California Workers' Compensation Institute

Research Update

# Independent Medical Review Decisions: January 2014 through December 2020

By Robby Bullis and Rena David

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## Executive Summary

### Key Findings

- After increasing steadily from 2014 to 2018, the number of Independent Medical Review (IMR) determination letters issued in 2019 and 2020 fell sharply, declining from a record 184,725 letters in 2018 to 136,746 letters in 2020 – the lowest level since IMR first took effect. This 26.0 percent decline is likely due to the combined effect of reforms and the drop in workers' compensation claims and medical services in 2020, following the government lockdowns in response to the pandemic.

- Prescription drug requests again topped the list of medical services submitted for IMR, representing 39.1 percent of the 2020 IMR decisions, though that proportion is down from 49.9 percent of decisions in 2015. Opioid requests made up 28.3 percent of the 2020 pharmaceutical IMRs, down from 30.9 percent in 2019. IMR physicians continued to uphold about 90 percent of the UR denials and modifications of pharmaceutical requests, including opioid requests.

- Overall, IMR physicians upheld Utilization Review (UR) modifications and denials 89.4 percent of the time in 2020, up slightly from the 88.2 percent uphold rate in 2019. IMR uphold rates by medical service category ranged from 80.7 percent for evaluation/management services to 91.3 percent for both injection requests and DMEPOS requests.

- Los Angeles County, the Bay Area, and the Central Valley accounted for 70 percent of the 2020 IMR determination letters. Los Angeles County saw the largest declines in both letter volume and percentage of letters, with 9,400 fewer letters in 2020 than in 2019 (-19.8 percent).

- In an estimated 11.5 percent of all 2020 IMR decisions the requested service had been approved as medically necessary by the UR physician, but modified to comply with the treatment guideline (typically to a lesser quantity). A closer look at IMRs in six service categories found that in 9.8 percent of the IMRs the service was approved by UR but the quantity or purchase arrangement was modified – with these types of modifications accounting for 17.8 percent of pharmaceutical IMRs and 18.9 percent of physical therapy IMRs.

- A small number of physicians continue to drive a high percentage of IMR requests, with the top 1 percent of requesting physicians (89 providers) accounting for 39.8 percent of the disputed service requests that underwent IMR in 2020, and the top 10 individual physicians accounting for 10.2 percent of the disputed service requests. Seven of the top 10 physicians in 2020 were also on the top 10 list for 2019.

## Background/Objective

The goal of workers' compensation medical treatment is to provide injured workers with reasonable and necessary medical care to cure or relieve the effects of their injury and bring them to their maximum possible health and functioning – ideally so that they can return to work as soon as possible. In California, the presumption is that the best way to achieve this goal is to follow evidence-based medicine guidelines, which provide clinical rationale to determine whether requested medical services are necessary, effective, and appropriate. The guidelines adopted by the state in the Medical Treatment Utilization Schedule (MTUS) are presumed correct unless patient-specific factors warrant alternative treatments that are supported by other nationally recognized, peer-reviewed, evidence-based guidelines.

UR is the avenue of oversight used by claims administrators to ensure that the care provided to injured workers meets evidence-based medicine standards for medical necessity. In 2003, state lawmakers included a provision in SB 228 mandating that every workers' compensation claims organization have a UR program governed by written policies and procedures consistent with requirements detailed in the Labor Code,[1] and that all UR programs be filed with the Administrative Director of the Division of Workers' Compensation. Following the adoption of regulations, implementation of the mandatory UR programs began in 2005. In 2008, the California Supreme Court expanded the scope of UR programs, ruling that all workers' compensation treatment requests must undergo UR.[2] That process may include prior authorization for certain treatment requests as outlined in the written UR program, or simple review and approval by a claims examiner or other non-physician. However, only a physician may deny or modify a treatment request. Thus, any request that is not approved in the initial review, or that is not subject to prior authorization, is subject to review for medical necessity by a physician who uses the evidence-based guidelines to decide whether to authorize, modify or deny the treatment.

UR programs address not only the types of medical services appropriate for a specific injury or illness, but the modality, frequency, duration, and setting in which the services are rendered. Most treatment reviewed in UR is approved, but in 2012 state lawmakers enacted SB 863, which included the adoption of the IMR process to allow an injured worker or their representative to dispute a UR modification or denial of treatment, submit additional evidence in support of the treatment request, and obtain an independent medical opinion on whether the service is medically necessary under evidence-based medicine standards. Prior to SB 863, treatment disputes were settled by administrative law judges; but with implementation of IMR in January 2013, responsibility for determining whether a disputed medical service request met the evidence-based clinical guidelines shifted to the IMR physician, along with the responsibility to protect injured workers from unproven, unnecessary, and potentially harmful treatment. In 2016, additional changes to the medical dispute resolution process were adopted after Governor Brown signed SB 1160, which amended Labor Code §4610 in order to streamline delivery of injured workers' medical treatment by reducing the types of services subject to prospective UR when provided within the first 30 days of injury. SB 1160, which took effect January 1, 2018, also mandated greater oversight of UR programs, including a requirement that all organizations providing UR services be accredited.[3]

[1] California Labor Code §4610.
[2] *State Compensation Insurance Fund. v. WCAB (Sandhagen)* (2008) 44 Cal. 4th 230, 186 P.3rd, 535, 79 Ca. Rptr. 3rd 171.
[3] Pending adoption of regulations defining the selection process for a non-profit accrediting organization, URAC accreditation is required (eff. July 1, 2018). Labor Code §4610(g)(4).

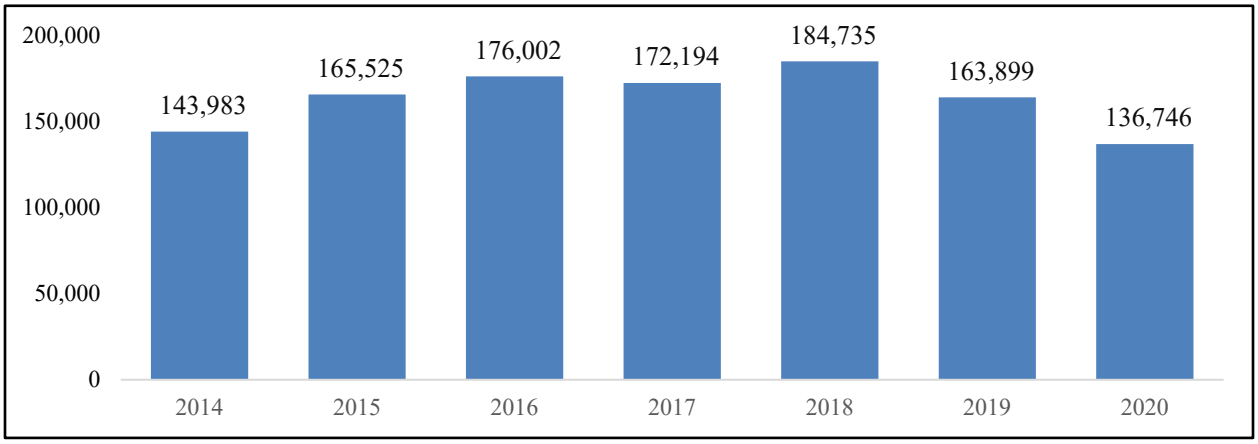
CWCI has tracked IMR volume and outcomes since the program's inception.[4,5,6] This report continues the research series by generating summary statistics compiled from 2014 to 2018 IMR determination letters. In addition to IMR volume, the authors examine shifts in the mix of services reviewed, regional variations, and the concentration of IMR activity among high-volume physicians named in IMR letters. The first part of the study reviews data on the determination letters; the latter part of the report focuses on the medical service decisions in the letters.

# Results

## Number of IMR Determination Letters

For this study, the authors reviewed data from more than 1.1 million IMR determination letters generated by Maximus, the Independent Medical Review Organization contracted by the state to manage the IMR process, from January 2014 through December 2020. As shown in Exhibit 1a, in 2014, the first year that the IMR process took effect, Maximus generated 143,983 IMR determination letters. Although state lawmakers who enacted IMR expected that IMR volume would diminish following an initial learning curve as physicians, attorneys, and others involved in the process adjusted to the new rules and gained an understanding of the types of treatment that would meet the evidence-based medicine standards, by the fifth year (2018), IMR volume hit an all-time high as the number of IMR determination letters climbed to a record 184,735 letters.[7] It was not until 2019 – six years after the IMR process was first put into place – that there was a significant decline in IMR volume, with the total number of IMR letters falling 11.3 percent from the 2018 peak. That decline accelerated in 2020 as the number of IMR letters fell another 16.6 percent to a 7-year low of 136,746.

**Exhibit 1a: Eligible IMR Determinations, Jan. 2014 – Dec. 2020**




[4] David, R., Jones, S., Ramirez, B., Swedlow, A. "IMR Outcomes in California Workers' Comp," CWCI Research Update, April 2015.

[5] David, R., Jones, S., Ramirez, R., and Swedlow, A. "Medical Review and Dispute Resolution in the California Workers' Compensation System," CWCI Research Update, Dec. 2015.

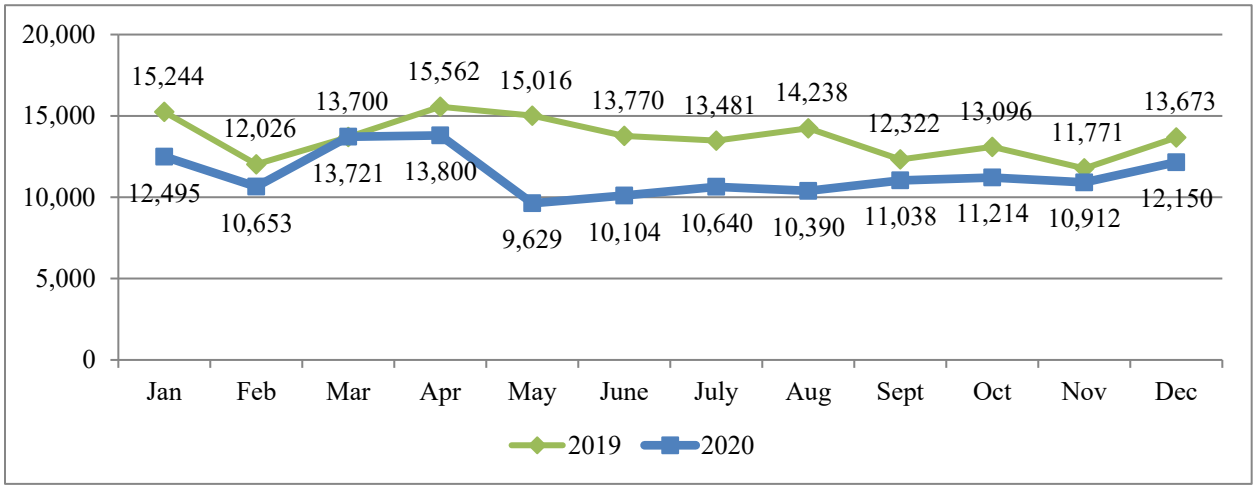
[6] David, R. "IMR Decisions, January through December 2015," CWCI Spotlight Report, Feb. 2016; David, R., 1st Quarter 2016 IMR Outcomes," CWCI Spotlight Report, June 2016; David, R. and Bullis, R., "IMR Outcomes: January 2014-June 2017." CWCI Spotlight Report, Sept. 2017.

[7] The numbers for 2014-2020 shown on this page are from the Division of Workers' Compensation on the Dept of Industrial Relations website. The CWCI analysis for January 2014-December 2020 reflects data compiled from 1,127,364 Final Determination Letters provided by Maximus, so the balance of the report is based on a 98.6 percent subset of the 1,143,084 letters reported by DWC for this period.

Exhibit 1b compares the number of IMR determination letters by month for calendar years 2019 and 2020. With the exception of March, when the number of letters was marginally higher in 2020, IMR letter volume was consistently lower throughout 2020 than in the corresponding months of 2019, with the biggest disparities occurring in May, June, July, and August, shortly after Governor Newsom issued and then amended his stay-at-home order affecting all California employees other than essential workers.[8]

During this period, unemployment in the state surged[9] and the state's Legislative Analyst's Office estimated that millions of California workers began working remotely.[10] At the same time, workers' compensation claim volume declined, driving down demand for workers' compensation medical services. Thus, the drop in the total number of IMR applications and determination letters in 2020 can be seen as both a continuation of the 2019 decline, as well as an aftereffect of the government lockdowns.

**Exhibit 1b: Eligible IMR Determination by Month, Jan. 2019 – Dec. 2020**




Two-thirds of the IMR determination letters issued in 2020 contained just one medical decision, though as has been the case in prior years, some of the determination letters included decisions on five or more treatment requests. The distribution of the 2020 IMR determination letters by the number of medical decisions within the letter is noted in Appendix A1.

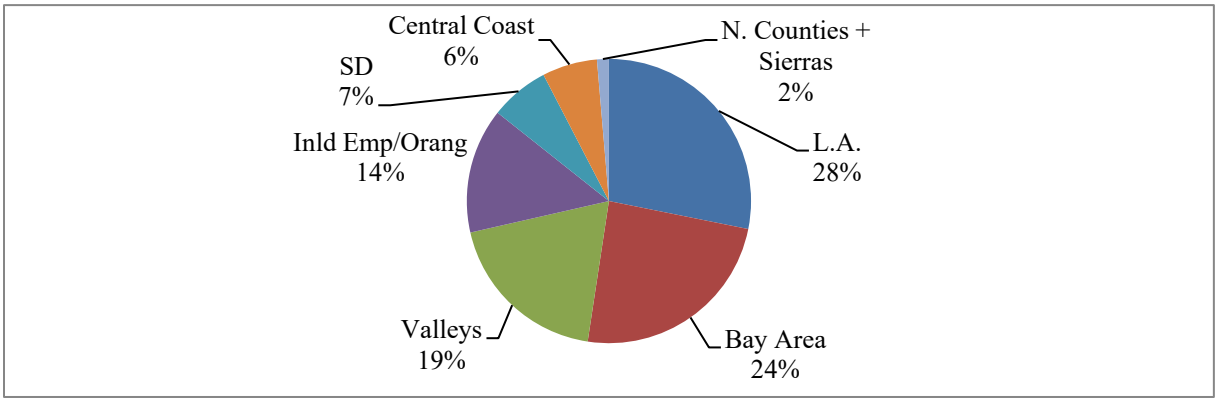
Among the 2020 determination letters, the average number of decisions per letter was 1.60, which was down only slightly from 2019. Over the entire 7-year span that the Institute has been monitoring IMR activity, the average number of decisions per determination letter has remained within a range of 1.60 and 1.86 decisions per letter (see Appendix A2). The change in the length of time needed to render an IMR decision (median and quartile number of days from the IMR application date to the date on the determination letter) is shown in Appendix A3, and as noted, the IMR response time in 2020 increased for the first time ever in 2020, albeit only slightly, which may be due to some extent to pandemic-related delays.

[8] Executive Order N-33-20, issued March 29, 2020; Executive Order N-60-20, issued May 4, 2020.
[9] According to the California Employment Development Department, the state's civilian unemployment rate during 2020 rose from 5.5 percent in March to 16.4% percent in April and May, then began to improve, falling to 14.9 percent in June and 11.2 percent in July.
[10] There is no statewide data available on the number of remote workers in California, but the Legislative Analyst's Office (LAO) estimates that 7.4 million Californians (40 percent of the work force) are employed in jobs that could be performed from home if the proper technology and other resources are available. LAO further notes that initial data suggest that most workers that it identified as remote workers have been able to work remotely during the pandemic. Alamo, Chas. "COVID-19 and the Labor Market: Who Are California's Frontline and Remote Workers?" California Legislative Analyst's Office, December 2020.

## Distribution of IMR Letters

Each IMR determination letter includes an address for the injured worker or their representative, enabling the authors to use the ZIP codes from the IMR determination letters to determine the prevalence of IMR in seven different regions of the state. Exhibit 2 shows that the volume of IMR letters was highest in Los Angeles County and the Bay Area, which together accounted for 52 percent of the letters issued last year.

**Exhibit 2: Distribution of 2020 IMR Letters by Region**




Exhibits 3a and 3b show the change in the volume of IMR letters by region between 2019 and 2020. Los Angeles County registered the biggest decrease in letter volume, with about 9,400 fewer letters in 2020 than in 2019. On a percentage basis, declines were fairly similar among all regions, ranging from a 12.3 percent decline in the Bay Area to a 19.8 percent decline in Los Angeles County.

**Exhibit 3a: Volume Change in IMR Letters from 2019 to 2020 by Region**

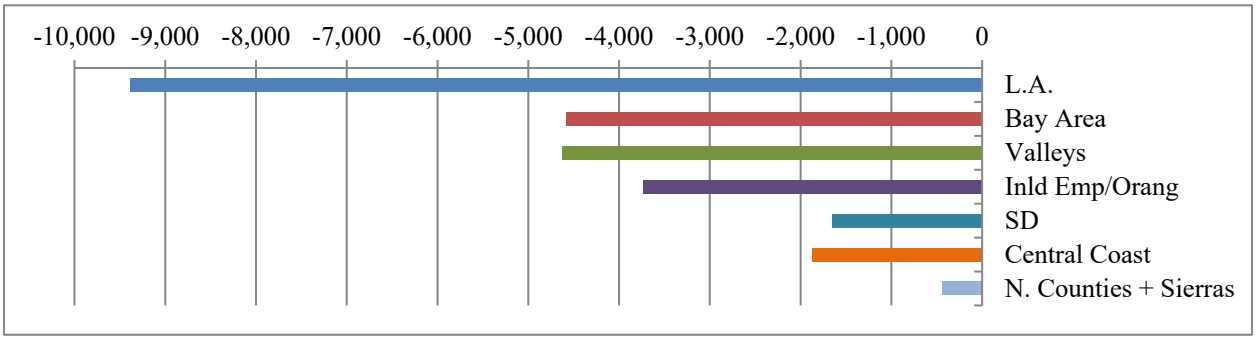
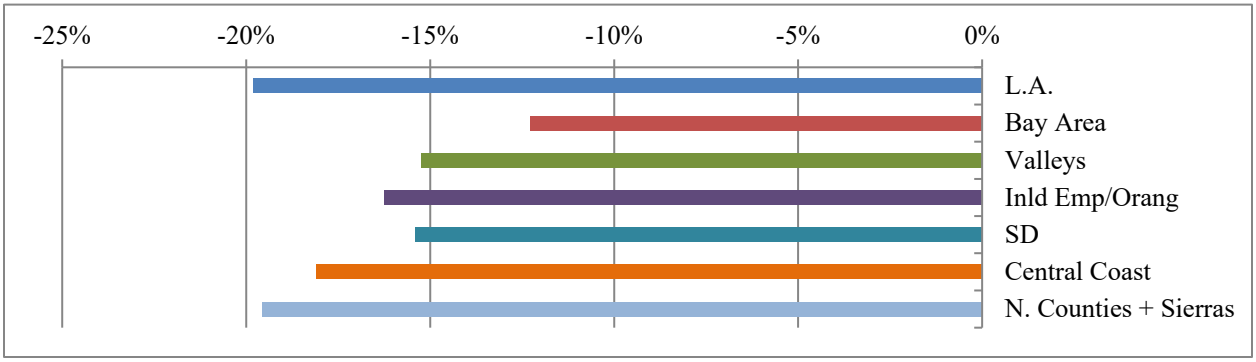



**Exhibit 3b: Percent Change in IMR Letters from 2019 to 2020 by Region**



## IMR Uphold Rates of UR Decisions on Primary Service Requests

After reviewing the medical records, applicable guidelines, and additional materials submitted in support of a medical service request, the IMR physician makes a finding as to whether the treating physician's request is medically appropriate, then issues a determination upholding or overturning the decision of the UR physician. The high uphold rates shown in Exhibit 4 offer evidence that UR decision-making typically adheres to the relevant guidelines. At the same time, in 2020 10.6 percent of UR decisions were overturned, demonstrating the value that IMR provides to injured workers who want a second opinion on the interpretation of guidelines and/or patient-specific factors that should drive exceptions.

### Exhibit 4: IMR Uphold Rates, Jan. 2014 – Dec. 2020

| | Number of Primary Service Decisions | | | | | | | Percent of Decisions | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Result** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| Upheld UR | 233,598 | 255,839 | 284,523 | 274,735 | 270,837 | 230,892 | 192,882 | 91.3% | 88.4% | 91.2% | 91.0% | 88.6% | 88.2% | 89.4% |
| Overturned UR | 22,389 | 33,479 | 27,442 | 27,276 | 34,707 | 30,808 | 22,914 | 8.7% | 11.6% | 8.8% | 9.0% | 11.4% | 11.8% | 10.6% |
| **Total** | **255,987** | **289,318** | **311,965** | **302,011** | **305,544** | **261,700** | **215,796** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

## IMR Distribution and Uphold Rates by Medical Service Category

Since IMR was first implemented in 2013, the types of services that undergo the process has remained fairly consistent, with pharmaceuticals remaining the highest volume category, accounting for 39.1 percent of all services reviewed in 2020. However, that proportion was down by nearly 11 percentage points from the peak level recorded in 2015, when pharmaceutical requests accounted for nearly half of all IMRs.

### Exhibit 5a: IMR Distribution by Medical Service Category, Jan. 2014 – Dec. 2020

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|
| **Service Requested** | % of Service Requests | | | | | | |
| Pharmaceuticals | 45.0% | 49.9% | 48.8% | 47.3% | 46.4% | 41.1% | 39.1% |
| Physical Therapy | 9.5% | 9.0% | 9.2% | 10.0% | 10.3% | 12.0% | 12.3% |
| Injections | 7.0% | 7.0% | 7.5% | 8.3% | 9.2% | 10.2% | 11.0% |
| DME/Prosth/Ortho/Supplies | 9.4% | 7.7% | 7.1% | 6.7% | 7.1% | 7.8% | 8.6% |
| MRI/CT/PET | 3.7% | 4.2% | 4.5% | 4.7% | 4.6% | 4.8% | 4.9% |
| Acupuncture | 2.1% | 2.2% | 2.3% | 2.5% | 3.0% | 3.7% | 3.8% |
| Surgery | 4.3% | 3.4% | 3.2% | 3.1% | 3.1% | 3.6% | 3.7% |
| Diagnostic Test / Measure | 4.6% | 3.5% | 3.5% | 3.4% | 3.4% | 3.2% | 3.0% |
| Chiropractic Manipulation | 1.8% | 1.6% | 1.7% | 1.7% | 1.7% | 2.2% | 2.2% |
| Evaluation / Management | 1.8% | 2.3% | 2.2% | 2.2% | 2.0% | 1.9% | 2.1% |
| Laboratory Services | 2.6% | 2.8% | 3.2% | 3.2% | 2.5% | 2.1% | 1.6% |
| Psych Services | 2.1% | 1.4% | 1.4% | 1.3% | 1.2% | 1.3% | 1.4% |
| Other | 6.1% | 5.1% | 5.3% | 5.6% | 5.5% | 6.1% | 6.1% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

As shown in Exhibit 5a, pharmaceuticals' share of the IMRs has now declined for five consecutive years, beginning in 2016, though most of that decline occurred after the ACOEM's Chronic Pain and Opioid Guidelines took effect in December 2017, and after the MTUS prescription drug formulary took effect in January 2018. A key goal of the formulary was to reduce prescription drug disputes by classifying drugs

as Exempt from prospective UR; Non-Exempt or subject to prospective UR; or Not Listed and subject to prospective UR; and to establish two subcategories of Non-Exempt drugs – Special Fill and Perioperative drugs – to allow for special circumstances or pre-and post-operative situations in which physicians can prescribe limited amounts of certain drugs that would otherwise be subject to prospective UR and IMR. With prescription drugs accounting for a declining share of the IMR disputes since 2018, physical therapy; injections; and DME, prosthetics, orthotics, and supplies have all seen their share of the IMRs increase by 1.5 to 2.0 percentage points.

Exhibit 5b shows that since 2014, uphold rates have been fairly stable across service categories, with the five highest volume categories having less than a 5 percentage point difference between the highest uphold rate year and the lowest uphold rate year.

**Exhibit 5b: IMR Uphold Rates by Medical Service Category, Jan. 2014 – Dec. 2020**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|
| **Service Requested** | **% Upheld** | | | | | | |
| Pharmaceuticals | 91.9% | 89.7% | 92.5% | 91.9% | 89.3% | 89.2% | 90.4% |
| Physical Therapy | 93.9% | 92.3% | 93.2% | 93.5% | 91.2% | 89.8% | 89.8% |
| Injections | 91.8% | 87.4% | 89.4% | 89.5% | 89.1% | 88.8% | 91.3% |
| DME/Prosth/Ortho/Supplies | 93.5% | 90.0% | 91.9% | 91.9% | 88.9% | 89.7% | 91.3% |
| MRI/CT/PET | 89.1% | 86.4% | 88.6% | 89.2% | 87.6% | 86.4% | 88.2% |
| Acupuncture | 94.1% | 91.6% | 93.6% | 93.9% | 92.7% | 89.7% | 87.8% |
| Surgery | 87.9% | 86.6% | 88.9% | 90.7% | 88.1% | 88.6% | 87.3% |
| Diagnostic Test / Measure | 87.8% | 84.5% | 91.3% | 91.3% | 89.0% | 86.7% | 88.6% |
| Chiropractic Manipulation | 95.3% | 90.7% | 92.0% | 93.8% | 92.2% | 89.0% | 86.8% |
| Evaluation / Management | 78.7% | 67.2% | 77.3% | 77.9% | 75.9% | 74.8% | 80.7% |
| Laboratory Services | 86.9% | 82.9% | 88.5% | 86.5% | 82.9% | 81.5% | 82.1% |
| Psych Services | 85.0% | 83.1% | 85.2% | 84.5% | 78.8% | 79.1% | 81.9% |
| Other | 89.8% | 85.5% | 88.5% | 87.8% | 84.9% | 85.4% | 87.7% |
| **Total** | **91.3%** | **88.4%** | **91.2%** | **91.0%** | **88.6%** | **88.2%** | **89.4%** |

The difference in uphold rates is also fairly consistent across most service categories, with 10 of the 13 categories ranging from 86.8 percent to 91.3 percent in 2020. As has been the case in every year, the 2020 data shows the IMR uphold rate was lowest (80.7 percent) for evaluation/management services, which are primarily requests for office visits and consultations, however requests for evaluation/management services accounted for only 2.1 percent of the services submitted for IMR in 2020.

Overall, the IMR uphold rate across all medical service categories rose by 1.2 percentage points last year, from 88.2 percent in 2019 to 89.4 percent in 2020. Comparing IMR outcomes by treatment category shows that between 2019 and 2020, uphold rates declined in only three categories: surgery, chiropractic manipulation, and acupuncture. The largest absolute change was a significant increase of 5.9 percentage points in the uphold rate for evaluation/management services. Results for the top three service categories, which together accounted for 62.4 percent of the 2020 IMR volume, show a 1.2 percentage point increase in the uphold rate for pharmaceuticals, no change in the uphold rate for physical therapy, and a 2.5 percentage point increase in the uphold rate for injections.

## Prescription Drug IMR Distribution and Uphold Rates by Drug Category

Disputes involving prescription drug requests can arise over a number of factors, including the appropriateness and strength of the drug, the quantity and duration of the prescription, and contraindications with other prescribed medicines. All of these factors are considered by UR and IMR physicians. Over 83,000 prescription drug requests went through IMR in 2020. In 90.4 percent of those cases, the IMR physicians upheld the UR physicians' modification or denial.

Exhibits 6a and 6b show the distribution of the pharmaceutical IMR decisions by therapeutic drug category and the uphold rates for the UR physicians' modification or denial. As in the past, requests for opioid painkillers topped the list in 2020, accounting for 28.3 percent of all pharmaceutical IMR decisions, though that was the lowest percentage since 2014. Requests for compounded drugs accounted for only 1.3 percent of the IMRs in 2020, down from 8.6 percent of the IMRs in 2014. Modifications and denials of the compounded drug requests were upheld by the IMR physicians in about 99 percent of the cases in all years.

**Exhibit 6a: Distribution of Rx IMR Decisions by Drug Type, Jan. 2014 – Dec. 2020**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|
| Service Requested | % of Service Requests | | | | | | |
| Analgesics-Opioid | 26.2% | 30.3% | 28.9% | 29.5% | 32.2% | 30.9% | 28.3% |
| Musculoskeletal Therapy | 12.0% | 11.9% | 12.6% | 12.9% | 14.3% | 15.4% | 16.7% |
| Dermatologicals | 10.5% | 9.5% | 10.3% | 11.4% | 10.9% | 12.8% | 14.8% |
| Anticonvulsants | 4.5% | 5.0% | 5.4% | 6.0% | 8.1% | 8.7% | 10.1% |
| Anti-Inflammatory | 6.4% | 7.5% | 8.7% | 9.7% | 7.5% | 6.3% | 6.4% |
| Antidepressants | 3.4% | 3.6% | 3.9% | 4.0% | 4.9% | 5.0% | 4.4% |
| Ulcer Drugs | 7.9% | 7.3% | 7.3% | 7.1% | 4.7% | 3.5% | 3.4% |
| Hypnotics | 3.6% | 3.9% | 3.7% | 3.1% | 2.7% | 2.4% | 2.0% |
| Antianxiety | 2.7% | 2.7% | 2.7% | 2.6% | 2.4% | 2.2% | 1.9% |
| Analgesics - Non-Narcotic | 0.5% | 1.1% | 1.4% | 1.8% | 2.2% | 1.9% | 2.1% |
| Compounded | 8.6% | 8.5% | 6.6% | 4.2% | 2.0% | 1.6% | 1.3% |
| Other | 13.6% | 8.8% | 8.4% | 7.7% | 8.2% | 9.3% | 8.7% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

**Exhibit 6b: IMR Uphold Rates by Drug Type, Jan. 2014 – Dec. 2020**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|
| Service Requested | % Upheld | | | | | | |
| Analgesics-Opioid | 90.7% | 88.0% | 90.3% | 90.1% | 89.5% | 90.3% | 90.9% |
| Musculoskeletal Therapy | 97.0% | 96.1% | 96.9% | 97.2% | 95.8% | 95.5% | 96.5% |
| Dermatologicals | 95.9% | 94.8% | 96.3% | 96.5% | 94.6% | 93.6% | 93.1% |
| Anticonvulsants | 84.3% | 80.4% | 86.8% | 87.5% | 80.5% | 81.9% | 86.0% |
| Anti-Inflammatory | 85.9% | 80.5% | 89.3% | 88.2% | 83.5% | 81.0% | 82.7% |
| Antidepressants | 76.5% | 73.0% | 83.3% | 81.8% | 75.8% | 74.8% | 79.7% |
| Ulcer Drugs | 88.3% | 89.0% | 93.0% | 91.8% | 88.3% | 87.8% | 86.7% |
| Hypnotics | 97.1% | 97.4% | 98.2% | 97.7% | 97.2% | 97.2% | 97.9% |
| Antianxiety | 97.9% | 96.3% | 97.2% | 95.1% | 94.4% | 92.5% | 94.5% |
| Analgesics - Non-Narcotic | 88.6% | 88.6% | 92.5% | 91.8% | 91.6% | 89.5% | 90.9% |
| Compounded | 99.0% | 99.3% | 99.5% | 99.3% | 98.9% | 98.8% | 99.3% |
| Other | 91.1% | 87.5% | 90.6% | 89.3% | 85.4% | 85.6% | 86.0% |
| **Total** | **91.9%** | **89.7%** | **92.5%** | **91.9%** | **89.3%** | **89.2%** | **90.4%** |

Anticonvulsants' share of the pharmaceutical IMRs showed the biggest increase over the past 7 years, climbing steadily from 4.5 percent in 2014 to 10.1 percent in 2020. That increase is likely tied to the increased demand for non-opioid painkillers, as the two most common anticonvulsants, gabapentin (common brand name Neurontin) and pregabalin (common brand name Lyrica), which together accounted

for nearly 90 percent of the anticonvulsants dispensed to injured workers in 2020, are often used to treat neuropathic pain. Musculoskeletal therapy drugs [*i.e.*, muscle relaxants such as cyclobenzaprine HCL (common brand name Flexeril), baclofen (common drug name Lioresal), and tizanidine (common brand name Zanaflex)] also accounted for an increased share of the pharmaceutical IMRs, with a notable increase beginning in 2018 when the MTUS prescription drug formulary took effect, as under the formulary nearly all of the musculoskeletal drugs are on the Non-Exempt drug list, making them subject to prospective UR.

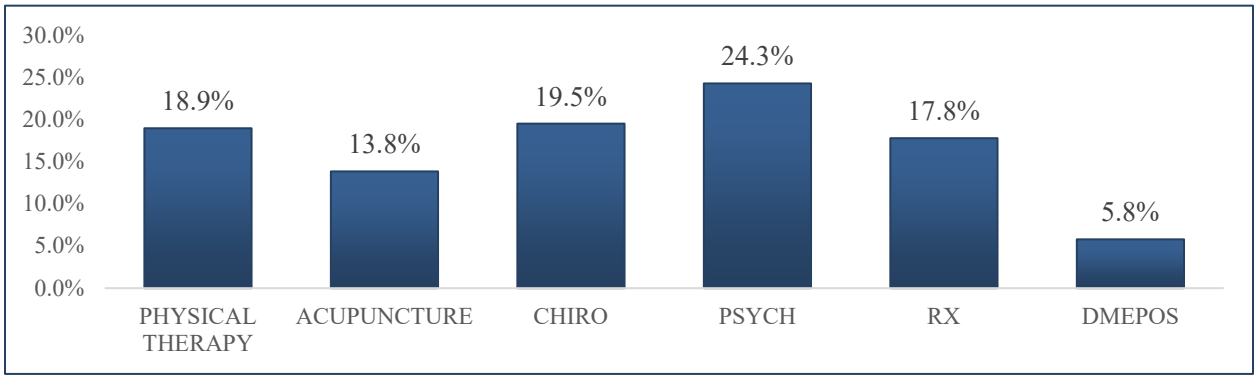
Dermatological drugs, which have ranked as the third most common drug category submitted for IMR in each of the past seven years also have seen their share of the pharmaceutical IMRs increase, and again, much of that increase occurred after the formulary took effect in 2018. The increase in IMR activity involving dermatologicals may not only be related to greater utilization, but to the rapid growth in dermatological payments over the prior decade, as documented in recent CWCI research.[11]

## IMR Reviews of UR Modifications

Currently, any UR modification of a service is eligible for IMR, including those where the UR physician approves the medical necessity of a service but reduces the quantity to a level consistent with the MTUS. These represent 11.5 percent of all services reviewed in IMR in 2020. Certain types of service requests (*i.e.*, prescription drugs, physical therapy (PT), chiropractic care, and acupuncture) are particularly prone to these types of modifications. A common example is when a provider requests eight PT visits, but UR approves six since the guidelines for most PT other than postoperative cases usually call for a six-visit trial to see if the treatment is helpful. If it is, the provider can request additional visits. Exhibit 7 shows the six service categories where the authors were able to verify that the service itself is not modified, only the quantity or purchase arrangement. These six categories represented 85.1 percent of all modifications reviewed in IMR in 2020.

In the case of physical medicine and mental health (psych), the modifications submitted to IMR last year were almost exclusively changes in the quantity of visits, representing 18.9 percent of physical therapy, 13.8 percent of acupuncture, 19.5 percent of chiropractic, and 24.3 percent of mental health services under review. Pharmacy modifications – typically limits on the number of refills or, in the case of opioid weaning, limits on the number of pills – accounted for 17.8 percent of pharmacy services reviewed. DMEPOS modifications were typically for rental versus purchase or length of time in use and represented 5.8 percent of the DMEPOS reviews. Overall, 9.8 percent of all IMRs in 2020 involved disputes over service modifications in one of the six categories shown in Exhibit 7 rather than the medical necessity of treatment.

**Exhibit 7: UR Modifications as a Percent of Total for Selected Services in 2020**




[11] Young, B., Secia, J., Hayes, S. California Workers' Compensation Drug Trends. CWCI Research Update, March 2021.

## Concentration of IMR Determinations Among High-Volume Providers

A review of the IMR letters issued in 2020 revealed a total of 8,874 unique providers who requested the disputed medical services. As in each of the Institute's prior analyses of IMR outcomes, a small number of these providers continued to account for a disproportionate share of the modified or denied medical service requests that underwent IMR in 2020, with the top 50 providers listed on 29.9 percent of the IMR letters. Exhibit 8 shows the proportion of service requests originating from the top 10, top 25, and top 50 individual providers in each of the five years studied, and the proportion that originated with the top 1 percent and top 10 percent of providers based on their IMR volume.

**Exhibit 8: Top Providers, Jan. 2014 – Dec. 2020 Determinations**

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|
| **Providers** | **% of Service Requests** | | | | | | |
| Top 10 | 12.4% | 11.9% | 11.3% | 12.5% | 9.5% | 9.9% | 10.2% |
| Top 25 | 20.6% | 20.7% | 20.3% | 21.5% | 18.1% | 18.6% | 19.4% |
| Top 50 | 29.7% | 29.9% | 30.0% | 30.8% | 28.2% | 28.2% | 29.9% |
| Top 1% | 45.5% | 45.4% | 45.3% | 45.5% | 44.2% | 41.2% | 39.8% |
| Top 10% | 84.1% | 85.4% | 85.1% | 86.9% | 84.6% | 83.5% | 82.2% |

## Concentration of IMR Determinations Among Top 10 Providers

Exhibit 9 shows the percentage of IMR determination letters, disputed services, and claims linked to the 10 individual physicians with the highest number of IMR decision letters in 2020, further illustrating the high concentration of disputed medical services that were associated with a small number of high-volume medical providers. Together, these 10 physicians – six of whom are specialists in pain management – were associated with 13,487 IMR service decisions rendered in 2020, which is 10.2 percent of all IMR determinations. Furthermore, comparing the top 10 provider lists from 2019 with 2020 shows that 7 of the 10 individual providers with the highest number of IMR requests in 2019 remained on the top 10 list in 2020 (with the other three being in the top 25).

**Exhibit 9: 2020 IMR Letters and Decisions – Top 10 Providers**

| Requesting Provider | # of IMR Decision Letters | % Letters | # of Medical Service Decisions | % of Total Medical Service Decisions | Rank in 2019 | % of UR Decisions Upheld by IMR |
|---|---|---|---|---|---|---|
| Provider 1 | 1,661 | 1.2% | 3,310 | 1.5% | 1 | 91.6% |
| Provider 2 | 1,717 | 1.3% | 2,584 | 1.2% | 3 | 84.9% |
| Provider 3 | 1,745 | 1.3% | 2,397 | 1.1% | 7 | 83.0% |
| Provider 4 | 1,446 | 1.1% | 2,232 | 1.0% | 8 | 87.1% |
| Provider 5 | 1,301 | 1.0% | 2,174 | 1.0% | 2 | 91.2% |
| Provider 6 | 1,275 | 0.9% | 1,976 | 0.9% | 12 | 86.1% |
| Provider 7 | 1,343 | 1.0% | 1,973 | 0.9% | 22 | 87.8% |
| Provider 8 | 1,194 | 0.9% | 1,923 | 0.9% | 19 | 95.2% |
| Provider 9 | 884 | 0.7% | 1,775 | 0.8% | 10 | 93.5% |
| Provider 10 | 921 | 0.7% | 1,713 | 0.8% | 5 | 90.7% |
| **Top10** | **13,487** | **10.0%** | **22,057** | **10.2%** | | **89.0%** |

## Discussion

This study shows that after dropping from a record 184,725 IMR determination letters in 2018 to 163,899 letters in 2019 (11.3 percent), the decline in IMR decision letters not only continued last year, but accelerated, falling another 16.6 percent to a 7-year low of 136,746 letters. Some of that decline can certainly be attributed to the pandemic-driven drop in claim volume, as CWCI's initial review of AY 2020 claim counts recorded by the DWC showed that as of January 11, 2021, systemwide claim volume was down 13.5 percent from the AY 2019 level, and even though additional claims were still coming in, the Institute projected that ultimately, total claim volume would be down 6.5 percent in AY 2020.[12]

That, however, is likely not the only driver, especially if one considers the sharp decline in the number of IMRs involving pharmaceutical requests – most notably for opioids and compound drugs – a trend that began in 2016 and continued to gain steam after the DWC incorporated ACOEM's Chronic Pain and Opioid guidelines into the MTUS in late 2017 and the MTUS prescription drug formulary took effect in January 2018. As shown in Exhibit 5a, with prescription drugs accounting for a dwindling share of the IMR disputes since 2018, there has been a shift in the mix of requested services that are submitted to IMR, with physical therapy; injections; and DME, prosthetics, orthotics, and supplies all registering increases of 1.5 to 2.0 percentage points in their share of the IMRs.

The distribution of the prescription drug IMRs by drug category shows that even with the formulary and the opioid and chronic pain guidelines, opioid requests still top the list, accounting for 28.3 percent of all pharmaceutical IMRs in 2020 (though that was down from 32.2 percent in 2018 and 30.9 percent in 2019). At the same time, the uphold rate on opioid IMRs has shown little change, as IMR physicians concurred with the UR denials or modifications of opioid requests 89.5 percent of the time in 2018; 90.3 of the time in 2019; and 90.9 percent of the time in 2020. Musculoskeletal therapy drugs, which are on the formulary's Non-Exempt drug list and subject to prospective UR, ranked second (16.7 percent of pharmaceutical IMRs, with a 96.5 percent uphold rate); followed by dermatological drugs, which represented 14.8 percent of the prescription drug IMRs in 2020 – up by nearly 4 percentage points since 2018 – the biggest increase among all drug groups since the formulary took effect, even though the IMR uphold rate for dermatologicals barely budged, coming in at 94.6 percent in 2018 vs. 93.1 percent in 2018.

The recent surge in the dermatologicals' share of the prescription drug IMRs may be related to the growth in dermatological payments over the past decade. A 2019 Institute study[13] identified two factors that fueled the growth in dermatological payments: increased use of topical diclofenac sodium (a nonsteroidal anti-inflammatory) that comes in different formulations and strengths; and the increased use of mass-produced, high-cost, private-label topicals that are marketed to physicians either for in-office dispensing or mail order. Among the high-priced diclofenac sodium products is diclofenac with adhesive sheets, which is Not Listed in the formulary, and does not have a Federal Upper Limit (FUL) set by Medicare, which would establish a maximum reimbursement amount and serve as a price control in the California workers' compensation pharmacy fee schedule. Drugs for which there is no FUL are paid at 83 percent of the Average Wholesale Price (AWP), which is set by the drug manufacturer. CWCI's Prescription Drug Interactive Application shows that in 2019, the AWP set by the manufacturer for diclofenac sodium with adhesive sheets was $4,862, and the average payment per prescription was $4,126. The private label topicals usually contain one or more active ingredients commonly found in over-the-counter topical

[12] COVID-19 Claims Data Updated Through AY 2020. CWCI Bulletin 21-01, January 13, 2021.
[13] Young, B., Hayes, S. "California Workers' Compensation Prescription Drug Utilization & Payment Distributions, 2009-2018: Part 1," CWCI Research Update, February 2019.

analgesics (*e.g.*, capsaicin, lidocaine, methyl salicylate, and/or menthol), and in many cases they are either Not Listed or Non-Exempt within the formulary. Given the increasing share of the prescription dollars going toward dermatologicals over the past decade, and that since 2017 they have been either the first or second most expensive therapeutic drug group in California workers' compensation, it should come as no surprise that once the formulary took effect in January 2018, requests for many of the high-priced dermatological drugs became subject to greater scrutiny via UR and IMR.

The outcomes data show that the overall IMR uphold rate of 89.4 percent for 2020 was similar to the rates from 2018 (88.6 percent) and 2019 (88.2 percent), while conversely, in 10.6 percent of the IMR determinations issued last year, the independent medical reviewer reversed the decision of the UR physician and found the requested medical service was necessary and appropriate, showing that IMR does offer a viable option for injured workers to challenge a UR decision.

As in previous years, a significant share of the disputed medical services submitted to IMR in 2020 involved modifications where the UR physician approved the medical necessity of a service but reduced the requested quantity to a level consistent with the MTUS guidelines or changed from a purchase of DME to rental. The authors estimate that disputes over these types of modifications comprised nearly one out of every 10 IMRs conducted last year. Given the time and expense involved in conducting an IMR, it is debatable whether disputes over these types of modifications should be eligible for IMR, especially given that there is no disagreement over the appropriateness of the treatment and the physician can request additional treatment if the recommended level of service proves beneficial.

As we have for the past seven years, CWCI will continue to track IMR outcomes as additional data becomes available and new issues and trends emerge. In the meantime, additional details on the number of decisions per IMR determination letter and changes in IMR response times (from date of application to the date of the determination letter) are included in the appendices to this report, and all of the Institute's prior studies on UR, IMR and medical dispute resolution are available in the Research section of our website, www.cwci.org.

## Appendix 1: Number of Decisions per Determination Letter

IMR applications and determination letters often involve multiple medical service requests. Each of the medical services addressed in an IMR letter is adjudicated separately by the IMR reviewer unless the decision involves an associated service linked to the necessity of a primary service (*e.g.*, a request for preoperative lab and radiology linked to a surgery request). Although these "associated" services have always been excluded from CWCI's analysis of decisions, the ability to identify them improved starting with mid-2017 letters when reviewers began using more standard language to describe these services in the Rationale section of the IMR letters.

Exhibit A1 shows the distribution of the 2020 IMR letters by the number of requested medical services addressed in the determination letter, excluding associated services. As can be seen in the pie chart below, 66 percent of the IMR determination letters issued in 2020 involved a decision on a single medical service request, while the other 34 percent had decisions on multiple services. The average number of decisions per letter was 1.60, down from 1.86 in 2014 (Exhibit A2). The authors attribute this decrease primarily to the improved identification of associated services.

**Exhibit A1: Distribution of 2020 IMR Letters by Number of Medical Service Decisions in the Letter**

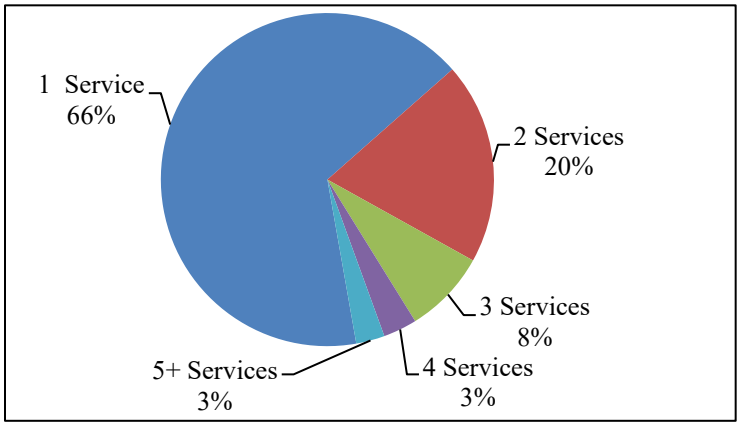
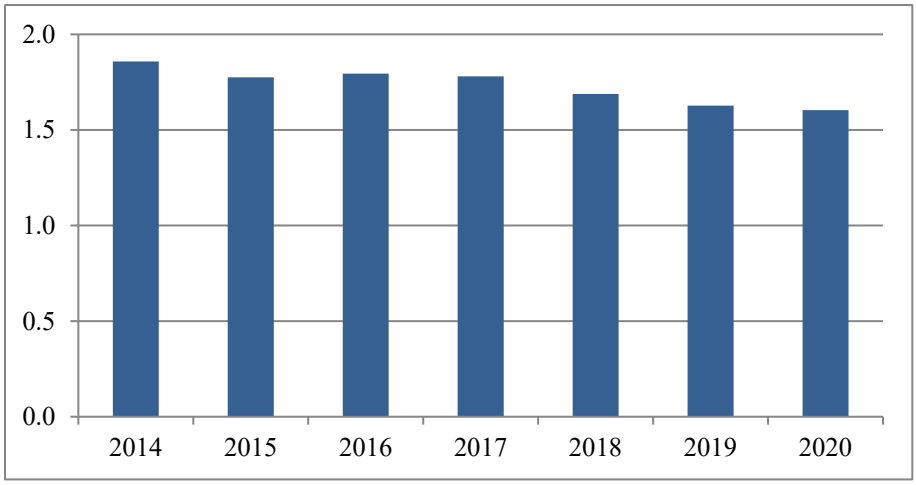



**Exhibit A2: Average Number of Medical Service Decisions Per Determination Letter, 2014 – 2020**



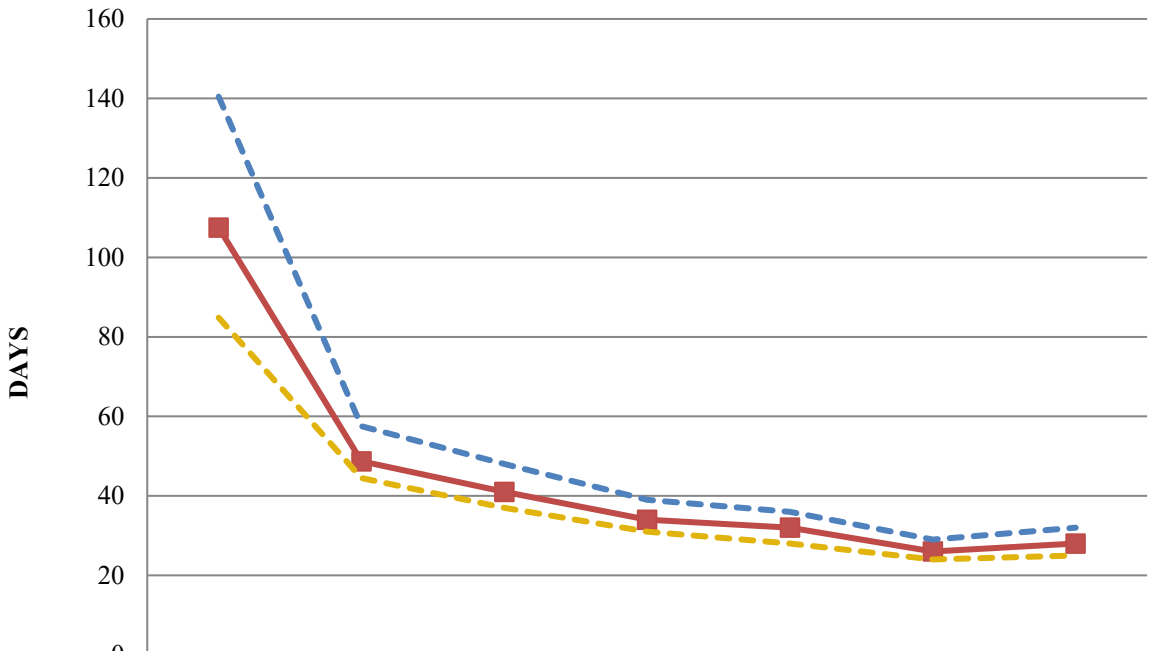
## Appendix 2: IMR Response Time

Each IMR determination letter shows the date of the UR denial or modification, the date the IMR application was received, and the date of the determination letter, which is considered to be the review completion date.

After Maximus receives an IMR application, it must confirm the eligibility of the application; request, receive, and process the medical records; and assign the case to a reviewing physician to complete the review. State law requires that Maximus issue an IMR determination letter within 30 days of receiving the application and all necessary records (up to 15 days are allowed for the receipt of necessary records, so Maximus has up to 45 days to issue the determination letter). Exhibit 3 shows the median time that elapsed between Maximus' receipt of an IMR application and the date it issued the determination letter, with results broken out based on the year in which the decision was issued.

The timeliness of Maximus' response to IMR applications improved steadily from 2014 through 2019, but edged up slightly in 2020, which may be due in part to the pandemic. After declining for five consecutive years, in 2020, the median number of days from Maximus' receipt of an IMR application to the issuance of a decision letter rose from 26 to 28 days; with 25 percent of the applications decided within 25 days, and 75 percent determined within 32 days, all of which were still well within the statutory requirements.

**Exhibit A3: Days from IMR Application Date to Date of Decision Letter, Jan. 2014 – Dec. 2020**




| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|
| Median | 108 | 49 | 41 | 34 | 32 | 26 | 28 |
| 25th% | 85 | 44 | 37 | 31 | 28 | 24 | 25 |
| 75th% | 140 | 58 | 48 | 39 | 36 | 29 | 32 |

## About the Authors

**Rena David** is Senior Vice-President, Research and Operations at the California Workers' Compensation Institute.

**Robby Bullis** is a Senior Research Associate with the California Workers' Compensation Institute.

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## California Workers' Compensation Institute

The California Workers' Compensation Institute, incorporated in 1964, is a private, nonprofit organization of insurers and self-insured employers conducting and communicating research and analyses to improve the California workers' compensation system. Institute members include insurers that collectively write more than 81 percent of California workers' compensation direct written premium, as well as many of the largest public and private self-insured employers in the state. Additional information about CWCI research and activities is available on the Institute's website (www.cwci.org). The California Workers' Compensation Institute is not affiliated with the State of California. This material is produced and owned by CWCI and is protected by copyright law. No part of this material may be reproduced by any means, electronic, optical, mechanical, or in connection with any information storage or retrieval system, without prior written permission of the Institute. To request permission to republish all or part of the material, please contact CWCI Communications Director Bob Young (byoung@cwci.org).

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1333 Broadway, Suite 510
Oakland, CA 94612
https://www.cwci.org