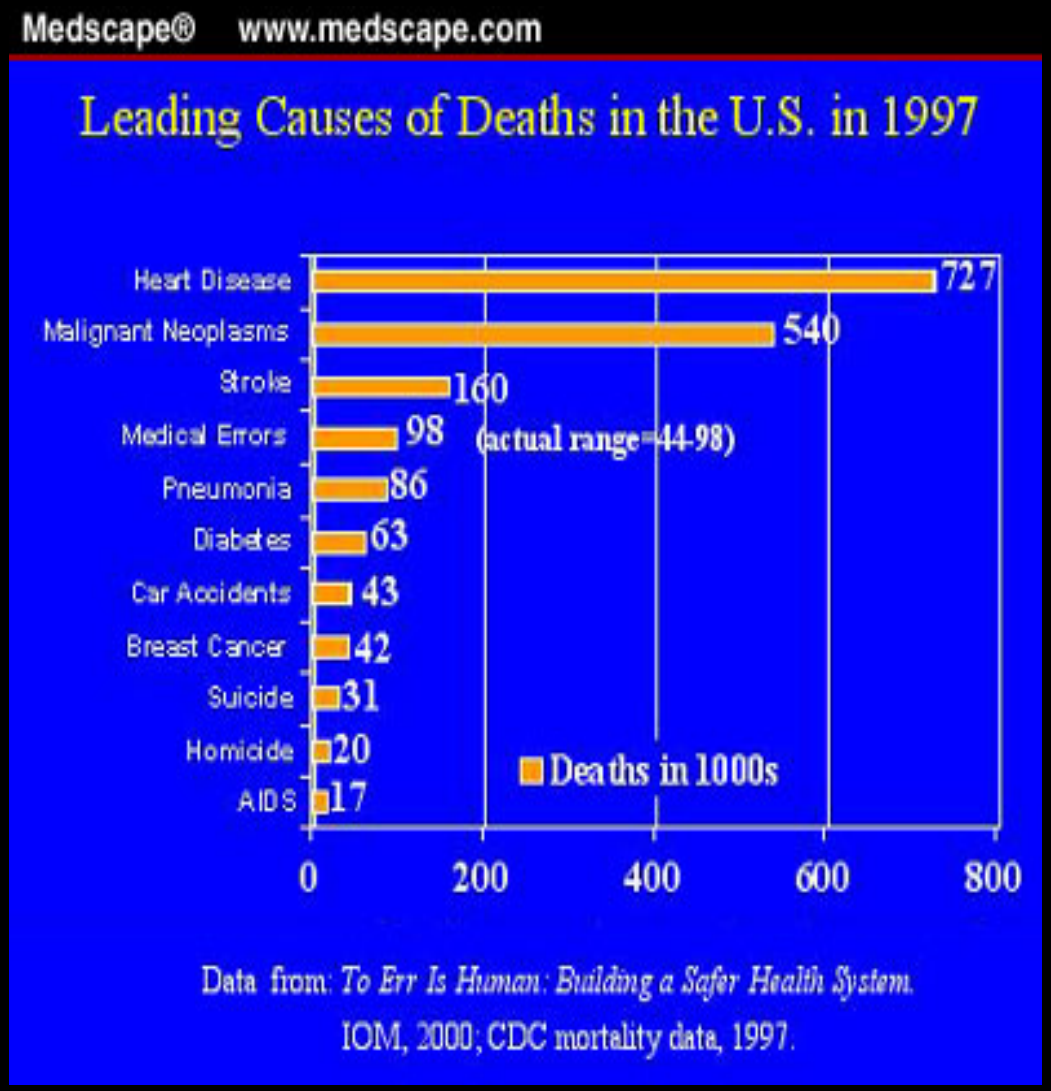
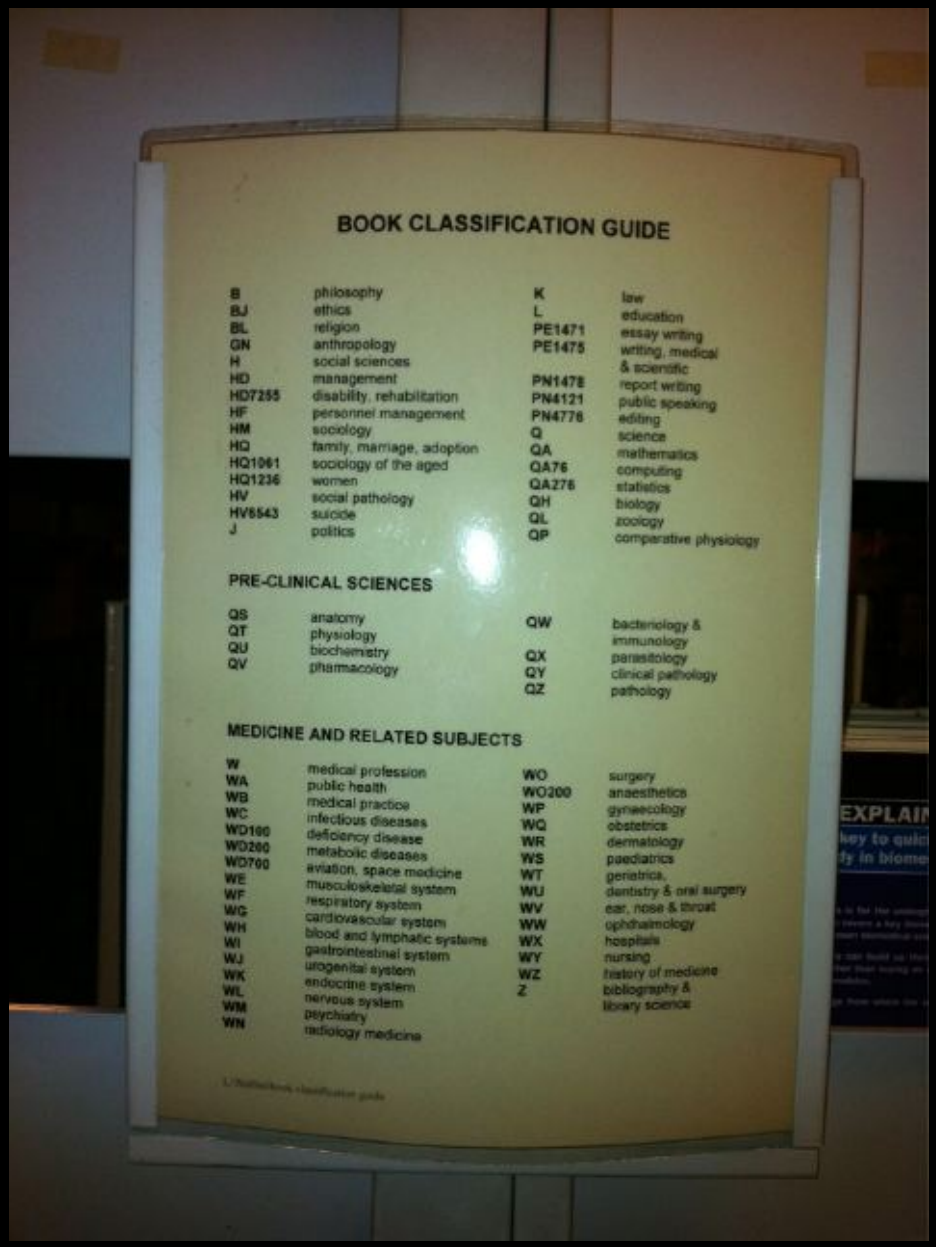
(how to avoid)
Making Medical Mistakes



Linda Kohn, Janet Corrigan, Molla Donaldson 1999

Committee on Quality of Health Care in America

44,000 to 98,000 die as a result of preventable medical errors



Linda Kohn, Janet Corrigan, Molla Donaldson 1999

Committee on Quality of Health Care in America

44,000 to 98,000 die as a result of preventable medical errors

Why??? - the Person Approach

- focus on unsafe act and therefore its perpertrator
- blames aberrant mental processes
  - forgetfullness, carelessness, negligence, recklessness

The Person Approach

Emotionally satisfying

Chimes with ‘people as free agents’

In interests of managers

Legally convenient

Why?? - the System Approach

Humans are fallible and will err

Errors consequences not causes

Origins ‘upstream’ in conditions and practises

Clinical decision making

Problem solving

Emphasizes cognitive processes underlying handling of clinical information.

Ways of putting it together

Decision making

Describes how clinicians choose one rather than another diagnosis

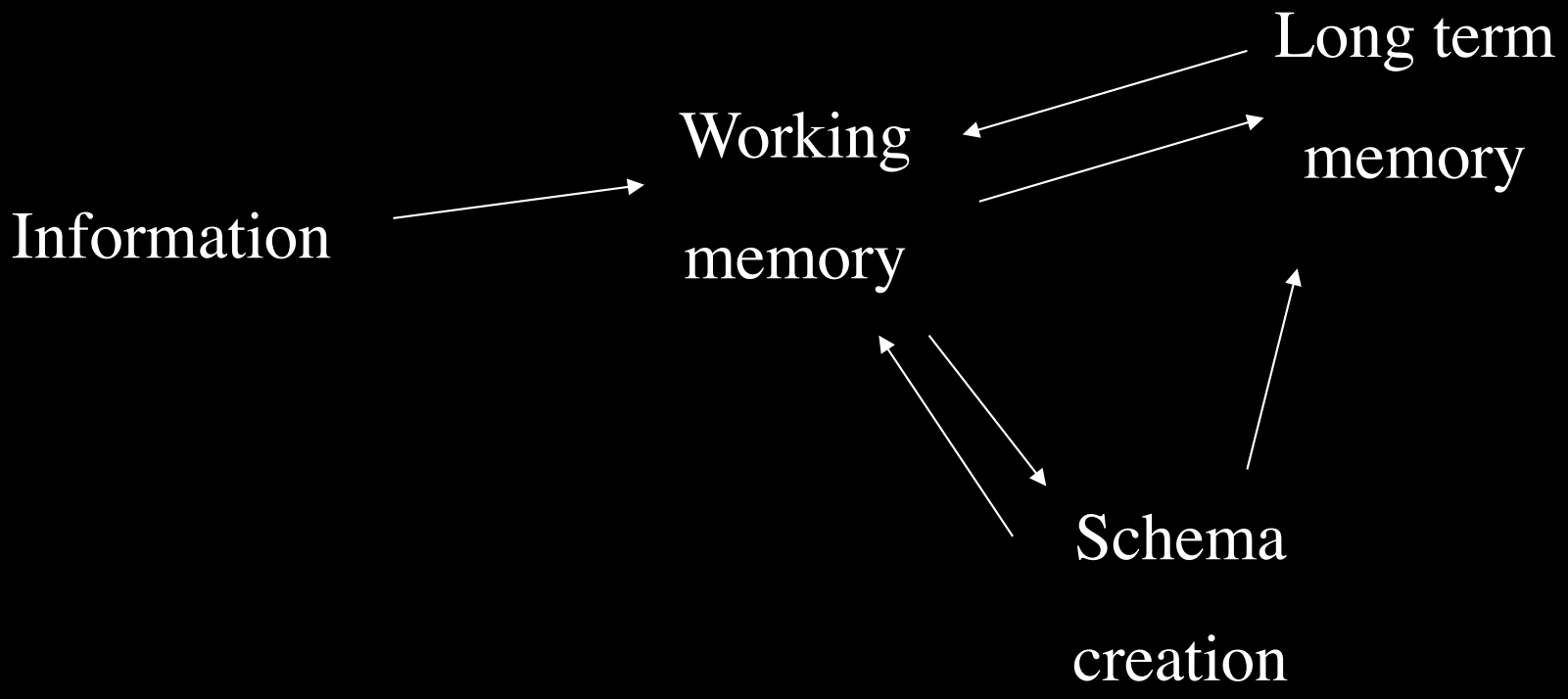
Problem solving approaches

- Hypothesis based
- List based
- Pattern based
- Solution based

Personal biases

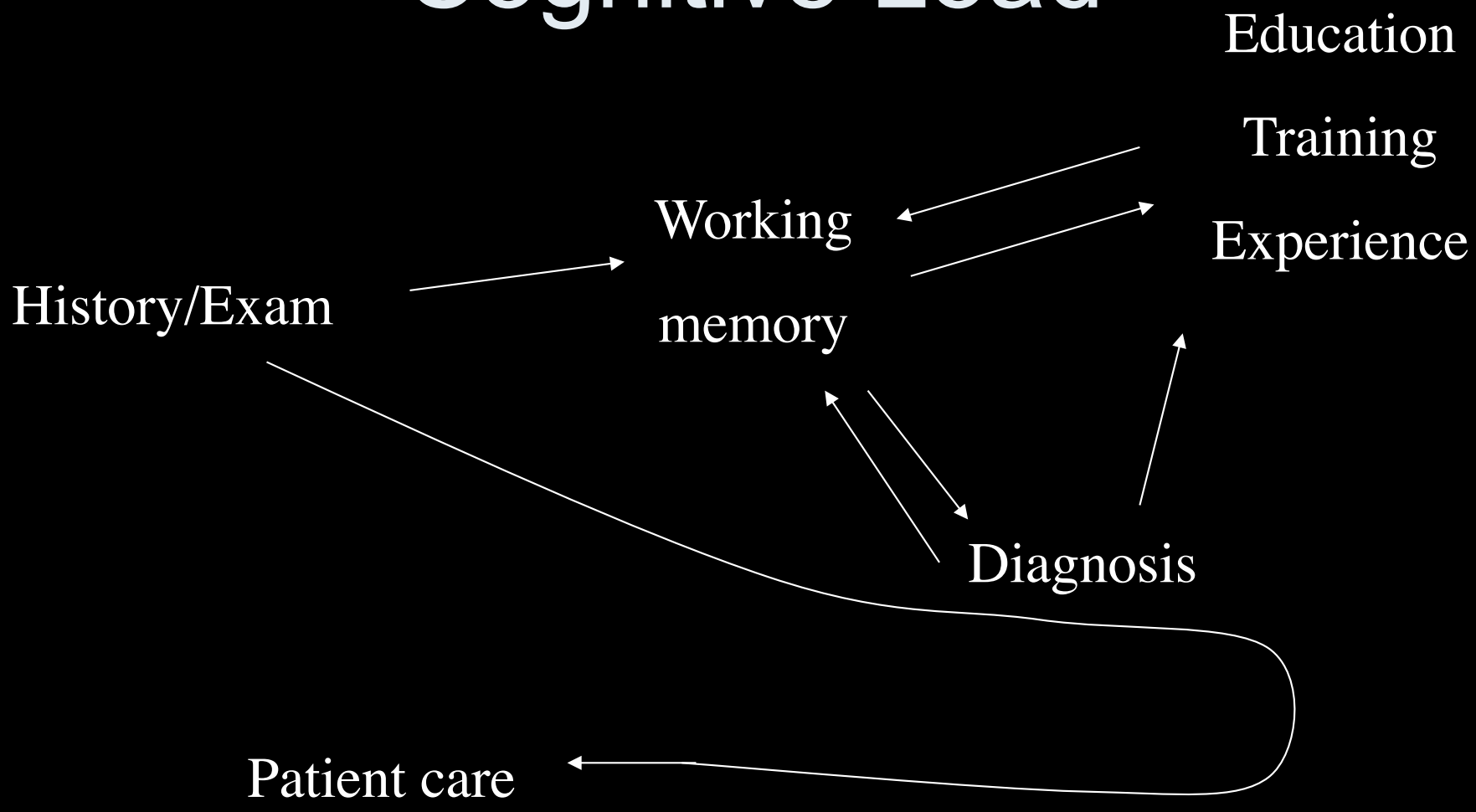
* Anchoring on one piece of information
* Bandwagon effect –doing/believing things because many other people do
* Bias blind spot –seeing oneself as less biased than other people
* Choice-supportive bias –remembering one's choices as better than they were
* Confirmation bias –searching for/interpreting information to confirm preconceptions
* Illusion of control –overestimating one's influence over other external events.
* Impact bias – the tendency to overestimate the length or the intensity of the impact of future feeling states
* Information bias –seeking information even when it cannot affect action
* Omission bias – the tendency to judge harmful actions as worse, or less moral, than equally harmful omissions (inactions)
* Reactance –doing the opposite of what someone wants you to do to resist an attempt to constrain your freedom of choice.
* Semmelweis reflex – the tendency to reject new evidence that contradicts an established paradigm

Cognitive Load



Sweller 1991

Cognitive Load



Cognitive Load

7 +/- 2

Intrinsic cognitive load

inherent difficulty of task

Extrinsic cognitive load

distractions

Germane cognitive load

creating the schema

Types of errors made

system
communication
blinkering
bravado
ignorance

sloth
triage/prioritisation
un-teamwork
training/skills
loss of perspective

So far…..

doctors have multiple strategies to make decisions

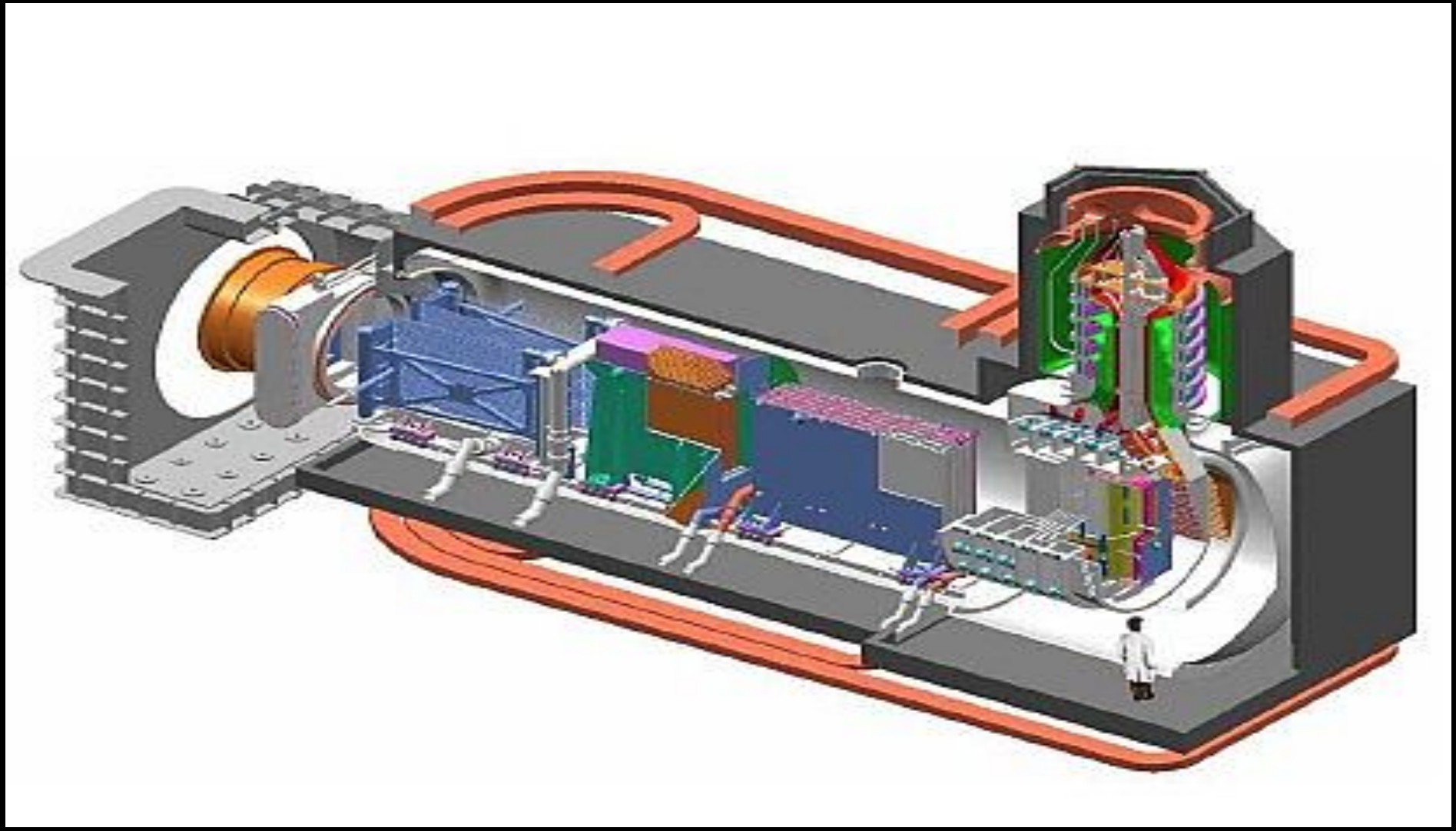
doctors often get it wrong….

……with consequences

doctors are susceptible to multiple biases

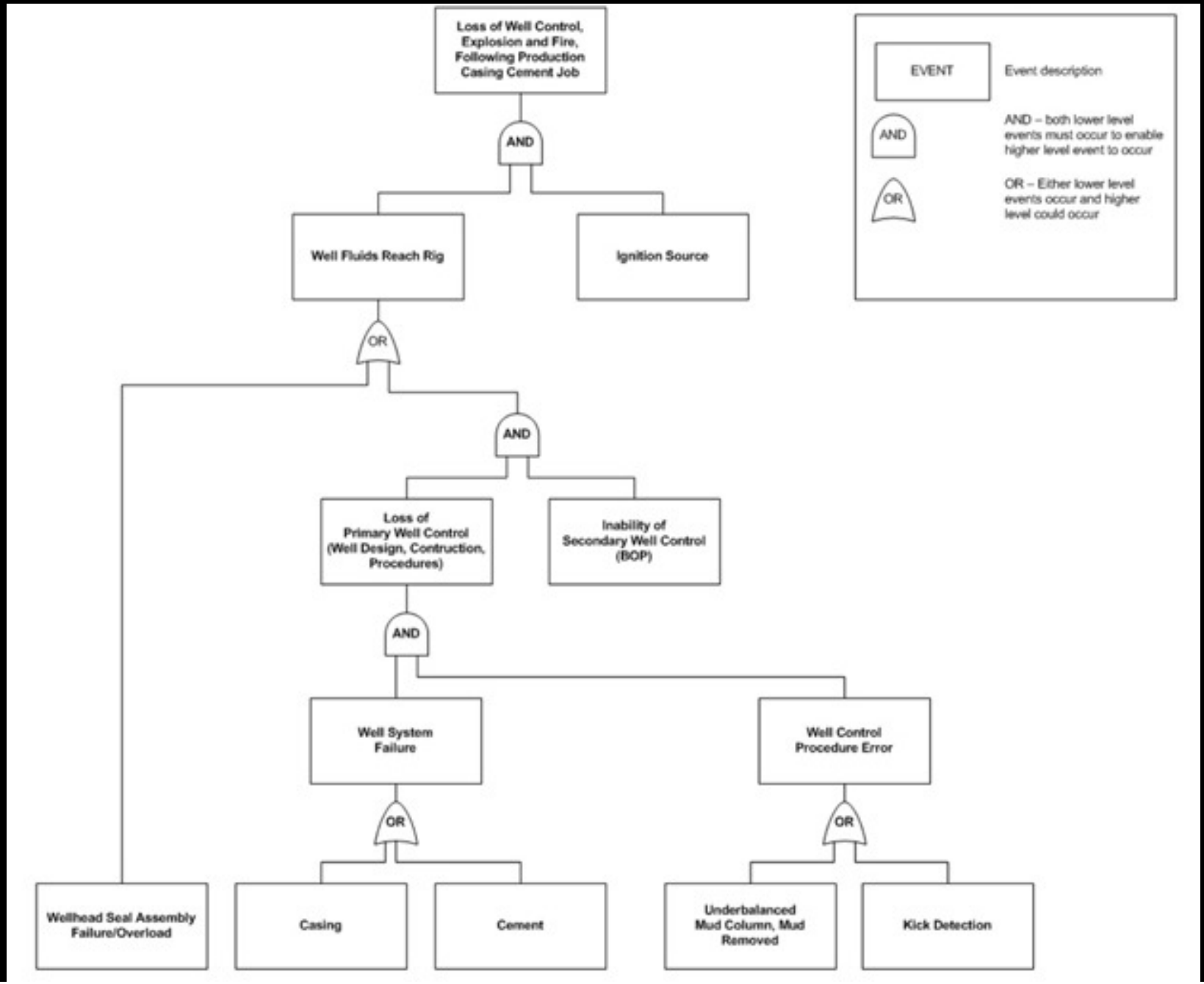
a doctor’s brain is like any other human brain

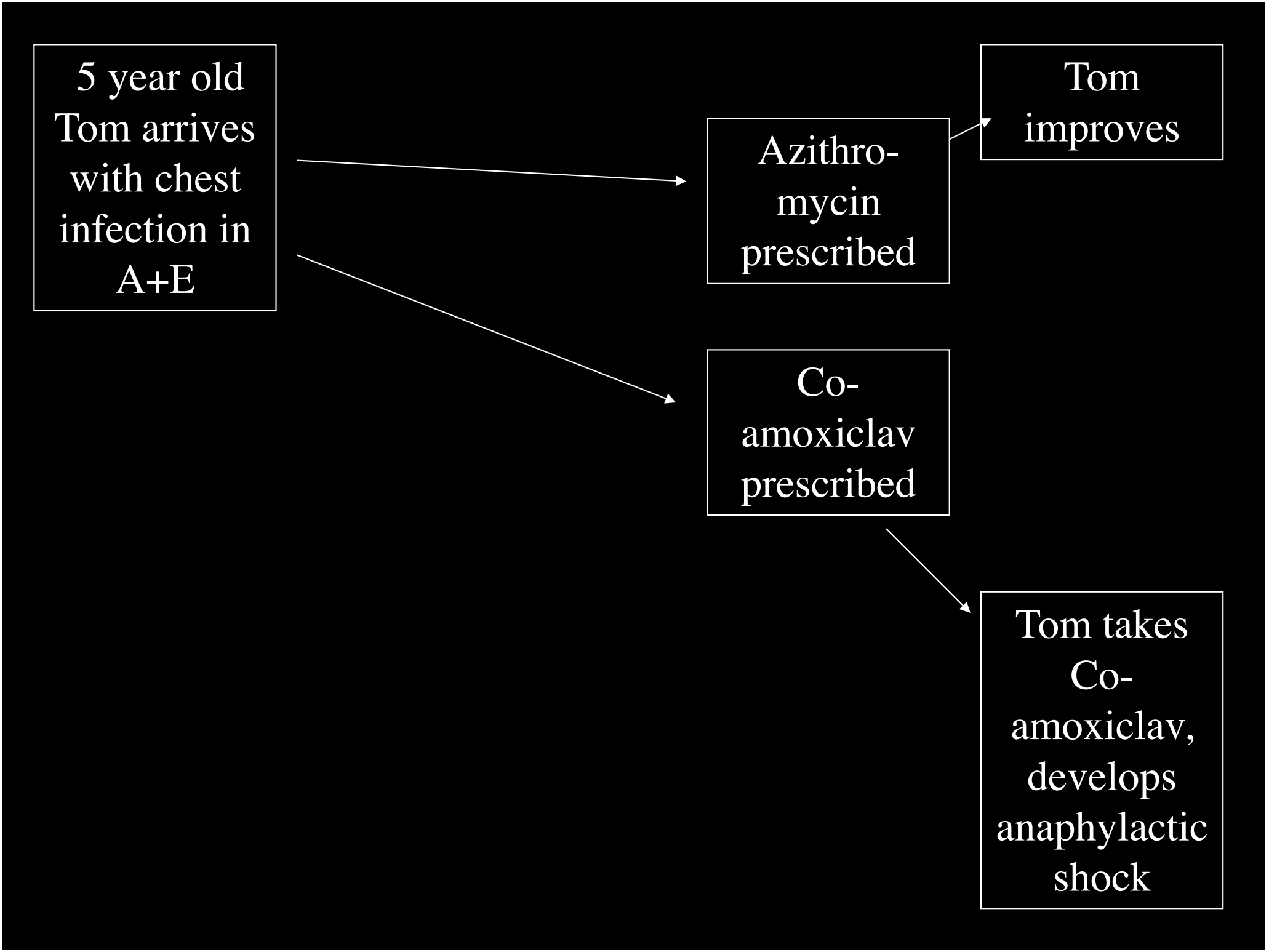
A system approach

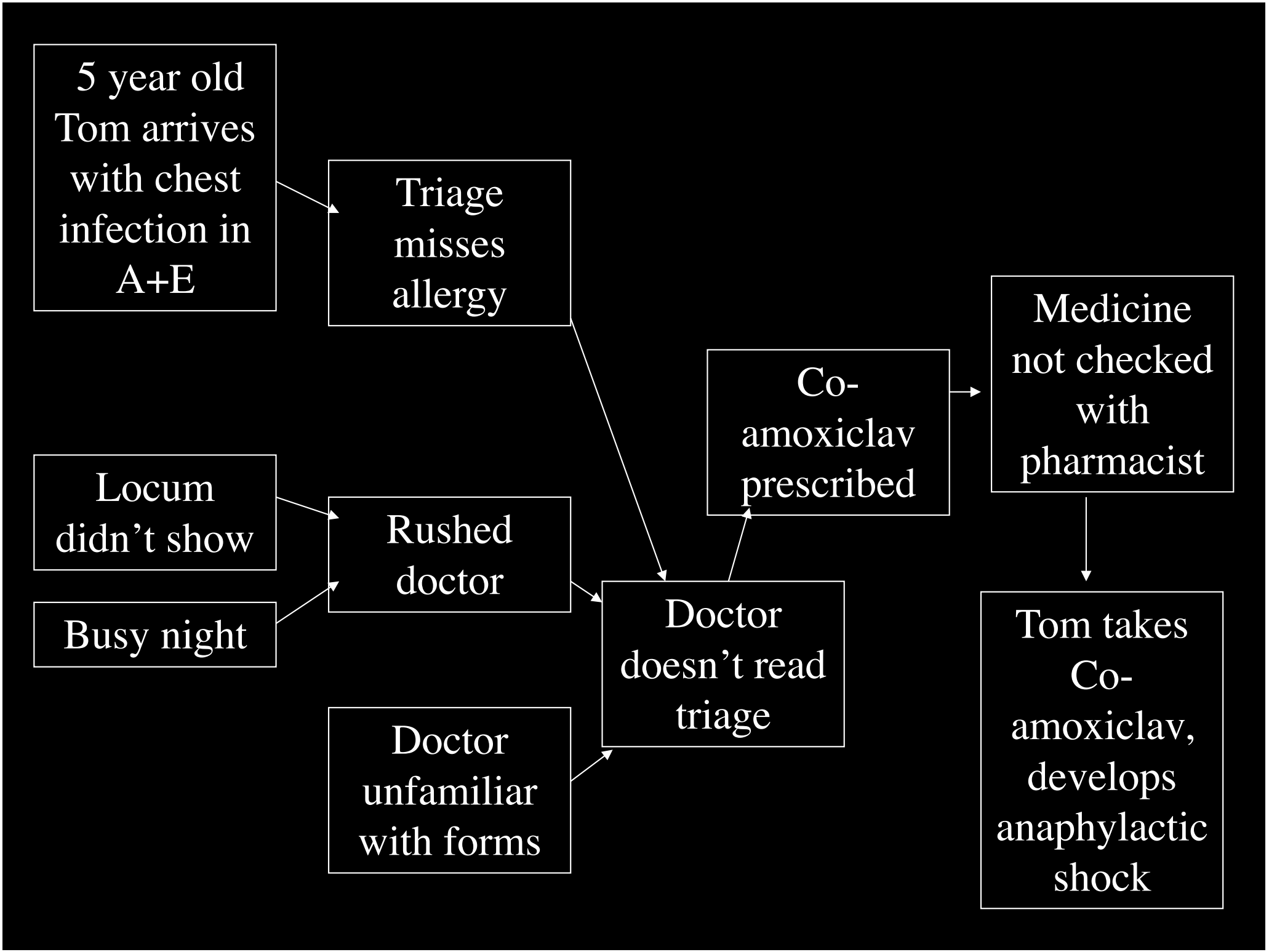


- Humans are fallible
- Systems based on humans will be prone to errors
- System design can reduce potential for errors
- Multiple defences can avoid errors
- Complex adaptive systems can mitigate evolving errors

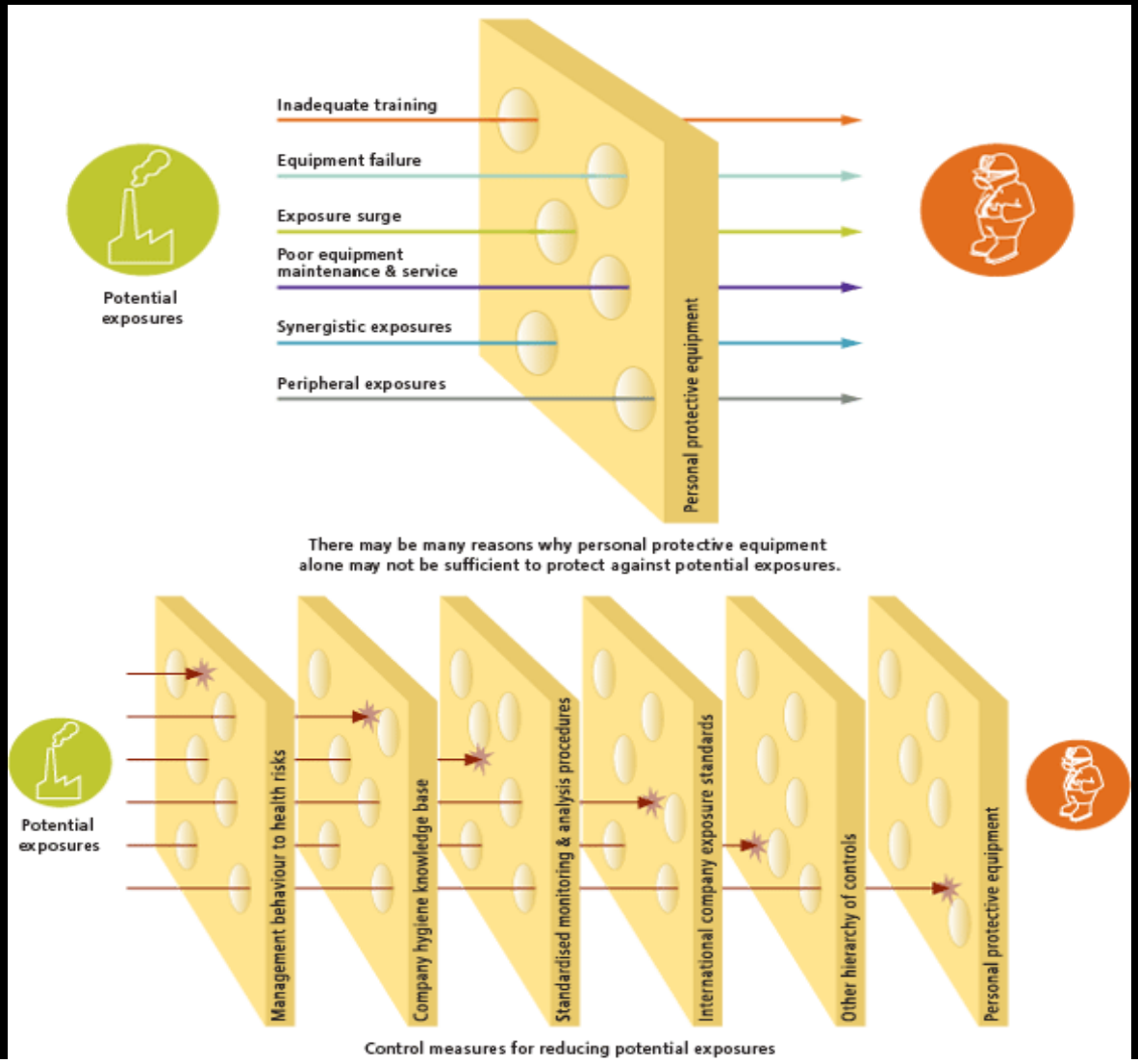
The Fault Tree




5 year old Tom arrives with chest infection in A+E
Azithro-mycin prescribed
Tom improves
Co-amoxiclav prescribed
Tom takes Co-amoxiclav, develops anaphylactic shock


5 year old Tom arrives with chest infection in A+E
Triage misses allergy
Co-amoxiclav prescribed
Medicine not checked with pharmacist
Locum didn't show
Rushed doctor
Busy night
Doctor doesn't read triage
Tom takes Co-amoxiclav, develops anaphylactic shock
Doctor unfamiliar with forms

Multiple layers of defence - the swiss cheese model



Holes in the cheese

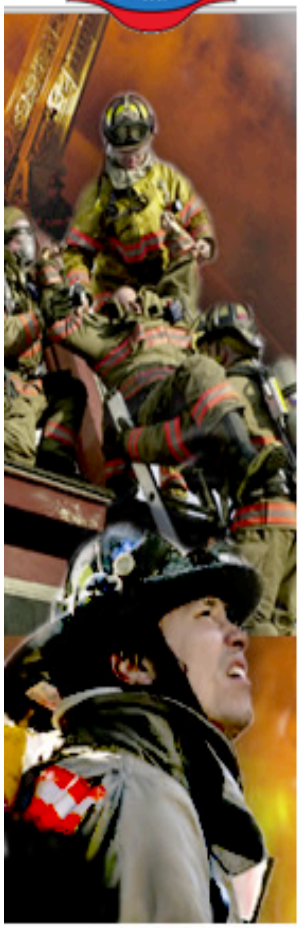
- Unsafe acts
  - errors or violations (exceptional or routine)
- Preconditions
  - internal operator state, poor procedures
- Unsafe supervision
- Organisational
  - resources, organisational culture, processes

Organisational Learning

- Most adverse outcomes have already nearly happened
- Cultural shift - report, analysis, change

National Fire Fighter Near - Miss Reporting System

Become a Facebook Fan



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Welcome to the National Fire Fighter Near-Miss Reporting System

The National Fire Fighter Near-Miss Reporting System is a voluntary, confidential, non-punitive and secure reporting system with the goal of improving fire fighter safety.

Submitted reports will be reviewed by fire service professionals. Identifying descriptions are removed to protect your identity. The report is then posted on this web site for other fire fighters to use as a learning tool.

Submit a Report

Questions? Ask a Report Reviewer

Photos by Jason R. Henske/Fyrfoto.com

Check it Out

The official Near-Miss video is now available to view from our homepage. To download the video visit our Resources Page-Videos and Photos.

Report of the Week

- ROTW 092310: "Every green isn't a guaranteed 'go'." (10-1033) (Defensive Driving)
- ROTW 091610: "Opposing hoselines are harmful to health and welfare." (10-1046) (Opposing Hoselines)
- ROTW 090910: "The tools get heavier with each passing minute." (10-1070) (Chain Saw Use)

→ **Past Reports of the Week**

Many of our files are PDFs and require Adobe Acrobat reader.

Click here to get the latest version for free.

In Affiliation With:

Take home messages….

- HCPs really try hard, but “to err is human”
- Systems based around fallible
  - components must act to minimise error
  - need multiple safeguards
  - require thinking HCPs to spot when its going wrong