

# 2019 Deep Dive – Safe Ambulatory Care

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ECRI Institute  
**PSO**  
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# Objectives

Participants will be able to:

- Recognize the most common and pervasive risks in the ambulatory care setting, as identified in the 2019 ECRI Institute PSO Deep Dive.
- Identify the major risks associated with diagnostic testing, and recognize strategies for mitigation.
- Identify situations that can lead to medication-safety-related events and recognize strategies for mitigation.
- Recognize that patient falls occur in the outpatient setting, and identify fall risk reduction strategies.
- Recognize security and safety issue in ambulatory care, and identify best practices to address those.
- Gain a foundational understanding of the importance of event reporting.

# About ECRI Institute PSO

- Component of ECRI Institute
- Federally Certified Patient Safety Organization
- 50 year history, close to 500 interdisciplinary staff
- Independent non-profit with strict conflict of interest policies
- Evidence-Based Practice Center
- Testing, investigation labs
- Expertise in systems improvement and accident investigation.
- 10 years working with FQHCs through the HRSA Clinical Risk Program



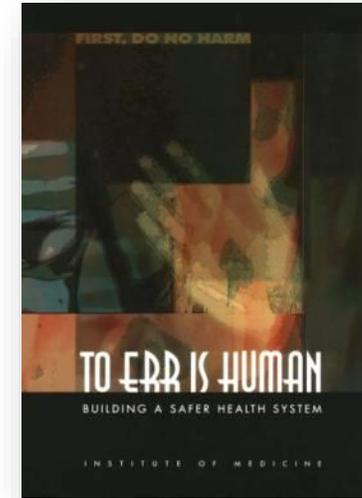
# Patient Safety and Quality Improvement Act (PSQIA) of 2005



- Fosters a culture of safety
- Creates a secure environment where providers can:
  - Collect, aggregate and analyze data
  - Identify and reduce the risks and hazards associated with patient care
  - Improve processes of care and outcomes

# Impetus for the Patient Safety and Quality Improvement Act

- Healthcare workers fear disclosure
- State-based peer-review protections are:
  - Vary from state to state
  - Limited in scope
  - Not necessarily the same for all healthcare workers
  - No existing federal protections
- Congress passed legislation to protect the development and analysis of information related to improving safety and quality.



# Share Learn Protect



# ECRI Institute Deep Dive



For its eighth Deep Dive analysis, ECRI Institute has extended the focus beyond the hospital to ambulatory care—a setting that represents the largest and most widely used segment of the healthcare system. Ambulatory care settings provide a diverse array of services to patients, from consultation and diagnosis to treatment and intervention.

# Why Ambulatory Care



The average American visits a physician office 4 times a year.

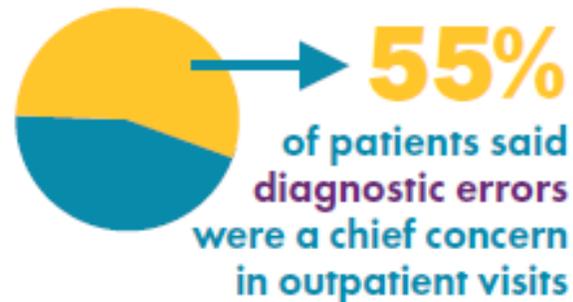
There are 30 times as many outpatient visits as hospital discharges.



Despite the fact that the vast majority of health care takes place in the ambulatory care setting, studies around patient safety have mostly focused on the inpatient setting.

# Why Ambulatory Care

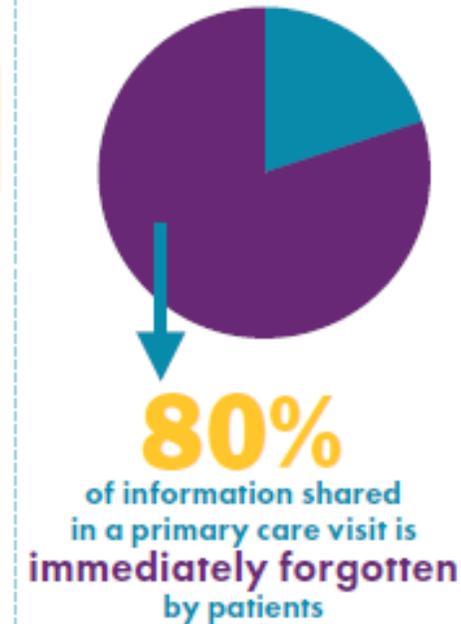
Annually,  
**1 In 20** outpatients experiences a **diagnostic error**



**1 in 9** ED admissions  
are related to an  
**adverse drug event**



An estimated  
**160 million**  
medication  
errors  
occur each  
year in  
primary care



# Safe Ambulatory Care

ECRI Institute PSO and our Partner PSOs participants include increasing numbers of ambulatory sites:

- Ambulatory care centers
- Physician practices
- Community health centers

ECRI Institute PSO also supports all Federally Qualified Health Centers (FQHCs) throughout the United States with risk management and patient safety services.

# A Tale of Two Settings

## Acute Care

- Well developed infrastructure
- Standardization of processes
- Resources dedicated to patient safety and quality
- More licensed staff
- Lower denominators

## Ambulatory Care

- Fewer or still developing utilization of system resources dedicated to safety, quality, and risk compared to hospitals
- Divergent processes, procedures and workflows across settings
- Less formal training and experience in safety and quality improvement methods among clinical staff
- A need for a cultural shift toward improving safety reporting and monitoring

2019



EXECUTIVE BRIEF

DEEP DIVE

# Safe Ambulatory Care

Strategies for Patient Safety & Risk Reduction

DIAGNOSTIC TESTING

MEDICATION SAFETY

FALLS

SECURITY & SAFETY

■ SHARE, LEARN, PROTECT\*



## Deep Dive Scope and Methodology

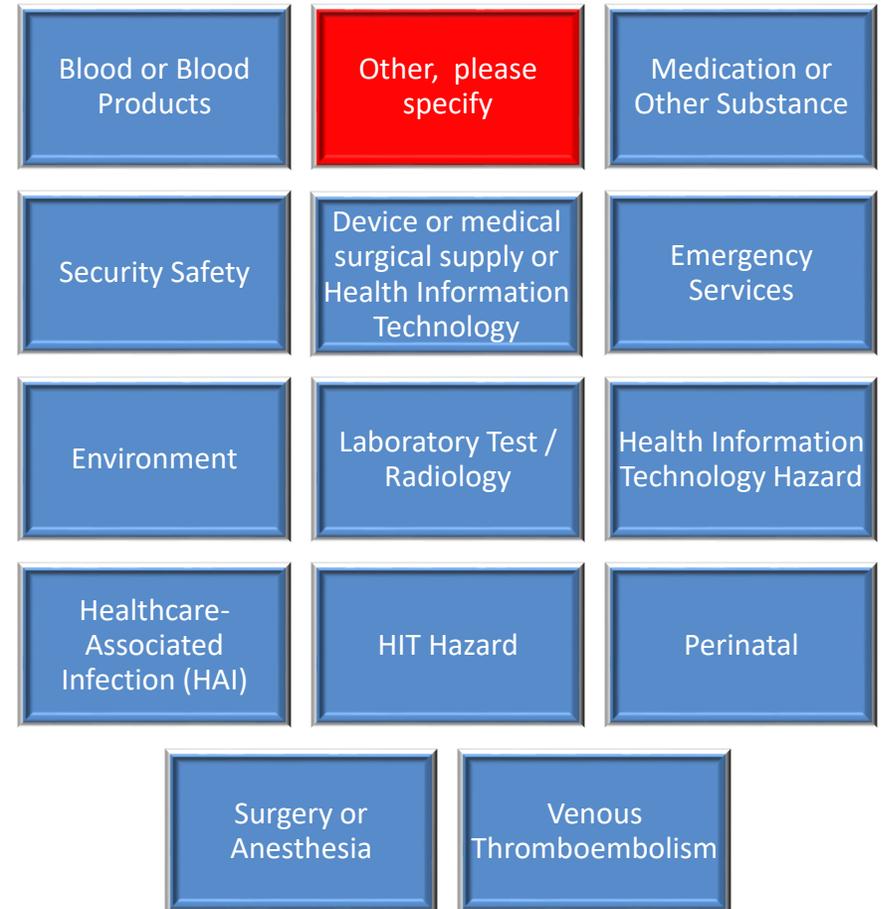
ECRI Institute PSO's event reporting system uses an enhanced version of AHRQ's Common Formats (version 1.2), which allow PSOs to collect information from providers and standardize how patient safety events are represented.

Using definitions from the PSO Privacy Protection Center, these events can be classified as follows (PSOPPC):

- **Incident**—A patient safety event that reached the patient, whether or not the patient was harmed.
- **Near miss**—A patient safety event that did not reach the patient.
- **Unsafe condition**—Any circumstance that increases the probability of a patient safety event.

# Deep Dive Scope and Methodology

- Events are entered using the AHRQ common format (14 different Event Types).
- Events are organized into meaningful and actionable data that allows for comparison and identification of trends.



# Deep Dive Scope and Methodology

*Events reported by:*

- Ambulatory care centers
- Community health centers
- Physician offices

*Event occurrence dates:*

December 2017 to November 2018

## Scope and Methodology

After an initial analysis of the events, the events were re-grouped into the following categories:

- Diagnostic testing
- Medication safety
- Falls
- Security and safety
- HIPAA

## Scope and Methodology

- Taxonomies were developed for each of the five event categories
- For each category, the taxonomy includes several subcategories that analysts could select when reviewing events.
- Analysts could select more than one taxonomy category and more than one subcategory for each event; as a result, the percentages in certain categories may not add up to 100%.

# Scope and Methodology

## Harm Score

- The National Coordinating Council for Medication Error Reporting and Prevention's (NCC MERP) Index for Categorizing Medication Errors is a tool used to categorize patient harm. Although originally designed for medication errors, the index—with its nine categories for harm, labeled A through I—is often used for non-medication related events to indicate the event's effect on the patient.
- NCC MERP scale to report harm because this is the most widely used scale in our members' risk management information systems.

# Scope and Methodology

## Harm Score

NCCMERP
A Circumstances or events occur that have the capacity to cause error.
B An error occurred, but the error did not reach the patient.
C An error occurred that reached the patient, but did not cause patient harm.
D An error occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient, and/or required intervention to preclude harm. Harm does not reach patient
E An error occurred that may have contributed to or resulted in temporary harm to the patient and required intervention.
F An error occurred that may have contributed to or resulted in temporary harm to the patient and required an initial or prolonged hospital stay.
G An error occurred that may have contributed to or resulted in permanent patient harm.
H An error occurred that required intervention necessary to sustain life.
I An error occurred that may have contributed to or resulted in patient death.

# Data Exclusions

- Events outside the scope of the Deep Dive
- Events that could not be coded under any category (or subcategory) in the taxonomy
- Events reported by ambulatory surgery centers as the services provided (surgical activities) are dissimilar to those provided at the ambulatory care settings studied

# Limitations

- Data is voluntary and subjective.
- Many other events involving ambulatory care issues could have occurred during the period of the analysis but were not recognized or reported.
- The data does not represent the incidence or prevalence of events involving ambulatory care needs.
- Event report narratives often do not provide all the information analysts would like, making it difficult to identify all the factors that contributed to a particular event.
- Uniform definitions for the three care settings have not been established.

# Issues in Ambulatory Care

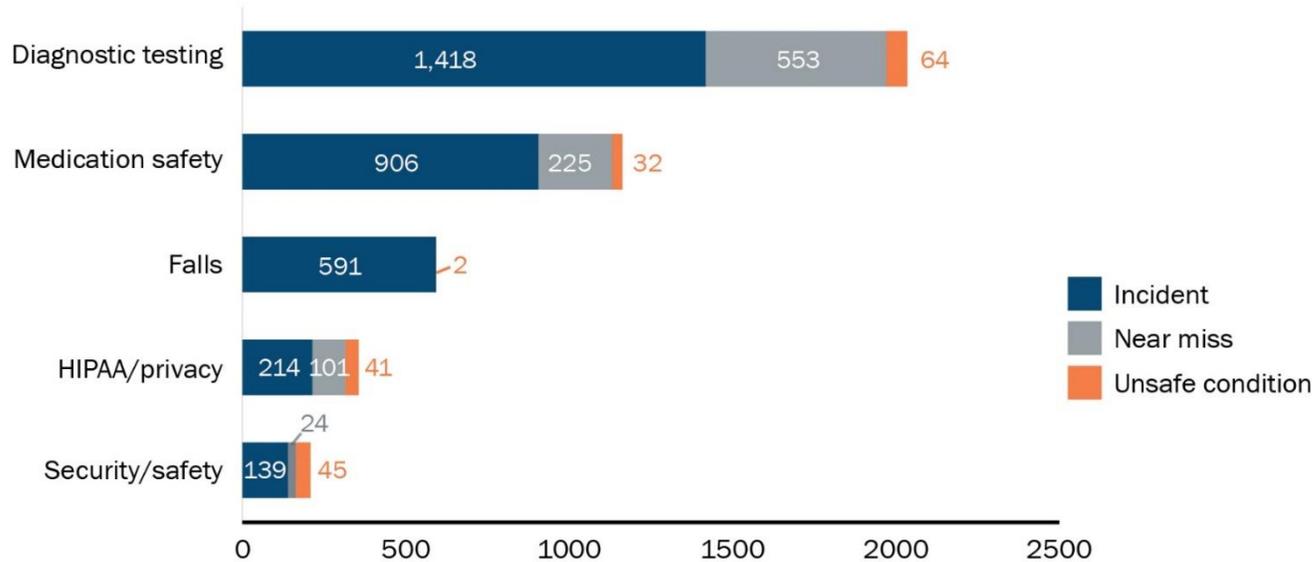
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Strategies for Patient Safety  
and Risk Reduction



# Scope and Methodology

Event Reports Submitted to ECRI Institute PSO by Type of Event (December 2017–November 2018)



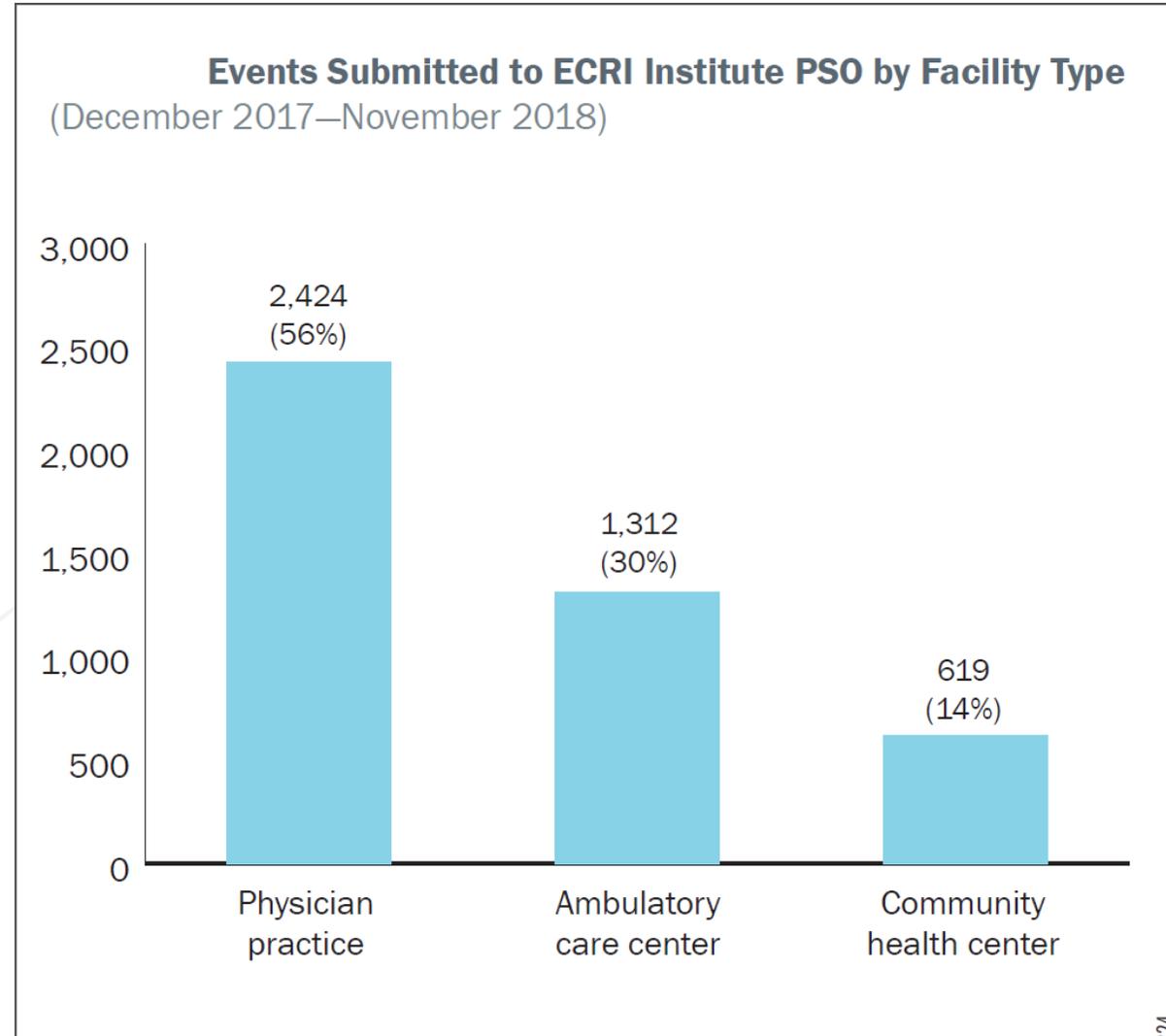
N = 4,355

Percentages may not add up to 100 due to rounding.  
HIPAA, Health Insurance Portability and Accountability Act.

4,300  
EVENTS

MS2225

# What ECRI Institute PSO Found





# Diagnostic Testing

# Diagnostic Event Examples

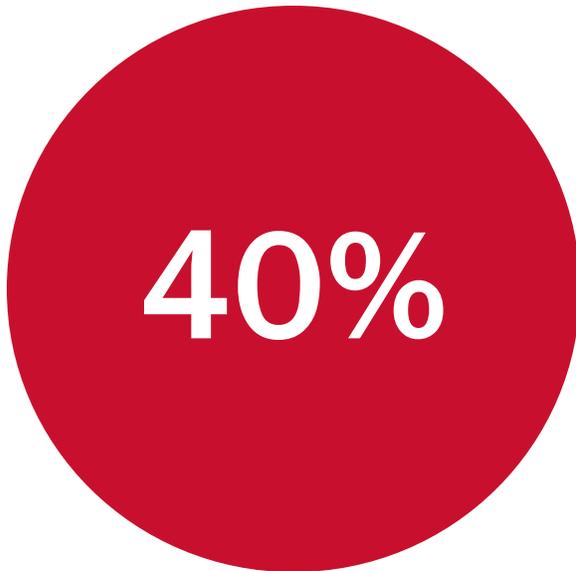
*A patient was seen for a urinary tract infection, and an antibiotic was prescribed while culture results were awaited. The culture showed Escherichia coli, which is resistant to the antibiotic the patient was taking; the prescribing physician ordered the current antibiotic to be discontinued, and an order for a new antibiotic was sent to the pharmacy. Because the patient had an account on the practice's portal, the office sent her a message through the portal informing her of the result and providing new instructions. However, the **patient did not know how to access her portal and therefore did not receive the message, and continued taking the first antibiotic. The office later received a message from the emergency department stating that the patient had been admitted for sepsis resulting from pyelonephritis.***

## Diagnostic Event Examples

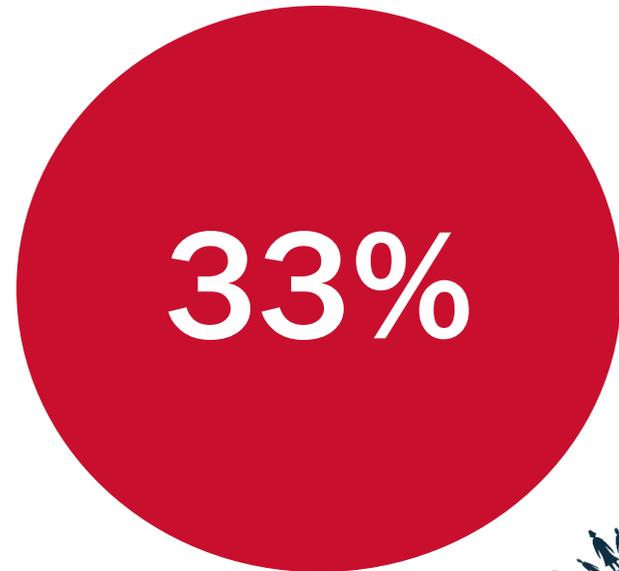
*A patient who presented to an infectious disease clinic received an order for lab work; samples were subsequently drawn at an outpatient lab. In the middle of the night, the lab called in a critical value to the geriatrics physician on call instead of to the infectious disease physician on call. This was done because the ordering provider worked in both departments, and the EHR listed contact information only for the geriatrics department. The lab refused to call the infectious disease doctor on call because the number was not associated with the order.*

# Diagnostic Testing Errors

Data suggest that diagnostic testing errors are especially prevalent in ambulatory care. 40% of primary care patient visits require a medical test (AHRQ estimate).



Diagnostic errors are a major source of liability claims: An analysis of more than 10.5k closed medical professional liability claims found that diagnosis-related errors accounted for approximately 33% of claims and 47% of indemnity payments.



# Diagnostic Testing Errors

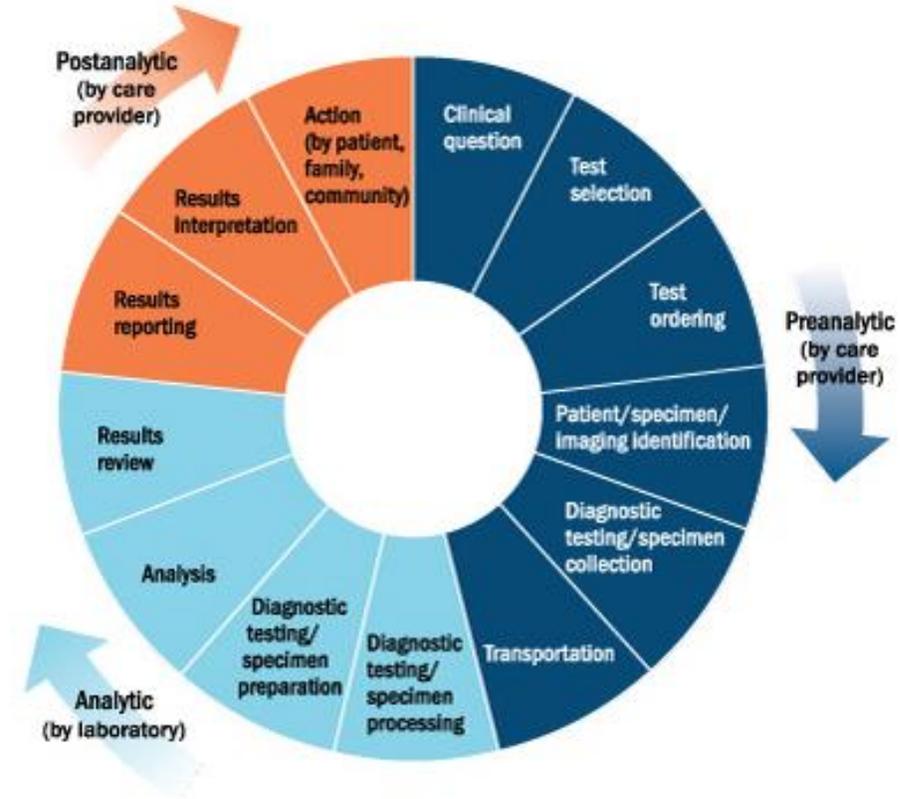
Diagnostic errors typically fall into three categories, defined as follows (National Academies):

- *No-fault errors* stem from factors outside the control of the clinician.
- *Cognitive errors* stem from how the clinician interprets available data to make care decisions and can be caused by factors such as biases, inadequate knowledge, poor critical thinking skills, lack of competency, incomplete or inadequate data gathering processes, and failure to synthesize information.
- *Systems-related errors* are issues involving the organization, its policies and procedures, its staff members, its culture, its technology, and other such factors.

This Deep Dive category addresses errors that typically fall into the "systems-related errors" category.

# Diagnostic Testing Errors

Figure 3 Stages of the Diagnostic Testing Process

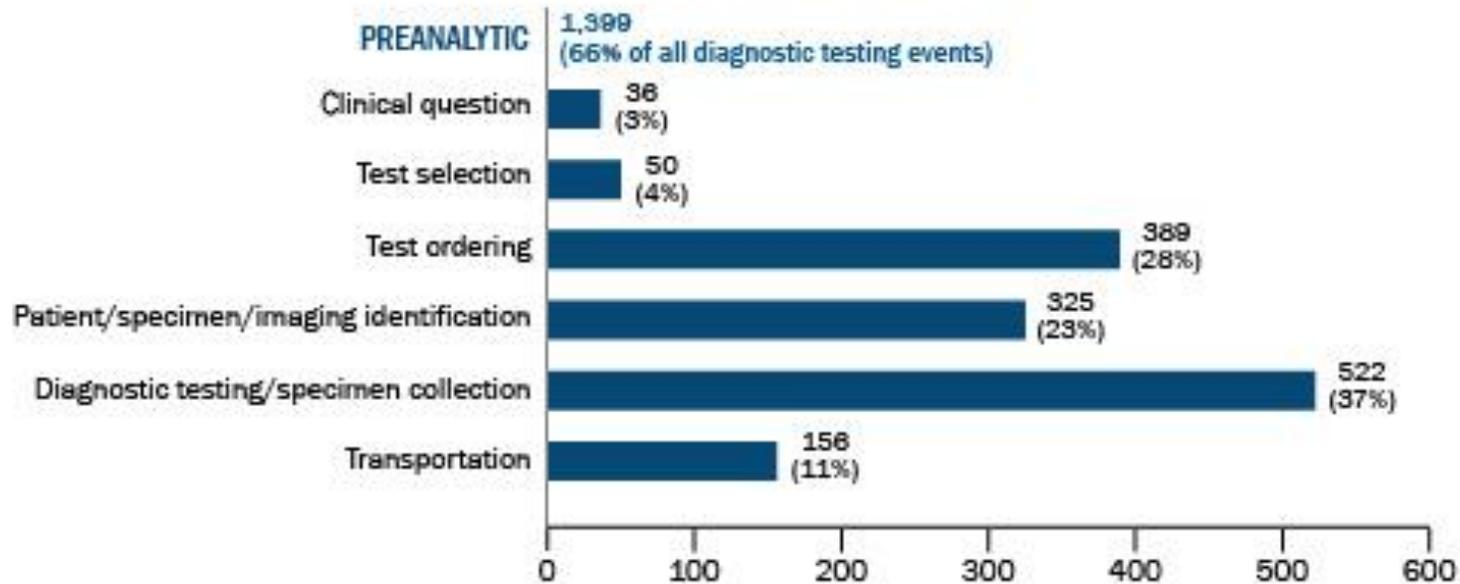


Source: Lewin Group. Laboratory medicine: a national status report. 2008 May [cited 2019 Jul 24].  
Adapted from: Boone J. Presented at: Institute on Critical Issues in Health Laboratory Practice: Managing for Better Health; 2007 Sep 26-27; Centers for Disease Control and Prevention, Atlanta (GA). [https://www.cdc.gov/labbestpractices/pdfs/2007-status-report-laboratory\\_medicine\\_-\\_a\\_national\\_status\\_report\\_from\\_the\\_lewin\\_group\\_updated\\_2008-9.pdf](https://www.cdc.gov/labbestpractices/pdfs/2007-status-report-laboratory_medicine_-_a_national_status_report_from_the_lewin_group_updated_2008-9.pdf)

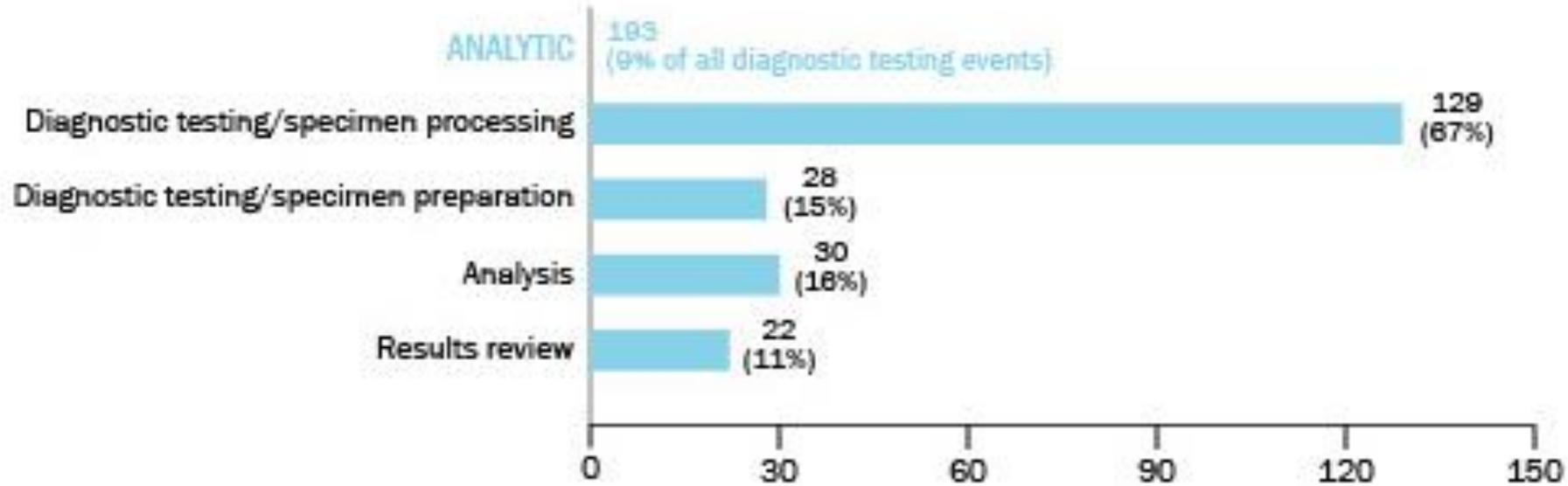
MS2757

# Diagnostic Testing Errors

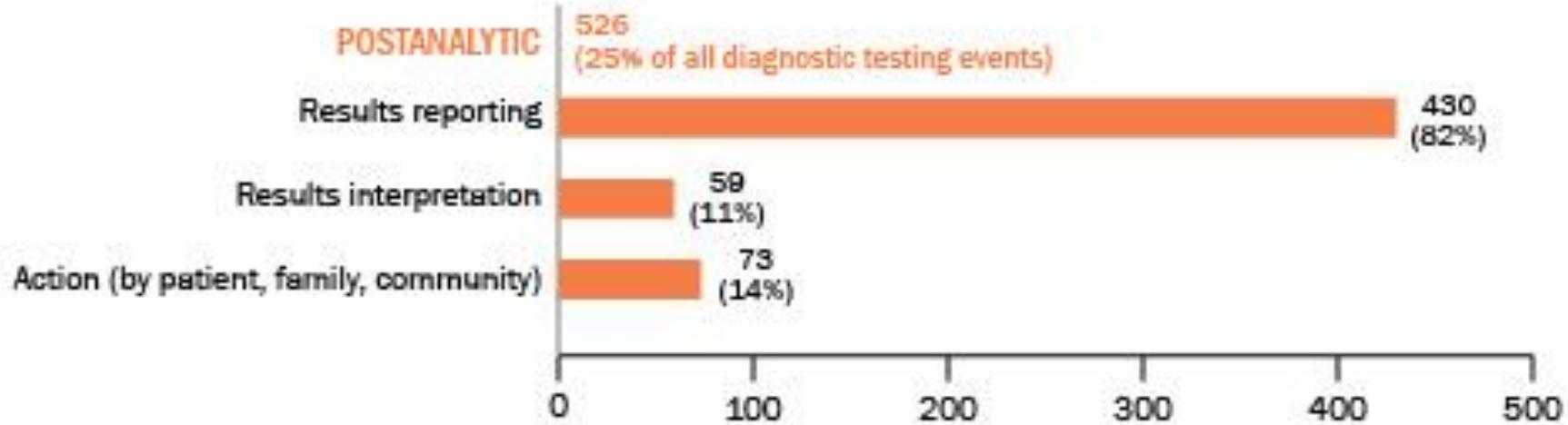
Of events reported in the 2019 ECRI Institute PSO Deep Dive, most (66%) occurred during the preanalytic stage.



# Diagnostic Testing Errors

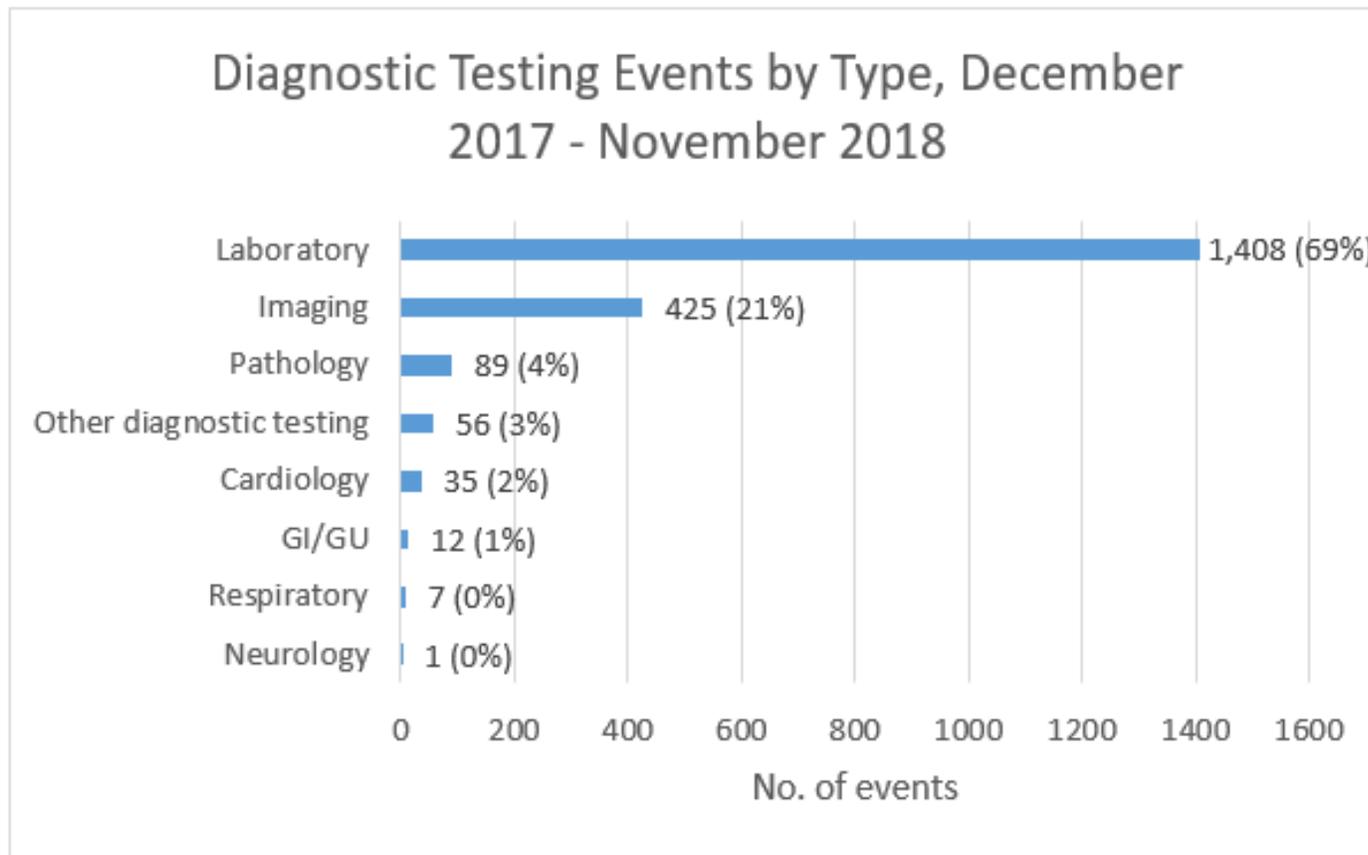


# Diagnostic Testing Errors



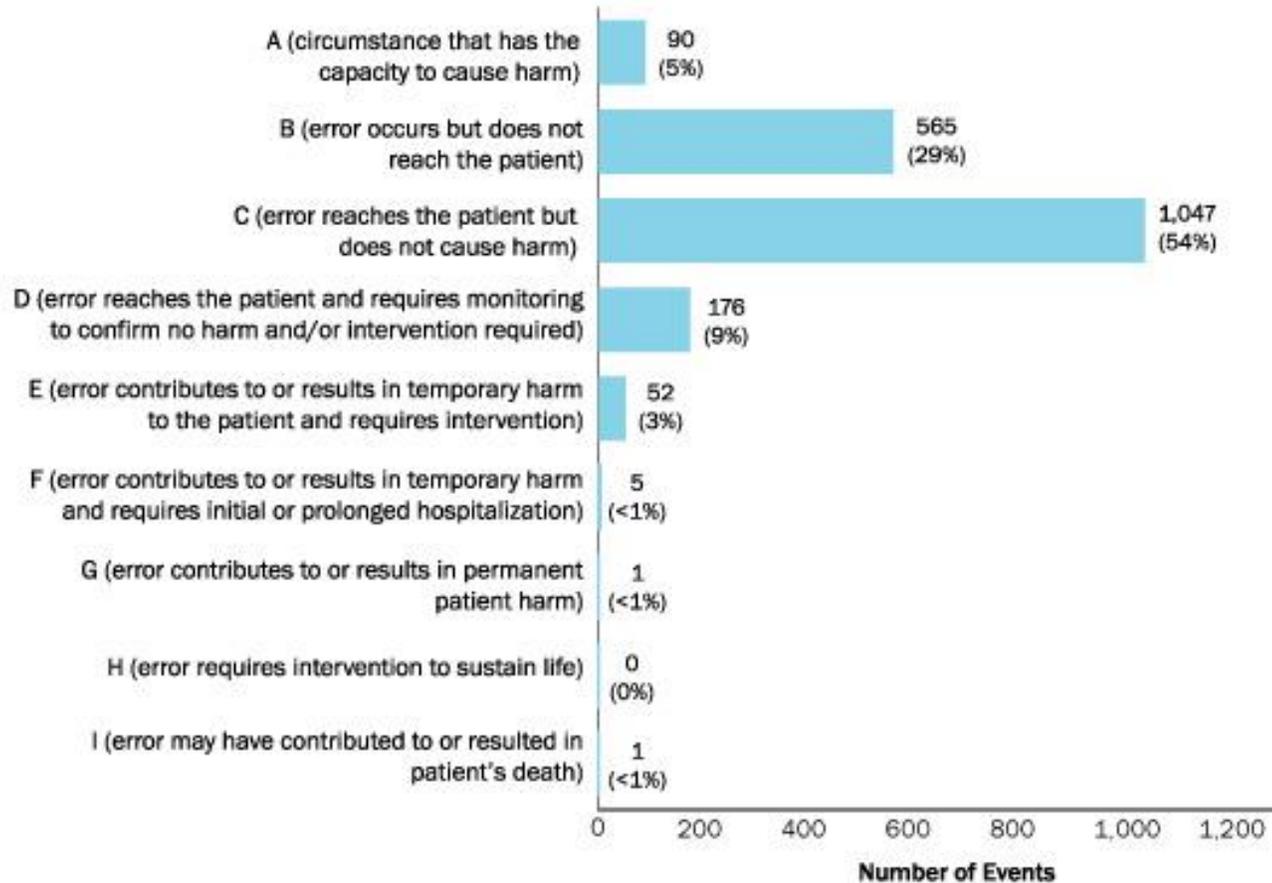
Note: For some events, errors may have occurred in more than one phase of the testing process.

# Diagnostic Testing Errors



# Diagnostic Testing Errors

**Figure 2 Diagnostic Testing Events Reported to ECRI Institute PSO by Harm Score**  
(December 2017–November 2018)



N = 1,937

Percentages may not add up to 100 due to rounding.

M57765

# Recommendations

## Promote a Culture of Patient Safety

- Verify that policies encourage staff to speak up and Creating a non-punitive culture that supports, promotes, and encourages safety efforts, including the frequent and accurate reporting of events and near misses, is a key element in reducing diagnostic testing errors.
- Assess system processes for breakdowns and pitfalls that impede optimal care coordination. A review of system and diagnostic processes at the facility may reveal specific areas of improvement that can be targeted through focused interventions.

# Recommendations

## Standardize and Simplify Procedures and Policies

- Standardize specimen collection, preparation, and delivery to outside labs.
- Track tests and ensure that results are returned to the practice, including informing the practice when specimens or tests are rejected.
- Document any actions take.

# Recommendations

## Accurately Communicate Critical Test Results

- Clearly define key terms.
- Clearly outline provider responsibilities.
- Establish procedures for fail-safe communication of abnormal test results.
- Set verbal and/or electronic procedures for both critical and significantly abnormal laboratory, imaging and other test values.
- Define “critical tests” and the acceptable length of time between their ordering and reporting.
- Set time limits between the availability of test results and patient notification, and the preferred mechanisms for patient notification.
- Determine “real world” values, and obtain feedback from key stakeholders.
- Establish responsibilities for evaluating and monitoring communication procedures.

# Recommendations

## Perform Monitoring and Surveillance of Test Tracking and Follow Up Processes

- Monitor processes for test tracking and follow-up on a regular basis and make changes when necessary.
- Designate a staff member (or multiple staff members) to be responsible for checking the test tracking log regularly, following up on delayed test results, ensuring that providers review all results, documenting when patients have been notified of results, and following up with patients if the log shows that their tests have not been performed.
- Verify that provider contact information is up to date in all documentation and in the electronic health record.

# Recommendations

## Perform Monitoring and Surveillance of Test Tracking and Follow Up Processes

- Evaluate whether the amount of time it takes to receive results from outside labs and to respond to results that are returned is reasonable.
- Evaluate whether contingency plans work effectively by scheduling times to simulate activation of the fail-safe or contingency plan at different times during the day.
- Periodically evaluate test tracking procedures and communication strategies for effectiveness.

# Recommendations

## Utilize Health IT Solutions to Close the Loop

- Adopt the strategies for using health IT for communicating, tracking, and linking test results outlined by the Partnership for Health IT Patient Safety's [Closing the Loop](#) guidance.
- Provide decision support tools to help providers order the proper tests.
- Improve the transmission of information using universally recognizable display icons in the EHR for alerts and notifications.
- Use available guidance, such as the Office of the National Coordinator for Health Information Technology's (ONC) SAFER guides (Safety Assurance Factors for EHR Resilience) for [Test Results Reporting and Follow-Up](#) and [Clinician Communication](#) to help identify best practices associated with EHRs and to incorporate those best practices into the organization's policies.

# Recommendations

## Utilize Health IT Solutions to Close the Loop

- Enhance the usability of communication of diagnostic results.
- Automate the notification process using existing EHR functionality.
- Set up an electronic tracking and monitoring system that clearly identifies the ordering provider and includes hard stops to ensure the provider takes appropriate action, and assign responsibility for oversight and monitoring of the system.
- Ensure that all actions taken related to test ordering, tracking, and follow-up are sufficiently documented.
- Educate clinicians and staff that technology is not a fail-safe method for test tracking and follow-up, and clinicians must still actively check results throughout the day and follow procedures for responding to tests and following up with patients.

# Recommendations

## Employ Proactive Approaches to Patient Safety & Communication

- Inform patients of the expected return time for results and empower them to call if they have not received results.
- When possible, provide referrals and schedule tests before appointments, so the results can be reviewed with the patient during the appointment.
- Never interrupt the communication of diagnostic test results.
- Follow up with each patient to ensure he or she has complied with referrals for tests, scheduled and attended referral appointments, or taken other recommended actions in response to a test result. Do not rely on the patient's next appointment to verify compliance. (For more information, see the Physician Consortium for Performance Improvement's [Closing the Referral Loop](#) project).

# Recommendations

## Employ Proactive Approaches to Patient Safety & Communication (cont..)

- Develop strategies for addressing patient noncompliance with recommended tests, referrals, or treatments. Verify that these strategies include educating the patient on potential consequences of noncompliance and documenting the exchange in the HER.
- Look to individuals and organizations with low error rates in areas such as specimen labeling to identify best practices.
- Conduct user satisfaction surveys to elicit feedback from clinicians and staff about laboratory testing.
- Implement standardized communication techniques for staff members when conveying patient information and test results (Massachusetts Coalition).

# Recommendations

## Educate & Train Staff on Effective Test Tracking and Response

- Educate staff about the facility's diagnostic testing policies and procedures, including information on common diagnostic testing errors; best practices; and reporting procedures for critical, abnormal, and normal test results.
- Train staff to maintain critical thinking skills, and advise that the obvious diagnosis may not always be the correct one. Providers should be instructed to consider all information available when making a diagnosis, including the patient's problem list, history, presenting symptoms, results of the physical assessment, and, when available, results from lab and other diagnostic tests.
- Instruct staff to confirm a patient's identity before discussing test results (i.e., by using two patient identifiers).
- Instruct staff to confirm or update patient contact information at each visit.

# Recommendations

## Educate & Train Staff on Effective Test Tracking and Response (cont.)

- Instruct staff to document all communication with the patient, including the date and time of communication, the means used to communicate results (e.g., phone call), acknowledgment by the patient that he or she has received the results and understands the instructions given, and any other clinical information that has been shared or obtained from the patient.
- Instruct staff to document any unsuccessful attempts to reach the patient, including the mode of communication, the number of attempts, the outcome of each attempt, and the date and time they were made.
- Ensure that staff performing tests, including sample collection, are properly trained and that their onboarding curriculum includes all factors that influence lab results, including specimen requirements for each test, such as order of the draw and sample container labeling and collection requirements.



# Medication Safety Events

# Medication Events

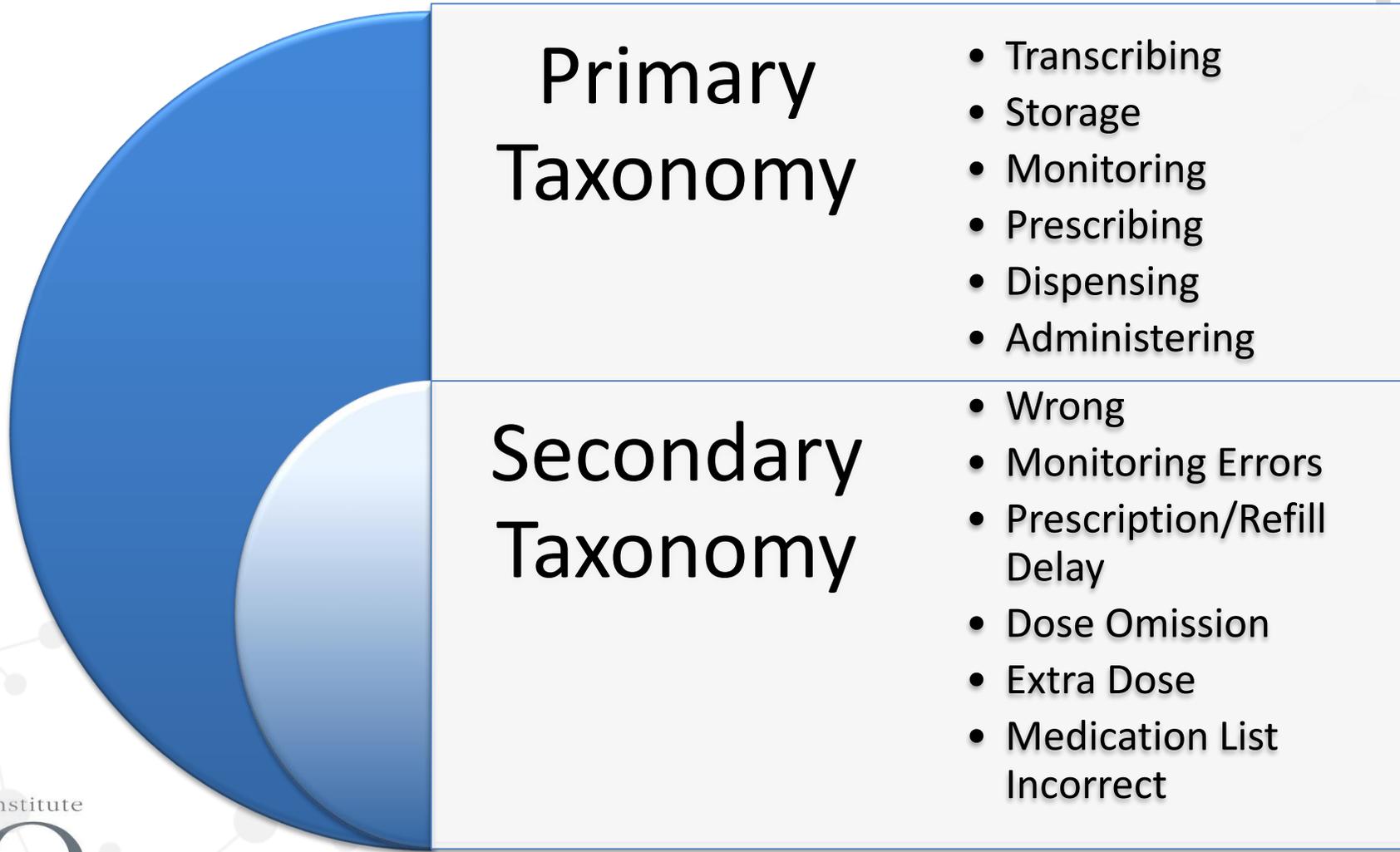
- Medication safety events are some of the most common adverse events in healthcare.
- Such events can—and do—occur frequently in ambulatory care centers, community health centers, and physician offices.
- Medication safety events are also a leading cause of malpractice claims in ambulatory care.
- Facilities reporting medication events to ECRI Institute PSO indicate that approximately 14% fell into categories E through I using the National Coordinating Council for Medication Error Reporting and Prevention's (NCC MERP) Index.

## Medication Event Examples

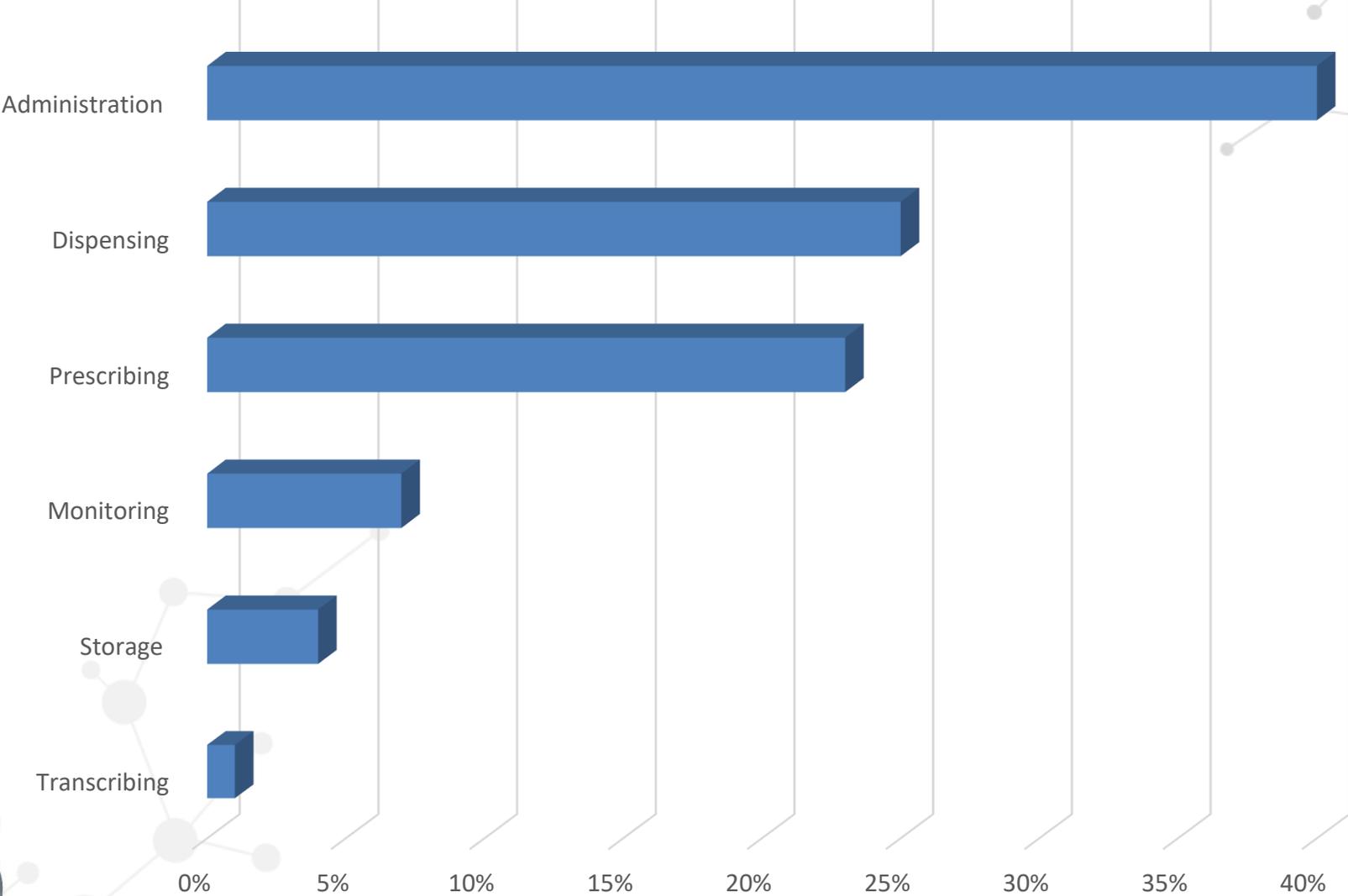
*Mother of patient reported that PCP prescribed the wrong dosage and frequency of medication to 7 month old daughter for Tamiflu, which resulted in patient being hospitalized. Mother stated intent to sue provider because of this mistake.*

*Patient ordered IV cyclophosphamide 300 mg/m<sup>2</sup>. Noted 9.1% dose increase since last dose. Upon further investigation noticed that documented height in EPIC has ranged from 4'11" to 5'6" reported as increases and decreases over a period of time and even noted an inpatient chemo note verifying as 5'10"....Patient actually 4'11". Paged NP to correct dose accordingly. Patient received correct dose.*

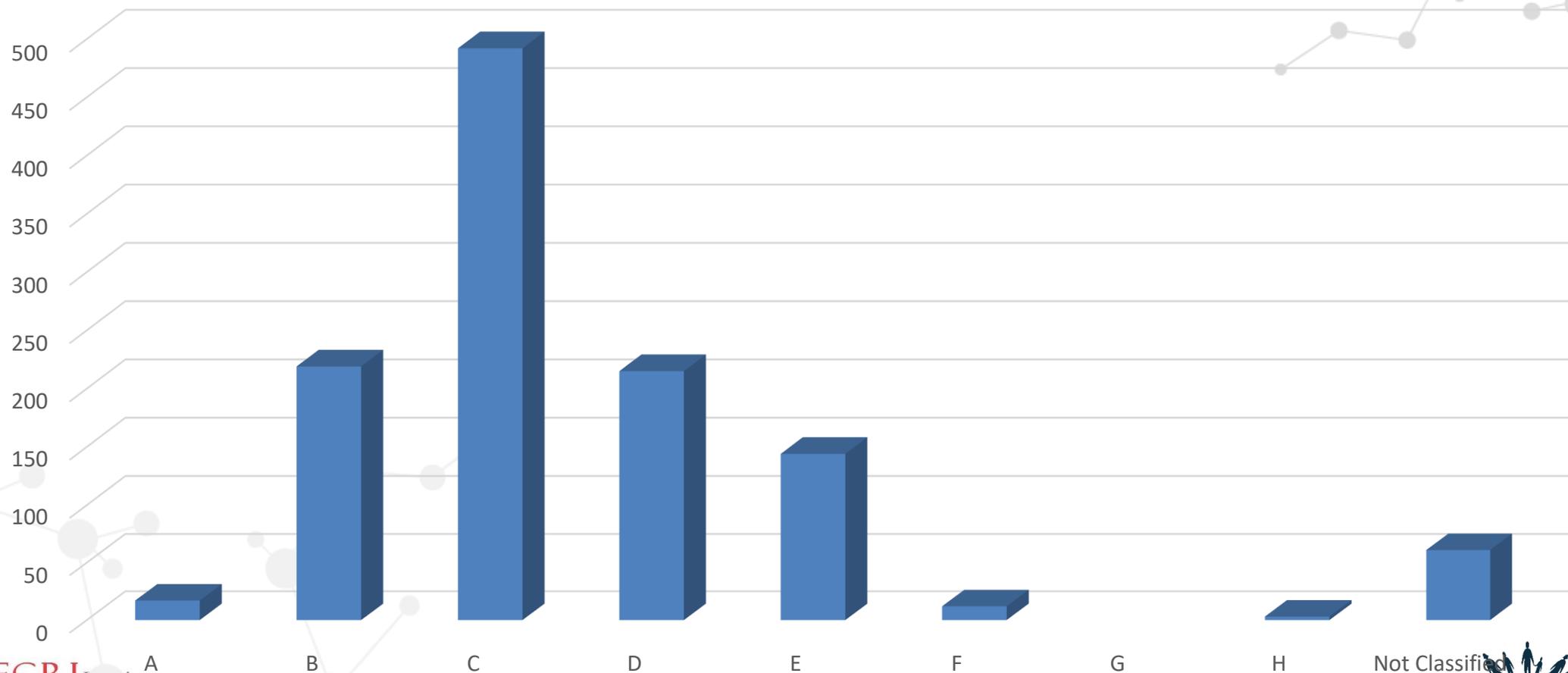
# Taxonomy



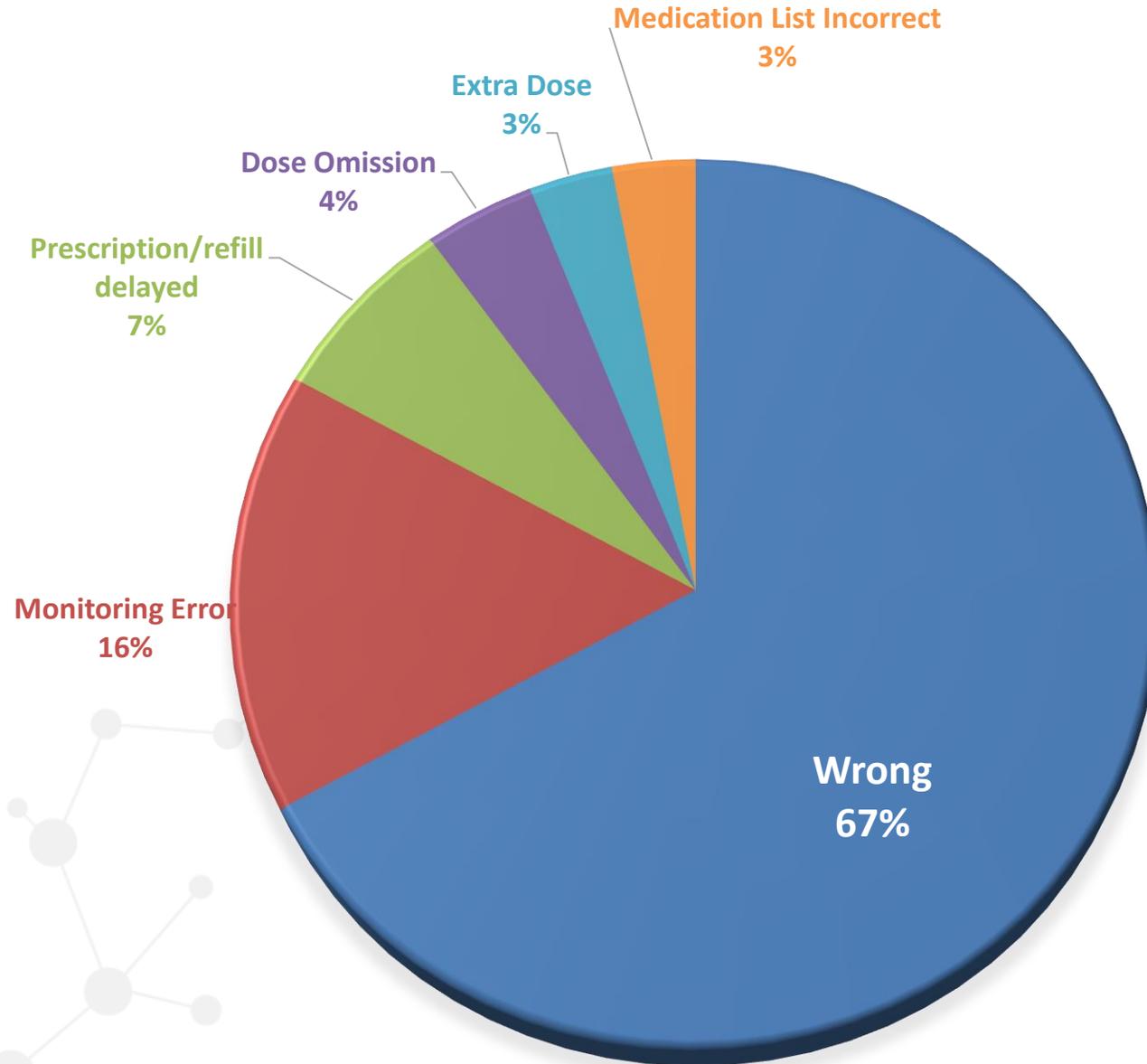
# Findings - Medication Safety Events by Node



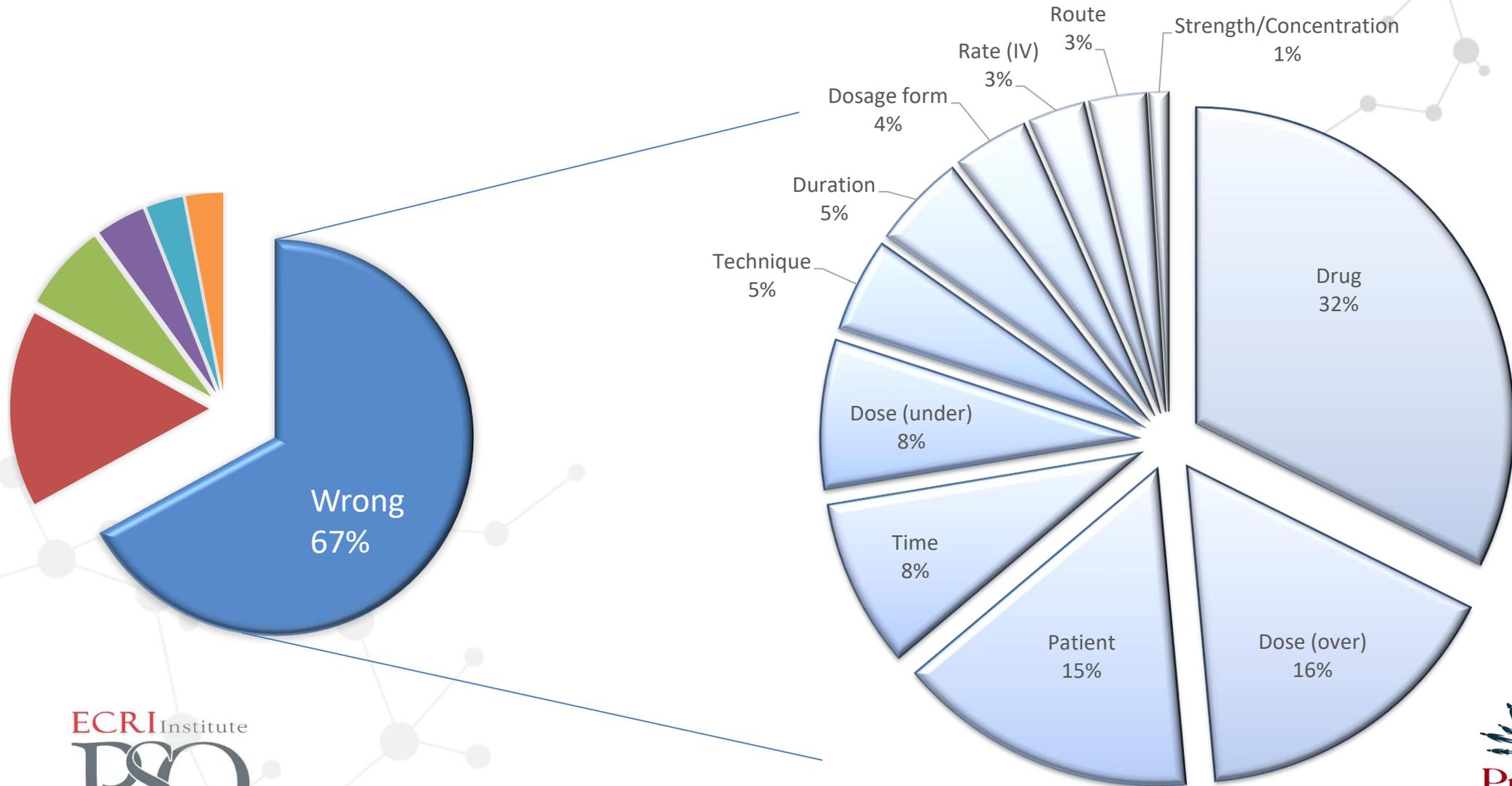
# Findings: Medication Events by Harm Score



# Findings



# Medication Safety “Wrong” Categories by Type



## About Us

The world's foremost non-profit organization educating the healthcare community and consumers about safe medication practices

Join us in our efforts to improve medication safety

[LEARN MORE](#)



The Institute for Safe Medication Practices (ISMP) is the only 501c (3) nonprofit organization devoted entirely to preventing medication errors. During its more than 30- year history, ISMP has helped make a difference in the lives of millions of patients and the healthcare professionals who care for them.



ISMP is known and respected as the gold standard for medication safety information. It also has served as a vital force for progress. ISMP's advocacy work alone has resulted in numerous necessary changes in clinical practice, public policy, and drug labeling and packaging.

# Considerations

## ISMPs Key Elements of the Medication Use System

Patient Information (age, allergies, weight, lab results)

Drug Information

Drug labeling, packaging and nomenclature

Drug storage, stock, standardization and distribution

Drug device use, acquisition and monitoring

Environmental factors )poor lighting, noise, interruptions workload

Staff competency and education

Patient education

Quality processes and risk management

# Recommendations

## Promote a Culture of Patient Safety

- Encourage **ALL** staff to report **ALL** medication-related events (even if no harm occurs) and near misses, as part of a non-punitive culture.
- Verify that policies encourage staff to speak up and seek clarification if they think a medication order is unclear or ambiguous.

# Recommendations

## Take a Multidisciplinary Systems Approach

- Encourage buy-in from organization leadership for all medication safety efforts.
- Focus medication safety improvement efforts by identifying and addressing priority areas.
- Promote the use of various methods of identifying and preventing practices that increase risk of drug-related patient events throughout the medication management process.
- Verify that the organization's systems for identifying medication-related events will catch both actual events and near misses.

# Recommendations

## Implement Policies and Procedures

- Establish and implement standardized policies and procedures that incorporate the best practices and guidelines for each part of the medication management process.
- Establish standardized definitions for adverse medication events and near misses and how to report and manage such events.
- Use Standardized medication order sets for requesting frequently used medications
- Involve ALL the key players in medication use (medical, nursing, medical assistants, pharmacy staff, risk management, patient safety and quality improvement staff) in developing and reviewing medication policies.
- Establish policies and procedures that instruct staff on what to do in the event of an adverse drug reaction.
- Monitor compliance with medication policies and procedures.

# Recommendations

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- Monitor compliance with medication policies and procedures.

# Recommendations

## Educate and Train Staff

- Educate staff about the organization's medication policies and procedures.
- Provide Information and training, as needed, when new drugs or medication-related technologies are adopted.
- Involve pharmacists in the development and delivery of medication safety education programs.
- Provide feedback to providers and staff on how event and near-miss reporting has resulted increased patient safety.
- Instruct staff to confirm a patient's identity, using two identifiers.

# Recommendations

## Ensure Safe Delivery of High-Alert Medications

- Establish an articulated process for high-alert medications, including anticoagulants and oral hypoglycemic medications.
- Establish a list of high-alert medications specific to your ambulatory care setting.
- Ensure that providers who prescribe and administer high-alert medications receive and documented training for managing risks.
- Conduct an assessment of the ambulatory care setting's current practices related to identifying, prescribing and monitoring of high-alert or high-risk medications.
- Consider performing a Failure Mode and Effects Analysis (FMEA) on high alert medication administration.
- Regularly collect and analyze data on the effectiveness of error reduction strategies related to high-alert medications.
- Verify that staff provide mandatory patient education when administering or prescribing high-alert medications.

# Recommendations

## Ensure Safe Delivery of Vaccines

- Establish a process for vaccinations that covers everything from storage to administration.
- Consider designating a primary vaccine coordinator and at least one alternate, overseeing storage and handling of vaccines.
- Provide standard order sets in electronic and paper formats listing pertinent information for vaccines. (vaccine name, age-specific formulations, dose, frequency, route of administration, indications and contradictions.)
- Instruct staff to follow the rights of vaccine administration (**right** patient, **right** vaccine and diluent, **right** time, **right** dosage, **right** route, **right** site and right documentation.)
- Provide education to staff on how to hold open discussions with patients who have concerns about a vaccine side effects and serious adverse reactions, vaccine ingredients and vaccine schedules.
- Educate staff on what to do when a patient refuses a vaccine.

# Recommendations

## Implement General Medication Safety Strategies

- Consider the risk of confusing or similarly named products during purchasing.
- At each appointment review and confirm the patient's medical history, age, height and weight, allergies, current medications with name and dosage.
- Verify that each patient's medication list includes the drug name, dose, route, frequency, indication, name of prescriber and refill allotment.

# Recommendations

## Consider Health IT Solutions

- If not already implemented, consider adopting technologies such as CPOE systems, pharmacy information systems or e-prescribing that incorporate functions that make it harder for errors to reach patients.
- Allow sufficient time to plan for the adoption of technology.
- Ensure that the EHR facilitates communication with the pharmacy. Provide complete patient information to the pharmacy as a double check for allergies or potential interactions.

# Recommendations

## Safe Storage and Handling of Medications

- Keep a log of all drugs, including samples that documents the lot number, expiration date, quantity added/removed, name of patient who received the medication, total amount on hand, and the signature of the staff member who removed/dispensed the medication.
- Stock drugs with look-alike and sound-alike names in separate areas.
- Consider organizing medications by bin number or shelf location (NOT in alphabetical order).
- Store pediatric and adult formulations of vaccines separately and mark them clearly for age specific uses.
- Store any solutions and diluents together, and include instructions on reconstitution.

# Recommendations

## Safe Storage and Handling of Medications (cont.)

- Use “tALL Man” letters on labels for look-alike / sound-alike medications.
- Rotate medications so that those closest to expiration are near the front.
- Limit the amounts and types of drugs that are available to the most frequently prescribed.
- Be alert to drug recalls.
- Avoid storing high-alert medications in the ambulatory care setting. If needed on site then limit those who have access to them.
- Post brightly colored warning labels on high-alert medications, drugs that are available in multiple forms and concentrations, and potentially confusing medications.

# Recommendations

## Health Literacy & Patient Education

- Educate patients and families on potential complications associated with medications they are taking.
- With ALL medications provide clear instructions to patients for administration, including exact times and dosages.
- Use plain, nonmedical terminology when giving instructions to patients
- Ask the patient and caregiver to teach back or repeat medication instructions to ensure understanding
- Assess patient education materials to determine reading level and convert complex language to lower reading levels

# Recommendations

## Health Literacy & Patient Education (cont.)

- Use strategies to improve interpersonal communication.
- Demonstrate how to use equipment by using sample devices.
- Provide oral syringes or medication dispensers that are premeasured or marked.
- Take into account the patient's health literacy and possible culture or language needs when communicating about medications.
- Keep in mind that stress or illness may compromise patient understanding of information.
- Encourage patients and family members to speak up if they have questions/concerns.
- Document all communication with patients and family members in the medical record, including discussions about risk and benefits of treatment.
- Implement strategies to improve patient adherence to medication regimens by utilizing interventions that suit the patient's needs.



# Fall Events

# Fall Events

- Falls are often preventable occurrences that can lead to patient injury, cause hospitalizations, and significantly increase healthcare costs.
- Approximately 800,000 patients are hospitalized each year with a fall-related injury, usually a head injury or a fractured hip (CDC "Important Facts").
- The cost of falls in 2015 was estimated at more than \$50 billion (CDC "Costs").
- Between 2007 and 2016, the rate of deaths due to fall-related injuries rose 4% per year for adults 85 years or older (age adjusted per 100,000) (Burns and Kakara).

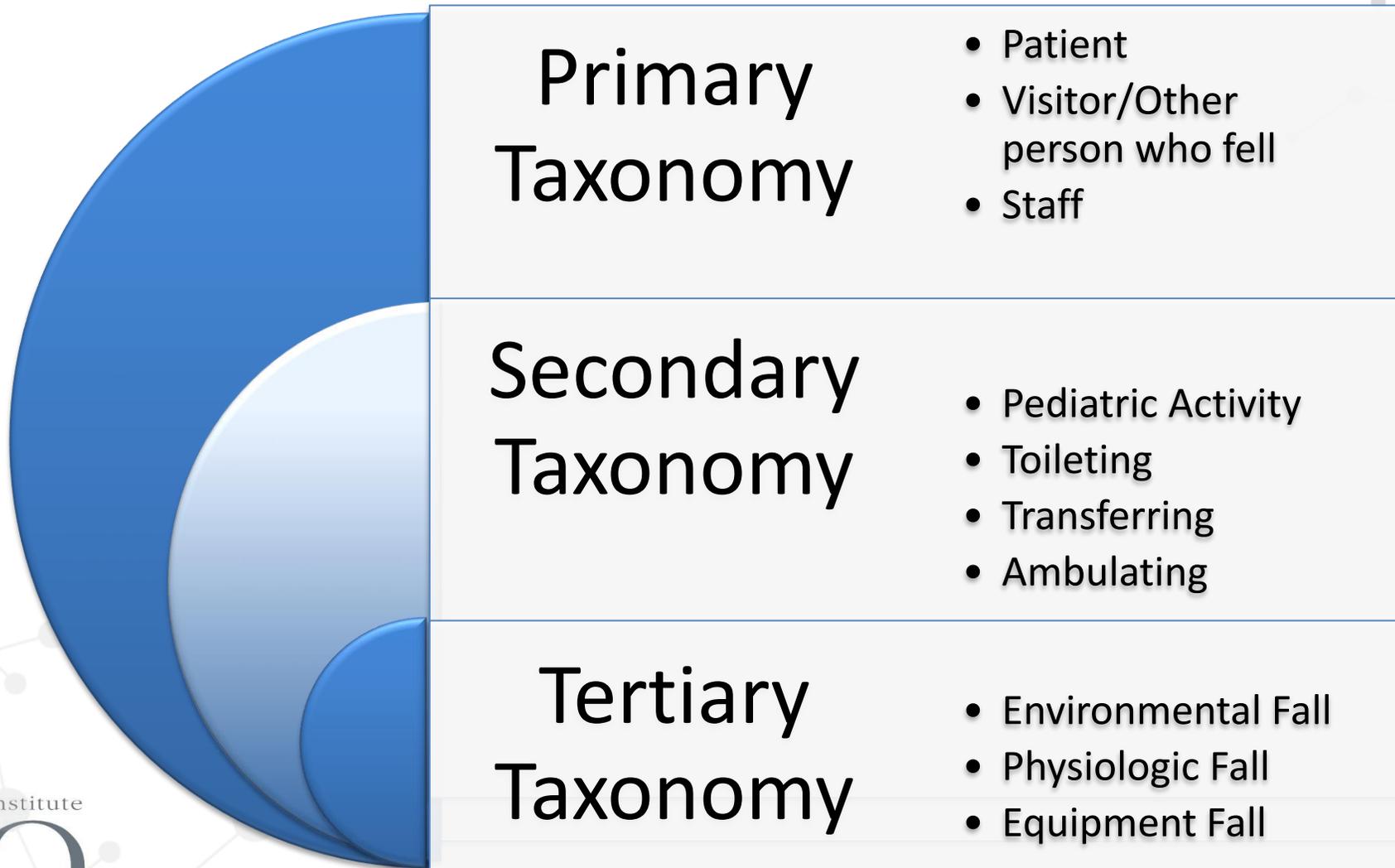
## Fall Event Examples

*The patient was in a seated position during a discussion about a procedure. He felt lightheaded and asked for a minute before lying down. Within seconds the patient fainted, falling forward onto the floor and hitting his head. He was unconscious for approximately 20 seconds.*

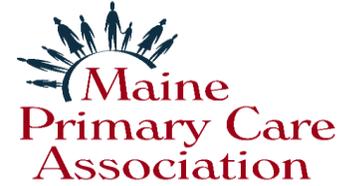
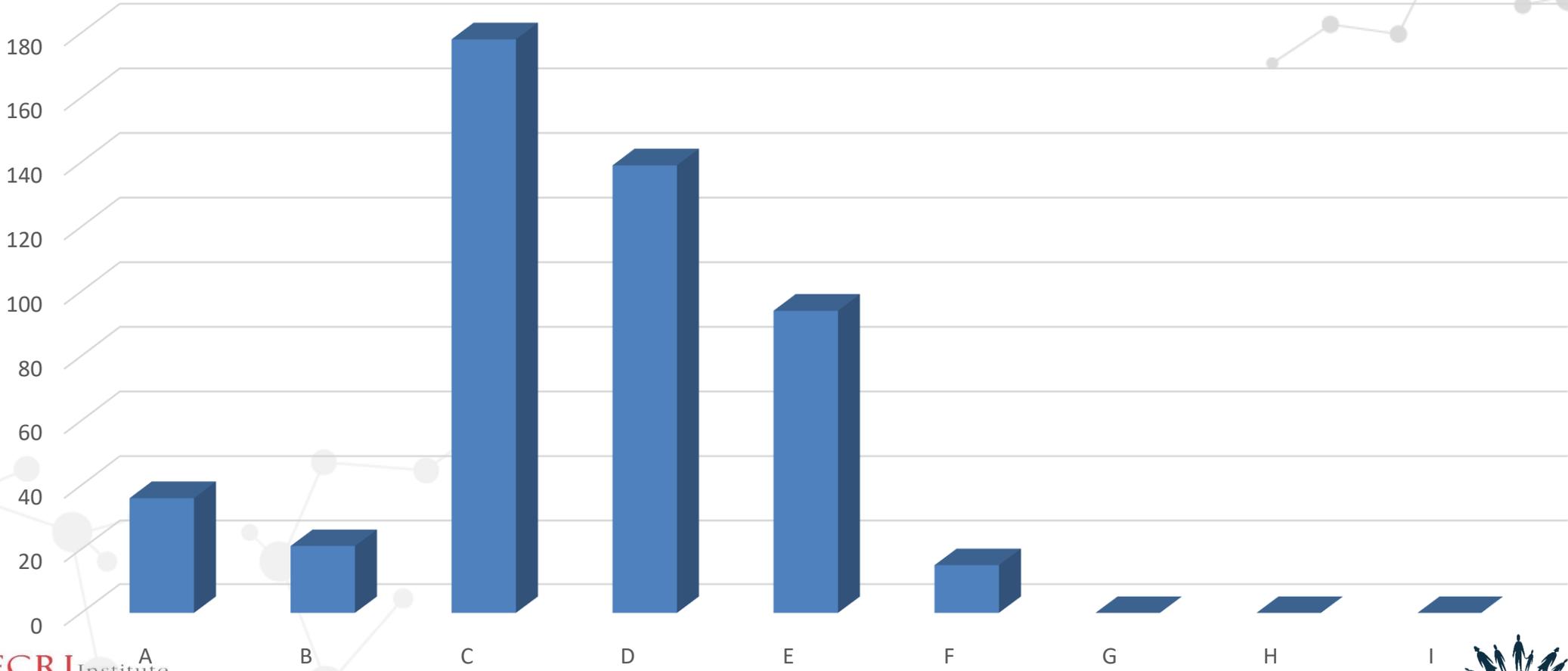
*A child fell, hitting his head when he attempted to climb up on an exam table.*

*A new patient left the exam room to use the bathroom. The staff heard a loud noise when the patient fell. Upon examination, the physician diagnosed the patient as dehydrated and as suffering from syncope resulting from the medical reason for his visit.*

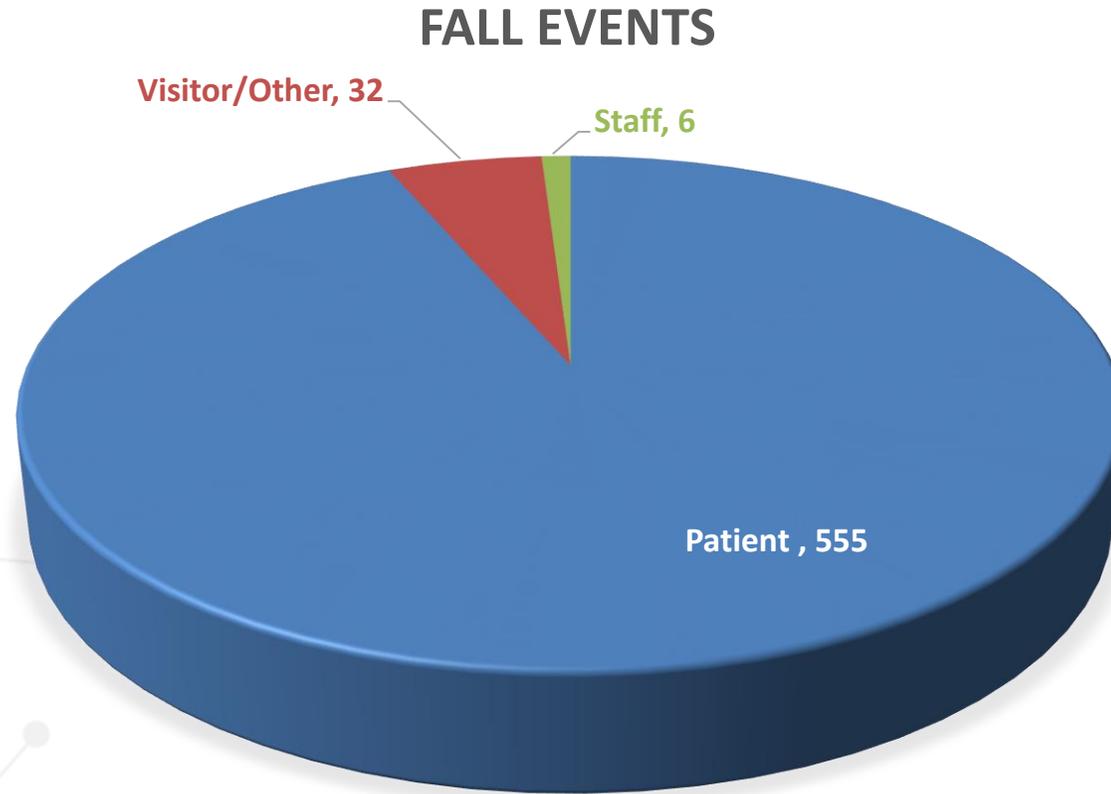
# Taxonomy: Fall Events



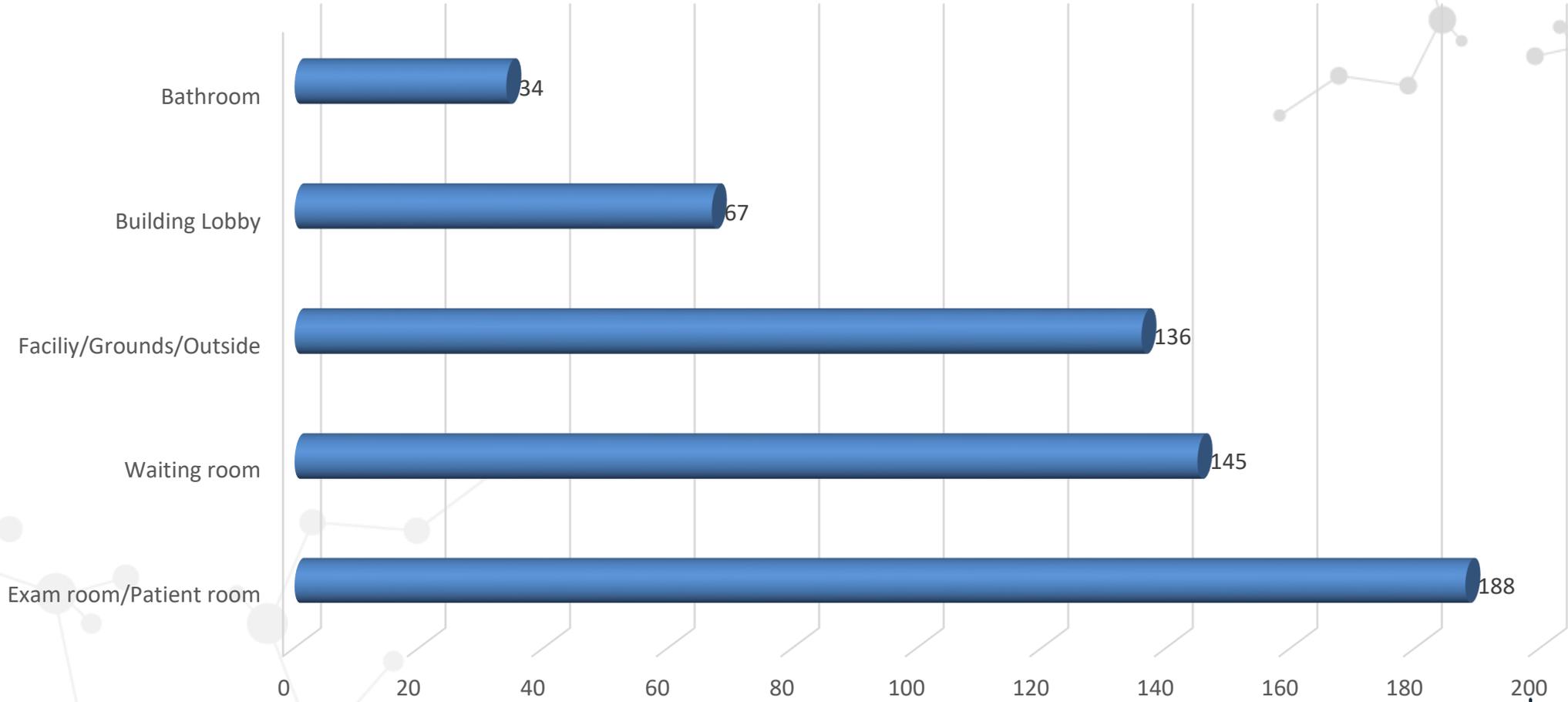
# Findings: Fall Events by Harm Score



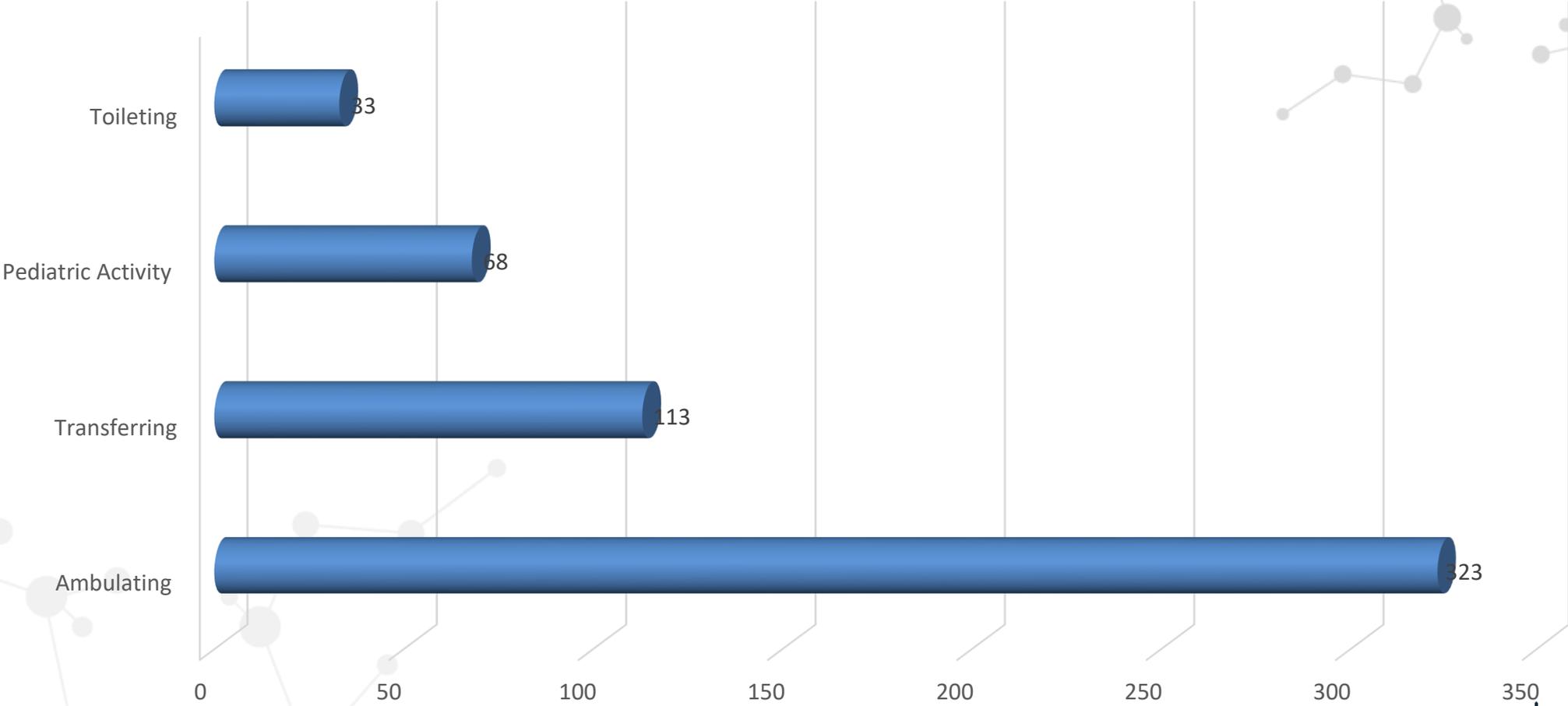
# Findings: Fall Event Classification



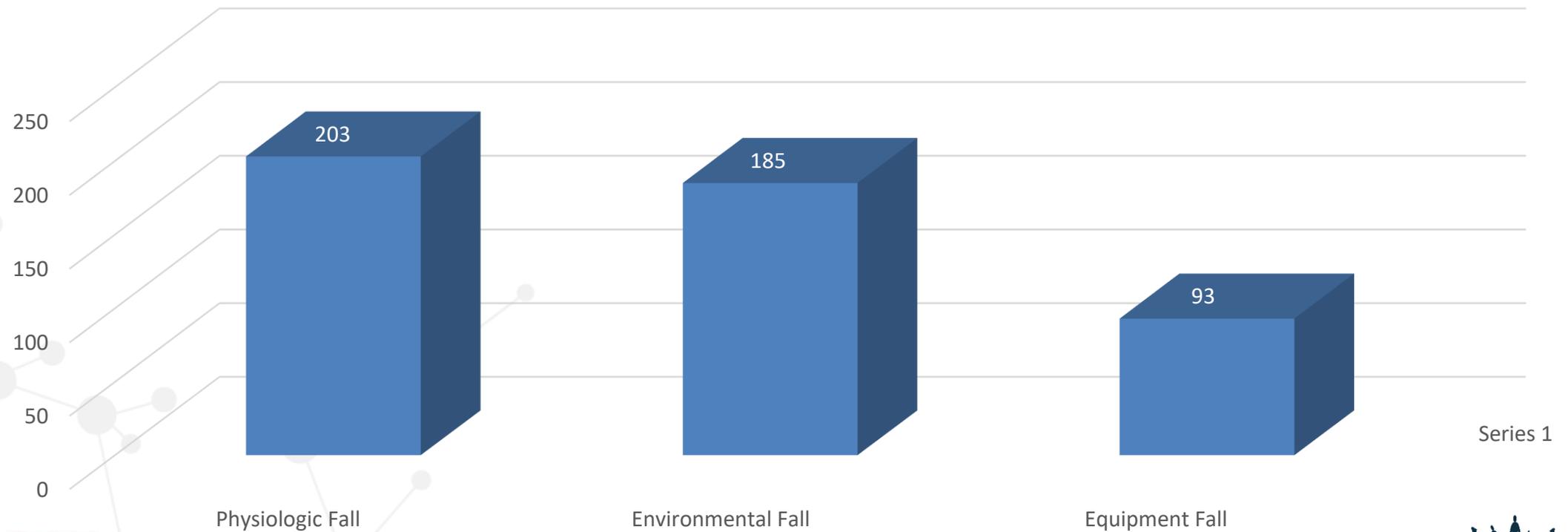
# Findings: Fall Locations



# Findings: Activity at time of Fall



# Findings: Type of Fall



# Recommendations

## Identify Fall Risk

- Educate staff on the facilities definition of a fall, as well as definitions for events that are not a fall.
- Train staff to identify intrinsic and extrinsic factors related to fall risk when interacting with patients.

# Recommendations

## Develop a Fall Prevention Program

- Develop, implement and routinely update all policies and protocols related to the fall prevention program.
- Assign fall prevention program oversight to a fall prevention champion.
- Ensure the fall prevention policies address visitor and employee falls.
- Conduct reactive system analysis of all serious falls.
- Conduct quality improvement evaluation of all fall events to identify process improvements.
- Set goals against which the proposed interventions can be measured.
- Implement effective interventions to manage patients who are at risk of falling
- Monitor and measure the effectiveness of fall preventions strategies.

# Recommendations

## Identify Environmental Factors

- Provide standardized equipment designed to help prevent falls, such as grab bars and elevated toilet seats in all bathrooms.
- Ensure office floor coverings are smooth, especially in transitions from one room to another.
- Conduct environmental rounds at least monthly, both inside and outside the practice setting to identify and eliminate hazards that increase risk of falls.
- Ensure that hallways, entrances, outside pathways and adjacent parking areas are free of clutter and have sufficient lighting.
- Ensure outside walkways are free from ice during cold weather.
- Provide a mechanism for patients, visitors, and staff to report extrinsic risk factors whenever identified.

# Recommendations

## Conduct Fall Risk Screening and Assessment

- Educate patients on fall risks, including the physical and financial costs related to a fall with injury.
- Ensure that patients are screened for falls risk.
- Conduct a comprehensive fall risk assessment for patients who demonstrate indications of high fall risk.
- Develop a fall prevention plan of care and educate the patient on the plan.
- Use the CDC STEADI tools (e.g., the [4-Stage Balance Test](#) and the [30-Second Chair Stand Test](#)) as indicated.

# Recommendations

## Identify Medication Fall Risk

- Be aware that certain medications significantly increase fall risk.
- Educate all staff and patients about medication-related fall risk.
- Ensure that a "flag" appears in the EHR to alert the ordering clinician that the medication carries a fall risk. The flagged information should appear when the drug is ordered and during medication reconciliation.

# Recommendations

## Provide Patient Education

- Ensure that the patient's risk of falling, and of sustaining a fall-related injury, is effectively communicated to the patient.
- Provide written fall prevention materials to patients and families.
- Offer patients the opportunity to talk about falls that have happened and about their fear of falling; educate patients and families on the benefits of increased mobility and autonomy.
- Encourage patients to use non-skid footwear.

# Recommendations

## Train Staff to Use Fall Prevention Strategies & to Report Fall Events

- Develop and implement an initial and ongoing fall prevention education program for professional staff, clinical personnel, volunteers, and nonclinical employees of the organization.
- Consider the benefits of reducing or eliminating medications that can increase the risk of falling.
- Ensure that physicians and other clinicians understand fall risks related to specific medications.
- Educate all staff members on the appropriate way to respond to falls, including injury assessment.
- Train staff on how to effectively participate in post-fall debriefings.
- Educate all staff members on the importance of filing an event report and train staff how to enter the report into the system.



# Security & Safety Events

# Security & Safety Events

- Security and safety issues, such as workplace violence, are common in healthcare.
- U.S. Department of Justice (U.S. DOJ), reported that assaults on healthcare workers accounted for 10% to 11% of workplace injuries requiring days away from work, as compared with 3% of injuries in private-sector employees overall.
- According to a 2016 U.S. Government Accountability Office (U.S. GAO) study, "workers in health care facilities experience substantially higher estimated rates of nonfatal injury due to workplace violence compared to workers overall."

## Security & Safety Event Examples

*The agitated spouse of a patient ignored staff instructions to stay in the waiting room. He instead went searching for his wife, opening several exam room doors where other patients were being treated. Ultimately, he was redirected to the correct exam room.*

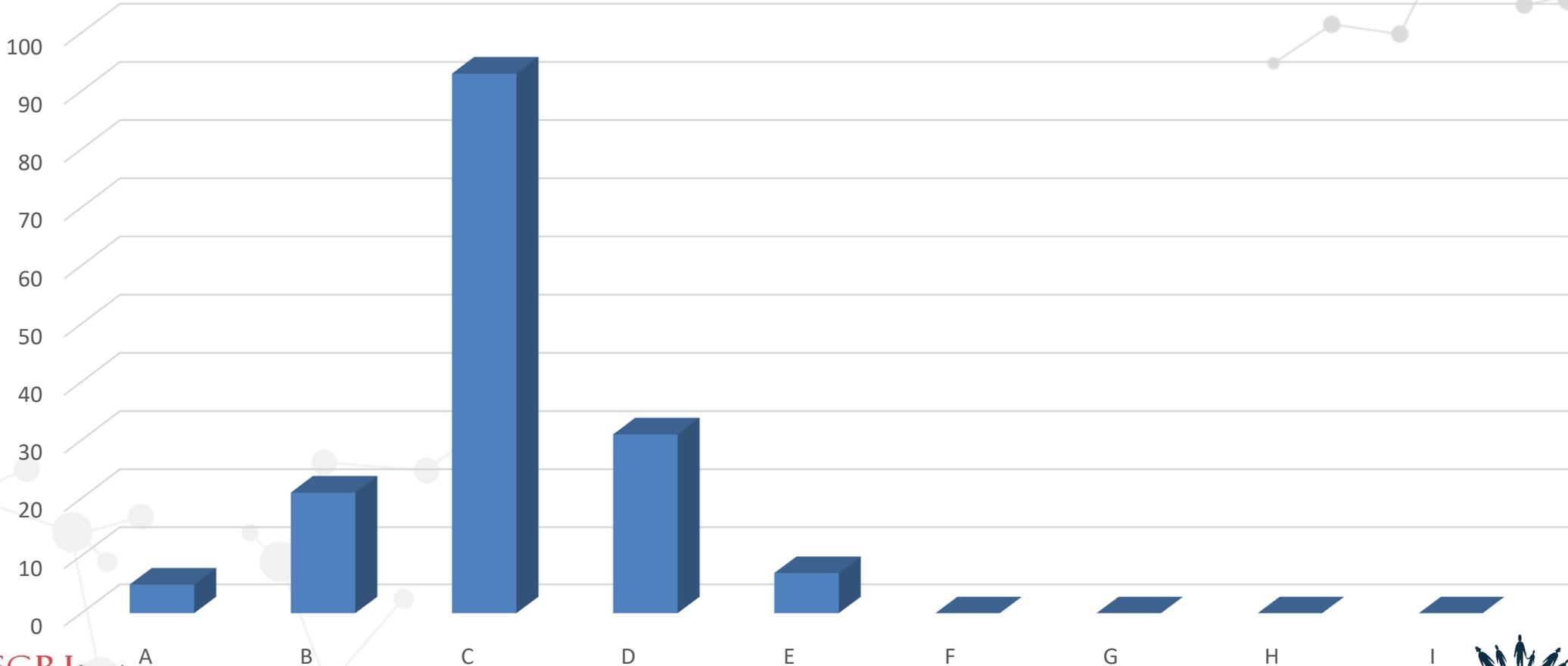
*A patient was frustrated with information that had been sent to a specialist. The patient demanded to see a copy of paperwork to confirm it had the correct contact information. While staff gathered the requested paperwork, the patient became very anxious, repeatedly berating the staff for not meeting his needs quickly enough. He eventually stormed out of the office.*

# Taxonomy: Safety & Security Events

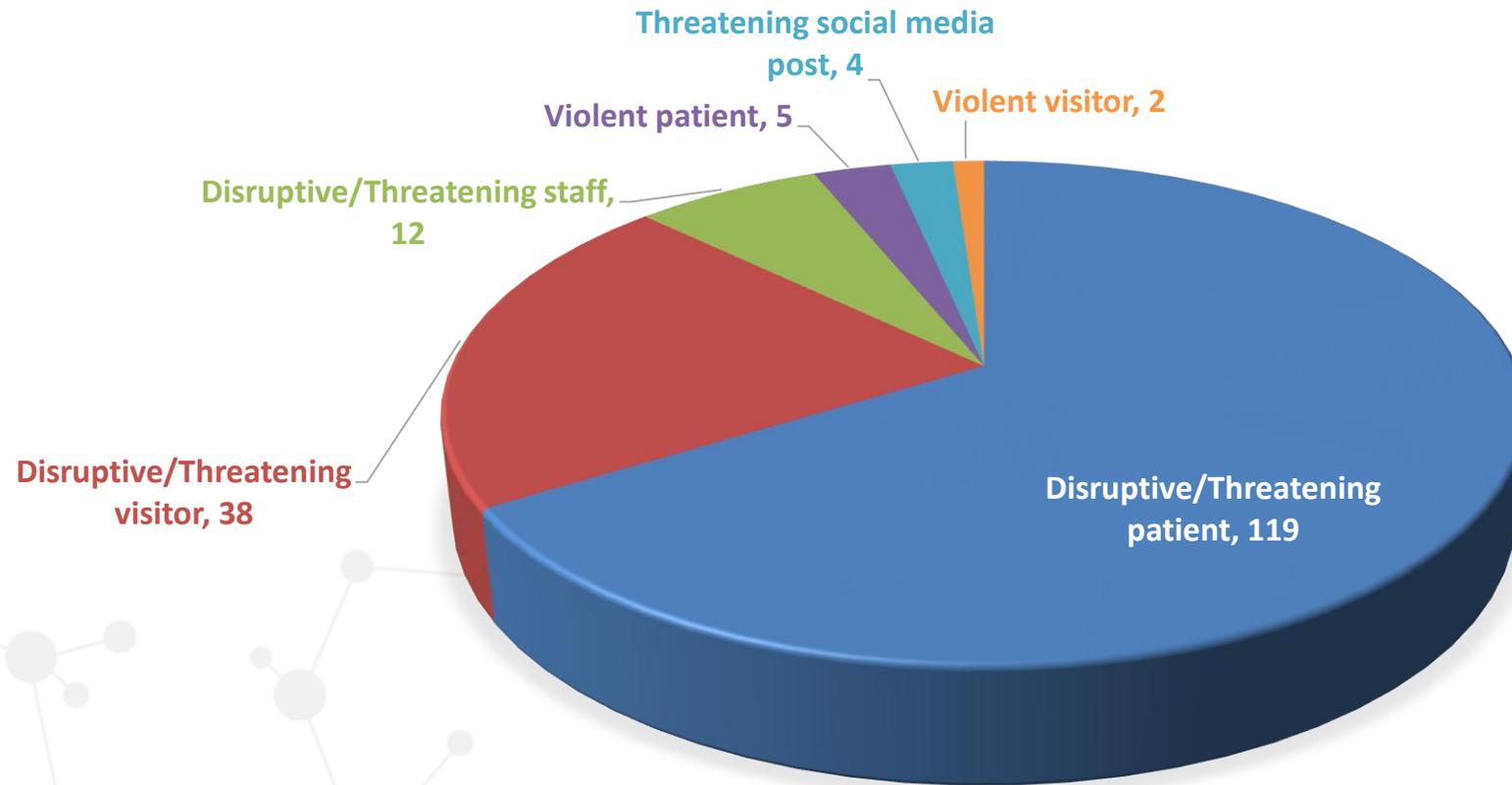
## Primary Taxonomy

- Disruptive/threatening patient
- Disruptive/threatening visitor
- Disruptive/threatening staff
- Violent patient
- Social media post (threatening)
- Violent visitor
- Violent staff

# Findings: Safety & Security Events by Harm Score



# Findings: Security & Safety Events



# Recommendations

## Demonstrate Leadership's Commitment to a Culture of Safety

- Establish a comprehensive workplace violence prevention program.
- Conduct an all-hazards risk assessment to evaluate the potential for violence at least annually, incorporating patient-related risk factors, environmental risks, and operational risks.
- Employ interventions that are designed to minimize stress for patients and visitors.
- Develop and communicate codes of conduct for employees and patients.
- Ensure that all staff are trained in de-escalation techniques.
- Encourage all employees and other staff to report incidents of violence or perceived threats of violence.
- Ensure appropriate follow-up to workplace-violence-related events, including reporting, post-incident support, and investigation.

# Recommendations

## Conduct a Security and Safety Assessment

- Conduct security and safety surveillance rounding at least monthly.
- Evaluate environmental factors in the practice setting to identify elements that could contribute to disruptive behaviors or workplace violence (see "Factors That May Foster Disruptive Behavior").
- Identify hazard prevention strategies.
- Keep noise/white noise to a minimum (e.g., soothing waterfall sounds or low-volume TV).
- Ensure the parking areas are brightly lit; suggest employees consider entering and leaving the building together as a group.
- Improve relations with law enforcement (e.g., organize meet and greets, offer coffee and bathroom breaks for patrolling officers, explain safety concerns).

# Recommendations

## Conduct Staff Training on Workplace Violence

- Train staff on organization-specific workplace violence policies and procedures that conform to the risks and strategies actually used in the practice.
- Provide staff with guidance on recognizing verbal and behavioral cues that suggest a patient could become combative.
- Educate staff on appropriate and inappropriate techniques to handle aggressive behaviors (e.g., de-escalation techniques). Include simulation and role-playing exercises during training.
- Provide staff with an understanding of the practice's patient populations, and offer information to improve staff sensitivity to cultural differences.
- Develop and encourage safety champions.
- Train reception staff to recognize and accommodate patients who may need early exam-room placements to remain calm.
- Conduct workplace violence training drills.
- Develop a policy that addresses what to do if a patient arrives for an appointment with a weapon.

# Recommendations

## Identify Specific Risks

- Evaluate workflow and staffing during peak times to decrease wait times.
- Inform patients and their families about estimated wait times; update the information as needed.
- Ensure that all physicians, clinicians, and staff are educated about the organization's code of conduct.
- Train staff on how to respond to patients who have mental health conditions who exhibit disruptive behavior.
- Communicate the organization's philosophy prohibiting harassing behavior.

# Recommendations

## Identify Specific Risks (cont.)

- Educate staff on how to identify and respond to a patient, family member, or visitor's discriminatory behavior.
- Educate staff about the importance of reporting discriminatory behavior or any incidents of workplace bullying, threats, or violence.
- Explain the protection from retaliation offered to those who report a coworker's harassing, demeaning, bullying, threatening, or violent behavior.
- When applicable, terminate provider-patient relationships by following the organization's termination protocol.

# Recommendations

## Evaluate Prevention Program Effectiveness

- Encourage all employees and other staff to report incidents of violence or perceived threats of violence.
- Explain the procedure for how to report a workplace violence event.
- Ensure appropriate follow-up to violent events, including communication, post incident support, and investigation.
- Ensure that counseling or critical-incident stress debriefing is available to employees who are victims of, involved in, or witnesses to violent events.
- Communicate clearly that the organization's response to reporting will be non-punitive and that the organization maintains zero tolerance for retaliation against reporters.

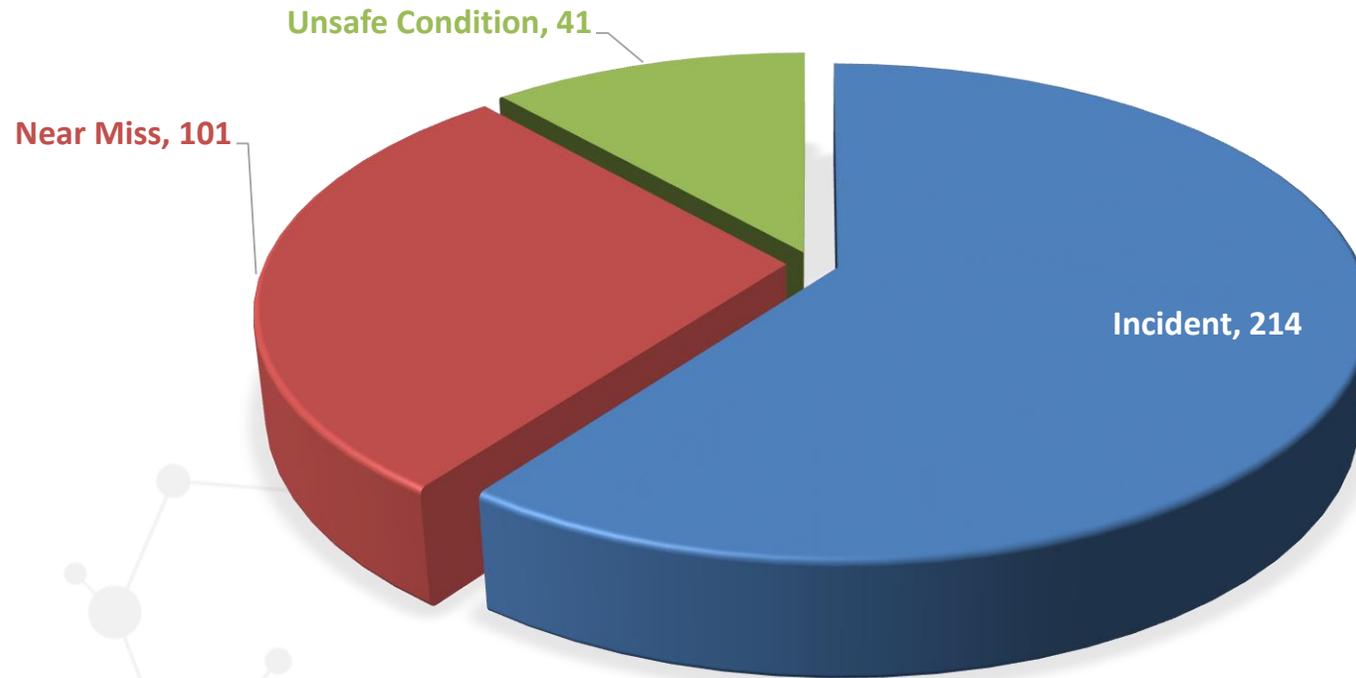


# HIPAA/Privacy

## Background: HIPAA / Privacy

- Long after the Health Insurance Portability and Accountability Act's (HIPAA) effective compliance date, the HIPAA privacy rule and the HIPAA security rule continue to be misunderstood, misapplied, or ignored, to the detriment of healthcare providers and the patients they serve.
- The rapid increase in the volume of electronic health information, the increased numbers of patients seen & static staffing levels combined with insufficient staff training regarding HIPAA may increase the likelihood that staff will make mistakes.
- ECRI Institute PSO identified 356 reports of HIPAA-related events in the ambulatory care setting. The majority involved the mishandling of medical records.

# Findings: HIPAA / Privacy



# Findings: HIPAA/Privacy

## Wrong Patient

- The patient is given another patient's visit summary in lieu of their own
- The patient is given his or her own visit summary combined with another patient's.

## Intentional Security Breach

- Result of Hacking
- Result of Ransomware

## Unintentional Security Breach

- Improper disposal of paper records
- Lost mobile devices with unencrypted data

# Recommendations

## Conduct a Privacy Risk Assessment

- Resolve any identified gaps from the risk assessment.
- Provide staff training that stresses the importance of paying attention to detail when handling a patients protected health information.



# So How Do We Get From Here to There?



# Culture of Safety and Event Reporting

# Culture of Safety

- Utilizes a transparent and non-punitive approach to reporting adverse events
- Recognizes that most mistakes arise from systems not supporting the proper or appropriate action; distinguishes between events that are caused by human errors and those that stem from system errors
- Leadership adopts and models behaviors that can eliminate intimidation of staff who report events.
- Embraces patient safety as a core value – everyone owns the duty to keep patients safe

# Why Is Event Reporting Important?

- Events involve patients, visitors, volunteers, staff, and others. Injury may or may not occur.
- How errors are identified, reported, and communicated to those involved or affected has much to do with how deeply safety is rooted in the organization's culture.
- Capturing information about events, including hazardous conditions, near misses, adverse events, and serious events, helps an organization learn and improve continuously while creating safer care for patients and safer conditions for staff.

# From Blame to Learning

- Historical perspective: event reports identify potential liability claims
- 1999: IOM's *To Err is Human*: event reports help to focus on system safety
- Now: event analysis data drives culture of safety improvements



# Goals of Reporting

- Internal event reporting programs include the comprehensive identification and reports of hazardous conditions, near misses, adverse events, and sentinel events.
- Goals of reporting:
  - Prevention: preventive action on contributing factors of system breakdown
  - Improvement: prevent and reduce high frequency/high severity events
  - Loss reduction: timely investigation and communication of harm to those affected
  - Education: organization-specific educational programs and relevant feedback to staff
  - Monitoring: track trends and the success of improvement actions

The ultimate goal is to implement system improvements that reduce the incidence of harm.

# Culture Supports Reporting

- The culture of the organization is not conducive to reporting, the system will not be successful.
- Staff are more willing to report when they do not fear punishment and when they are aware of the positive impact of event reporting.
- Event reporting processes must be as easy for staff as possible.
- Staff need meaningful feedback on how the information in their report is used.

# Create a Culture to Support Reporting

- In order to mitigate possible negative perceptions of reporting, organizations should take a two-pronged approach:
  - Demonstrate through policy and action that reporting is expected, encouraged, and rewarded.
  - Reserve disciplinary action for willful disregard, wrongful intent, noncompliance with reporting procedures, and reckless behavioral choices.

# Event Reporting Policies and Procedures

- The organization should have written policies and procedures on event reporting that are approved and endorsed by organization leadership
- Event reporting policies should address:
  - What to report
  - How to report
  - Why it is important to report
  - When to report (i.e. ASAP, within 24 hours)
  - Who is responsible to report (i.e. anyone who witnesses or discovers the event )

# Why Did the Error Occur?

- Determining the cause of the error:
  - Those involved in the analysis must remain open-minded and work to minimize bias.
  - The analysis should consider the systems involved, the opinions of those involved and carefully determine the cause of the event.



# Making It Easier to Provide Safe Patient Care

Safe Patient Care



Mitigation of harm

Increased efficiency

Increased effectiveness

Increased satisfaction

# Continuously Improve to Prevent Errors

- Event reporting, analysis, and monitoring should be considered part of the healthcare organization's continuous quality improvement efforts. The goal is improving systems and processes to provide safe, high-quality patient care.



# Maine PCA PSO Event Reporting



## Cumulative Data Analysis for Focused Interventions

- Access to the patient safety data collection and reporting system
- RCA documentation submission
- Leverage data through use of interactive dashboards



## Decreased Provider Burnout - A mechanism for collective problem solving

- Transition from being isolated by an event to partnering with like facilities to learn from an event
- Provide a mechanism for collective problem solving



## Increased Patient Safety and Improved Care

- Harnessing Evidenced Based Practice Tools
- Dissemination of Best Practices
- Reduce Harm

# Questions?

*Thank you*