Radiology Malpractice: Facts and Statistics

Richard Duszak, MD, FACR, FSIR, FRBMA
ARRS Leonard Berlin Scholar in Medical Professionalism
Professor and Vice Chair for Health Policy and Practice
Department of Radiology and Imaging Sciences
Emory University School of Medicine
Radiology Malpractice: Facts and Statistics Nuts and Bolts

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Disclosures…

Consulting and Other Financial Relationships
- Ethos Medical, Inc. (Advisor and Shareholder)
- United States Department of Homeland Security Research Support
- Harvey L. Neiman Health Policy Institute
- ARRS Roentgen Fund

Fiduciary Relationships
- Chancellor, American College of Radiology

The opinions expressed herein are my own.
Disclosure of Note...

ARRS Leonard Berlin Scholarship
Richard Duszak, MD
Emory University School of Medicine

Dr. Duszak aims to fill gaps in scholarship and teaching by developing a deeper and broader understanding of the contributors to and drivers of malpractice litigation and better disseminating such knowledge to reduce radiologists’ collective malpractice exposure and improve the quality and value of radiology services to patients.

Learn more about the Leonard Berlin Scholarship
And a Caveat…
And Finally…

• This 2-hour program is endorsed by SVMIC.
• Attendees who are SVMIC policyholders have an opportunity to receive a 10% discount on their malpractice insurance for participating.
• At the conclusion of the program, policyholders will be given instructions on how to claim their credit.
Agenda

1. Facts and figures
2. Perception and interpretation “misses”
3. Communication deficiencies
4. Complications and informed consent
5. Litigation considerations
Agenda

1. Facts and figures
2. Perception and interpretation “misses”
3. Communication deficiencies
4. Complications and informed consent
5. Litigation considerations
Why Lawsuits Occur

- Undesired Outcome
- Unhappy Patient

Lawsuit
How to Mitigate Risk

Undesired Outcome

Unhappy Patient

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Lawsuit
Public Scrutiny is High

TO ERR IS HUMAN:
BUILDING A SAFER HEALTH SYSTEM

Health care in the United States is not as safe as it should be—and can be. At least 44,000 people, and perhaps as many as 98,000 people, die in hospitals each year as a result of medical errors that could have been prevented, according to estimates from two major studies. Even using the lower estimate, preventable medical errors in hospitals exceed attributable deaths to such feared threats as motor-vehicle wrecks, breast cancer, and AIDS.
Public Scrutiny is High

*To Err Is Human: Building a Safer Health System*

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**TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM**

Health care in the United States is not as safe as it should be—and can be. At least 44,000 people, and perhaps as many as 98,000 people, die in hospitals each year as a result of medical errors that could have been prevented, according to estimates from two major studies. Even using the lower estimate, preventable medical errors in hospitals exceed attributable deaths to such feared threats as motor-vehicle wrecks, breast cancer, and AIDS.
Sensationalism Sells

“The equivalent of three jumbo jets crashing every single day.”
What Does this Mean for You?
Will You Pay?

Average malpractice payment dollar amount, by specialty.

Will You Be Sued?

Proportion of physicians facing a malpractice claim annually, by specialty.
But That’s Just One Year…

Cumulative Career Risk
But That’s Just One Year…

Cumulative Career Risk

Radiology Estimates
• Age 45-65

Any claim:
• 57%-90%

Cumulative Career Risk

Radiology Estimates
- Age 45-65

Any claim:
- 57%-90%
Payment
- 17%-53%

But That’s Just One Year…
How Long Will It Last?

Mean time to resolution (per claim):

20.3 months

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean time to resolution, months</th>
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<tr>
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Mean time to resolution (per claim): 20.3 months
How Long Will It Last?

Mean time to resolution (per claim):

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How Long Will It Last?
Are Things Getting Better?

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Rate of Past Medical Malpractice Claims</th>
<th>Difference in Mean Rate from Period 1 to Period 4</th>
<th>Percentage Change</th>
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<td>Other</td>
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</table>

*The percentage change was statistically significant for all specialties except cardiology (P = .15 for cardiology, P = .001 for colorectal surgery, and P < .001 for all other specialties).*

Or Worse?

Table 3. Medical Malpractice Payment Amounts for 280,368 Paid Claims*

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Mean Malpractice Payment, $ (Period 1)</th>
<th>Mean Malpractice Payment, $ (Period 2)</th>
<th>Difference in Mean (Period 1) vs (Period 2), $</th>
<th>P Value for Difference (Period 1 vs Period 2)</th>
</tr>
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<tbody>
<tr>
<td>All specialties</td>
<td>329,563</td>
<td>326,751</td>
<td>0.02</td>
<td>&lt;.001</td>
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<td>Anesthesiology</td>
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<td>511,201</td>
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<tr>
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<td>370,625</td>
<td>370,625</td>
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<tr>
<td>Colon and rectal surgery</td>
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<td>357,852</td>
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<td>Dermatology</td>
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<td>Emergency medicine</td>
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<td>376,123</td>
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*All payment amounts were adjusted to 2014 dollars based on the Consumer Price Index.
Location, Location, Location

Counts per 100,000 population

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<tr>
<td>1.25</td>
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<tr>
<td>2.50</td>
<td>3.00</td>
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<td>3.00</td>
<td>5.00</td>
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<td>5.00</td>
<td>7.00</td>
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</table>

Duszak R. Unpublished 2017 5-year rolling NPDB data.
Location, Location, Location

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Dollars per 100,000 population

<table>
<thead>
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<tr>
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</tr>
<tr>
<td>1,250,000</td>
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<td>2,500,000</td>
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</table>
"...although the costs of [medical malpractice defense] are higher for claims that result in indemnity payments, there is still a meaningful cost of resolving claims that never result in payment."
"...although the costs of [medical malpractice defense] are higher for claims that result in indemnity payments, there is still a meaningful cost of resolving claims that never result in payment."
Is Defensive Medicine Protective?

Table 3: Estimated effect of increased physician spending on subsequent malpractice risk, within physician analysis

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Absolute % change in malpractice claim rate (95% CI)</th>
<th>P value†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal medicine</td>
<td>−2.1 (−3.4 to −0.8)</td>
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<td>Internal medicine subspecialty</td>
<td>−2.4 (−4.7 to −0.1)</td>
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<td>−1.2 (−3.0 to 0.6)</td>
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<td>Pediatrics</td>
<td>−1.3 (−2.1 to −0.4)</td>
<td>0.003</td>
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<tr>
<td>General surgery</td>
<td>−3.4 (−4.6 to −2.1)</td>
<td>&lt;0.001</td>
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<tr>
<td>Surgical subspecialty</td>
<td>−1.9 (−3.0 to −0.9)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Obstetrics and gynecology</td>
<td>−1.3 (−2.3 to −0.4)</td>
<td>0.01</td>
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</table>

Table reports effect of increasing physician hospital spending from bottom fifth to top fifth on the probability a physician experiences an event that leads to a subsequent malpractice claim. The model was estimated with physician fixed effects (that is, within physician analysis) and therefore accounted for the possibility that within a specialty and even after adjustment for patient case mix and diagnosis related group, unobserved patient characteristics may be associated with both higher use of healthcare resources by physicians and risk of malpractice claims. The model estimated the effect of physician spending on subsequent malpractice claims by studying changes in spending and malpractice claims within physicians over time.

*Associated with increase in physician spending from bottom to top fifth.
†Two sided † tests.
Do Malpractice Claims Drive Imaging Utilization?

Imaging utilization rates per 100,000 beneficiaries.

Paid malpractice claims per 100,000 population.
Do Malpractice Claims Drive Imaging Utilization?

Are paid malpractice claims associated with a higher utilization of advanced medical imaging?

Explore state level relationships between the incidence and payout amounts for medical malpractice claims and Medicare imaging utilization and spending across the United States.

Each 1% increase in average paid malpractice claims is associated with a subsequent 0.20% increase in advanced imaging utilization.

Positive associations between paid malpractice claims and advanced Medicare imaging utilization support the contention that US physicians use medical imaging as a defensive medicine strategy.
Do Malpractice Claims Drive Imaging Utilization?

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Villalobos A et al. JACR 2021; 18: 34-41.
Criteria for Malpractice Claim

- Duty
- Breach
- Causation
- Damages

- A meritorious claim should require all four
Criteria for Malpractice Claim

- **Duty**
  - Exists when a health care entity or provider undertakes care or treatment of a patient
Criteria for Malpractice Claim

- **Duty**
  - Exists when a health care entity or provider undertakes care or treatment of a patient

- **Breach**
  - Provider failed to conform to the relevant *standard of care*
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- **Duty**
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  - That breach was a proximate cause of the injury
Criteria for Malpractice Claim

- Duty
  - Exists when a health care entity or provider undertakes care or treatment of a patient

- Breach
  - Provider failed to conform to the relevant standard of care

- Causation
  - That breach was a proximate cause of the injury

- Damages
  - Without damages, there is no basis for judgment, regardless of negligence
“Damages” are Varibly Defined

- Worried about a brain tumor, Plaintiff Judith Richardson Haines underwent a brain CT examination at Temple University Hospital.
- The jury rendered a verdict of $988,000 against radiologist Dr. Judith Hart and Temple University Hospital.

Court of Common Pleas of Pennsylvania, Philadelphia County.

Judith HAIMES, Plaintiff,

v.

TEMPLE UNIVERSITY HOSPITAL, Defendant,

No. 4408.

The Damages?

---

Los Angeles Times

Says Her Powers Vanished: 'Psychic' Awarded $988,000 in Hospital CAT-Scan Lawsuit

March 30, 1986 | Associated Press

PHILADELPHIA — A woman who claimed a CAT scan she received at a hospital in 1976 made her unable to use her psychic powers was awarded $988,000 by a jury last week.

The eight-member Common Pleas Court jury deliberated about 45 minutes before awarding Judith Richardson Haines $600,000 plus $388,000 in interest on her malpractice claim against Temple University Hospital.
Why Do Radiologists Get Sued?
Agenda

1. Facts and figures
2. Perception and interpretation “misses”
3. Communication deficiencies
4. Complications and informed consent
5. Litigation considerations
Allegations Against 8,401 Radiologists

Distribution of malpractice claims against radiologists, by allegation (n=4,793)

- Failure to diagnose
- Procedural complication
- Failure to communicate
- Failure to recommend tests
- Contrast agent reaction
- Negligence
- Unknown
- Peripheral role

Allegations Against 8,401 Radiologists

Distribution of malpractice claims against radiologists, by allegation (n=4,793)

- Failure to diagnose: 15.6%
- Procedural complication: 5.0%
- Failure to communicate: 3.7%
- Failure to recommend tests: 2.6%
- Contrast agent reaction: 1.7%
- Unknown: 15.6%
- Negligence: 5.0%
- Peripheral role: 3.7%

Allegations Against 8,401 Radiologists

Distribution of malpractice claims against radiologists, by allegation (n=4,793)

- Failure to diagnose: 62.3%
- Procedural complication: 15.6%
- Failure to communicate: 5.0%
- Failure to recommend tests: 3.7%
- Contrast agent reaction: 5.0%
- Unknown: 15.6%
- Negligence: 5.0%
- Peripheral role: 3.7%

Primary Diagnosis-Related Allegations

- **Cancer**: 44.0%
- **Fractures**: 16.3%
- **Other**: 39.7%

Primary diagnosis in radiology malpractice claims involving diagnosis-related allegations (n=504)

Primary Diagnosis-Related Allegations

Primary diagnosis in radiology malpractice claims involving diagnosis-related allegations (n=504)

- 39.7%
- 44.0%
- 16.3%

“Missed cancers”

- 47.8% Breast
- 23.4% Lung
- 4.8% Brain
- 4.3% Colon
- 3.3% Renal
- 3.3% Lymphoma

Body Region in Diagnosis-Related Allegations

Distribution of primary body regions involved in radiologist diagnostic-related lawsuits (n=504)

- Musculoskeletal: 21.4%
- Breast: 20.0%
- Thoracic: 16.1%
- Neurological: 14.7%
- Abdominal: 14.5%
- Other: 13.3%
“Misses” are Actually Pretty Common

Of 2,145 radiographic examinations each interpreted by two radiologists, diagnostic error rates varied by body region and ranged from 15.9% to 38.0%.

Table I: Error Rates by Type of Examination

<table>
<thead>
<tr>
<th></th>
<th>Original</th>
<th>Copy</th>
<th>Difference</th>
<th>No. of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest</td>
<td>33.2</td>
<td>37.1</td>
<td>-3.9</td>
<td>536</td>
</tr>
<tr>
<td>Skull</td>
<td>35.0</td>
<td>38.7</td>
<td>-3.7</td>
<td>137</td>
</tr>
<tr>
<td>Body surveys</td>
<td>26.2</td>
<td>29.8</td>
<td>-3.6</td>
<td>84</td>
</tr>
<tr>
<td>Hips and pelvis</td>
<td>35.7</td>
<td>38.5</td>
<td>-2.8</td>
<td>70</td>
</tr>
<tr>
<td>Extremities</td>
<td>31.0</td>
<td>33.6</td>
<td>-2.6</td>
<td>375</td>
</tr>
<tr>
<td>Vascular</td>
<td>37.5</td>
<td>39.3</td>
<td>-1.8</td>
<td>112</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>25.5</td>
<td>26.2</td>
<td>-0.7</td>
<td>145</td>
</tr>
<tr>
<td>Abdomen</td>
<td>33.1</td>
<td>33.1</td>
<td>0.0</td>
<td>130</td>
</tr>
<tr>
<td>Biliary</td>
<td>15.9</td>
<td>15.9</td>
<td>0.0</td>
<td>69</td>
</tr>
<tr>
<td>Excretory urography—</td>
<td>28.8</td>
<td>27.7</td>
<td>1.1</td>
<td>94</td>
</tr>
<tr>
<td>genitourinary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>38.0</td>
<td>34.6</td>
<td>3.4</td>
<td>29</td>
</tr>
</tbody>
</table>

These Cases are Tough to Defend

Malpractice Issues in Radiology

Defending the “Missed” Radiographic Diagnosis

Leonard Berlin
The Answer is On the Film
Hindsight Bias

“…the tendency for people with knowledge of the actual outcome of a case to believe falsely that they would have predicted the outcome.”
Where’s Waldo?
Here I Am!
I’m Still Here!
Perceptual “Errors”

Q: So, why do you think that Dr. X was negligent?

A: Well, look at the arrows. We can all see the cancer right there. I’m not a doctor and if I can see it, it’s pretty obvious he screwed up.
You Can’t Un-See It!

12 months earlier
Hindsight Bias

- Cooperative Early Lung Cancer Group (NCI)
- 4,618 high risk patients underwent chest radiography at 4-month intervals over 6 years
- Interpreted by academic thoracic radiologists as lung cancer screening studies
- 92 lung cancers identified
- 85 “had their cancer detected only by chest radiography”

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Hindsight Bias

- Once a cancer diagnosis was established, old studies were then re-scrutinized
- Most neoplasms were now identifiable at earlier stages, but only in retrospect
Hindsight Bias

- Once a cancer diagnosis was established, old studies were then re-scrutinized.
- Most neoplasms were now identifiable at earlier stages, but only in retrospect.

- Peripheral tumors: 90%
- Perihilar tumors: 75%

Satisfaction of Search

Detection of one abnormality interferes with detection of others
Satisfaction of Search

Detection of one abnormality interferes with detection of others

Can you find 17 differences?

Missing Flag, Princess Crown, Princess Hands in Pockets, Princess Missing Ball, Turtle with Ball, Castle Wall Missing Windows, Bird with Stick, Rabbit with Sunglasses, Pool missing Ripples, Beaver’s Hammer Upside Down, Duck with Hat, Beach Ball Missing Stripes, Prince’s Bathing Suit, Pool Tent with Extra Stripes, Pool Tent Doors Open, Scuba Mask Missing, Beaver Cape Tied Differently
Satisfaction of Search

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Satisfaction of Search

- Skeletal radiography
- 15 cases with one abnormality and 15 cases with two or more abnormalities
- Single abnormality case average detection:
  - 11.25
- Multiple abnormality case average detection:
  - 11.72 for 1st finding
  - 6.12 for 2nd and 3rd findings

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- 15 cases with one abnormality and 15 cases with two or more abnormalities
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- Multiple abnormality case average detection:
  - 11.72 for 1st finding
  - 6.12 for 2nd and 3rd findings

Satisfaction of Search

Don’t get blinded by pathology!
Errors are More Likely When Rushed

Average rate of “major misses”:
- 10.0% at “normal speed”
- 26.6% at “fast speed”

Table 2. Results data

<table>
<thead>
<tr>
<th>Radiologist</th>
<th>Normal Reporting Time (min: sec)</th>
<th>Fast Reporting Time (min: sec)</th>
<th>Major Miss at Normal Speed (%)</th>
<th>Major Miss at Fast Speed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9:00</td>
<td>4:30</td>
<td>8.3</td>
<td>33</td>
</tr>
<tr>
<td>2</td>
<td>9:36</td>
<td>4:48</td>
<td>8.3</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>5:00</td>
<td>2:30</td>
<td>25</td>
<td>16.6</td>
</tr>
<tr>
<td>4</td>
<td>15:20</td>
<td>7:40</td>
<td>8.3</td>
<td>41.6</td>
</tr>
<tr>
<td>5</td>
<td>11:52</td>
<td>5:56</td>
<td>0</td>
<td>16.6</td>
</tr>
<tr>
<td>Mean or average</td>
<td>10:9</td>
<td>5:5</td>
<td>10</td>
<td>26.6</td>
</tr>
</tbody>
</table>

The Vicious Cycle of Declining Payments

Declining Reimbursement

Higher Volumes

Higher Volumes

Declining Reimbursement
Volume Carries Risk

Malpractice Issues in Radiology

Liability of Interpreting Too Many Radiographs

An expert radiologist retained by the plaintiff testified in deposition that the "national average" number of radiologic procedures interpreted by a radiologist in 1 day was 50 and that any radiologist whose daily workload exceeded 100 procedures a day was breaching the standard of care. The expert then asserted that by interpreting 162 cases in 1 day, a radiologist would be exceeding the "national average by three times" and would therefore be conducting himself in a "reckless and wanton" manner.
Savvy Attorneys Will Ask
“If we were to assume that he did nothing but open them up and immediately start reading them, he spent half a second looking at each image. That’s two images per second, and that is insanity.”

Lawyers recently extracted a $2 million settlement from one Dallas-based hospital chain after a subpoena proved that radiologist Steven Fuhr spent less than a second interpreting CT images.
Agenda

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3. Communication deficiencies
4. Complications and informed consent
5. Litigation considerations
Distribution of malpractice claims against radiologists, by allegation (n=4,793)
Allegations Against 8,401 Radiologists

Distribution of malpractice claims against radiologists, by allegation (n=4,793)

- Failure to diagnose: 4.1%
- Procedural complication: 0.8%
- Failure to communicate: 4.9%
- Failure to recommend tests
- Contrast agent reaction
- Negligence
- Unknown
- Peripheral role

Criteria for Malpractice Claim

- Duty
  - Exists when a health care entity or provider undertakes care or treatment of a patient

- Breach
  - Provider failed to conform to the relevant standard of care

- Causation
  - That breach was a proximate cause of the injury

- Damages
  - Without damages, there is no basis for judgment, regardless of negligence
The Standard of Care

- Definition varies by jurisdiction, but typically relate to behavior of an “ordinary,” “reasonable,” or “prudent” physician
- “…that course of action which a reasonably prudent [physician] in the defendant’s specialty would have taken under the same or similar circumstances”
The Standard of Care is Not Static

Expectations

Lawsuits
What is Communication?

**Definition of communication**

1. **a**: a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior
   // the function of pheromones in insect *communication*
   also : exchange of information

   **b**: personal rapport
   // a lack of *communication* between old and young persons

2. **a**: information communicated : information transmitted or *conveyed*

   **b**: a verbal or *written message*
   // The captain received an important *communication*. 
What is Communication?

Definition of *communication*

1. a: a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior
   // the function of pheromones in insect *communication*
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Conceptual Moving Target

Hypothetical example

Non-critical reports called (percent)
Conceptual Moving Target

Hypothetical example

Non-critical reports called (percent) vs. Time (years)
Conceptual Moving Target

Non-critical reports called (percent)

Time (years)
Conceptual Moving Target

Hypothetical example
Conceptual Moving Target

Non-critical reports called (percent) vs. Time (years)

Hypothetical example
Conceptual Moving Target

Hypothetical example

- Non-critical reports called (percent)
- Time (years)
ACR Practice Parameters: Routine Communication

“The final report is the definitive documentation of the results of an imaging examination or procedure.”
ACR Practice Parameters: Non-Routine Communication

- Situations exist where non-routine communication is warranted:
  - Findings that suggest a need for immediate or urgent intervention
  - Examples: pneumothorax, pneumoperitoneum
  - Often included in institutional “critical values” categories
ACR Practice Parameters: Non-Routine Communication

- Situations exist where non-routine communication is warranted:

- Findings are **discrepant with a prior interpretation of the same examination** and where failure to act may have an adverse effect

- Examples: discrepancy between preliminary and final report, or discrepancy upon further review after availability of prior images

ACR practice parameters for communication of diagnostic imaging findings, 2014.
ACR Practice Parameters: Non-Routine Communication

- Situations exist where non-routine communication is warranted:
  - Findings that the interpreting physician reasonably believes may be seriously adverse and may not require immediate attention but, if not acted on, may result in an adverse patient outcome
  - Example: possible malignant lesions
  - Particularly applicable when there is a potential break in the continuity of care
What Does this All Mean?

- For critical or urgent findings
  - Simply dictating a report is not sufficient
  - Synchronous interruptive communication is usually necessary
What Does this All Mean?

- For critical or urgent findings
  - Simply dictating a report is not sufficient
  - Synchronous interruptive communication is usually necessary

- For important unexpected findings
  - Understand that “balls get dropped”
  - Non-routine communication may facilitate care
  - Synchronous and interruptive communication is not necessary…and paradoxically may not be ideal
Operational Considerations

Critical “findings pose immediate threat to the patient and generally require rapid direct communication by the radiologist. While [important non-urgent] findings are not of immediate risk to the patient, these nonetheless are significant and do require attention and possible action.”

Operational Considerations

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99.4%
Operational Considerations

Table 2
Modality of imaging examination triggering submission

<table>
<thead>
<tr>
<th>Modality</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiograph</td>
<td>180 (38.6%)</td>
</tr>
<tr>
<td>CT</td>
<td>130 (27.9%)</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>84 (18.0%)</td>
</tr>
<tr>
<td>MRI</td>
<td>59 (12.7%)</td>
</tr>
<tr>
<td>Nuclear medicine</td>
<td>12 (2.6%)</td>
</tr>
<tr>
<td>Fluoroscopy</td>
<td>1 (0.2%)</td>
</tr>
</tbody>
</table>

* Data represent raw number (out of 466) and percentage.

Table 3
Abnormalities triggering utilization of the communication tool

<table>
<thead>
<tr>
<th>Abnormality</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung nodule/mass</td>
<td>136 (29.2%)</td>
</tr>
<tr>
<td>Osseous fracture</td>
<td>58 (12.4%)</td>
</tr>
<tr>
<td>Lung parenchyma (nonnodule)</td>
<td>55 (11.8%)</td>
</tr>
<tr>
<td>Osseous lesion (nonfracture)</td>
<td>24 (5.2%)</td>
</tr>
<tr>
<td>Gynecologic/Pelvic</td>
<td>22 (4.7%)</td>
</tr>
<tr>
<td>Renal</td>
<td>21 (4.5%)</td>
</tr>
<tr>
<td>Liver</td>
<td>19 (4.1%)</td>
</tr>
<tr>
<td>Brain</td>
<td>18 (3.9%)</td>
</tr>
<tr>
<td>Vascular</td>
<td>16 (3.4%)</td>
</tr>
<tr>
<td>Other</td>
<td>14 (3.0%)</td>
</tr>
<tr>
<td>Biliary</td>
<td>12 (2.6%)</td>
</tr>
<tr>
<td>Thyroid</td>
<td>12 (2.6%)</td>
</tr>
<tr>
<td>Spine</td>
<td>10 (2.1%)</td>
</tr>
<tr>
<td>Muscle/Tendon/Ligament</td>
<td>9 (1.9%)</td>
</tr>
<tr>
<td>Head and neck</td>
<td>9 (1.9%)</td>
</tr>
<tr>
<td>Lymphadenopathy</td>
<td>8 (1.7%)</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>6 (1.3%)</td>
</tr>
<tr>
<td>Pancreatic</td>
<td>4 (0.9%)</td>
</tr>
<tr>
<td>Normala</td>
<td>4 (0.9%)</td>
</tr>
<tr>
<td>Breast</td>
<td>3 (0.6%)</td>
</tr>
<tr>
<td>Mediastinal</td>
<td>3 (0.6%)</td>
</tr>
<tr>
<td>Cardiac</td>
<td>1 (0.2%)</td>
</tr>
<tr>
<td>Scrotum</td>
<td>1 (0.2%)</td>
</tr>
<tr>
<td>Prostate</td>
<td>1 (0.2%)</td>
</tr>
</tbody>
</table>

* Data represent raw number (out of 466) and percentage.
Case 1: The Silent Report

OPINION: Possible left chest summation shadow but cannot exclude early nodule. Recommend follow up CXRs and CT if clinically indicated.
Case 1: The Silent Report

**OPINION:** Possible left chest summation shadow but cannot exclude early nodule. Recommend follow up CXRs and CT if clinically indicated.
Case 2: The Noisy Report

EXAM # TYPE/EXAM
001137423 CT/Abdomen Pelvis WO Contr

CT OF THE ABDOMEN AND PELVIS WITH ORAL AND NO IV CONTRAST

Comparison is made to 9/13/06.

Multidetector CT imaging of the abdomen and pelvis was performed at 5 mm intervals without IV and with oral contrast from the lung bases to the greater trochanters.

The liver, spleen, adrenal glands, kidneys and pancreas is unremarkable. The gallbladder has been surgically removed. There are dense atherosclerotic changes of the aorta. There is no small bowel obstruction. There is no abdominal ascites or adenopathy. There is a small hiatal hernia. There is dense degenerative change of the spine. Sequence of ventral abdominal hernia repair is seen. The previously described postoperative seroma is no longer present. There is sigmoid diverticulosis without evidence of diverticulitis. There is no free pelvic fluid. There is no gross pelvic adenopathy. At the lung bases, the heart size is enlarged. There is a 1.3 cm mass seen in the right middle lobe. Recommend follow-up.

IMPRESSION
Cholecystectomy. Small hiatal hernia. Ventral abdominal hernia repair. Postoperative seroma is no longer present. 1.3 cm right middle lobe pulmonary nodule. Sigmoid diverticulosis without evidence of diverticulitis. No cardiomegaly.
Case 2: The Noisy Report

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Case 3: The Overnight Phone Call
Case 3: The Overnight Phone Call

STAT Preliminary Radiology Report

Note: This preliminary report is not meant to describe non-acute findings. No prior studies were available. Please review the final report for full descriptions.

Patient Name: [Redacted]
Institution Name: [Redacted]
Study Type: CT ABDOMEN W/O CON / CT PELVIS W/O CON
Date: [Redacted]
Patient Age: 73
Patient ID: [Redacted]
Patient Location: ER (Emergency Room)

Time Ordered: 01:52:06 EDT
Time Faxed: 02:26:59 EDT

This interpretation is based upon receipt of 256 images.

Clinical History / Indication for Exam:
ABD PAIN, DISTENSION, IVO COLITIS, SBO.

FINDINGS:
marked colonic distension - transverse colon measuring up to 9-cm.
diverticulosis sigmoid colon without diverticulitis. No definite obstructing distal colonic mass or stricture clearly seen.

No evidence to suggest sigmoid or cecal volvulus.

Trace amounts portal venous gas within the liver as well as in the right lower quadrant mesenteric image number 74.

No small bowel obstruction, free air or abscess.
Small amount of free fluid within pelvis.
7.5 cm right renal cyst.
Moderate large hialtal hernia.

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Date: [Redacted]
Patient Age: 73
Patient ID: [Redacted]
Patient Location: ER (Emergency Room)

Time Ordered: 01:52:06 EDT
Time Faxed: 02:25:59 EDT

This interpretation is based upon receipt of 256 images.

Report Created by: [Redacted]

These findings were telephoned immediately to assistant on 02:14:51 EDT by a radiologist.

If there are any questions regarding this case, please contact...
Case 3: The Overnight Phone Call

- **Q:** “Doctor, why did you wait 8 hours after receiving a phone call at 2:14 in the morning to consult a surgeon about this surgical emergency?”
- **A:** “I didn’t think it was a surgical emergency.”
- **Q:** “Why didn’t you think pneumatosis and portal venous gas was a surgical emergency?”
- **A:** “Because the radiologist never said it was a surgical emergency.”
- **Q:** “So, he told you to ignore his report?”
- **A:** “No, not really. But, if the radiologist thought it was a surgical emergency, he should have just said so. All he said was that there was pneumatosis and portal venous gas.”
Case 4: No Answer

“The number you have dialed is no longer in service. Please check the number and try again.”
What If You Can’t Contact the Referrer?

- “A jury, depending on the specific facts presented, must decide on a case-by-case basis whether the radiologist has a duty to directly communicate significant findings to a patient on whom a radiologic examination has been performed.”

- Stanley v McCarver 92 P3d 849 (AZ 2004)
What If You Can’t Contact the Referrer?

▪ “The court ruled that it is the radiologist’s breach of the standard of care—namely, his failure to directly communicate with either the referring physician or the patient—that initiated the chain of events that led to the patient’s death. The court concluded that even the ‘slightest degree’ of negligence is sufficient to impose liability.”

▪ *Williams v Le*, 662 SE2d 73 (VA 2008)
Case 4: No Answer

CLINICAL HISTORY
Abdominal aortic aneurysm.

TECHNIQUE
Spiral imaging was performed through the abdomen during uneventful administration of intravenous [redacted]reference is made to examination from 12/19/2019.

COMMENT
182 images.
An approximately 1 cm right lower lobe pulmonary nodule (image four) is now present. This was not seen on the referenced examination. While it is possible this reflects a focal conglomerate of inflammatory change or atelectasis, an early neoplasm could present with an identical appearance. A full and completed CT examination of the chest is advised, perhaps allowing for a delay of several days into this reflecting atelectasis, to further evaluate. Is unable to contact to Dr. [redacted] office by telephone, and personally discussed this finding and recommendation with both the patient and his wife by phone.

Aortic atherosclerotic disease is again identified, without identifiable hemodynamically significant stenosis. Once again, an approximately 2.0 x 2.9 cm infrarenal abdominal aortic aneurysm is present, terminating at the aortic bifurcation. There is no evidence for associated hemorrhage.

The liver and spleen are within expected limits. The pancreas and adrenal glands are within expected limits. The kidneys are within expected limits. No retroperitoneal lymphadenopathy is noted by size criteria. No bowel or mesenteric abnormality is identifiable. Change is present in the spine.

IMPRESSION
1. New right lower lobe pulmonary nodule. Followup is warranted.
2. Stable approximately 3 cm infrarenal abdominal aortic aneurysm.
I was unable to contact Dr. XXX's office by telephone, and personally discussed this finding and recommendation with both the patient and his wife.
Agenda

1. Facts and figures
2. Perception and interpretation “misses”
3. Communication deficiencies
4. Complications and informed consent
5. Litigation considerations
Allegations Against 8,401 Radiologists

Distribution of malpractice claims against radiologists, by allegation (n=4,793)

- Failure to diagnose: 7.3%
- Procedural complication: 4.9%
- Failure to communicate
- Failure to recommend tests
- Contrast agent reaction
- Unknown
- Negligence
- Peripheral role

Medical Malpractice in Image-Guided Procedures: An Analysis of 184 Cases

Casey S. Branach, MD, JD, Minhaj S. Khaja, MD, MBA,
Jacob J. Bundy, MD, MPH, Jeffrey Forris Beecham Chick, MD, MPH,
Rick Boothman, JD, Joseph J. Gemmete, MD, FSIR, and
Ravi N. Srinivasan, MD, FSIR

ABSTRACT

Purpose: To report types and outcomes of a small subset of malpractice lawsuits filed against physicians performing image-guided interventions in the United States.

Materials and Methods: In total, 1,312 cases involving common image-guided procedures were reviewed from the Westlaw and LexisNexis databases in the United States from 1963 to 2018. Social Security, disability, employment contract, product liability, criminal, and government employment claims were excluded. The final legal cohort comprised 184 (14.0%) cases. They were categorized into vascular (113/184; 61.4%), inferior vena cava filter (n = 22; 12.0%), neurointerventional (n = 13; 7.1%), gastrointestinal and genitourinary (n = 17; 9.2%), foreign body (n = 7; 3.8%), biopsy related (n = 9; 4.9%), and oncologic (n = 3; 1.6%) interventions. Claims were also organized by defendant type and by specialty, complication stage, verdict, and year.

Results: From 2001 to 2018, 58.7% of claims (n = 108) were reported. Procedural complications related to arteriography were most commonly litigated (63/113; 55.8%). Claims arising from intra-procedural and early post-procedural complications were common (84/184; 45.7%). Community hospitals were most often named as defendants (61/184; 33.2%). In reported outcomes, courts sided with defendants in 81.9% (104/127) of the cases, similar to national malpractice trends. Unreported outcomes comprised 31% (57/184) of the data.

Conclusions: For the small subset of claims published within national legal databases, intra-procedural and early post-procedural complications after diagnostic arteriography were most commonly litigated. Most (81.9%) claims with reported outcomes sided with the defendant physician.
Temporality and Type of Claim

- 45.7%: Informed consent
- 40.2%: Delayed complication
- 9.8%: Periprocedural complication
- 3.8%: Periprocedural complication; informed consent
- 0.5%: Delayed complication; informed consent
Periprocedural Complications

- Periprocedural complication: 49.5%
- Periprocedural complication; informed consent: 3.8%
- Delayed complication: 45.7%
- Delayed complication; informed consent: Minor
- Informed consent: Minor

Delayed Complications

40.7%

- Periprocedural complication; informed consent
- Periprocedural complication
- Delayed complication
- Delayed complication; informed consent
- Informed consent

Complications

Complication $\neq$ Malpractice
Can Patients Tell the Difference?

Q: So, why do you think that Dr. X was negligent?

A: Well, it’s pretty obvious. My husband came in for a minor procedure, spent two weeks in the ICU, and he died a horrible death. Last time he had one of these done, he drove home all by himself and then we went to play bridge at Edith and Ray’s house.
Can Patients Tell the Difference?

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Complications are Complications

“If you say you haven’t had a complication, you’re either lying...
“If you say you haven’t had a complication, you’re either lying… or you just haven’t done enough cases.”
The Standard of Care

- Definition varies by jurisdiction, but typically relate to behavior of an “ordinary,” “reasonable,” or “prudent” physician
- “…that course of action which a reasonably prudent [physician] in the defendant’s specialty would have taken under the same or similar circumstances”

Berlin L. AJR 1997; 170: 275-278.
Complications

• Failure of technique
• Failure of judgement
Complications

Procedural
- Failure of technique
- Failure of awareness
- Failure of judgement

Management
- Failure of awareness
- Failure of judgement
Complication: Case 1

Similar to Ahmed O & Funaki B. CARJ 2019; 70: 292-299.
Complication: Case 1
Complication: Case 1
Complication: Case 1

PREOPERATIVE DIAGNOSIS: Renal vascular hypertension with stenosis left renal artery.

POSTOPERATIVE DIAGNOSIS: Renal vascular hypertension with stenosis left renal artery.

orifice. The balloon was inflated. The stent was able to be expanded fully with excellent result. The catheter was pulled back at the orifice and completion of arteriogram was obtained which showed fully dilated left renal artery with a stent. The guidewire was removed along with the sheath. The patient tolerated the procedure well.
Complication: Case 2
Complication: Case 2
Complication: Case 2
Complication: Case 2
Complication: Case 2

side. Next, initial sheath placed in the right groin was placed with a guiding sheath, and a balloon inflatable stent was next placed. After inflation and checking the proper position, the balloon was inflated to deploy the stent. After deploying the stent had completed, an arteriogram was obtained. The stent was found to be in position with good results and no extravasation. The guidewire for the guiding sheath was replaced with a smaller sheath, and the patient was transported to the recovery room in stable condition.
Complication: Case 2

ABDOMEN CT:
CT of the abdomen was done from above the diaphragm to the bifurcation of the abdominal aorta. The study was done with and without IV contrast.

There is basilar atelectasis bilaterally. There is atherosclerotic change in the abdominal aorta but no aneurysm or dissection is seen. The noncontrasted small and large intestine as they are visualized are unremarkable. The liver, pancreas, and spleen appear normal. The patient has had a cholecystectomy. There is decreased attenuation in the lower pole of the left kidney consistent with an infarct. A renal artery stent is seen at the origin of the renal artery on the right. On the right side there is striated enhancement of the kidney. There is a huge perinephric hematoma with soft tissue attenuation extending from the inferior aspect of the right lobe of the liver inferiorly to just above the level of the bifurcation of the abdominal aorta. No contrast is seen within this blood collection. No abdominal mass is seen.

IMPRESSION:
1. HUGE RIGHT PERINEPHRIC HEMATOMA.
2. RIGHT RENAL ARTERY STENT.
3. CHANGES IN THE LOWER POLE OF THE LEFT KIDNEY CONSISTENT WITH AN INFARCT.
4. ATHEROSCLEROTIC CHANGE IN THE ABDOMINAL AORTA.
5. POST CHOLECYSTECTOMY.
Context Matters
Temporality and Type of Claim

- Periprocedural complication; informed consent: 45.7%
- Periprocedural complication: 3.8%
- Delayed complication: 9.8%
- Delayed complication; informed consent: 0.5%
- Informed consent: 40.2%
Lack of Informed Consent

- Periprocedural complication; informed consent: 14.1%
- Periprocedural complication: 3.8%
- Delayed complication: 9.8%
- Delayed complication; informed consent: 0.5%

Informed Consent and the Courts

- Traced back to English Common Law but reaffirmed in US case law precedent
- “Any human being of adult years and sound mind has a right to determine what shall be done with his body; and a surgeon who performs an operation without his patient’s consent commits an assault.”

Schloendorf v. The Society of New York Hospital, 105 NE 92 (NY 1914).
Informed Consent and the Courts

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Informed Consent and the Courts

- Traced back to English Common Law but reaffirmed in US case law precedent
- “Any human being of adult years and sound mind has a right to determine what shall be done with his body; and a surgeon who performs an operation without his patient’s consent commits an assault.”
- The right of patient self-determination is now nearly universally accepted in all jurisdictions
Informed Consent Guidelines

II. Protocol for Informed Consent for Elective Procedures

1. Before the proposed procedure is performed, the following will be explained to the patient or, if the patient is unable to provide consent, to the patient’s legal representative:
   a. The purpose and nature of the procedure or treatment
   b. The method by which the procedure or treatment will be performed
   c. The risks, complications, and expected benefits or effects of such procedure or treatment
   d. The risk of not accepting the procedure or treatment
   e. Any reasonable alternatives to the procedure or treatment and their most likely risks and benefits
   f. The right to refuse the procedure or treatment

2. After the above items are explained and the physician or health care provider is satisfied that the patient understands the procedure and its possible consequences, the informed consent is executed and appropriately documented. This is most commonly done by having the patient sign a consent form.

3. The name of the person or his or her designee performing the procedure must appear on the consent form prior to the signature by the patient.

4. Documentation: A copy of the consent form(s) or videotape, if used, should be placed in the medical record. In all other situations a note should appear in the medical record that a discussion was held with the patient and that informed consent was obtained. The note should also include the date and time of the discussion, the contents of the discussion, and an evaluation of the patient’s understanding and response to information provided. A copy of any written informational materials given to the patient may also be included in the medical record.

5. Since the patient must be able to understand the risks at the time he or she gives consent, medications that affect the sensorium should be kept at a minimum and ideally not given to the patient <4 hours prior to the patient’s giving consent. Chronic pain medications are less likely to affect the sensorium. No patient should be deprived of adequate pain control for the purpose of obtaining consent.

6. State statutes should be known and followed with regard to consent of those under legal age within that state. Some states have “emancipated minor” or “mature minor” statutes that may apply.

7. Telephone consent: If consent is sought from the patient’s health care representative, legally appointed guardian, or family member who cannot be physically present to sign the consent form before the procedure, informed consent may be obtained by telephone. The discussion should be documented on the consent form with a note that the consent was obtained by telephone. In such cases it is advisable to have the discussion witnessed by a second hospital staff member who signs the form as a witness.

C. Protocol for Informed Consent for Emergency Procedures

This protocol defines the scope of the emergency exception to the informed consent requirement when a patient needs immediate medical care and is unable to give informed consent:

1. When a delay in treatment would jeopardize the health of a patient and the patient is unable to give informed consent, an exception to the requirement for obtaining informed consent from the patient is made.

2. If the patient is unable to consent and has a legally authorized representative who is available to consent, the treating physician must obtain the informed consent of the representative.

3. When informed consent cannot be obtained from the patient or from his or her legally authorized representative, the physician treating the patient should determine the immediacy of the need for treatment.
   a. A physician may provide any treatment or perform any procedure immediately required to prevent serious disability or death or to alleviate great pain and suffering.
   b. During the course of an operation or a procedure, a physician may perform any procedure that becomes necessary because of a condition discovered or arising during the operation or the procedure that presents an immediate threat to the life or the health of the patient.

4. The emergency exception to the requirement of informed consent does not extend to a conscious, competent adult patient, otherwise able to give his or her own informed consent, who has refused to consent to a treatment or a procedure.

5. The need for immediate treatment is documented in the patient’s medical record. Documentation includes all information establishing the nature, immediacy, and magnitude of the problem and the impossibility of obtaining consent under the circumstances. Any consulting physicians should enter their findings and recommendations in the record. All notes should show the date and time that the determinations were made.
Informed Consent: Elective Procedure Guidelines

- Explain
  - The purpose and nature of the procedure
  - The method by which the procedure will be performed
  - The risks, complications, and expected benefits or effects
  - The risk of not accepting the procedure
  - Reasonable alternatives and their most likely risks and benefits
  - The right to refuse the procedure
Informed Consent: Elective Procedure Guidelines

- Explain
  - The purpose and nature of the procedure
  - The method by which the procedure will be performed
  - The risks, complications, and expected benefits or effects
  - The risk of not accepting the procedure
  - Reasonable alternatives and their most likely risks and benefits
  - The right to refuse the procedure

- Document
Informed Consent: **Emergency Procedure Guidelines**

- When informed consent cannot be obtained (from patient or legally authorized representative), the physician treating the patient should assess the immediacy of the need for treatment.
  - A physician may perform any procedure immediately required to prevent serious disability or death or to alleviate great pain and suffering.
  - During the course of a procedure, a physician may perform any procedure that becomes necessary because of a condition discovered or arising during the operation or the procedure that presents an immediate threat to the life or the health of the patient.
- The need for immediate treatment should be documented.
Informed Consent: Emergency Procedure Guidelines

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- The need for immediate treatment should be documented.
Informed Consent: Emergency Procedure Guidelines

- If the patient is unable to consent and a legally authorized representative is available to consent, the treating physician must obtain consent of the representative.
- The emergency exception does not extend to a conscious, competent adult patient who has refused to consent.
Informed Consent: Emergency Procedure Guidelines

- If the patient is unable to consent and a legally authorized representative is available to consent, the treating physician must obtain consent of the representative.

- The emergency exception does not extend to a conscious, competent adult patient who has refused to consent.
Informed Consent: Case Study

I Agree that I am consenting to have: Name of Procedure (Description in Layman Terms):

[Handwritten: Ranoff angiogram]
Informed Consent: Case Study
Informed Consent: Case Study

RADIOLOGY FINAL REPORT

Pt. Name: [Redacted]  Unit#: [Redacted]
Ord Phy: [Redacted]  Acc#: [Redacted]
Ordered Date/Time: [Redacted]  Dob: [Redacted]  Age: [Redacted]  Sex: [Redacted]
Patient Type: [Redacted]  Loc: [Redacted]
Adm: [Redacted]  DC Date/Time: [Redacted]

Ord Proc: SP ANGIOGRAM
Ord Diag: CLAUDICATION

PROCEDURE:
Aorta and runoff angiogram.
Bilateral renal arteriogram.
Right renal angioplasty with stent.

CLINICAL HISTORY:
Progressive claudication.

PROCEDURE:
After sterile preparation and local anesthesia with 1% lidocaine, 21 gauge needle access
Q: So, it was your understanding that Dr. X was only going to be working on your legs?

A: Yes, I wasn’t having any problem with my kidneys. They were just fine. If I known he was going to be messing with my kidneys, there ain’t no way I would have let him do that.
Informed Consent: Case Study

Q: So, it was your understanding that Dr. X was only going to be working on your legs?

A: Yes, I wasn’t having any problem with my kidneys. They were just fine. If I known he was going to be messing with my kidneys, there ain’t no way I would have let him do that.
How Many Physicians View Informed Consent

Do we have consent?
Informed Consent isn’t Just a Form

- Informed consent
Informed Consent is a Process

- Informed consent is a process
- The form is just an affirmation of the consent process
Informed Consent is a Process

- Informed consent is a process
- The form is just an affirmation of the consent process

Ask yourself?
- Was there a real conversation?
- Did the patient truly understand?
- Were other family members involved?
Informed Consent is a Process

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Agenda

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3. Communication deficiencies
4. Complications and informed consent
5. Litigation considerations
Two Types of Witnesses

- Fact witness
  - Typically an observer
  - Can usually only testify about facts that have been seen or heard

- Expert witness
  - An individual with scientific, technical, or other special knowledge
  - Can testify about facts
  - Can also render opinions in areas of expertise
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  - An individual with scientific, technical, or other special knowledge
  - Can testify about facts
  - Can also render opinions in areas of expertise
This is Not Science!

- Scientists ideally focus solely on the evidence without the influence of the parties’ goals.
- Attorneys work in an adversarial system and look to sway the trier of fact with the most articulate, understandable, presentable, and persuasive expert, rather than the best scientist.
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- Attorneys work in an adversarial system and look to sway the trier of fact with the most articulate, understandable, presentable, and persuasive expert, rather than the best scientist.
Criteria for Malpractice Claim

- **Duty**
  - Exists when a health care entity or provider undertakes care or treatment of a patient

- **Breach**
  - Provider failed to conform to the relevant *standard of care*

- **Causation**
  - That breach was a proximate cause of the injury

- **Damages**
  - Without damages, there is no basis for judgment, regardless of negligence
Who Determines the Standard of Care?

- The jury does
- Based on the opinions of dueling experts

\[ A: \text{Are you saying, Doctor, that every time a radiologist misses a diagnosis on an X ray, he or she is guilty of malpractice?} \]
\[ W: \text{Yes.} \]
Radiology Expert Witness Considerations

ACR Practice Parameter on the Physician Expert Witness in Radiology and Radiation Oncology, 2017
Radiology Experts Should Avoid Bias

- “In a medical liability case, the expert opinion should be based on all relevant clinical and radiologic information available at the time of the incident now under review.”
- “Information, facts, and results of imaging studies performed after the incident generally should not be used to formulate an opinion.”
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Expert Witness Characteristics: Anesthesiology

- Anesthesiologists in 295 cases
- Averaged 30+ years of expertise
- Defense experts:
  - More likely to have a higher scholarly impact
  - More likely to practice in an academic setting
- “Defense expert witnesses may have greater expertise than plaintiff expert witnesses.”

A Comparison of Plaintiff and Defense Expert Witness Qualifications in Malpractice Litigation in Anesthesiology

Brian M. Radovansky, BA,* William T. Farver, BA,* Peter F. Svider, MD,† Jean Anderson Eloy, MD, FACS,‡ Yurly A. Gubenko, MD,* and Jean Daniel Eloy, MD*

BACKGROUND: Expert witnesses serve a crucial role in the medicolegal system, interpreting evidence so that it can be understood by jurors. Guidelines have been established by both the legal community and professional medical societies detailing the expectations of expert witnesses. The primary objective of this analysis was to evaluate the expertise of anesthesiologists testifying as expert witnesses in malpractice litigation.

METHODS: The WestlawNext Legal database was searched for cases over the last 5 years in which anesthesiologists served as expert witnesses. Internet searches were used to identify how long each witness had been in practice, Departmental websites, the Scopus database, and state medical licensing boards were used to measure scholarly impact (via the h-index) and determine whether the witness was a full-time faculty member in academia.

RESULTS: Anesthesiologists testifying in 295 cases since 2008 averaged over 30 years of experience per person (mean ± SEM, defense, 33.4 ± 0.7, plaintiff, 33.1 ± 0.6, P = 0.76). Individual scholarly impact, as measured by h-index, was found to be lower among plaintiff experts (mean ± SEM, 4.8 ± 0.5) than their defendant counterparts (mean ± SEM, 8.1 ± 0.8; P = 0.02). A greater proportion of defense witnesses were involved in academic practice (65.7% vs 54.8%, P = 0.04).

CONCLUSIONS: Anesthesiologists testifying for both sides are very experienced. Defense expert witnesses are more likely to have a higher scholarly impact and to practice in an academic setting. This indicates that defense expert witnesses may have greater expertise than plaintiff expert witnesses. (Anesth Analg 2015;120:1369-74)
Expert Witness Characteristics: Otolaryngology

- Otolaryngologists in 143 cases
- Defense experts:
  - Significantly more practice experience than plaintiff witnesses
  - Overall higher scholarly impact
- “Otolaryngologists who repeatedly served as expert witnesses were more likely to be testifying on behalf of plaintiffs than defendants.”

Comparison of Plaintiff and Defendant Expert Witness Qualification in Malpractice Litigation in Otolaryngology

Jean Anderson Elsay, MD,1–3, Peter F. Svidor,1, Dharti Patel1, Michael Setzen, MD,4,1, and Soly Barode, MD,2

Objective. Malpractice litigation contributes to rising health care costs in the United States. The role of expert witness testimony has been controversial in the past, with medical professional societies issuing statements regarding ethical obligations of physicians. Our objectives were to examine the relative qualifications of expert witnesses testifying on behalf of plaintiffs vs defendants.

Study Design and Setting. Analysis of expert witness and physician demographic data available on several databases.

Methods. The Westlaw legal database (Thomson Reuters, New York, New York) was searched for otolaryngologist expert witness testimony. Length of experience, practice setting, and subspecialty training information were obtained from hospital, practice, departmental, and state licensing board sites. Scholarly impact was assessed using calculation of the h-index from the Scopus database.

Results. Plaintiff expert witnesses had significantly less experience than those testifying for defendants (31.8 vs 35.4 years, P = .047) and lower scholarly impact (h = 6.3 vs 10, P = .049). A significantly higher proportion of defendant witnesses were in academic practice (49.3% vs 31.7%, P = .042). No differences were detected in postresidency fellowship training patterns.

Conclusion. Upon comparison of otolaryngologist expert witnesses, practitioners testifying on behalf of plaintiffs had statistically fewer years of experience, had a lower scholarly impact, and were less likely to work in an academic setting. Otolaryngologists who repeatedly served as expert witnesses were more likely to be testifying on behalf of plaintiffs than defendants. Professional societies may need to frequently update guidelines on expert witness testimony and address the ethical obligations of practitioners.

Perspectives on Expert Witnesses: Neurosurgery

- Neurosurgeons in 326 cases
- Averaged 30+ years of experience
- Defense experts:
  - Statistically higher scholarly impact
  - More likely to practice in an academic setting
- “Those testifying on behalf of plaintiffs were more likely to testify multiple times than those testifying on behalf of defendants (20.4% vs 12.6%).”

Comparison of plaintiff and defendant expert witness qualification in malpractice litigation in neurological surgery

**Clinical article**

JEAN ANDERSON ELOY, M.D.,*1,2 PETER F. SYDER, M.D.,*1,4 ADAM J. FOLBE, M.D.,*1,4 WILLIAM T. COULDWELL, M.D., PH.D.,*1,4 AND JAMES K. LEE, M.D.1,4

Departments of *1Neurosurgical and 2Otolaryngology–Head and Neck Surgery, and 3Center for Skull Base and Pituitary Surgery, Rutgers University, New Jersey Medical School, Newark, New Jersey; *4Department of Otolaryngology—Head and Neck Surgery, Wayne State University School of Medicine, Detroit, Michigan; and 4Department of Neurosurgery, University of Utah, Salt Lake City, Utah

Object. Expert witnesses provide a valuable societal service, interpreting complex pieces of evidence that may be misunderstood by nonmedical laypersons. The role of medical expert witness testimony and the potential professional repercussions, however, have been controversial in the medical community. The objective of the present analysis was to characterize the expertise of neurological surgeons testifying as expert witnesses in malpractice litigation.

Methods. Malpractice litigation involving expert testimony from neurological surgeons was obtained using the WestlawNext legal database. Data pertaining to duration of a surgeon’s practice, scholarly impact (as measured by the h index), practice setting, and the frequency with which a surgeon testifies were obtained for these expert witnesses from various online resources including the Scopus database, online medical faculty and practice sites, and state medical licensing boards.

Results. Neurological surgeons testifying in 326 cases since 2008 averaged over 30 years of experience per person (34.5 years for plaintiff witnesses vs 33.2 for defense witnesses, p = 0.35). Defense witnesses had statistically higher scholarly impact than plaintiff witnesses (h index = 8.76 vs 5.44, p < 0.001). A greater proportion of defense witnesses were involved in academic practice (46.1% vs 34.4%, p < 0.001). Those testifying on behalf of plaintiffs were more likely to testify multiple times than those testifying on behalf of defendants (20.4% vs 12.6%).

Conclusion. Practitioners testifying for either side tend to be very experienced, while those testifying on behalf of defendants have significantly higher scholarly impact and are more likely to practice in an academic setting. Potentially indicating a greater level of expertise. Experts for plaintiffs were more likely to testify multiple times. Surgical societies may need to clarify the necessary qualifications and ethical responsibilities of those who choose to testify.

(https://neurosurg.org/article/10.3171/2013.8.JNS13584)

Tactics and Strategies

“In weighing the opinions of experts, you may look at their qualifications, the reasoning process the experts used, and the overall credibility of their testimony. You may also look at things like bias, consistency, and reputation.”
Making or Breaking an Expert

- Qualifications
- Reasoning
- Credibility
- Bias
- Consistency
- Reputation
Tactics and Strategies

- Know the facts
  - Undisputable
  - Disputable
Tactics and Strategies

- Know the facts
  - Undisputable
  - Disputable
- Know the opinions
  - Undisputable
  - Disputable
Tactics and Strategies

- Know the facts
  - Undisputable
  - Disputable
- Know the opinions
  - Undisputable
  - Disputable

- Prepare for your testimony
  - Articulate
  - Understandable
  - Presentable
  - Persuasive
“I’ve Been Served”

- Don’t panic
- Contact your malpractice carrier
- Share details only with your attorney, or as directed by your attorney

https://www.ama-assn.org/residents-students/transition-practice/anatomy-lawsuit-what-medical-residents-need-know
Next Steps

- Meet with your attorney
- Be honest with your attorney
- Do your homework
  - Facts of case
  - Literature review
- Get engaged
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Next Steps

▪ Meet with your attorney
▪ Be honest with your attorney
▪ Do your homework
  ▪ Facts of case
  ▪ Literature review
▪ Get engaged
  ▪ Hindsight bias

Hindsight Bias:

“…the tendency for people with knowledge of the actual outcome of a case to believe falsely that they would have predicted the outcome.”

As to whether hindsight bias influences a radiology expert’s opinion regarding radiographs brought by an attorney for review, one of the defense experts asserted that it certainly did. “I’ve never had an attorney bring me a normal radiograph,” testified the expert. “Whenever an attorney shows or sends me radiographs, the first and only question that comes to my mind is, what was missed on these films?”

Next Steps

- Meet with your attorney
- Be honest with your attorney
- Do your homework
  - Facts of case
  - Literature review
- Get engaged
  - Hindsight bias
  - Expert selection

Retain the Right Expert(s)

“Attorneys work in an adversarial system and look to sway the trier of fact with the most articulate, understandable, presentable, and persuasive expert, rather than the best scientist.”

ACR Practice Parameter on the Physician Expert Witness in Radiology and Radiation Oncology

“Although patients are the first and obvious victims of medical mistakes, doctors are wounded by the same errors: they are the second victims.”
“Although patients are the first and obvious victims of medical mistakes, doctors are wounded by the same errors: they are the second victims.”
Second Victim Effect

- Malpractice litigation contributes to physician self-doubt, depression, and burnout.
Second Victim Effect by Proxy

- The specter of malpractice litigation influences physicians’ emotions, thinking, and behavior.
Second Victim Effect by Proxy

- The fear of medical malpractice litigation adversely impacts physician communication with patients and drives many physicians to impose restrictions on the patients they see and the services they will provide.
Policy Implications
Summary

- The best way to never lose a lawsuit is to never get sued
- But that’s not realistic
- The best you can do is to mitigate your risk by practicing as good as you can…
- And being prepared to actively and aggressively engage in your own defense if you do get sued
Thank You!

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If you are an SVMIC policyholder and wish to receive credit for participating in this program on 2/20/2021, please email your name to AlyssaB@svmic.com and include the following information:

• I attended Dr. Duszak’s presentation on Saturday, February 20, 2021.
• My SVMIC account number is ______.
• Magic Number: 71350

The deadline to claim your credit is Friday, February 26.