Institute for Healthcare Quality,
Safety and Efficiency

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Applied Patient Safety

Disclosures

NONE

Agenda

1. Patient Safety and Safety Culture
2. Systems-Based Case Review
3. Care for the Caregiver (née 2nd victim)

Learning Objectives

1. Understand the scope of harm in healthcare.
2. List the components of a Culture of Safety.
3. Explain Just Culture.
4. Differentiate a systems-based case review from other case conferences.
5. Recognize the importance of identifying the adverse event and/or medical error.
6. Recognize the impact of errors on clinicians and how to support colleagues.

Learning Objectives

NOTE: we will NOT be covering error disclosure, malpractice/liability, or peer-review.

Warning:

Today we will be discussing incidents and events that include medical error and patient harm. These events and discussions may be triggering for some, so please be mindful of others and step away and/or seek help if needed.

YOU ARE HERE

Session	Session Overview
Quality Improvement & Change Management	• Basics of Quality Improvement • Step-wise, practical implementation guide • Change Management framework overview for driving change
Applied Patient Safety	• Safety Culture • Systems-Based Case Review • Care for the Caregiver
Designing for Change	• Understanding the problem and the people involved • Design thinking and choice architecture • Pre-mortem analysis to identify the right solutions for the right problem
Acquiring Data to Drive Change	• Data sources to track improvement • Data analysis and organization • Data visualization
Spreading Change Locally and Nationally	• Diffusion of innovation framework • QI vs. research • Strategies for dissemination and publication • Grant opportunities
Coaching and Teaching Quality Improvement	• How to coach QI teams • Identifying and troubleshooting common QI missteps


zoom

1999

44K-98K deaths every year due to error

To Err Is Human: Building a Safer Health System. Washington, DC: National Academy Press; 1999.


FIRST, DO NO HARM
TO ERR IS HUMAN
BUILDING A SAFER HEALTH SYSTEM
INSTITUTE OF MEDICINE


1993-2016

1999

"The status quo is not acceptable and cannot be tolerated any longer."

2016

Medical Error – The Third Leading Cause of Death in the US

Makary MA, Daniel M. Medical error-the third leading cause of death in the US. BMJ. 2016;353:i2139.

The Commonwealth Fund

2022

U.S. Health Care from a Global Perspective, 2022: Accelerating Spending, Worsening Outcomes

The U.S. spends nearly 18 percent of GDP on health care, yet Americans die younger and are less healthy than residents of other high-income countries.

Not only does the U.S. have the lowest life expectancy among high-income countries, but it also has the **highest rates of avoidable deaths.**

https://www.commonwealthfund.org/publications/issue-briefs/2023/jan/us-health-care-global-perspective-2022

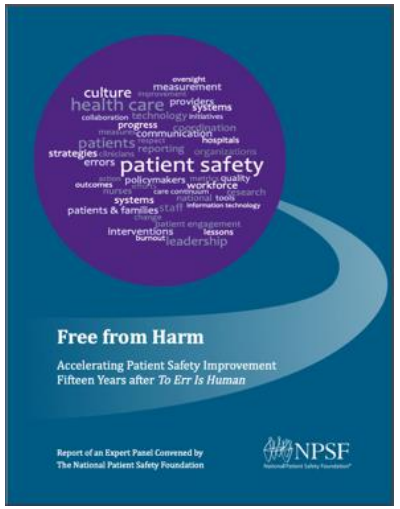
Wait…how many deaths?

Study, year	Review based on	Rate of lethal preventable AE [a]	Average lethal preventable AE	Average number of deaths/year
IOM Report, 2000	HMPS, 1991	0.29%	n/a	98,000
	CO/UT, 1999	0.13%		44,000
James, 2013	OIG Report, 2008	1.1%	0.61% of admissions	210,000 (440,000) [b]
	OIG Report, 2010	1.5%		
	Landrigan, 2010	0.6%		
	Classen, 2011	1.0%		
Makary, 2016	HealthGrades, 2004	0.7%	0.71% of admissions	251,454
	OIG Report, 2010	1.5%		
	Landrigan, 2010	0.6%		
	Classen, 2011	1.0%		
Rodwin, 2020	8 studies of inpatient deaths	n/a	3.1% (2.2%–4.1%) of deaths	22,165 (7150) [b]

"…exaggerated claims about medical error continue to be made by patient safety advocates erodes trust not only in the healthcare system but also in the patient safety movement.

We believe that leaders in patient safety should **move forward from the hype about lives lost and concentrate simply on preventing patient harm**, including hospital-acquired infections, procedural complications, medication errors, and diagnostic errors."

Gunderson CG, Rodwin BA. Overstating inpatient deaths due to medical error erodes trust in healthcare and the patient safety movement. *Journal of Hospital Medicine*. 2022;17(5):399-402.



Free from Harm

Accelerating Patient Safety Improvement
First Years After *To Err is Human*

"A **culture of safety** is fundamental to driving improvements in patient safety…"

Transforming Health Care: A Compendium of Reports from the NPSF Lucian Leape Institute. Boston, MA: National Patient Safety Foundation; 2016.

Culture of Safety

An informed culture

A reporting culture

A learning culture

A just culture

A flexible culture

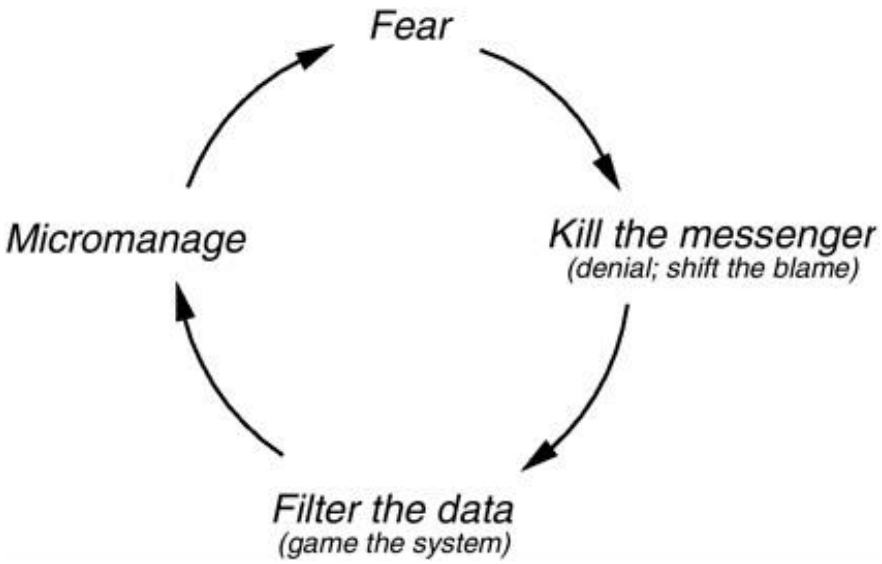
https://www.airsafety.aero/Safety-Information-and-Reporting/Safety-Management-Systems/Safety-Culture.aspx

James Reason, PhD, CBE

Reporting Culture

An atmosphere where people have confidence to report safety concerns without fear of blame.

Employees must know that confidentiality will be maintained and that the information they submit will be acted upon, otherwise they will decide that there is no benefit in their reporting.



Scherkenback, 1991

Top 5 self-perceived barriers to incident reporting for doctors

1. No feedback on incident follow-up (57.7%)
2. Form too long; lack of time (54.2%)
3. Incident seemed "trivial" (51.2%)
4. Ward was busy, forgot to report (47.3%)
5. Not sure who is responsible to make report (37.9%)

Cross-sectional survey of doctors and nurses across multiple hospitals in Southern Australia.

Evans SM, Berry JG, Smith BJ, et al. Attitudesand barriers to incident reporting: a collaborative hospital study. Qual Saf Health Care. 2006;15:39-43.

Anonymized, aggregated data on the number and type of incidents reported by 148 acute hospitals in England April 2004 – November 2005.

1. "There was no apparent association between reporting rates and the following data: standardised mortality ratios, data from other safety-related reporting systems, hospital size, average patient age or length of stay."

2. Higher reporting rates **correlated with positive data on safety culture** and incident reporting from the NHS Staff Survey..."

Table 3 Linear regression coefficients for predicting reporting rates from 2004 Staff Survey responses

Questions on fairness and effectiveness of reporting	Regression coefficients (95% CI)	p Values
Knows how to report errors, near misses and incidents	0.06 (−0.01 to 0.12)	0.080
Employer treats fairly staff involved in an error, near miss or incident	0.03 (0.005 to 0.06)	0.021*
Employer encourages staff to report errors, near misses or incidents	0.05 (0.02 to 0.09)	0.004*
Employer treat reports of errors, near misses or incidents confidentially	0.03 (0.01 to 0.06)	0.014*
Employer does not blame or punish people who make errors	0.03 (0.005 to 0.05)	0.017*
When errors are reported, employer takes action to ensure that they do not happen again	0.02 (−0.01 to 0.04)	0.145

*Significant at $p \leqslant 0.05$.

Hutchinson A, Young TA, Cooper KL, et al. Trends in healthcare incident reporting and relationship to safety and quality data in acute hospitals: results from the National Reporting and Learning System. *Qual Saf Health Care*. 2009;18(1):5-10.

Just Culture
2000s

Blame-Free Culture
Mid-1990s

Punitive Culture
Prior to the 1990s

Slide Credit: Ric Detlefsen, MSN, RN, CPHQ

Just Culture

Individual practitioners should NOT be held accountable for system failings over which they have no control.

Many individual or “active” errors are due to predictable interactions between human operators and the systems in which they work.

NOT
“No Blame”

Marx DA. New York, NY: Agency for Healthcare Research and Quality; 2001.

Human Error	At-risk Behavior	Reckless Behavior
Inadverter action, slip lapse, mista		onscious regard of sonable risk.

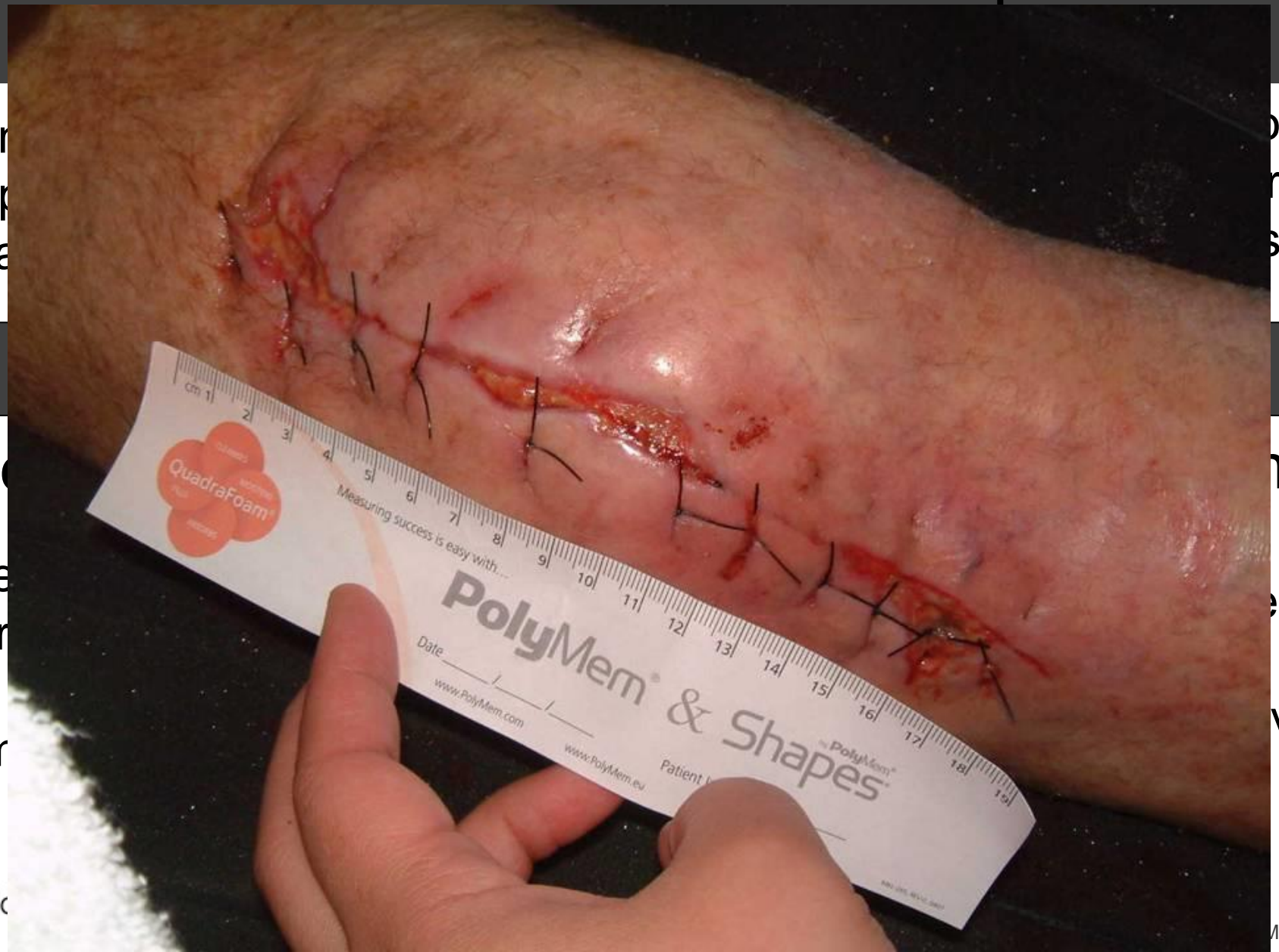
Consol

- Processe
- Procedur
- Design
- Environm
- Training

nediation

edial action

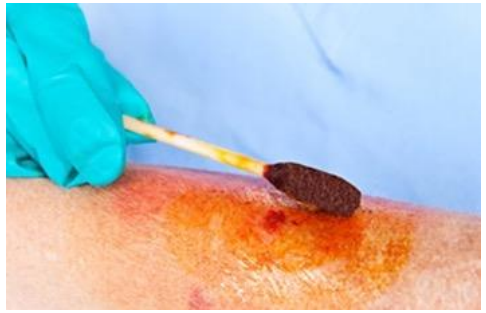
ve action



University of Colo

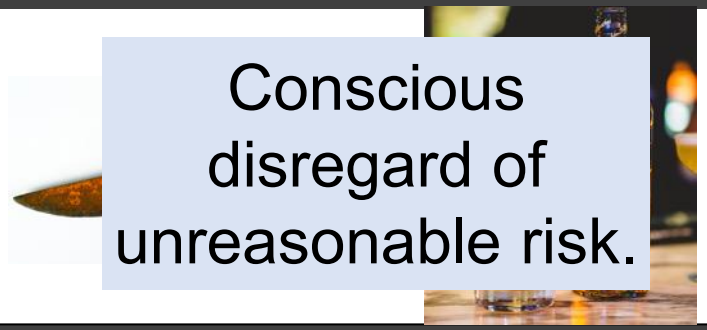
Marx, Michael Leonard, Allen Frankel

Human Error



At-risk Behavior

Reckless Behavior



Conscious disregard of unreasonable risk.

RESPONSE

Console

- Processes
- Procedures
- Design
- Environment
- Training

Coach

- Removing incentives for at-risk behavior
- Creating incentives for healthy behaviors
- Build systems that support ideal behavior

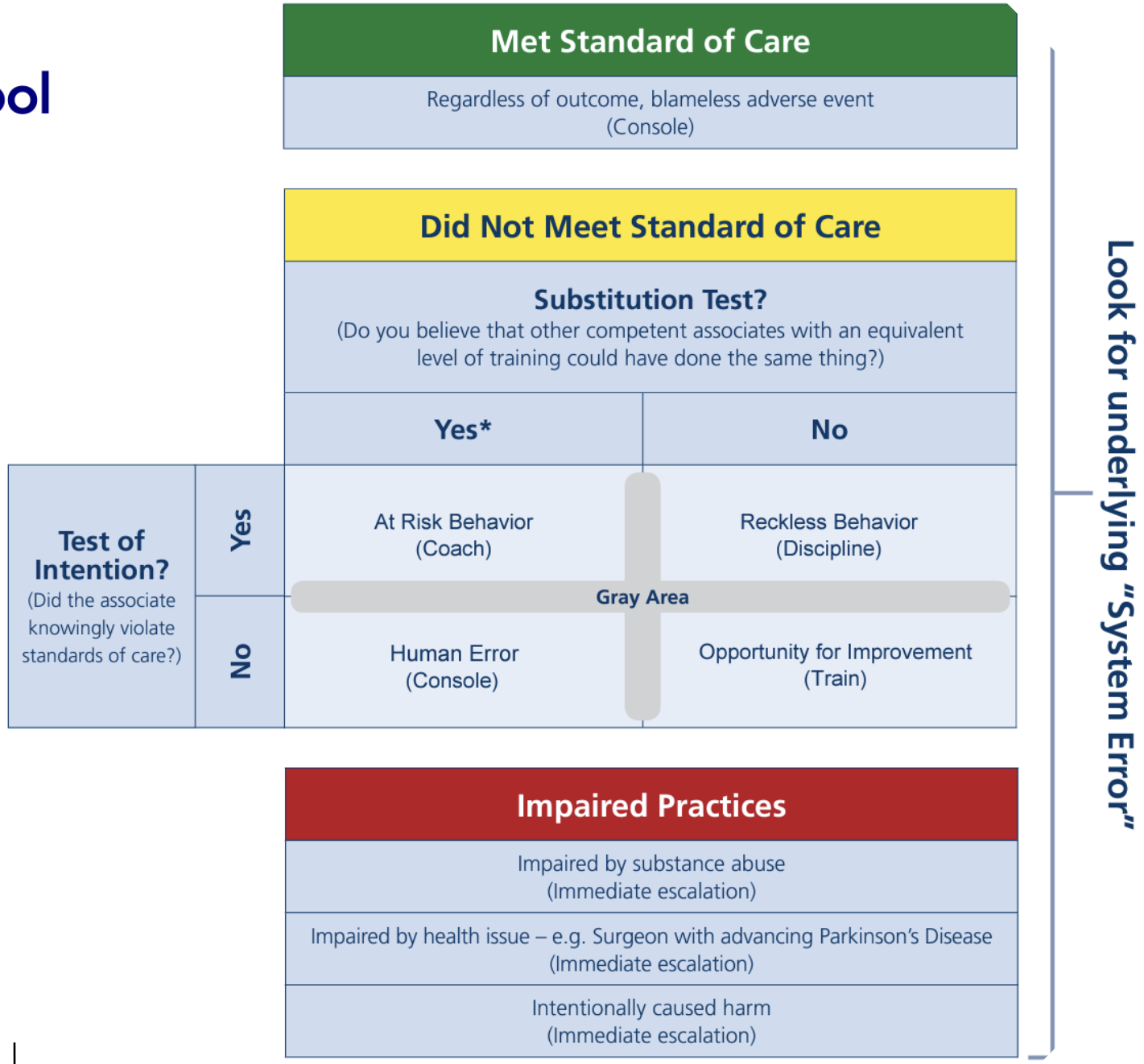
Remediation

- Remedial action
- Punitive action

Adapted from: James Reason, David Marx, Michael Leonard, Allen Frankel

A Just Culture Tool

NOTE: Every institution should have some version of this to refer to when reviewing/adjudicating cases.



https://zdoggmd.com/wp-content/uploads/2018/12/Just-Culture-Tool_NPSF-Version_Adelman_9_22_16.pdf

Initial Response…?

"Interactions with colleagues can be improved by always assuming best intentions and giving other people the benefit of the doubt."

VANDERBILT UNIVERSITY MEDICAL CENTER

State of Tennessee v. RaDonda L. Vaught
former Vanderbilt University Medical Center nurse convicted of criminally negligent homicide andgross neglect of an impaired adult after she mistakenly administered the wrong medication that killed a patient in 2017.

Setting the Stage: Why Health Care Needs a Culture of Respect Ted A. James, MD, MHCM August 31, 2018.

Former nurse found guilty in accidental injection death of 75-year-old patient. NPR.

Just Culture

Non-punitive environment for errors due to complexity or poor design

Accountable environment for reckless/careless actions of individuals

Slide Credit: Ric Detlefsen, MSN, RN, CPHQ

A just culture

⇩

A reporting culture

⇩

A learning culture

⇩

An informed culture

⇩

A flexible culture

https://www.airsafety.aero/Safety-Information-and-Reporting/Safety-Management-Systems/Safety-Culture.aspx

James Reason, PhD, CBE

10 minutes

Breakout 1: Safety Culture

Introductions: who you are, where you work, your role

Discuss: how is your culture of safety?

- Strengths
- Opportunities for improvement
- How do you know?

What are Case Reviews like at your institution?

- What are they called?

Systems-Based Case Conference

HPI:

88 y/o man with h/o atrial fibrillation, DM, CHF presents with right facial droop, aphasia and right-sided weakness (last nl 13:00).

Imaging:

CT head without hemorrhage. CTA with occlusion of left M1 (MCA)

Management:

- Systemic TPA administered at 17:26, pt admitted to the ICU
- 24 hours later, after discussion with neurology, ASA initiated as well as heparin gtt (Afib and high CHADS2VASC)

HD 3 at 0300 (+36 hours):

- Found unresponsive
- Head CT: large right frontotemporal intraparenchymal hemorrhage with midline shift
- Neurosurgery consulted and drainage not an option.

HD 4:

Developed progressive coma due to cerebral herniation. Family elected comfort care and the patient died.

What do you do next?

What's in a name…?

Traditional M&M	Traditional Case Conference	Systems-Based Case Conference	"RCA"

	Traditional M&M	Traditional Case-Conference	Systems-Based Case Conference	"RCA"
Purpose	Examine a case where something went wrong.	Explore an interesting case.	Examine a case in a systematic way.	Examine a sentinel event.
Involved Provider Included	Usually - presenting	Maybe	Yes	Yes
Literature Reviewed	Yes	Yes	Maybe	Maybe
Multi-Disciplinary	No	No	Yes	Yes
Multi-Specialty	Maybe	Maybe - expert	Yes	Yes
Adverse Event Defined	Maybe	N/A	Yes	Yes
Medical Error Defined	Maybe	N/A	Yes	Yes
Systems-Based Analysis	No	No	Yes	Yes
Action Items Identified	No	N/A	Yes	Yes

ACADEMIC MEDICINE
Journal of the Association of American Medical Colleges

Systems Based Case Conference

A systems-based case conference promotes a **just culture** in which members of a multidisciplinary health care team must engage in objective nonjudgmental **review of adverse outcomes** and **commit to systematic process change**.

Learners can uncover systems conditions that contribute to errors while maintaining individual accountability.

Tad-Y DB, et al. Leveraging a Redesigned Morbidity and Mortality Conference That Incorporates the Clinical and Educational Missions of Improving Quality and Patient Safety. Acad Med. 2016 Sep;91(9):1239-43. PMID: 26983075.

Elements of an effective* systems-based case review

- Multidisciplinary +/- multi-specialty
- Understanding of system (rules, policies, how things actually happen)
- Includes information regarding the patient(s) SDOH
- Input from those involved
- Objective and fact-based
- Facilitated
- Structured and consistent
- Clear objectives
- Assumes best intentions
- Follows just culture
- Adverse event/medical error clearly defined
- Used to determine current areas of strength *and* opportunity *for* improvement
- Case is discussable

effective* = promotes HRO

PSNet
PATIENT SAFETY NETWORK

High reliability organizations maintain a commitment to safety at all levels, from frontline providers to managers and executives, with these **key features**:

1. acknowledgment of the high-risk nature of an organization's activities and the determination to achieve consistently safe operations

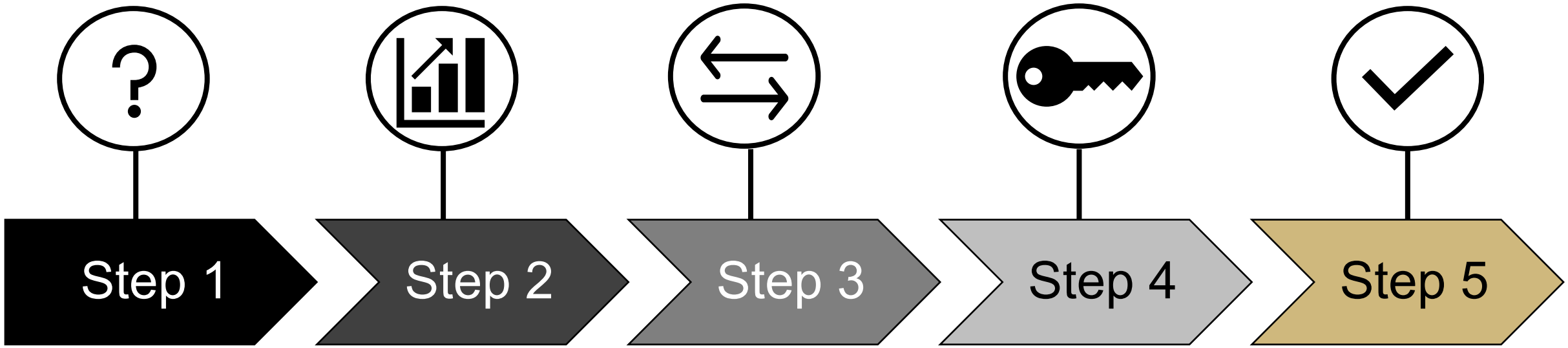
2. a blame-free environment where individuals are able to report errors or near misses without fear of reprimand or punishment

3. encouragement of collaboration across ranks and disciplines to seek solutions to patient safety problems

4. organizational commitment of resources to address safety concerns

Source: psnet.ahrq.gov/primer/culture-safety Accessed: 1/17/2024

Systems Based Case Review



Define the Problem/Focus

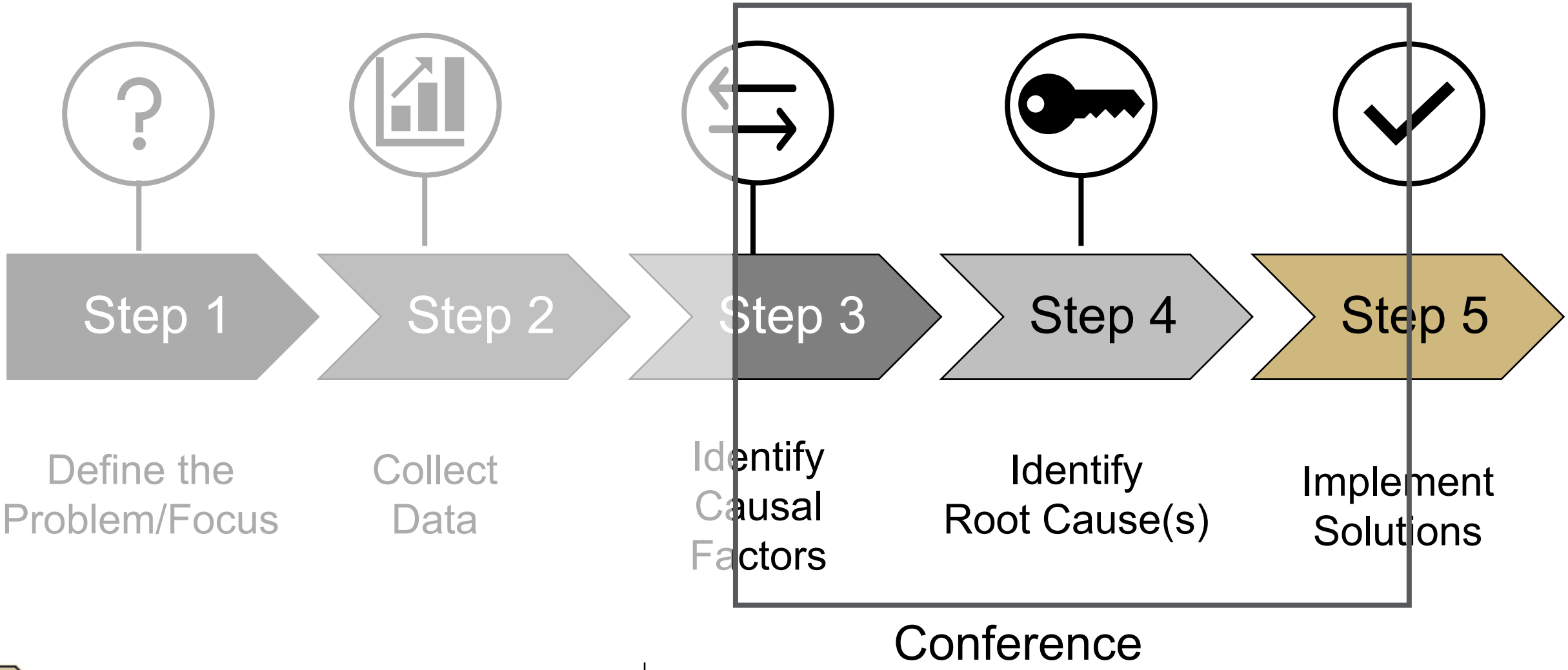
Collect Data

Identify Causal Factors

Identify Root Cause(s)

Implement Solutions

Systems Based Case Review



88 y/o man with h/o atrial fibrillation, DM, CHF presents with right facial droop, aphasia and right-side weakness

Last normal: 13:00

Background

PAST MEDICAL HISTORY

- DM type II – on insulin
- Paroxysmal Atrial fibrillation
- CHF – EF 45%

MEDICATIONS

- Furosemide
- Empaglifozin
- Metoprolol succinate
- Glargine 10U QHS
- ASA 81mg QD

SOCIAL HISTORY

- Lives with wife
- Two children
- Retired, worked in insurance
- No EtOH, Tobacco

PAST SURGICAL HISTORY

- R TKA

FAMILY HISTORY

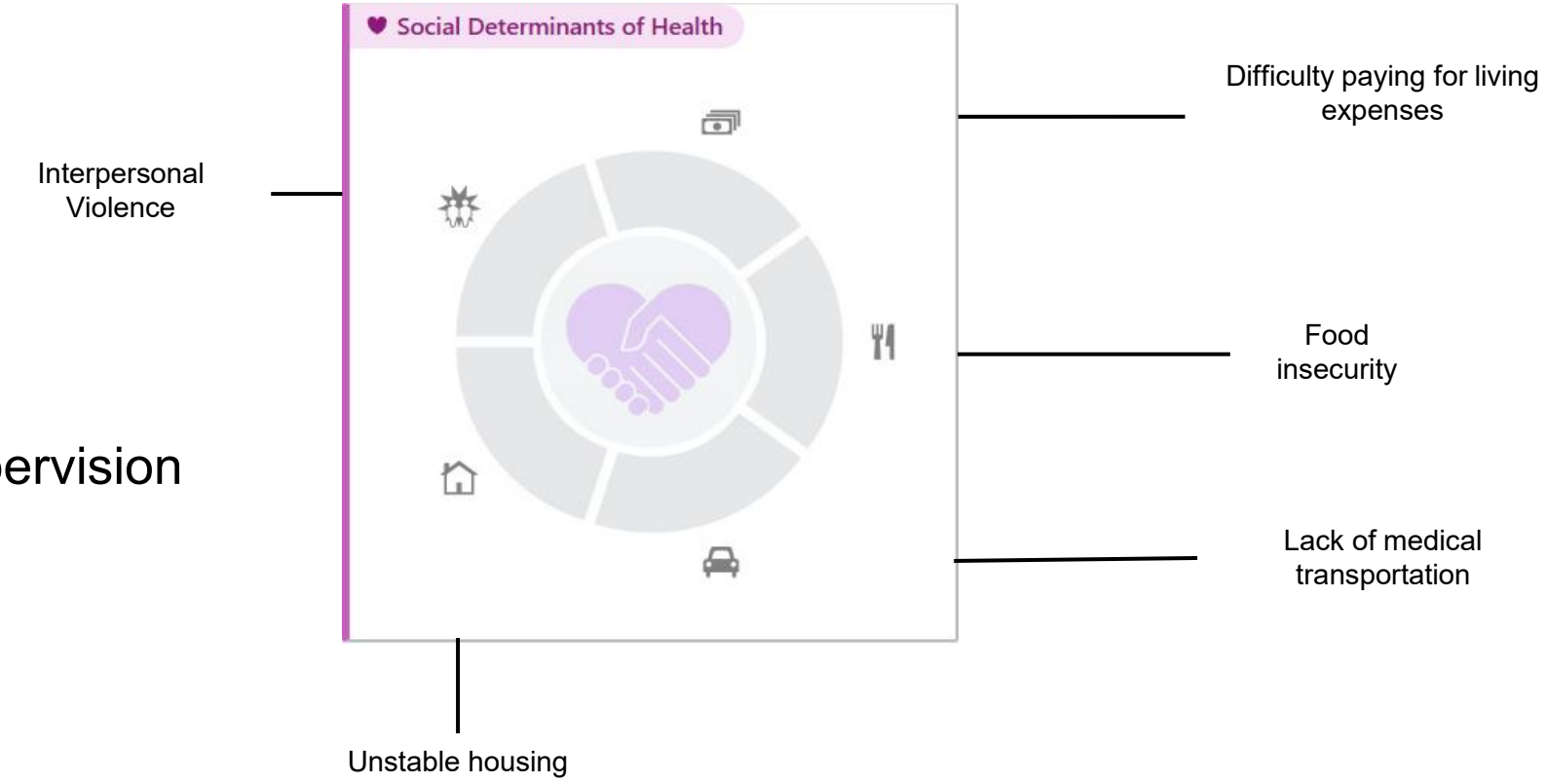
- Non-contributory

ALLERGIES

- None

Social History/SDOH

- White
- Cis-gender, straight
- English speaking
- Retired school bus driver
- Medicare - A,B,D
- 2x kids who live locally
- Wife who requires 24-hour supervision
- No safety concerns
- No housing insecurity



Admission

Vitals and Exam

Vitals

BP:128/71

P: 120

T: 36.8 C

RR: 20

SpO2: 97% on RA

Exam

General: mildly ill-appearing

Neuro: aphasia, R side weakness, R facial droop with forehead sparing

Resp: Normal work of breathing, lungs clear to auscultation bilaterally.

CV: irregularly irregular. No murmurs.

Abd: non-distended

Extr: Warm and well perfused. No edema. No rash.

Hospital Course

HD 0

- TPA administered
- Admitted to medical ICU

HD 1:

- Symptoms improved but dysphasia remains
- Neurology consulted – recommended starting anticoagulation

Hospital Course

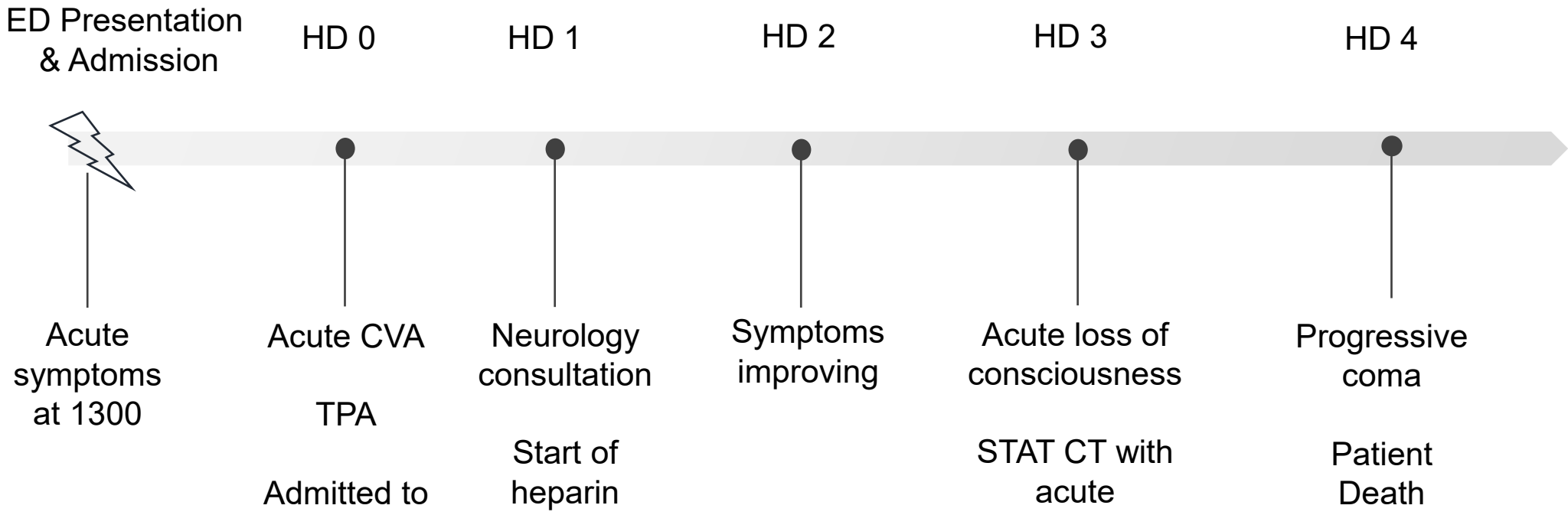
HD 3 at 0300 (+36 hours):

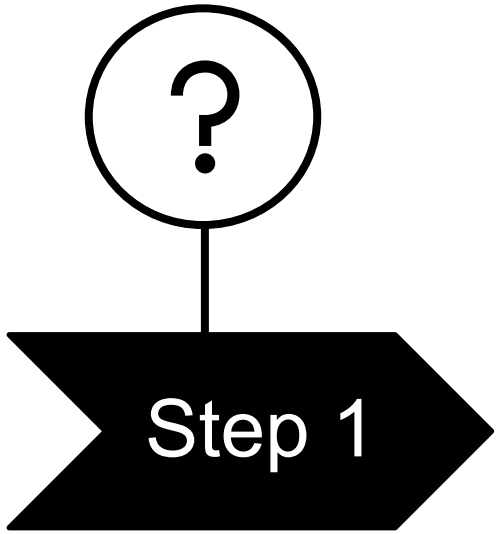
- Found unresponsive
- Head CT: large right frontotemporal intraparenchymal hemorrhage with midline shift
- Neurosurgery consulted and drainage not an option.

HD 4:

Developed progressive coma due to cerebral herniation. Family elected comfort care and the patient died.

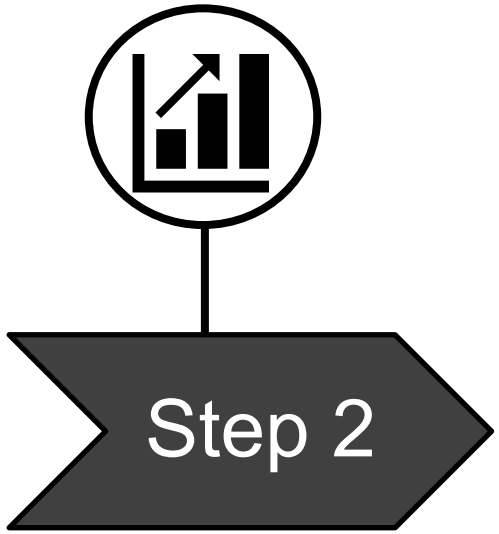
Hospital Course





Define the Problem/Focus

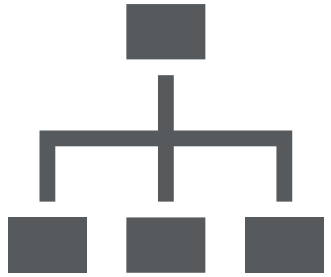
Patient death due to intracerebral hemorrhage.



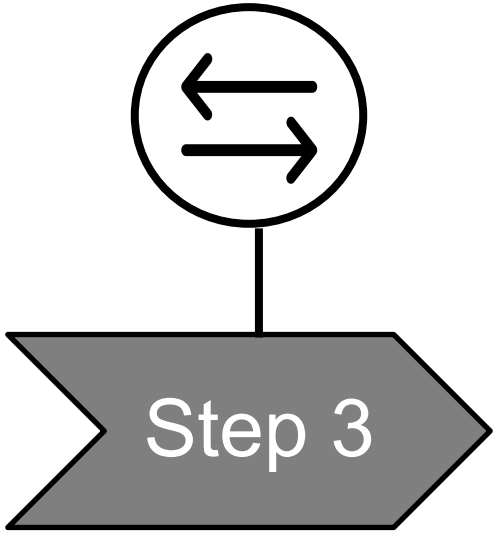
Collect Data

Talk with those involved.

Review the chart.



Define processes.

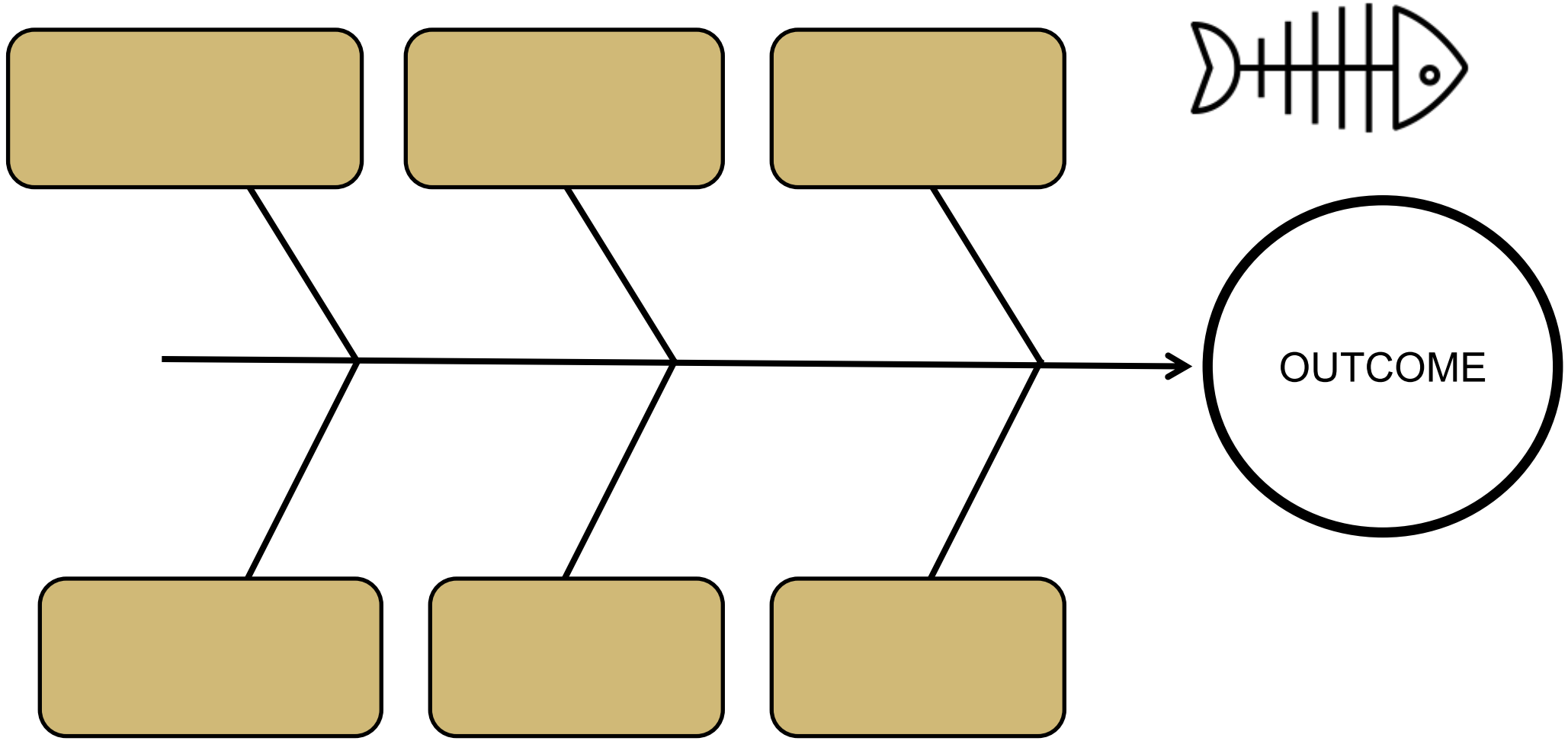


Identify Causal Factors

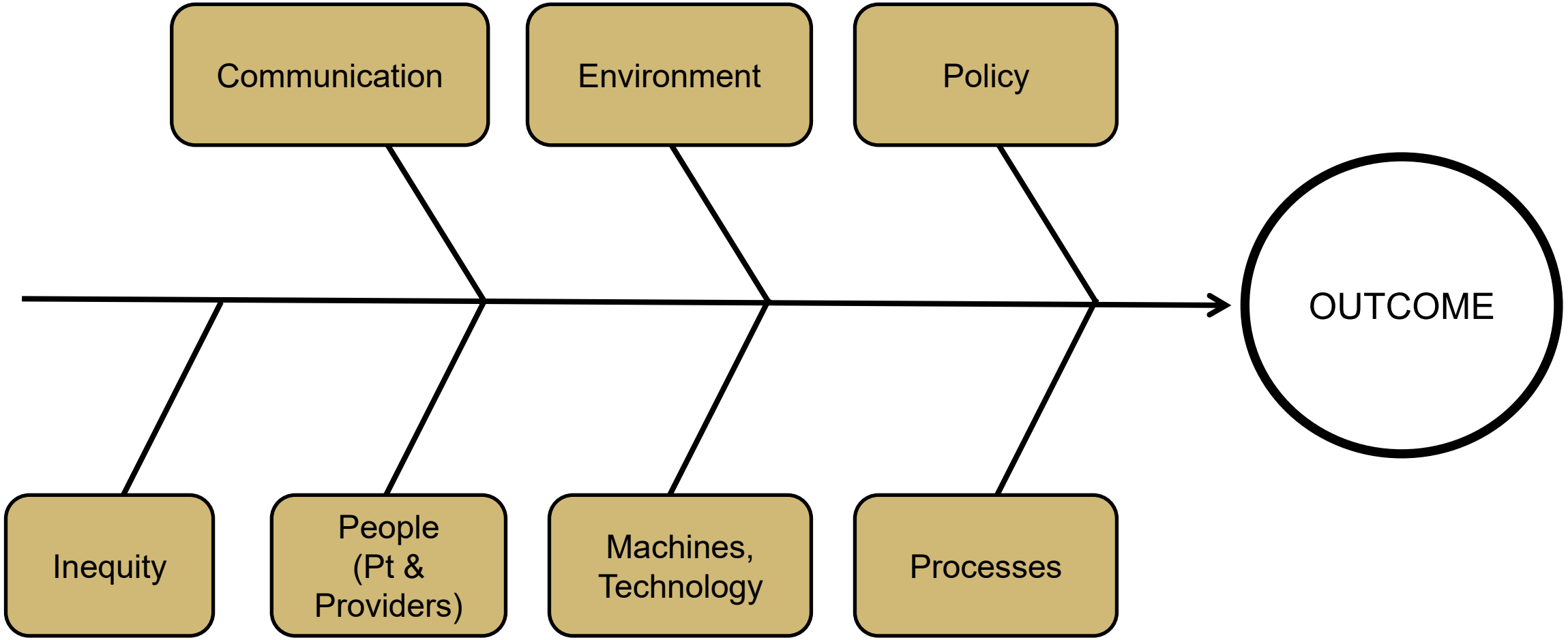
Common Themes

- Communication
- Handoffs
- Medication
- Inefficiencies
- Cognitive Errors
- Bias
- Inequities

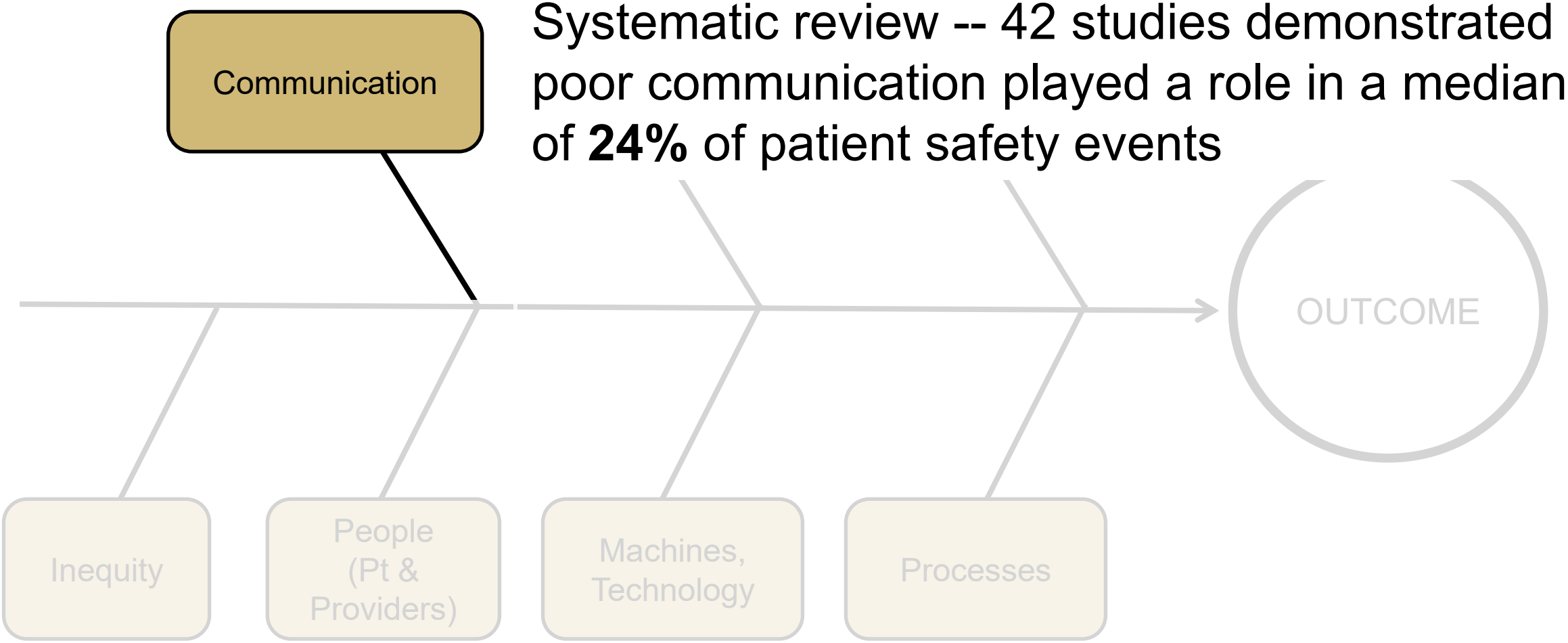
Cause and Effect Diagram



What System factors contributed?



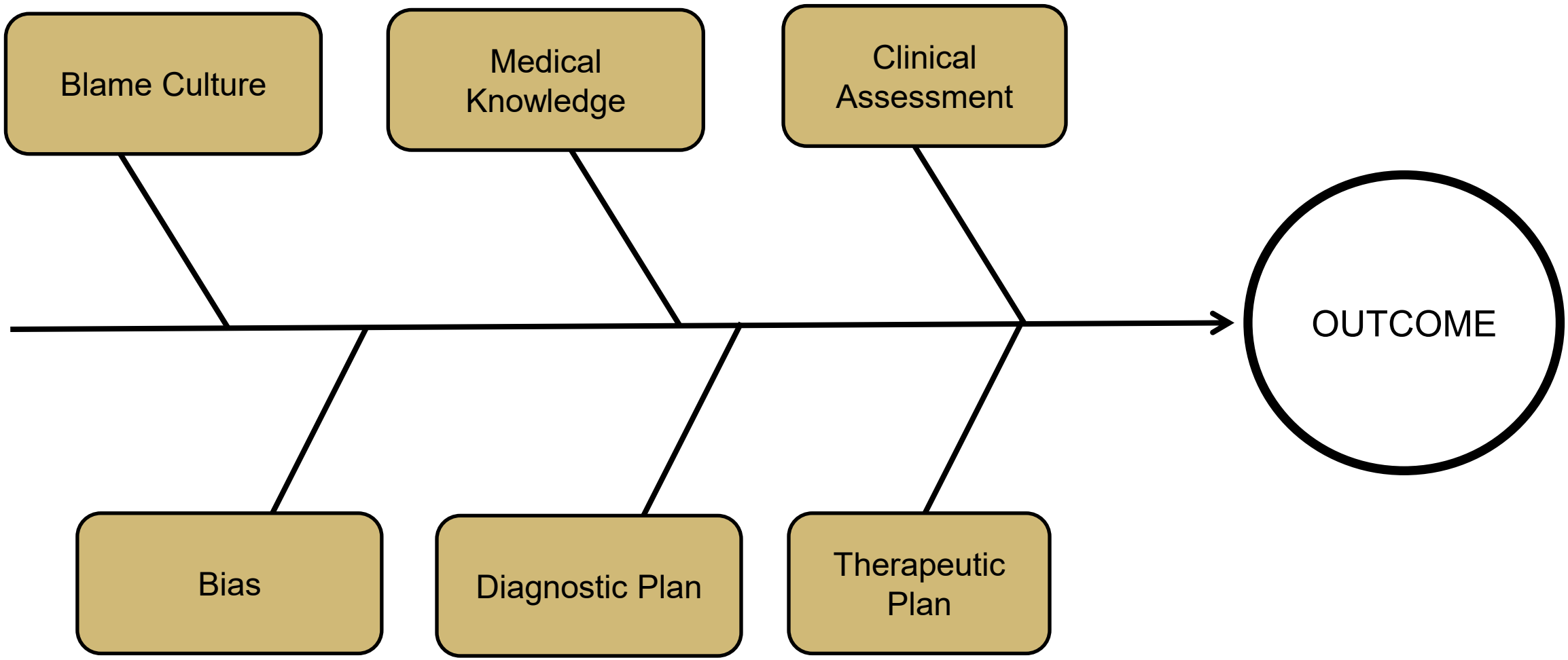
What System factors contributed?



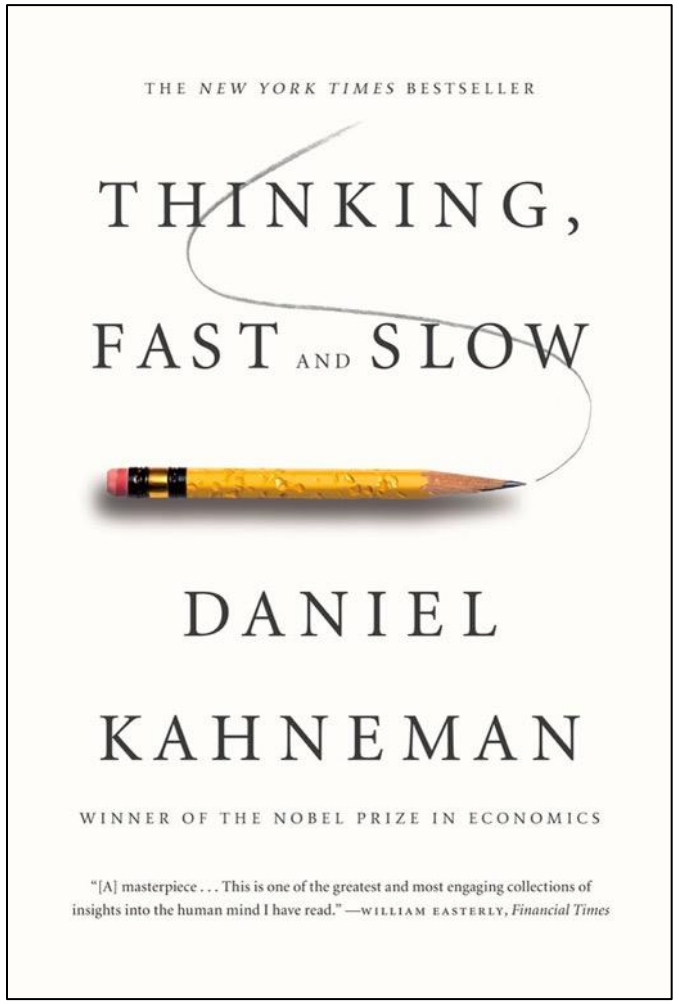
Systematic review -- 42 studies demonstrated poor communication played a role in a median of **24%** of patient safety events

Keshtkar L et al. Impacts of communication type and quality on patient safety incidents: A systematic review. *Ann Intern Med* 2025 Apr 15; [e-pub].

What Cognitive Factors contributed?



(Medical) Heuristics



System 1

post-op patient with tachycardia, hypoxia, chest pain, unilateral leg swelling

→ pulmonary embolism

System 2

HIV patient with CD4 50, fevers, myalgias, recent travel

→ …? System 2

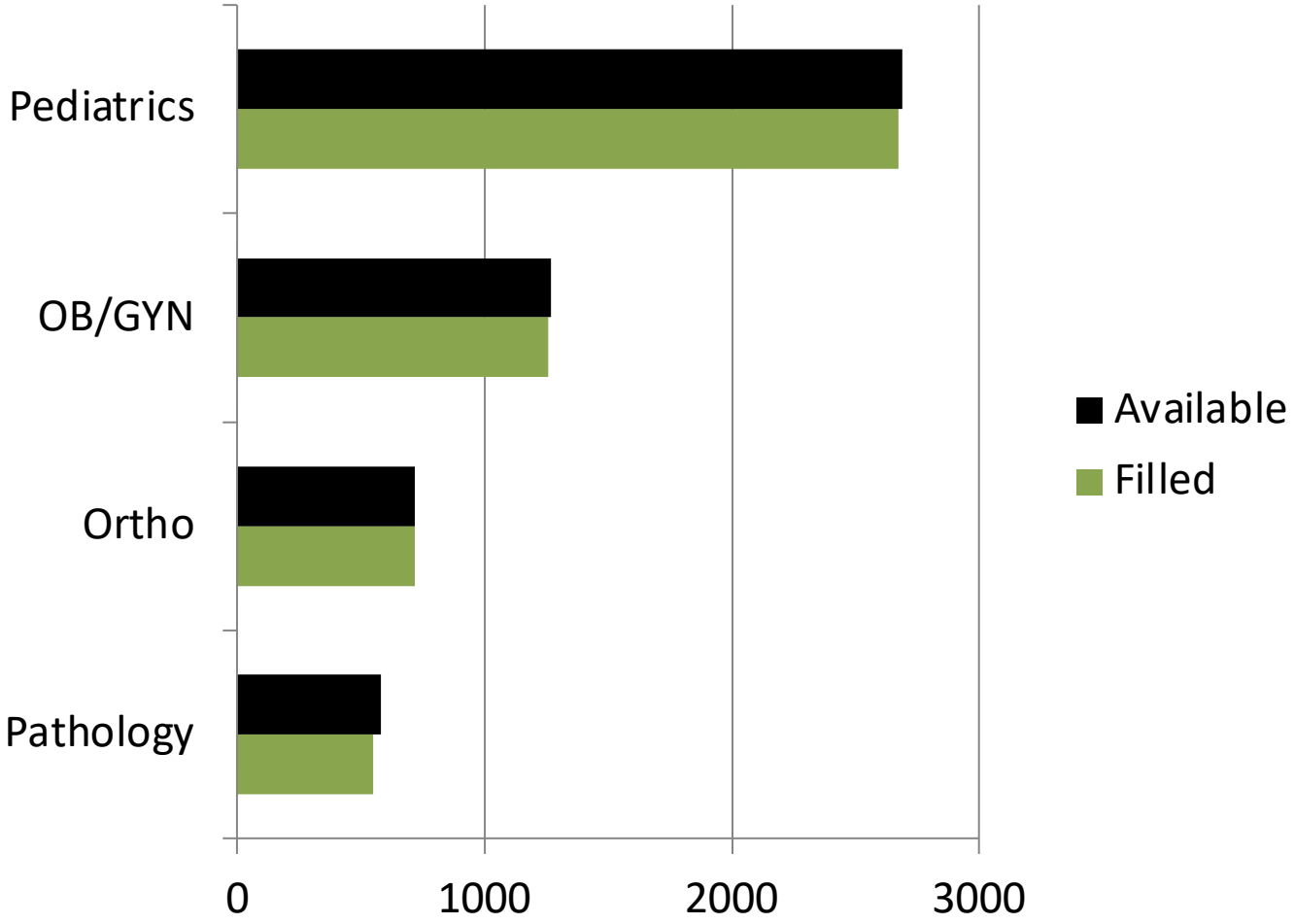
Hector's Specialty

- Hector scored 243 on Step 1 and 263 on Step 2
- Hector wrestled in college and can bicep curl 120#
- He enjoys woodworking in his spare time

Hector is most likely to be entering which specialty?

- Pediatrics
- Pathology
- Orthopedic Surgery
- OB/GYN

Hector's Specialty



Sam, a 32-year-old man, presented to the Emergency Department with an 8-hour history of severe (8 out of 10), intermittent lower abdominal pain. In triage, he had a blood pressure of 185/84 mm Hg and a heart rate of 67 beats per minute.

Sam told the nurse that he was a transgender man. His electronic medical record (EMR) indicated that he was male. He had previously used testosterone, as well as antihypertensives, both of which he had discontinued because he'd lost his insurance coverage. It had been several years since he last menstruated.

The triage nurse assessed him to be an obese man with abdominal pain who had not taken his prescribed blood-pressure medications. Determining that his condition was stable, she triaged him to nonurgent assessment.

Laboratory samples were drawn, including one for human chorionic gonadotropin (hCG) testing, and Sam awaited further evaluation.

Several hours later, an emergency physician came to evaluate him. She noted the positive results of the serum hCG test and took a more detailed history, considering possible early pregnancy complications. On examination, she noted that his abdomen was not only obese but also gravid.

Bedside ultrasonography was performed, confirming an advanced pregnancy with unclear presence of fetal cardiac activity.

On pelvic exam, the cervix was found to be dilated to 4 to 5 cm. The umbilical cord was palpated in the vagina: Sam had cord prolapse of uncertain duration. Sam was rapidly counseled regarding the findings and the need for an emergency caesarean delivery. In the operating room, no fetal heartbeat could be detected on ultrasound.

Given the fetal death, Sam was transferred to a delivery suite where, moments later, he delivered a stillborn baby.

Stroumsa D, Roberts EFS, Kinnear H, Harris LH. The Power and Limits of Classification - A 32-Year-Old Man with Abdominal Pain. N Engl J Med. 2019 May 16;380(20):1885-1888. PMID: 31091369; PMCID: PMC7395710.

Name the Bias - Cognitive

- Availability
  The tendency to weigh likelihood of a diagnosis by how easily it is recalled

- Framing
  Reacting to information based on how it is framed

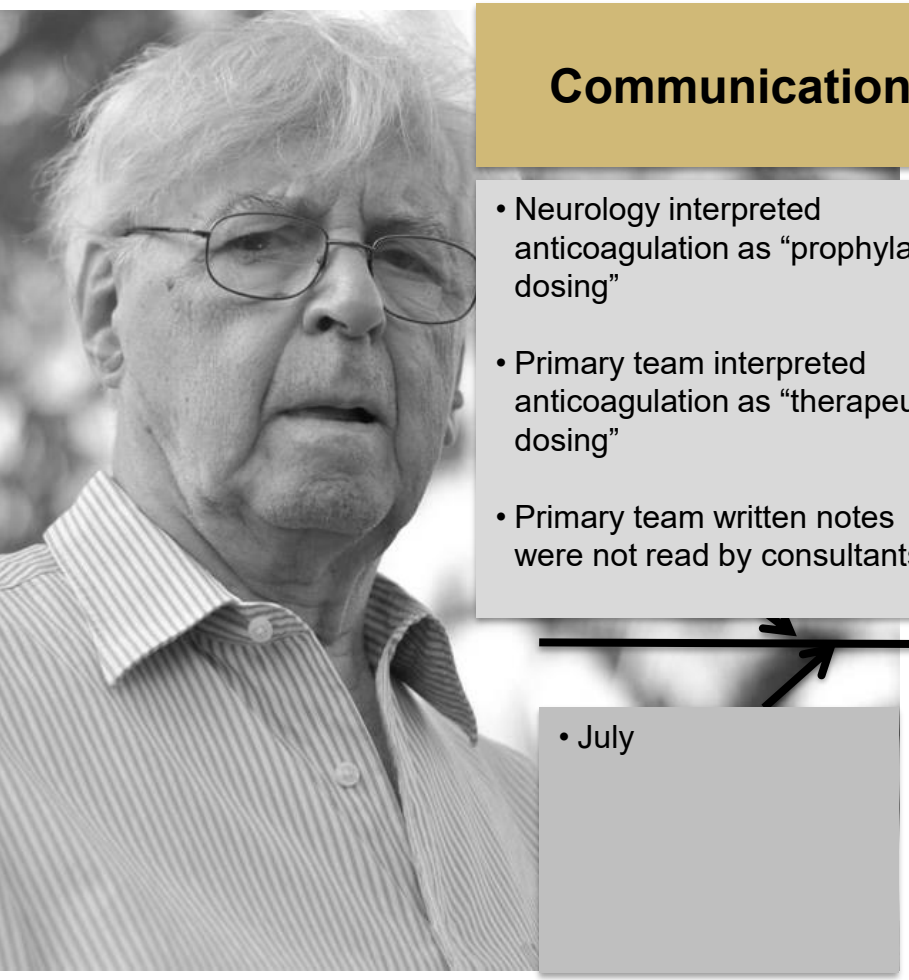
- Premature Closure
  Tendency to accept a diagnosis before it is fully verified

- Confirmation
  Tendency to focus on evidence that supports a working diagnosis, rather than to look for evidence that refutes it or supports an alternate diagnosis

Name the Bias - Implicit

Implicit Bias: (also referred to as unconscious bias) is the process of associating stereotypes or attitudes towards categories of people *without conscious awareness* – which can result in actions and decisions that are at odds with one's conscious beliefs about fairness and equality.

Definition source: NationalEquityProject.org



Communication

- Neurology interpreted anticoagulation as “prophylactic dosing”
- Primary team interpreted anticoagulation as “therapeutic dosing”
- Primary team written notes were not read by consultants

Knowledge & Assessment

- Post-TPA stroke care
- Head CT not obtained after 24 hours of TPA (prior to initiation of anticoagulation)

Decisions (Diagnostic and Therapeutic Plans)

- TPA administered 2 minutes before the 4.5 window of efficacy
- Therapeutic heparin drip started for atrial fibrillation within 24 hours of ischemic CVA with TPA (not-indicated)

Post-CVA Intracerebral Hemorrhage

- July

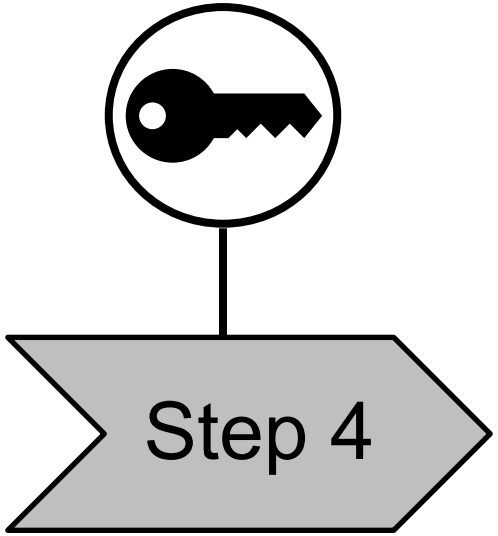
Environment and Equipment

- Patient with advanced Age (88)- high risk for hemorrhage

People (Patient and Provider)

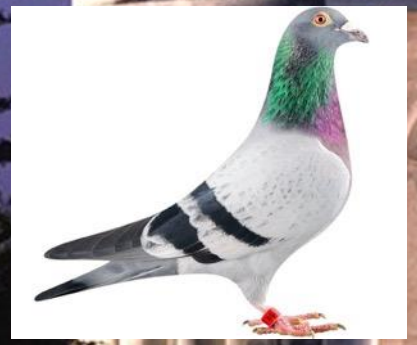
- Lack of dedicated Post-TPA for ischemic stroke order set
- Heparin order-set for atrial fibrillation→orders bolus

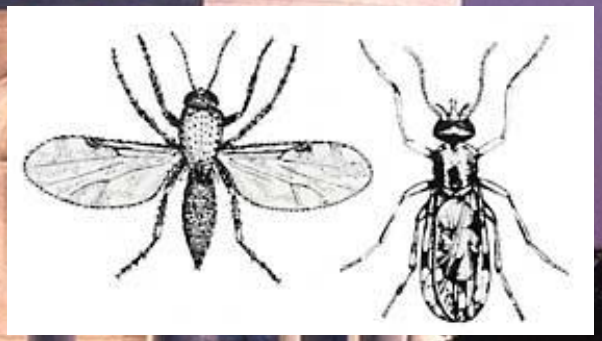
Processes and Procedures



Identify Root Cause(s)

Five Why's





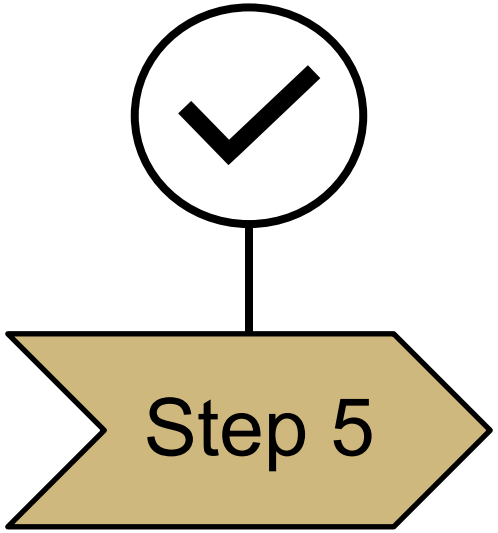
Knowledge & Assessment

- Post-TPA stroke care
- Head CT not obtained after 24 hours of TPA (prior to initiation of anticoagulation)

Why?

Care isn't standardized → Why? → No electronic order-set → Why? → Not built

RN knowledge deficit → Why? → Many different RNs → Why? → No dedicated stroke unit



Implement (Propose) Solutions

Medical Error

Just culture algorithm

Met Standard of Care

Regardless of outcome, blameless adverse event
(Console)

Did Not Meet Standard of Care

Substitution Test?
(Do you believe that other competent associates with an equivalent level of training could have done the same thing?)

Test of Intention? (Did the associate knowingly violate standards of care?)	Yes*	No
Yes	At Risk Behavior (Coach)	Reckless Behavior (Discipline)
	Gray Area	
No	Human Error (Console)	Opportunity for Improvement (Train)

Impaired Practices

Impaired by substance abuse
(Immediate escalation)

Impaired by health issue – e.g. Surgeon with advancing Parkinson's Disease
(Immediate escalation)

Intentionally caused harm
(Immediate escalation)

Look for underlying "System Error"

NO

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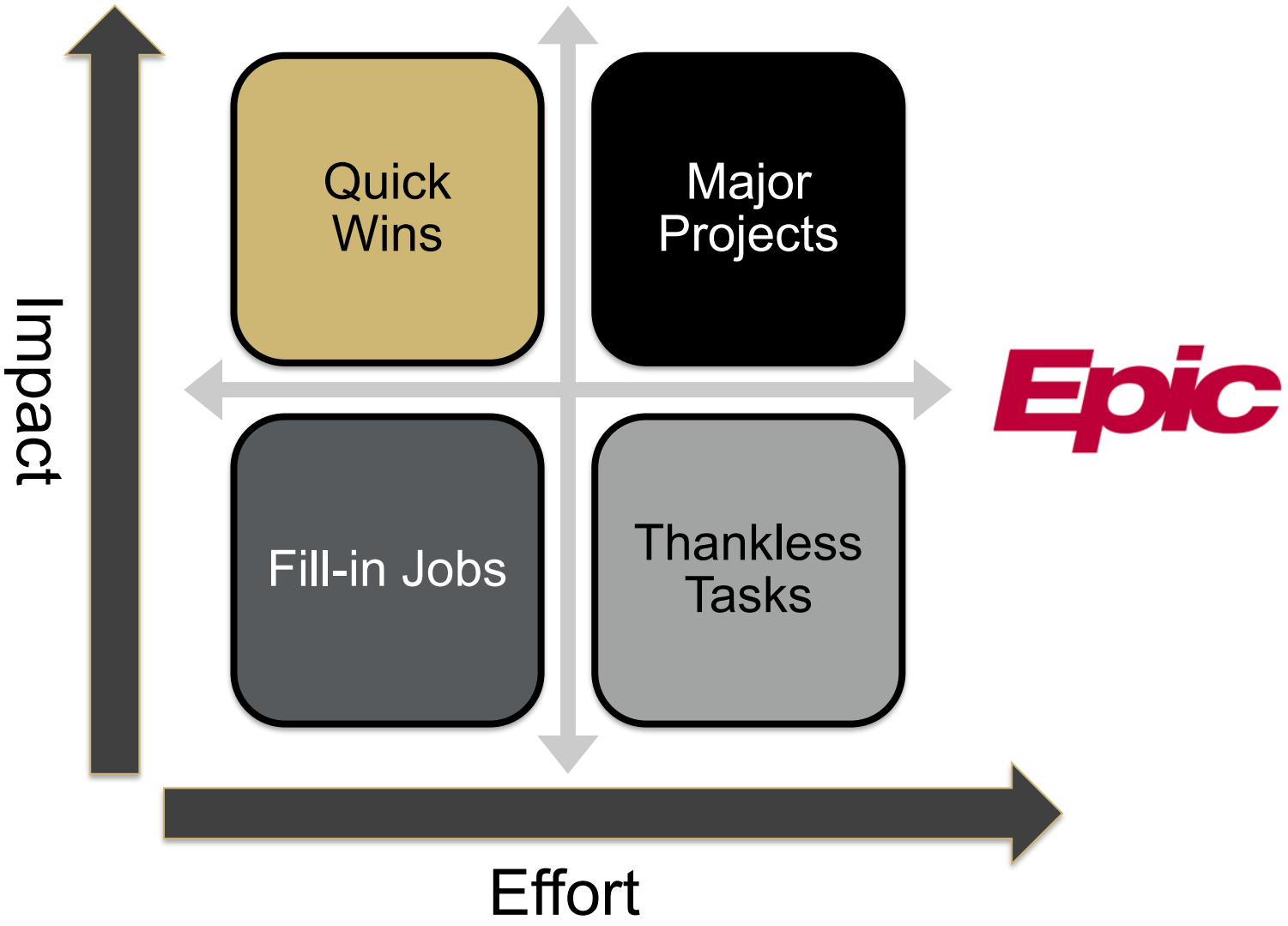
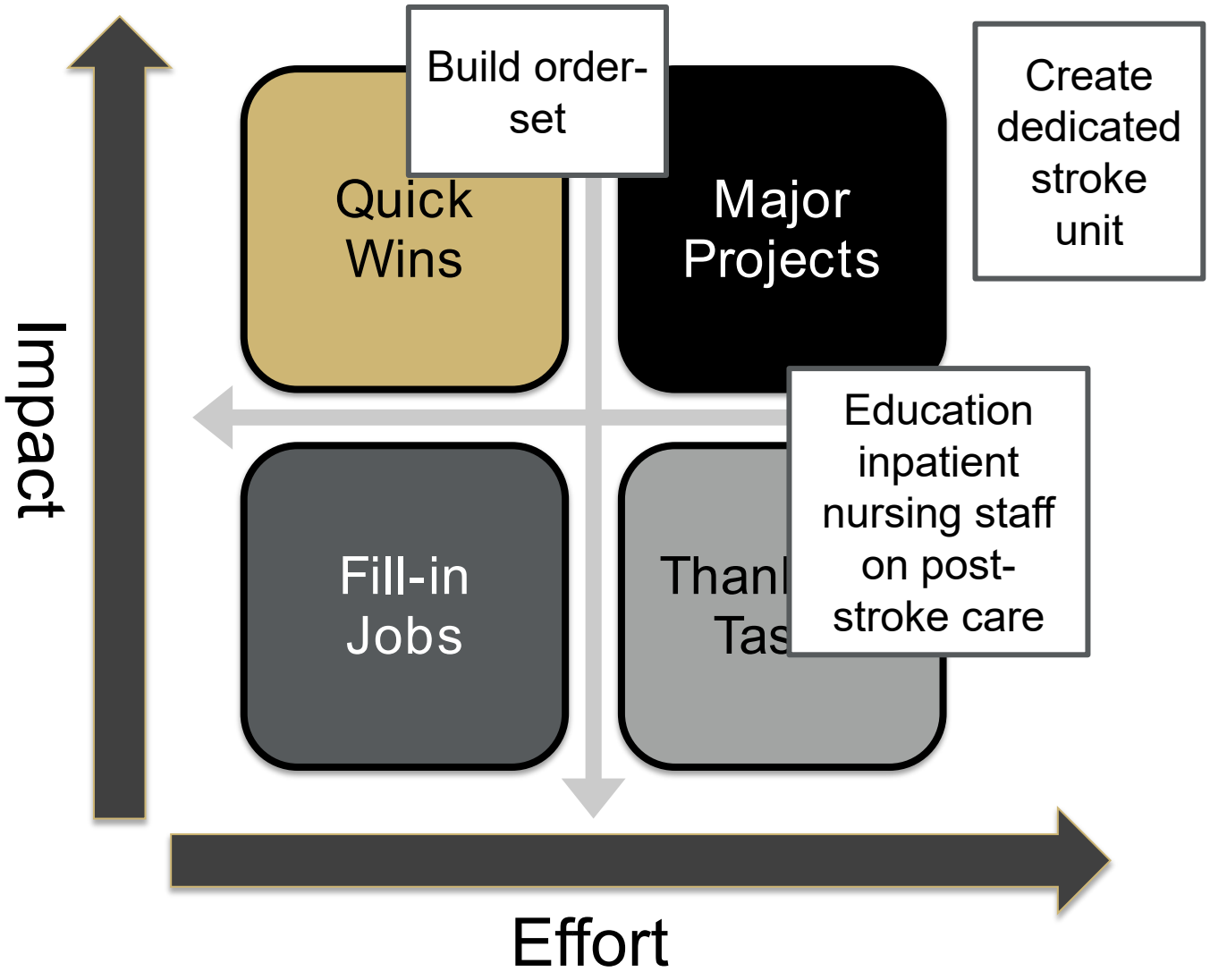
- Intentionally caused harm (Immediate escalation)

Look for underlying "System Error"

Action Priority Matrix




Build order-set
Create dedicated stroke unit
Quick Wins
Major Projects
Education inpatient nursing staff on post-stroke care
Fill-in Jobs
Impact
Effort

Step 1: **Adverse Event** – Patient Death

Step 2: Talked to all involved providers, chart review

Step 3: **Medical Error** – heparin gtt started <24 hours post TPA

Step 4: **Root Causes:** RN not familiar with CVA patients and workflow, no dedicated pathway, missed head CT and incorrect heparin order, no dedicated stroke unit

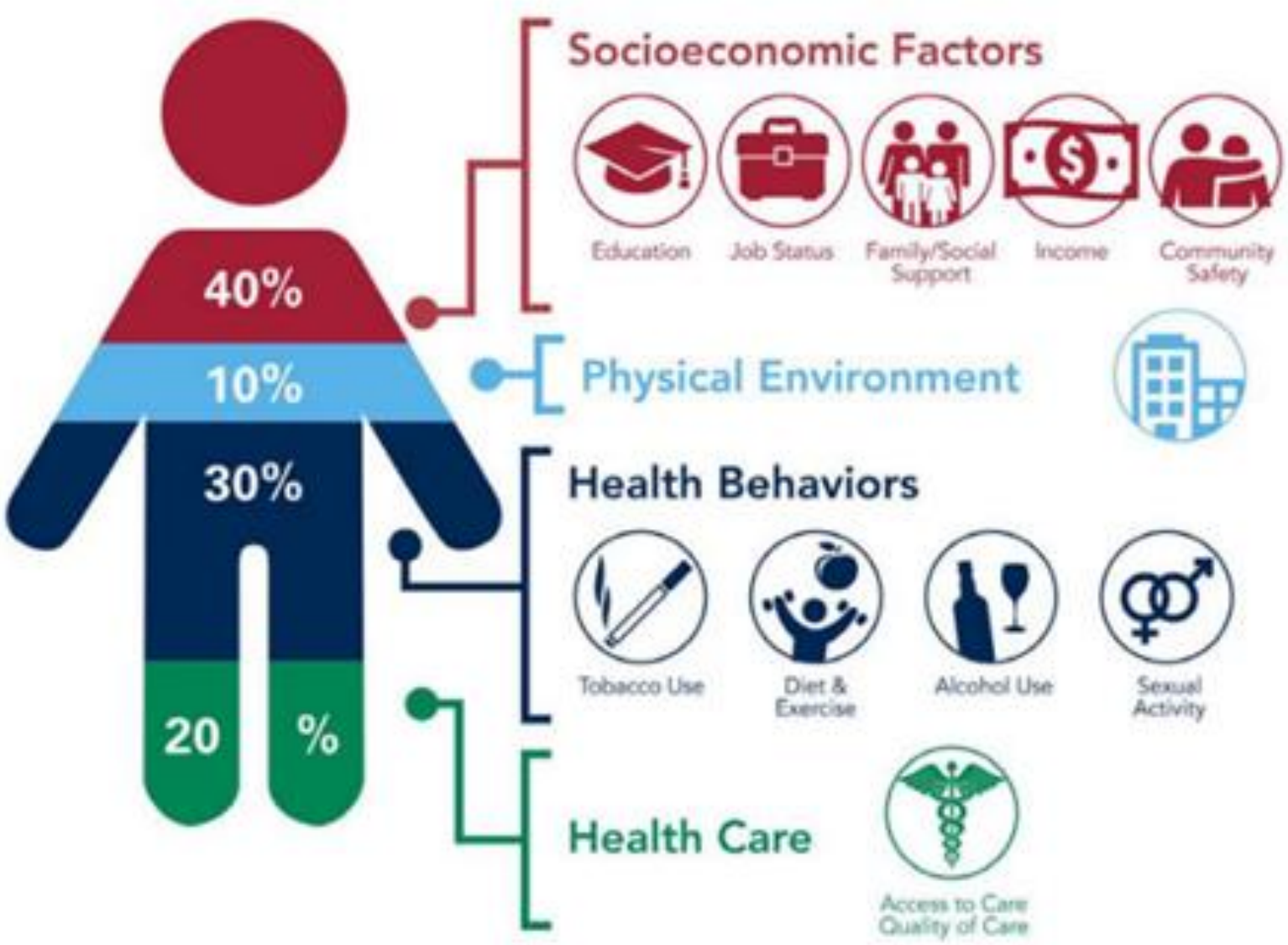
Step 5: **Easy Win** – Make an Order Set
Major Project – Dedicated Stroke Unit

(Shared) Understanding of the system

Vaccination Process for Outpatient Clinics

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6
Immunization order placed by provider or standing order exists	MA reviews chart for order	MA Pulls ordered immunization from Pyxis	MA verifies patient name, DOB, and ordered immunization	MA retains empty syringes for NDC, Lot #, expiration date	MA documents immunization info manually in Epic

Includes information regarding the patient(s) social drivers of health (SDOH)



American Hospital Association – Addressing Social Determinants of Health, 2018. Accessed via NACHC.org 1/17/2024

Includes information regarding the patient(s) social drivers of health (SDOH)

Patient safety incidents are experienced unequally

- Patients from ethnic minority communities: **increased risk of hospital acquired infections, adverse drug events, and pressure ulcers.**
- Socioeconomic disadvantage: **higher rates of death from avoidable causes** such as delayed healthcare interventions, as well as delays in promptness of resuscitation after in-hospital cardiac arrest.
- Patients with learning disabilities: **experience harmful delays in the timely diagnosis of sepsis.**

Wade C, Malhotra AM, McGuire P, Vincent C, Fowler A. Action on patient safety can reduce health inequalities. BMJ. 2022 Mar 29;376. PMID: 35351684

Facilitated

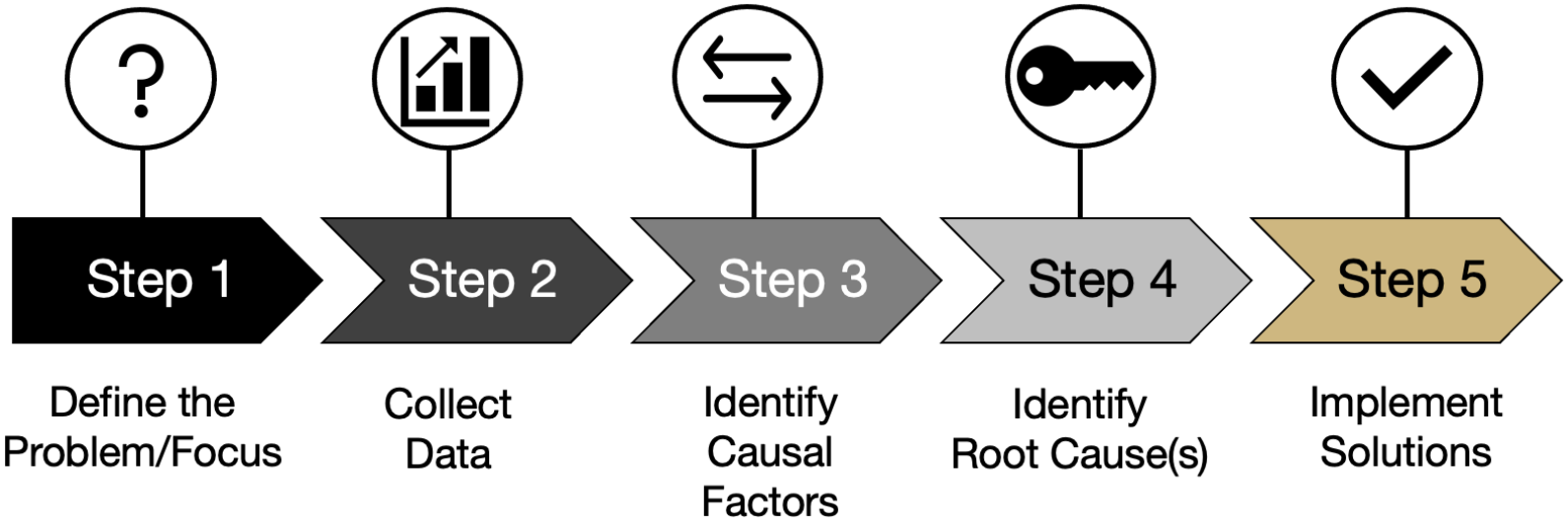
Commonly described personal characteristics of facilitators include being **empathetic, sensitive, flexible, pragmatic, authentic, credible, resilient, and passionate**."

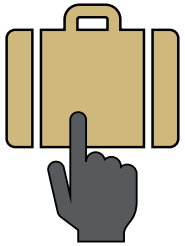
NOTE: those involved in case *can* present but facilitating a robust discussion is difficult.

Consider presenting the case only and having someone else facilitate the analysis

Harvey G, Lynch E. Enabling Continuous Quality Improvement in Practice: The Role and Contribution of Facilitation. Front Public Health. 2017 Feb 22;5:27 PMID: 28275594.

Structured and consistent





Case Identification

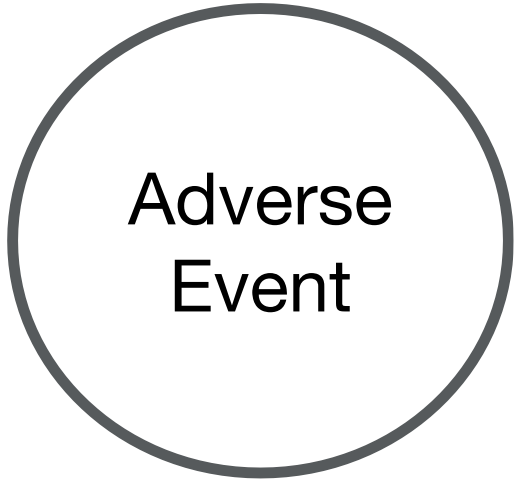
- Standard triggers
- Word of mouth
- Mortality
- Patient safety report
- Mandatory events
- Other

Clear Objectives

Mission: to establish a safe venue to identify areas for improvement in patient care, while promoting professionalism, integrity and transparency, to maximize learning and identify system issues for improvement.

Our goal is not to blame individuals, but to identify system issues to address to prevent a similar event in the future.

Adverse Event and Error Clearly Defined



Unintended physical injury **resulting from or contributed to by medical care** that requires additional monitoring, treatment or hospitalization, or that results in death.

Rodziewicz TL, Houseman B, Hipskind JE. Medical Error Reduction and Prevention. [Updated 2023 May 2]. In: StatPearls Available from: https://www.ncbi.nlm.nih.gov/books/NBK499956/

Adverse Event and Error Clearly Defined

Medical Error

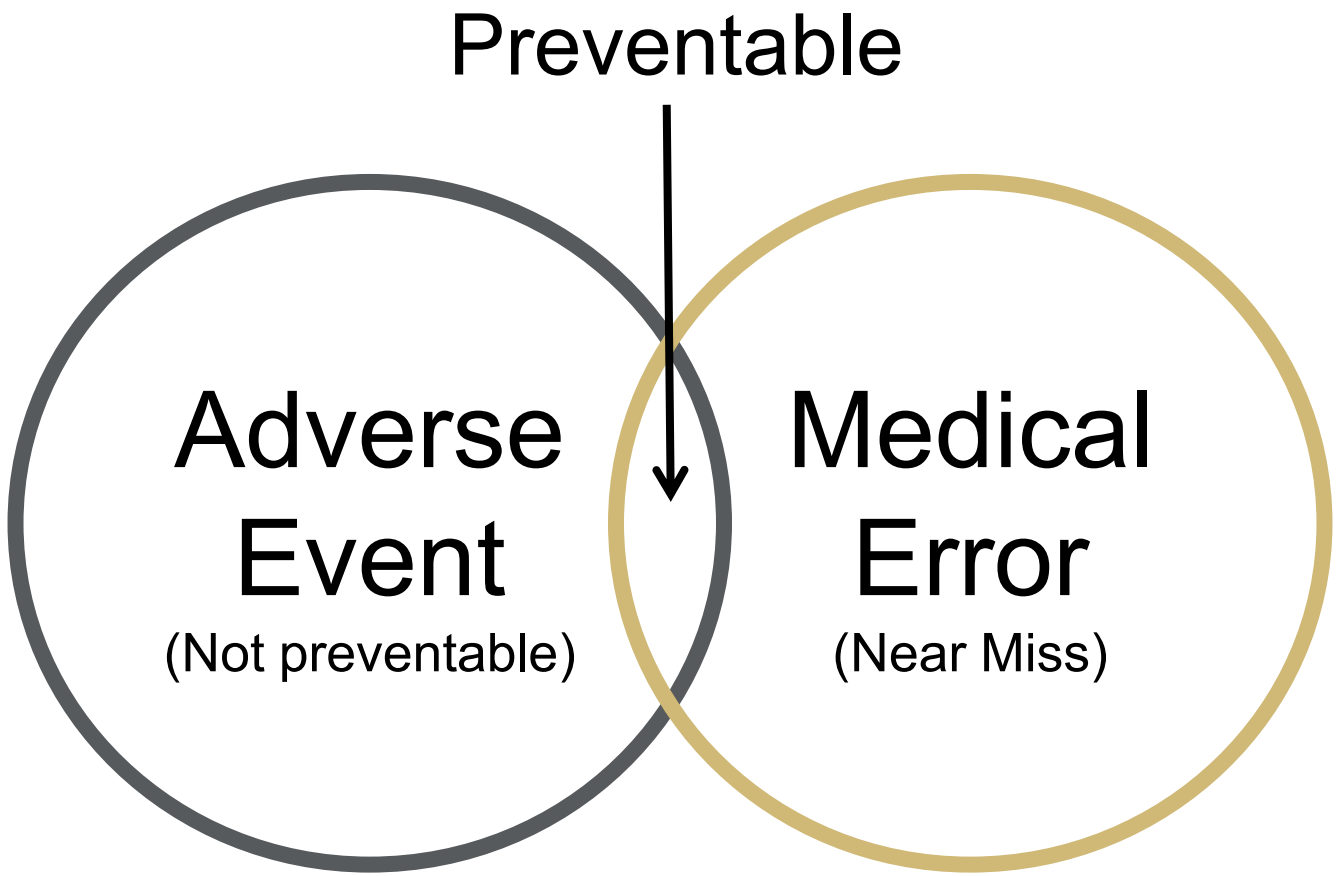
The failure to complete the intended plan of action or implementing the wrong plan to achieve an aim.

An unintended act or one that fails to achieve the intended outcome.

Act of commission: doing the right thing incorrectly
Act of omission: failure to do the right thing

Just culture algorithm

Adverse Event and Error Clearly Defined



Adverse Event

Medical Error

POLL

Patient has an anaphylactic response to penicillin. Allergy was not previously known.

Adverse Event

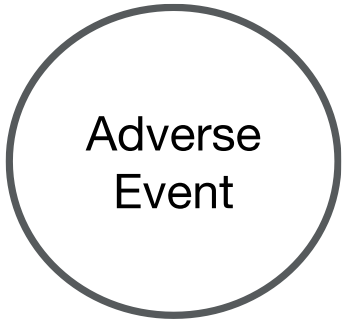
Medical Error

?

POLL

Patient has an anaphylactic response to penicillin. Allergy was not previously known.

Adverse Event



POLL

Patient with a known penicillin allergy receives a dose of penicillin. No reaction occurred.

Adverse Event

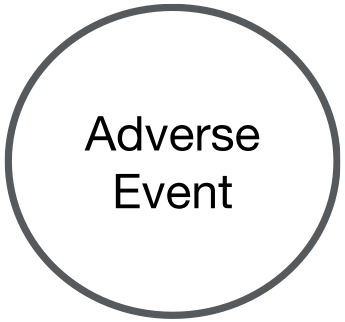
Medical Error

?

POLL

Patient with a known penicillin allergy receives a dose of penicillin. No reaction occurred.

Medical Error



POLL

A pregnant patient is administered the herpes zoster vaccine (live virus).

Adverse Event

Medical Error

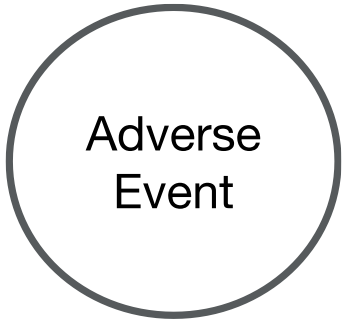
?

POLL

A pregnant patient is administered the herpes zoster vaccine (live virus).

Adverse Event

Medical Error



POLL

A patient dies of sepsis after admission to the hospital despite receiving appropriate early goal-directed care.

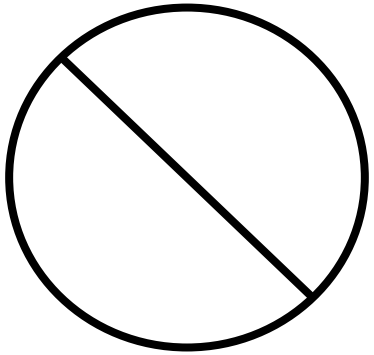
Adverse Event

Medical Error

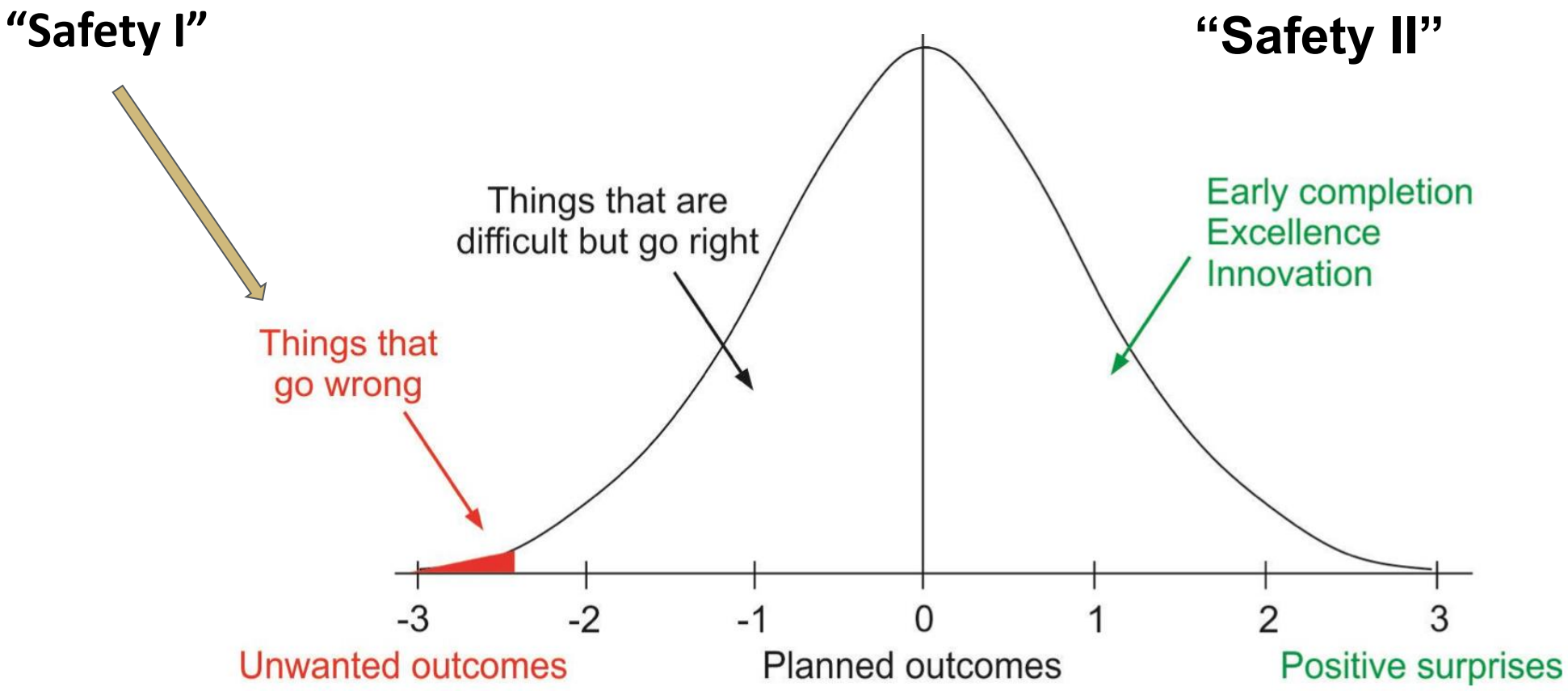
?

POLL

A patient dies of sepsis after admission to the hospital despite receiving appropriate early goal-directed care.



Used to determine current areas of strength *and* opportunity for improvement



Source: C. Horsley . *Safety II Translating Theory Into Practice*. https://www.hqsc.govt.nz/assets/Our-work/System-safety/Adverse-events/Publications-resources/Translating-theory-into-practice-Dec-2018. Accessed: 1/17/2024

Case is Discussable

While we want to be transparent and open – some cases are not amenable to large group examination and discussion….yet (?)

Some reasons not to discuss publicly:

1. Active litigation/risk management
2. Ongoing investigation
3. High profile case (identifiable)
4. High emotional toll/burden
5. Too complicated to distill into a single discussion

Elements of an effective* systems-based case review

- ☑ Multidisciplinary +/- multi-specialty
- ☑ Understanding of system (rules, policies, how things actually happen)
- ☑ Includes information regarding the patient(s) SDOH
- ☑ Input from those involved
- ☑ Objective and fact-based
- ☑ Facilitated
- ☑ Structured and consistent
- ☑ Clear objectives
- ☑ Assumes best intentions
- ☑ Follows just culture
- ☑ Adverse event/medical error clearly defined
- ☑ Used to determine current areas of strength *and* opportunity *for* improvement
- ☑ Case is discussable


BREAK-TIME
Come back at 3:15PM MT!

2nd Victim: Care for the Caregiver

Up to **73%** of all healthcare practitioners will suffer from second victim phenomena at least once in their careers.

Photo Credit: “We Suffer in Silence” The Challenge of Surgeons as Second Victims. Matthew Fox, MHSC. American College of Surgeons Bulletin. 12/1/2022.

Coughlan B, Powell D, Higgins MF. The second victim: a review. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 2017;213:11-16.

Peer Support

- Prevalence of second victims range from 10%-43% [1]
- Most physicians desire support after adverse events[2]
- Many second victims do not receive support[3,4]
- Strong peer relationships may promote resilience in health care[5]

Idren's Hospital Colorado
e, it's different."

Affiliated with
University of Colorado
Anschutz Medical Campus

[1]Seys et al 2013, [2]Khaneja et al 1998,
[3]Scott et al 2009, [4]Edrees et al 2011,
[5]Gittell 2016

(1879 – 1955)

"Every physician carries within (themselves) a small cemetery, where from time to time (they) go to pray – a place of bitterness and regret, where (they) must look for an explanation for (their) failures."

René Leriche
French surgeon and physiologist


B
A
EMERGENCY
Welcome To DENVER HEALTH


B
A
EMERGENCY
Welcome To DENVER HEALTH

15 minutes

Breakout 3: Discussion

What are your reactions to this narrative?

How have you seen this play out at your institution or in your career?

Definition of “second victim”

Any healthcare professional who is involved in an unanticipated

- adverse patient event,
- medical error, and/or
- patient-related injury

…and may be adversely impacted to the point of being traumatized by the event, feeling like a victim themselves.

- Frequently, these individuals feel personally responsible for the patient’s outcome.
- Many feel as though they have failed the patient, second guessing their clinical skills and knowledge base.

Scott SD, Hirschinger LE, Cox KR, et al The natural history of recovery for the healthcare provider “second victim” after adverse patient events BMJ Quality & Safety 2009;18:325-330.

Definition of trauma

by Substance Abuse and Mental Health Administration (SAMSHA)

Three "E's"

EVENT(S) Trauma results from an Event, series of events, or set of circumstances

EXPERIENCE Experienced by an individual as physically or emotionally harmful or threatening

EFFECTS Has lasting Adverse Effects on the individual's functioning and physical, social, emotional, or spiritual well-being.

Image by Gordon Johnson from Pixabay

Second Victim Stages of Recovery

1. Chaos and Accident Response
2. Intrusive Reflections
3. Restoring Personal Integrity
4. Enduring the Inquisition
5. Obtaining emotional first aid
6. Three outcomes: Dropping out, surviving or thriving

Photo Credit: **Second Victim Program Helps Health Care Workers Cope in the Aftermath of Tragedy. General Surgery News. 10/1/2029**

Scott SD, Hirschinger LE, Cox KR, et al
The natural history of recovery for the healthcare provider "second victim" after adverse patient events BMJ Quality & Safety 2009;18:325-330.

Chaos (and accident response)

Amygdala response

- Fight, flight, freeze, fawn
- Emotional Shock

Autonomic survival response

- Adrenaline ↑ heart rate, BP, breathing, sweating
- ↑ awareness of possible danger
- Muscles tense, ready to act

Multiple emotional, physical, cognitive, and existential reactions

- Numbness, anxiety, guilt
- Nausea, fatigue, faintness, tremors
- Difficulty concentrating, racing thoughts, memory problems, altered time/space
- Despair, disruption of life assumptions, loss of self-efficacy

Intrusive Reflections

Thinking about the event (past)

- What happened? How did it happen?
- What if's? Could I have prevented it?

Thinking about the future

- What is going to happen now?
- What will others think of me?
- Am I inadequate, or a failure?

"Haunted re-enactments" – reminders, triggers of the event

Periods of self-isolation, avoidance

Figure from SAMSHA Tip 57: Trauma-Informed Care in Behavioral Health Services. Treatment Improvement Protocol (TIP) Series 57. HHS Publication No. (SMA) 13-4801. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014, p. 67.

Restoring Personal Integrity

Connection and support from trusted others

- Listening, understanding
- Validation, normalization
- Non-judgmental, non-stigmatizing

NOTE: Can be compromised by a non-supportive, blaming, shaming environment

- “Grapevine gossip”
- Unjust culture / lack of team ethos

Enduring the Inquisition

How will the institution/organization react?

Answering “WHY”? What happened?

What are the privacy and disclosure laws?

- Who can/should I talk to? What is not allowed to be said?
- Will I be incriminating myself?

Case Investigations (M&M, Systems-Based Case Review, RCA)

Image by Marcin from Pixabay

Obtaining Emotional First Aid

May be personal, professional, or both.

Seeking help ≠ weakness Toughing it out ≠ strength

Also when litigation concerns tend to arise: *Will my credentials, my practice be compromised?*

Get Help

https://pastthepandemic.org/resources/

Toolkit

View details »

Disaster Response

View details »

Helplines

View details »

PAST THE PANDEMIC
mental wellbeing
TOOLKIT

Department of Psychiatry
SCHOOL OF MEDICINE
UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS

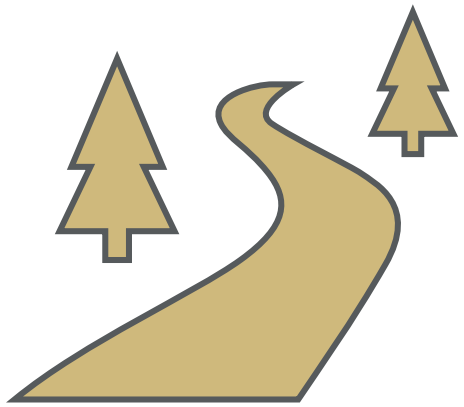
Project ECHO COLORADO

Crisis Resources - Get Help NOW | Urgent & Routine Care | Mental Health Care with CU Health Plans | Self-guided Resources | Self-screening Tools | Support Groups & Other Resources

Resident Crisis Resources

- Telus Health Support App
  - **24/7 Mental Health Counseling and Support for Residents**
  - **FREE** online mental health counseling and support resources 24/7.
  - The Support app offers virtual, chat, and call options to connect Residents with counseling services, anytime, anywhere.
  - Read the Telus Health Guide and get started today.
- Resident Mental Health Clinic
  - **Same day and after hours appointments available. Walk in to clinic for urgent care.**
  - **Available 24/7**- 303-724-4716 (business hours) and 303-370-9127 (after hours); smhservice@ucdenver.edu (e-mail for appointments only).
- Suicide & Crisis Lifeline
  - Call or Text **988**
- Colorado Crisis Services
  - Call **844-493-8255** or visit the website for 24/7 walk-in locations
- The Phoenix Center at Anschutz
  - Call **303-556-2255** free & confidential helpline for interpersonal violence victim services
- The Real Help Hotline
  - A free service for CU faculty, staff, residents/fellows facing a variety of life challenges - from financial stress, relationship problems, mental health and everything in between. The line is open 24/7 at **833-533-CHAT**.
- **UCHealth First Call**
  - Call **1-833-701-0448** for in-person or virtual assistance.
- **Emergency Services**
  - In an emergency, call **911** or report to the nearest emergency room.

Moving on…



Different path
"Dropping Out"

"Surviving"

"Thriving"

Care for the Caregiver – What YOU Can Do

1. **Ask for permission to discuss**

2. **Ask for their story**

3. **Allow space for their feelings**
   - Don't try to fix the feelings, validate them.
   - Don't minimize the importance of the mistake

4. **Offer to share a story of your own**

5. **Check in on their emotions**
   - If calm enough and still okay, *then* you can ask your questions

Learning Objectives

1. Understand the scope of harm in healthcare.
2. List the components of a Culture of Safety.
3. Explain Just Culture.
4. Differentiate a systems-based case review from other case conferences.
5. Recognize the importance of identifying the adverse event and/or medical error.
6. Recognize the impact of errors on clinicians and how to support colleagues.

Today = What + Why

Applied Patient Safety	• Safety Culture • Systems-Based Case Review • Care for the Caregiver

Patient Safety Academy: Seminar on Collaborative Case Review

Two days of in-person workshops + longitudinal coaching **= HOW**

Anschutz IHQSE

NEXT SESSION: September 2025


Anschutz
IHQSE