

Preventing Misdiagnosis:

Cognitive Errors In Misdiagnosis

Part 1



Seeing The Answer

Patients want to know

“What is causing my problem?”

Decisions

Multiple possible answers

Challenging conditions

Serious consequences



Poor Decisions

Medical errors cause harm

40,000 – 100,000 deaths per year

What type of mistakes?

Procedural

Clerical

Cognitive

Conclusions: Among malpractice claims, diagnostic errors appear to be the most **common**, most **costly** and most **dangerous** of medical mistakes. The public health burden of diagnostic errors could be **twice** that previously estimated.

Discouraging?
Motivating!

Example Case

- Board Certified Family Physician
- Middle-aged white male patient
- Typical cardiac chest pain
- Positive cardiac risk factors
- Misdiagnosed with GERD
- Died of fatal MI 4 weeks later.

Our Goal

Recognize mental traps

Prevent misdiagnosis



Psychology of Error

Heuristics - Mental Shortcuts

Often useful, sometimes dangerous

Choosing the diagnosis

Availability, Framing and Blind Obedience

Validating the diagnosis

Anchoring and Premature Closure

Psychology of Error

<u>Cognitive Error</u>	<u>Description</u>	
		coast

Availability



Psychology of Error

<u>Cognitive Error</u>	<u>Description</u>	
		Squirrel

Framing



Psychology of Error

<u>Cognitive Error</u>	<u>Description</u>	

Blind Obedience



Psychology of Error

Validating the diagnosis

Psychology of Error

<u>Cognitive Error</u>	<u>Description</u>	

Anchoring



Psychology of Error

<u>Cognitive Error</u>	<u>Description</u>	

Premature Closure



Review

Availability

biased by ease of recall

Framing

biased by details surrounding the clinical data

Blind Obedience

biased by authority or technology

Anchoring

stuck on initial impression

Premature Closure

prematurely halting diagnostic workup

Case review

Case #1 review

Identify and describe the cognitive errors that may have contributed to misdiagnosis



Review

Availability

biased by ease of recall

Framing

biased by details surrounding the clinical data

Blind Obedience

biased by authority or technology

Anchoring

stuck on initial impression

Premature Closure

prematurely halting diagnostic workup

Our Goal

Recognize mental traps that adversely affect our judgement.

How does this help?

- Next topic – prevention strategies.

Case review

Case #2 review

- What was the misdiagnosis in this case?
- Identify and describe the cognitive contributors to misdiagnosis in this case using the cognitive error worksheet.