz, MD, PhD

A radiology report is the official record documenting the contribution of a radiologist to a patient’s care. The use of structured reports and a common lexicon will help referring physicians better understand the contents of reports. These same features in electronic health records will enable radiologists to mine reports for utilization management information as well as form the basis for clinical investigations.

Key Words: Radiology report, structured reporting, quality improvement, best practices, multimedia report

*J Am Coll Radiol* 2008;5:626-629. Copyright © 2008 American College of Radiology
Radiology Reporting: Attitudes of Referring Physicians

Neal J. Clinger, MD • Tim B. Hunter, MD • Bruce J. Hillman, MD

CLARITY      UTILITY      TIMELINESS

Radiology 1988; 169:825
**WHAT IF WE ROUTINELY MEASURED SATISFACTION?**

<table>
<thead>
<tr>
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<td></td>
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<tr>
<td>1) Friendliness/courtesy of the care provider</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>5) Information the care provider gave you about medications (if any)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Instructions the care provider gave you about follow-up care (if any)</td>
<td></td>
<td></td>
<td></td>
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<td>7) Degree to which care provider talked with you using words you could understand</td>
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<td>8) Amount of time the care provider spent with you</td>
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<td>9) Your confidence in this care provider</td>
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<td>10) Likelihood of your recommending this care provider to others</td>
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<td>11) Comments (describe good or bad experience)</td>
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</tbody>
</table>

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VALUE FOR WHOM?

VALUE

FOR CUSTOMER (PATIENT)
Hospital Advances Breast Care St. Luke's Women's Imaging Center Is Unique

October 20, 1993 | The Morning Call

Buckinghamshire Healthcare providing one-stop-shop for breast referrals

3 June 2010

UMC Breast Care Center

Accredited by the National Accreditation Program for Breast Centers (NAPBC), the UMC Breast Care Center is your one-shop for comprehensive breast health. Top Texas Tech physicians including breast surgeons, medical oncologists and radiation oncologists as well as oncology trained support specialists including nurses and therapists all work together as one team to deliver treatment plans designed especially for you.
PATIENT-CENTERED CARE

Saturday, Jan. 26, 2008

Radiologists open a one-stop medical testing center in Merced

By CAROL REITER
creiter@mercedsu

One-stop shopping

Every shopper wants one-stop shopping has come

Dr. Steve Hansen, a former Portal Imaging Center's CEO, says the center will have all the equipment to perform both imaging and other services. "We wanted a full-service center, not just a small building across the street," he says.

"We wanted a full-service center, not just a small building across the street," he says.

Your Women's Center Experience

At Riverview, our team takes pride in putting our guests at ease, designed with your comfort and privacy in mind:

- Services performed in tranquil and beautiful environment
- Private changing rooms
- Coffee stations and refreshments
- Private waiting area for diagnostic appointments
- Calming water elements including a view of the Navesink River
- Evening and Weekend Hours
VALUE FOR WHOM?

VALUE

FOR THE HEALTH SYSTEM
ALTERNATIVE PAYMENT MODELS

- Insurers spending more than $65B a year in Value Based or Alternative Payment models
- Aetna reports 28% of payments under value-based care
  - Goal of 50% by 2018 and 75% by 2020
- BCBS has 24% of members under value-based programs
- United Health Care targeting $50B in value-based payments by 2017

Source: New York Times, Health Insurers Are Trying New Payment Models Study Shows, July 2014; Aetna Health Section, February 2015; United Health Group, July 2013

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FLIPPING RADIOLOGY ON ITS HEAD

PROFIT CENTER

RADIOLOGY

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COSTS & EFFICIENCY

Improve quality and reduce costs for the health care system

Better Screening and Prevention

Shorter Time to Diagnosis and Reduced Mis-Diagnosis

Earlier Detection Of Potential Complications

Shorter Length Of Stay

Reduced Risk Of Readmission

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KNOWING OUR COSTS
Processes to Improve Efficiency Without Sacrificing Quality

Labor
Supplies
Scanner/Equipment Time

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CAN WE SIMPLIFY PROTOCOLS?

< 10 min protocols at 1.5T for
• Brain
• C-spine
• Liver
• Knee
• Foot/Ankle

Leiner T, et al ISMRM 2013
How can we inculcate value-driven radiology in our trainees?
TRAINING TO VALUE IN UTAH

SYSTEM-WIDE IMPROVEMENTS

750+

13 Programs

71% Aligned Organizational Goal

25% Opted MOC IV / PI-CME

RESULTS
July 2015 – March 2016 (9 months)

61
TRAINEE PROJECTS

71% Aligned Organizational Goal

25% Opted MOC IV / PI-CME

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Residency program dashboard gives transparency to projects involving residents by program.
THANK You!

VIVIAN S. LEE, M.D., Ph.D., M.B.A.
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CEO, UNIVERSITY OF UTAH HEALTH CARE
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