Kansas Department of Labor
Workers Compensation Division

Closed Claims Analysis
Calendar Year 2021

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Introduction

This study presents an analysis of a sample of Workers Compensation claims that were closed by their respective claims administrators during Calendar Year **2021**. Not every injury results in a claim for indemnity benefits, but those that do allow our division to collect information about the costs of those claims. When no further payments are expected on a claim, a final report (FN) is submitted that details the total of all benefits and expenses paid to date.[1] The final reports allow us to examine claims in terms of the benefits paid on behalf of the insured from start to finish.

The data for the present study consist of **6406** claims taken from the set of all claims that closed in **2021** (the initial data set), excluding claims that did not meet certain restrictions, outlined in Appendix B.[2] A closed claim is any claim reporting at least one indemnity payment for which a final payment has been submitted.

Payment information was collected from the final payment for each claim, while basic information pertaining to the claimant and the circumstances and nature of the injury were collected from First Reports of Injury (FROIs).

[1] Certain assumptions and limitations are worth noting. Because the state of Kansas legislates the actions that employers and employees must take when a workplace injury takes place, we assume that injuries are reported honestly by both employees and their employers. EDI industry implementation standards, together with Kansas legislation, determine the sequencing of EDI files as well as which information is mandatory on a claim file. We, therefore, assume that claim administrators have received the training needed to submit correct claim and payments information to our division. We assume that when an FN is filed, no further payments are anticipated. It should be noted that this is not always the case, as claims may be reopened for various reasons, but we assume that this is true at the time of reporting.

[2] Because a lag can exist between when an FN report was created and when it is received by our division, we define the set of FNs by the date they were generated in the Electronic Data Interchange (EDI) system, which is not necessarily the date it was created.

1 Characteristics of Closed Claims

1.1 Duration of Closed Claims

Duration is defined as the number of days from the date that the injury is reported to the date that the final report is filed. Of the **6406** claims in this study, the mean duration is **566** days while the median is **405** days. Figure 1.1 illustrates the distribution of the duration of claims in our sample set in terms of the number of days the claim remains open. Note that the mean duration is heavily influenced by a small percentage of claims that take several years to close, while most claims close in a much shorter time period. For this reason, the median is the more appropriate measure of duration.

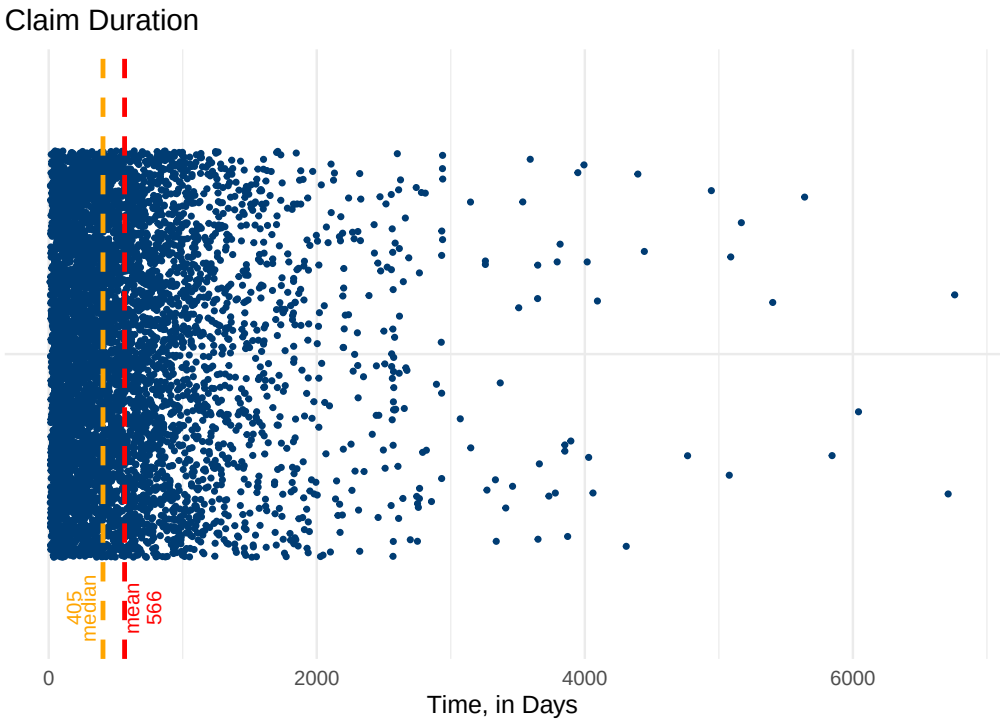

Figure 1.1: Distribution of Claim Duration in Days

Figure 1.2 shows the duration of claims by years instead of days. The year groupings have been chosen to highlight the distribution of claim duration data. Of the **6406** closed claims, **45.9%** of claims closed in one year or less. Over half of claims closed in 2 years. (**74.7%**), while only **2.4%** of claims closed after 5 or more years of being open.

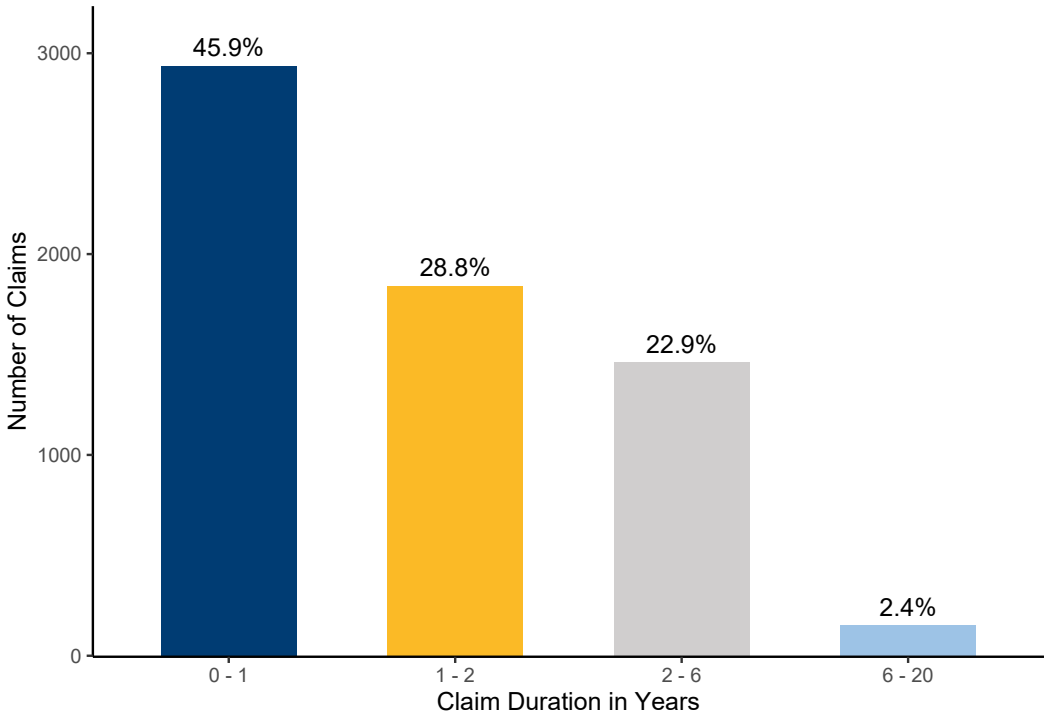

Figure 1.2: Claim Duration in Years, Grouped by Year Categories

The Workers Compensation Division has reported the median duration of a claim since 2016 and that data is plotted in Figure 1.3 for the years **2018**-**2021**.

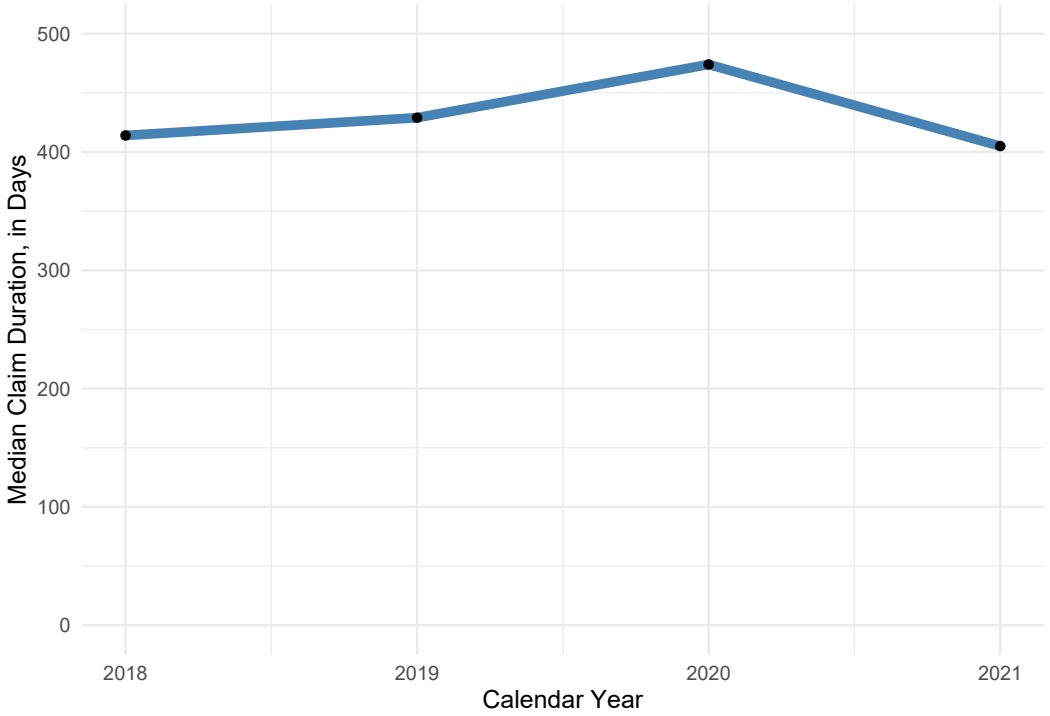

Figure 1.3: Median Duration of Claims

1.2 Total Costs of Closed Claims

The total reported cost of benefits associated with indemnity claims that closed in calendar year **2021** was **$217,663,365**. **Medical** benefits comprised the greatest share of this cost at **51.2** percent, followed by **Indemnity** benefits at **44.4** percent, **Legal** benefits at **4.3** percent and **Other** benefits at **0.2** percent. Figure 1.4 illustrates total benefits paid on behalf of insurers for claims with reported indemnity benefits that closed in **2021**. The total amount is given, as well the percentage that each type of expense represents of the total. Note that the medical benefits stated below are the medical benefits reported on indemnity claims and not claims that report only medical benefits.

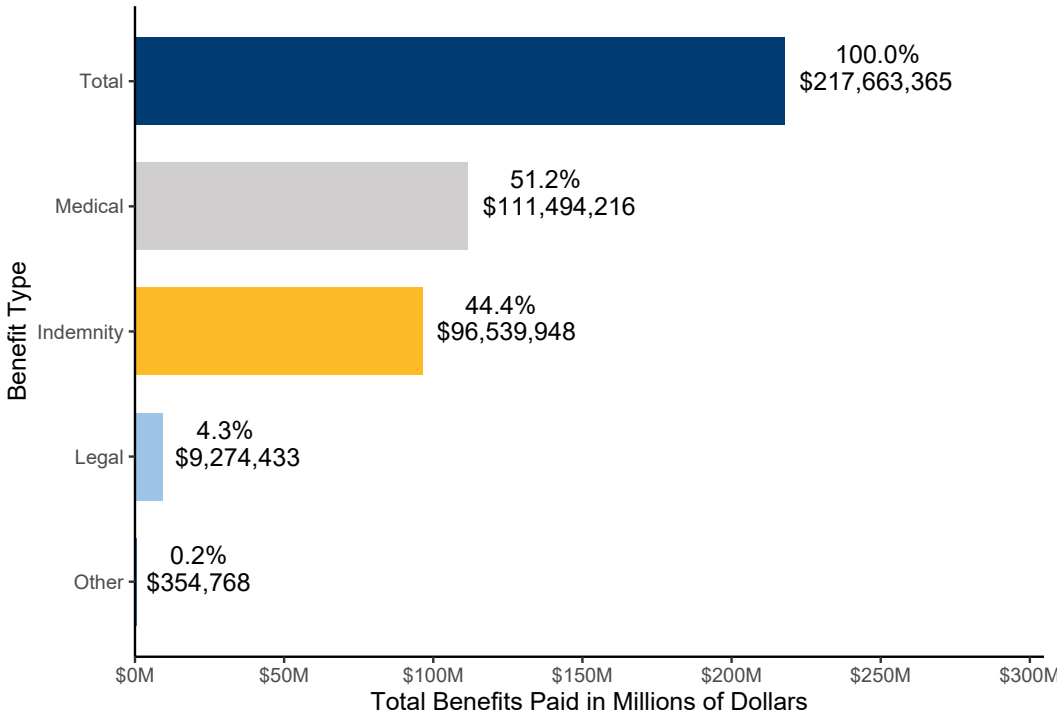

Figure 1.4: Total Benefits Paid for All Claims that Closed in the Calendar Year

In terms of individual claims, the mean cost of a claim in our **2021** claim set was **$33,978.05** while the median cost was **$16,452.78**. The cost of an individual claim is defined as the total dollar amount of all expenses and indemnity payments incurred during the life of a claim. Legal and other (non-medical, indemnity, or legal) benefit types on a claim had median values of $0. This means that, while a few claims did incur legal and other expenses, the typical claim that closed in **2021** did not involve insurer-paid benefits not categorized as indemnity or medical. Figure 1.5 below illustrates mean and median benefits by benefit type paid for the claims closing in calendar year **2021**.

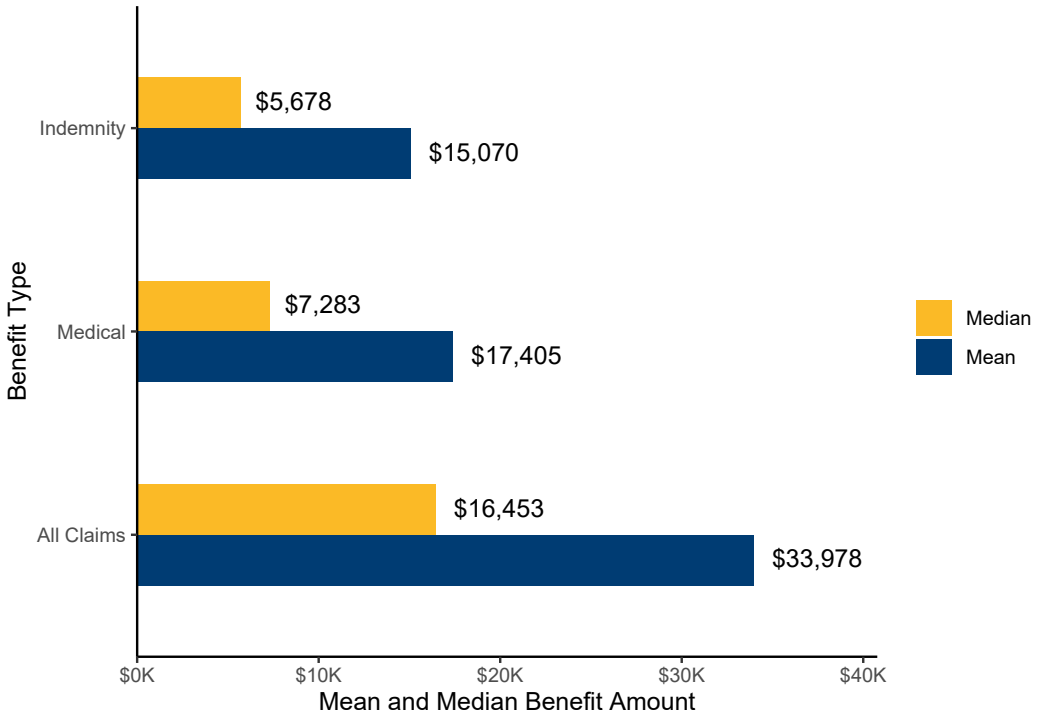

Figure 1.5: Mean and Median Paid Benefit Amounts by Benefit Type

In Figure 1.5 (above) note that the mean paid benefit amount of a claim is greater than the median paid benefit amount of a claim for both medical and indemnity benefits. This is because the mean paid amount of benefits, like mean duration, is influenced by a small percentage of very expensive claims. This positively skewed distribution of cost data is typical as there are generally a small percentage of costly claims in any given report year. For this reason, the median paid benefit amount is generally regarded as more informative than the mean. Figure 1.6 (below) illustrates the distribution of the total costs of claims data and demonstrates the similarity between the cost data and the duration data.

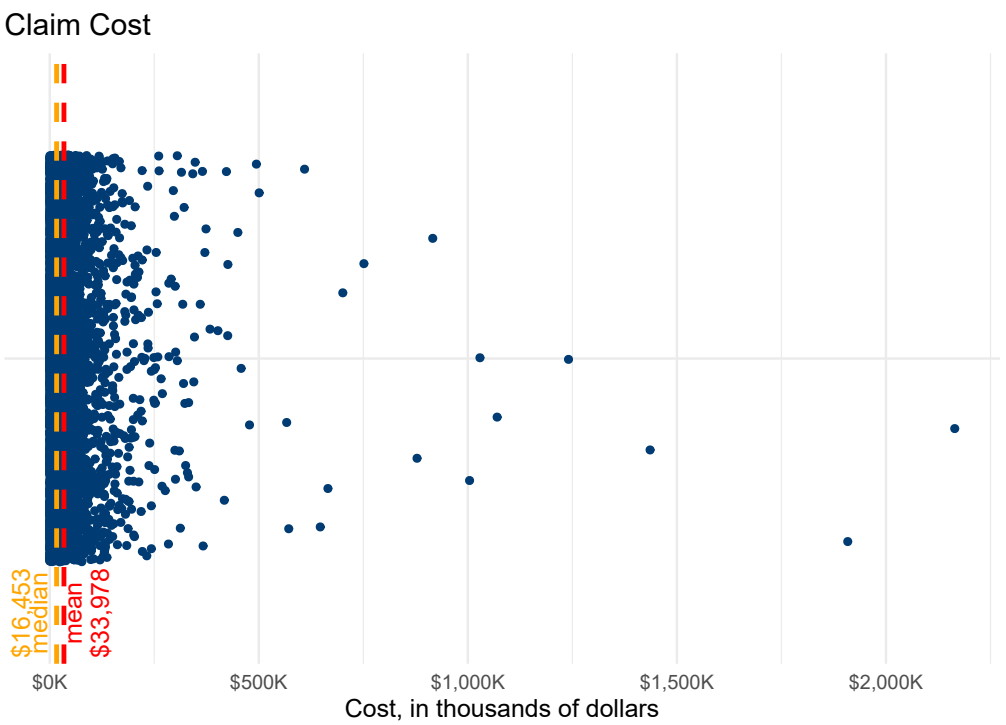

Figure 1.6: Distribution of Claim Total Paid Benefits

1.2.1 Contributors to Claim Cost

To better understand what contributes to the cost of a claim, the data is divided into percentiles by the total paid benefits of a claim. The lower 3 quartiles are aggregated to represent claims whose costs fall into the lower 75 percent of the distribution. The upper quartile represents claims whose costs fall into the highest quarter (25th percentile) of the distribution. The lower-cost claims set includes claims whose paid benefits total **$39,348.97** or less and the higher-cost claims set include claims that total greater than **$39,348.97**. Fatal injuries are removed from the dataset before dividing into percentiles since fatalities are uncommon and expensive and could skew the characteristics of the higher-cost claims. The mean and median of each group is shown in Figure 1.7. Note that each group exhibits similar distributional properties as the entire sample set in which the mean is greater than the median.

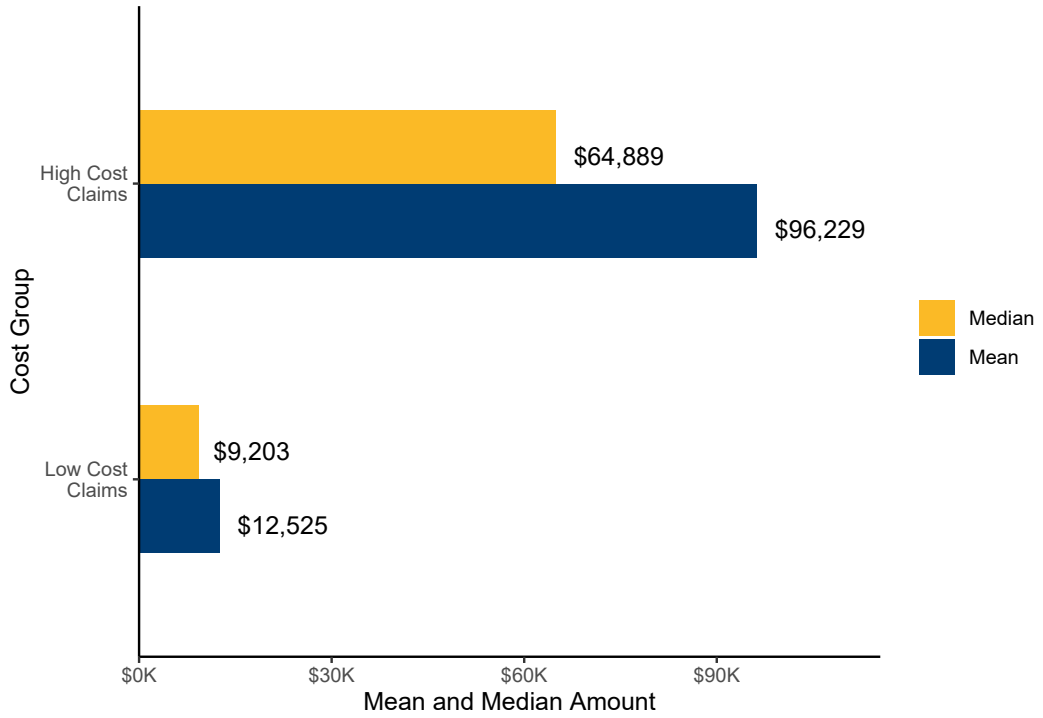

Figure 1.7: Mean and Median Cost of Claims for Lower-Cost and Higher-Cost Groups

In table 1.1 the costs are examined in terms of benefits paid in each group, both groups display nearly the same proportions of paid benefit amounts by each benefit type. Medical paid benefits are a slightly greater percentage of total paid benefits in the higher-cost claims, by about **4%** percent.

Table 1.1: Percentage of Paid Benefits in Lower-Cost and Higher-Cost Groups by Benefit Type

	High Cost	Low Cost
Indemnity	43.9%	47.4%
Medical	51.8%	47.4%
Legal	4.2%	5.2%
Other	0.2%	0.1%

One characteristic that higher cost claims do exhibit is longer claim duration. The mean and median duration of claims for higher and lower cost claims are shown in Figure 1.8 (below). The total cost of a claim is correlated with claim duration (r = **0.41**), meaning that there is a **moderate** positive relationship between the movement in claim cost as related to the movement in claim duration. The longer the claim remains open, the more costs may be associated with it.

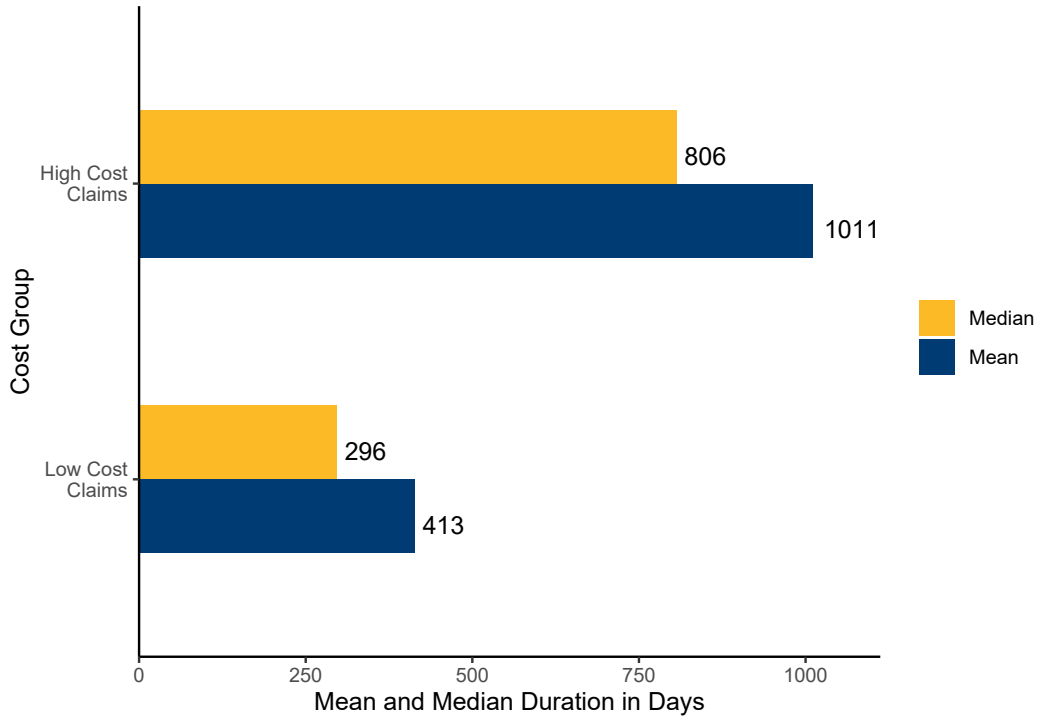

Figure 1.8: Mean and Median Claim Duration for Lower-Cost and Higher-Cost Groups in Days

1.3 Injuries Reported by Sector and Industry

In terms of economic sectors that report injuries, **21%** of all injuries were reported as occurring in the **Manufacturing** sector. Manufacturing contributes **1.3** times the amount of claims than the next highest contributor (**Health Care** at **16%**). Other top contributing sectors are included in Figure 1.9, which illustrates the percent of injuries contributed by a specific sector as a percentage of all injuries reported for the sample set of claims that closed in **2021**.

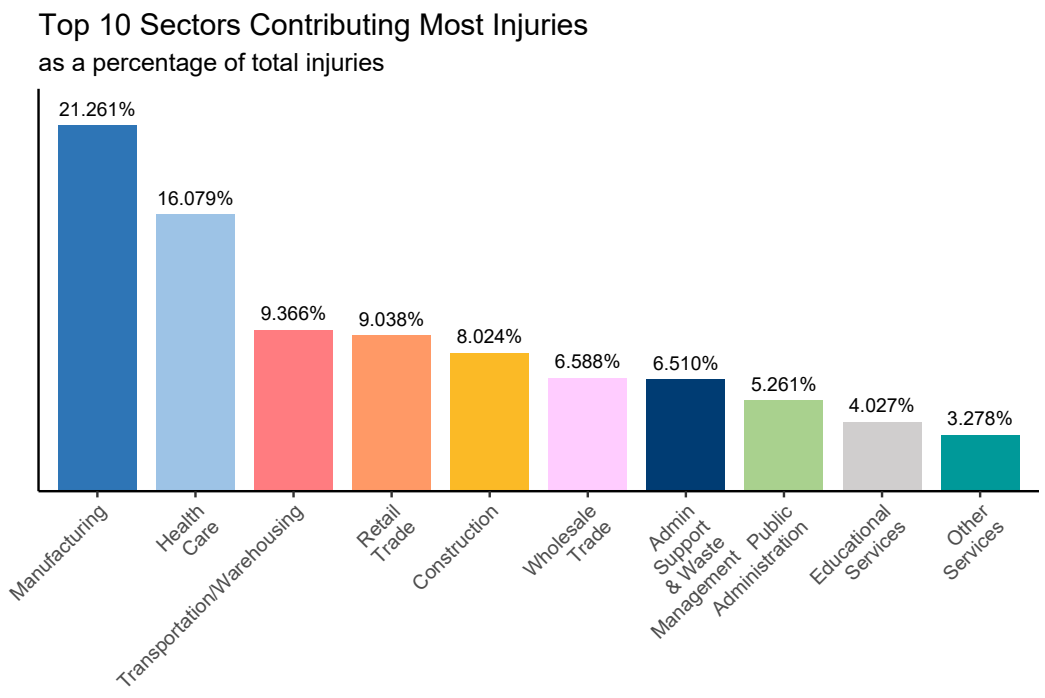

Figure 1.9: Top Ten Sectors Contributing Injury Reports by Percentage of Total Injuries Reported

When the **Manufacturing** sector claims are disaggregated into the unique industries that make up that sector that report injuries (Figure 1.10) it becomes evident that the **Aircraft Manufacturing** industry accounts for most manufacturing claims at 15.1%. This is followed by the **Animal (except Poultry) Slaughtering** industry (**9.0%**), the **Metal Crown, Closure, and Other Metal Stamping (except Automotive)** industry (**4.6%**), the **Blind and Shade Manufacturing** industry (**4.5%**), and **Other Aircraft Parts and Auxiliary Equipment Manufacturing** industry (**3.7%**).

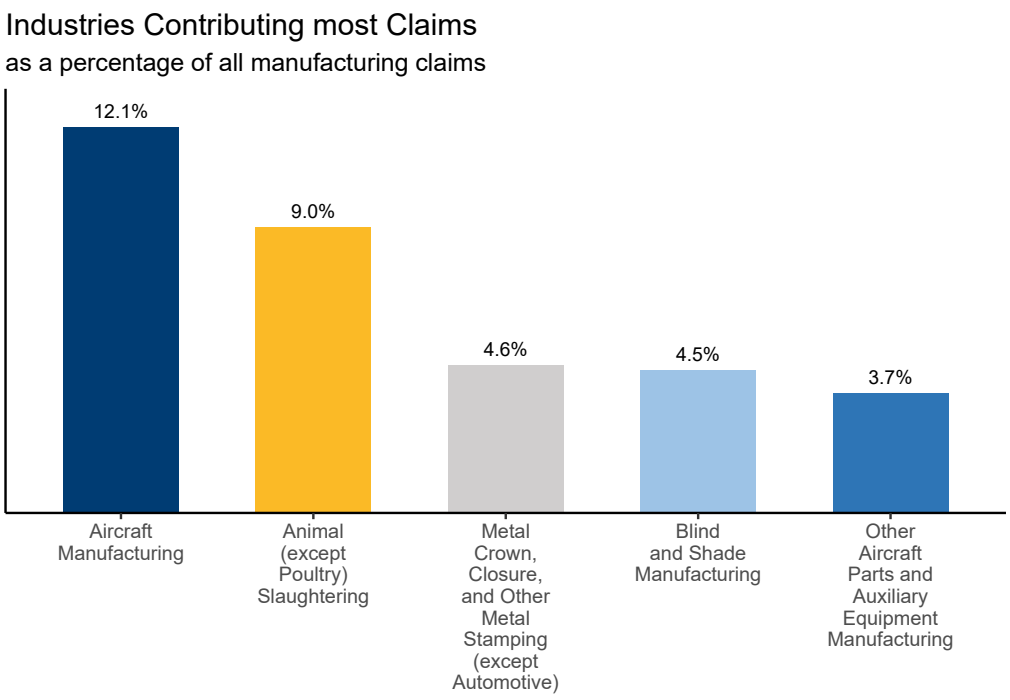

Figure 1.10: Industries that Report Injuries, as a Percentage of all the Top Sector's Reports

As a proportion of the total benefits paid on **2021** closed claims(Figure 1.11), the **Manufacturing** sector comprised **24.8%** of total paid benefits. With the next highest being the **Construction** at **11.5%** of total paid benefits.

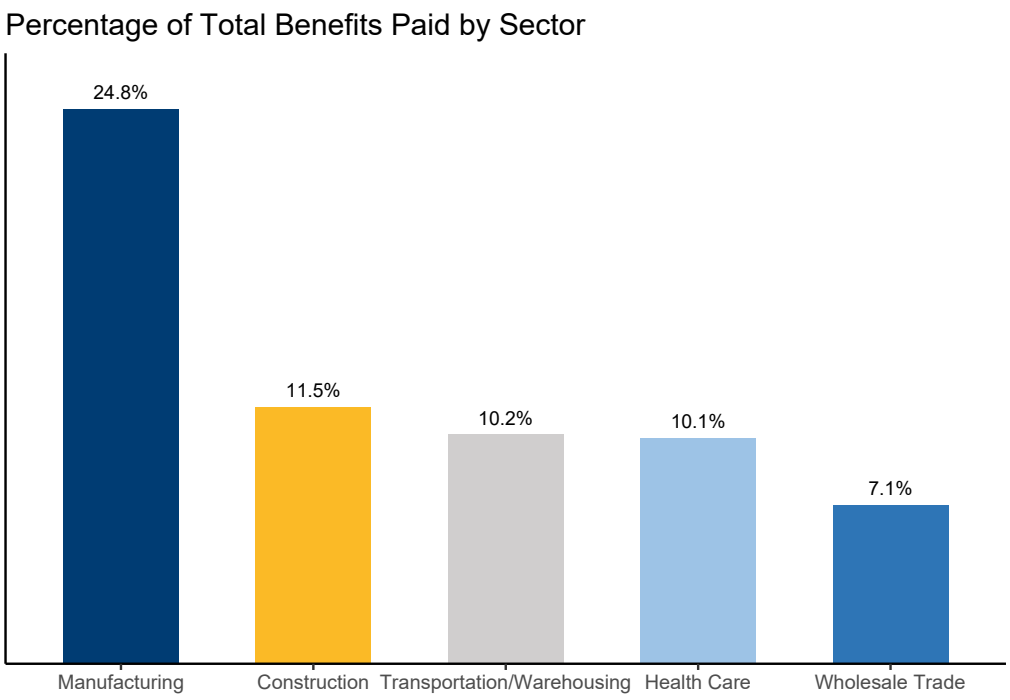

Figure 1.11: Proportion of Total Benefits Paid by Sector

Table 1.2 (below) displays the mean and median indemnity costs by sector, ranked in terms of mean cost. Although **Manufacturing** contributes **24.8%** of all claims and total paid benefits, it ranks **5th** of 18 sectors in terms of mean cost of a claim (**$39,598.05**). The highst mean cost is the **Agriculture, Forestry, Hunting** sector at **$61,836.48**.

Table 1.2: Mean and Median Total Costs of Claims by Sectors, Ranked by Mean Claim Cost

Sector	Mean Claim Cost	Median Claim Cost
Agriculture, Forestry, Hunting	$61,836.48	$17,457.04
Real Estate	$49,033.21	$21,000.00
Construction	$48,525.30	$22,338.00
Mining, Oil, Gas	$45,729.19	$19,896.04
Manufacturing	$39,598.05	$23,691.67
Transportation/Warehousing	$37,171.33	$17,239.76
Information	$37,027.56	$9,187.24
Wholesale Trade	$36,546.95	$18,940.26
Utilities	$33,715.53	$25,582.02
Public Administration	$33,370.87	$16,722.38
Admin Support & Waste Management	$31,614.46	$14,122.54
Profession, Scientific, Technical Services	$31,388.42	$16,164.45
Other Services	$30,890.22	$16,181.08
Educational Services	$29,788.16	$19,182.31
Arts, Entertainment, Recreation	$29,706.11	$14,980.05
Finance and Insurance	$27,928.54	$16,554.42
Retail Trade	$23,421.93	$11,092.64
Health Care	$21,295.72	$2,826.16

1.4 Characteristics of Injuries

When claims are filed by trading partners, they must categorize the body part injured, the cause of injury, and the nature of injury. These categories, while not identical across all states, are tracked by Workers Compensation Insurance Organizations (WICOS), and are useful for analysis in many different agencies.

1.4.1 Body Parts

The purpose of the body part category is to identify the physical parts of the body which have sustained injury. For this reason, one can select multiple body parts as well as use codes that indicate “multiple” injuries sustained to a specific region of the body. Table 1.3 (below) shows the frequency of each body part selected in the **2021** set of closed claims. It shows that, of the **8052** body parts cited in the data set, **Shoulder(s)**, **Knee**, and **Lower Back Area** were the three most commonly selected.

Table 1.3: Total Injuries by Body Part Injured

Body Part Injured	Count	Body Part Injured	Count
Shoulder(s)	972	Wrist(s) & Hand(s)	90
Knee	851	Multiple Upper Extremities	83
Lower Back Area	728	Upper Leg	79
Multiple Body Parts	434	No Physical Injury	75
Finger(s)	375	Brain	70
Ankle	369	Whole Body	66
Hand	354	Insufficient Info to Properly Identify	63
Wrist	347	Multiple Lower Extremities	59
Elbow	265	Disc (Trunk)	50
Lower Arm	252	Lumbar & or Sacral Vertebrae	48
Lungs	239	Disc (Neck)	46
Foot	237	Eye(s)	41
Lower Leg	195	Multiple Trunk	41
Upper Arm	186	Multiple Neck Injury	37
Abdomen Including Groin	160	Toes	35
Upper Back Area	147	Pelvis	29
Thumb	118	Nose	28
Multiple Head Injury	110	Facial Bones	24
Hip	108	Big Toe	22
Other Facial Soft Tissue	104	Vertebrae	22
Soft Tissue	103	Buttocks	17
Body Systems and Multiple Body	102	Spinal Cord (Neck)	17
Chest	98	Sacrum and Coccyx	16
Skull	95	Internal Organs	15

Body part codes can also be organized by larger, more general categories based on the region of the body. The frequency of injuries of these broader categories is shown below in Figure 1.12. The more general categories make patterns of injuries more evident. For example, shoulder is a commonly cited body part on claims and, when aggregated with other body parts in the same body region, creates an upper extremities category that accounts for **38%** of all injuries.

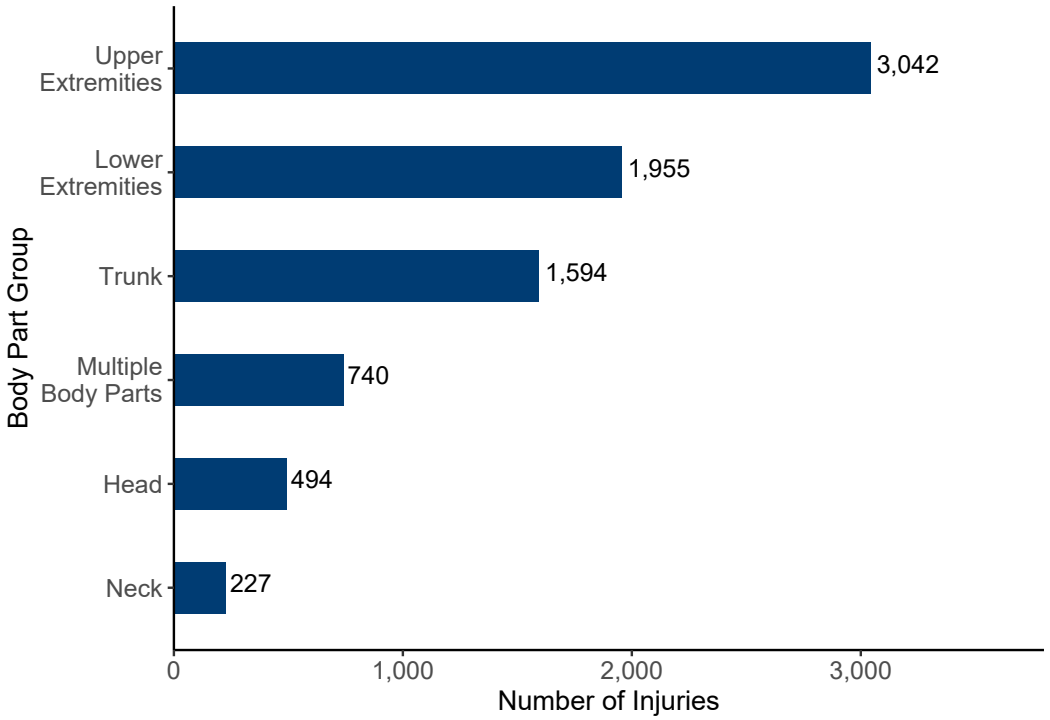

Figure 1.12: Total Injuries by Primary Body Part Group

1.4.2 Causes of Injury

The cause of injury codes describes how an injury occurred. If multiple injuries are sustained in one accident, one primary cause of injury must be identified. Table 1.4 lists the frequency of cause of injury codes that were selected for each closed claim.

Table 1.4: Total Injuries by Cause of Injury

Cause of Injury	Count	Cause of Injury	Count
Lifting	721	Powered Hand Tool, Appliance	61
On Same Level	439	Animal or Insect	57
Pandemic	414	Cumulative, NOC	50
Strain or Injury By, NOC	414	Hand Tool or Machine in Use	47
Fall, Slip or Trip, NOC	409	Motor Vehicle	46
Pushing or Pulling	329	Striking Against or Stepping On, NOC	46
Repetitive Motion Carpel Tunnel Syndrome	315	Hand Tool, Utensil; Not Powered	40
From Different Level (Elevation) Off Wall, Catwalk, Bridge, etc.	238	Into Openings Shafts, Excavations, Floor Openings, etc.	39
Other - Miscellaneous, NOC	217	Other Than Physical Cause of Injury	35
Falling or Flying Object	214	Vehicle Upset/Overturned/Jackknifed	27
Object Being Lifted or Handled	209	Jumping	26
Twisting	192	Moving Parts of Machine	21
On Ice or Snow	160	Object Handled By Others	21
Fellow Worker; Patient	132	Absorption, Ingestion or Inhalation, NOC	16
From Ladder or Scaffolding	130	Collision with a Fixed Object Standing Vehicle or Stationary Object	16
Holding or Carrying	122	Repetitive Motion Callous, Blister, Etc.	16
From Liquid or Grease Spills	107	Person in Act of a Crime	13
Machine or Machinery	106	Foreign Matter (Body) in Eye(s)	12
Struck or Injured, NOC	106	Stepping on Sharp Object	11
Caught In, Under or Between, NOC	102	Moving Part of Machine	9
Stationary Object	88	Wielding or Throwing	8
Collision or Sideswipe With Another Vehicle	85	Electrical Current	5
Object Handled	80	Broken Glass	4
Reaching	79	Explosion or Flare Back	3
Using Tool or Machinery	79	Cold Objects or Substances	2
Slipped, Do Not Fall	73	Collapsing Materials (Slides of Earth) Either Man Made or Natural	2
On Stairs	72	Gunshot	2
Caught, Puncture, Scrape, NOC	71	Rubbed or Abraded, NOC	2
Motor Vehicle, NOC	63		

Cause of injury codes, like body part codes, can be grouped more generally into primary causes of injury. For example, burns, whether resulting from hot objects or chemicals, can be aggregated as injuries caused by burns. Figure 1.13 lists causes of injury, aggregated into primary causes and grouped by frequency. The “Strain or Injury By” category refers to a strain or injury caused by a variety of movement such as twisting, lifting, pushing, reaching, etcetera, which have been grouped together. “**Strain or Injury By**” was the highest cause of injury, followed by “**Fall or Slip**”, and finally “**Struck or Injured By**”.

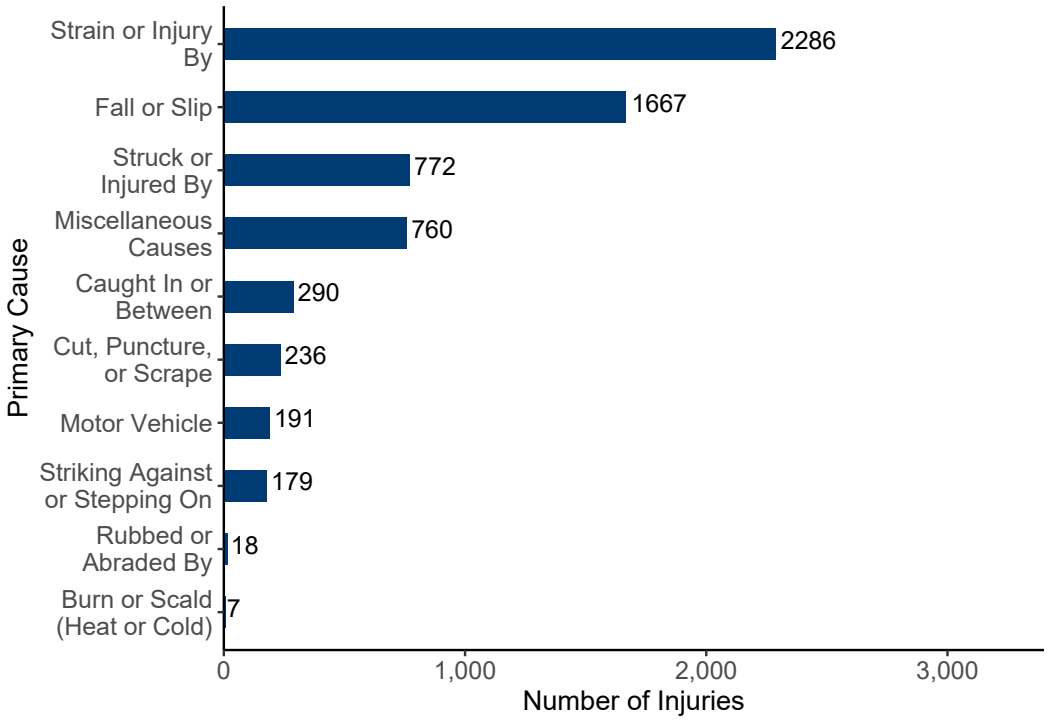

Figure 1.13: Total Injuries by Primary Cause of Injury

Some causes of injury result in costlier workers compensation claims. Figure 1.14 displays the median cost of claims, grouped by cause of injury codes, of the ten cause of injury codes with the highest median costs. Generally, causes that resulted in claims with the highest median costs have the lowest frequencies (see Table 1.4).

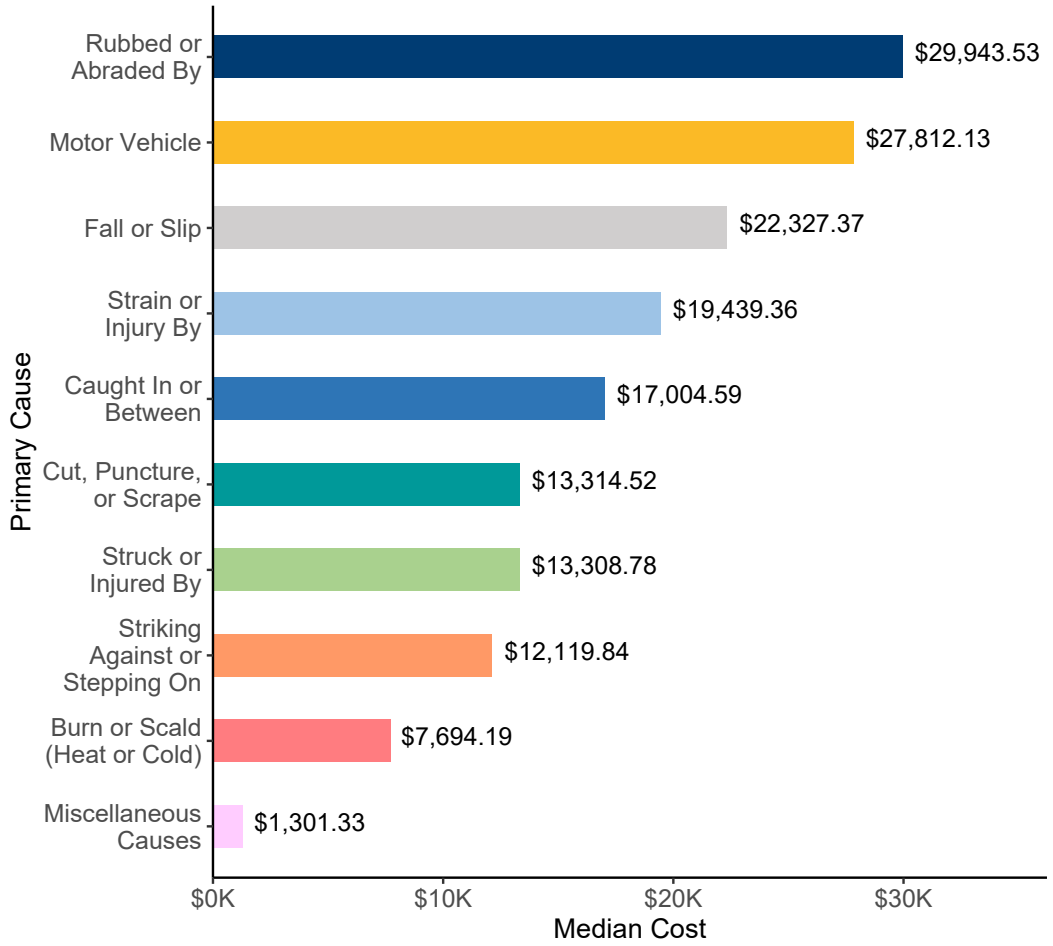

Figure 1.14: Top Ten Causes of Injury by Median Total Cost

1.4.3 Nature of Injuries

Nature of injury can be understood as a description of the injury sustained to a body part. In other words, nature of injury is the result of an accident rather than the cause. Table 1.5 below lists the frequencies of nature of injury codes as they occurred in the claims sample set.

Table 1.5: Total Injuries by Nature of Injury

Nature of Injury	Count	Nature of Injury	Count
Strain or Tear	1878	Severance	14
Fracture	824	Burn	6
Sprain or Tear	570	Multiple Injuries (Incl. Physical/Psychological)	6
Contusion	552	Dermatitis	4
COVID-19	423	Electric Shock	4
All Other Specific Injuries, NOC	417	Heat Prostration	4
Laceration	275	Myocardial Infarction	4
Inflammation	242	Poisoning - General	3
Multiple Physical Injuries Only	166	Respiratory Disorders	3
Rupture	165	Syncope	3
Dislocation	155	Mental Disorder	2
Concussion	116	Poisoning - Chemical, (Other Than Metals)	2
Carpal Tunnel Syndrome	109	Asphyxiation	1
Crushing	105	Cancer	1
Hernia	103	Freezing	1
All Other Cumulative Injury, NOC	48	Hearing Loss or Impairment	1
Amputation	44	Loss of Hearing	1
Puncture	41	Poisoning - Metal	1
All Other Occupational Disease, NOC	37	Vision Loss	1
Infection	15		

In terms of median costs associated with different nature of injury codes, there are some similarities to the causes of injury median costs. This pattern is less extreme, but still true for other nature of injury codes with high median costs. Figure 1.15 illustrates that the majority of nature of injury codes associated with higher median costs occur relatively less frequently than the most common nature of injury codes selected in the sample set.

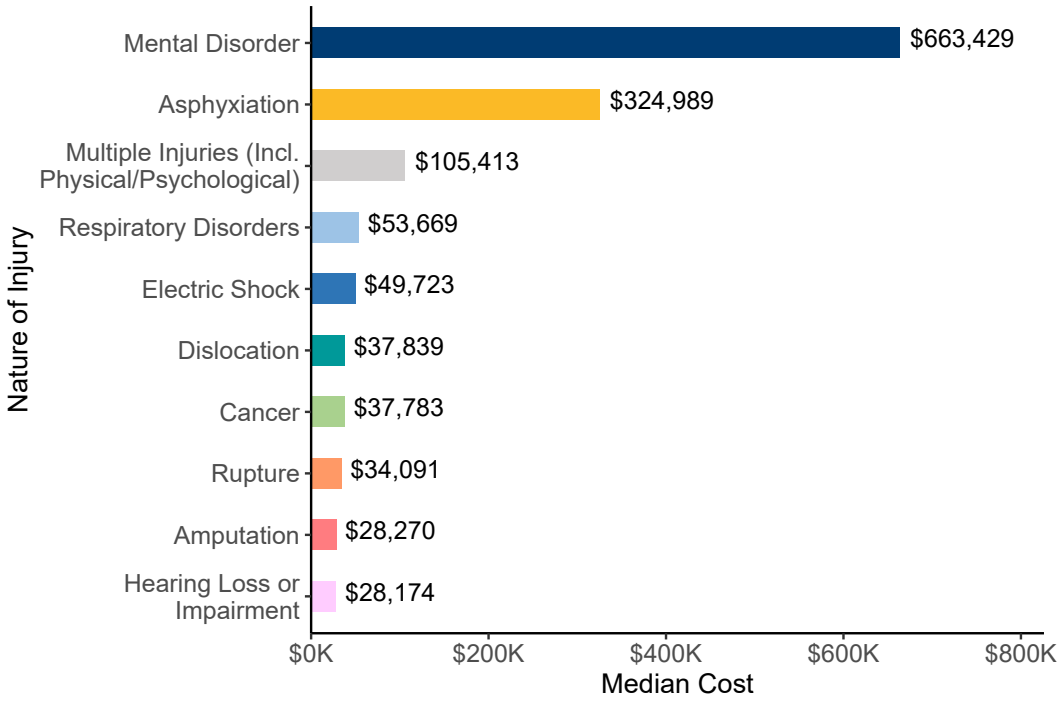

Figure 1.15: Top Ten Natures of Injury by Median Total Cost

2 Judicial Outcomes of Closed Claims

2.1 Judicial Initiation and Resolution of Closed Claims

Although claims are often resolved without recourse to the judicial system, the resolution of claims frequently requires some form of judicial action. For the purpose of the present study the claim is judicially initiated when either 1) a claimant or a claimant's surviving spouse, dependent, employer their attorneys request judicial review of a claim through the filing of an E1/E2 (Application for Benefits)[1], or 2) a claimant and their employer file a formal settlement that must be approved by an Administrative Law Judge (ALJ)[2]. Of the **6406** closed claims, **6406** claims are used in this judicial study. **3514** claims required some form of judicial action. Of these, **663** claims were judicially initiated, but resolved extra-judicially[3]. A claim is considered judicially resolved when the claim reaches a formal settlement or a final decision regarding benefits is reached by an ALJ. Out of the total claims, the remaining **2892** claims were not judicially resolved. Figure 2.1 shows the breakdown of claims in the study according to their path to resolution (judicially resolved, judicially initiated but not judicially resolved, or not judicially resolved.

[1]The E1 is the standard filing for seeking benefits, while an E2 is filed by a deceased claimant's surviving spouse, dependent, or heir.

[2]Note that this includes Special Administrative Law Judges, which are appointed under certain circumstances as prescribed by law, and which typically oversee settlement hearings.

[3]While a claim may go through various of the judicial process, there are cases in which the claim is nevertheless resolved extra-judicially. These are claims in which an E1 is filed, but no other judicial events occurred before the claim filed an FN to close.

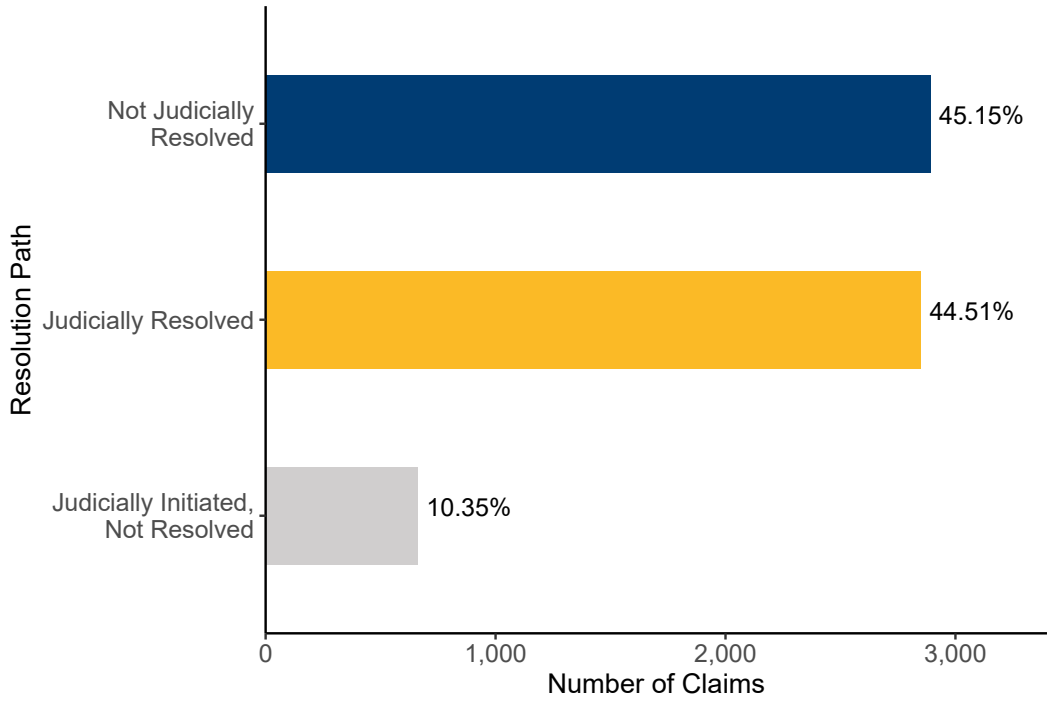

Figure 2.1: Total Number of Closed Claims by Resolution Path

To gain a better understanding of the ways that claims may be resolved, claims were analyzed according to the type of resolution that occurred. The resolution of a claim takes many forms. Among judicially resolved claims, there are various ways that resolution can occur, and as mentioned above, a claim may also be resolved between a claimant and their employer with or without recourse to the judiciary. The resolution type of a claim was categorized according to the following definitions:

- **Award:** compensation determined by decision of an ALJ
- **Agreed Awards:** compromises that require oversight of an ALJ. For the purposes of the present study, includes true Agreed Awards, Redemption Settlements, and Joint Petition/Stipulation
- **Docketed Settlement:** settlement arrived at after filing application for hearing
- **Undocketed Settlement:** settlement approved without prior filing of application for hearing
- **Dismissed/Partial Denial:** judiciary denies some portion of benefits, or case ultimately dismissed with no further benefits awarded. Involves cases for which benefits are paid, but claimant seeks further benefits through judicial process, or cases in which some portion of benefits is reimbursed to the
- **Non-Judicial Resolution:** benefits conferred without reaching resolution via judicial intervention
- **In Process:** A claim with an FN, that has some form of judicial initiation, but final resolution has not been reached.

Of all closed claims in the study, **3.8%** were in process, meaning an FN has been submitted but

there is subsequent or remaining judicial activity in the case. The remaining claims have some form of resolution. Of those, a significant portion result in a settlement or resolution between parties without recourse to the judiciary, what is termed a non judicial resolution. For settlements, there were **1416** claims that were resolved by a docketed settlement and **1307** that were resolved by an undocketed settlement.

The percentage of claims that require a final decision regarding benefits by means of an ALJ is just **1.7%**. Of those claims, there were **45** claims resulting in awards, **47** resulting in agreed awards, and **18** were partially denied or dismissed from further consideration

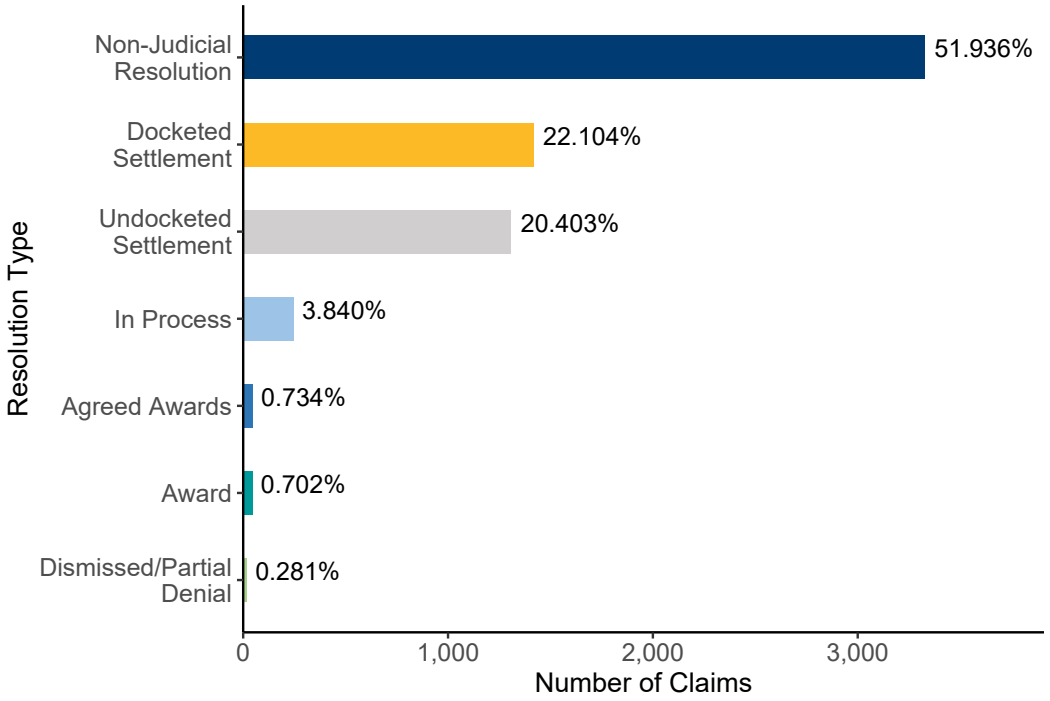

Figure 2.2: Total Number of Closed Claims by Resolution Type

2.2 Hearings Associated with Closed Claims

Claims that have been judicially initiated typically require at least one hearing on their way to resolution. Of the **3514** claims in **2021** that required some form of judicial action. **3467** (**98.7%** of judicially initiated claims, **54.1%** of all claims) required a hearing. Figure 2.1 illustrated that **10.3%** of claims that file an E1 to initiate the judicial process are resolved outside of that process. For the remaining claims, this would mean that simply filing an E1 is not sufficient to resolve benefit disputes, but that a hearing is needed in order to further the process. Claims that resulted in a settlement make up **42.5%** of all claims that required hearings. If claims that resulted in a settlement are excluded, only **96** claims (**2.8%** of judicially initiated claims, **1.5%** of all claims) required a hearing. Figure 2.3 shows the number of claims that required at least one hearing for each resolution type.

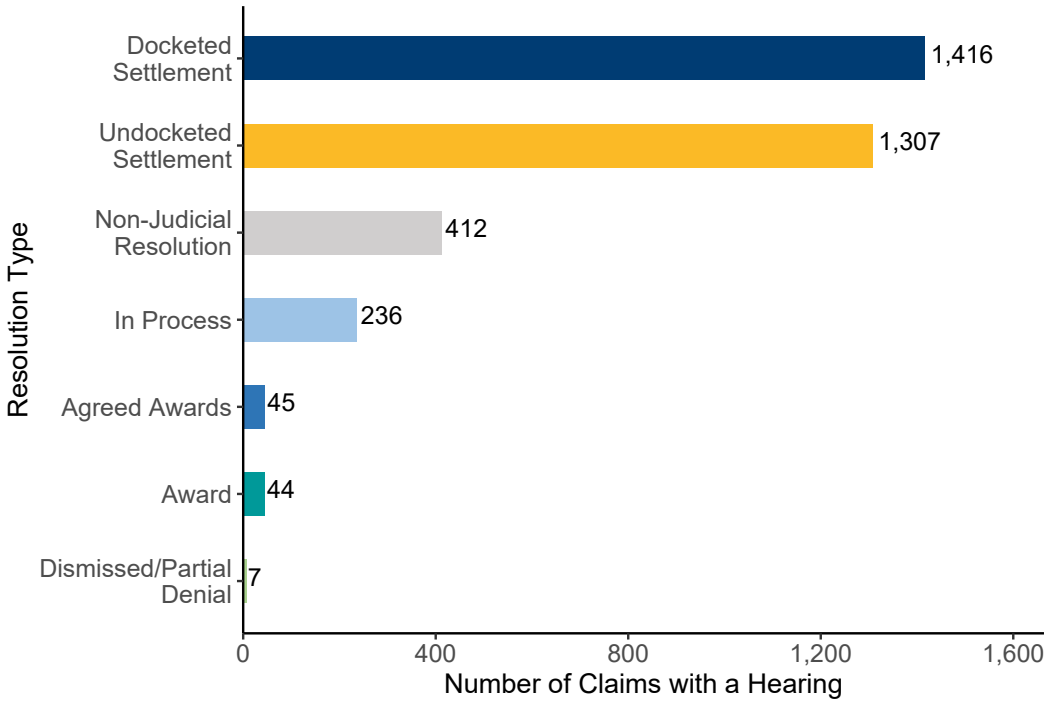

Figure 2.3: Number of Claims with at Least One Hearing, by Resolution Type

In terms of the overall number of hearings, there were a total of **8146** hearings associated with the claims in the present study. Of these, **6197** (**76.1%**) were associated with a claim that resulted in a settlement. Figure 2.4 shows the number of hearings held according to the resolution type of the claim.

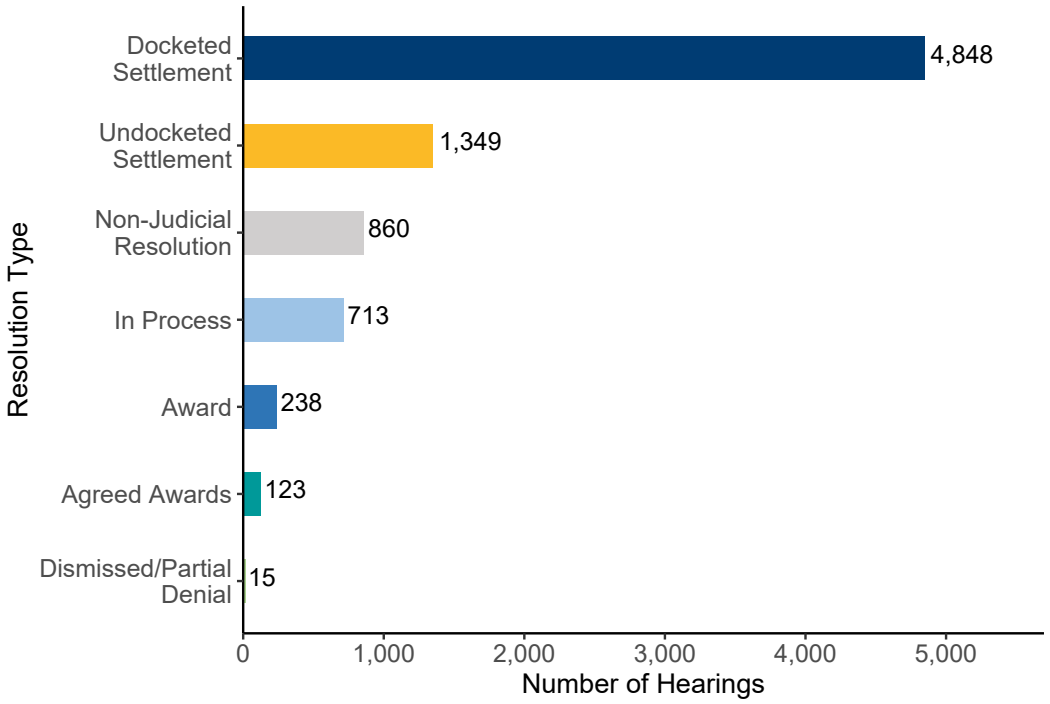

Figure 2.4: Total Number of Hearings by Resolution Type

Judicially initiated claims varied in the number of hearings that were required on their way to resolution. Figure 2.5 shows the distribution of claims in the study according to the number of hearings that were held. While **48** claims in the study did not require a hearing at all (**1.4%** of judicially initiated claims)[4], most required only one hearing (**1964** claims, **55.9%** of judicially initiated claims).

[4]Interestingly, judicially initiated claims sometimes do not require a hearing to be held at all. Sometimes, a claim for which an E1 is filed is settled before any hearing is necessary. In such cases, it often seems to be that the threat of judicial entanglement is sufficient motivation for reaching a settlement.

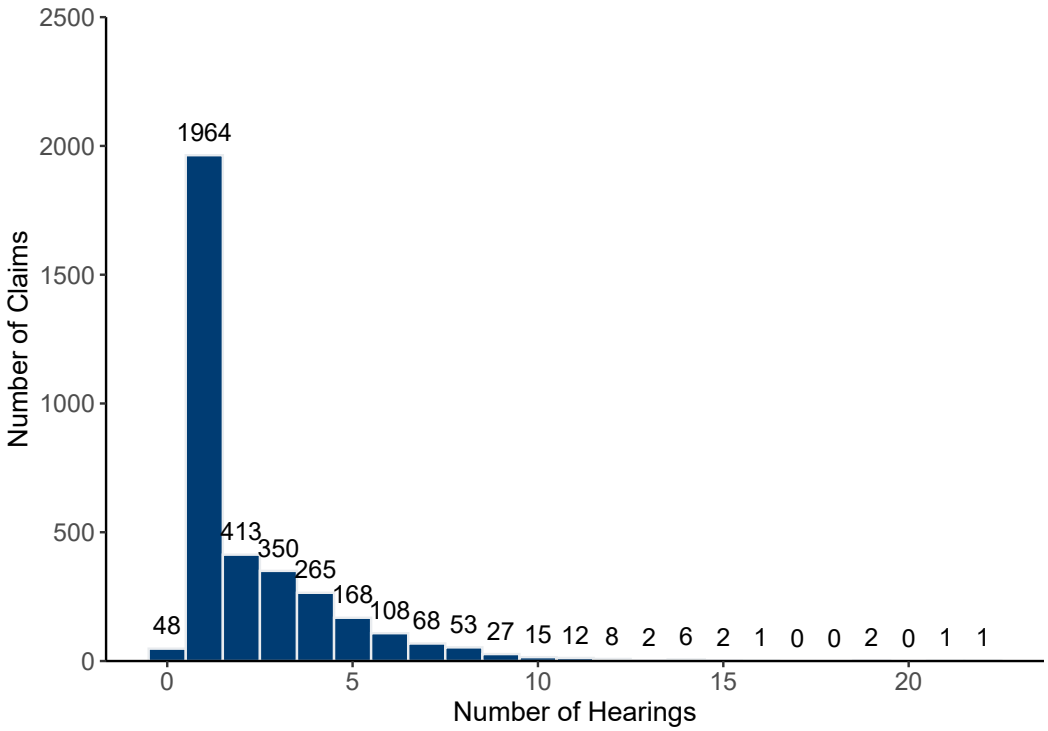

Figure 2.5: Histogram of Number of Hearings per Claim

Table 2.1 shows the data for Figure 2.5, listing the count of claims in the study with the number of corresponding hearings, along with the cumulative percentage of judicially initiated claims that required that number of hearings. As seen in the table, **69%** of judicially initiated claims required two hearings or fewer.

Table 2.1: Count of Claims by Number of Hearings, with Cumulative Percentage of Judicially Initiated Claims

Hearings	Number of Claims	% of Total
1	1964	57.3%
2	413	69%
3	350	79%
4	265	86.5%
5	168	91.3%
6	108	94.4%
7	68	96.3%
8	53	97.8%
9	27	98.6%
10	15	99%
11	12	99.3%
12	8	99.6%
13	2	99.6%
14	6	99.8%

As to the average number of respective hearings, claims vary primarily in terms of the resolution type that they result in. Figure 2.6 shows the mean number of hearings per claim for each resolution type. It is to be expected that generally, resolutions requiring more judicial activity, such as awards or docketed settlements, will require a higher number of hearings on average. Docketed settlements should see an average close to 1.[5] Only rarely did a judicially initiated claim with a non-judicial resolution ever have a hearing held, with an average under **0.26** hearings.

[5]The number for hearings on average for undocketed settlements is not exactly equal to 1 due to a small number of claims that end up having a second hearing for some reason or other after the settlement is initially approved.

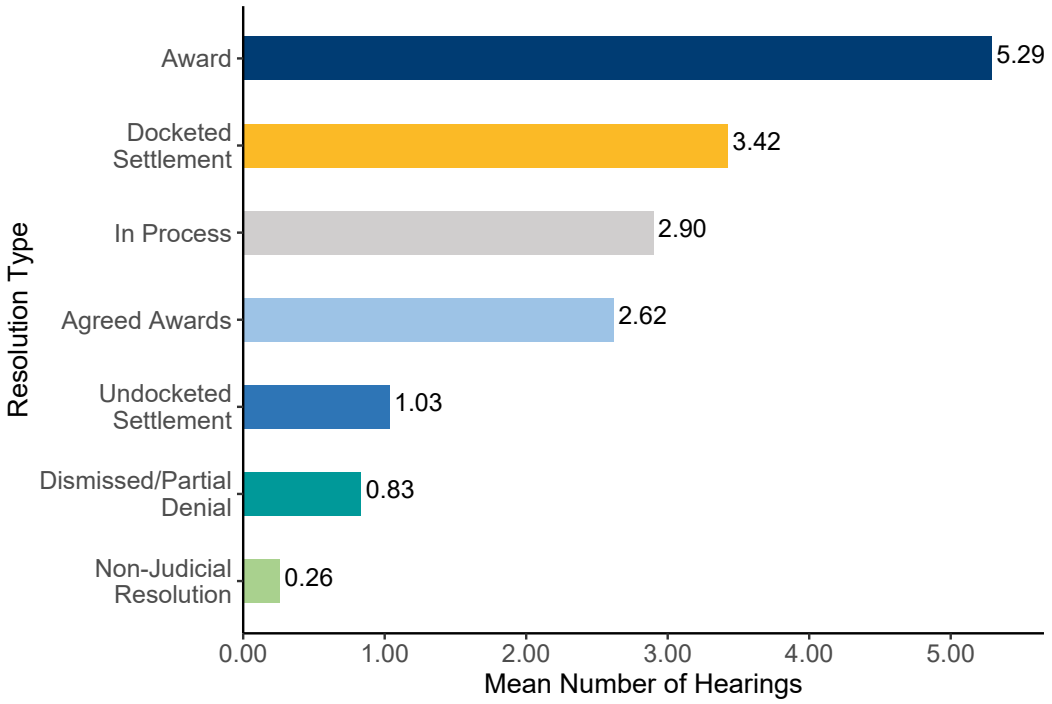

Figure 2.6: Mean Number of Hearings per Claim by Resolution Type

2.3 Judical Time of Closed Claims

This section reports the amount of time that judicially initiated claims spent in the judicial system. Due to the widely varying nature of injuries and costs, claims vary as to the extent of time in the judicial process that is required to mediate them. For the purposes of the present study, the "judicial time" of a claim, or time that a claim spends in the judicial system, is defined here as the number of days between the first official judicial filing and the earlier of 1) the claim closure date or 2) the last judicial resolution point (the most recent acceptance or rejection of a matter involving benefits dispensation; includes settlement dates, (agreed) award approval dates, dismissal or denial orders, or otherwise date most recent hearing was held).

Table 2.2 shows the count of claims in the study resolving within a corresponding range of years, along with the cumulative percentage of claims that lasted that length of time. As can be seen, the largest proportion of the judicially initiated claims (**853**, or **24.6%** of judicially initiated claims) spent **0 - 1** years in the judicial system followed closely by those that spent **1 - 2** years in the system (**676**, or **19.5%** of judicially initiated claims) Only infrequently did a claim in the study last longer than four years, with **95.2%** of all claims resolving before four years had passed. The longest running claim closed in **2021** lasted **18.2** years (specifically, **6643** days, roughly **18 years, 2 months**).

Table 2.2: Count of Claims by Length of Judicial Time in Years, with Cumulative Percentage of Total

Years	Number of Claims	% of Total
0 - 1	853	38.65%
1 - 2	676	69.28%
2 - 3	330	84.23%
3 - 4	161	91.53%
4 - 5	81	95.2%
5 - 6	39	96.96%
6 - 7	23	98.01%
7 - 8	13	98.6%
8 - 9	5	98.82%
9 - 10	7	99.14%
10 - 11	9	99.55%
11 - 12	2	99.64%
12 - 13	3	99.77%
13 - 14	2	99.86%
14 - 15	0	99.86%
15 - 16	1	99.91%
16 - 17	1	99.95%
17 - 18	0	99.95%
18 - 19	1	100%

Figure 2.7 shows the overall mean and median judicial time in days for judicially initiated closed claims, excluding undocketed settlements, which nearly always have a Judicial Time of zero due to the fact that the day that they were officially filed being identical to the settlement hearing date.[6] As noted above, there is a general disparity in judicial times between claims resulting in an undocketed settlement and claims resulting in other outcomes due to this difference in how undocketed settlements are filed.

[6]Undocketed settlements are excluded here because they obscure important patterns with respect to judicial times, due to the way that they are filed. The first official filling under the data management system in which they were entered was recorded as the same day as the settlement hearing itself, resulting in most such claims having a judicial time of zero days.

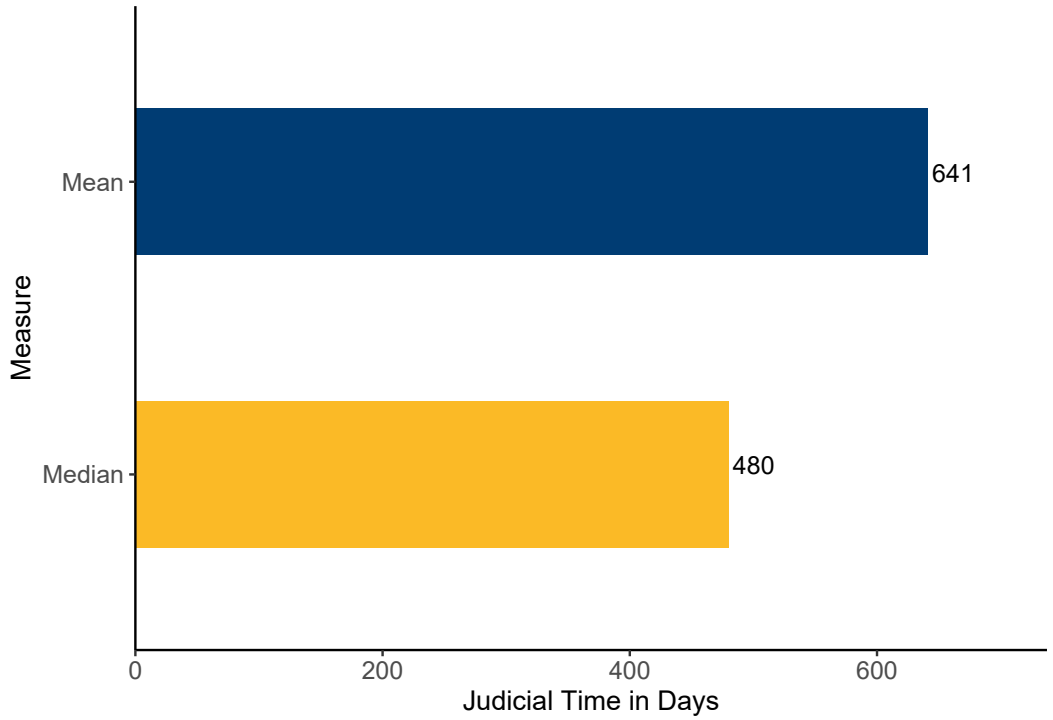

Figure 2.7: Overall Mean and Median Judicial Time in Days (Excluding Undocketed Settlements)

As seen in Figure 2.7, on average, judicially initiated claims in the study (other than undocketed settlements) spent **641** days (**1.8** years) in the system, while the median judicial time for the same claims was **480** days (**1.3** years). However, the typical time that a claim spends in the judicial process varies widely, depending especially on the type of resolution involved.

Figure 2.8 shows the mean and median judicial time in days broken down according to resolution type. Claims that resulted in **Award** (mean **1459.9** days, median **1143** days) spent the longest time in the system, with **Undocketed Settlement** (mean **177.1** days median **57** days) spending the least.

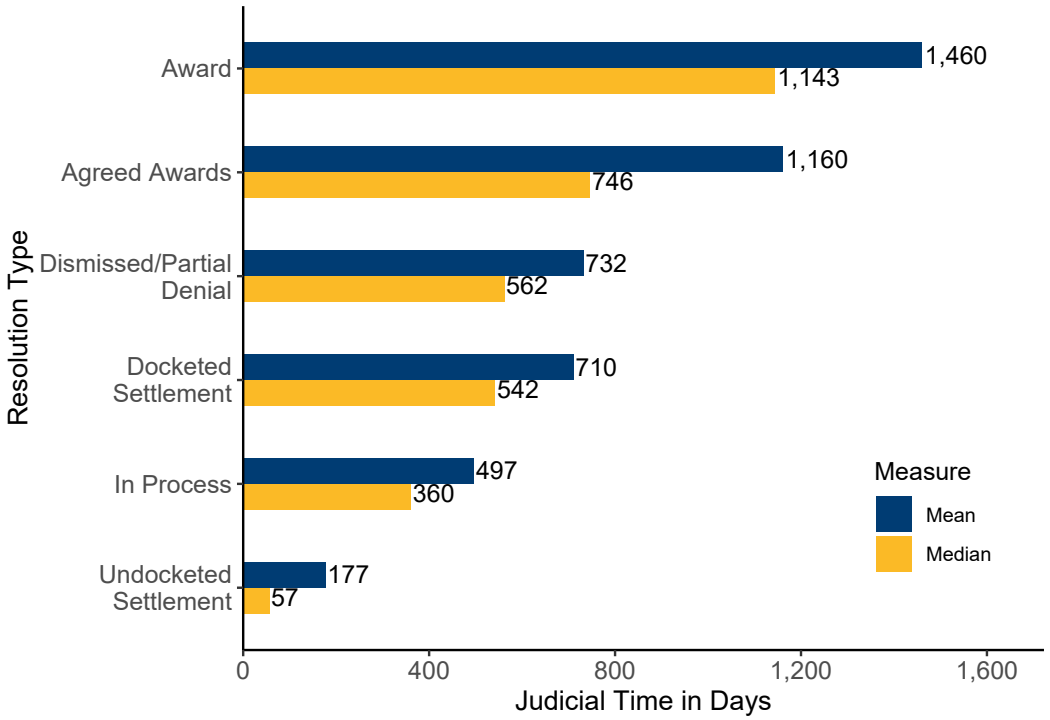

Figure 2.8: Mean and Median Judicial Time in Days by Resolution Type

2.4 Costs Associated with Judicial Outcomes

This section reports basic information regarding the cost of judicially initiated closed claims. There are differences in overall claim costs depending on the path to resolution of a claim, and on the type of resolution that is reached. In general, claims requiring more judicial intervention tend to cost more.

Figure 2.9 shows the mean and median total overall claim cost by resolution path. Claims that are **Judicially Resolved** had the highest average and median cost (**$54,627.53** and **$32,520.30**) Claims that are **Not Judicially Resolved** were substantially less costly than the other categories, in both mean and median (**$10,966.01** & **$4,084.32**).

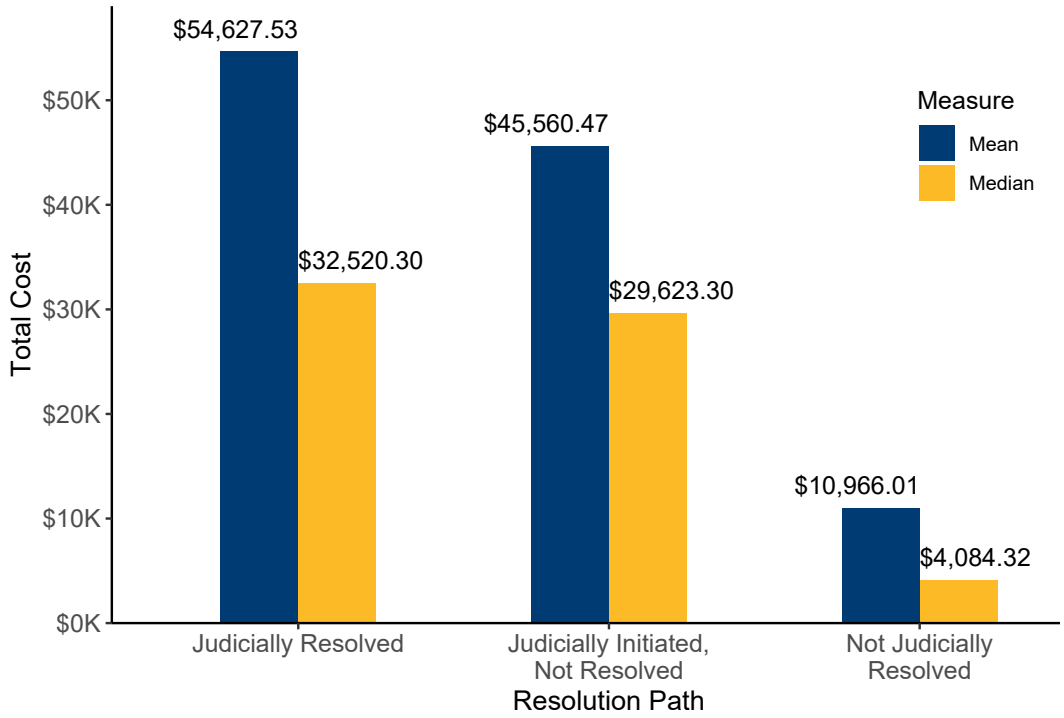

Figure 2.9: Mean and Median Total Claim Cost by Resolution Path

Figure 2.10 shows the mean and median total overall claim cost broken down by resolution type. Claims with the **Dismissed/Partial Denial** resolution type had the highest total cost in terms of mean (**$136,123**), with a median value of **$44,930.98**.

Figure 2.10 shows median total indemnity and total medical cost of claims according to the resolution type. In general, the median cost of indemnity and medial benefits are often comparable for a given claim resolution type. when one cost type is higher for one resolution type, compared to another resolution type where the other cost type is higher, this flip of medical and indemnity costs are likely a result of a difference in the nature of claims that had that resolution type.

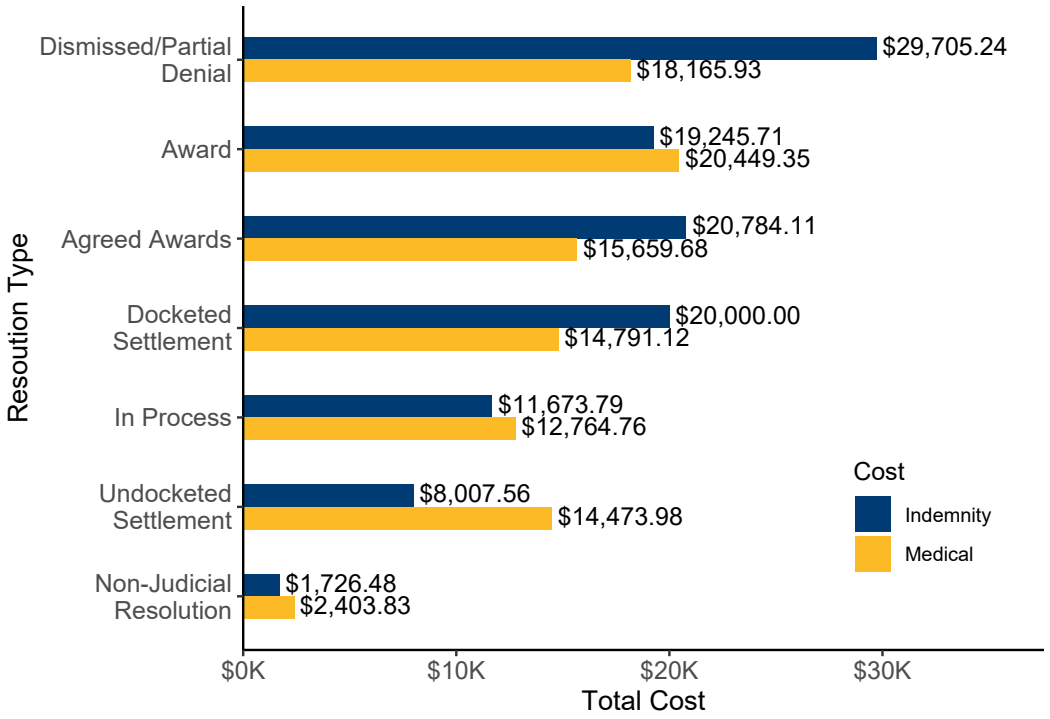

Figure 2.10: Median Total Indemnity and Medical Costs by Resolution Type

Appendix A: Data Set Variables

Claim-related variables

Qualitative

- Claimant characteristics
  - Age in Years
  - Gender
  - Annual Wage
  - Industry Classification (NAICS code)
- Injury characteristics
  - Type of Loss (Traumatic Injury, Occupational Disease, Cumulative/Repetitive Trauma)
  - Cause of Injury; how the injury occurred
  - Nature of Injury; how body part(s) and/or systems were affected
  - Body Part: which body part(s) and/or systems were affected

Quantitative

- Cost of individual benefit types
- Aggregated benefit costs (Total Benefits Paid, Indemnity Benefits Paid, Medical Benefits Paid, etc.)

Temporal

- Claim Time: the number of days between the submission date of the earliest First Report of Injury and the submission date of the final (SROI FN) report

Judicial process variables

Qualitative

- Resolution Type (Judicially Resolved, Judicially Initiated/Not Resolved, Non-Judicially Resolved)
- Resolution Path (Award, Undocketed Settlement, etc.)
  - Award: compensation determined by decision of an Administrative Law Judge

  - Agreed Awards: compromises that require oversight of an Administrative Law Judge
    * include true Agreed Awards, Joint Petition/Stipulation, Redemption Settlements
    * Docketed settlement: settlement arrived at after filing application for hearing
    * Undocketed Settlement: settlement approved without filing of application for hearing
  - Dismissed/Partial Denial: judiciary determines benefits to be partially denied, or case ultimately dismissed with no further benefits awarded. Involves cases for which benefits are paid, but claimant seeks further benefits through judicial process
  - Non-Judicial Resolution: benefits conferred without need for judicial intervention

Temporal

- Judicial Time: the number of days between the first official judicial filing and the earlier of the claim closure date or the last judicial resolution point (the most recent acceptance or rejection of a matter involving benefits dispensation; includes settlement dates, (agreed) award approval dates, dismissal or denial orders, or otherwise date most recent hearing was held).

Appendix B: Data Methodology

Beginning with the initial data set, Claims were removed if they did not meet a basic threshold for inclusion. Claims that did not have regular benefits reported on their Final (FN) summary EDI (Electronic Data Interchange) reports were excluded[7] ,as were all claims from a particular EDI trading partner who failed to report any medical payment information. We also excluded claims with certain types of claimant information. These included claims whose claim time was erroneously greater than 40 years, and claims with claimants having an annual wage less than $1500 or greater than $250,000. Finally, claims were excluded if they were later denied by judicial determination, rendering reported payment information inaccurate.

[7]The failure to include summary indemnity payment information on an indemnity claim indicates a serious reporting error. Because of the complexity of EDI reporting requirements, it is possible for indemnity claims to be closed with information missing on the final report. Claims administrators use a variety of reporting tools, some of which do not automatically calculate benefit summary information on reports.