NEBRASKA HOSPITALS

Medication Safety and Reporting

June 22, 2023| 10:00-11:00 am CT

nebraskahospitals.org

Objectives

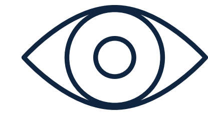
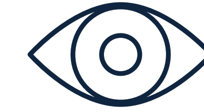
- Safety Culture
- Medication Error Reporting
- Tools and Resources to Utilize when Reviewing Incident Reports
- Process Improvement Ideas for Safe Medication Practices

NHA | NEBRASKA HOSPITALS

Just Culture Principles

- A system that:
  - Holds itself accountable
  - Holds staff members accountable
  - Has staff members who hold themselves accountable

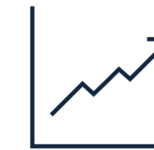
Just Culture Principles

 Investigate for Safety 

Champion Innovation

Strive for Learning

Respect for Others

Seek Improvement 

Be Transparent

Be Fair

Trust

Embrace Different Perspectives

NHA | NEBRASKA HOSPITALS

Just Culture and Safety Culture

Just Culture

- Safety incidents are seen as opportunities
- Recognizes that competent individuals make mistakes
- Accounts for all factors contributing to an incident

Preventable medication errors cost approximately $20 billion annually

Patient Safety

- Protecting patients from errors, injuries, accidents, and infections
- Culmination of individual and group beliefs, values, attitudes, perceptions, competencies, and patterns of behavior that determine the organization's commitment to quality and patient safety

NHA | NEBRASKA HOSPITALS

Understanding Risk and Human Behavior

Human Error	At-Risk Behavior	Reckless Behavior
• Inadvertently completing the wrong action; slip, lapse, mistake	• Choosing to behave in a way that increases risk where risk is not recognized, or it is mistakenly believed to be justified	• Choosing to consciously disregard a substantial and unjustifiable risk

NHA | NEBRASKA HOSPITALS

Managing Error and Risk

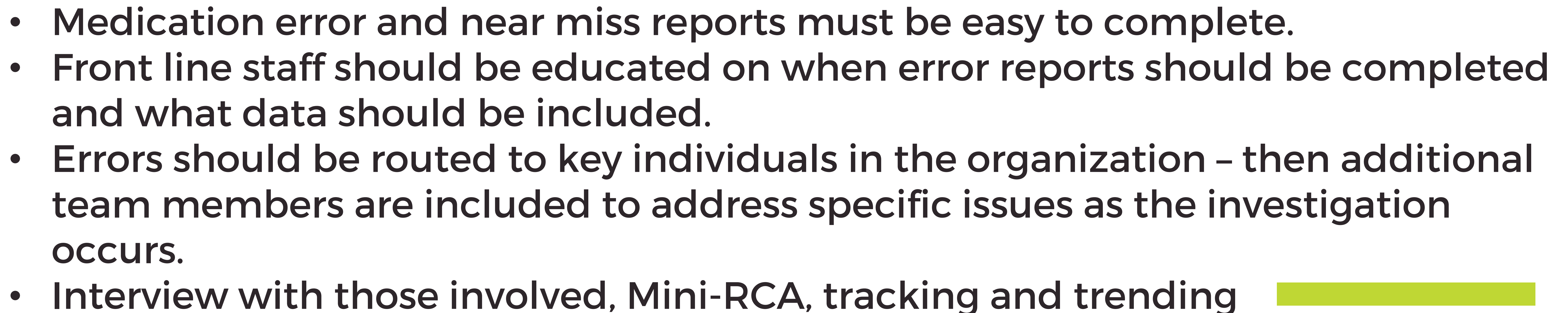
Human Error	At-Risk Behavior	Reckless Behavior
• *Product of our current system design and behavioral choices* Manage through change in: - Choices - Processes - Procedures - Training - Design - Environment	• *A choice: risk believed insignificant or justified* Manage through: - Removal of incentives for at-risk behaviors - Creation of incentives for healthy behaviors - Situational awareness	• *Conscious disregard of substantial and unjustifiable risk* Manage through: - Remedial action - Punitive action
Console	**Coach**	**Punish**

NHA | NEBRASKA HOSPITALS

Safety Events Will Happen...

- To Err is Human
- Healthcare is complex and naturally risky
- Medication errors are multifactorial
- Error prevention is proactive – planning and ongoing efforts for prevention

Protecting the Caregiver...



NHA | NEBRASKA HOSPITALS

Capturing Errors

- Safe reporting culture
- Voluntary reporting programs
- Information from technology
  - Infusion pumps
  - Bar coding
  - Electronic prescribing
  - Pharmacy reports
- Focused reporting
- Internal and external information

NHA | NEBRASKA HOSPITALS

Serious Reportable Events – Never Events

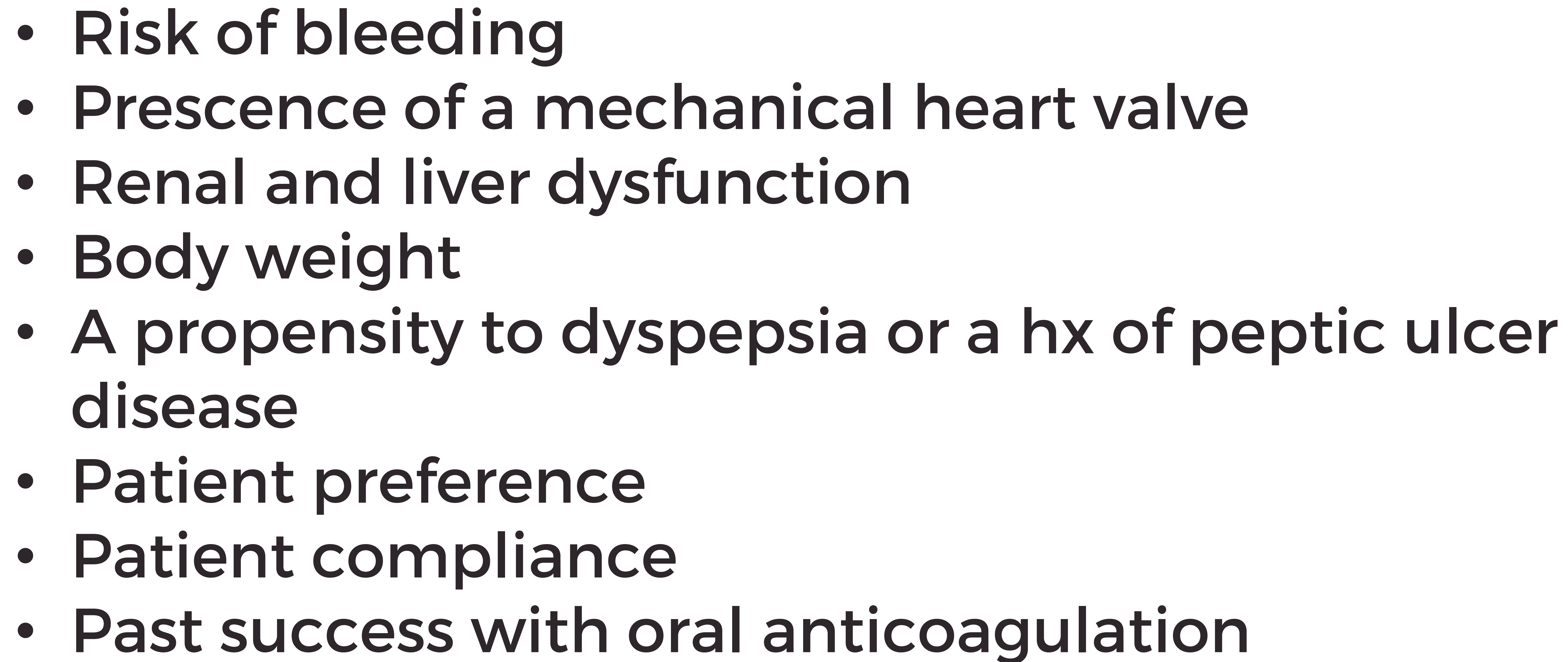
- Surgical or Invasive Procedure Events
- Product or Device Events
- Patient Protection Events
- Care Management Events
- Environmental Events
- Radiologic Events
- Potential Criminal Events

https://www.qualityforum.org/Topics/SREs/Serious_Reportable_Events.aspx

Most Common Error Trends

- Inadequate safeguards with electronic prescribing
- Similar medication names
- Wrong patient
- Vaccine related errors

Medication Safety with Related to Oral Anticoagulants

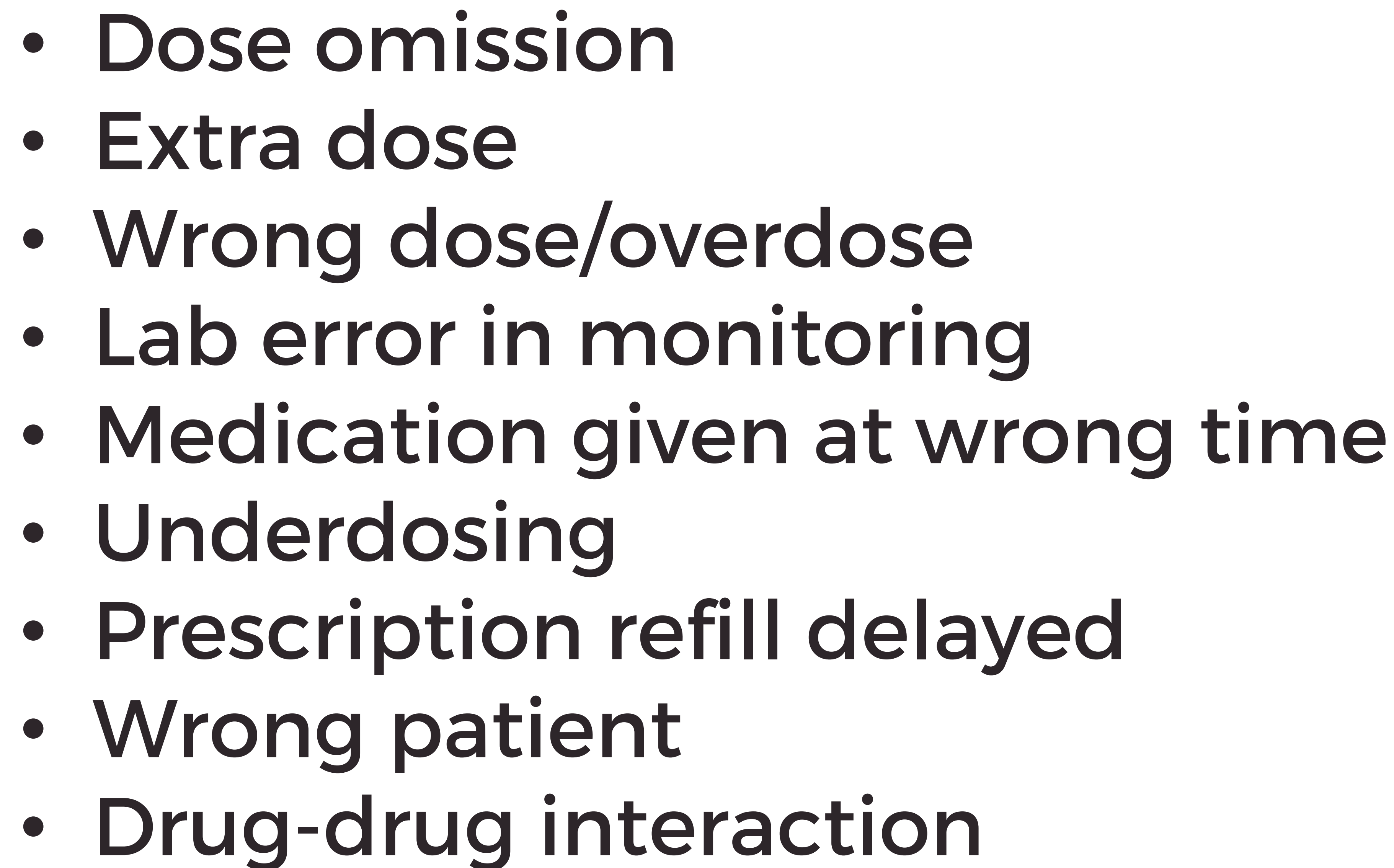


Factors to Consider

- Risk of bleeding
- Prescence of a mechanical heart valve
- Renal and liver dysfunction
- Body weight
- A propensity to dyspepsia or a hx of peptic ulcer disease
- Patient preference
- Patient compliance
- Past success with oral anticoagulation

NHA | NEBRASKA HOSPITALS

Medication Safety with Related to Oral Anticoagulants

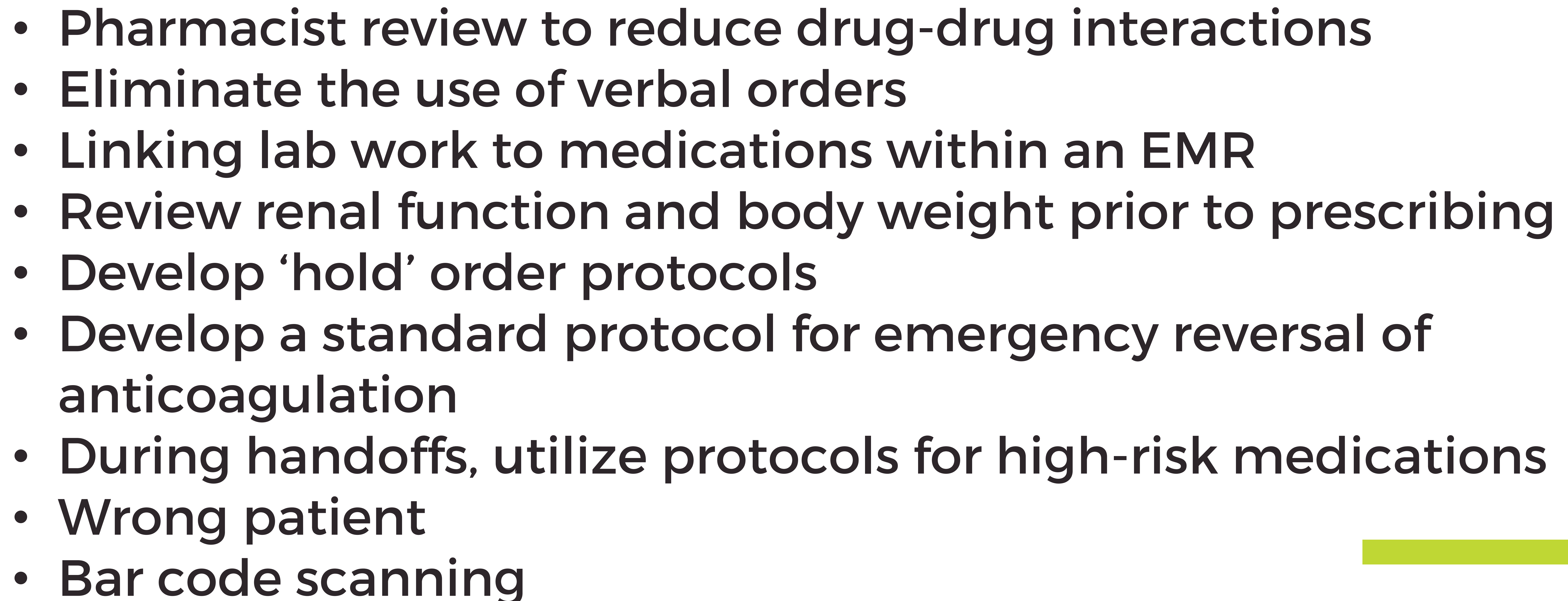


Types of Medication Errors

- Dose omission
- Extra dose
- Wrong dose/overdose
- Lab error in monitoring
- Medication given at wrong time
- Underdosing
- Prescription refill delayed
- Wrong patient
- Drug-drug interaction

NHA | NEBRASKA HOSPITALS

Medication Safety with Related to Oral Anticoagulants



Strategies to Reduce the Risk of Adverse Events

- Pharmacist review to reduce drug-drug interactions
- Eliminate the use of verbal orders
- Linking lab work to medications within an EMR
- Review renal function and body weight prior to prescribing
- Develop ‘hold’ order protocols
- Develop a standard protocol for emergency reversal of anticoagulation
- During handoffs, utilize protocols for high-risk medications
- Wrong patient
- Bar code scanning

NHA | NEBRASKA HOSPITALS

Medication Safety with Related to Oral Anticoagulants

Bleeding Risk Assessment Tools

- HAS-Bled Score
- Hemorrhages
- Atria

Therapeutic Monitoring

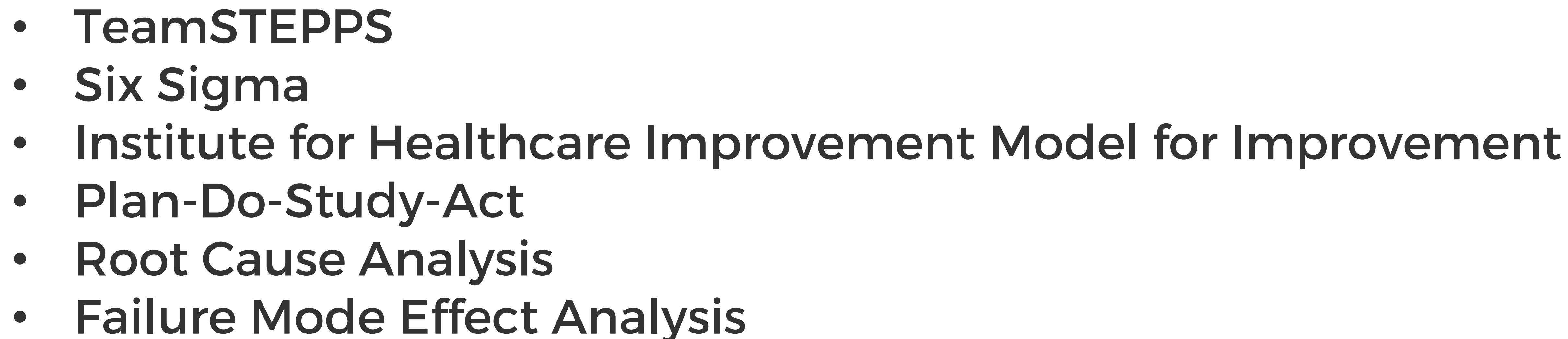
- Baseline lab testing, coag profile, renal function
- INR monitoring
- Therapeutic INR template for different conditions

NHA | NEBRASKA HOSPITALS

CUSP Toolkit Review

- The Comprehensive Unit-Based Safety Program
  - Created through a collaborative effort of AHRQ and Quality/State/National Level Innovators
  - Supports a range of quality and safety improvement models
  - Believes that harm is not an acceptable "cost of doing business"
  - Can be applied to anyone, anywhere

Aligns with and Supports other Quality/Safety Tools

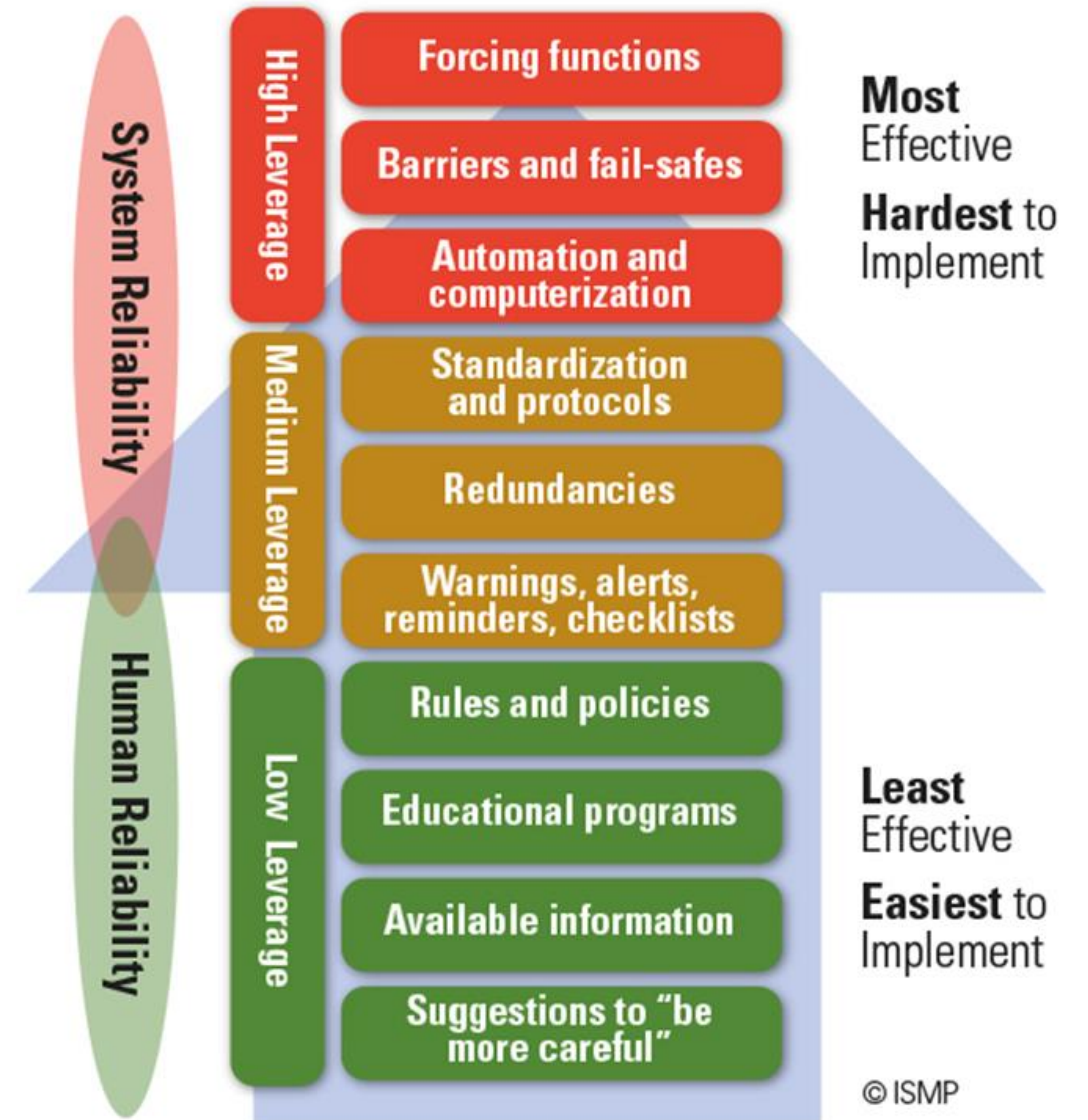


- TeamSTEPPS
- Six Sigma
- Institute for Healthcare Improvement Model for Improvement
- Plan-Do-Study-Act
- Root Cause Analysis
- Failure Mode Effect Analysis

NHA | NEBRASKA HOSPITALS

Hierarchy of Risk Reduction

- **High-Leverage Strategies**
  - Design out hazards
- **Medium-Leverage Strategies**
  - Need periodic updating and reinforcement
- **Low-Leverage Strategies**
  - Aim to improve human performance



NHA | NEBRASKA HOSPITALS

Focusing on System Factors

Technology
-Medical Devices
-EHRs
-Apps and Sensors

Tasks
-Procedures
-Workflows
-Workarounds

Person
-Perception
-Reasoning
-Action

Organization
-Policies
-Culture
-Commitment

Environment
-Interruptions
-Noise/Distraction
-Design

NHA | NEBRASKA HOSPITALS

Human Factors and Medication Safety

System Factor	Medication Specific Elements
Person	Memory, Fatigue, Perceptual Confusion
Technology	CPOE, Dispensing Machines, EMR, BCMA
Environment	Distractions, Interruptions, Stress
Tasks	Multi-tasking, Fragmented Tasks, Workarounds
Organization	Unclear Policies, Unsupportive and Poor Safety Culture

NHA | NEBRASKA HOSPITALS

Human Factors Application

Identify Areas of Risk

System Solutions

- Care for the caregiver
- Formal event review – Root Cause Analysis
- Review of literature and best practices
- Use of occurrence reports
  - Incidents and Near Misses
  - Track and Trend
- Report serious events to PSO

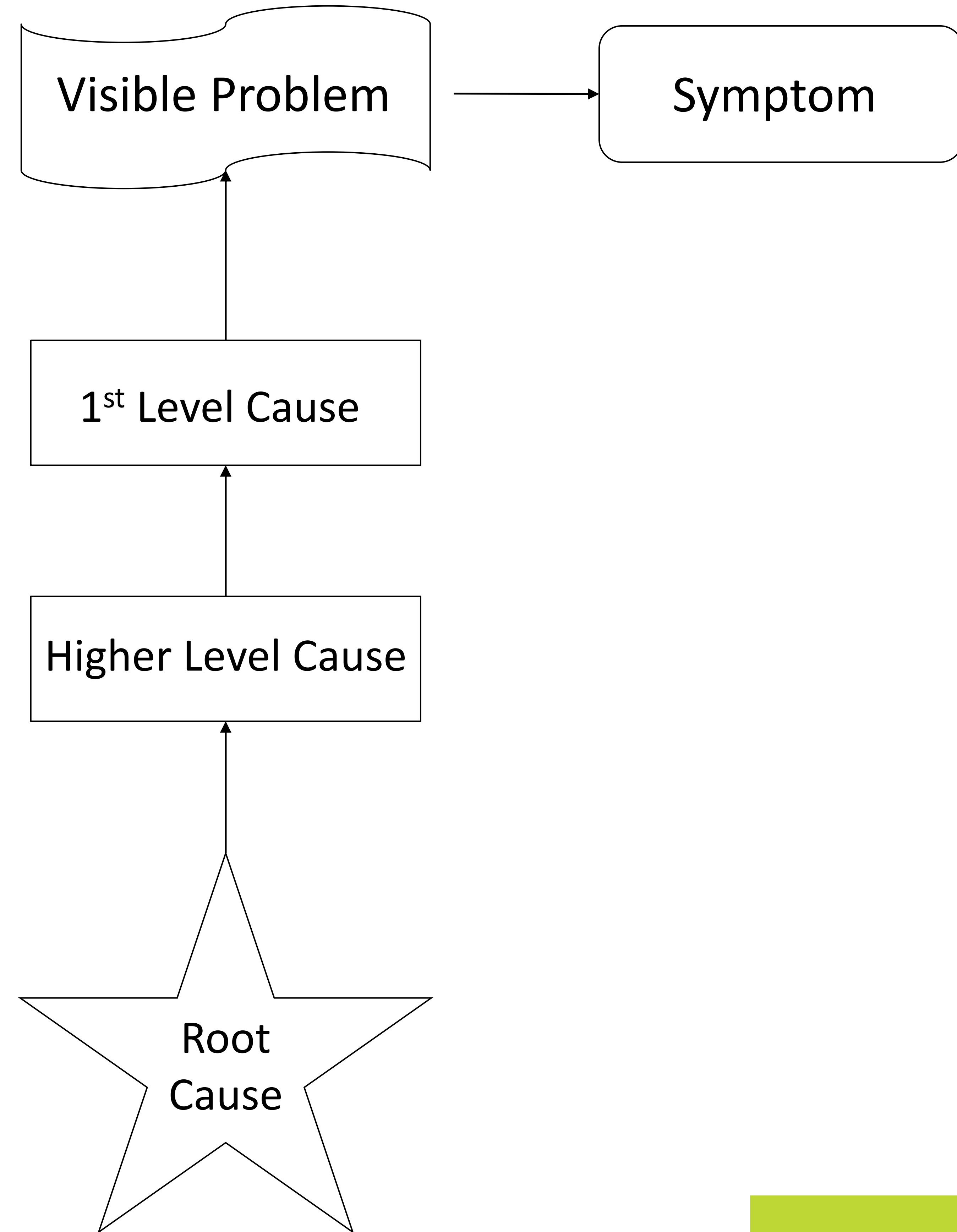
NEBRASKA HOSPITALS

Tools for Incident Review

NHA | NEBRASKA HOSPITALS

Root Cause Analysis

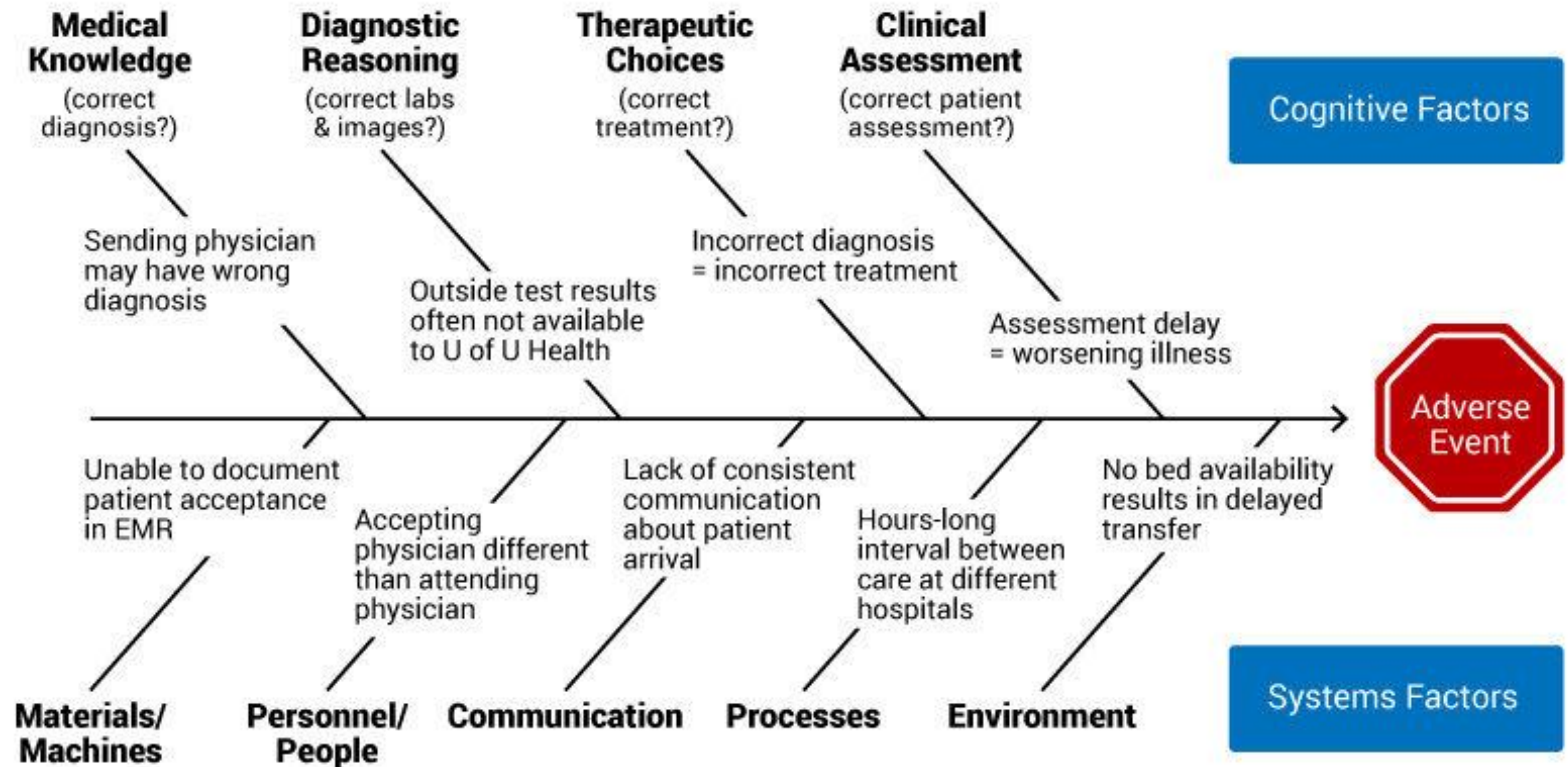
- A collective term that describes a wide range of approaches, tools, and techniques used to uncover causes of problems



NHA | NEBRASKA HOSPITALS

Fishbone Diagram

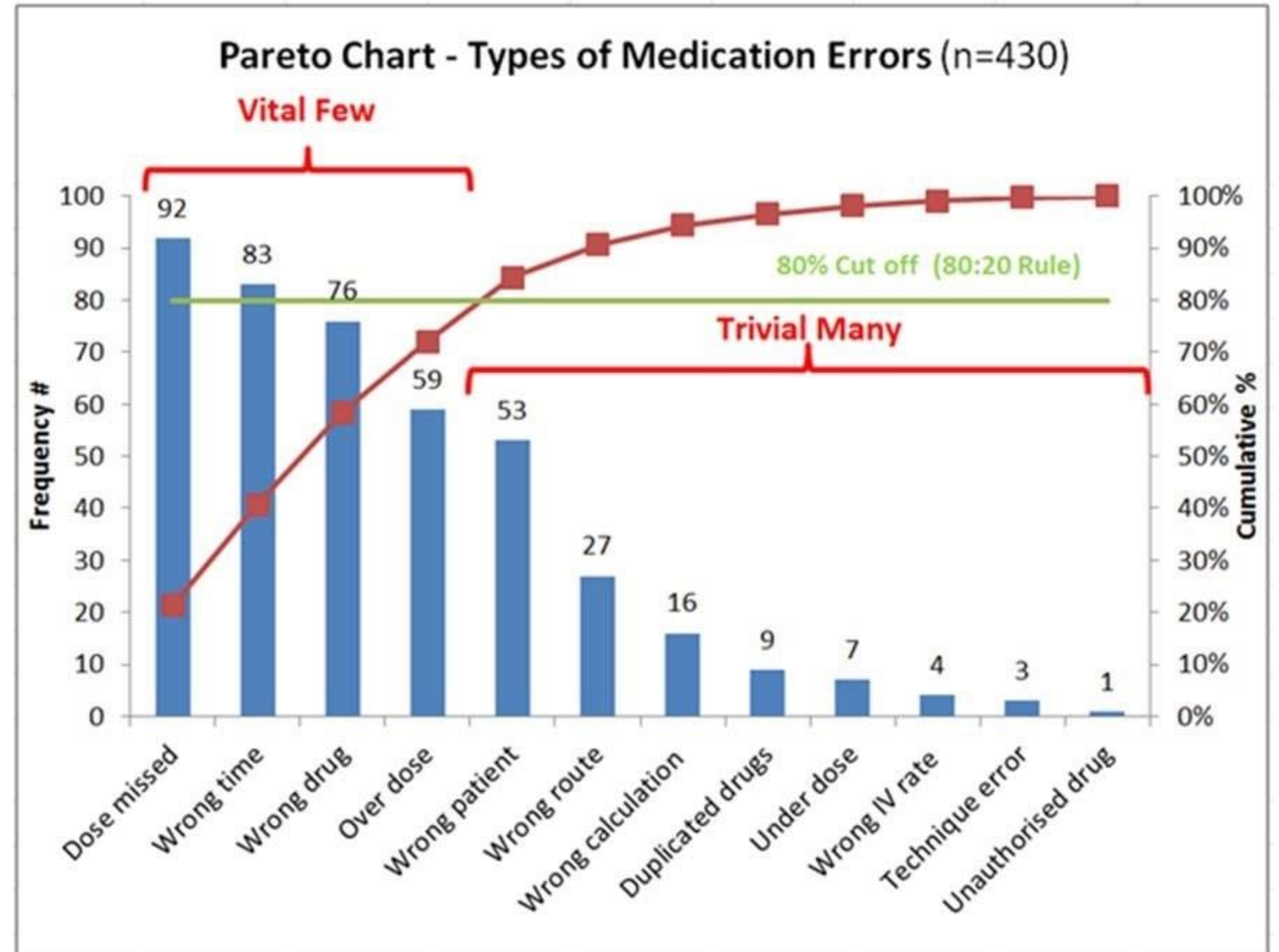
- Identifies many possible causes for an effect or problem
- Can be used to structure a brainstorming session
- Sorts ideas into useful categories



NHA | NEBRASKA HOSPITALS

Pareto Chart

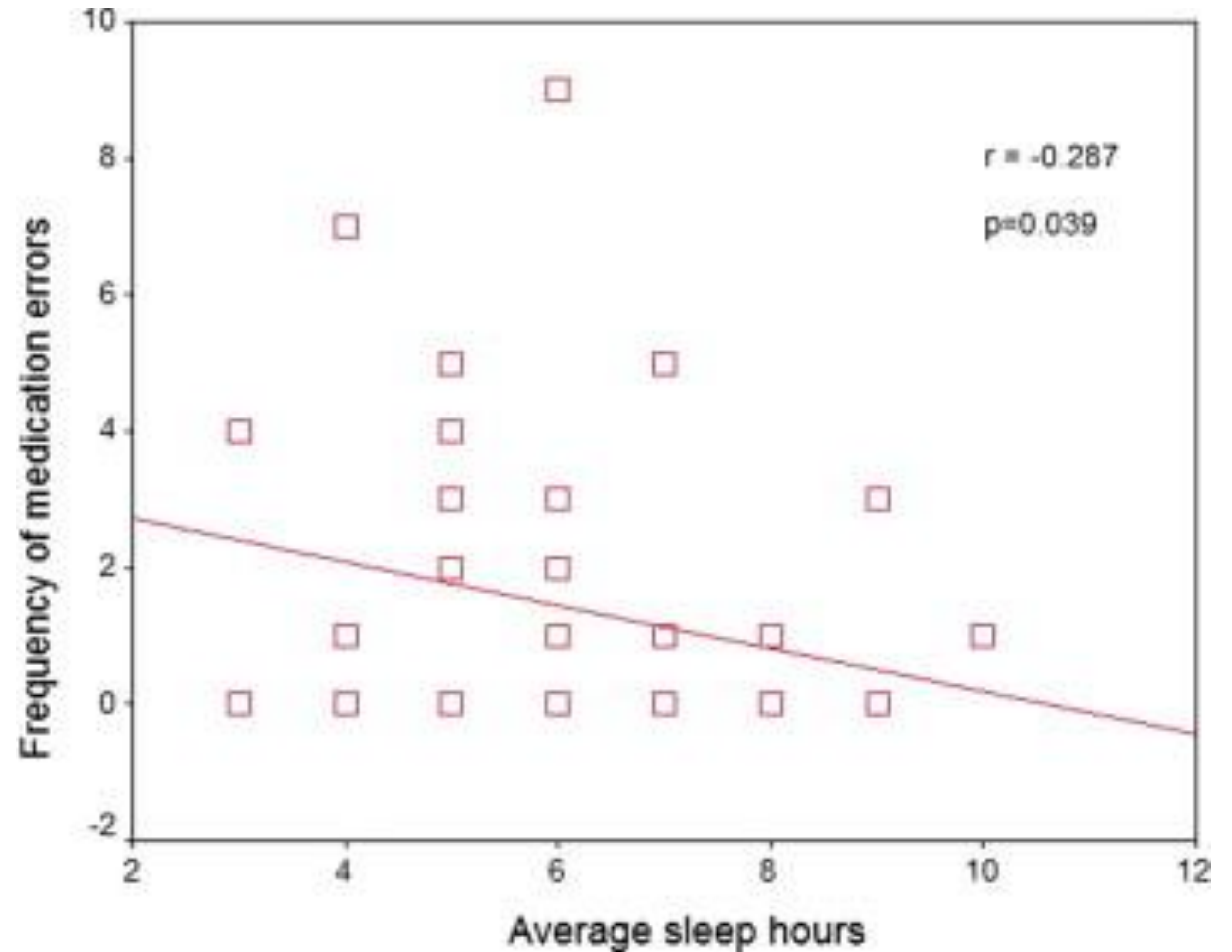
- Prioritizes opportunities when there are many problems or causes
- Looks at specific components to broad causes



NHA | NEBRASKA HOSPITALS

Scatter Diagram

- Pairs of numerical data, with one variable on each axis, to look for a relationship between them
- If variables are correlated, the points will fall along a line or curve



NHA | NEBRASKA HOSPITALS

Wrap-Up

- Questions
- Next Session:
  - June 29th | 12:00-1:00 pm CT
  - How Care Transitions Impact Patient Safety

Our Great Team

Dana Steiner, BSN, MBA, CPHQ

Quality and Performance Improvement Director

dsteiner@nebraskahospitals.org

Amber Kavan, BSN, RN, CPHQ

Quality and Performance Improvement Manager

akavan@nebraskahospitals.org

NEBRASKA HOSPITALS

THANK YOU

nebraskahospitals.org