

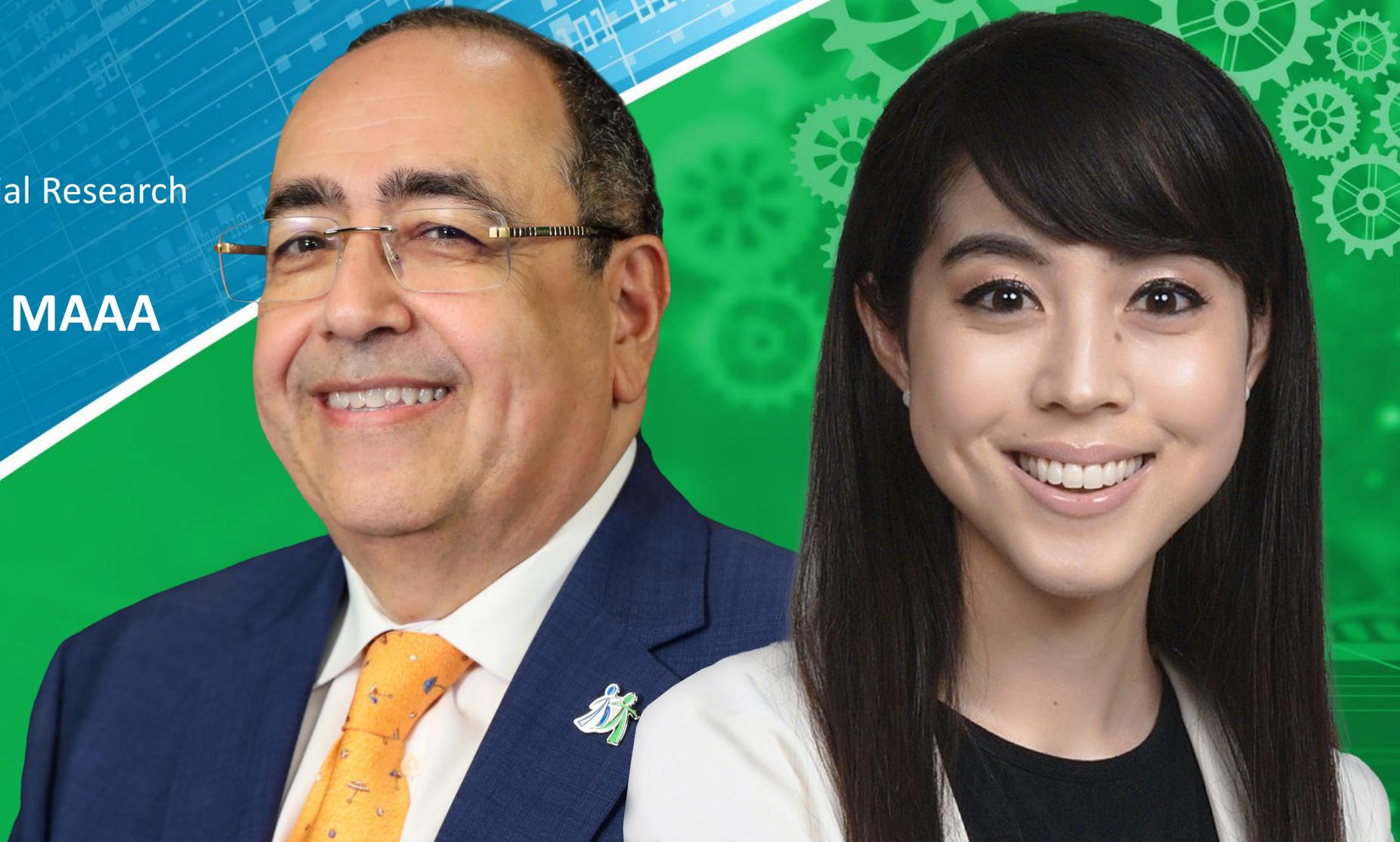
# Large Claims Deconstructed

## **Raji Chadarevian**

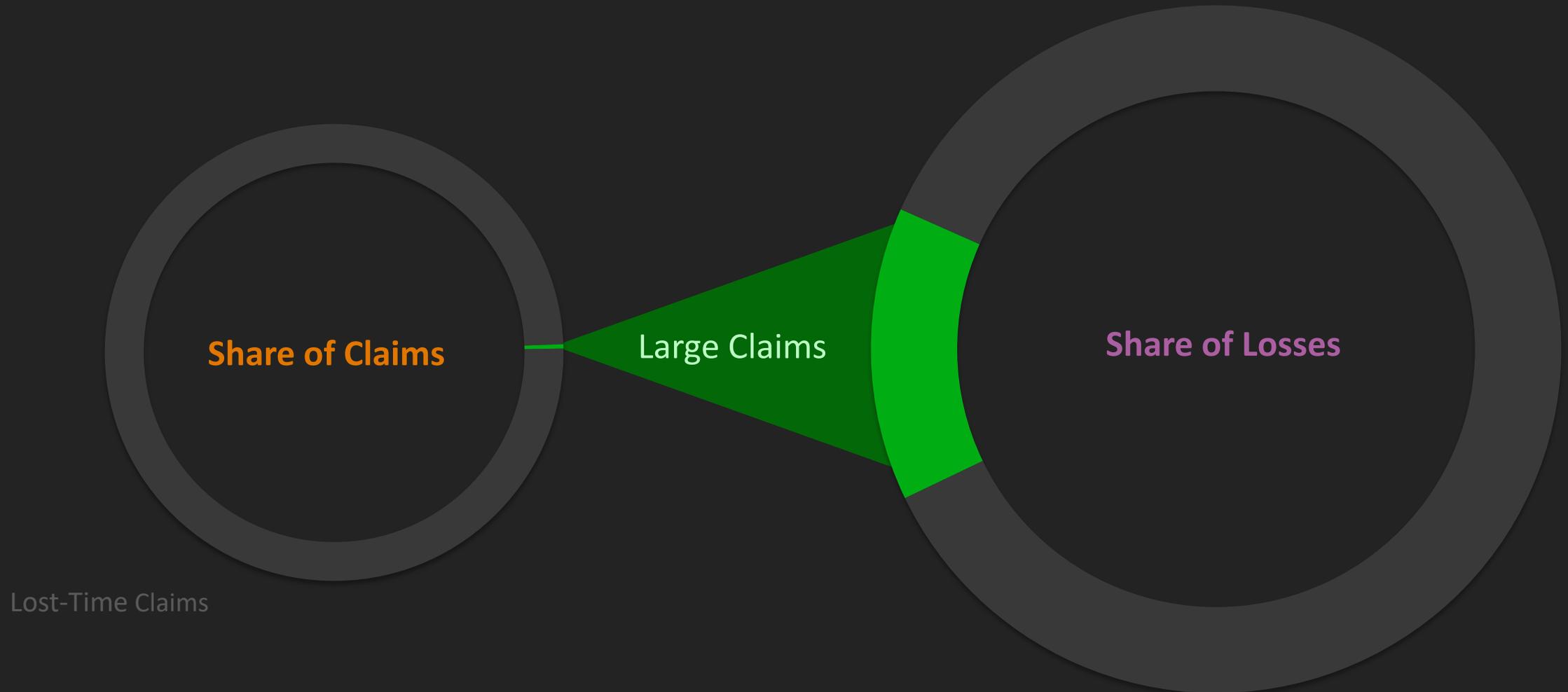
Executive Director—Actuarial Research  
NCCI

## **Anae Myers, ACAS, MAAA**

Associate Actuary  
NCCI



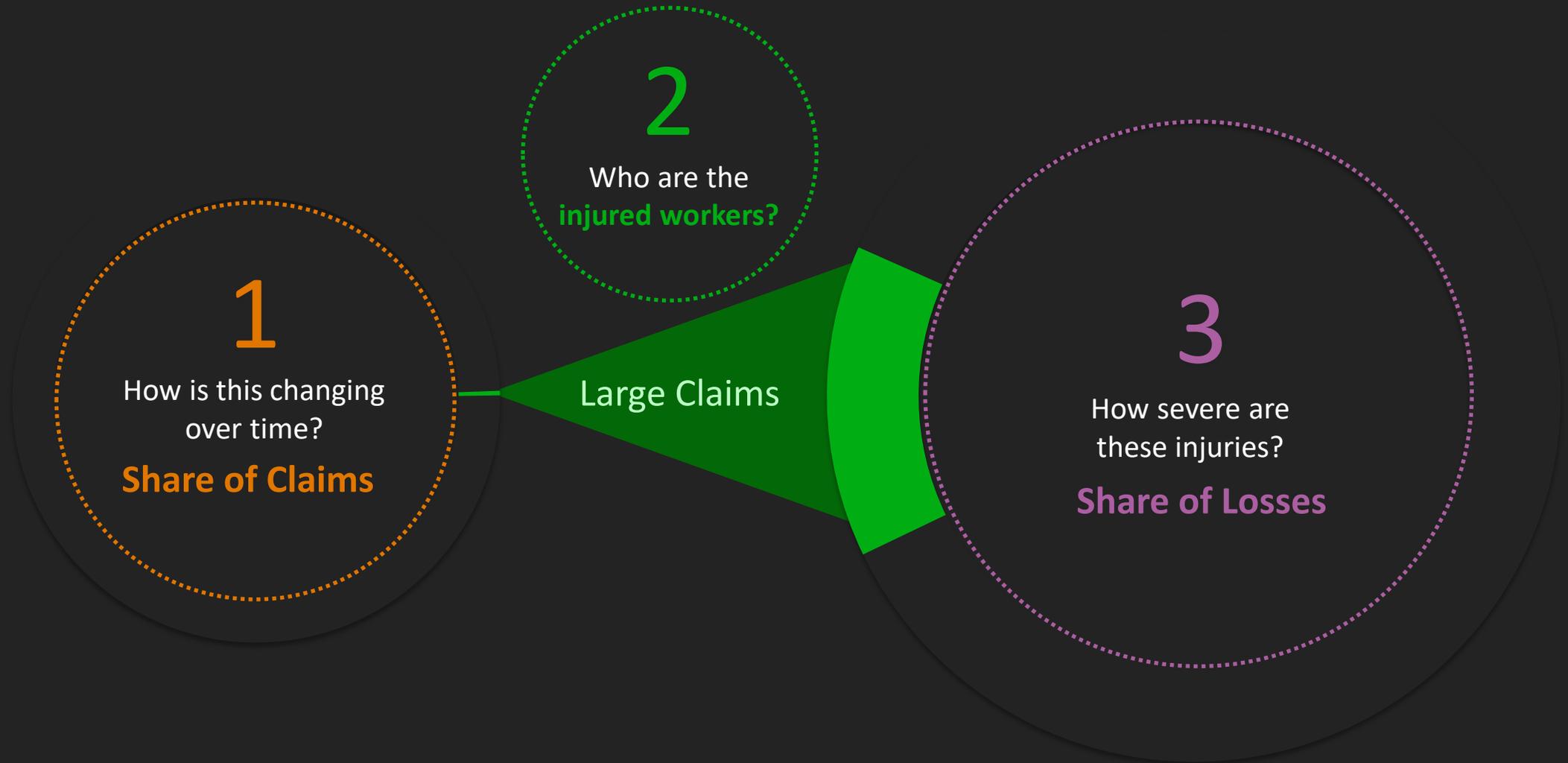
A **large claim** is defined as exceeding \$1M in incurred loss



Lost-Time Claims

**AIS**  
2023

A **large claim** is defined as exceeding \$1M in incurred loss



# Deconstructing Large Claims



**FAST**<sub>ELC</sub>

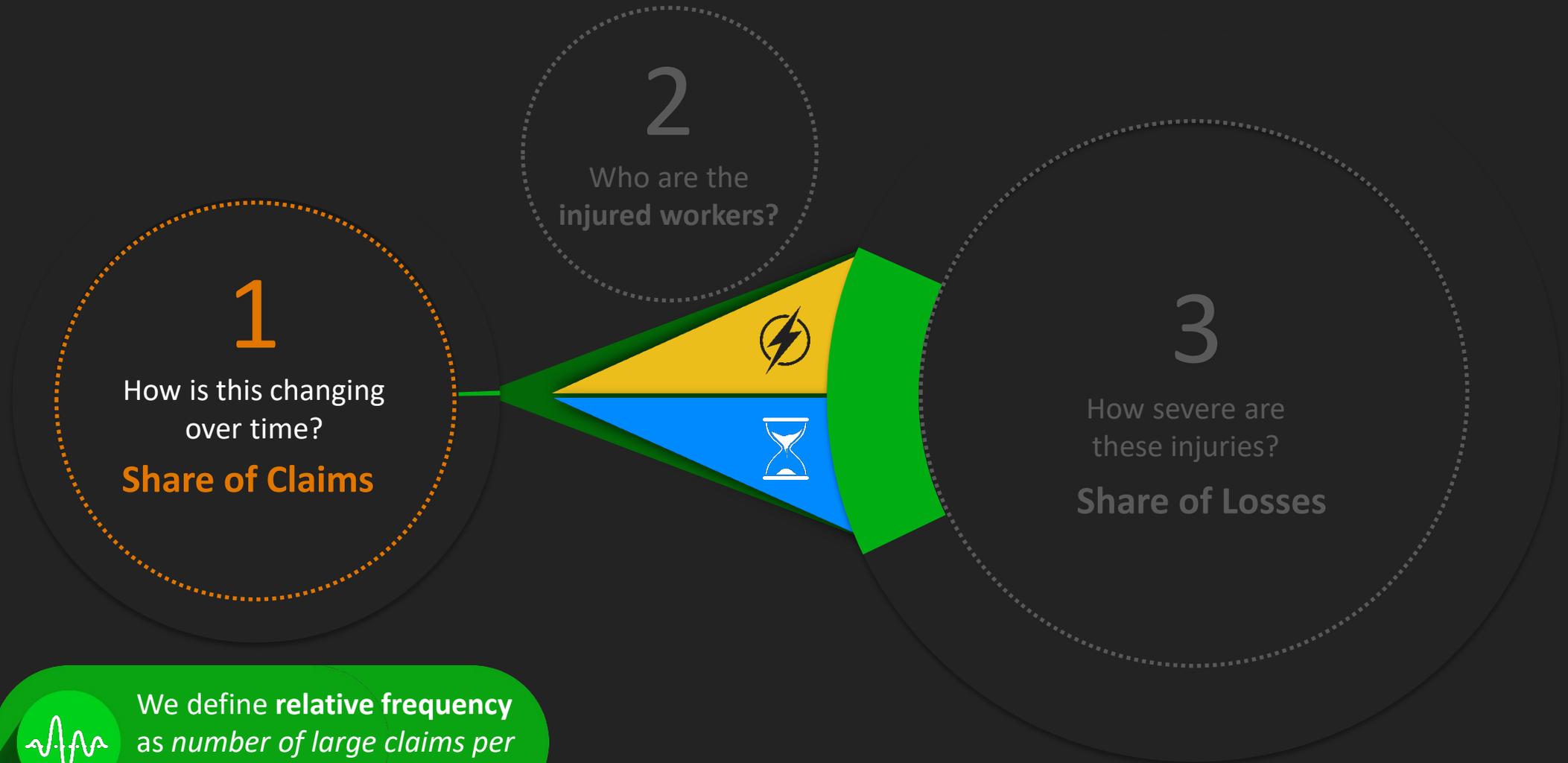
Exceed \$1M **within** 2 years of injury

**SLOW**<sub>ELC</sub>

Exceed \$1M 2 years or more **after** injury



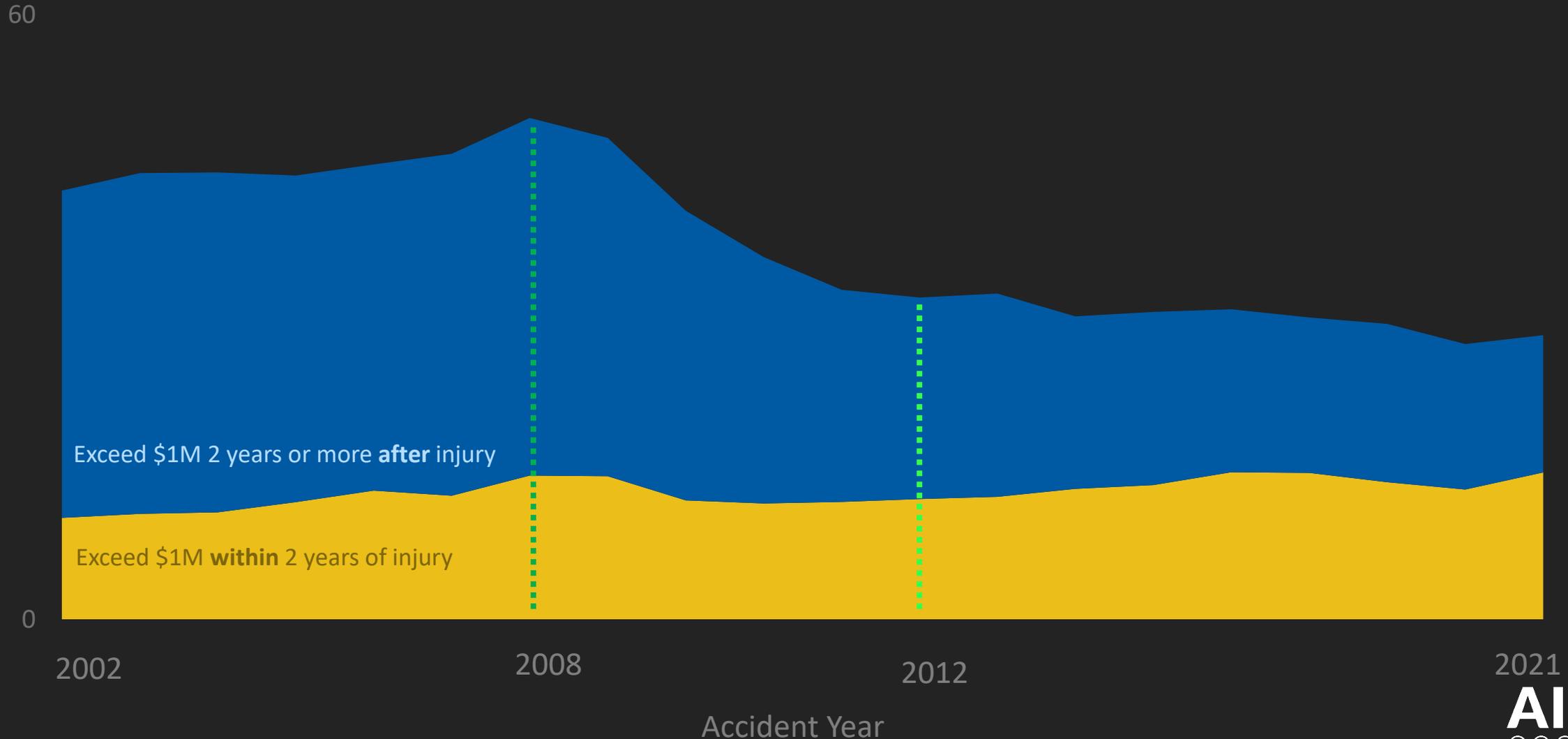
# Deconstructing Large Claims



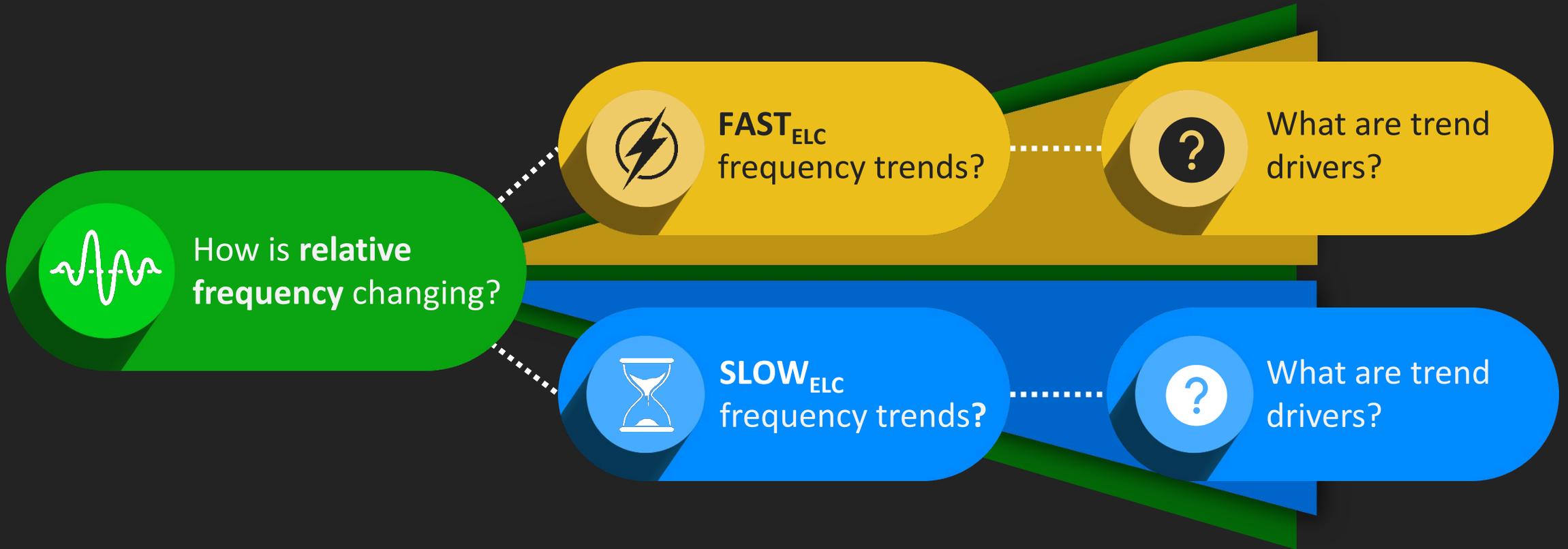
# Frequency of Large Claims per 10K Lost-Time Claims



# Deconstructing Frequency into **FAST<sub>ELC</sub>** and **SLOW<sub>ELC</sub>**



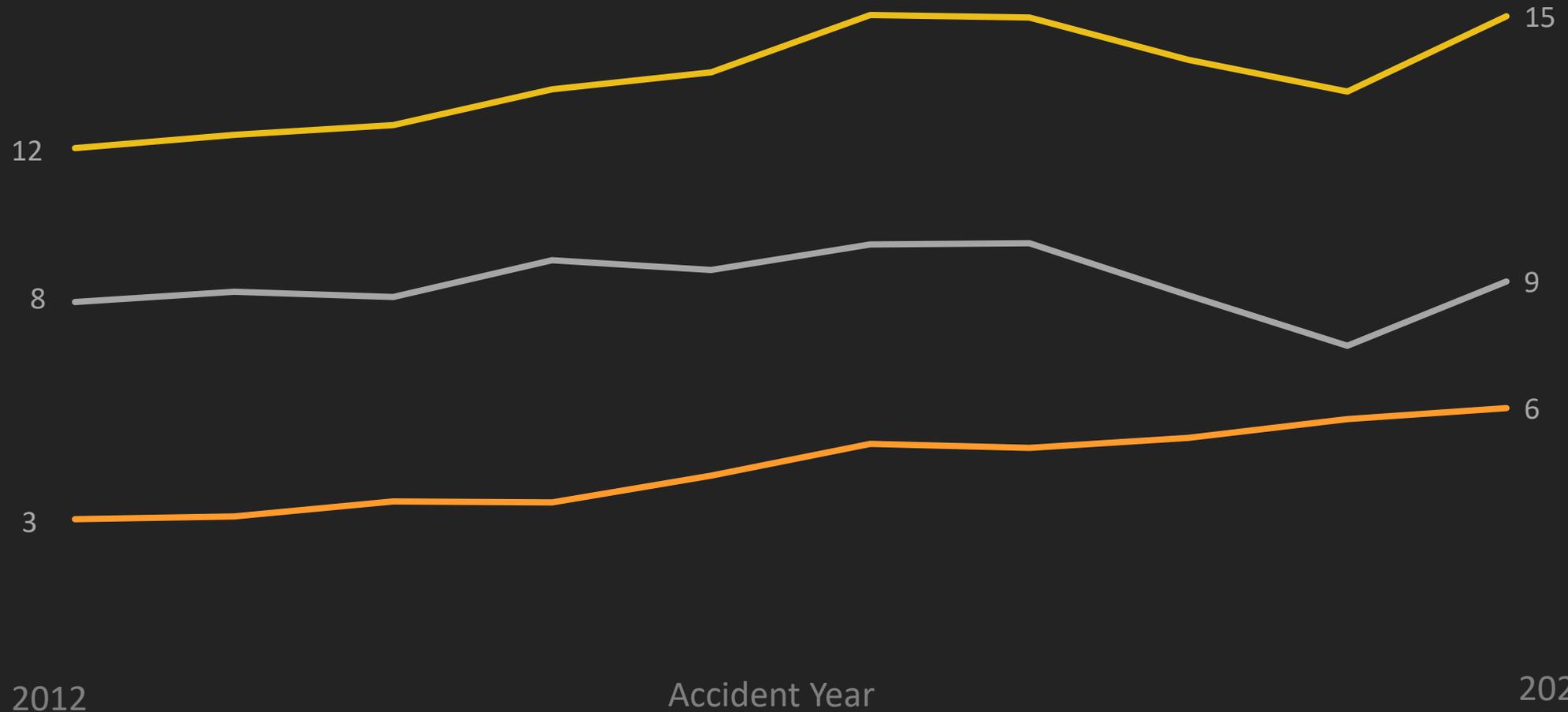
# Deconstructing Large Claim Frequency



# Deconstructing Frequency of **FAST<sub>ELC</sub>** per 10K Lost-Time Claims

## Burns, Spinal Cord Injuries, and Traumatic Brain Injuries (B, SCI, TBI)

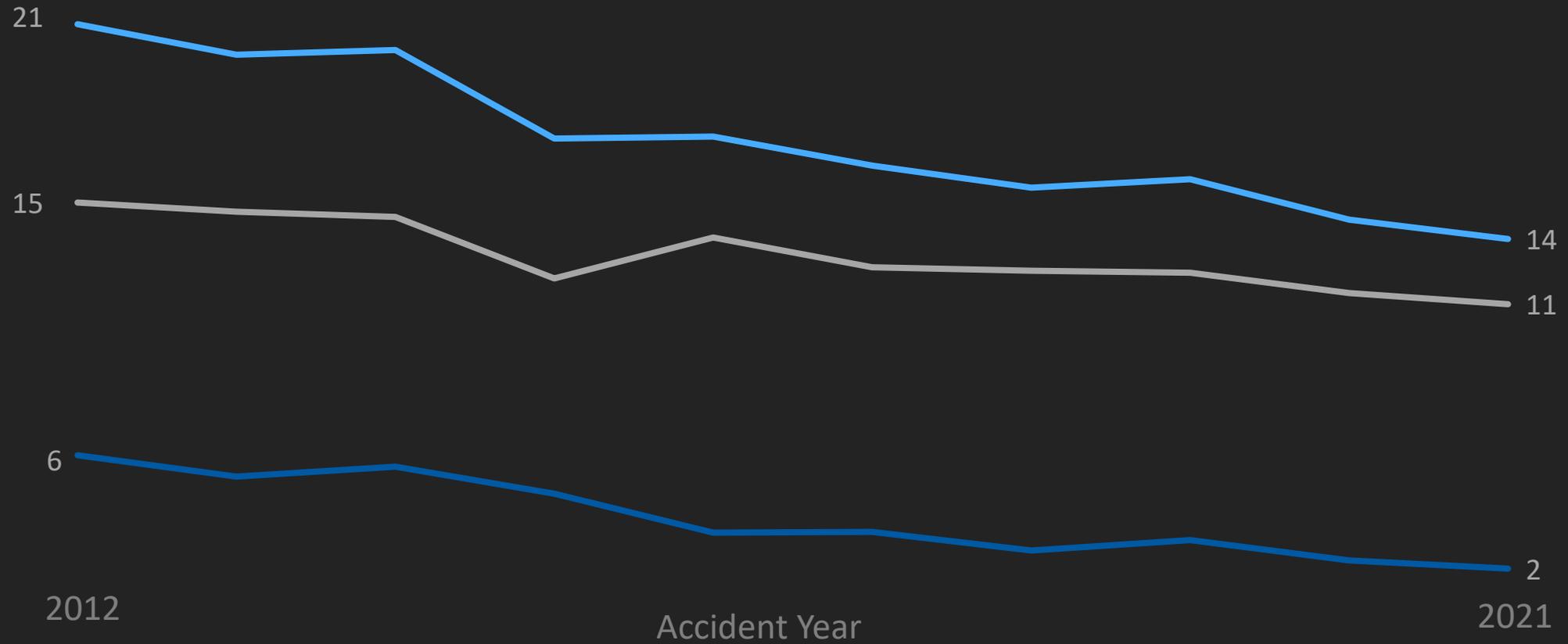
16



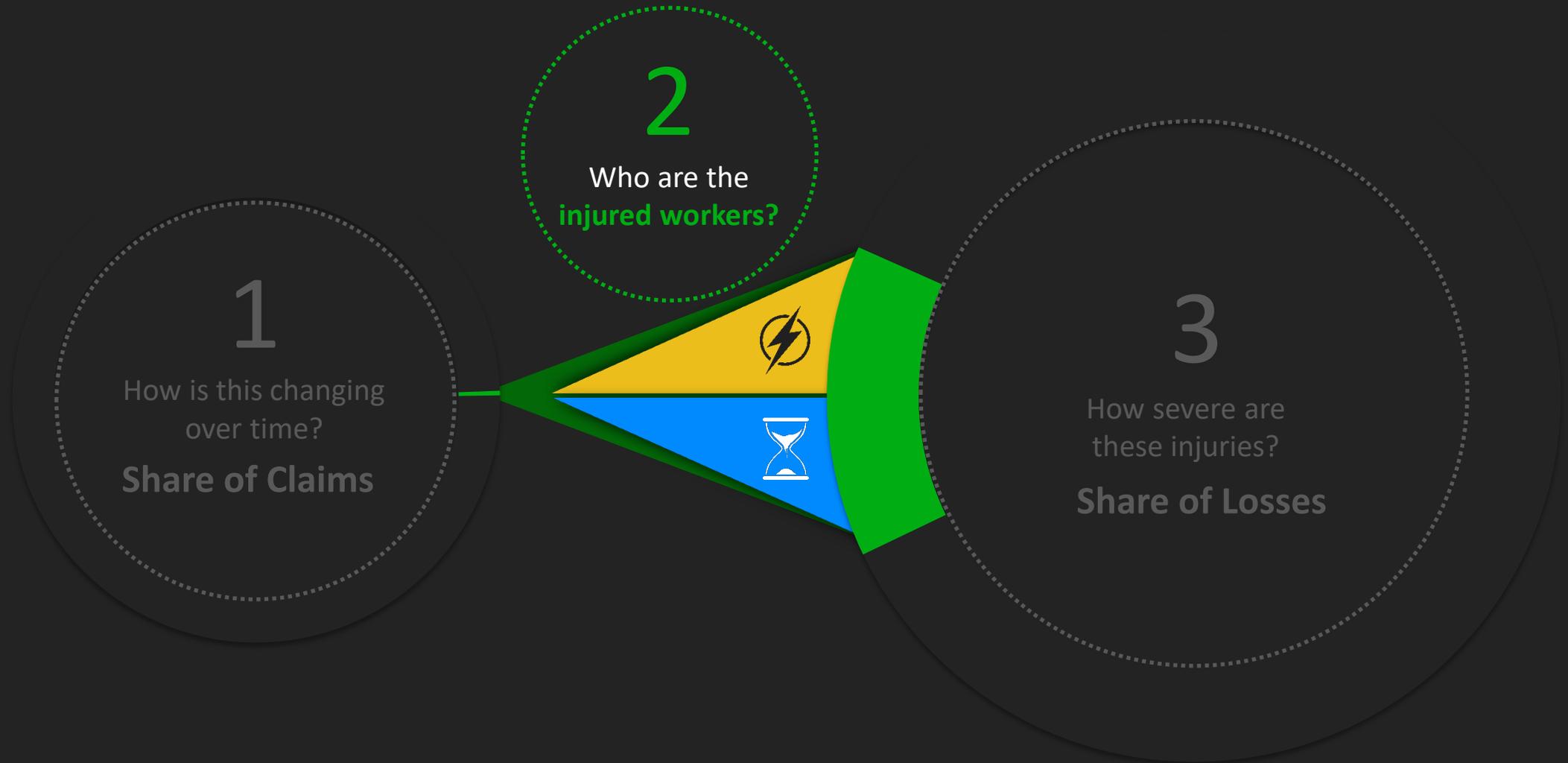
# Deconstructing Frequency of **SLOW**<sub>ELC</sub> per 10K Lost-Time Claims

## Degenerative Disc Disorders, Pain

25



# Deconstructing Large Claims





# Who are the injured workers?

CAUSE



EFFECT

**Why** are injuries resulting in large claims distinct?

**Where** do injured workers with large claims work?

**When** is the worker injured?

**What** are the claim outcomes?

# Why are injuries resulting in large claims distinct?

## Top Causes and Injuries



**FAST**<sub>ELC</sub>

Caused by **Fall or Slip from Elevation** and **Motor Vehicle Accidents**



Resulting in **Fractures**

Primarily injuring **Multiple Body Parts**



**SLOW**<sub>ELC</sub>

Caused by **Strain or Injury by Lifting**



Resulting in **Strains**

Primarily injuring **Lower Back**

# Where do injured workers with large claims work?

## Industry Mix



Construction-Related



Operation of Motor Vehicles



Installation of Machines and Equipment



**25–31%** of **FAST<sub>ELC</sub>** are construction-related

**8-11%**

**4-5%**



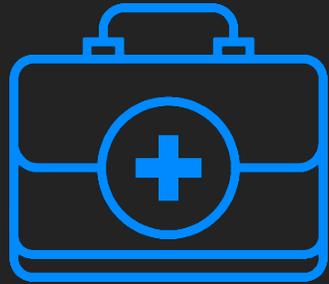
**20–24%** of **SLOW<sub>ELC</sub>** are construction-related

**8-10%**

**4-6%**

# Where do injured workers with large claims work?

## Industry Mix



Instructional  
and Medical  
Professionals

5-7%



Clerical

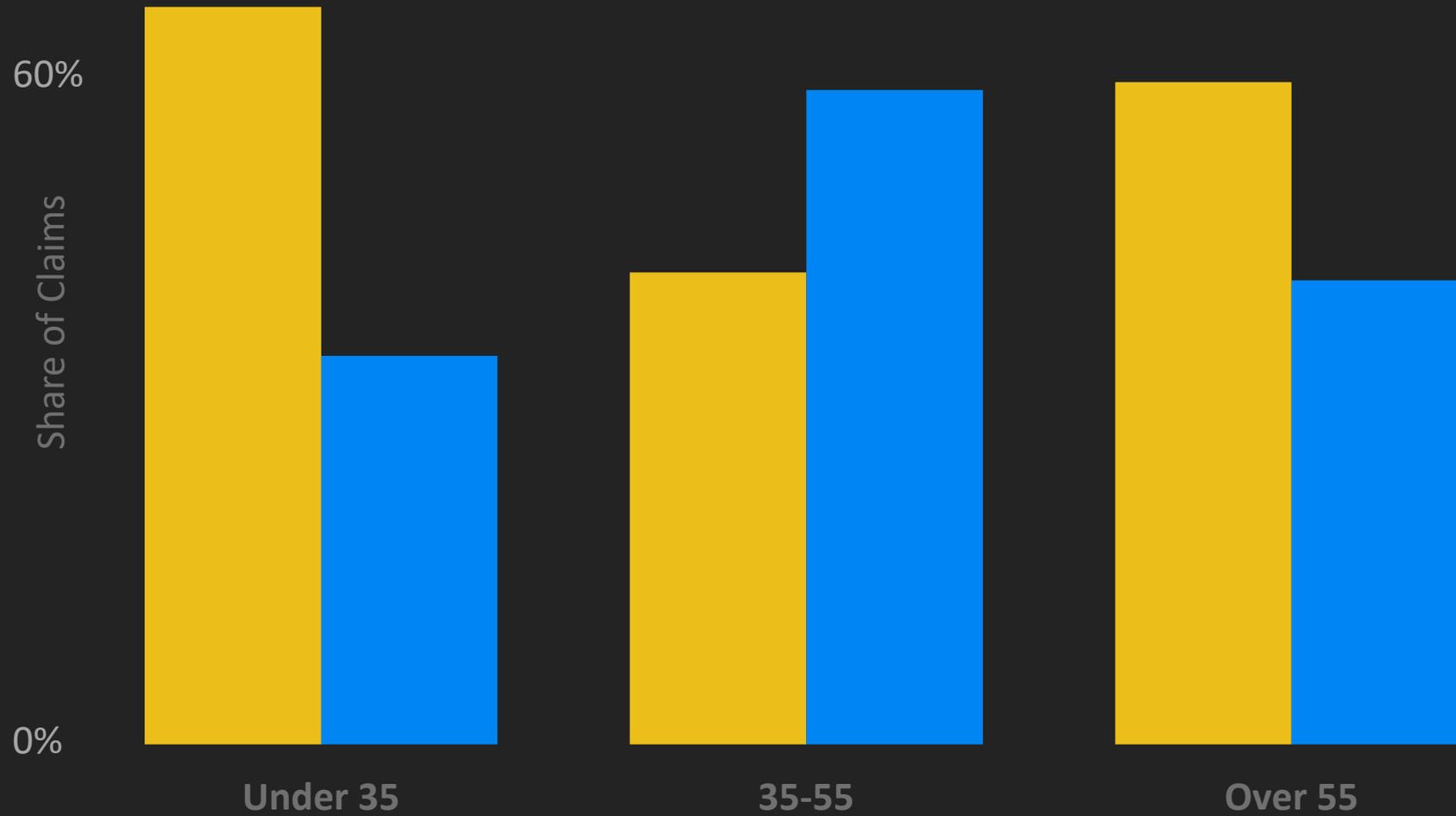
4-6%



**SLOW**<sub>ELC</sub>

**AIS**  
2023

# When is a worker with a large claim injured? Age at Injury for **FAST**<sub>ELC</sub> and **SLOW**<sub>ELC</sub>



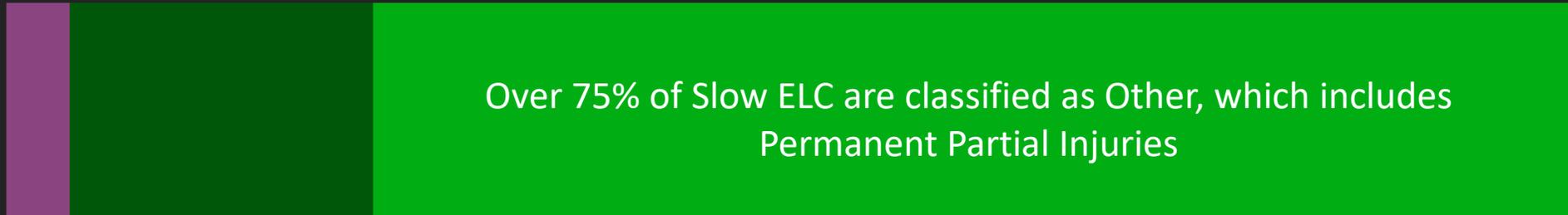
# What are outcomes for injured workers with large claims?

## Injury Type

■ Fatal ■ Permanent Total ■ Other



## How are these differences reflected in severity?



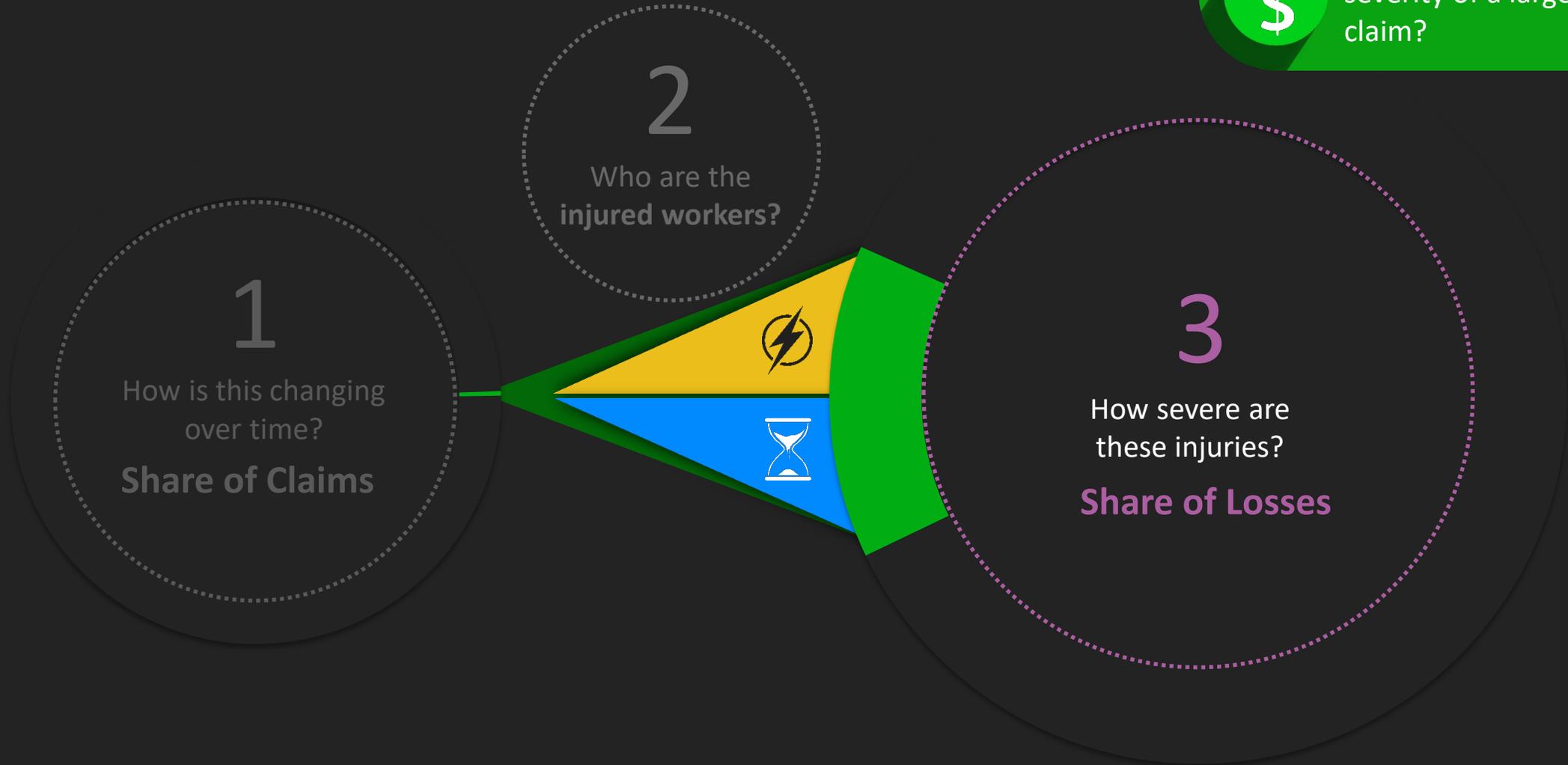
0%

100%

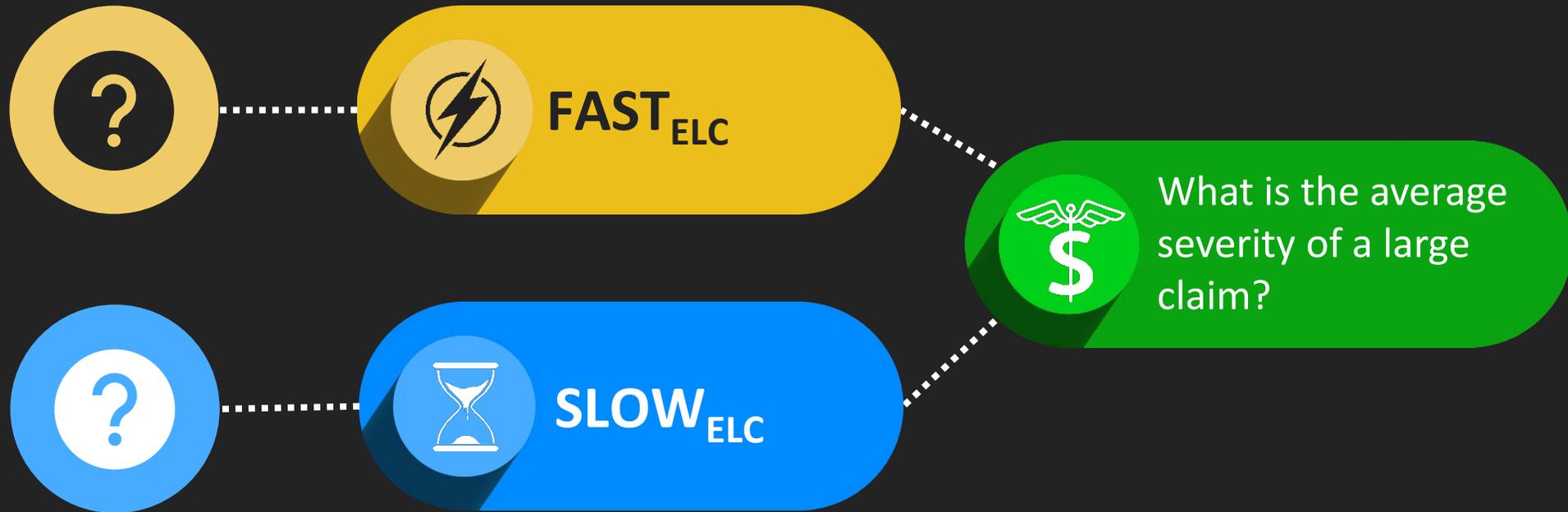
**AIS**  
2023

# Deconstructing Large Claims

 What is the average severity of a large claim?

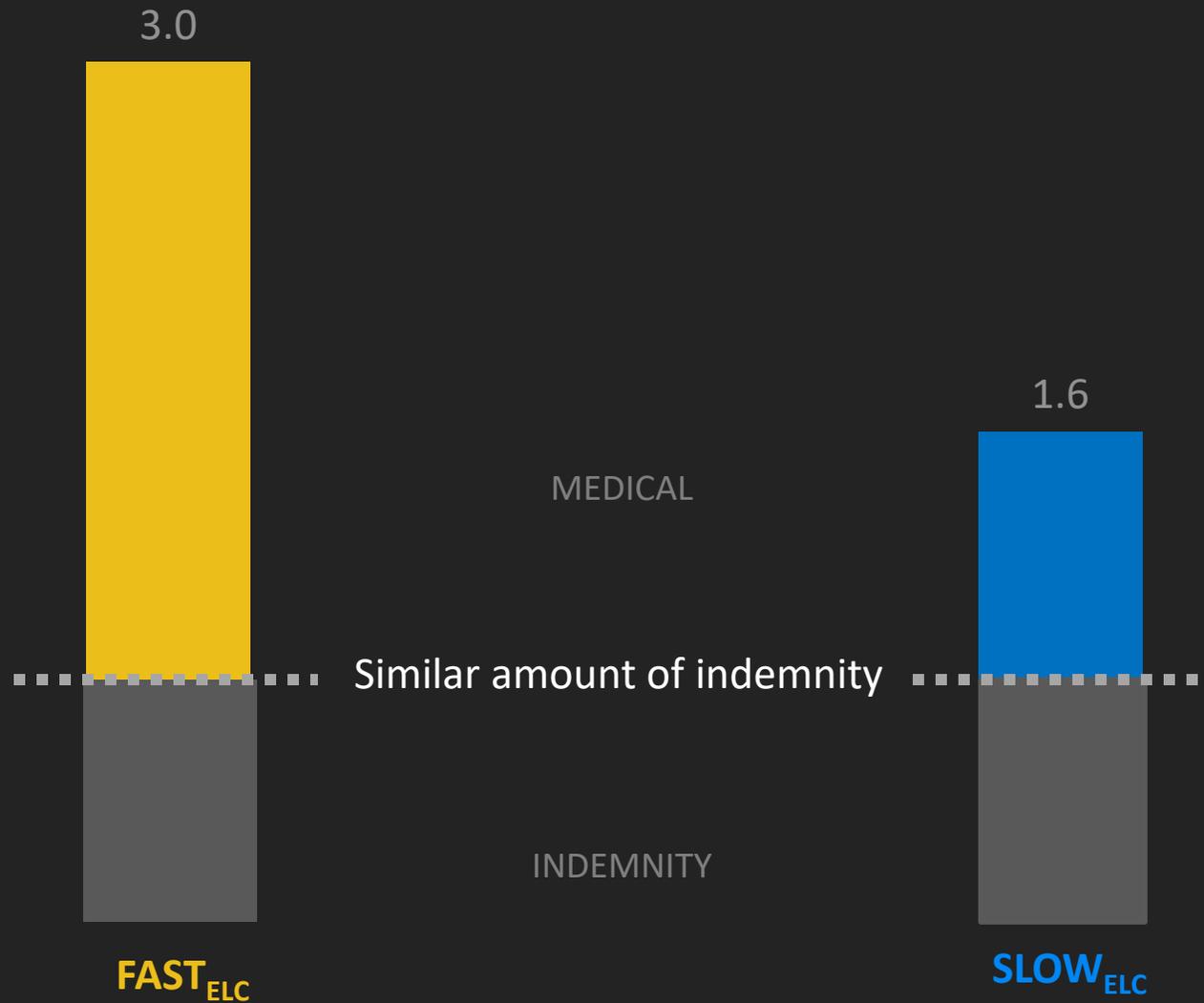


# Deconstructing Large Claim Severity

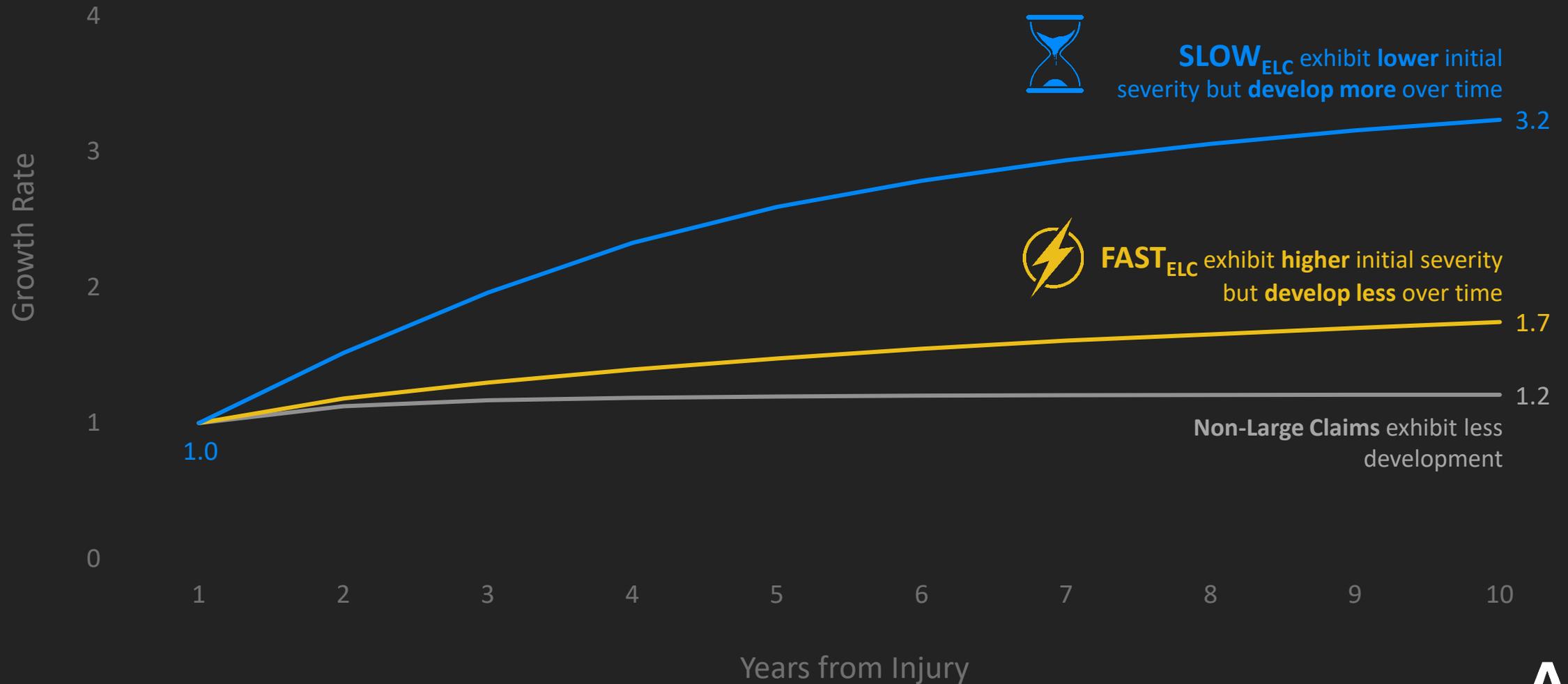


# Deconstructing Large Claim Severity

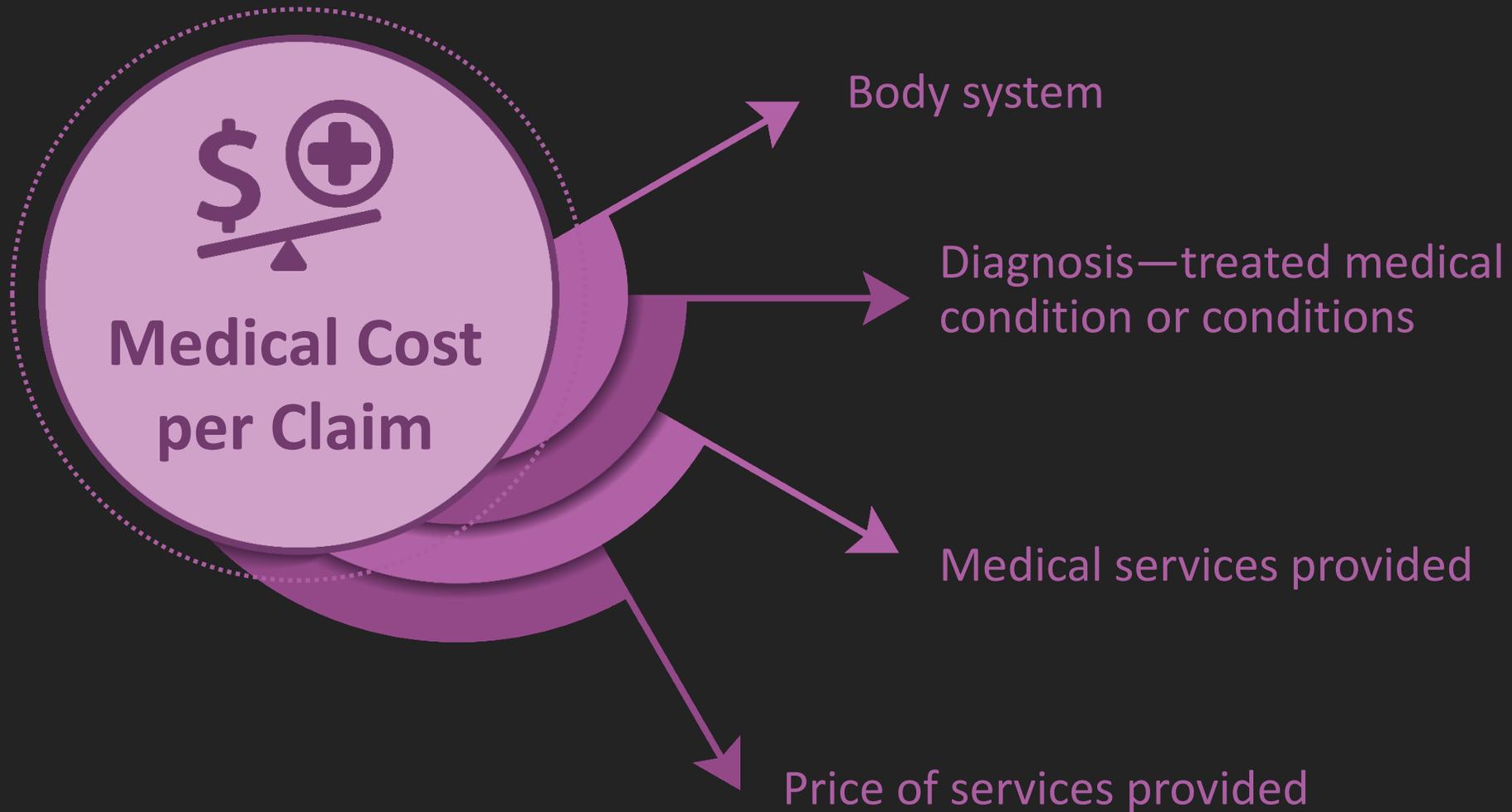
Average Claim Cost (\$ in Millions)



# Deconstructing Medical Payment Loss Development



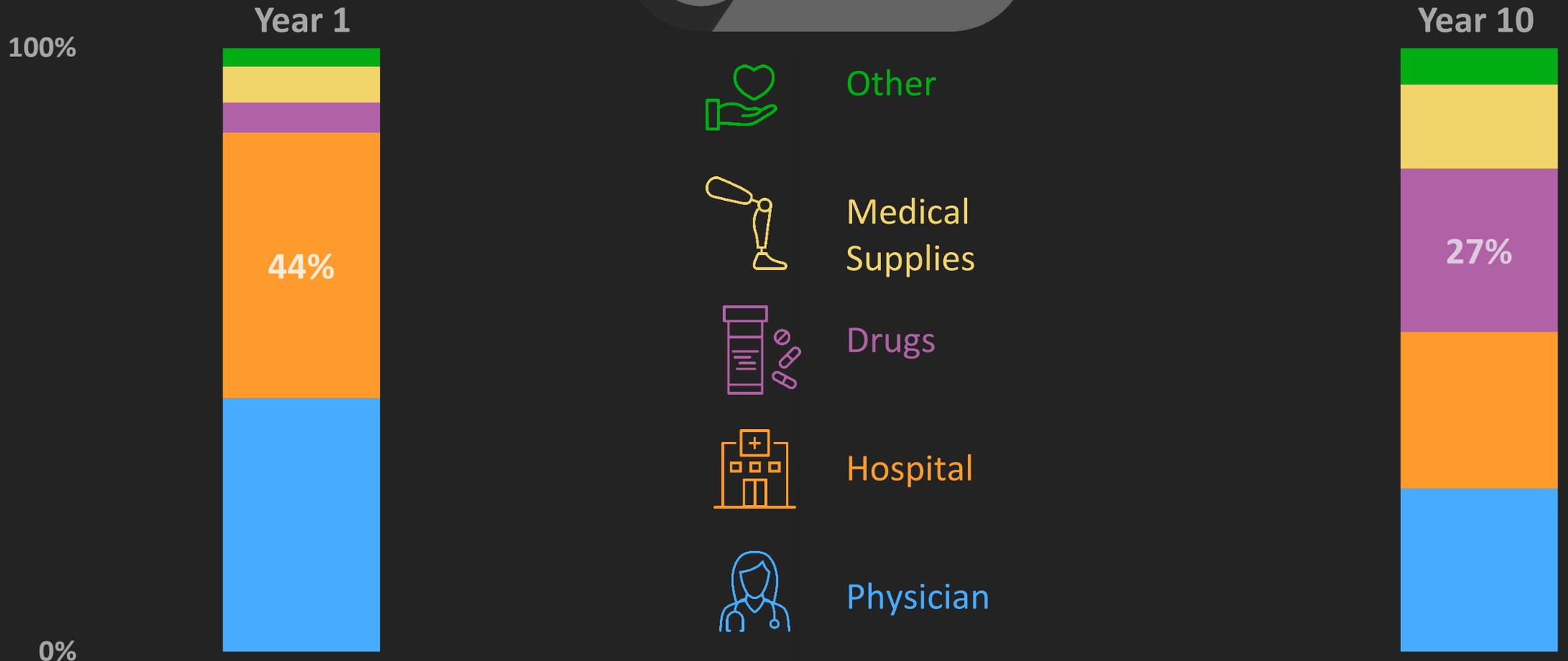
# So what are the medical trends critical for severe injuries?



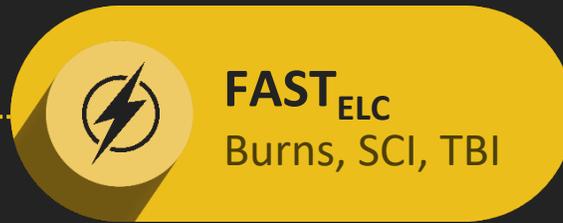
# Deconstructing Medical Service Costs



Non-Large Claims



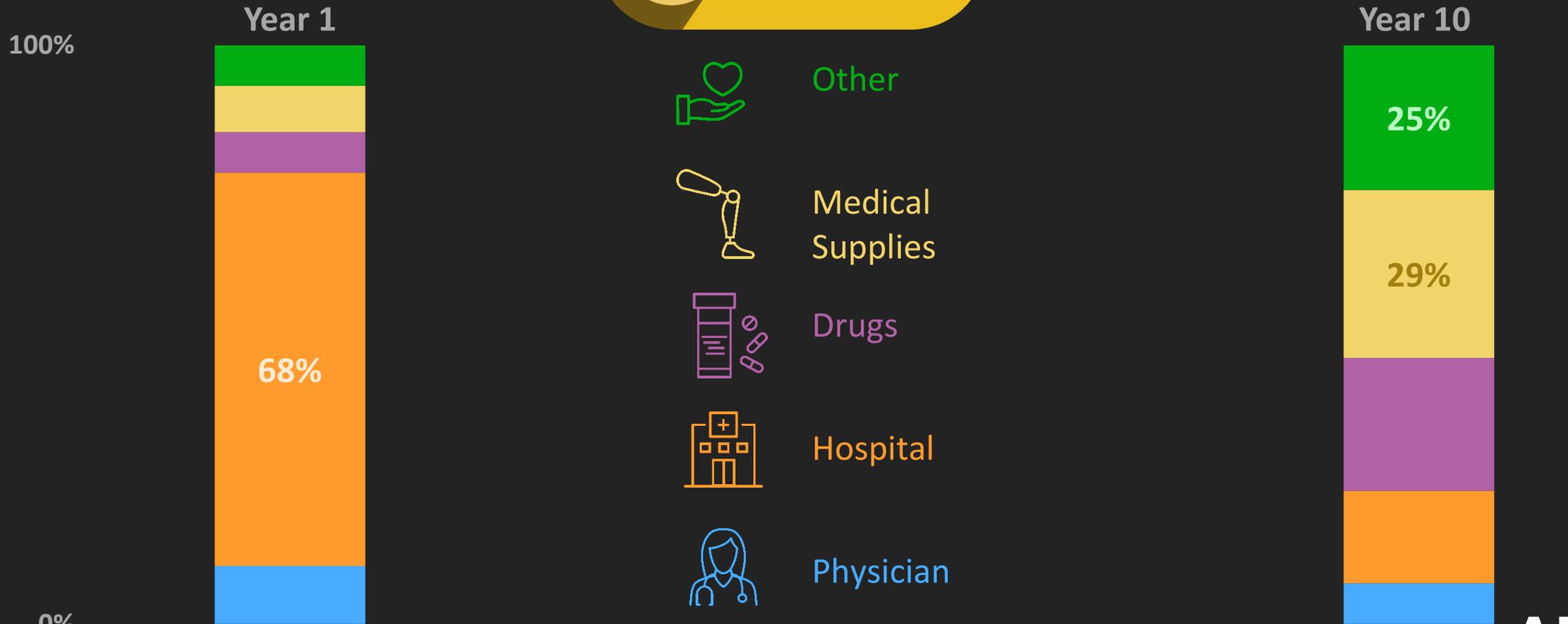
# Deconstructing Medical Service Costs



# Deconstructing Medical Service Costs



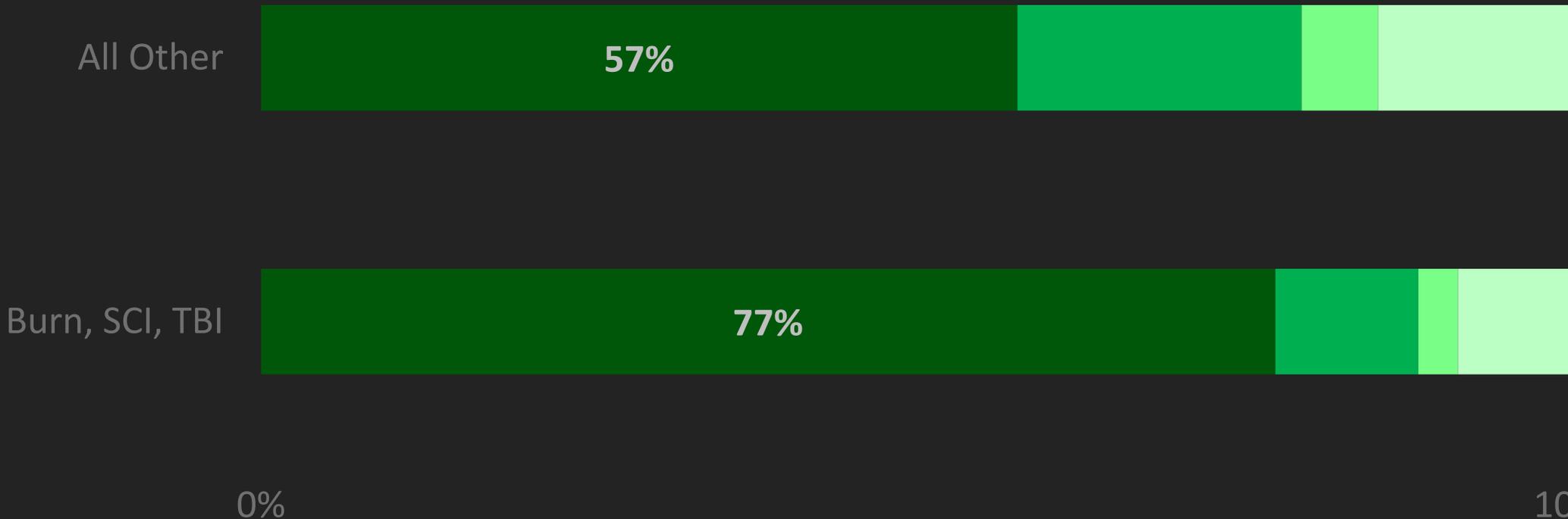
**FAST**<sub>ELC</sub>  
for All Other



# Distribution of **Other** Medical Cost Category



■ Home Health   ■ Skilled Nursing   ■ Transportation   ■ Miscellaneous

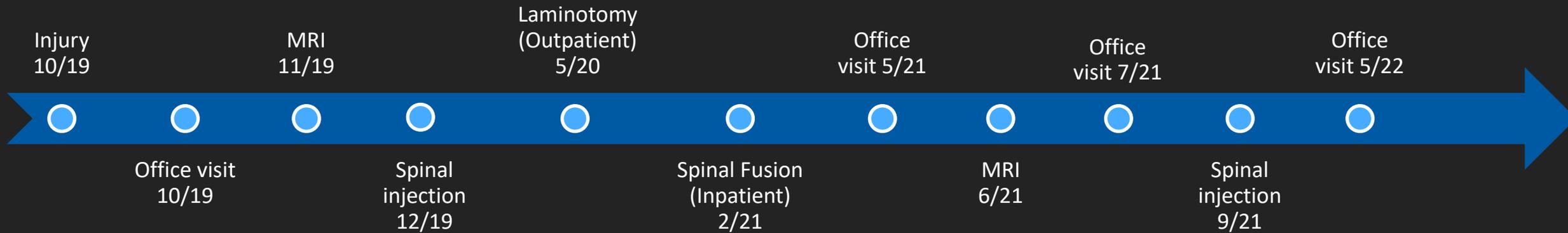


# Injured Worker With a Low Back Strain

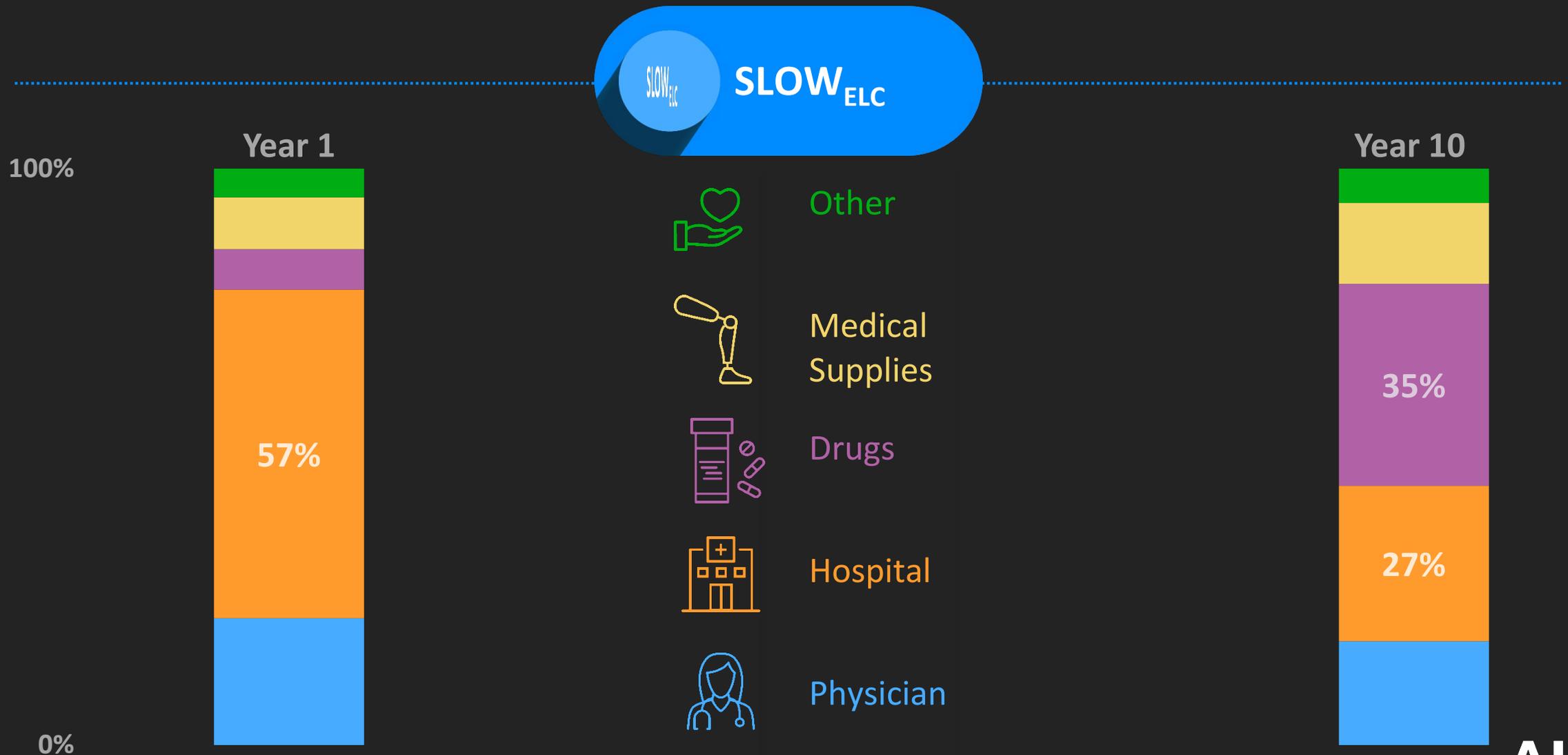


54-Year-Old Male

Strain or Injury by: Repetitive Motion

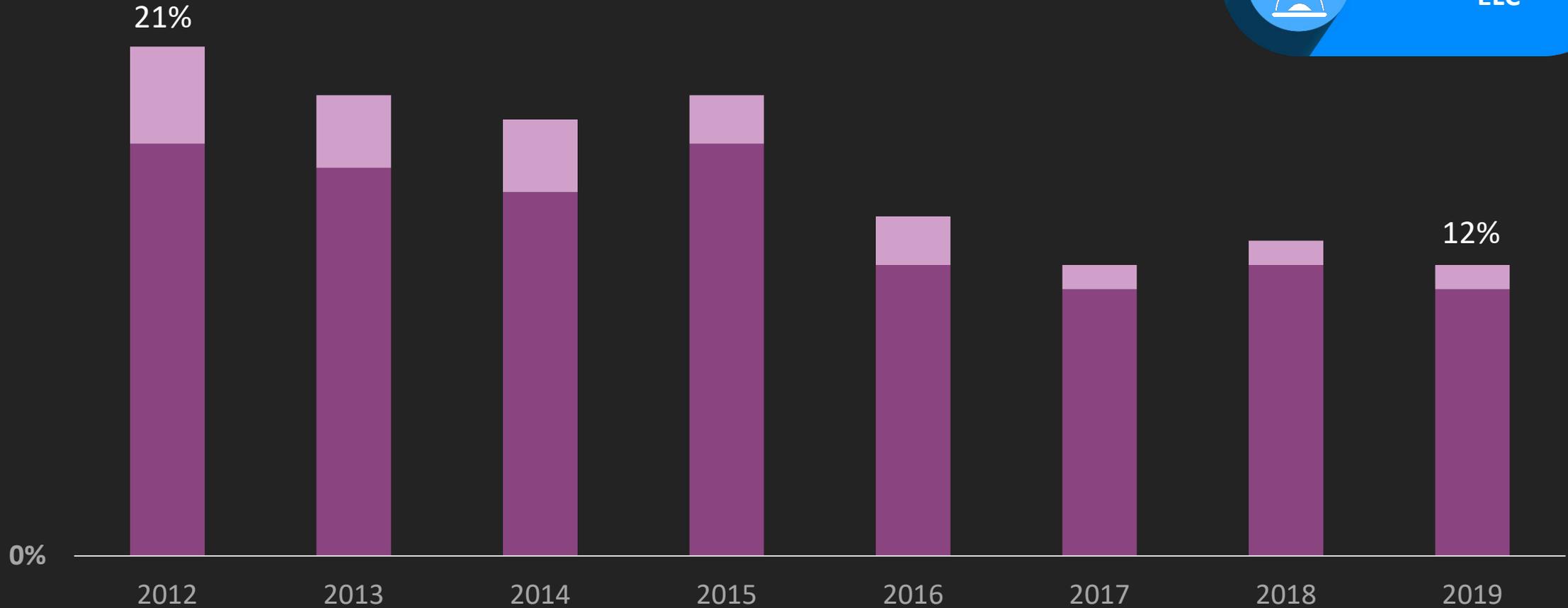


# Deconstructing Medical Service Costs



# Both **Non-Opioid** and **Opioid** Share of Prescription Drugs Have Been Steadily Decreasing

25%



0%

12%

# And then there's medical inflation ...

We've seen the types of services, so how about prices?

Medical inflation steady

- PPI 3.0%
- CPI 2.8%

To what extent does inflation impact the cost of **LARGE** claims?

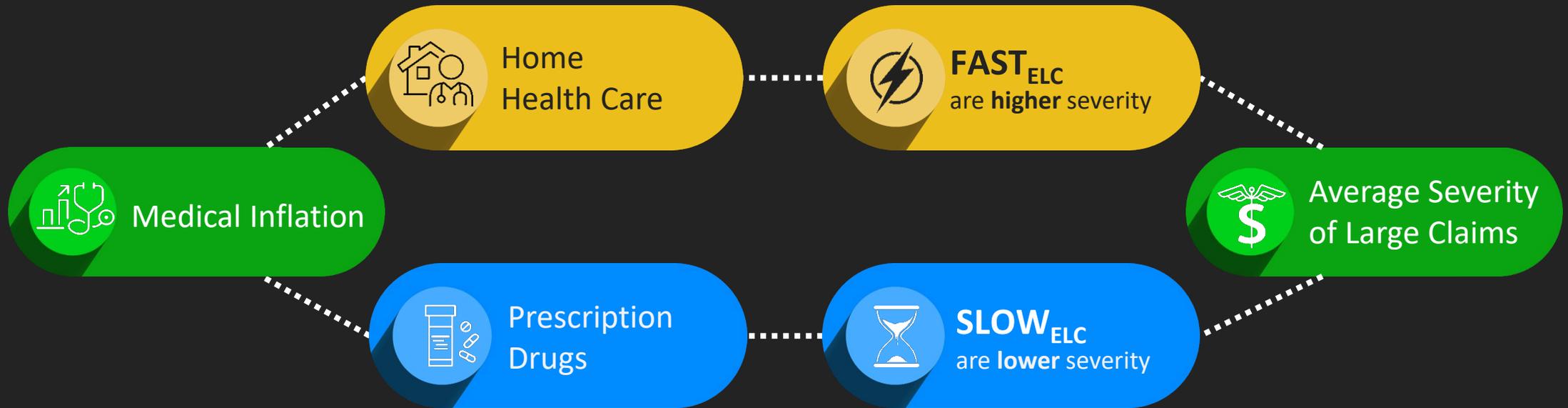


# Yes, but that's not what we heard about the costs for large claims!

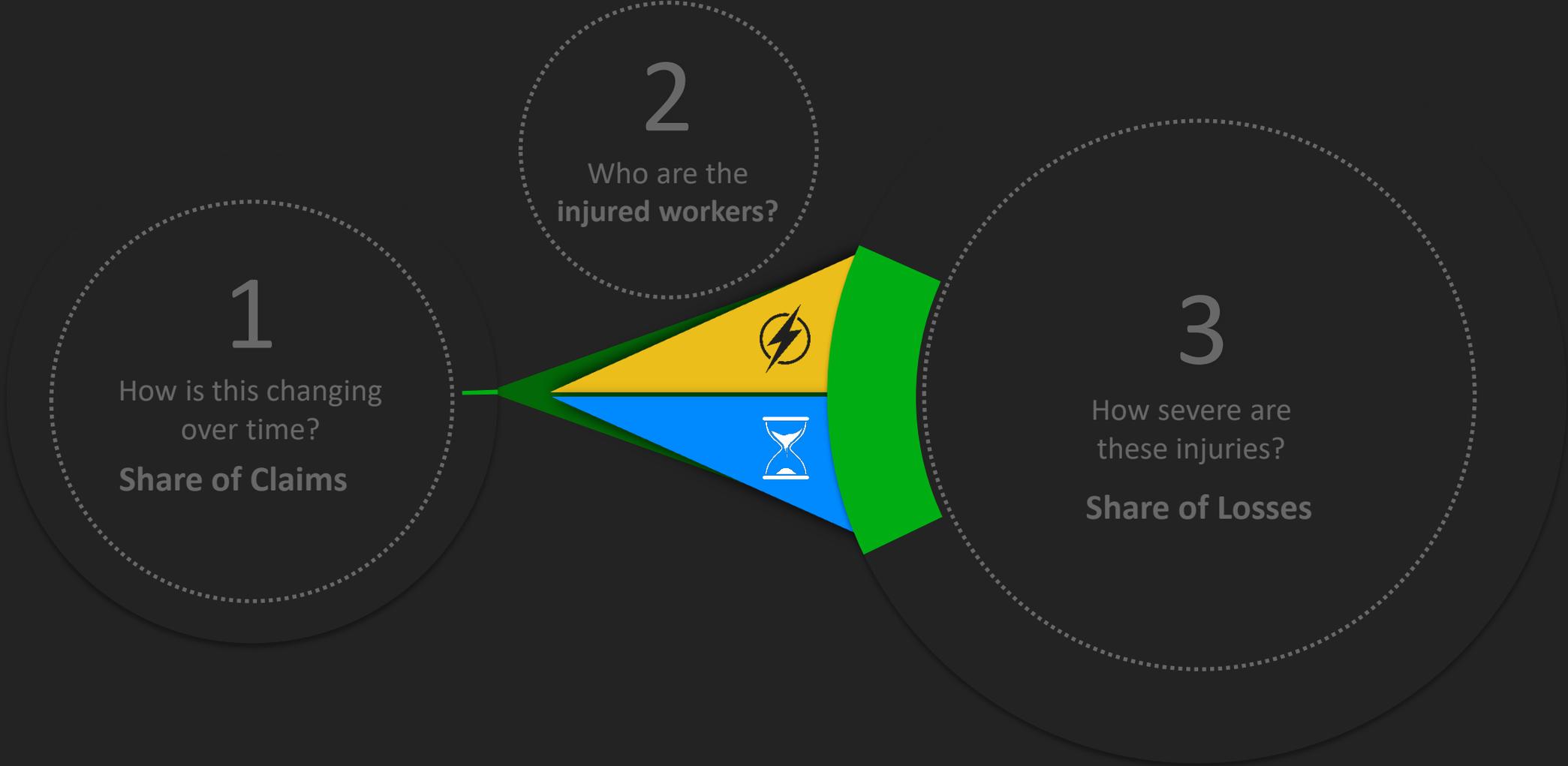
Medical Service Category	Inflation Rate as of March
 Physician care	1.0%
 Hospital <i>inpatient</i> care	3.5%
 Hospital <i>outpatient</i> care	1.7%
 Prescription drugs	2.4%
 Medical supplies	7.7%
 Home health and hospice care	7.6%
 Nursing home care	5.7%
Transportation services	14.6%



# Reconstructing Large Claim Severity



# A large claim can be **FAST** or **SLOW** Emerging

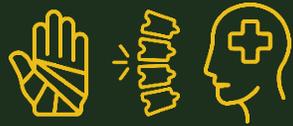


# Reconstructing Large Claims

1

Relative frequency trends indicate long-term declines

Burns, Spinal Cord Injuries, Traumatic Brain Injuries



Degenerative Disc Disorders and Pain



2

Identifying leading causes of injury

Fall or Slip from Elevation  
Motor Vehicle Accidents



Strain or Injury by Lifting



3

Medical services exhibit varying inflation and utilization

Home Health Care



Prescription Drugs



Increases in  
**FAST**<sub>ELC</sub>



Declines in  
**SLOW**<sub>ELC</sub>

# Large claims Reconstructed

