Addressing Diagnostic Error

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What is the number??

40,000 – 80,000 deaths (autopsy data)

1 in 10 diagnoses are wrong (secret shoppers)

1 in 3 people surveyed have experienced a dx error (survey)

Most common cause for a malpractice claim (CRICO, VA, KP)

1 in 20 patients will experience a dx error every year (chart review)
“It is likely that most of us will experience at least one diagnostic error in our lifetime, sometimes with devastating consequences.”
Where do they happen?

CRICO - Analysis of 4519 claims related to diagnostic error
Why do they happen?

Dx is complex -- 10,000 diseases
Uncertainty at every step

Patient’s Clinical Course

SYSTEM

Communication, coordination, training, policies, procedures

BLUNT end

SHARP end

Me

Cognitive
Getting the right diagnosis is a key aspect of health care: it provides an explanation of a patient’s health problem and informs every subsequent health care decision.

Diagnostic errors persist through all settings of care and harm an unacceptable number of patients; Diagnostic error is a significant but underappreciated challenge to health care quality.
IOM Report Recommendations

1. **Improve communication and teamwork** in every healthcare setting (Patients, MD’s, RN’s, Radiology, Pathology, everyone)

2. **Education**: Ensure medical training programs promote dx competency (Course on diagnosis, interdisciplinary); Assess competency

3. **ONC and vendors** should work to optimize the use of health IT to improve diagnosis (Usability, decision support, for measurement, address unanticipated consequences)

4. **HCO’s** should identify, learn from and reduce dx errors, monitor the dx process, provide feedback to providers; Resurrect autopsies
IOM Report Recommendations

5 Professional societies should identify opportunities in their domains to improve dx

6 AHRQ should help promote reporting through PSO’s, provide a Common Format for dx

7 Payment reform: Provide time for dx; de-emphasize coding

8 Research: HHS, DOD, VA to develop a coordinated and funded research agenda by 2016
Policy Implications

What’s the Cost of Dx Error?

The Need for Research

The Problem of Ownership
What’s the Cost of Diagnostic Error?

At a time when we know the cost of EVERYTHING in health care ..... And when the cost of healthcare is SO HIGH, and RISING And we know that potentially one third of health care costs could be WASTE....

THE COST OF DIAGNOSTIC ERROR HAS NEVER BEEN ESTIMATED
The Need for Research

Patient & family engagement – 6
Educating healthcare professionals – 5
Health IT – 7
Finding, analyzing, reducing Dx error – 15
Work system improvements – 4
Policy and finance - 4

41 Research Priorities in the IOM Report:

How can we measure diagnostic performance ??
What IS the likelihood of dx error in practice today ??
What IS timely diagnosis ??
What interventions work ??
## Top 10 Causes of Death

<table>
<thead>
<tr>
<th>Cause</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular disease</td>
<td>596,339</td>
</tr>
<tr>
<td>Cancer</td>
<td>575,313</td>
</tr>
<tr>
<td>Chronic lower respiratory disease</td>
<td>143,382</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>128,831</td>
</tr>
<tr>
<td>Accidents</td>
<td>122,777</td>
</tr>
<tr>
<td>Alzheimer's disease</td>
<td>84,691</td>
</tr>
<tr>
<td>Diabetes</td>
<td>73,282</td>
</tr>
<tr>
<td><strong>DIAGNOSTIC ERROR</strong></td>
<td><strong>60,000</strong></td>
</tr>
<tr>
<td>Pneumonia and influenza</td>
<td>53,677</td>
</tr>
<tr>
<td>Kidney diseases</td>
<td>45,731</td>
</tr>
<tr>
<td>Suicide</td>
<td>38,285</td>
</tr>
</tbody>
</table>
Research Funding on Leading Causes of Death
Data: GAO (costs) and CDC (deaths), in 2011

- Diabetes: 13.74
- Kidney Disease: 12.05
- Cancer: 9.17
- Pneumonia: 7.58
- Alzheimer's: 5.95
- Cardiovascular: 3.29
- Accidents: 2.99
- COPD: 2.32
- Cerebrovascular: 2.19
- Suicide: 0.97
- Diagnostic Error: 0.03

Million Dollars per 1,000 Deaths
The Problem of Ownership

Hospitals: Its not OUR problem!

Docs: Its not MY problem!

Oversight Organizations: Its not OUR problem!
“Improving the diagnostic process is not only possible, but it also represents a moral, professional, and public health imperative.”