



Concepts to Action: Addressing a Public Health Epidemic

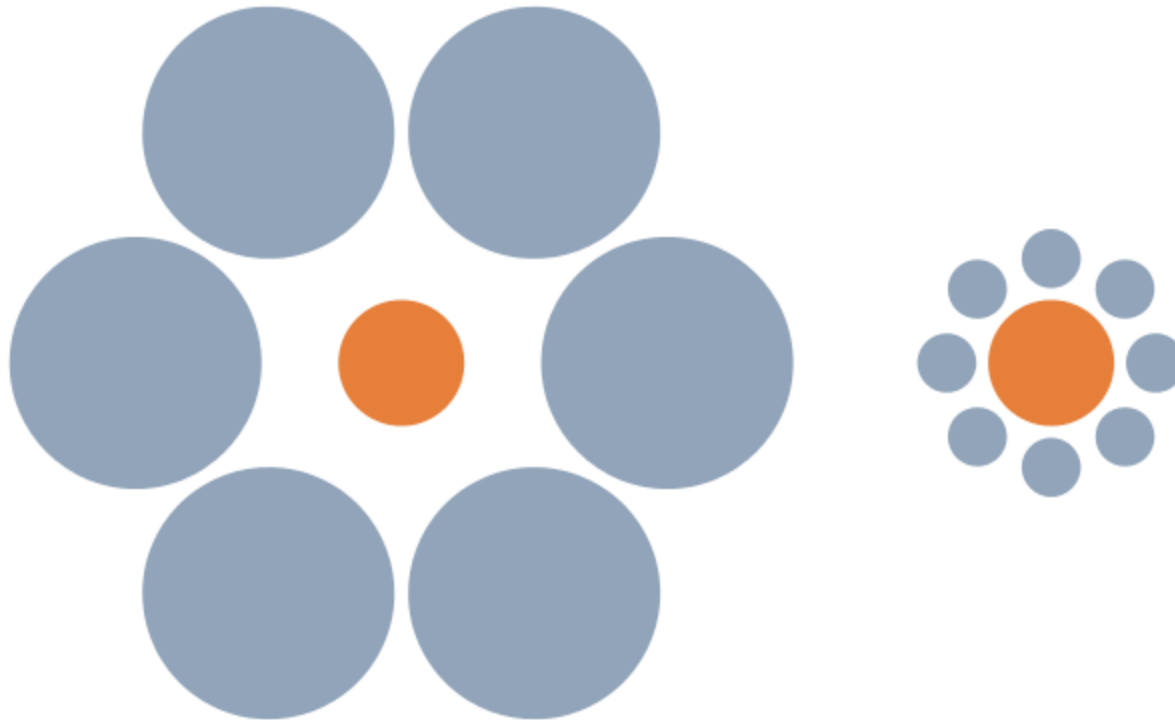
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Overview

- Perspective
- Current Issues
- Biopsychosocial Model and Beyond
- Interventions: Frieden Pyramid
- Root Cause Analysis
- Assessment - Outcome Measures
- Strategy

Perspective

Ebbinghaus Illusion or Titchener Circles



Optical Illusion of Relative Size

Current Issues: U.S. Opioid Epidemic

On an average day in the U.S.:

- More than **650,000 opioid prescriptions** dispensed¹ **3,900 people** initiate nonmedical use of prescription opioids²
- **580 people** initiate heroin use²
- **78 people** die from an opioid-related overdose^{*3}
- *Opioid-related overdoses include those involving prescription opioids and illicit opioids such as heroin

Source: IMS Health National Prescription Audit¹ / SAMHSA National Survey on Drug Use and Health² / CDC National Vital Statistics System³

Economic Impact of the Opioid Epidemic:

- **55 billion** in health and social costs related to prescription opioid abuse each year¹
- **20 billion** in emergency department and inpatient care for opioid poisonings²

Source: Pain Med. 2011;12(4):657-67.¹ 2013;14(10):1534-47.²

Background

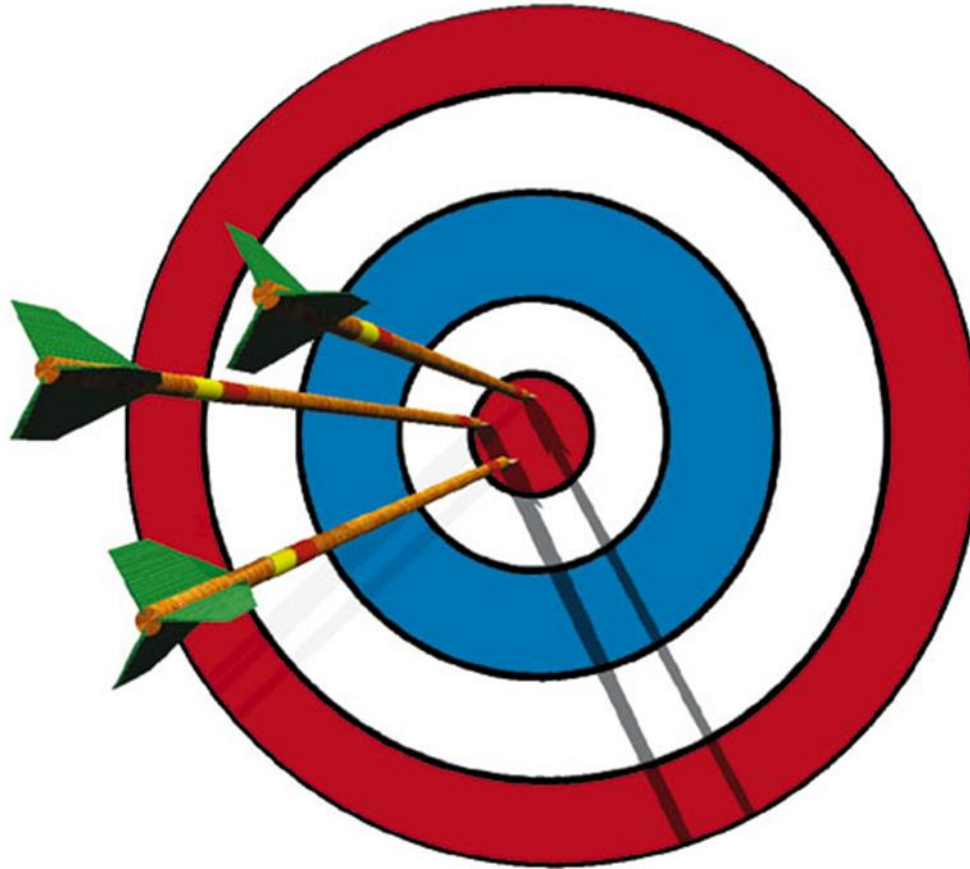
- According to the Institute of Medicine of the National Academies, more Americans (100 million) suffer from **chronic pain** than from cancer, heart disease and diabetes combined¹
- Opioids and other painkillers are often prescribed (~ 90 percent of the time) to treat chronic pain ²
- The number of employees who suffer from chronic pain as a result of a serious workplace injury has increased from less than 10 percent a decade ago to more than half today ³

1. Institute of Medicine Report from the Committee on Advancing Pain Research, Care, and Education: Relieving Pain in America, A Blueprint for Transforming Prevention, Care, Education and Research. The National Academies Press, 2011. http://books.nap.edu/openbook.php?record_id=13172&page=1.

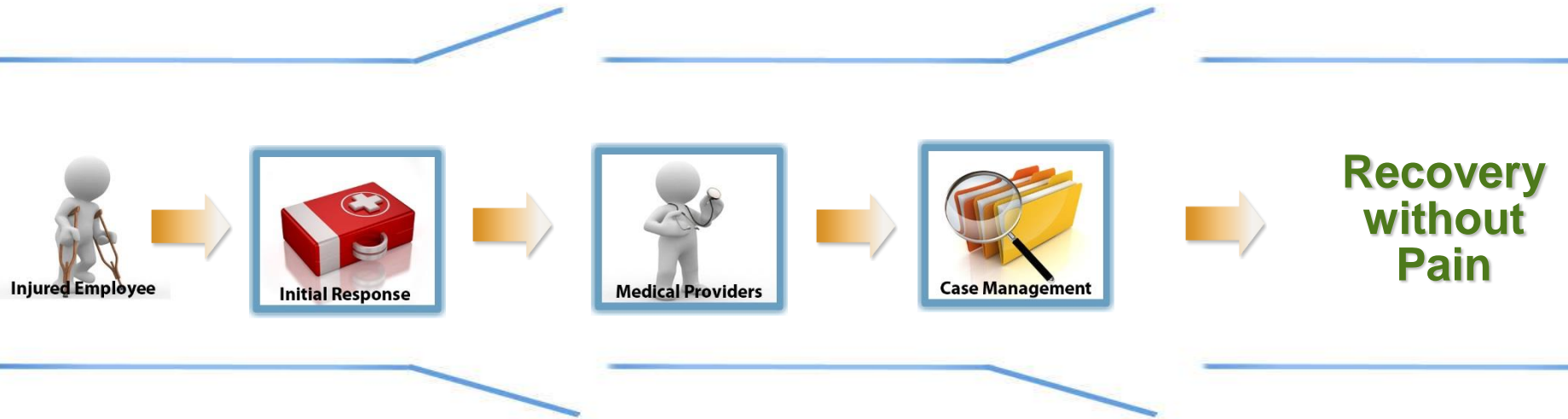
2. 5 Surprising facts on prescription painkillers: Why you should be concerned about opioids—the most prescribed drugs in America: Published: January 2014

3. Travelers Major Case Claim Mix Analysis

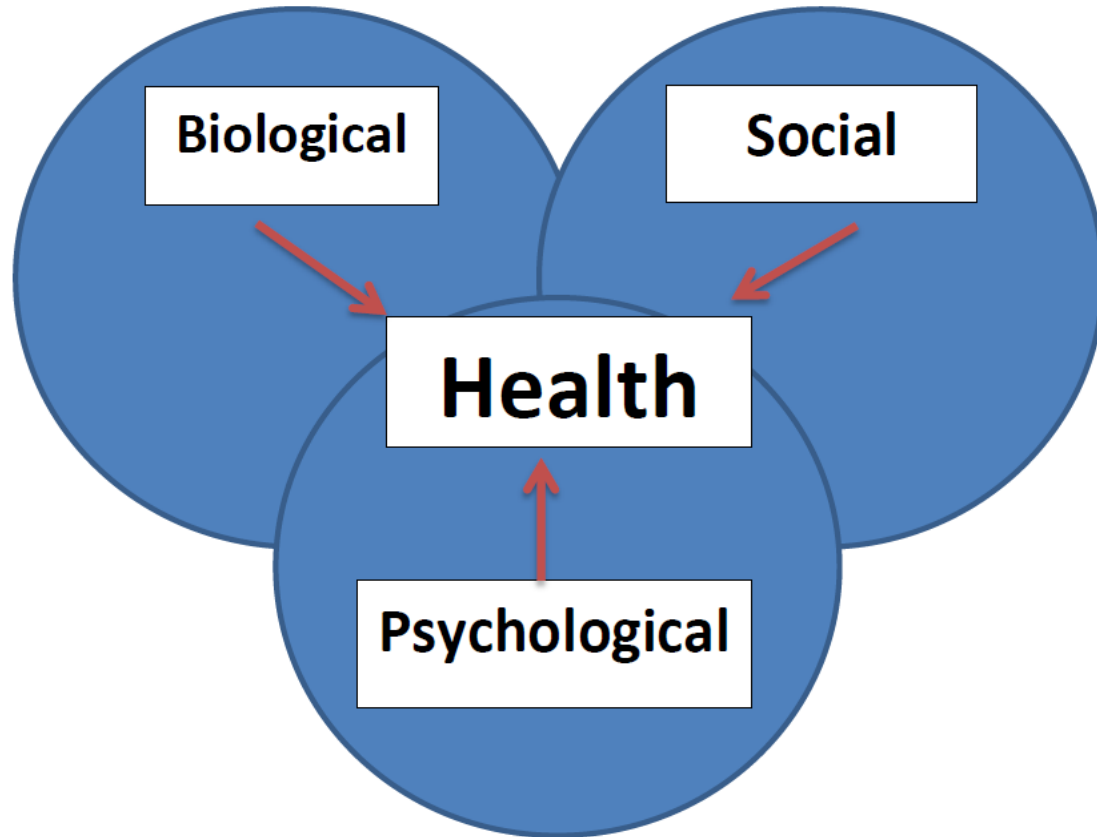
What is the Target?



Injury to Recovery



Biopsychosocial Model



Biopsychosocial Model

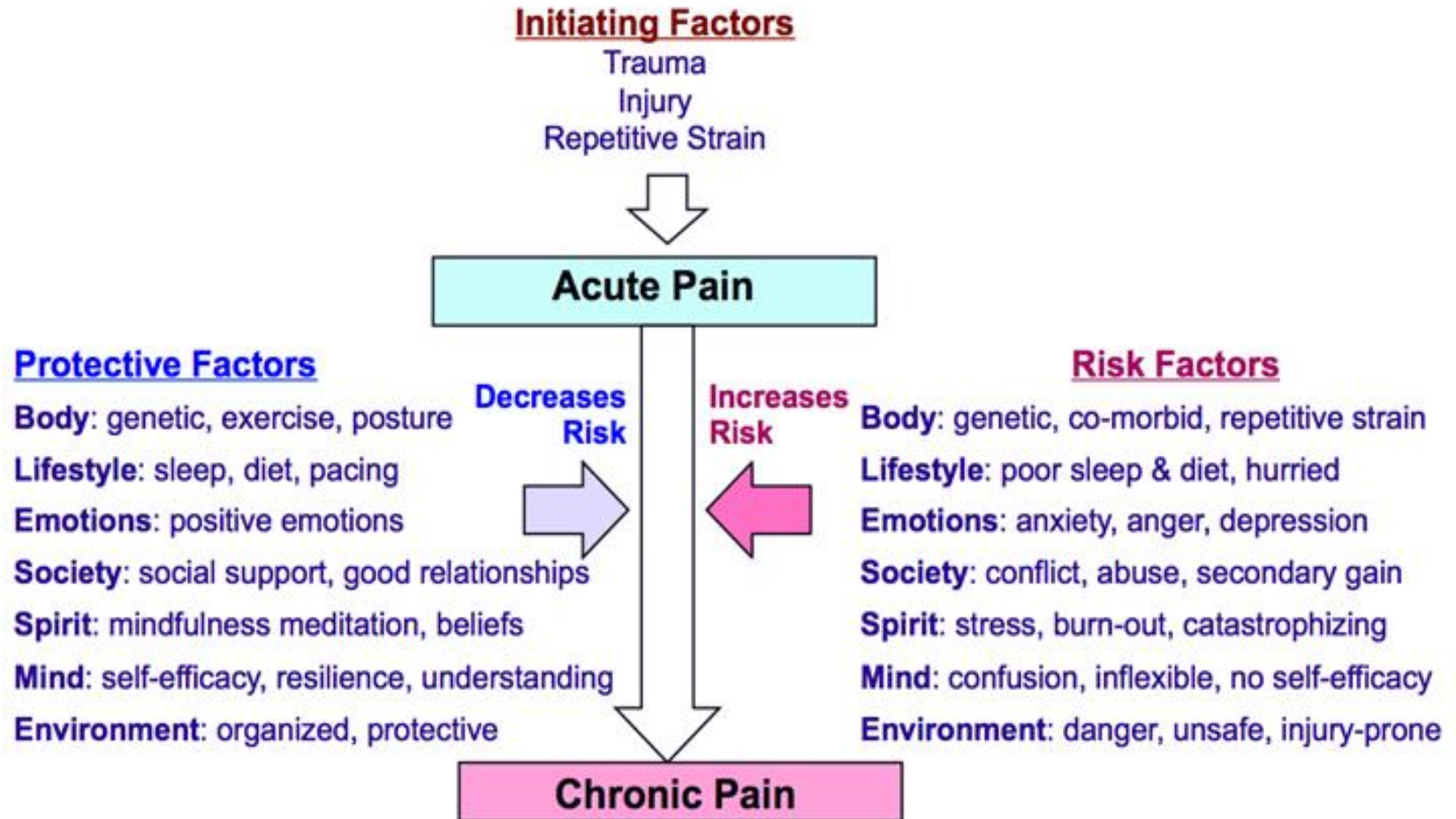
- A vision and an approach to practice
- Not an empirically verifiable theory, a coherent philosophy, or a clinical method
- Habits of mind may be the missing link between a biopsychosocial intent and clinical reality. These habits of mind include attentiveness, peripheral vision, curiosity, and informed flexibility
- These qualities are teachable and can be reinforced

Source: Families, Systems, & Health 2005, Vol. 23, No. 4, 426–431

Human Systems: Paradigm Shift

- New paradigm
- Understand the whole patient
- Every patient is complex
- Self responsibility
- Education and training
- Long-term change
- Strong provider-patient partnerships
- Personal motivation
- Social Support

Human Systems Approach



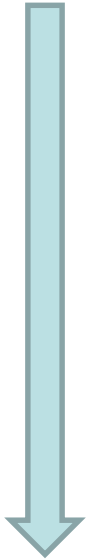
Initiating Factors

- Trauma
- Habits
- Repetitive Strain

Intervention Selection

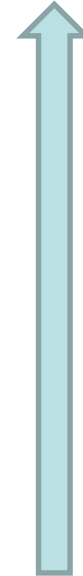
Health Impact Hierarchy

Impact



Counseling and Education
Clinical Interventions
Long Lasting Interventions
Environment drives Healthy Default
Social and Economic Factors

Effort



Source: American Journal of Public Health, April 2010, Vol 100, No. 4

Analysis and Travelers' Experience

Root Cause Analysis Defined

- Root cause analysis (RCA) is a systematic process for identifying “root causes” of problems or events and an approach for responding to them. RCA is based on the basic idea that effective management requires more than merely “putting out fires” for problems that develop, but finding a way to prevent them.¹
- RCA helps pinpoint contributing factors to a problem or event
- Most RCA experts believe that achievement of total prevention by a single intervention is not always possible and see RCA as an ongoing process that strives for continuous improvement

Source: 1 - <http://www.des.wa.gov/services/risk-management/about-risk-management/enterprise-risk-management/root-cause-analysis>

RCA Goals

The primary goal of using RCA is to analyze problems or events to identify:

- What happened
- How it happened
- Why it happened...So that
- Actions for preventing reoccurrence are developed

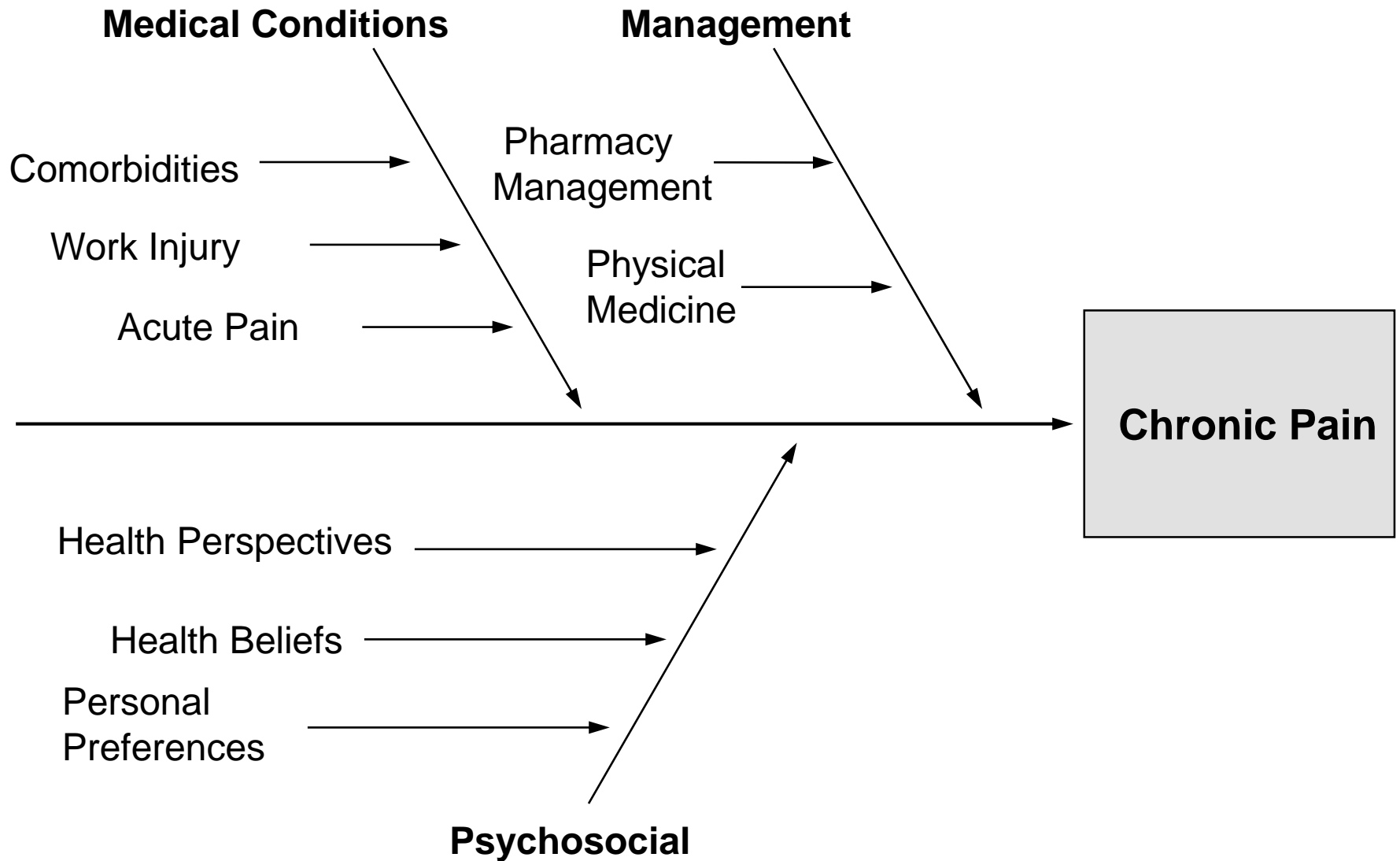
RCA Principles

- Focusing on corrective measures of root causes is more effective than simply treating the symptoms of a problem or event.
- RCA is performed most effectively when accomplished through a systematic process with conclusions backed up by evidence.
- There is usually more than one root cause for a problem or event.
- The focus of investigation and analysis through problem identification is WHY the event occurred.

RCA Basic Method

- Define the problem
- Gather information, data and evidence
- Identify all issues and events that contributed to the problem
- Determine root causes
- Identify recommendations for eliminating or mitigating the reoccurrence of problems or events
- Implement the identified solutions

Fishbone (Ishikawa) Diagram for Drivers of Chronic Pain



Impact of Intervention and Outcomes

Early Severity Predictor[®]

First step: Data and Analysis

- Our patent-pending model predicts employees who are at risk of having their injury cause chronic pain which could lead to delays in their recovery.

Early Severity Predictor[®]

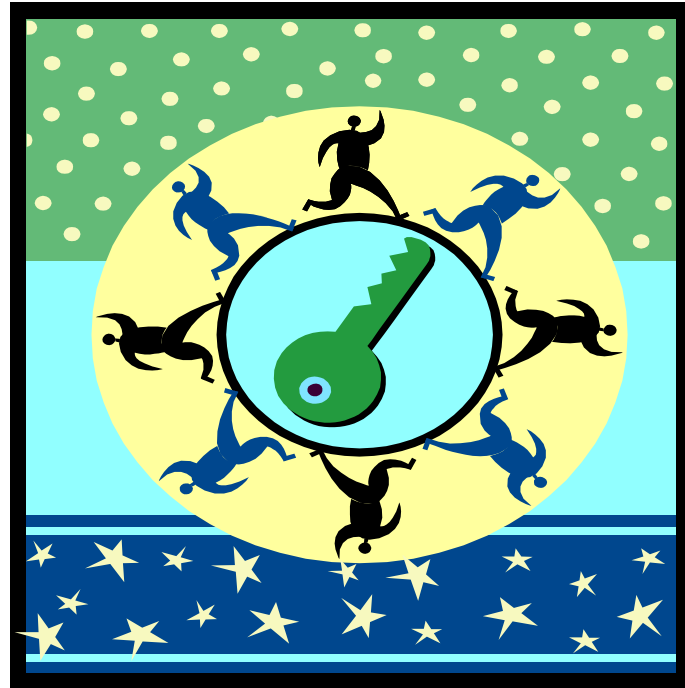
Step two: Application and Assessment

- Work closely with medical professionals who will care for at-risk employees to ensure that they receive a sports medicine-like treatment regimen to both improve and accelerate their recovery.
- Program Results

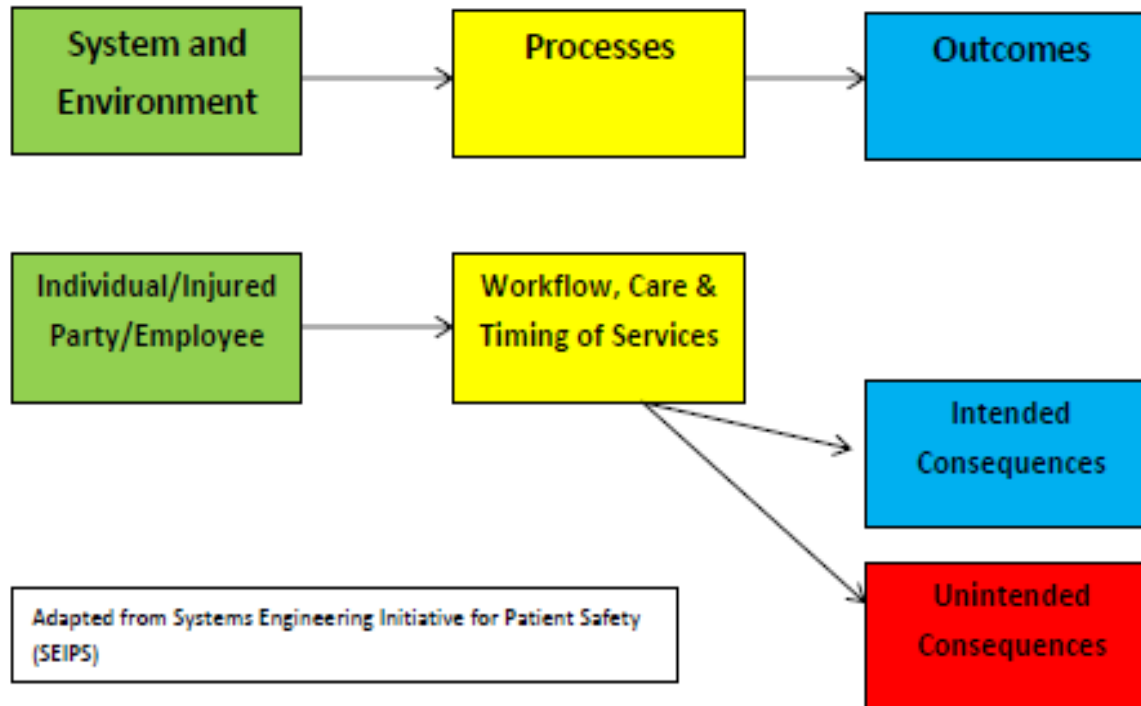
Opioid Dependency

- Though the model was developed to help employees recover from workplace injuries
- Medical professionals of all specialties can use the insights it provides to improve patient outcomes and help fight opioid dependency

Strategy



Work System and Outcomes



Working Together

Data Analytics and Education



Healthcare Providers

- Population Trends
- Wellness
 - Disease Managem



Regulatory/Legislative Initiatives



Wellness



Questions

