



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	<ul style="list-style-type: none">• Basics of Quality Improvement• Step-wise, practical implementation guide• Change Management framework overview for driving change
Applied Patient Safety	<ul style="list-style-type: none">• Safety Culture• Systems-Based Case Review• Care for the Caregiver
Designing for Change	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Data sources to track improvement• Data analysis and organization• Data visualization
Spreading Change Locally and Nationally	<ul style="list-style-type: none">• Diffusion of innovation framework• QI vs. research• Strategies for dissemination and publication• Grant opportunities
Coaching and Teaching Quality Improvement	<ul style="list-style-type: none">• How to coach QI teams• Identifying and troubleshooting common QI missteps



1999

44K-98K deaths
every year due to
error





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



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
	OIG Report, 2010	1.5%		(440,000) ^b
	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.”





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.**



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...”



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



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

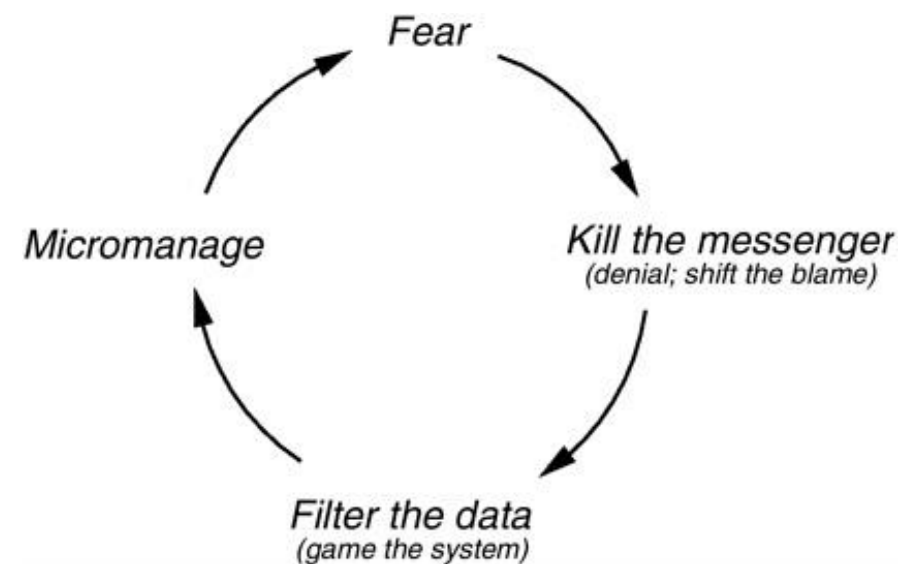




Reporting Culture

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.



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.



	Total Numbers	
	n	Percentage
Knowledge		
I do not know which incidents to report	176	50.3%
I do not know how to use the electronic incident reporting system (STARS)	152	43.3%
I don't know what happens to reports after they are submitted	109	31.1%
Retaliation		
I am worried about disciplinary action	24	6.9%
I am worried about litigation	23	6.6%
I am worried about retaliation from other hospital employees	40	11.4%
System effectiveness		
I worry that the reports are not anonymous	29	8.3%
I don't think systems will change as a result of my reporting	103	29.4%
I don't think reporting will keep the situation from happening again	83	23.7%
I find the electronic adverse event reporting system too time-consuming	83	23.7%
I am too busy doing my other work to file a report	143	40.9%
I feel making mistakes is an unavoidable part of medical training	32	9.1%

Single center study at Boston Medical Center

350/527 (66%) Residents from all specialties responded



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

1 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 $p \leq 0.05$.

2 “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.”

Just Culture

2000s

Blame-Free Culture

Mid-1990s

Punitive Culture

Prior to the 1990s





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”



Human Error

At-risk Behavior

Reckless Behavior

Inadvertent
action, slip
lapse, mistake

conscious
regard of
reasonable risk.

Consolidation

- Processes
- Procedures
- Design
- Environment
- Training

Mediation

Medial action
ve action



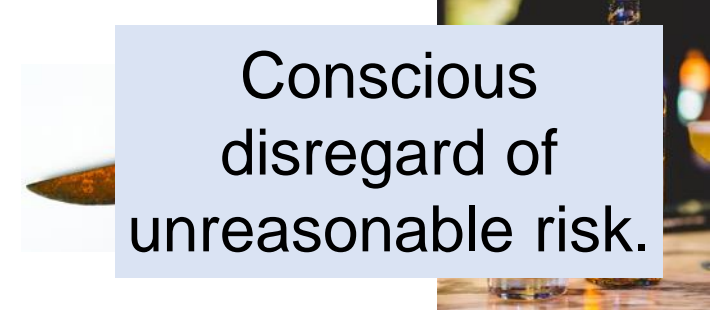
Human Error



At-risk Behavior



Reckless Behavior



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

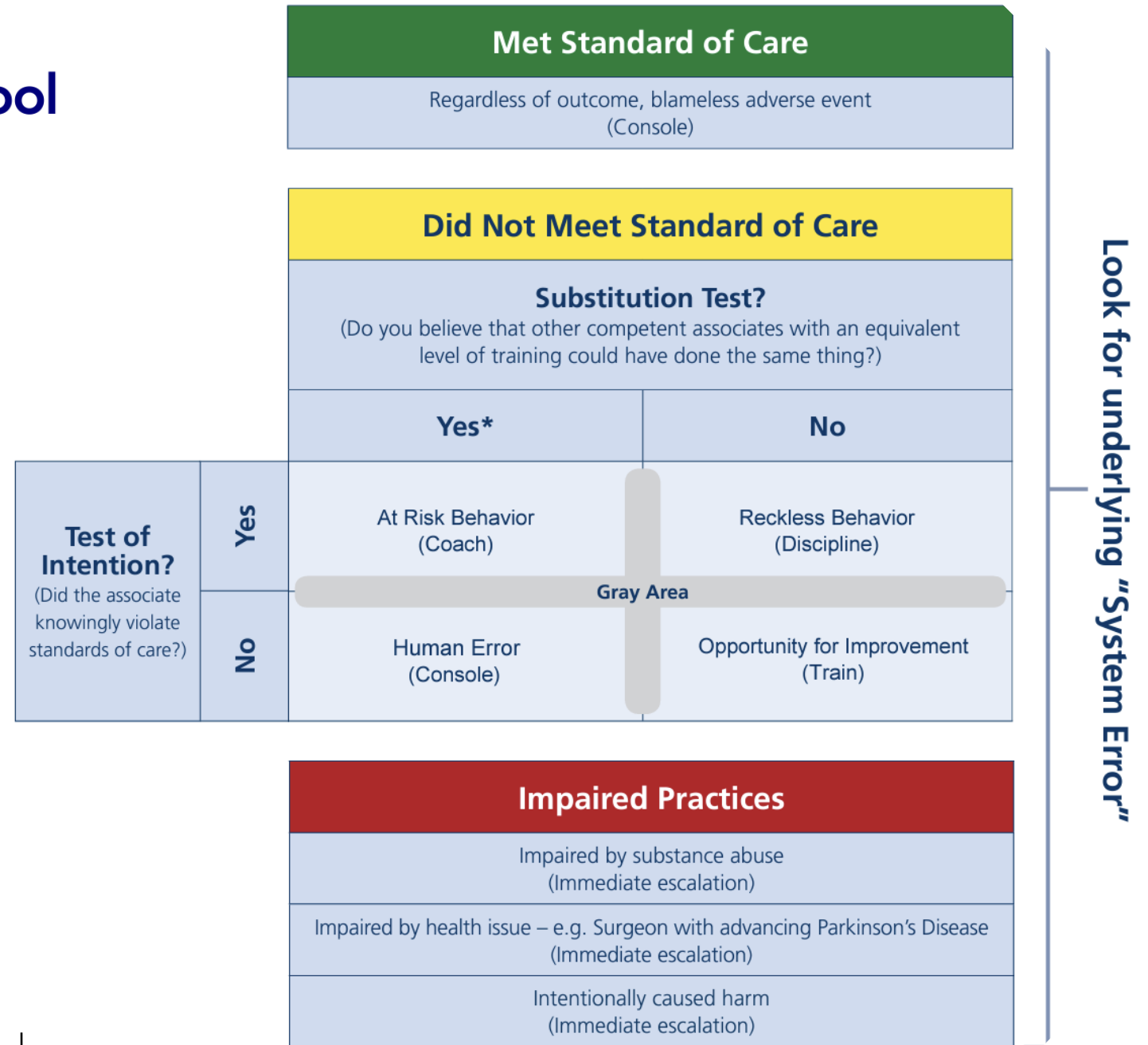
Remediation

- Remedial action
- Punitive action



A Just Culture Tool

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





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 and gross 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.



University of Colorado **Anschutz Medical Campus**

IHQSE



Just Culture

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

Accountable
environment for
reckless/careless
actions of
individuals





An informed culture

A reporting culture

A learning culture

A just culture

A flexible culture



A just culture



A reporting culture



A learning culture



An informed culture



A flexible culture

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?

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



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.



Breakout 2: Case Review



Describe the case reviews that happen at your institution.

What are the elements of an effective* Systems-Based Case Conference?

effective* = promotes HRO

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

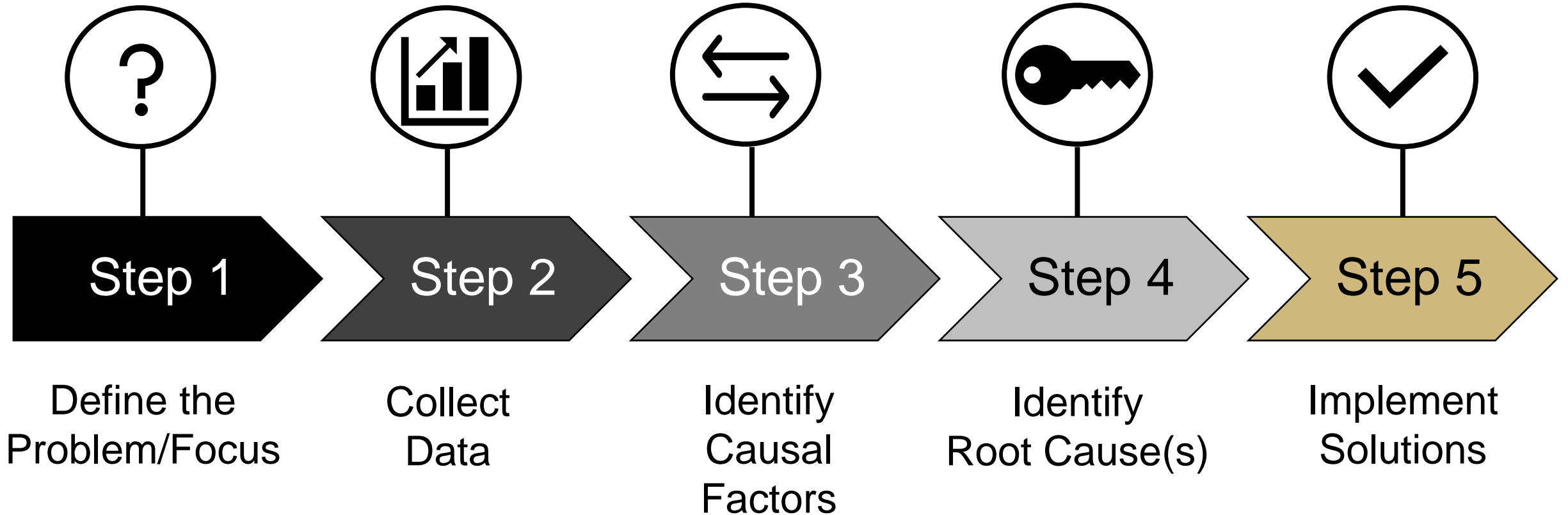
1. acknowledgment of the high-risk nature of an organization's activities and the determination to achieve consistently safe operations
2. a blame-free environment where individuals are able to report errors or near misses without fear of reprimand or punishment
3. encouragement of collaboration across ranks and disciplines to seek solutions to patient safety problems
4. organizational commitment of resources to address safety concerns

Elements of an effective* systems-based case review

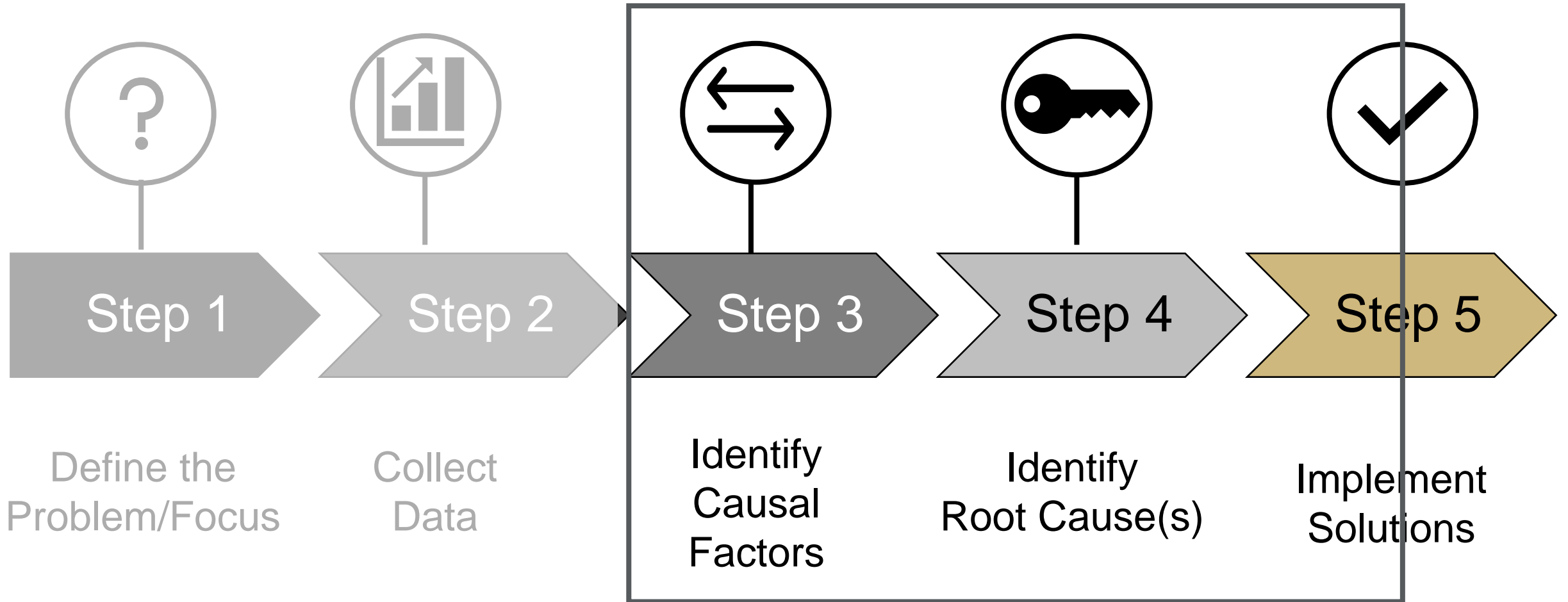
- Multidisciplinary +/- multi-specialty
- Understanding of system (rules, policies, how things actually happen)
- Includes information regarding the patient(s) SDOH
- Input from those involved
- Objective and fact-based
- Facilitated
- Structured and consistent
- Clear objectives
- Assumes best intentions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



Systems Based Case Review



Systems Based Case Review



Conference





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
- Empagliflozin
- 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

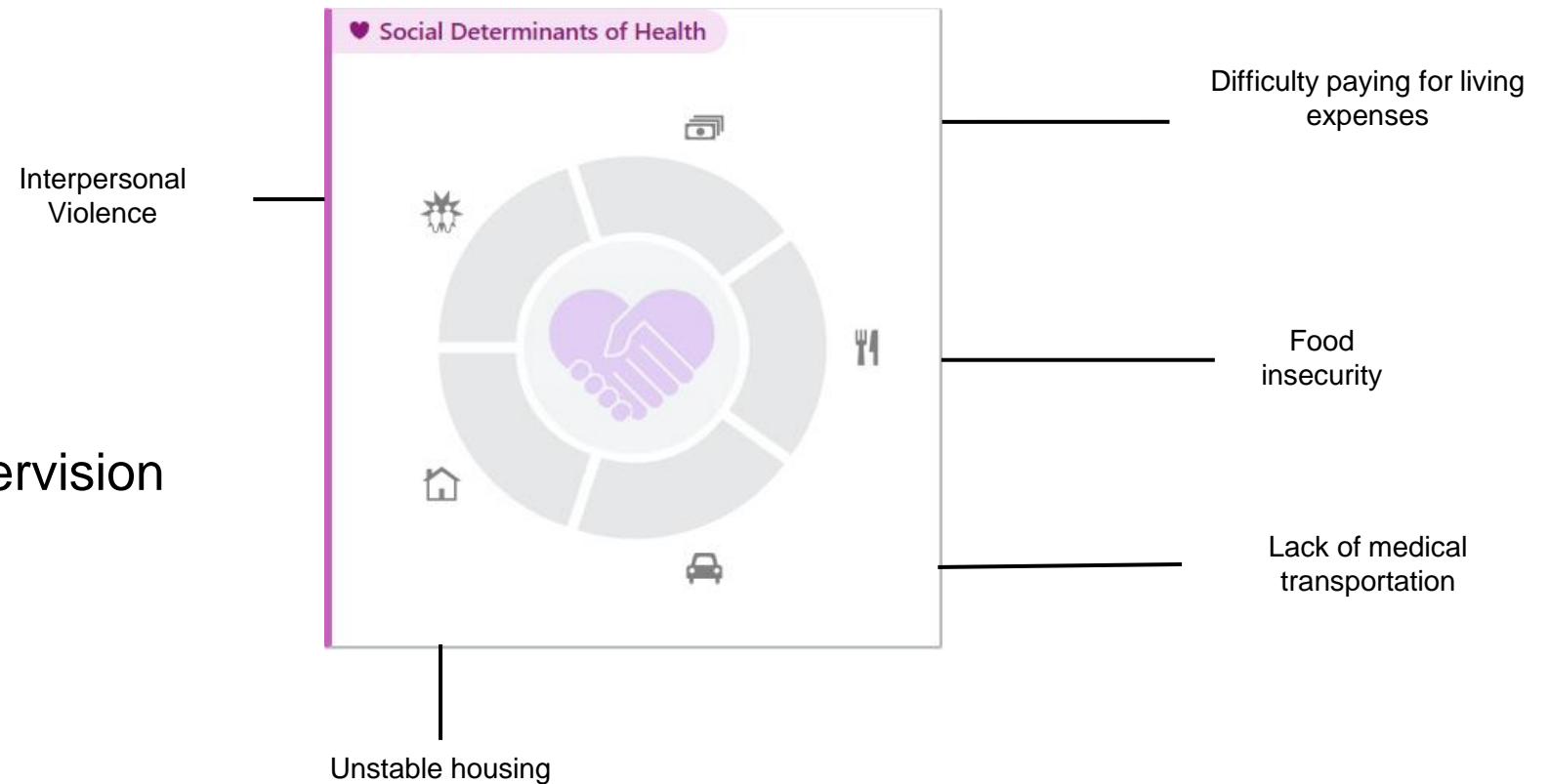
ALLERGIES

- 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



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.

Admission



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):

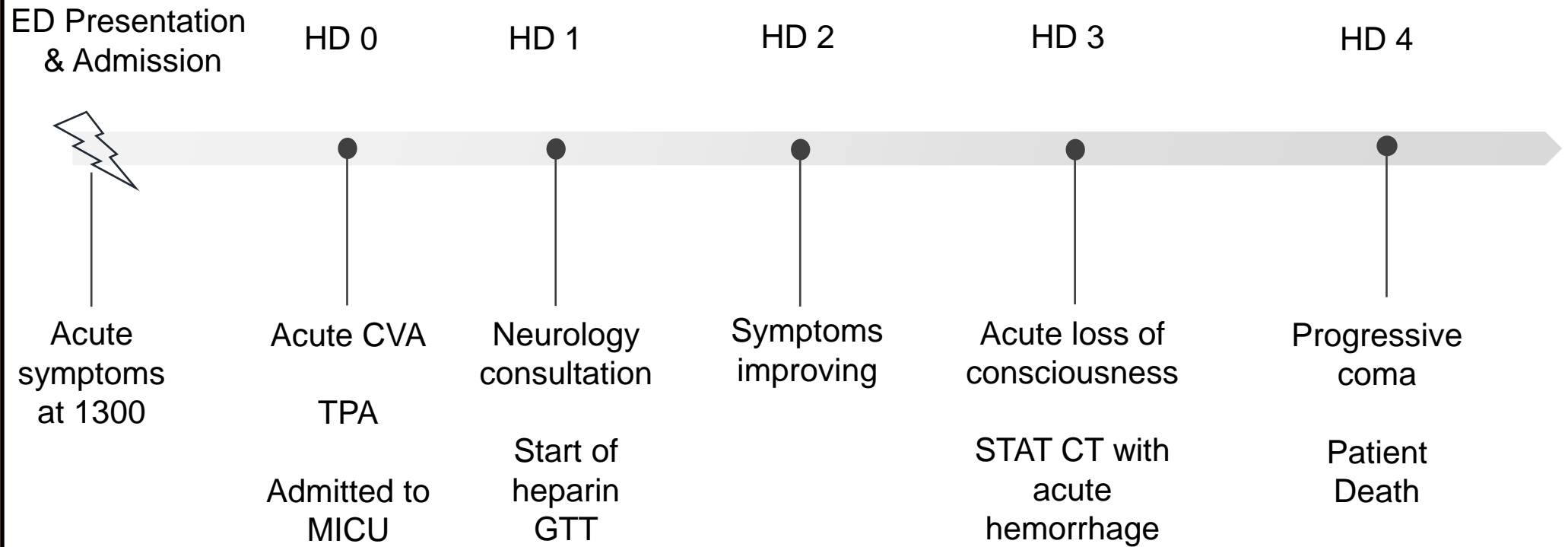
- Found unresponsive
- Head CT: large right frontotemporal intraparenchymal hemorrhage with midline shift
- Neurosurgery consulted and drainage not an option.

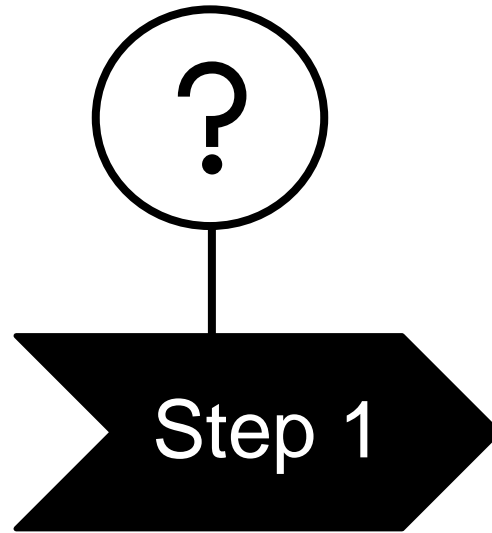
HD 4:

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



Hospital Course





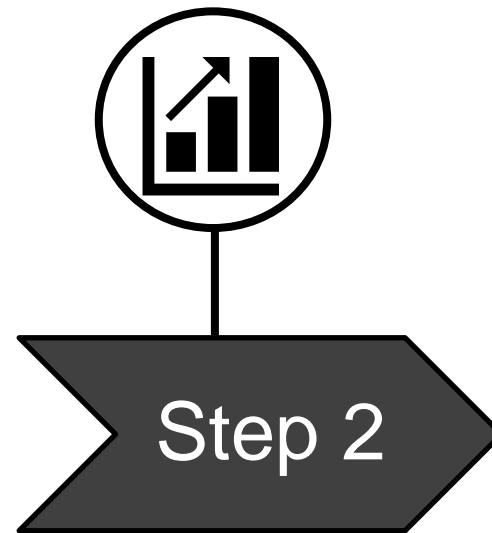
**Define the
Problem/Focus**





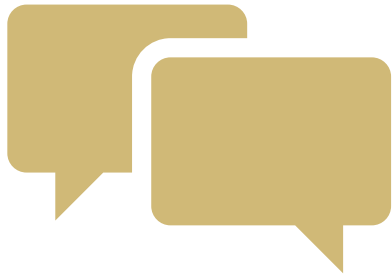
Patient death due to intracerebral hemorrhage.





Collect Data

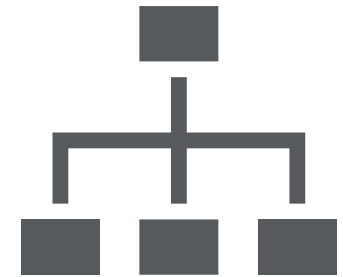




Talk with those involved.

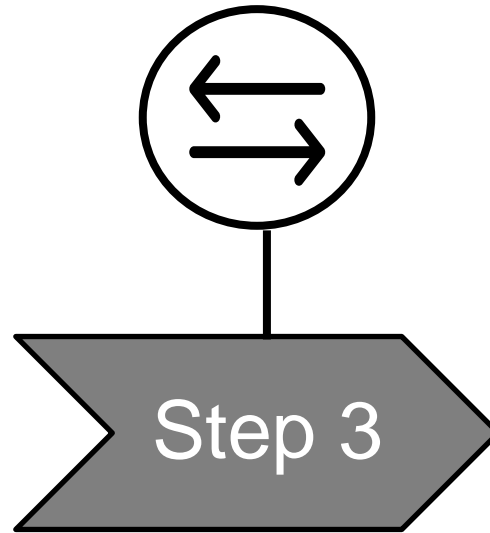


Review the chart.



Define processes.





Identify Causal Factors



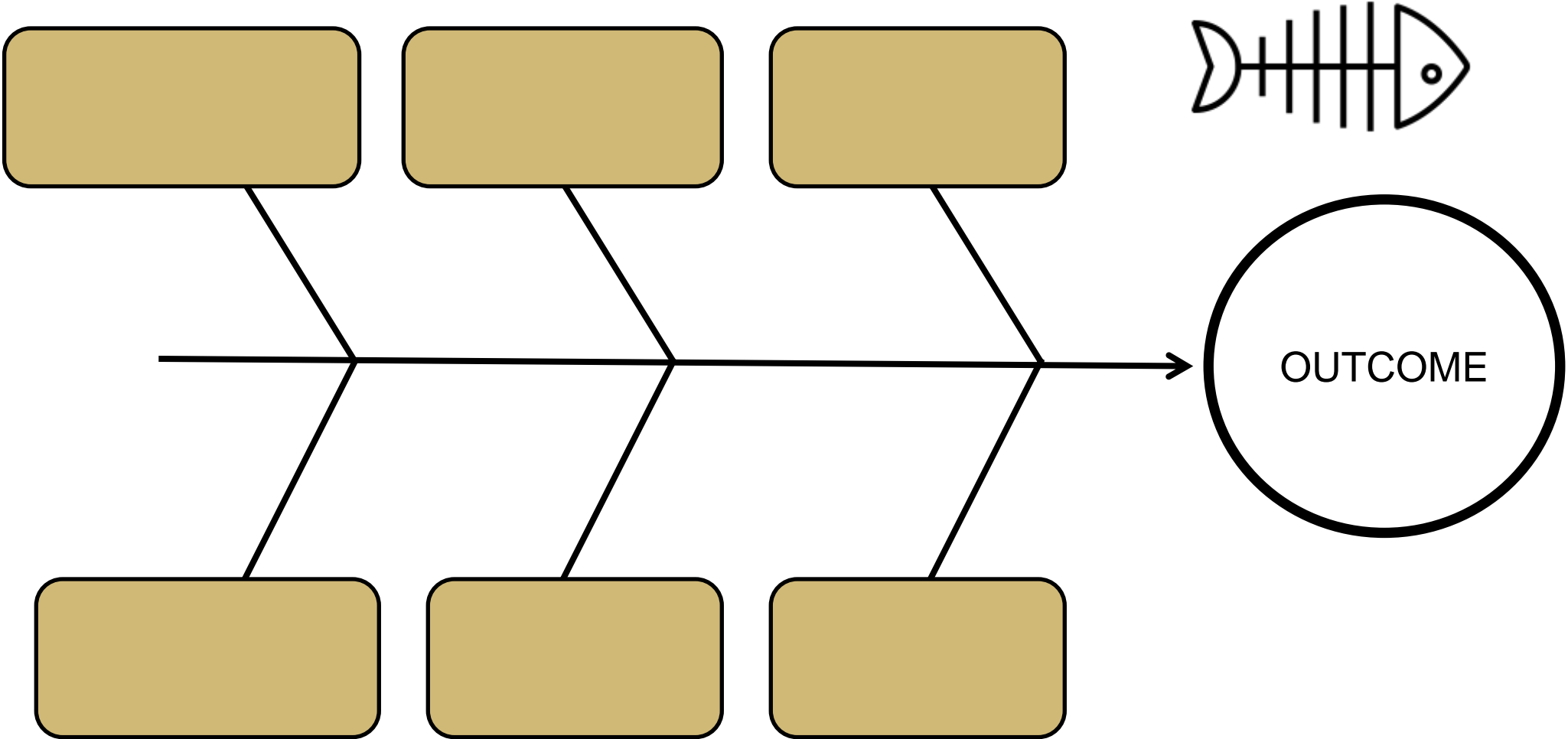
Common Themes

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

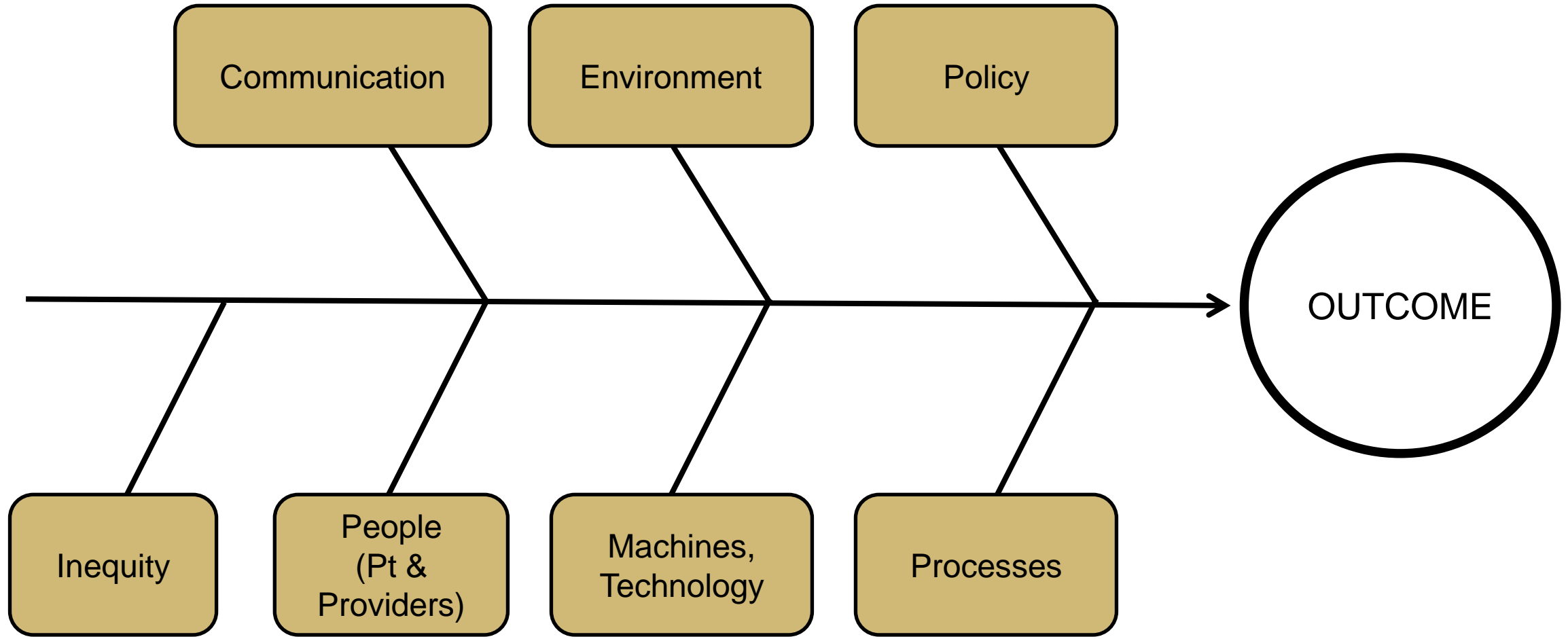




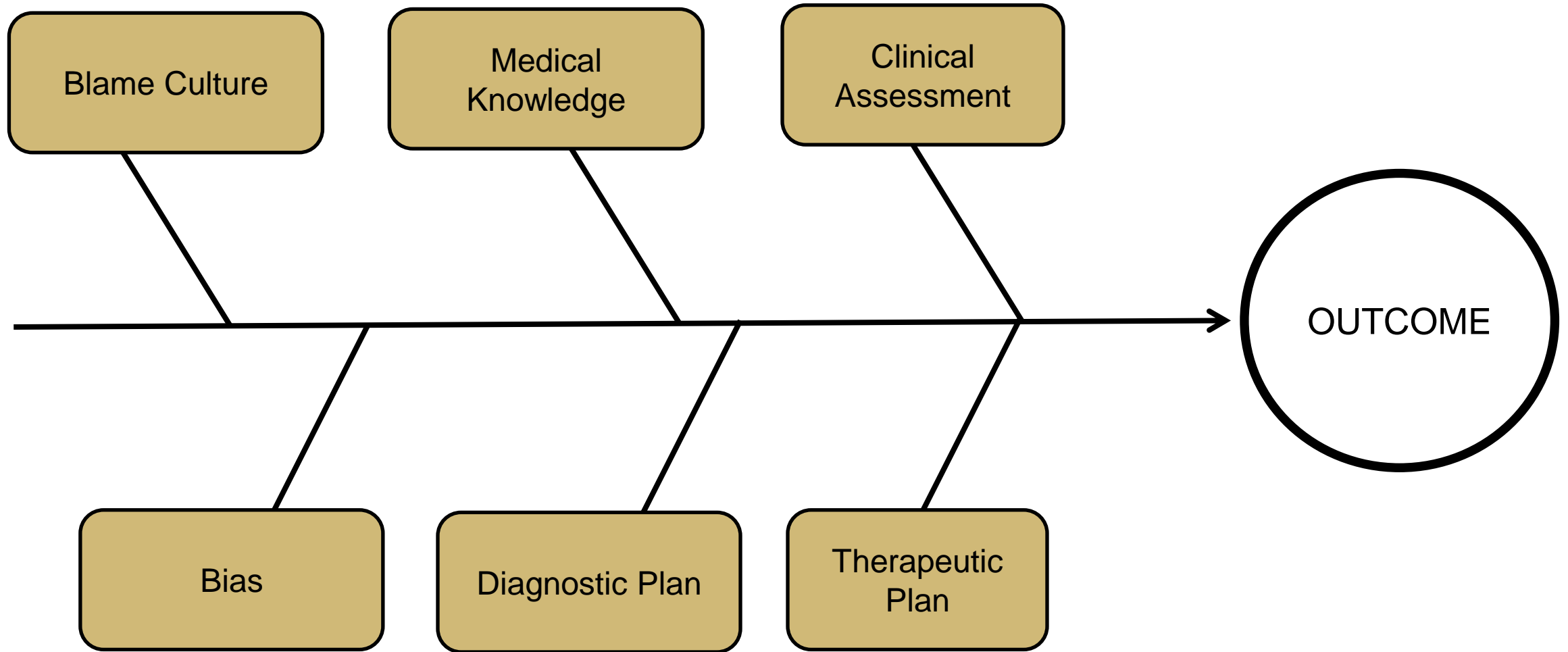
Cause and Effect Diagram



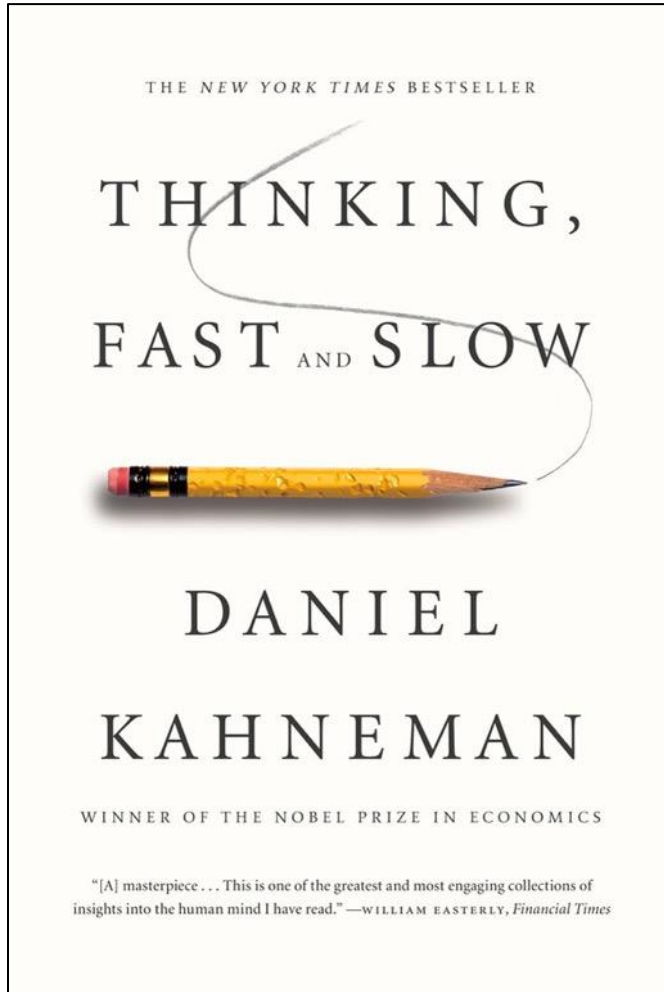
What System factors contributed?



What 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

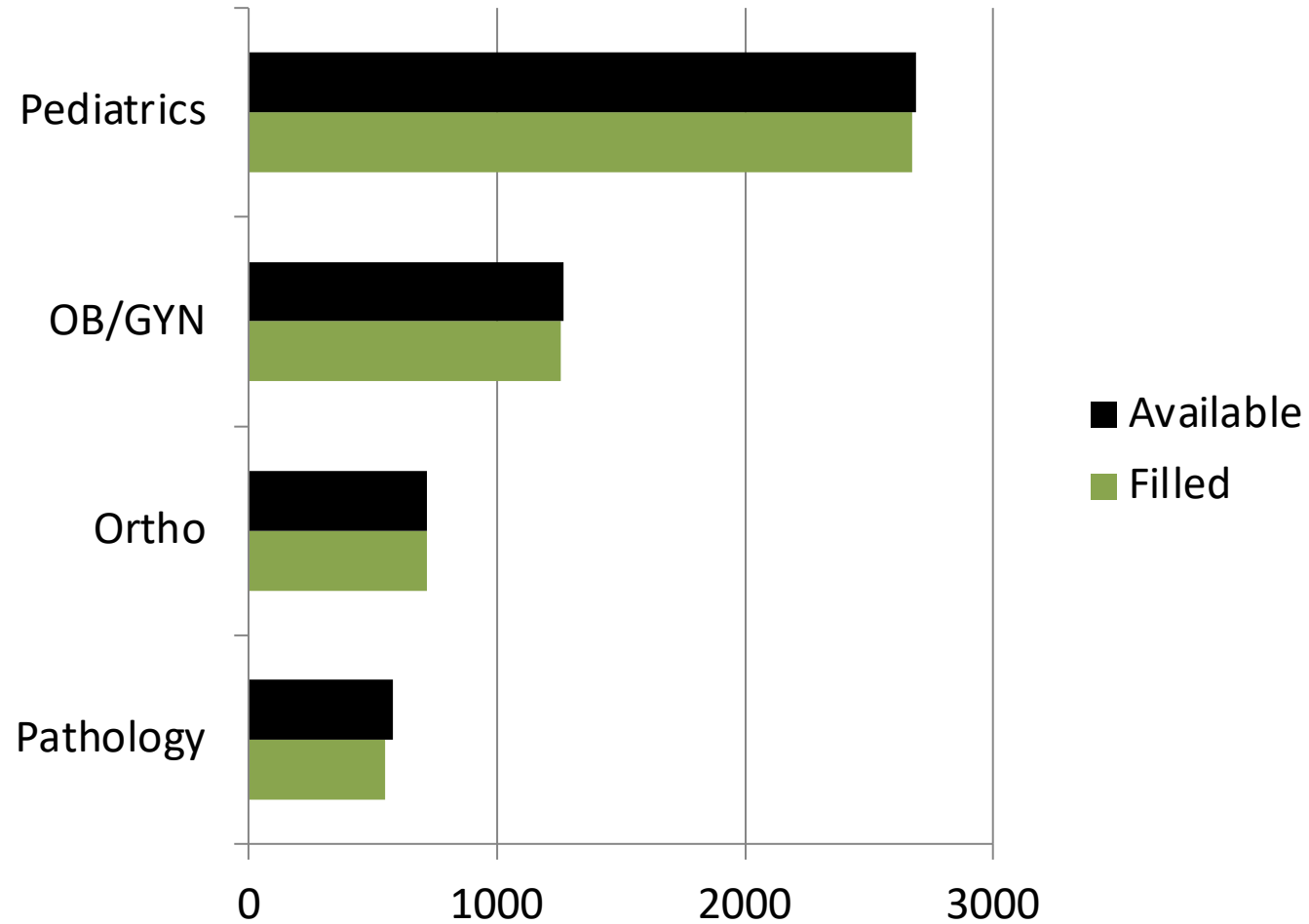
- Hector scored 243 on Step 1 and 263 on Step 2
- Hector wrestled in college and can bicep curl 120#
- He enjoys woodworking in his spare time

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.



Name the Bias - Cognitive

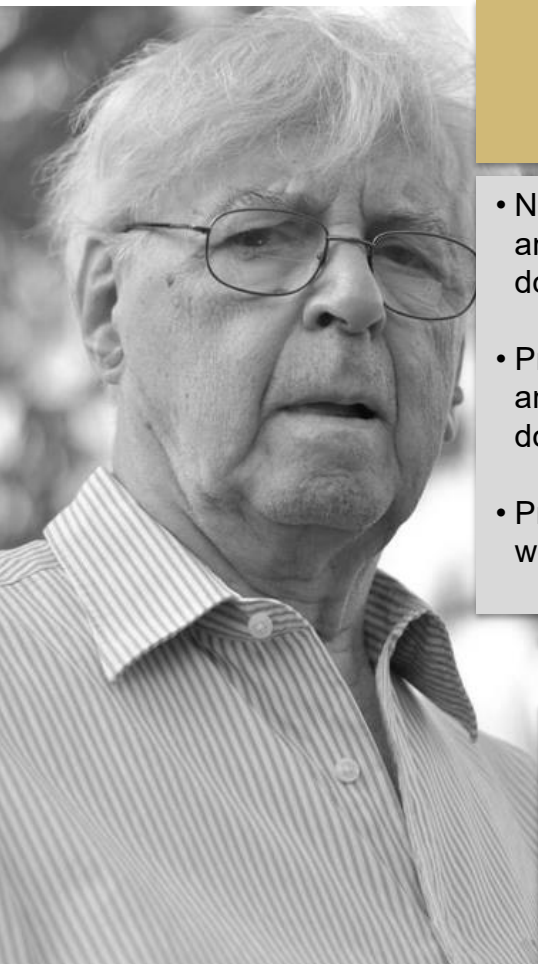
- Availability
The tendency to weigh likelihood of a diagnosis by how easily it is recalled
- Framing
Reacting to information based on how it is framed
- Premature Closure
Tendency to accept a diagnosis before it is fully verified
- Confirmation
Tendency to focus on evidence that supports a working diagnosis, 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.





Communication

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

- July

Environment and Equipment

Knowledge & Assessment

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

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

People (Patient and Provider)

Decisions (Diagnostic and Therapeutic Plans)

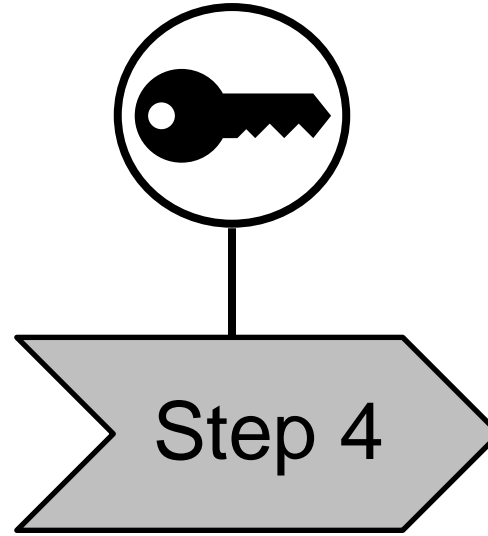
- TPA administered 2 minutes before the 4.5 window of efficacy
- Therapeutic heparin drip started for atrial fibrillation within 24 hours of ischemic CVA with TPA (not-indicated)

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

Processes and Procedures

Post-CVA
Intracerebral
Hemorrhage





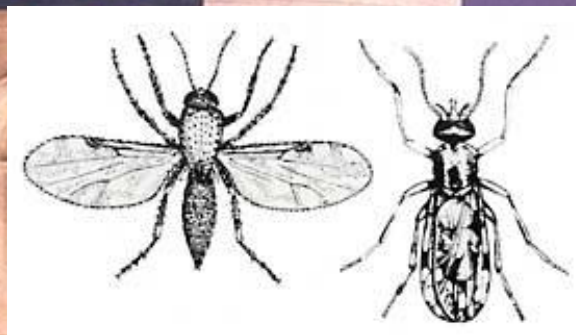
Identify Root Cause(s)







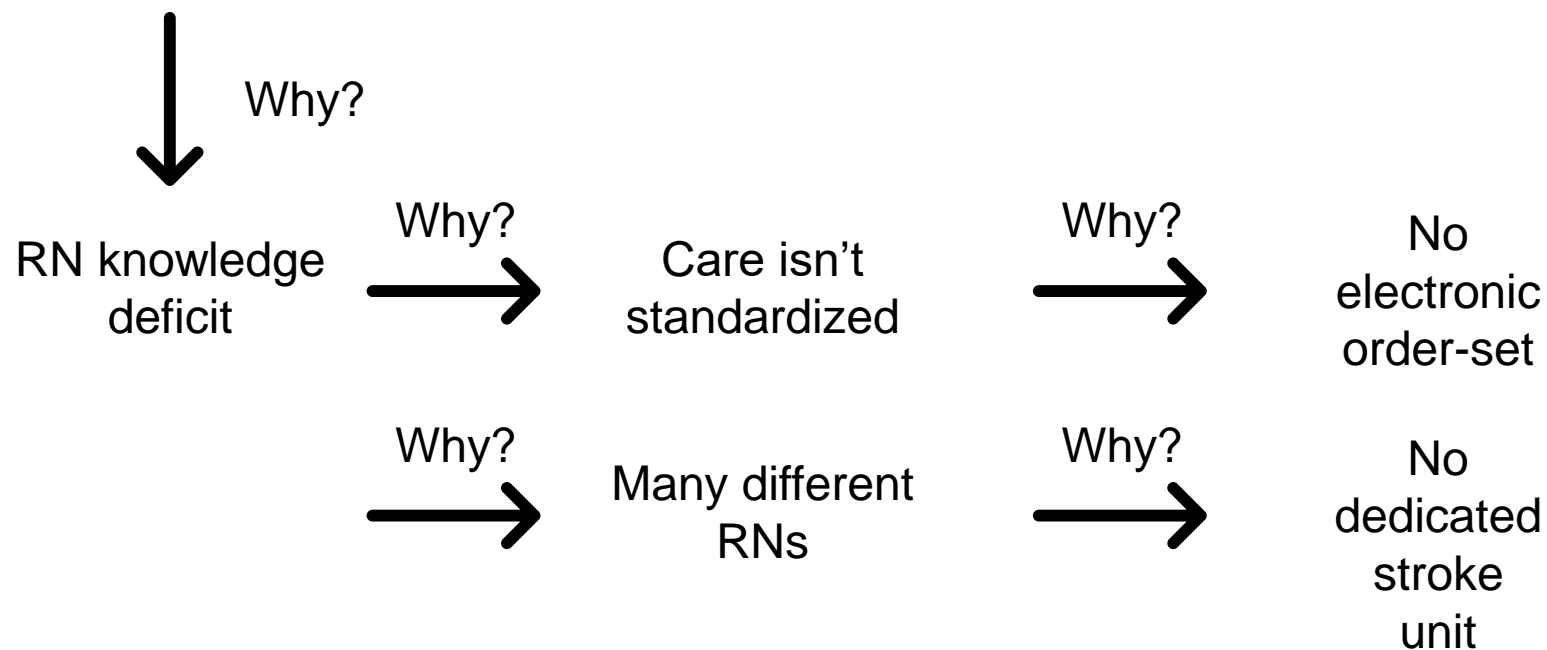
Five Why's

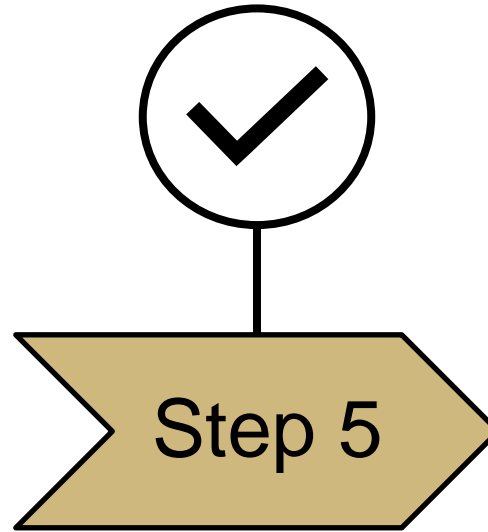




Knowledge & Assessment

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





Implement (Propose) Solutions





Medical
Error



Just culture algorithm



Medical Error

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?)

Yes*

No

At Risk Behavior
(Coach)

Reckless Behavior
(Discipline)

Gray Area

**Test of
Intention?**
(Did the associate
knowingly violate
standards of care?)

Yes

No

Human Error
(Console)

Opportunity for Improvement
(Train)

Impaired Practices

Impaired by substance abuse
(Immediate escalation)

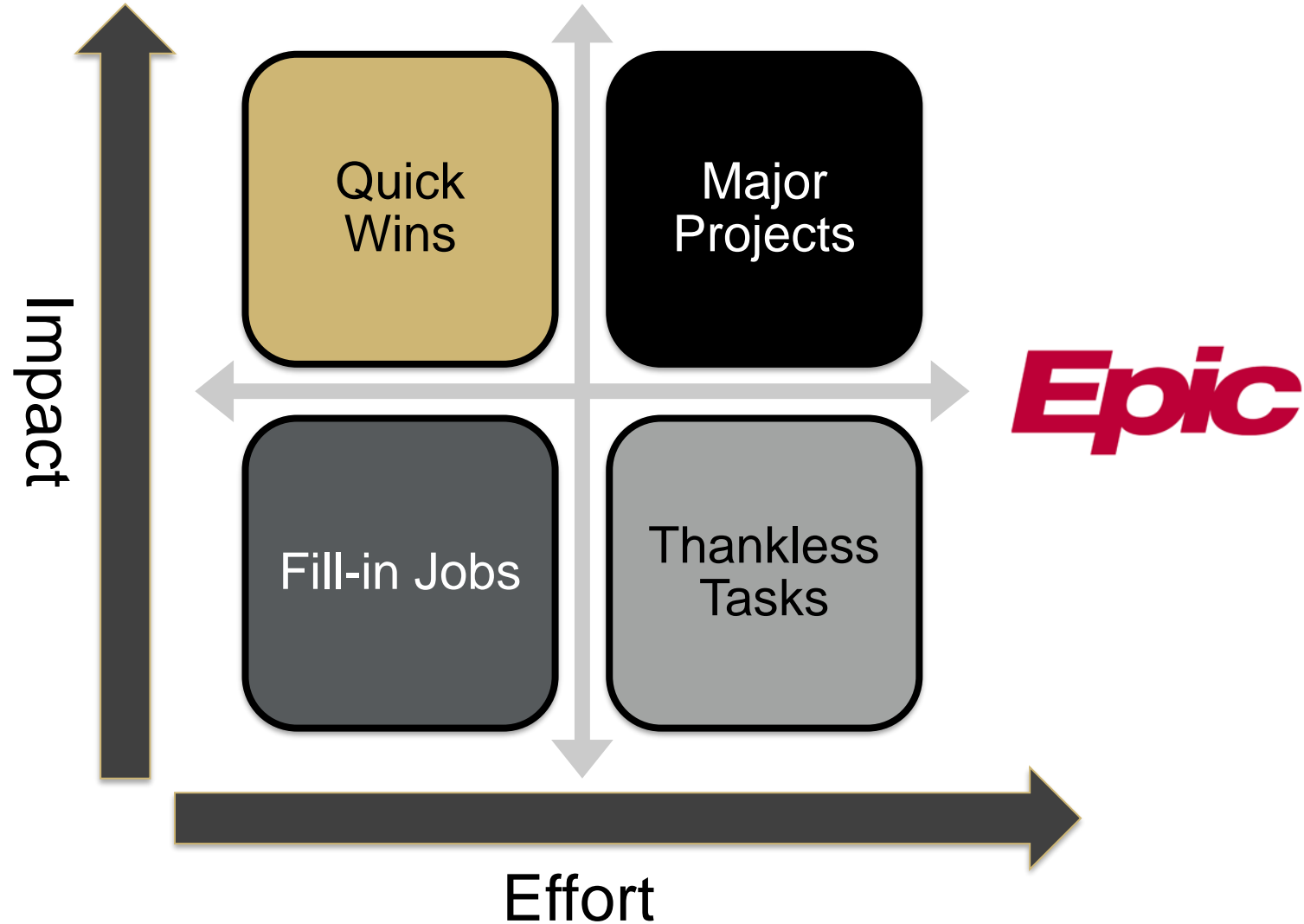
Impaired by health issue – e.g. Surgeon with advancing Parkinson's Disease
(Immediate escalation)

Intentionally caused harm
(Immediate escalation)

Look for underlying "System Error"



Action Priority Matrix





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

Look for underlying “System Error”

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)



NO

Met Standard of Care

Regardless of outcome, blameless adverse event
(Console)

Did Not Meet Standard of Care

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

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No

Human Error
(Console)

Opportunity for Improvement
(Train)

Gray Area

Look for underlying "System Error"

NO

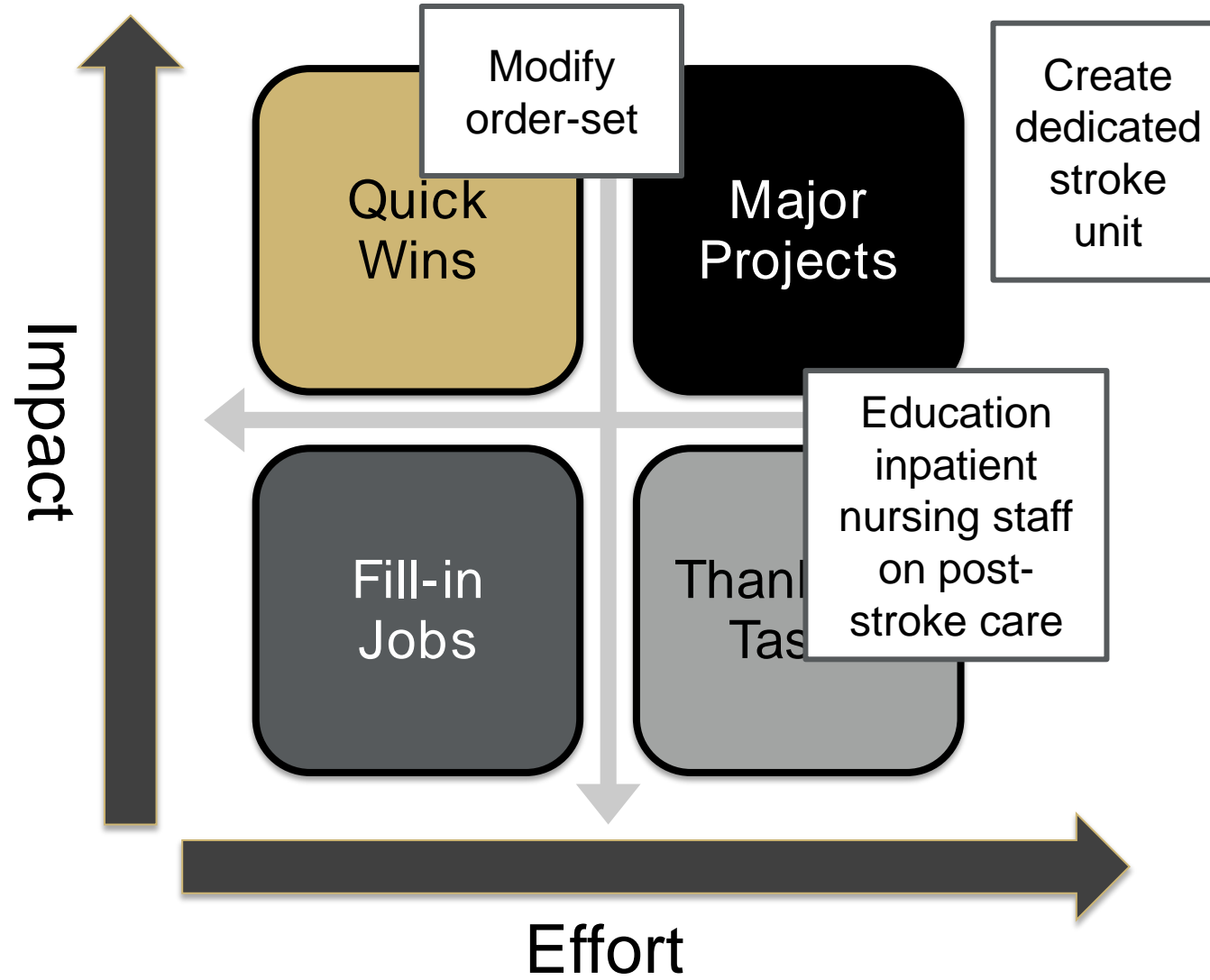
Impaired Practices

Impaired by substance abuse
(Immediate escalation)

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Intentionally caused harm
(Immediate escalation)







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



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



(Shared) Understanding of the system

IE: how things *actually* happen or *should* happen

Table 2. Alteplase Prescribing Guidelines

Dosage	Contraindications
0.9 mg/kg IV; max 90 mg; 10% given as bolus, 90% given over 60 min	<ul style="list-style-type: none">• Hypersensitivity to alteplase or any component of product• Evidence of IH on pretreatment evaluation• Suspicion of SH on pretreatment evaluation• Recent (<3 mo) intracranial or intraspinal surgery, serious head trauma, or previous stroke• History of IH• Uncontrolled hypertension at time of treatment• Seizure at onset of stroke• Active internal bleeding• Intracranial neoplasm, arteriovenous malformation, or aneurysm• Known bleeding diathesis, including but not limited to:<ul style="list-style-type: none">Current use of oral anticoagulants (e.g., warfarin sodium) or INR >1.7 or PT >15 secHeparin administration <48 h preceding stroke onset and elevated aPTT at presentationPlatelet count <100,000/mm³

aPTT: activated partial thromboplastin time; IH: intracranial hemorrhage; INR: international normalized ratio; max: maximum; min: minute; PT: prothrombin time; sec: second; SH: subarachnoid hemorrhage.
Source: Reference 11.

Innovations in Care

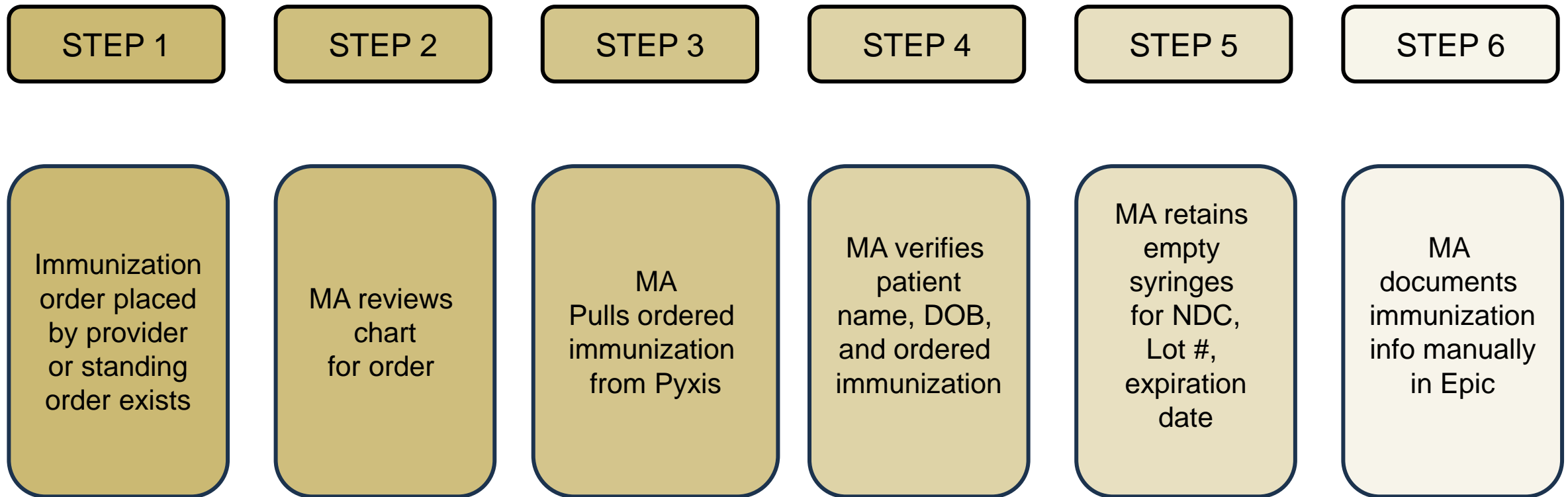
Electronic Stroke CarePath Integrated Approach to Stroke Care

Irene L. Katzan, MD, MS; Youran Fan, PhD; Micheal Speck, BS; Johanna Morton, MD;
Lauren Fromwiller, BSN; John Urchek, BS; Ken Uchino, MD; Sandra D. Griffith, PhD;
Michael Modic, MD

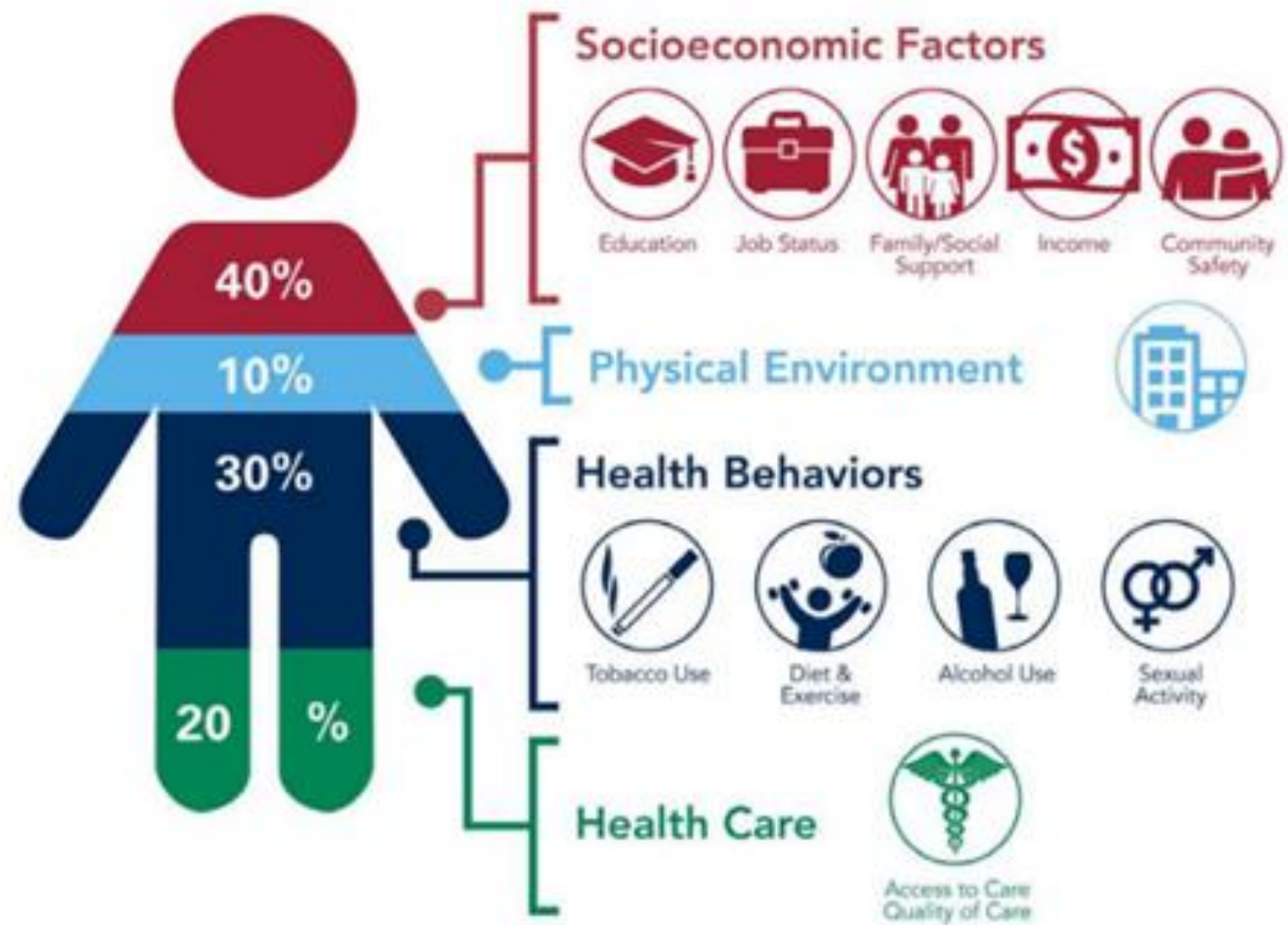


(Shared) Understanding of the system

Vaccination Process for Outpatient Clinics



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



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

Patient safety incidents are experienced unequally

- Black patients: adjusted rates of **perioperative pulmonary embolism and sepsis among black patients are 28% and 24% higher**, respectively, compared with white patients admitted to the same hospital.
- 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.**



Facilitated

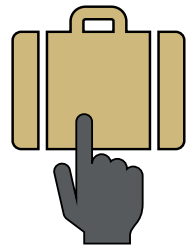
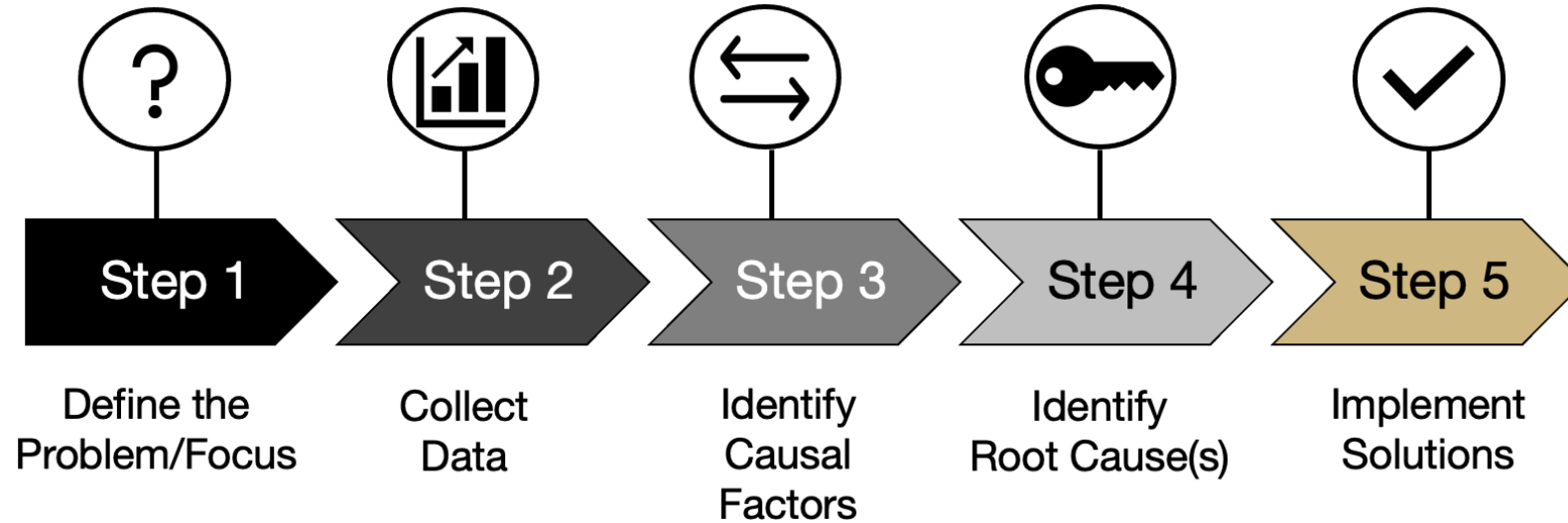
“Facilitators can be internal or external to the organization, from a clinical or non-clinical background, and be operating at different organizational levels from a clinical team through to the wider health system level.

The key is that they meet the requirements of the role, in terms of their personal attributes, knowledge, and skills. Commonly described personal characteristics of facilitators include being **empathetic, sensitive, flexible, pragmatic, authentic, credible, resilient, and passionate.**”

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



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.



This meeting is privileged and confidential; subject to peer and medical review protections at UCH and the State of Colorado

“The records, reports, and other information (discussed in this meeting) shall not be subject to subpoena or discoverable or admissible as evidence in any civil or administrative proceeding. No person who participates in the reporting, collection, evaluation, or use of such quality management information with regard to a specific circumstance shall testify thereon in any civil or administrative”

2017 Colorado Revised Statutes, Title 25, section 25-3-109



Adverse Event and Error Clearly Defined



Adverse
Event

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



Adverse Event and Error Clearly Defined



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

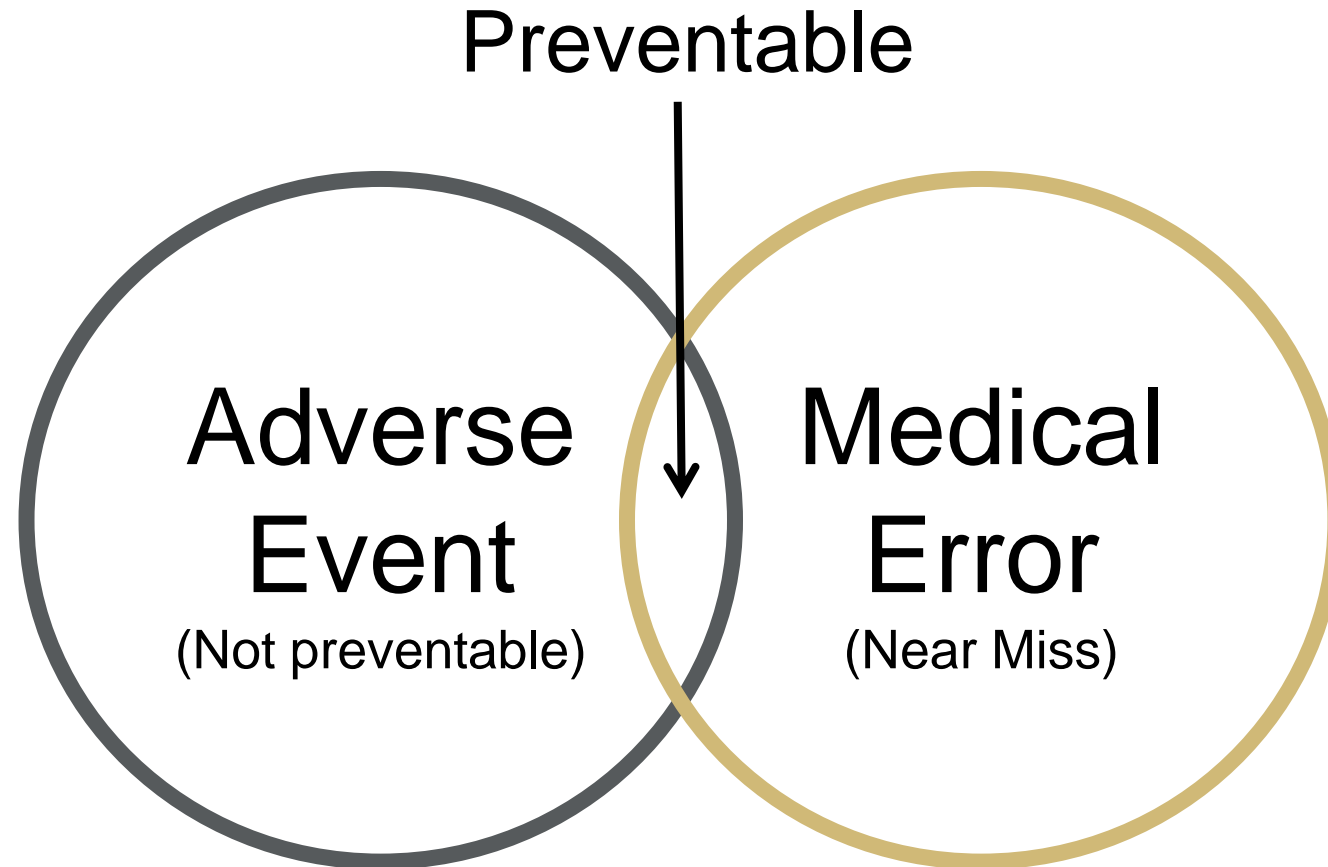
Act of omission: failure to do the right thing

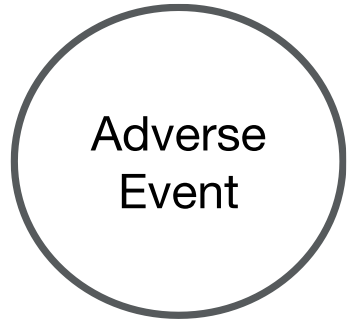


Just culture algorithm



Adverse Event and Error Clearly Defined





POLL

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



Adverse
Event

Medical
Error

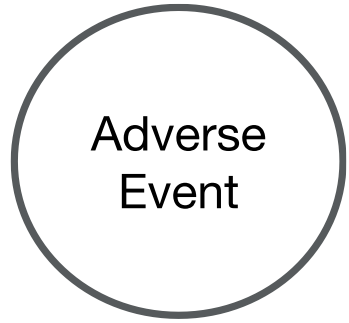


POLL

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

Adverse
Event

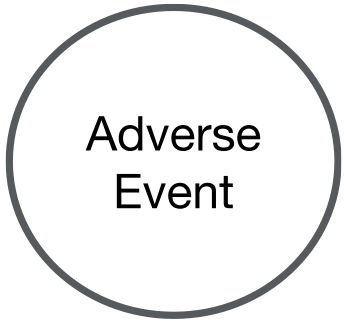




POLL

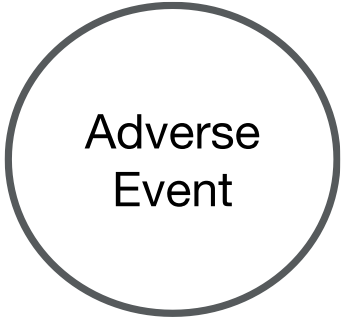
Patient with a known penicillin allergy
receives a dose of penicillin. No reaction
occurred.





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





POLL

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



Adverse
Event

Medical
Error



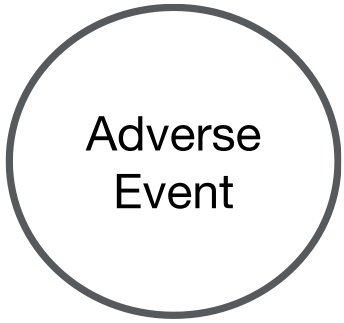
POLL

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

Adverse
Event

Medical
Error





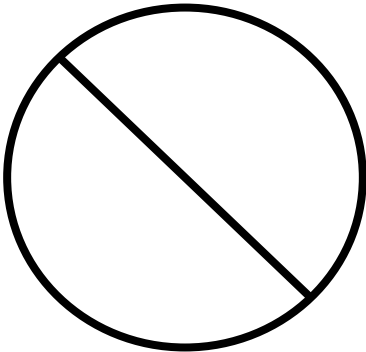
POLL

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



POLL

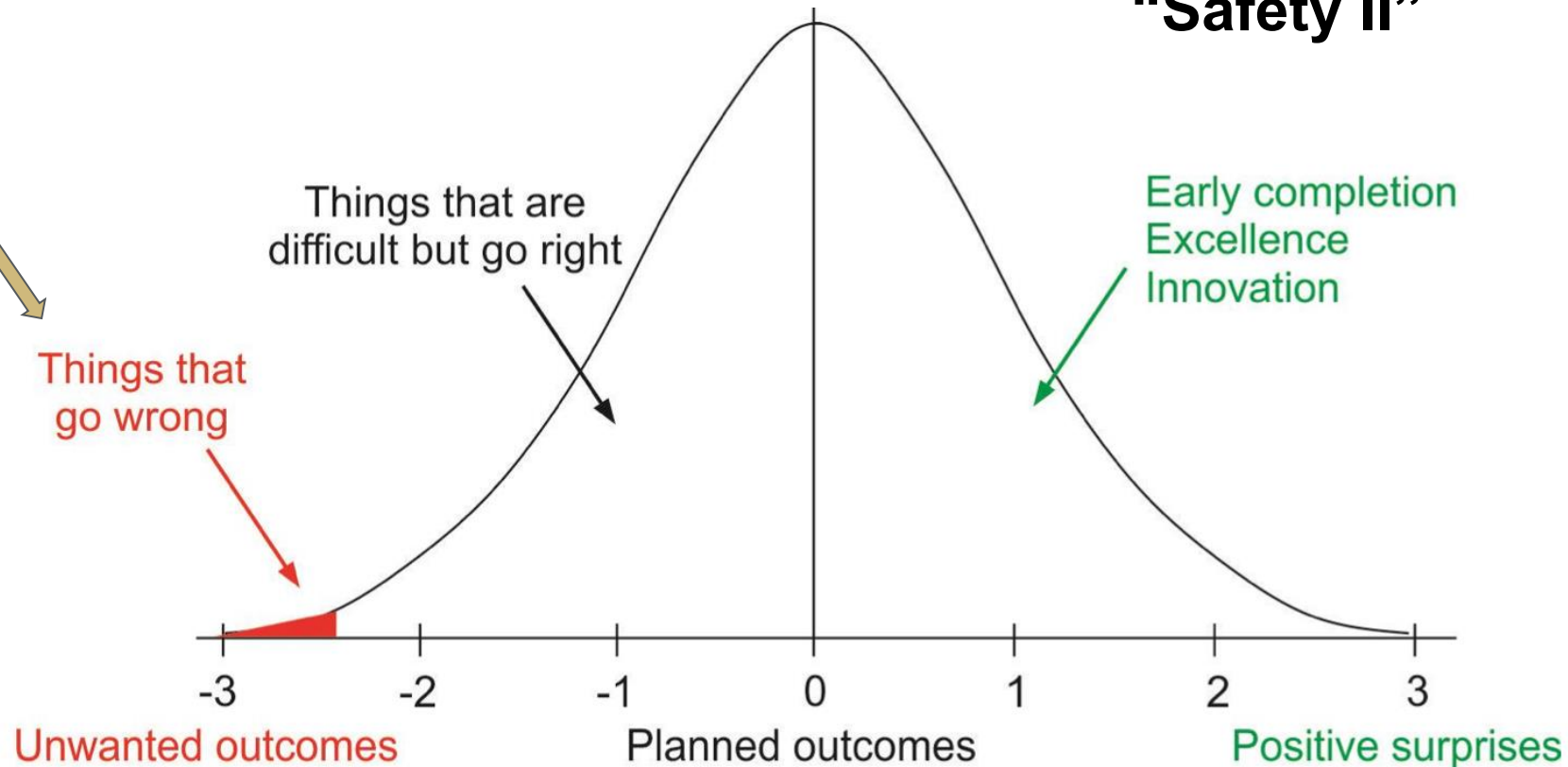
A patient dies of sepsis after admission to the hospital despite receiving appropriate early goal-directed care.



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

“Safety I”

“Safety II”



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



A top-down photograph of two white coffee cups on a dark grey table. The cup on the left is filled with a latte and has a spoon resting on its saucer. A hand is visible at the top left, holding the handle of this cup. The cup on the right is filled with a darker coffee and also has a spoon on its saucer. A hand is visible at the bottom right, holding the handle of this cup. A wooden tray is partially visible under the right cup. A black and white checkered cloth is in the top left corner. A semi-transparent white rectangular box is centered over the image, containing the text 'BREAK-TIME' and 'Come back at 3:15PM MT!'.

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.



Peer Support

- Prevalence of second victims range from 10%-43% ¹
- Most physicians desire support after adverse events²
- Many second victims do not receive support^{3,4}
- Strong peer relationships may promote resilience in health care⁵

Children's Hospital Colorado
It's different.

Affiliated with
 University of Colorado
Anschutz Medical Campus

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







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

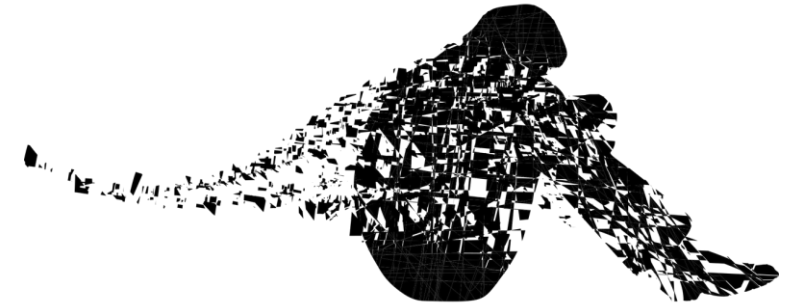
...and may be adversely impacted to the point of being traumatized by the event, feeling like a victim themselves.

- 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.



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.



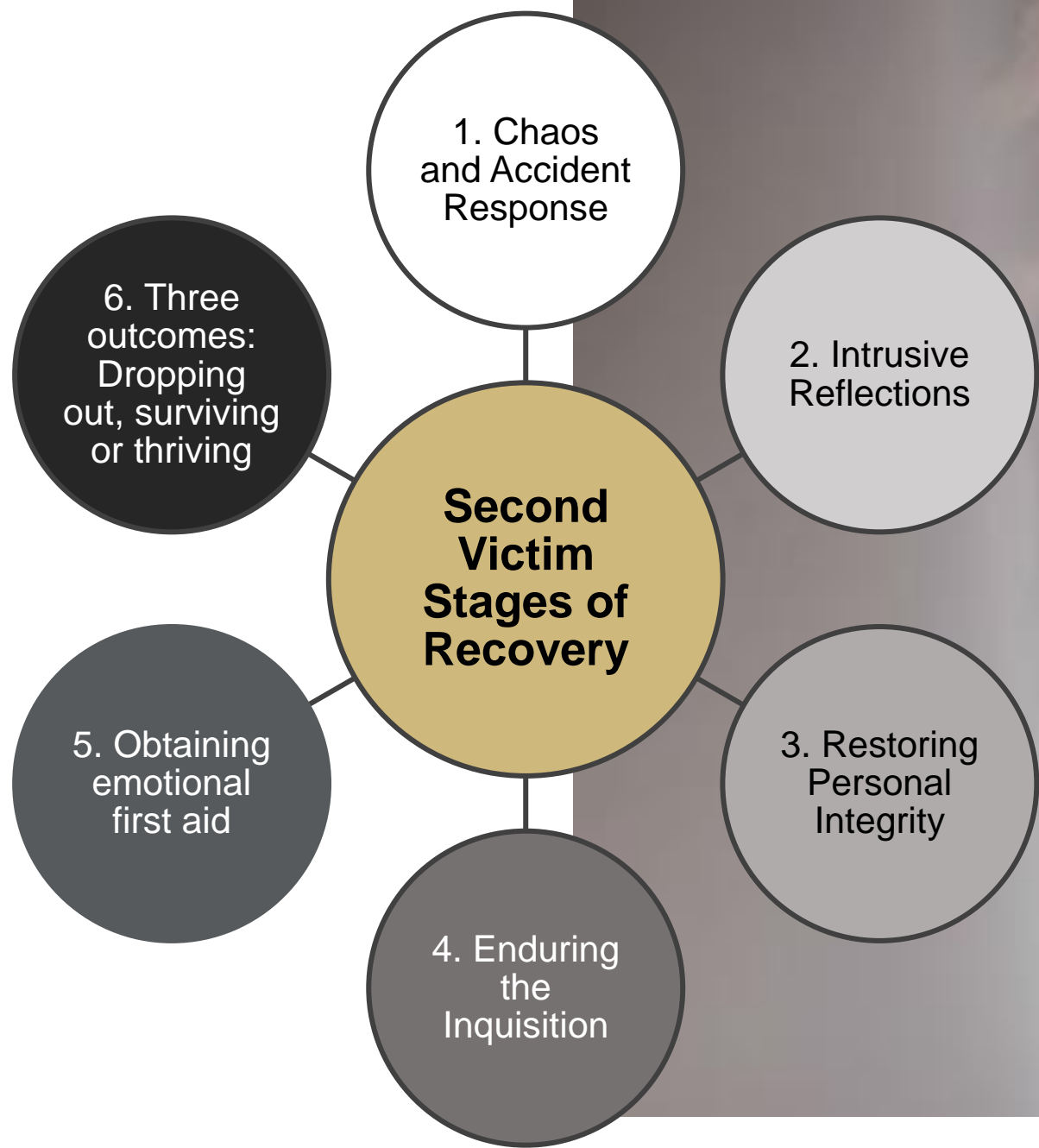


Photo Credit: Second Victim Program Helps Health Care Workers Cope in the Aftermath of Tragedy. General Surgery News. 10/1/2029



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?

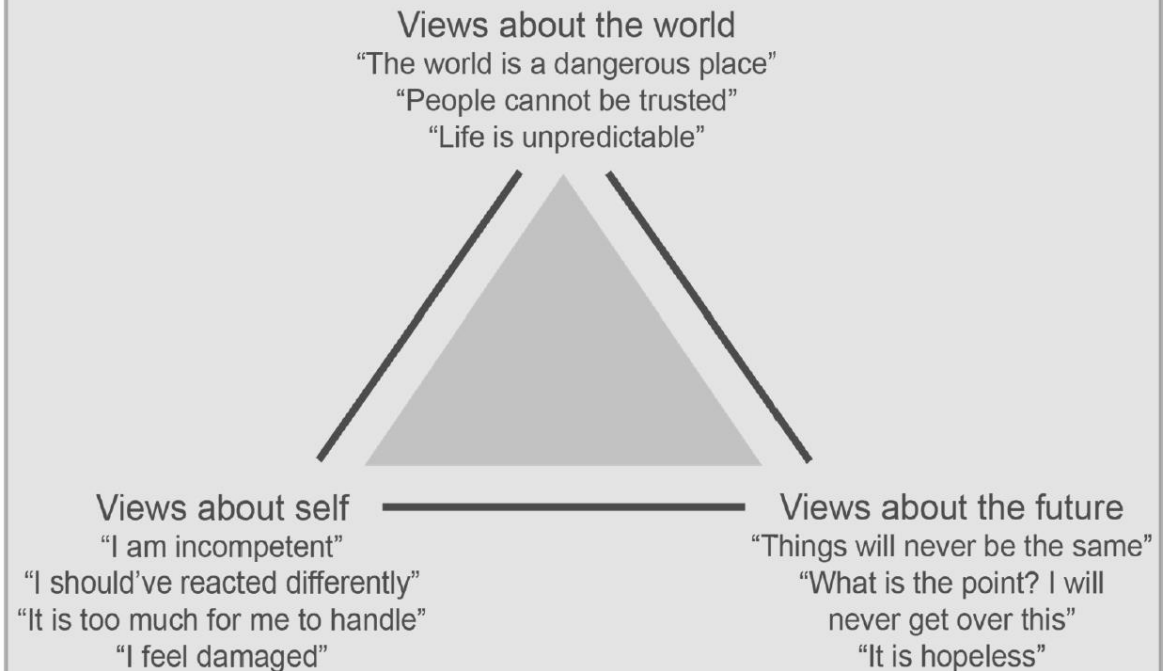
Thinking about the future

- 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

Exhibit 1.3-2: Cognitive Triad of Traumatic Stress



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)



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



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IHQSE



Crisis Resources -
Get Help NOW



Urgent & Routine
Care



Mental Health Care
with CU Health
Plans



Self-guided
Resources



Self-screening
Tools

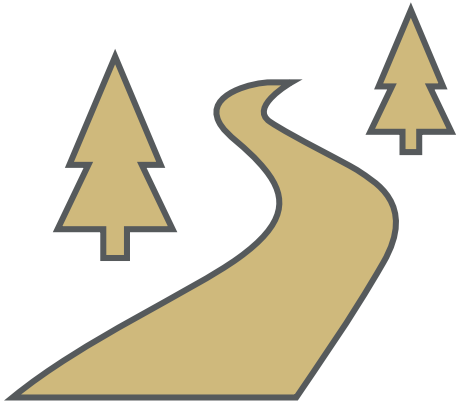


Support Groups &
Other Resources

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	<ul style="list-style-type: none">• Safety Culture• Systems-Based Case Review• Care for the Caregiver
-------------------------------	---

- 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**



NEXT SESSION: September 2025





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