IOM: Improving Diagnosis in Health Care

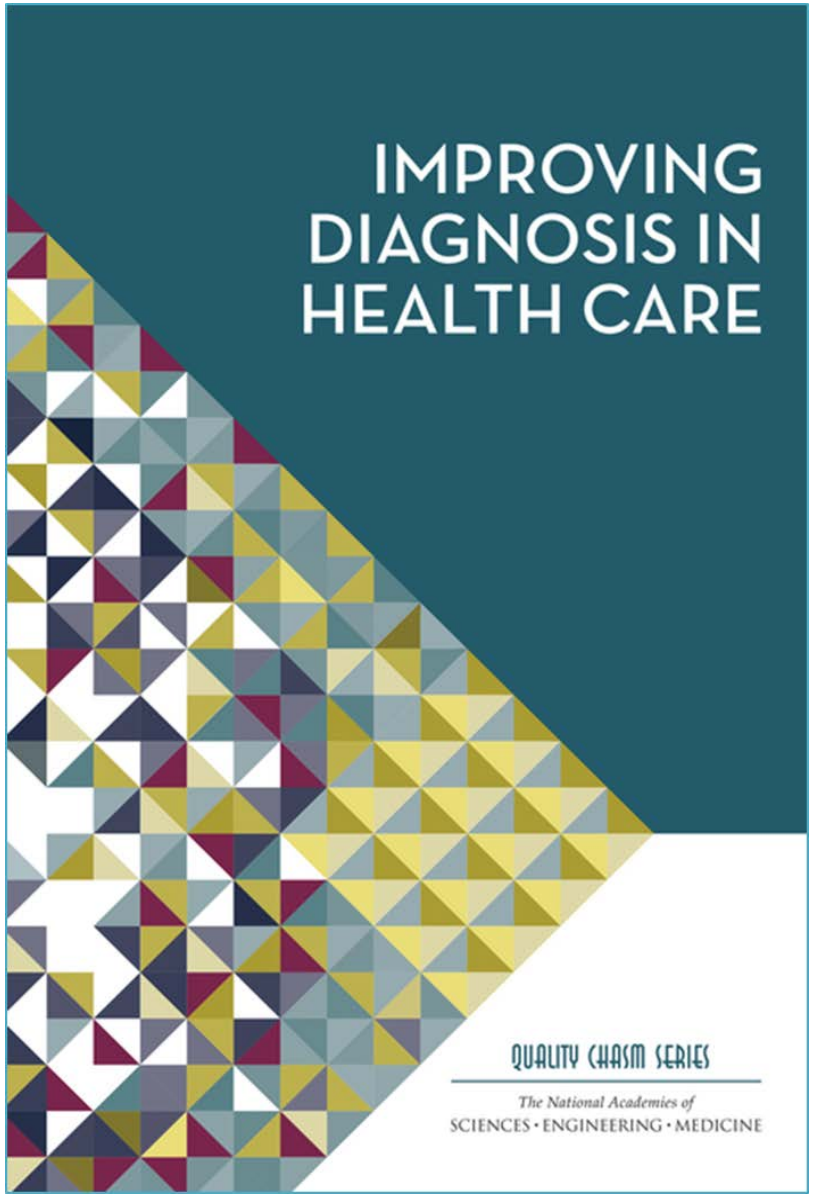
Mark L Graber MD FACP

Senior Fellow – RTI International

Founder and President – SIDM

graber.mark@gmail.com

GOAL



Provide a very brief overview of dx error and the IOM report

Focus on issues relevant to the CDC

Opinions reflect those of SIDM, not the IOM

http://nas.edu/improvingdiagnosis

Study Solicitor

SOCIETY to IMPROVE DIAGNOSIS in MEDICINE

Better Outcomes Through Better Diagnosis

Study Sponsors

Agency for Healthcare Research and Quality

American College of Radiology

American Society for Clinical Pathology

Cautious Patient Foundation

Centers for Disease Control and Prevention

College of American Pathologists

The Doctors Company Foundation

Janet and Barry Lang

Kaiser Permanente National Community Benefit Fund at the East Bay Community Foundation

Robert Wood Johnson Foundation

HOW BIG A PROBLEM IS THIS ??

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)

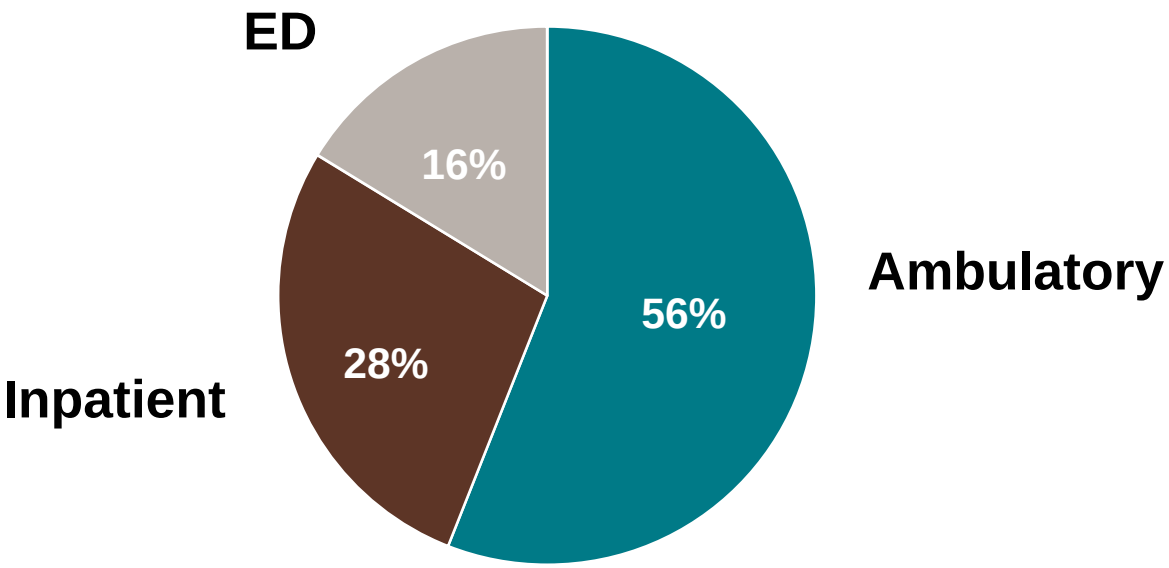
Most common cause for a malpractice claim (CRICO, VA, KP)

1 in 20 patients will experience a dx error every year (chart review)

"The committee recognized that … the available research estimates were not adequate to extrapolate a specific estimate or range of the incidence of diagnostic errors in clinical practice today."

"It is likely that most of us will experience at least one diagnostic error in our lifetime, sometimes with devastating consequences."

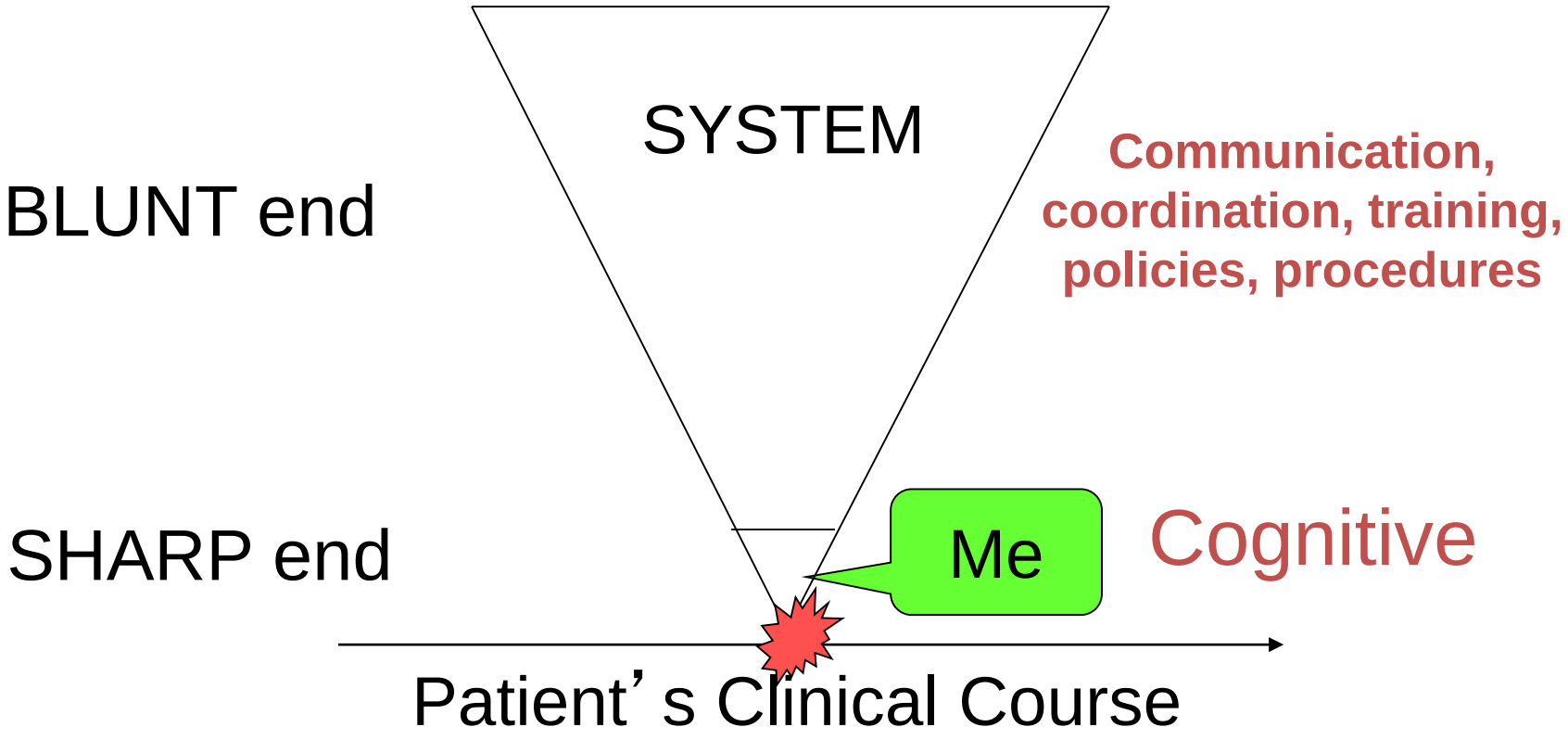
Where are Diagnostic Errors Encountered?



Dana Siegel; CRICO-RMF 2014
CBS N=4,519 PL cases closed 1/1/08–12/31/12 with a diagnosis-related major allegation.

Why do they happen?

100 cases – 535 root causes
Graber et al. Arch Int Med 165:1493-9, 2005



Diagnosis is HARD !

PATIENT VARIABLES

Stage of disease

How it manifests

How it is perceived

How it is described

When help is sought

SYSTEM COMPLEXITY

Disjointed care

Communication barriers

Production pressure

Tight coupling

Access to care & expertise

PHYSICIAN VARIABLES

Knowledge and experience

Access to patient data, tests, consults

Skill in clinical reasoning

Stress, distractions, mood, time to think

10,000 Diseases

5,000 Lab Tests

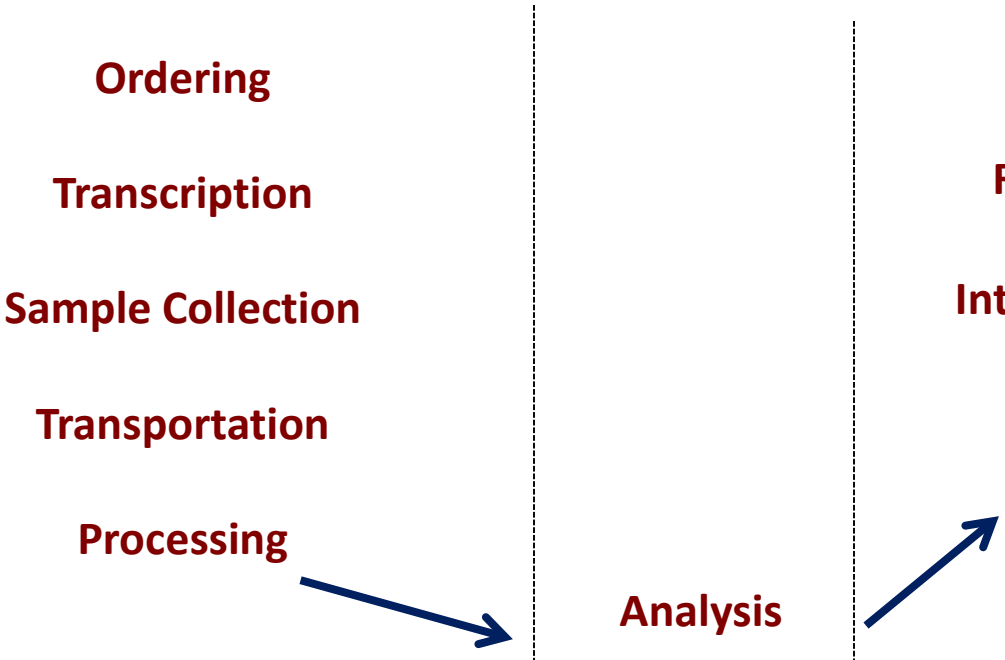
IOM Conclusion

Diagnostic errors are a significant but underappreciated challenge to health care quality

- Getting the right diagnosis is a key aspect of health care: it provides an explanation of a patient's health problem and informs subsequent health care decisions

- Diagnostic errors persist through all settings of care and harm an unacceptable number of patients

The Total Testing Process



	ERROR RATES		
Bench tests:	**14%**	**< 0.1%**	**7.5%**
Anatomic Path		**2-4%**	

IOM Definition of Diagnostic Error

The failure to:

(a) establish an accurate and timely explanation of the patient's health problem(s)

or

(b) **communicate** that explanation to the patient

The single biggest problem in communication is the illusion that it has taken place.
George Bernard Shaw

“I wish I had seen this test result earlier !”

Survey of 262 internists:

83% reported at least one unacceptable delay during the previous 2 months

EG Poon et al. Arch Intern Med 164: p2223-8, 2004

Notification of Abnormal Lab Results

AMBULATORY CARE

Studied 4 alerts: A1c > 15%, PSA > 15 ng/ml, TSH > 15 mIU/L, + Hep C Ab
1163 critical abnls sent over 6 mo period: 10% never acknowledged

Singh et al. Am J Med 2010; 123:238-44

TESTS PENDING AT DISCHARGE

Systematic review of 12 studies

- 23% of inpatients will have tests still pending at discharge
- 10% require action, but physicians are unaware of 60%

Callen et al. Journal of general internal medicine. 2012;27(10):1334-48.

SIDM Recommendation #1:

CDC should encourage laboratories to take responsibility for failsafe communication of ALL test results, and should identify best practices in this area.

(No specific IOM recommendation on this)

IOM: 8 Goals to Improve Diagnosis and Reduce Diagnostic Errors I

1	Facilitate more effective teamwork in the diagnostic process among health care professionals, patients, and their families
2	Enhance health care professional education and training in the diagnostic process
3	Ensure that health information technologies support patients and health care professionals in the diagnostic process
4	Develop and deploy approaches to identify, learn from, and reduce diagnostic errors and near misses in clinical practice
5	Establish a work system and culture that supports the diagnostic process and improvements in diagnostic performance
6	Develop a reporting environment and medical liability system that facilitates improved diagnosis through learning from diagnostic errors and near misses
7	Design a payment and care delivery environment that supports the diagnostic process
8	Provide dedicated funding for research on the diagnostic process and diagnostic errors

IOM GOAL 1
More effective teamwork in the diagnostic process

1A: Health care organizations should ensure…..

- **Involvement of the PATIENT as a member of the team, and NURSES**

- **Collaboration** among **pathologists**, **radiologists**, other **diagnosticians**, and **treating health care professionals** to improve diagnostic testing processes.

SIDM Recommendation #2:

CDC should support the IOM recommendations for Pathologists to be full members of the diagnostic team, and necessary changes in payment practices to allow compensation of consultative services.

IOM GOAL 4
Develop approaches to identify, learn from and prevent diagnostic errors

Autopsy

To counter-act overconfidence, nothing is more powerful than an autopsy to convey the uncertainty of diagnosis

The autopsy has essentially disappeared from use as a learning tool and nothing has replaced this

IOM RECOMMENDATIONS:

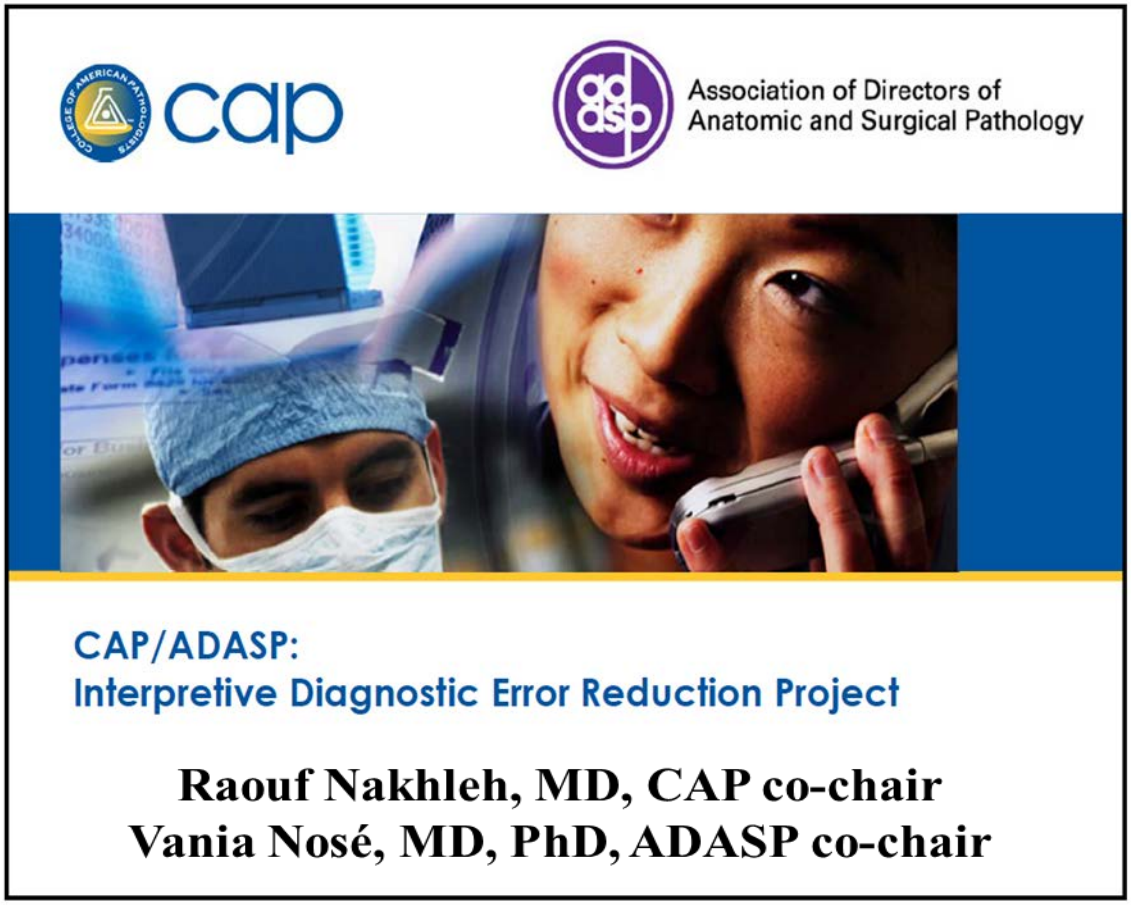
4a: Accreditation organizations and the Medicare conditions of participation should require that health care organizations have programs in place to monitor the
diagnostic process and identify, learn from, and reduce diagnostic errors and near misses in a timely fashion.

4b: Health care organizations should implement procedures and practices to provide systematic feedback on diagnostic performance to individual health care professionals, care teams, and clinical and organizational leaders.

4c: HHS should provide funding for a designated subset of health care systems to conduct routine postmortem examinations on a representative sample of patient

SIDM Recommendation #3:

CDC should support the IOM recommendations that would support learning from autopsies at special centers



148 peer reviewed comparative studies

Swapp et al. Outside case review of surgical pathology for referred patients.

Arch Pathol Lab Med. 2013;137:233–240

5 year look-back at the Mayo Clinic of 71,811 cases

- 457 major disagreements (0.6%)
- Of these: 90% involved a major change of treatment or prognosis

- Of 166 cases with tissue follow-up: second opinion correct in 85%

Park et al. Second opinion in thyroid fine needle aspiration biopsy by the Bethesda System

Endocrine Journal 2012; 59: 205-212

Look back at 1499 patients

- 394 major disagreements (26%)

- Of these disagreements, on follow-up:
  - 69% agreement with second opinion
  - 24% agreement with the first opinion

SIDM Recommendation #4

CDC should endorse second opinions in anatomic pathology and provide more definitive guidance on what cases should be reviewed and by whom

(No specific IOM recommendation on this)

Summary: SIDM Recommends that CDC should support

1. Failsafe communication of lab test results
2. Funded clinical liaison pathologists in every hospital (IOM)
3. Funded autopsies at special centers (IOM)
4. Second opinions on surgical pathology

IOM: "Improving the diagnostic process is not only possible, but it also represents a moral, professional, and public health imperative."