

Enhancing Patient Safety through the Realization of Just Culture

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Program Goals

1. Compare and contrast the differences between a "punitive", "blame-free", and "just" culture
2. List 6 indicators of a Just Culture
3. Recognize the characteristics of a department or organization that has adopted Just Culture
4. Describe the difference between human error, at-risk behavior, and reckless behavior
5. Outline questions to draw on during the investigation of events so that the workforce is treated consistently and fairly
6. Given a case scenario of an adverse event, formulate an action plan in response to the event and outline how the employees involved in the event should be treated
7. Describe how a Just Culture further develops an organization's safety culture

I declare no conflict or potential conflict of interest in relation to this presentation



ASHP 2015 Initiatives

- Medication Safety
- 90% of health-systems
 - supporting an organizational program,
 - appropriate pharmacy involvement
 - achieves significant annual, documented improvement in the safety of all steps in medication use.



Just Culture is...



- A journey
- A destination
- One person at a time
- A change in mindset

...we'll get there



To understand failure, you must first understand your reaction to failure.

Sidney Dekker
The Field Guide to Understanding Human Error



Consider the following

A pharmacist misreads a doctor's prescription, written for a 50 year old man who has been admitted with congestive heart failure. Inderal 10mg TID is dispensed instead of Isordil 10mg TID.

A nurse detects the error before she administers the wrong medication to the patient.



How do you respond?

1. No action
2. Warn the pharmacist involved not to do it again.
3. Encourage different behavior; engage staff in prevention of look-alike sound-alike discussions
4. Take disciplinary action

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1 2 3 4

15



Consider the following

A pharmacist misreads a doctor's prescription, written for a 50 year old man who has been admitted with congestive heart failure. Inderal 10mg TID is dispensed instead of Isordil 10mg TID.

The error is detected by nursing staff after the patient receives the wrong medication for 24 hours. The patient suffers no adverse outcome resulting from this error.



How do you respond?

1. No action
2. Warn the pharmacist involved not to do it again.
3. Encourage different behavior; engage staff in prevention of look-alike sound-alike discussions
4. Take disciplinary action

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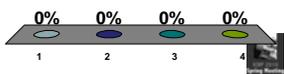
The doctor detects the error after the patient becomes hemodynamically unstable and is transferred to the ICU. The patient suffers no permanent adverse outcome resulting from this error.



How do you respond?

- 1. No action
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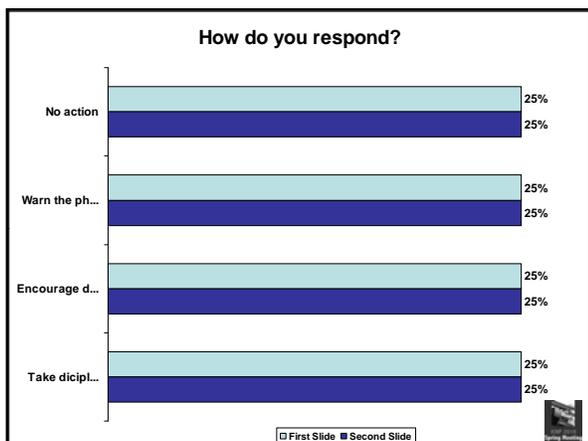
The doctor detects the error after the patient becomes hemodynamically unstable and is transferred to the ICU. The patient dies several days later resulting from this error.

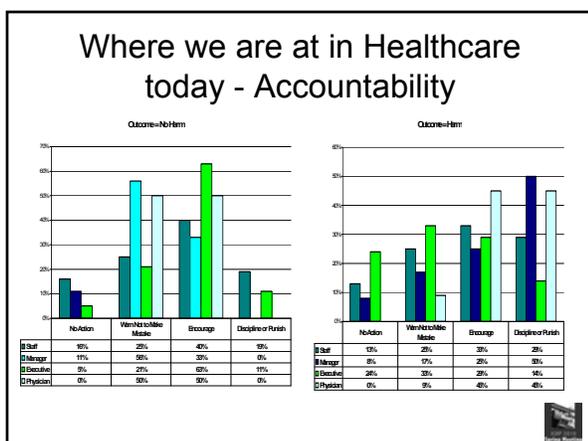


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Accountability

We are a culture of “No harm, no foul”

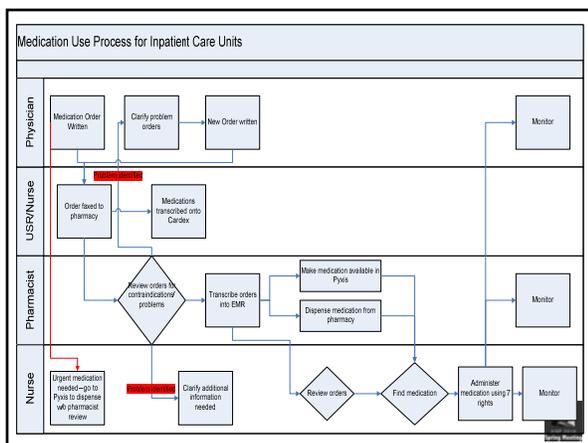
- We turn a blind eye to those imposing unnecessary risk – so long as the outcome is good
- We have given up on accountability for our personal choices



Accountability

- Harm = Foul
- Perfection = Positive Outcomes
- Focus on the Severity
- Who was the unfortunate soul to be closest to the harm
- Little focus on the system and choices that contributed to the adverse outcome





Introduction to Just Culture

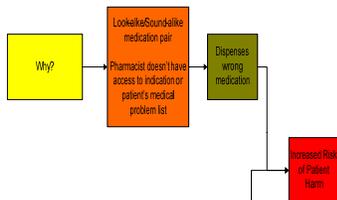
The single greatest impediment to error prevention in the medical industry is “that we punish people for making mistakes”

Dr. Lucian Leape
 Professor, Harvard School of Public Health
Testimony before Congress on Health Care Quality Improvement
 January 25, 2000

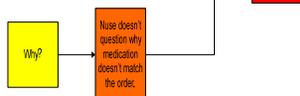


Healthcare as a Learning Culture

- 70-80% of human errors go unexplained

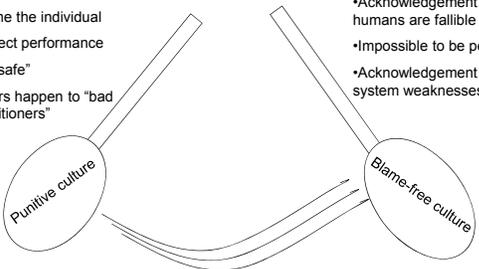


- 70-90% of at risk behaviors go unexplained



Where have we been?

- Blame the individual
- Perfect performance
- "Be safe"
- Errors happen to "bad practitioners"



Weakness in Blame-Free

- Growing discomfort with “blame-free” approach
 - both inside and outside health-care
- Increased concern that safety problems continue, even after 10 years
 - Was the “systems approach wrong”?
- It fails to confront individuals who willfully (and often repeatedly) make unsafe behavioral choices, knowingly disregarding a substantial and unjustifiable risk that most peers would recognize as being likely to lead to a bad outcome.



Competing Goals

Hold those who caused the event appropriately accountable

- Most errors are committed by caring, competent people trying hard to get it right
- Finger pointing, shaming and suing them doesn't help, it stifles open discussions and learning

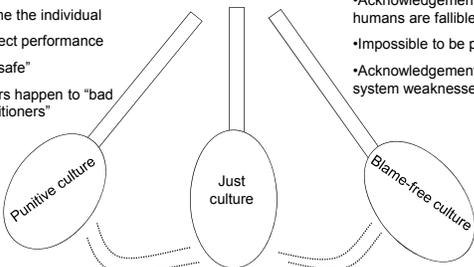
Make fixes to prevent future events

- The system produces low quality, unsafe, unreliable care partly because there's been no incentive to do otherwise
- The last 10 years have seen a variety of initiatives to create accountability, which generates action, focus, and resource flow.



Where have we been?

- Blame the individual
- Perfect performance
- “Be safe”
- Errors happen to “bad practitioners”



An Introduction to Just Culture

“People make errors, which lead to accidents. Accidents lead to deaths. The standard solution is to blame the people involved. If we find out who made the errors and punish them, we solve the problem, right?”

Wrong. The problem is seldom the fault of an individual; it is the fault of the system. Change the people without changing the system, and the problems will continue.”

*Don Norman
Author, the Design of
Everyday Things*



What is Just Culture?

- Just Culture is a workplace culture that is both fair to workers who make errors and effective in reducing safety risks.
- If the organizational environment is punitive, employees will be discouraged from reporting events, whether the events reflect their personal errors or errors committed by others.



What is Just Culture?

- Focus on learning
- Focus on proactive management of system design
- Focus on behavioral choices



Managing Risk

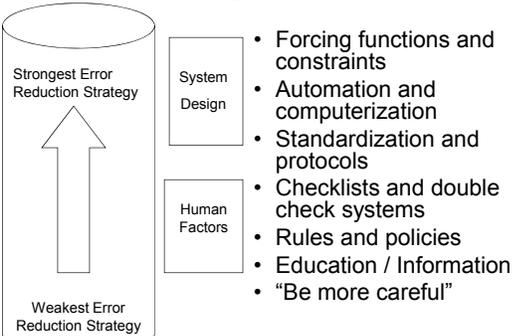


Risk Management

- To err is human
- To drift is human
- Risk is everywhere
- We must manage in support of our values
- We are all accountable



Design Strategies to Manage Risk



System Design	<ul style="list-style-type: none">• Forcing functions and constraints• Automation and computerization• Standardization and protocols
Human Factors	<ul style="list-style-type: none">• Checklists and double check systems• Rules and policies• Education / Information• "Be more careful"



Managing Behavior



Types of Behavior Involved in Errors

- Human Error:
 - Unintentional and unpredictable behavior that causes or could have caused an undesirable outcome (slip, lapse, mistake)

 - Slip = inadvertent, unconscious lapses in the performance of some automatic tasks
 - Mistake = result from incorrect choices usually from insufficient knowledge, lack of experience/training, inadequate information, applying the wrong set of rules or algorithms to a decision



- Human Error
 - Examples:
 - Misreading an order
 - Wrong patient selected from a computer list
 - Wrong frequency
 - Typo



Managing a Human Error

- Questions to ask:
 - Did the individual involved make the correct behavioral choices in the task involved?
 - Does the individual effectively manage their own performance factors?
 - If yes to both....then console the individual involved



Managing Human Error

- Caveat: you are never in the tunnel with them...will always be an outsider looking in
- Reactions to failure are:
 - Retrospective
 - Counterfactual
 - Judgmental
 - Proximal



Managing Human Error

- Focus on:
 - System design
 - Actions that led to the outcome
 - Accountability lies within the choices and actions made – not the outcome of the event.



Human Error

- 1month old infant with hypoplastic left heart syndrome was receiving bivalirudin (Angiomax) while on ECMO. After requesting a refill for the infusion, the nurse noted the Angiomax dispensed was 250mg/50mL bag rather than the routine 50mg/50mL syringe used in this population. The error was identified prior to administering placing the bivalirudin bag on the infusion pump.
- After further investigation in the pharmacy, it was discovered bivalirudin 250mg vials on a 50mL minibag were dispensed for bivalirudin 50mg in 50mL syringes on at least 3 other occasions in the Pediatric Intensive Care Unit.



System Issues Identified

- Medication labels do not differentiate between pediatric and adult patients.
 - Room numbers on the labels can be confusing. There are a mixture of adults and pediatrics on the floor. The use of swing rooms to flex up and down for pediatric and adult census also leads to confusion.
- The IV labels do not provide clear directions.
 - The total dose of the vial used to compound and the total dose to be administered all appears on one line.
 - The adult preparation does not include a diluent on the label.
 - Both premixed and compounded IVs use the same label. It is not easy to discern the difference on the labels.
- The total volume of a pediatric syringe for bivalirudin is the same as the total volume of the adult preparation.



Interaction with the Persons Involved

- Inform the individual of the error
- Console
- Educate about the system's changes that will take place to prevent the same error in the future
- Celebrate the lifesaving catch with the individual who identified the error.



Interaction with the Department

- Be transparent
- Educate about the system's changes that will take place to prevent the same error in the future.
- Explaining why can result in buy-in to new processes.



Considerations for Multiple Human Errors

- What is the source of a pattern?
 - System – address the system
 - If no, can the non-disciplinary means be used?
 - Education
 - Competency assessment
 - Alternative job assignments
 - If no, how will disciplinary action reduce the rate of human error?
- Caution with 3 strikes your out.



Types of Behavior Involved in Errors

- At-Risk Behavior:
 - Behavioral research shows that we are programmed to drift into unsafe habits, to lose perception of the risk attached to everyday behaviors, or mistakenly believe the risk to be justified.
 - Driven by the perception of consequences
 - Immediate and certain consequences are strong
 - Delayed and uncertain consequences are weak
 - Rules are generally weak or not routinely enforced
 - Examples:
 - "I know they wrote the drug this way, but I am sure that they really meant it to be this"
 - Fast order entry
 - Filling automated dispensing cabinets without scanning the bar codes



Managing At-Risk Behavior

- Questions to ask:
 - Did the individual involved make the correct behavioral choices in the task involved?
 - Does the individual effectively manage their own performance factors?
- If no to either one....coach the individual



Manage the Behavior Choice

- Add forcing functions (barriers to prevent non-compliance)
- Manage by changing perceptions of risk (Coaching)
- Manage by changing consequences
- Examine the system for improvement opportunities



Caution with Coaching

- Coaching ≠ punishment
 - Constructive dialogue
- Focus on the perception of risk
 - Do they not see the risk they are taking
 - Do they believe the risk is justified
 - Coach on the risk, regardless of the outcome



What dose of Keppra do you see?

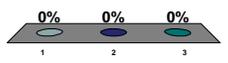
G220 08/03/2009 12:21:48 18.722.115.194

Pediatric Patient

DATE	TIME	ORDER	REASON	DRUG	DOSE	ROUTE
5/19/09		(1) please look at chart				
12:00		(2) please convert Lamotrigine to IV IV TID (convert dose)	Lamotrigine 50mg			
		(3) please convert Keppra to 2000mg IV TID (08,14,09)				

1. 2000mg IV TID
2. 200mg IV TID
3. Both 2000mg and 200mg

15



Suggested Responses to the Keppra Event

- Many errors occur as prescriptions are written;
 - these tend to be failures of communication
 - in far too many cases, the underlying problem is clinicians' handwriting
- Context is important for Order Interpretation & Verification
 - Clear Communication for Pediatric Patients' Med Orders should include:
 - Patient identification
 - Weight
 - Drug name
 - Dose - in unit/kg
 - Calculated dose
 - Legible signature or IDX #
- Coach the individual involved with both writing and filling the order.



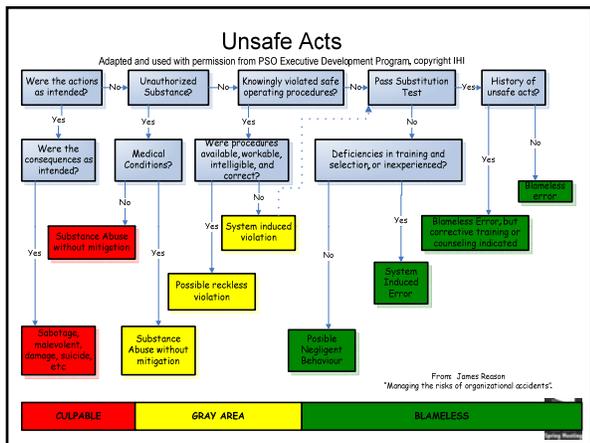
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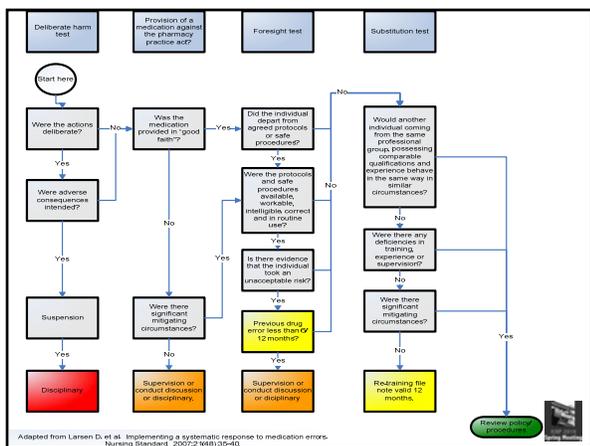
- Reckless Behavior
 - Always perceives the risk he/she is taking, understands that the risk is substantial, behaves intentionally, and makes a conscious choice to disregard the risk
 - **Healthcare workers rarely engage in reckless behavior**



Managing Reckless Behavior

- Punitive Action
- Hold the person accountable for the choice made





Case Scenario:
Ketamine v. Heparin





Case Scenario:
Ketamine v. Heparin

1. Human Error
2. At-Risk Behavior
3. Reckless Behavior

Outline a Response

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1	2	3



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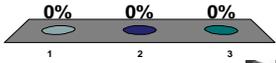
Case Scenario:
Sodium Chloride



Case Scenario:
Sodium Chloride

1. Human Error
2. At-Risk Behavior
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Outline a Response



10



Case Scenario:
Sodium Chloride

- Human Error
- At-risk behavior
- Reckless

- Outline a response



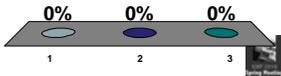
**Clinical Decisions and
Accountability**

Pharmacy to Dose Case



**Clinical Decisions: Pharmacy to
Dose Case**

1. Human Error
2. At-risk Behavior
3. Reckless Behavior



Lessons Learned

- Renal function alert did trigger in EMR for the pharmacist filling the order.
- Potential unfamiliarity of dosing for both the pharmacist and physician involved.
- Inconsistencies identified in when pharmacists discuss dosing with physician on “pharmacy to dose orders”.



Managing the Behavior

- Coach entire department about scope of practice
 - Discuss documentation responsibility of duty to warn
 - Establish expectations and parameters of pharmacy to dose order without existing protocols.
 - Considering a peer-review process



Indicators of Just Culture

- Values and Expectations
- System Design
- Management Subordinate Coaching
- Peer to Peer Coaching
- Outcomes
- Open Reporting
- Search for Causes
- Internal Transparency
- Responses to Human Error
- Responses to Reckless Error
- Severity Bias
- Equity



Values and Expectations



- Overlapping duties?
 - Yes
- Competing duties?
 - Yes
- Prioritize and Balance our efforts



Every Patient, Every Time

We are perfecting the medication use system to be safe for every patient, every time, while making it easy for caregivers to do the right thing, and impossible to do the wrong thing.



System Design



- Focuses on system design
- Supports a culture of learning

Error Reporting

- Situations and outcomes are reported; People are not
- When an error occurs, the most important question is not necessarily how to handle the involved workers, but what can be done to the process to avoid the next error
- Most events are unintended; therefore, the reports are regarded as sources of information and no discipline is involved



How do I “investigate” a error?

- Questions to ask when investigating an incident reported event:
 - How did it happen (or almost happen)?
 - What normally happens?
 - Why did it happen?
 - Were any at-risk behaviors involved?
 - How can we prevent it?



SFMCs Thirst for Knowledge

- why do systems not work?
- why do humans sometimes make mistakes?
- why do we drift into an at risk behavior?

SFMC as an organization is willing to talk about the risk – we are trying to be transparent from the top down.



Learning Culture

- Open reporting
- Search for Causes
- Internal Transparency
- Outcomes – both good and bad



Learning Culture

- It's not seeing events as things to be fixed
- It's seeing events as opportunities to inform our risk model
 - System risk
 - Behavioral risk
- Allows for management/organizational decisions about where resources can be applied to minimize the risk



Benefits of a Just Culture

- All workers know that safety is valued in their workplace
- All workers continually look for risks that pose a threat to patient safety
- Everyone learns from events and each other



How well have we created a culture of safety?

Hospital Survey on Patient Safety Culture	% positive Response	Benchmark: % positive response	Delta
We are actively doing things to improve patient safety.	100	87	13
Mistakes have led to positive changes here.	94	73	21
We are given feedback about changes put into place based on event reports.	76	53	23
In this unit, we discuss ways to prevent errors from happening again.	94	75	19
Staff feel like their mistakes are held against them.	76	63	13
When an event is reported, it feels like the person is being written up, not the problem.	76	57	19
The actions of hospital management show that patient safety is a top priority.	88	71	17

AHRQ Hospital Survey on Patient Safety Culture Pharmacist Results



Just Culture

- Rewards reporting
- Values open communication
- Open discussion of risks between managers and staff
- Culture hungry for knowledge



- Well-established system of accountability
- Shared accountability
 - Good system design
 - Good behavioral choices
 - Good results



So where does accountability fit?

- The practice is important and it works
- The systems have been fixed
- Unintended consequences have been addressed
- Providers understand the practice, its value, the auditing strategy, and the penalties
- A single transgression has led to a warning



Wachter RM, Pronovost PJ. NEJM 2009;361(14):1401-1406

Criminalization?

- Accountability should be at the professional level
 - Tort system for true negligence
- Criminal systems is not appropriate for professional mistakes
 - Rare exception: willful and egregious negligence
- Natural for some patients/families to seek retribution



Wachter R. When is a medical error a crime? http://community.the-hospitalist.org/blogs/wachters_world/archive/2007/11/05/when-is-a-medical-error-a-crime.aspx (accessed 2010 Feb 26)

“Wake up call for medical professionals”

Eric Cropp Case



Current Reality

- Safety Movement and Just Culture promotes institutional accountability much more than individual accountability
- We need to step up to the plate on professional accountability
- If we don't – we risk outside pressures
 - Institutional: increased state and federal regulations
 - Individual: malpractice, and even criminalization



Adoption of Just Culture

- There will always be opponents to management initiatives
- Many believe it will be the success of the organization
- Many will need to see leadership “walk the talk” before they buy in.



Just Culture

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"Most healthcare providers choose a life of service. They put themselves in harm's way to care for others. They expect a lot of themselves as professionals. Yet, they remain fallible human beings, regardless of any oaths to do no harm. They are going to make mistakes and occasionally drift into risk places (see hand hygiene). The future of our nation's health depends upon our ability to learn from their errors and at-risk behaviors."

David Marx, JD
Whack-A Mole



Just Culture is...



- A journey
- A destination
- One person at a time
- A change in mindset



Post-test Questions

1. Which quality is NOT an indicator of Just Culture in an organization?
 - A. Peer to peer coaching
 - B. Responds to reckless error
 - C. Hides errors from staff
 - D. Equity

2. When assessing individuals involved in an error, the reviewer should consider were the behavioral choices appropriate for the situation and does the individual manage their own performance.
 - A. True
 - B. False

3. The public and all health-care professionals accept and support a blame-free culture.
 - A. True
 - B. False

Case Scenario #1: Ketamine v. Heparin

RN pulls heparin flush syringe out of the ADC in order to perform her central line care on an 18yo. In the cubie, she finds 2 syringes of ketamine instead. She notifies the pharmacy immediately.

Investigation shows a pharmacist verified the ADC run using bar-code technology, but only for 1 syringe in a bag of 20. The pharmacy technician refilled the cabinet using bar-code technology.

Is this:

A. Human Error

B. At-risk Behavior

C. Reckless Behavior

Outline your interaction with the employees involved and the plan of action you will take to address this error.

Case #2: Sodium chloride

An order was written for 6mL sodium chloride every 3 hours through the reconciliation process. Clarification of the order did not occur. The pharmacist chose to dispense 6mL of 14.6% sodium chloride because this was the common concentration used for oral sodium chloride orders. (16-fold difference in the intended dose). The child received this for 48 hours. No labs were ordered on a routine basis during this time.

The error was discovered when a request was made to refill the 14.6% sodium chloride. The pharmacist was involved with this patient on a prior admission and was aware the child received sodium chloride 0.9%. The physician was notified, labs were ordered. The sodium was 161. Baseline for this child was 141 on this admission.

Is this:

- B. Human Error B. At-risk Behavior C. Reckless Behavior

Outline your interaction with the employees involved and the plan of action you will take to address this error.