

# Telehealth Services in the California Workers' Compensation System

March 2023

**WCIRB**  
California<sup>™</sup>  
Objective. Trusted. Integral.  
**REPORT**

Enter





# Table of Contents

<b>Background and Definitions</b>	<b>3</b>
<b>Report Summary</b>	<b>4</b>
<b>Research Question 1: What are the Overall Trends and Patterns of Telehealth Services?</b>	<b>5</b>
<b>Chart 1: Trend of Medical Payments for Telehealth Services</b>	<b>6</b>
<b>Chart 2: Use of Telehealth Services Compared to In-Person Services</b>	<b>7</b>
<b>Chart 3: Utilization of E/M Services</b>	<b>8</b>
<b>Chart 4: Types of Physician Services with the Highest Share Provided via Telehealth</b>	<b>9</b>
<b>Chart 5: Leading Types of Telehealth Service Providers</b>	<b>10</b>
<b>Chart 6: Telehealth Services by Region</b>	<b>11</b>
<b>Research Question 2: How do Claims Involving Telehealth Services Compare to Claims Involving Only In-Person Services?</b>	<b>12</b>
<b>Key Definitions</b>	<b>13</b>
<b>Chart 7: Injury Type</b>	<b>14</b>
<b>Chart 8: Injured Worker's Age</b>	<b>15</b>
<b>Chart 9: Leading Industry Sectors</b>	<b>16</b>
<b>Chart 10: Leading Medical Diagnoses by Share of Medical Payments</b>	<b>17</b>
<b>Chart 11: Leading Medical Diagnoses by Share of Claims with Telehealth Services</b>	<b>18</b>
<b>Chart 12: Median Time (Days) from Injury Date to First Service as E/M</b>	<b>19</b>
<b>Chart 13: Service Utilization by Type of First E/M Service</b>	<b>20</b>
<b>Chart 14: Share of Subsequent E/M Services Provided via Telehealth</b>	<b>21</b>
<b>More Info</b>	<b>22</b>
<b>Conditions and Limitations</b>	<b>26</b>
<b>Notice and Copyright</b>	<b>27</b>



# Background and Definitions

Use of telehealth services in the California workers' compensation system has increased dramatically in response to the COVID-19 pandemic, mostly driven by a growing demand for telehealth services as a result of the stay-at-home orders in 2020 and surges of COVID-19 infections. An expanded list of telehealth procedure codes was published by the Centers for Medicare & Medicaid Services (CMS) and adopted by the California Division of Workers' Compensation, allowing these procedures to be reimbursed at the same rate as in-person services, effective March 1, 2020. The adoption of the CMS's list intends to facilitate injured workers continuing to receive medical care while adhering to public health guidelines.

This study is an initial review of the characteristics of telehealth services provided in the California workers' compensation system and how claims involving telehealth services compare to claims involving only in-person medical services. Future research areas include efficacy of telehealth in improving access to care and in injured workers' medical outcomes, such as return to work. For the purpose of this study, telehealth services are defined as medical services provided via synchronous, real-time audio and/or video communication, including those in the CMS's list of telehealth procedure codes.



## Report Summary

**1** Use of telehealth services increased sharply during the early months of the pandemic, driving up the share of telehealth payments. Despite a gradual decline of telehealth service utilization in subsequent quarters, the overall usage and payments for telehealth services remained significantly higher in 2021 and 2022 than during the pre-pandemic period (**Chart 1** and **2**).

**2** The increased utilization of telehealth services is mainly concentrated in evaluation and management (E/M) services, which account for over 80% of all telehealth services provided during the pandemic (**Chart 3**).

**3** Psychotherapies and psychiatric evaluations have the highest share of services provided via telehealth (**Chart 4**). Claims involving mental and behavioral disorders are also more likely to use telehealth services (**Chart 11**).

**4** Compared to claims with in-person services only, claims with telehealth services are more likely to be indemnity claims (**Chart 7**) and are more common among somewhat younger injured workers and workers in the retail and healthcare industries (**Charts 8** and **9**).

**5** For indemnity claims that received E/M as the first service, the time from injury to the first E/M service is longer when the service is provided via telehealth than in-person (**Chart 12**). However, indemnity claims using telehealth E/M as the first service generally have lower service utilization (**Chart 13**).

**6** Indemnity claims using telehealth E/M as the first service are more likely to use telehealth E/M for subsequent care (**Chart 14**).



# 01

## What are the Overall Trends and Patterns of Telehealth Services?



## Chart 1

The share of medical payments for telehealth services increased sharply in the second quarter of 2020 with the outbreak of the COVID-19 pandemic and subsequent stay-at-home orders. Not surprisingly, the increase in telehealth payments was driven by increased utilization of telehealth services ([Chart 2](#)).

Despite the gradual decline in subsequent quarters, the share of medical payments for telehealth services remained significantly higher than during the pre-pandemic period.

# Trend of Medical Payments for Telehealth Services

Share of Medical Payments for Telehealth Services



[More Info](#)

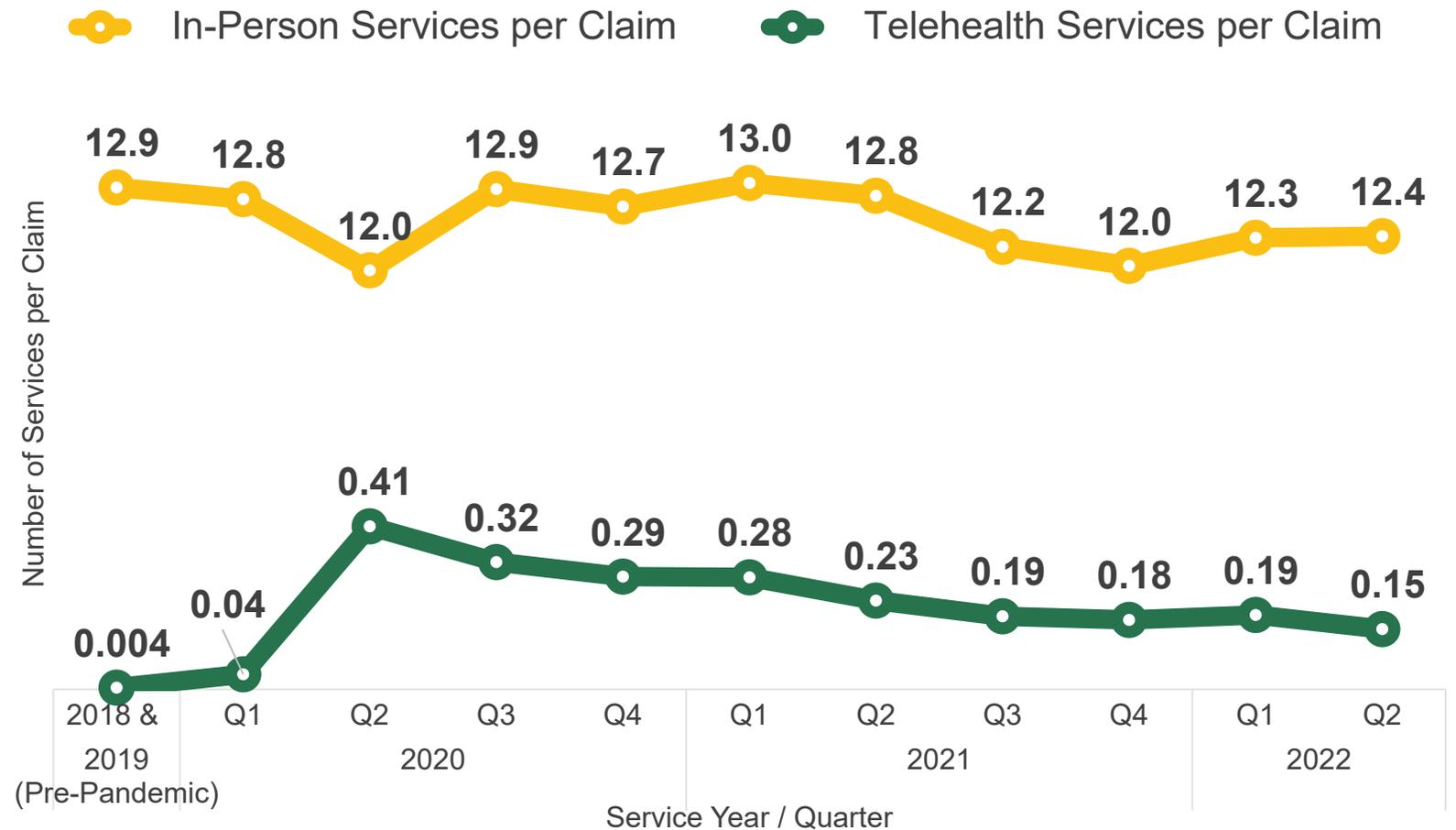


## Chart 2

The use of telehealth services increased significantly in the second quarter of 2020 and gradually declined in the following quarters. Despite the decline, telehealth usage by the second quarter of 2022 remained more than 30-fold higher than that of the pre-pandemic period, largely driven by the increased use of E/M telehealth services ([Chart 3](#)).

In contrast to the spike in telehealth utilization, use of in-person services dipped during the early months of the pandemic but returned to the pre-pandemic level by the third quarter of 2020.

# Use of Telehealth Services Compared to In-Person Services



[More Info](#)

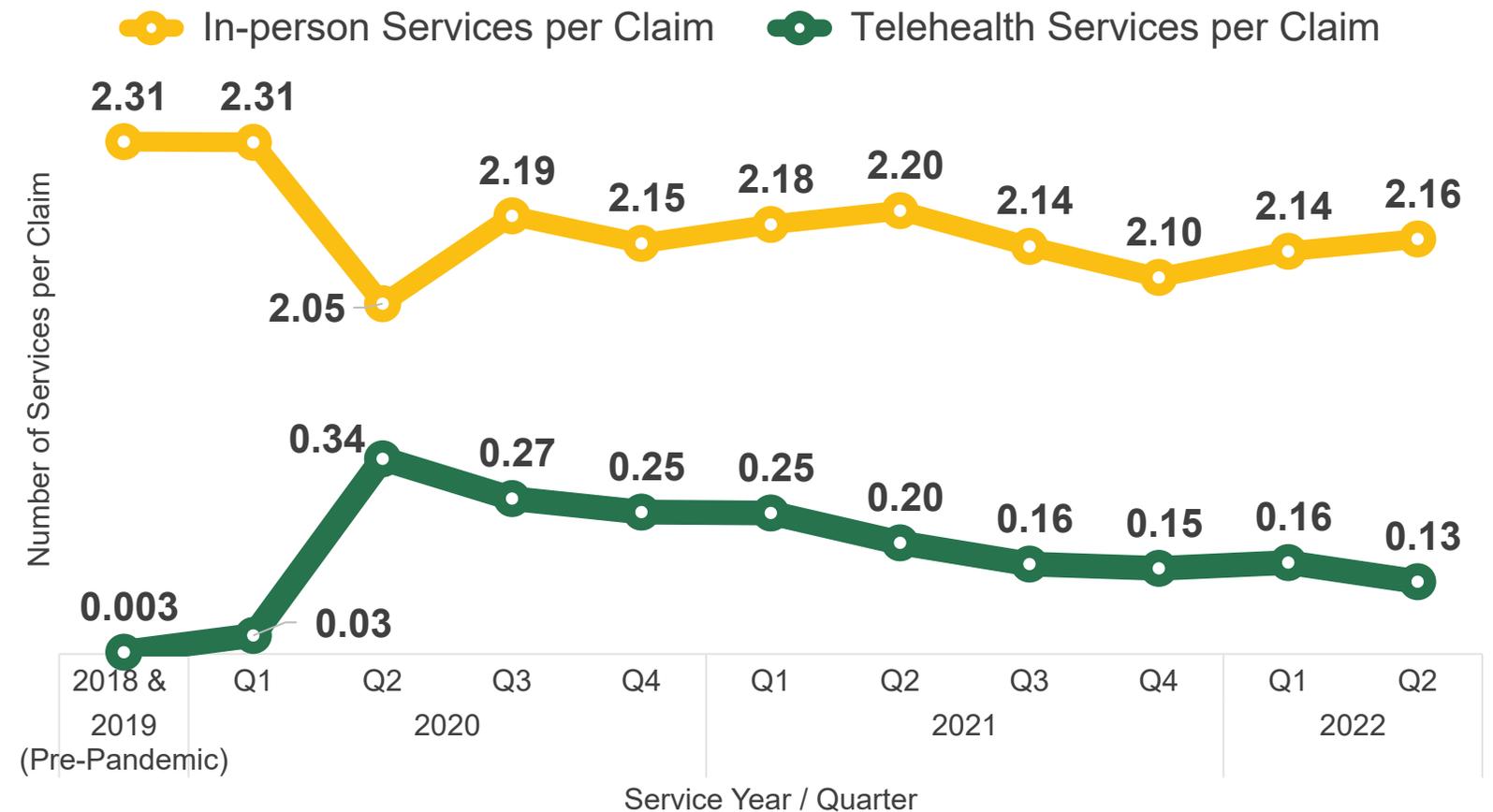


### Chart 3

E/M services, mostly office visits, were the leading type of telehealth service even before the pandemic and yet the share of telehealth services for office visits increased to over 80% during the pandemic. Its utilization pattern drives the overall pattern of telehealth utilization ([Chart 2](#)).

Some E/M services shifted from being provided in-person to via telehealth especially during the early months of the pandemic. This led to a sharp drop in the number of in-person E/M services in the second quarter of 2020 and lower-than-pre-pandemic-level utilization in subsequent quarters.

## Utilization of E/M Service - Telehealth vs. In-Person



[More Info](#)



## Chart 4

Almost 40% of psychotherapies and psychiatric evaluations were provided via telehealth, the highest among physician services. This is potentially because teletherapies are convenient and can provide additional comfort and privacy to patients seeking mental health treatments.

Follow-up office visits are the leading E/M services provided via telehealth, potentially due to the convenience of virtual visits and the fact that limited in-person intervention may be needed during the follow-up visit.

# Types of Physician Services with the Highest Share Provided via Telehealth

Share of Medical Services with Telehealth  
(Service Year 2020-2021)

**37%**



**Psychotherapy and  
Psychiatric  
Evaluation**

**26%**



**Health Behavior  
Assessment  
and Intervention**

**12%**



**Follow-up  
Office Visit**

**More Info**

## Chart 5

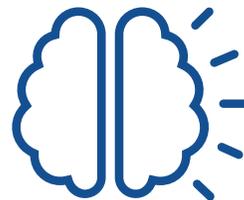
Medical care provided by Psychologists, Psychiatrists and Neurologists makes up the largest share of telehealth services (14%), consistent with the leading type of telehealth services in [Chart 4](#).

Other physician specialists, primary care providers and surgeons also used telehealth services during the pandemic, most likely for services or follow-up visits not requiring in-person contact.

# Leading Types of Telehealth Service Providers

Share of Medical Services with Telehealth  
(Service Year 2020-2021)

**14.2%**



**Psychology,  
Psychiatry  
& Neurology**

**5.8%**



**Physician Specialist**  
(e.g., Internal Medicine,  
Physical Medicine,  
Rehabilitation and Pain  
Management)

**3.0%**



**Primary Care  
Provider**

**2.5%**



**Surgeon**

## Chart 6

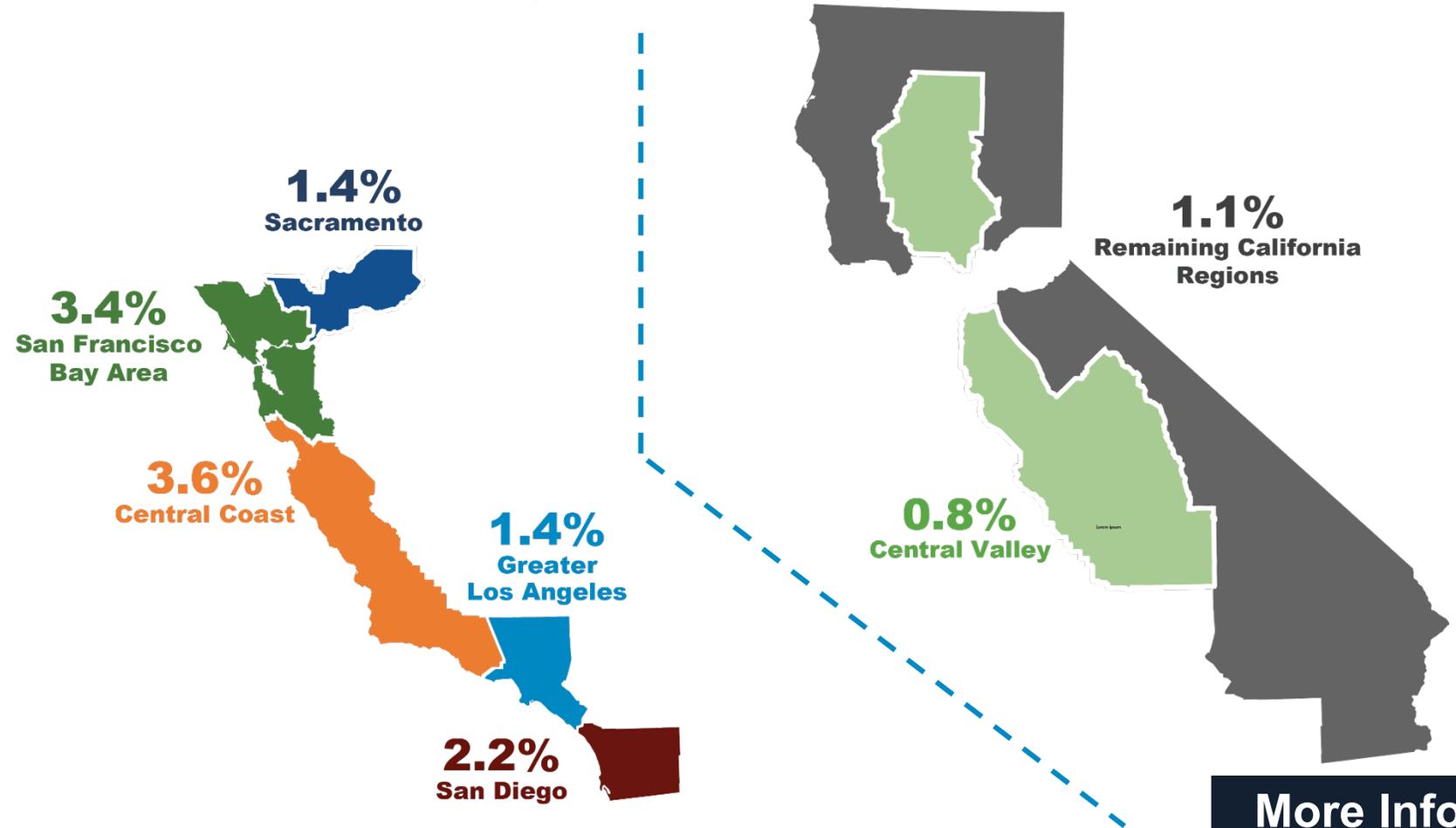
The top five regions that have a relatively high share of telehealth service payments are medium to large metropolitan areas, while the Central Valley and other remaining regions in California with a lower share of telehealth payments tend to be more rural.

The Bay Area has a much higher share of payments for telehealth services than the Los Angeles area, likely due to more accessible telehealth technologies for both injured workers and providers and different industry mix of workers.

# Telehealth Services by Region

## Share of Medical Payments for Telehealth Services by Region

(Service Year 2020-2021)



[More Info](#)



# 02

## How do Claims Involving Telehealth Services Compare to Claims Involving Only In-Person Services?



# Key Definitions

For the purpose of this study, **claims with telehealth services** are defined as claims involving a mix of telehealth and in-person services or only telehealth services; **claims with in-person services only** are defined as claims that do not receive any telehealth services but receive strictly in-person services. Both groups of claims excluded claims involving any inpatient services to address comparability issues given that inpatient care typically cannot be provided via telehealth.

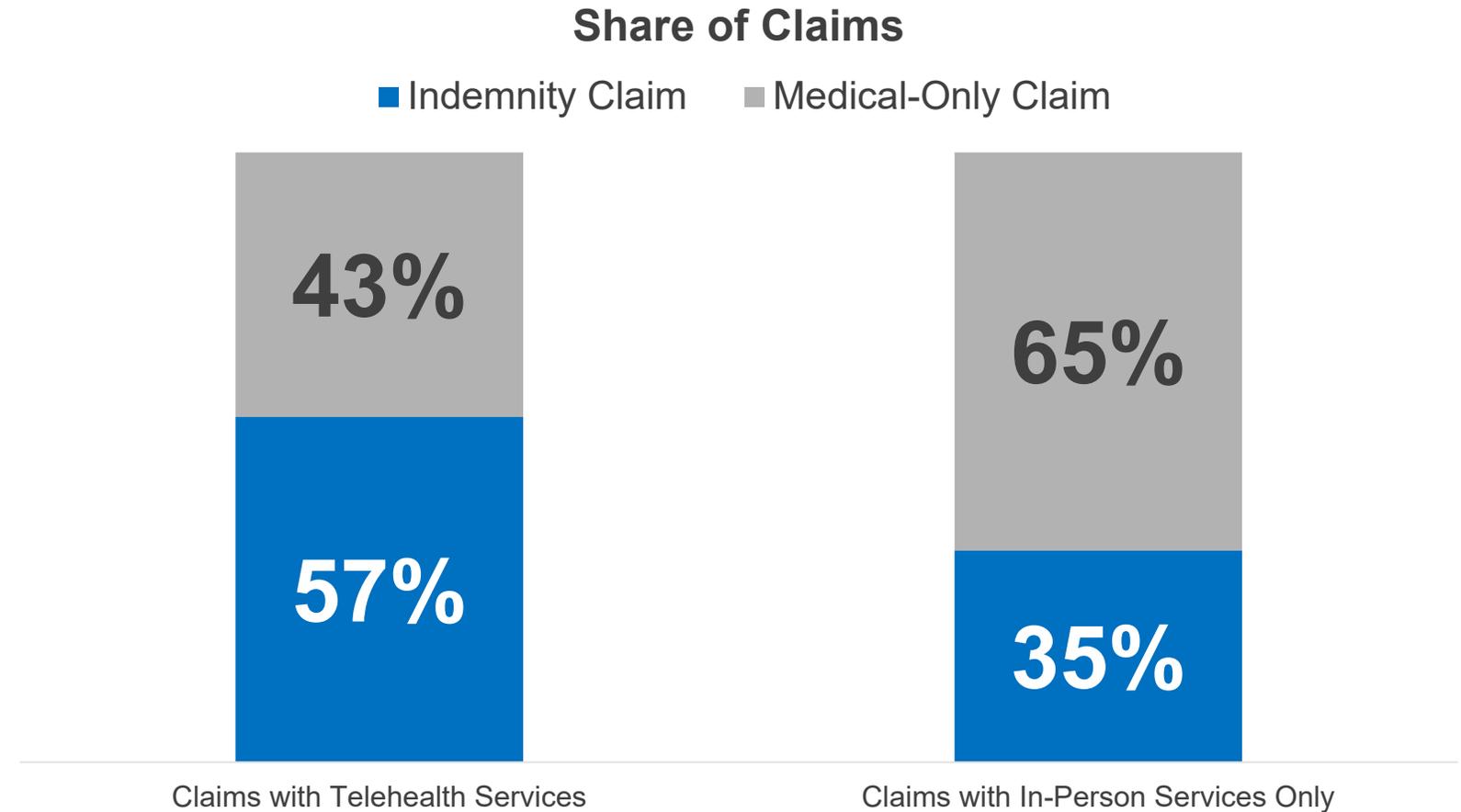
The comparison between the two groups of claims focuses on the first year of claim experience.



## Chart 7

Claims with telehealth services are more likely to be indemnity claims than claims with in-person services only. This may be because indemnity claims tend to require more medical treatments and as a result have more opportunities for receiving telehealth services.

### Injury Type





## Chart 8

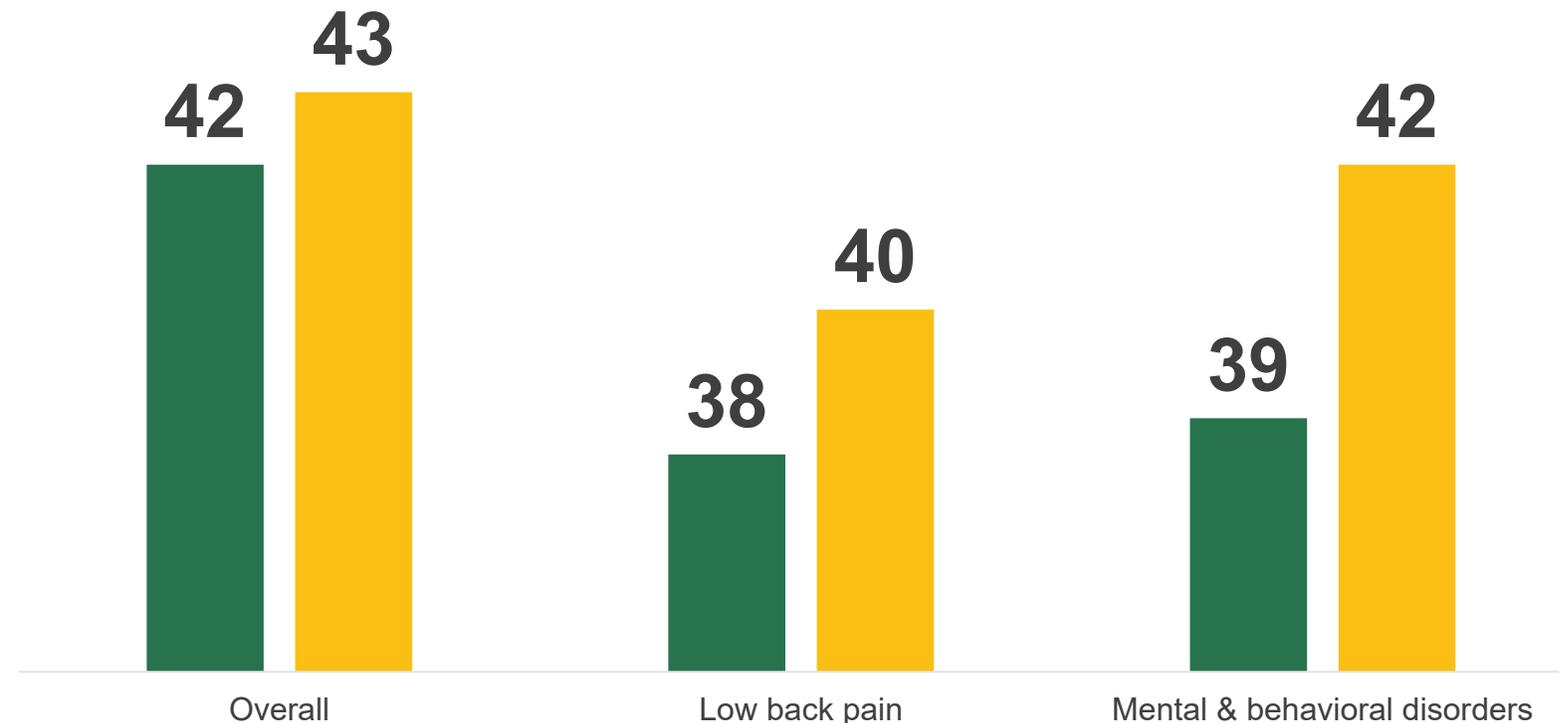
Overall, the median age of injured workers is similar between those with telehealth services and those with in-person services only.

However, the pattern is slightly different for injured workers who have low back pain or mental and behavioral disorders, which are the leading medical diagnoses for claims with telehealth services ([Chart 11](#)). For both diagnoses, workers using telehealth services tend to be younger than those using in-person services only. This may be partly due to younger patients being more familiar with telehealth technologies.

## Injured Worker's Age

### Median Age for Injured Workers with an Indemnity Claim

■ Claims with Telehealth Services ■ Claims with In-Person Services Only



[More Info](#)

## Chart 9

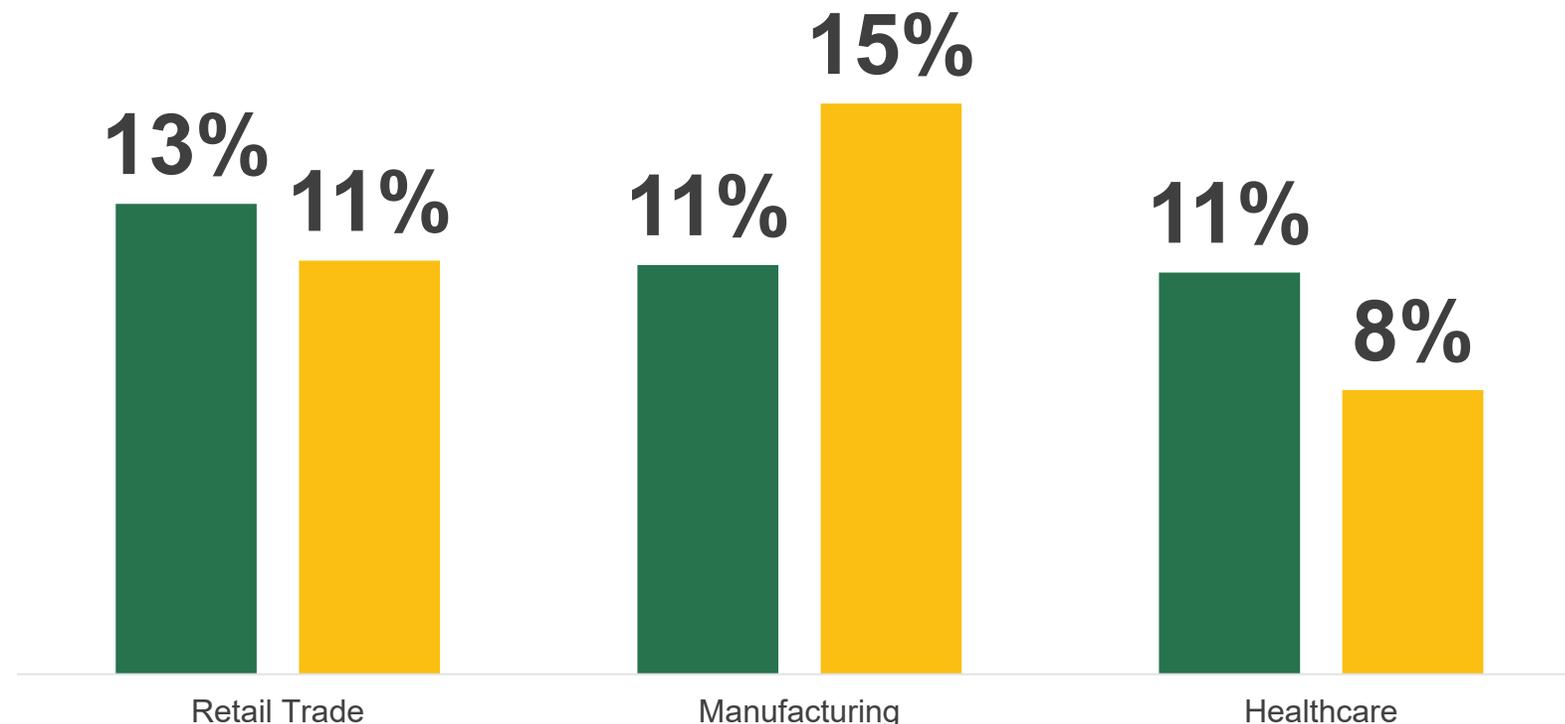
The retail trade industry has the highest share of claims with telehealth services compared to other industries. The manufacturing industry, on the other hand, has a lower share of claims with telehealth services.

Injured workers in healthcare are also more likely to use telehealth services, potentially because healthcare workers may be more familiar with and have better access to telehealth services.

## Leading Industry Sectors

### Share of Indemnity Claims

■ Claims with Telehealth Services ■ Claims with In-Person Services Only





## Chart 10

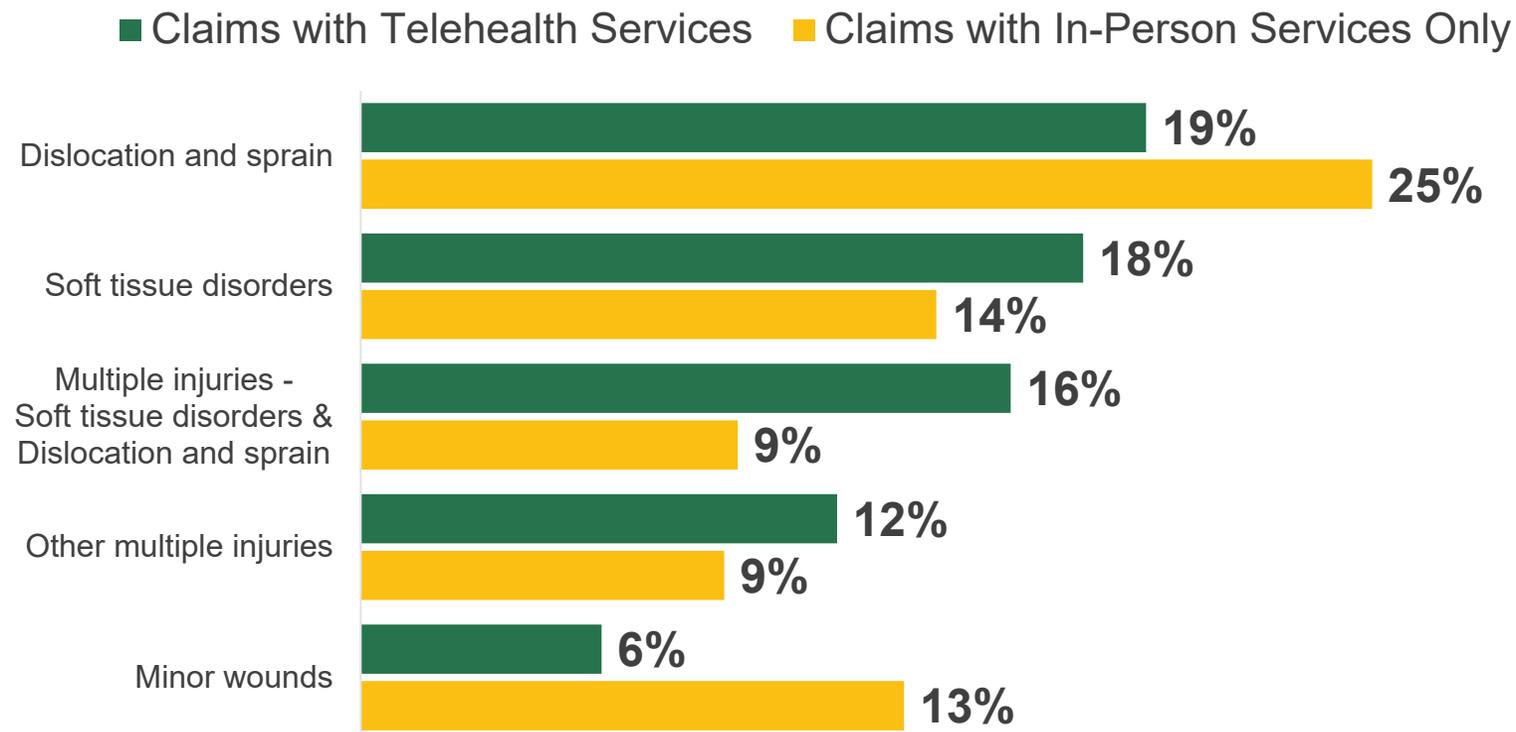
Overall, the leading medical diagnoses for claims with telehealth services and claims with strictly in-person services are similar.

Claims involving dislocation and sprain, soft tissue disorders and multiple injuries account for more than half of the medical payments for claims using telehealth services.

Claims involving dislocation and sprain and minor wounds have a lower share of telehealth payments, potentially because more in-person care is needed for those injuries.

# Leading Medical Diagnoses by Share of Medical Payments

**Share of Medical Payments**  
(Accident Year 2020-2021)



[More Info](#)



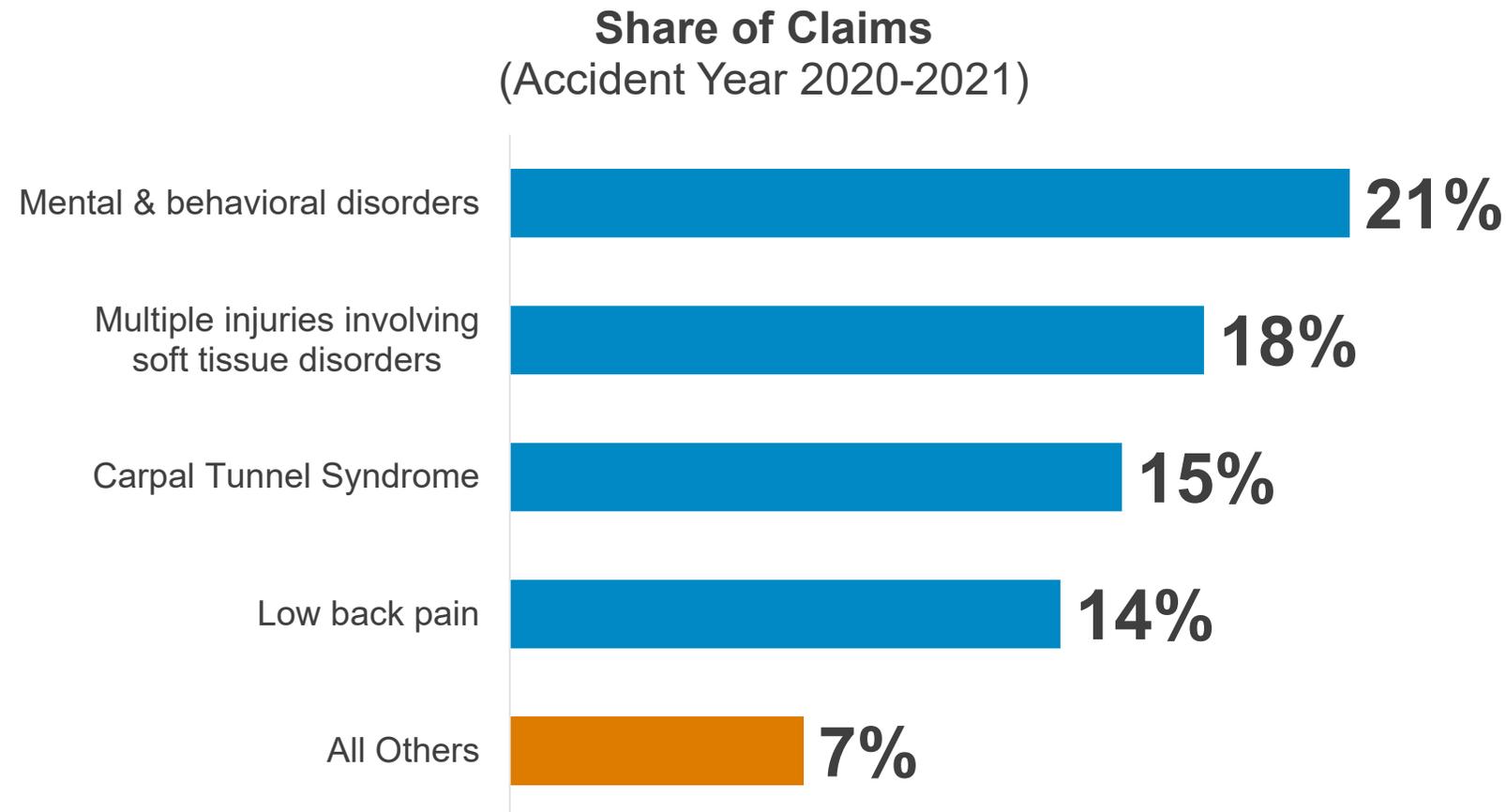
## Chart 11

More than one in five claims involving mental and behavioral disorders received medical care via telehealth. The pattern is consistent with [Chart 4](#), which shows psychiatric services as the leading type of telehealth services.

Claims involving multiple injuries of soft tissue disorders also tend to seek medical treatments via telehealth, in conjunction with in-person care to better manage more complex medical conditions.

Claims involving chronic pain conditions, such as carpal tunnel syndrome and low back pain, are also more likely to use telehealth services.

# Leading Medical Diagnoses by Share of Claims with Telehealth Services



[More Info](#)

## Chart 12

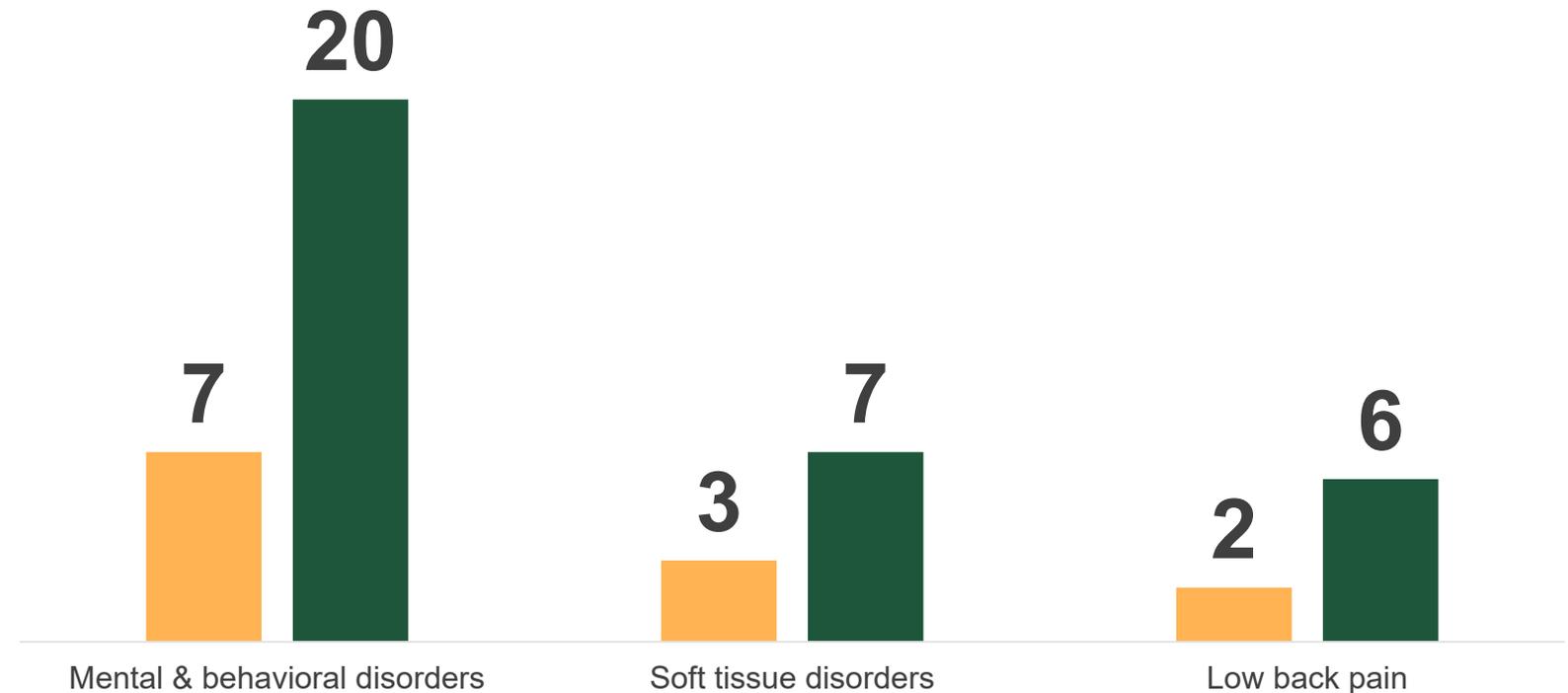
Overall, for claims that receive E/M as the first service and use telehealth services within the first year, the time elapsed between injury and the first E/M service is longer when the service is provided via telehealth. The pattern may be because claims using telehealth E/M as the first service are less likely to need urgent care.

Claims involving mental and behavioral disorders tend to take a much longer time to receive the first E/M service than claims involving soft tissue disorders or low back pain. The lag is longer if the initial service is provided via telehealth.

# Median Time (Days) from Injury Date to First Service as E/M

- Indemnity Claims with Telehealth Services

■ In-Person E/M as First Service    ■ Telehealth E/M as First Service



Leading Medical Diagnoses for Claims Using Telehealth Services

[More Info](#)



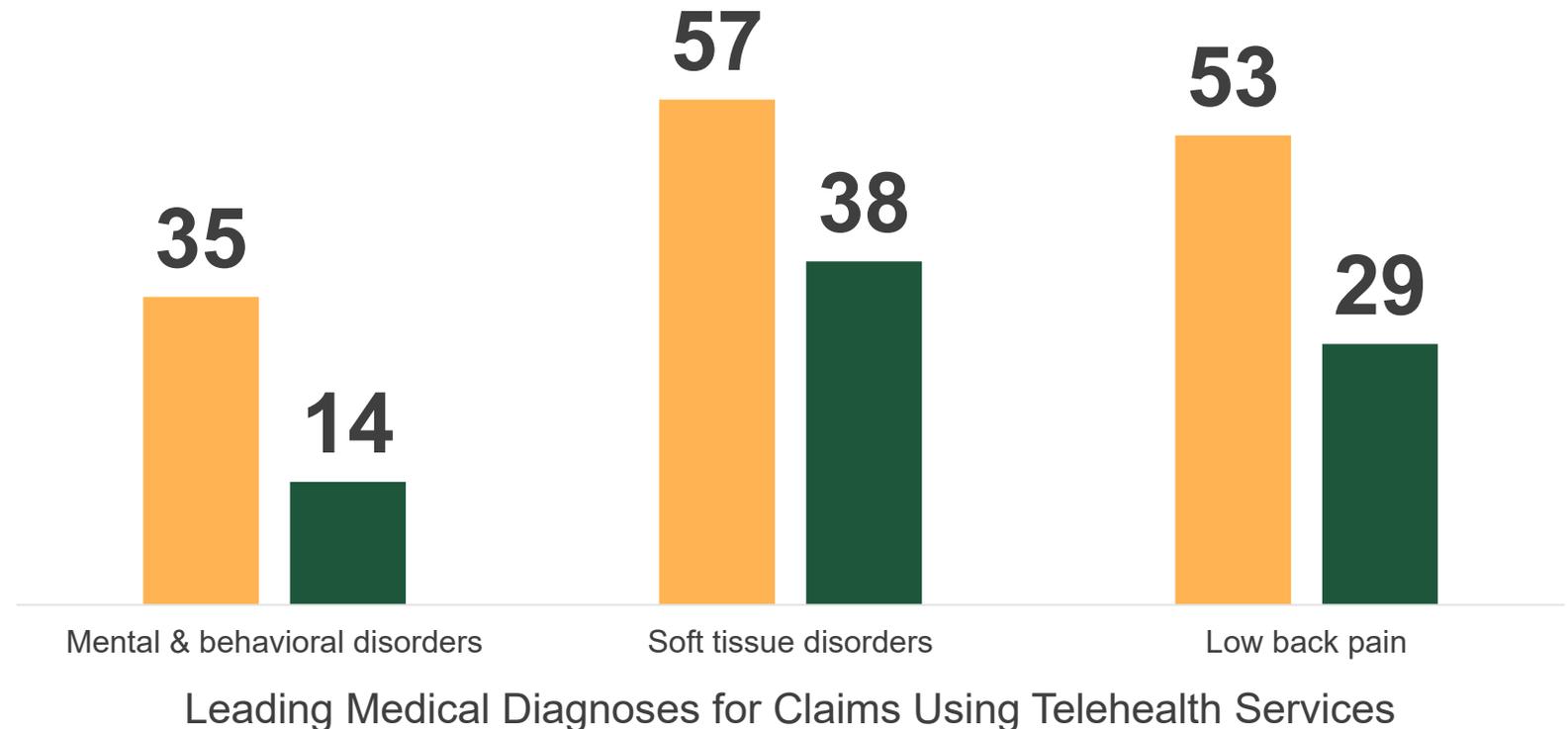
## Chart 13

Of all the three leading medical diagnoses in the study, indemnity claims with telehealth E/M as the first service have, on average, a lower number of medical services (including both telehealth and in-person services) per claim than those with in-person E/M as the first service, potentially because those who use in-person E/M as the first service may have more severe injuries and need more intensive care.

## Service Utilization by Type of First E/M Service - Indemnity Claims with Telehealth Services

### Number of Medical Services per Claim

■ In-Person E/M as First Service    ■ Telehealth E/M as First Service



[More Info](#)



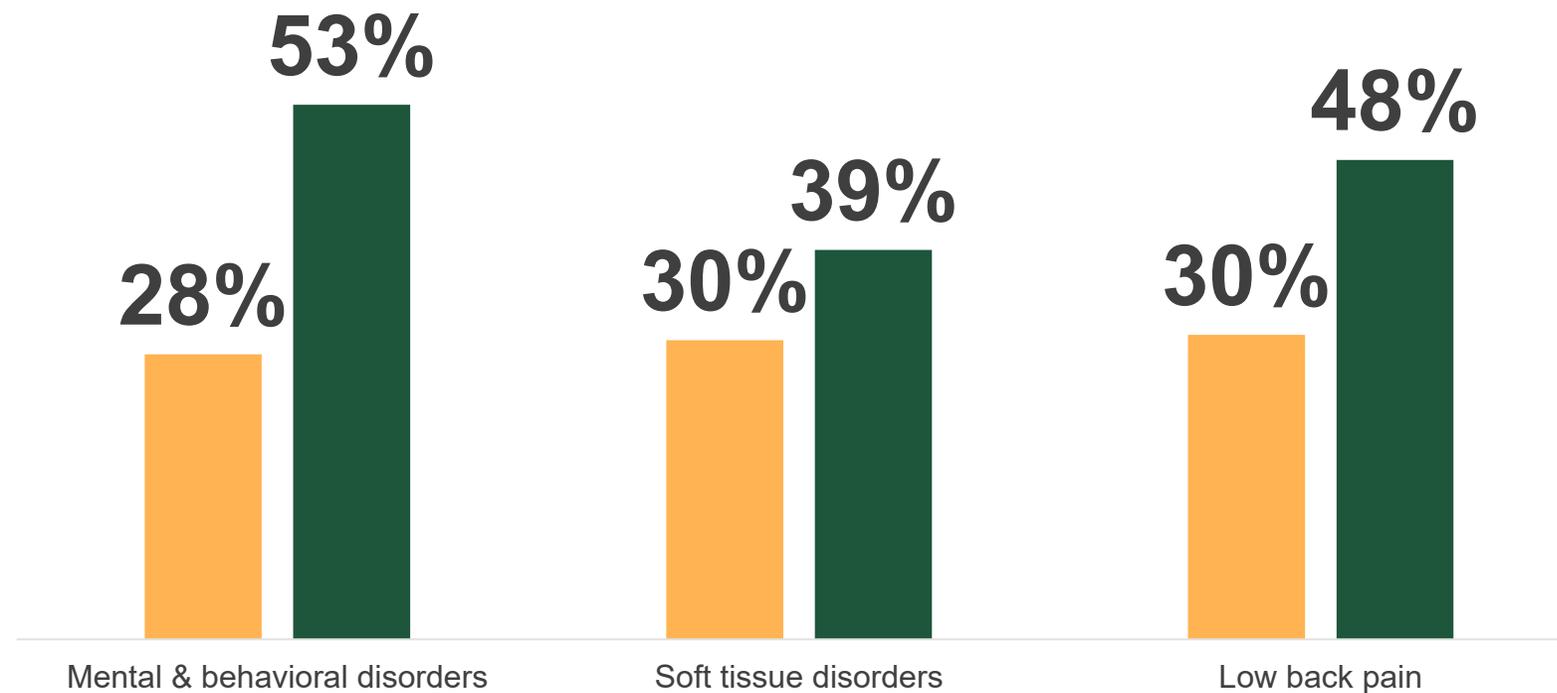
## Chart 14

Of the three leading medical diagnoses in the study, indemnity claims that have telehealth E/M as the first service are much more likely to receive subsequent E/M services via telehealth compared to only roughly 30% on claims with in-person E/M as the first service.

# Share of Subsequent E/M Services Provided via Telehealth

- Indemnity Claims with Telehealth Services

■ In-Person E/M as First Service    ■ Telehealth E/M as First Service



Leading Medical Diagnoses for Claims Using Telehealth Services

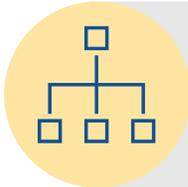
[More Info](#)



# More Info



## More Info



### Overall Source Data:

- Based on WCIRB medical transaction data for service years 2018 through 2022 as of January 7, 2023.
- For annual data, medical services are restricted to those paid for services provided during that year by July 7th of the following year.
- For quarterly data, medical services are restricted to those paid within the next quarter.
- Claims of accident years 2020 and 2021 are restricted to those with medical services provided within the same accident year.
- Specific data sources for values pulled throughout the report are listed for each chart. COVID-19 claims are excluded from the overall source data.



### Telehealth Services:

- Telehealth Services between January 2018 and February 2020 are defined as medical services with Place of Service code 02 or any non-surgical medical service with Modifier 95 (excluding medical liens, medical-legal, special reports, copy services, surgeries and interpreter services).
- Telehealth Services between March 2020 and December 2022 are defined as medical services with Place of Service code 02 or Modifier 95 on the list of telehealth procedure codes from the CMS, medical-legal services with Place of Service code 02 or medical services with Revenue code 0780.



### Claims with Telehealth Services

- Claims involving a mix of telehealth and in-person services or only telehealth services, the latter of which only account for 0.5% of claims with telehealth services. Claims involving hospitalization are excluded.



### Claims with In-Person Services Only

- Claims that do not receive any telehealth services but receive strictly in-person services. Claims involving hospitalization are excluded.



### COVID-19 Claims

- Identified using Nature of Injury code 83, Cause of Injury code 83 or Catastrophe Number 12 in WCIRB indemnity transaction data and WCIRB unit statistical data.



### Medical Diagnoses

- Developed for each claim based on a WCIRB algorithm using International Classification of Diseases (ICD) information, medical transactions and payment information during the first 90 days from the first- medical services on the claim.



### Cumulative Trauma (CT) Claims

- Claim with Loss Type code 02 or 03, or Nature of Injury code 71, 78 or 80 or early medical diagnosis involving carpal tunnel syndrome.



## More Info

### Research Question 1: What are the Overall Trends and Patterns of Telehealth Services?

#### **Chart 1: Trend of Medical Payments for Telehealth Services**

- Values represent the percentage of payments for telehealth services relative to all medical payments for each quarter.
- **Source Data**—WCIRB medical transaction data for service year 2018 through the third quarter of service year 2022.

#### **Chart 2: Use of Telehealth Services Compared to In-Person Services**

- Values represent the number of medical services relative to all claims with at least one paid service for each quarter.
- Services per claim for service years 2018 and 2019 are calculated based on the average quarterly services per claim over service years 2018 and 2019.
- **Source Data**—WCIRB medical transaction data for service year 2018 through the second quarter of service year 2022.

#### **Chart 3: Utilization of E/M Services – Telehealth vs. In-Person**

- Values represent the number of E/M services relative to all claims with at least one paid service for each quarter.
- E/M services per claim for service years 2018 and 2019 are calculated based on the average E/M services per claim per quarter for service years 2018 and 2019.
- **Source Data**—WCIRB medical transaction data for service year 2018 through the second quarter of service year 2022.

#### **Chart 4: Types of Physician Services with the Highest Share Provided via Telehealth**

- Values represent the number of telehealth services relative to all medical services in each physician service type. Procedures in each physician service type are based on the CMS's list of Telehealth Procedure Codes.
- Psychotherapy and psychiatric evaluation includes Current Procedural Terminology (CPT) codes 90832-90838, 90853 and 90791-90792. Health behavior assessment and intervention includes CPT codes 96156-96159. Follow-up office visit includes CPT codes 99212-99215 and 99441-99443.
- **Source Data**—WCIRB medical transaction data for service years 2020 and 2021.

#### **Chart 5: Leading Types of Telehealth Service Providers**

- Values represent the number of telehealth services relative to all medical services for each provider type. Provider type is based on the Taxonomy code reported on each medical transaction.
- **Source Data**—WCIRB medical transaction data for service years 2020 and 2021.

#### **Chart 6: Telehealth Services by Region**

- Region is based on the 3-digit zip code reported on each medical transaction and represents the medical provider's location.
- Values represent the number of telehealth services relative to all medical services within each region.
- **Source Data**—WCIRB medical transaction data for service years 2020 and 2021.



## More Info

### Research Question 2: How do Claims Involving Telehealth Services Compare to Claims Involving Only In-Person Services?

#### Chart 7: Injury Type

- **Source Data**—WCIRB unit statistical data and WCIRB medical transaction data for accident years 2020 and 2021.

#### Chart 8: Injured Worker's Age

- **Source Data**—WCIRB unit statistical data and WCIRB medical transaction data for indemnity claims only for accident years 2020 and 2021.

#### Chart 9: Leading Industry Sectors

- Industry sectors are based on the North American Industry Classification System (NAICS) sectors derived from a crosswalk between the reported classification codes and NAICS sector codes.
- **Source Data**—WCIRB unit statistical data and WCIRB medical transaction data for indemnity claims only for accident years 2020 and 2021.

#### Chart 10: Leading Medical Diagnoses by Share of Medical Payments

- Values represent the share of medical payments by medical diagnosis for claims with telehealth services or for claims with in-person services only.
- **Source Data**—WCIRB medical transactional data for accident years 2020 and 2021.

#### Chart 11: Leading Medical Diagnoses by Share of Claims with Telehealth Services

- Values represent the number of claims with telehealth services among all claims within each medical diagnosis.

- **Source Data**—WCIRB medical transactional data for accident years 2020 and 2021.

#### Chart 12: Median Time (Days) from Injury Date to First Service as E/M – Indemnity Claims with Telehealth Services

- Claims included in the chart are those with E/M as the first service.
- **Source Data**—WCIRB unit statistical data and WCIRB medical transaction data for indemnity claims only for accident years 2020 and 2021. CT claims are excluded.

#### Chart 13: Service Utilization by Type of First E/M Service – Indemnity Claims with Telehealth Services

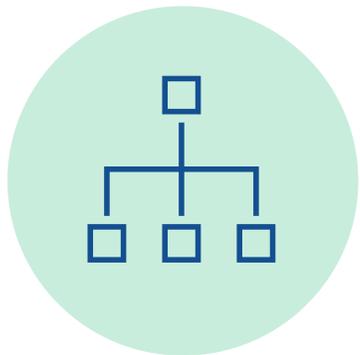
- Values represent the number of medical services relative to claims with in-person or telehealth E/M as the first service for each medical diagnosis.
- **Source Data**—WCIRB unit statistical data and WCIRB medical transaction data for indemnity claims only for accident years 2020 and 2021. CT claims are excluded.

#### Chart 14: Share of Subsequent E/M Services Provided via Telehealth – Indemnity Claims with Telehealth Services

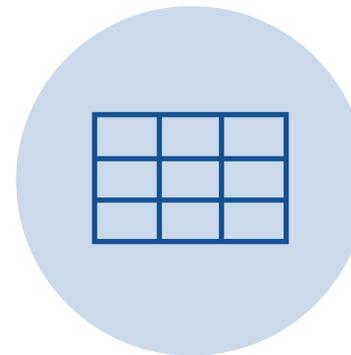
- Values represent the number of telehealth E/M services subsequent to the initial telehealth E/M service relative to all E/M services on claims with in-person or telehealth E/M as the first service.
- **Source Data**—WCIRB unit statistical data and WCIRB medical transaction data for indemnity claims only for accident years 2020 and 2021. CT claims are excluded.



## Conditions and Limitations



This information presented reflects a compilation of individual insurer submissions of information to the WCIRB. While the individual insurer data submissions are regularly checked for consistency and comparability with other data submitted by the insurer as well as with data submitted by other insurers, the WCIRB can make no guarantees with respect to the information provided by third parties.



WCIRB estimates were based on information available at the time of this study. If subsequent information becomes available that changes the basis of our assumptions, these estimates would be affected.



Unless otherwise noted, the information in this report is based on the reported experience of insured employers only and may or may not be indicative of the experience of the state as a whole including self-insured employers.



The amounts and ratios shown represent statewide totals based on the amounts reported by insurers writing workers' compensation insurance in California. The results for any individual insurer can differ significantly from the statewide average. An individual insurer's results are related to its underwriting book of business, claims and reserving practices, as well as the nature of its reinsurance arrangements.



## Notice and Copyright

The *WCIRB Telehealth Services in the California Workers' Compensation System* (Report) was developed by the Workers' Compensation Insurance Rating Bureau of California (WCIRB) for the convenience of its users. This Report contains information for a specific period of time and may not reflect long term trends before or after the specific period addressed in the Report. The WCIRB has made reasonable efforts to ensure the accuracy of this Report but cannot guarantee the accuracy of the data or the data source. You must make an independent assessment regarding the use of this Report based upon your particular facts and circumstances.

© 2023 Workers' Compensation Insurance Rating Bureau of California. All rights reserved.

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including, without limitation, photocopying and recording, or by any information storage or retrieval system without the prior written permission of the Workers' Compensation Insurance Rating Bureau of California (WCIRB), unless such copying is expressly permitted in this copyright notice or by federal copyright law. No copyright is claimed in the text of statutes and regulations quoted within this work.

Each WCIRB member company, including any registered third party entities, (Company) is authorized to reproduce any part of this work solely for the following purposes in connection with the transaction of workers' compensation insurance: (1) as necessary in connection with Company's required filings with the California Department of Insurance; (2) to incorporate portions of this work, as necessary, into Company manuals distributed at no charge only to Company employees; and (3) to the extent reasonably necessary for the training of Company personnel. Each Company and all agents and brokers licensed to transact workers' compensation insurance in the state of California are authorized to physically reproduce any part of this work for issuance to a prospective or current policyholder upon request at no charge solely for the purpose of transacting workers' compensation insurance and for no other purpose. This reproduction right does not include the right to make any part of this work available on any website or any form of social media.

Workers' Compensation Insurance Rating Bureau of California, WCIRB, WCIRB California, WCIRB Connect, WCIRB Inquiry, WCIRB CompEssentials, X-Mod Direct, eSCAD, Comprehensive Risk Summary, X-Mods and More, Annual Business Comparative and the WCIRB California logo (WCIRB Marks) are registered trademarks or service marks of the WCIRB. WCIRB Marks may not be displayed or used in any manner without the WCIRB's prior written permission. Any permitted copying of this work must maintain any and all trademarks and/or service marks on all copies.

To seek permission to use any of the WCIRB Marks or any copyrighted material, please contact the WCIRB at [customerservice@wcirb.com](mailto:customerservice@wcirb.com).

### Workers' Compensation Insurance Rating Bureau of California

1901 Harrison Street, 17<sup>th</sup> Floor  
Oakland, CA 94612  
888.CA.WCIRB (888.229.2472)

[wcirb.com](http://wcirb.com)



wcirb.com

**WCIRB** California™  
Objective. Trusted. Integral.

1901 Harrison Street, 17<sup>th</sup> Floor  
Oakland, CA 94612  
888.229.2472

