California Workers' Compensation Institute

Research Update

Independent Medical Review Decisions January 2014 through December 2018

By Rena David and Robby Bullis

April 2019

Executive Summary

Key Findings

- The number of Independent Medical Review (IMR) determination letters issued each year has increased steadily since 2014, with the exception of a relatively minor 2.2 percent decline in 2017. The latest results show the number of letters climbed to a record 184,733 in 2018, 7.3 percent more than in 2017 and 28.4 percent more than in 2014.
- In 2018, 95 percent of the IMR letters were in response to applications submitted by injured workers' representatives, almost all of them attorneys. There were 541 law firms that were named in more than 50 IMR determination letters in 2018. The top 10 firms alone accounted for 15.0 percent of all IMR volume, the top 25 accounted for 25.0 percent, and the top 50 accounted for 35.4 percent.
- A small number of physicians continue to drive a high percentage of IMR requests, with the top 1 percent of requesting physicians (122 providers) accounting for 44.2 percent of the disputed service requests that underwent IMR in 2018, and the top 10 individual physicians accounting for 9.5 percent of the disputed service requests. Seven of the top 10 physicians in 2018 were also on the top 10 list for 2017.
- In a significant number of IMRs, the requested service was approved by UR, but modified for a lesser quantity than requested to comply with the treatment guidelines. The authors estimated that 7 percent of pharmaceutical IMRs, 8 percent of physical therapy IMRs, and 4 percent of both the chiropractic and acupuncture IMRs were submitted solely on the basis of a reduction in the number of services allowed, even though provision of the initial or trial service was approved.
- IMR physicians upheld Utilization Review (UR) modifications and denials 88.6 percent of the time in 2018, down from the 91.0 percent uphold rate in 2017. IMR uphold rates by medical service category ranged from 75.8 percent for evaluation/management services to 92.7 percent for acupuncture requests.
- Pharmaceutical requests again topped the list of medical services submitted for IMR, representing about 46.3 percent of the 2018 IMR decisions. Opioid requests made up 32.3 percent of the 2018 pharmaceutical IMRs, up from 29.5 percent in 2017. IMR physicians continued to uphold about 90 percent of the UR denials and modifications of pharmaceutical requests, including opioid requests.
- Uphold rates did not vary with the age of the claim, but the mix of services submitted for IMR varied considerably. Among 2018 IMR decisions, pharmaceutical requests represented 26.2 percent of the IMRs on first-year claims but 61.2 percent of the IMRs on claims that were at least 11 years old.
- Los Angeles County, the Bay Area, and the Inland Empire/Orange County accounted for two-thirds of the 2018 IMR determination letters. The Bay Area saw the biggest jump in letter volume, with 4,500 more letters in 2018 than in 2017, while San Diego had the biggest percentage increase (18.3 percent).

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 guidelines, which provide a 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 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 delay, 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, must be reviewed for medical necessity by a physician who uses the evidence-based guidelines to decide whether to authorize, modify, delay, 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. While most treatment reviewed in UR is approved, in 2012 state lawmakers enacted SB 863, which included the adoption of the IMR process to allow injured workers 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 or not 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. More recently, additional changes to the medical dispute resolution process were adopted after Governor Brown signed a 2016 bill (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]

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 and law firms 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.

[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 (effective July 1, 2018). Labor Code §4610(g)(4).

[4] David, R., Jones, S., Ramirez, B., and Swedlow, A. "Independent Medical Review Outcomes in California Workers' Compensation," 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, December 2015.

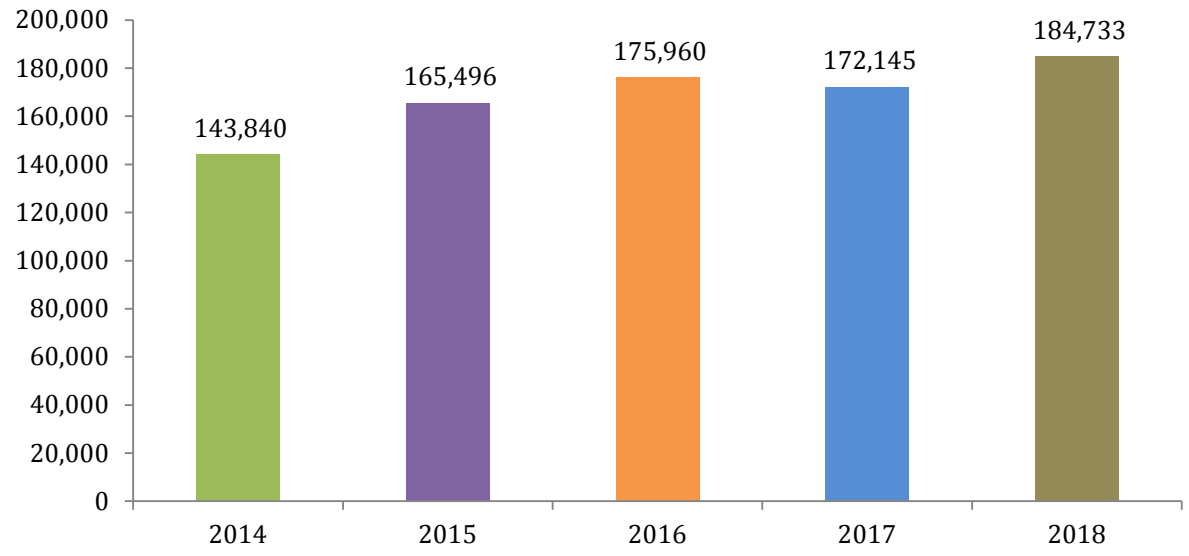
[6] David, R. "IMR Decisions, January through December 2015, CWCI Spotlight Report, February 2016; David, R., 1st Quarter 2016 IMR Outcomes," CWCI Spotlight Report, June 2016; David, R. and Bullis, R., "IMR Outcomes: January 2014 Through June 2017." CWCI Spotlight Report, September 2017.

Results

Number of IMR Determination Letters

For this study, the authors reviewed data from nearly 830,000 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 2018. As shown in Exhibit 1, with the exception of a 2.2 percent decline in 2017, the number of determination letters issued each year has been trending up since 2014, climbing to a record 184,733 letters in 2018, up 7.3 percent from the prior year, and up 28.4 percent over the 5-year span of the study.[7]

Exhibit 1: Eligible IMR Determination Letters, Jan. 2014 – Dec. 2018



[7] The numbers for 2014-2017 shown on this page are from the Division of Workers' Compensation's "2018 Independent Medical Review (IMR) Report: Analysis of 2017 Data," posted online at www.dir.ca.gov/dwc/imr/reports/2018_IMR_Annual_Report.pdf. The 2018 figure was presented by DWC Administrative Director George Parisotto at the California Self-Insurers' Association 2019 Annual Meeting and Employer Educational Conference in April 2019. The Institute analysis for January 2014-December 2018 reflects data compiled from 829,976 final determination letters provided by Maximus, so the balance of the report is based on a 98.6 percent subset of the 842,174 letters reported by the DWC for this period.

IMR Submissions by Top Law Firms

As in past years, the 2018 IMR decision letters show that 95 percent of the IMR applications were submitted by a representative rather than by an injured worker. A small number of the applications were sent in by doctors, and an even smaller number were sent in by durable medical equipment vendors, but the vast majority of the IMR applications were submitted by attorneys. For the first time since the Institute began monitoring IMR activity, the authors used the address information on the IMR determination letters (cross-checked against lists from the Electronic Adjudication Management System (EAMS) and the California State Bar Association) to identify law firms associated with the IMR letters, then tallied the total number of IMR applications submitted by each law firm. Altogether, there were 541 law firms that had more than 50 IMRs in 2018 and these 541 firms served as the basis for this portion of the report.

Exhibit 2 shows how heavily concentrated IMR submissions are among a relatively small number of high-volume law firms. In 2018, the 10 law firms with the highest number of IMR submissions accounted for 15.0 percent of all IMR volume, while the top 25 firms accounted for 25.0 percent, and the top 50 accounted for 35.4 percent. Furthermore, IMR volume became even more concentrated among the high-volume law firms between 2017 and 2018, as the overall volume of submissions among these firms increased between 8.2 percent and 8.7 percent, exceeding the 7.3 percent increase in total IMR volume over that same period.

Exhibit 2: Top Law Firms, Jan. 2017 – Dec. 2018 Determination Letters

Top Firms	2018 Letters	% of Total	% Change 2017 to 2018
Top 10	27,760	15.0%	8.6%
Top 25	46,238	25.0%	8.2%
Top 50	65,367	35.4%	8.7%

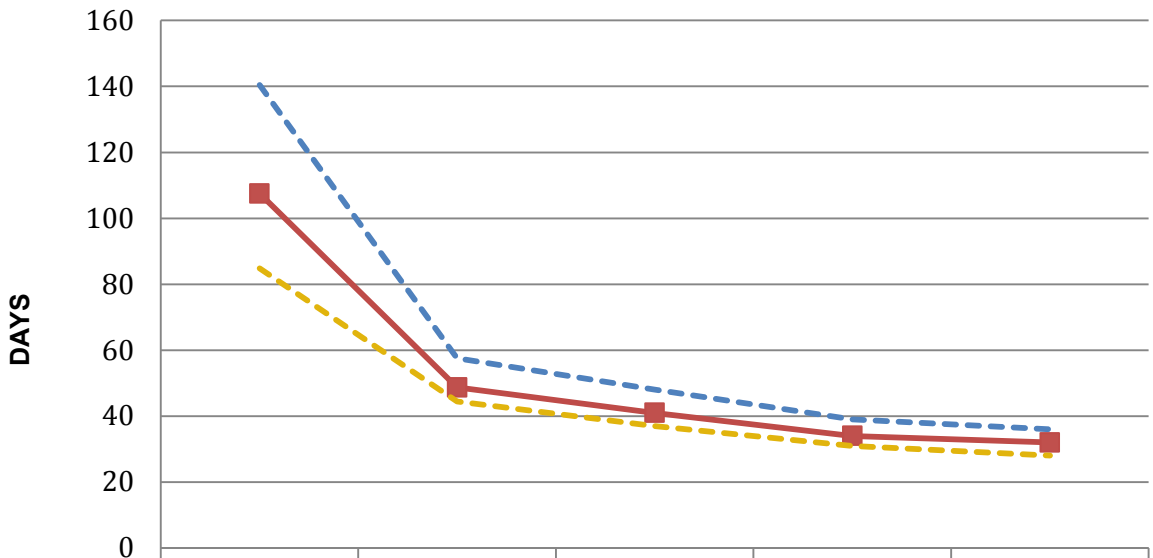
IMR Response Time

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.

As has been the case since 2014, timeliness of Maximus' response to IMR applications continues to improve. In 2018, the median number of days from Maximus' receipt of an IMR application to the issuance of a decision letter fell to a new low of 32 days; with 25 percent of the applications decided within 28 days, and 75 percent determined within 36 days, all of which are well within the statutory requirements.

Exhibit 3: Days from IMR Application Date to Date of Decision Letter, Jan. 2014 – Dec. 2018



	2014	2015	2016	2017	2018
Median	108	49	41	34	32
25th%	85	44	37	31	28
75th%	140	58	48	39	36

Distribution of IMR Letters and Uphold Rates by Region

Each IMR determination letter includes an address for the injured worker or their representative, enabling the authors to use the ZIP codes noted in the 2018 IMR determination letters to determine the prevalence of IMR in seven different regions of the state. Exhibit 4 shows that the volume of IMR letters was highest in Los Angeles County and the Bay Area, which together accounted for 53 percent of the letters.

Exhibit 4: Distribution of 2018 IMR Letters by Region

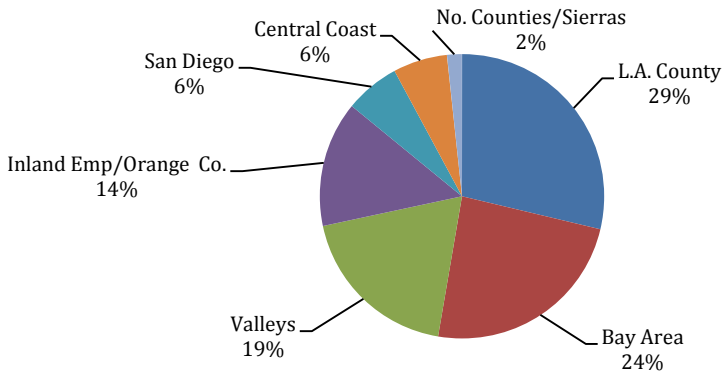
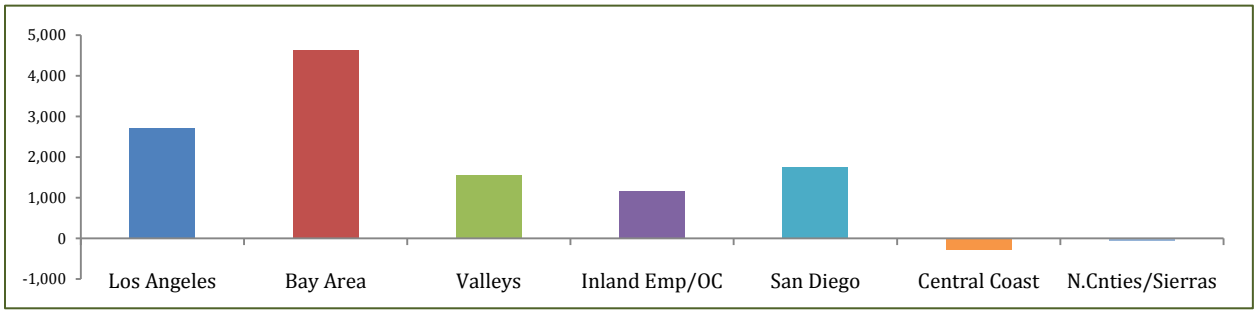
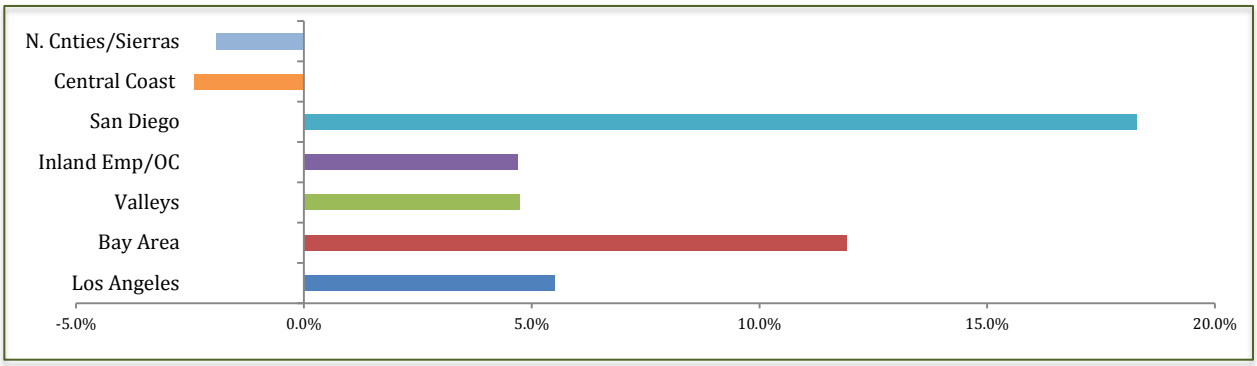


Exhibit 5 shows the change in the volume of IMR letters by region between 2017 and 2018. The Bay Area registered the biggest increase in letter volume, with about 4,500 more letters in 2018 than in 2017, a year-over-year increase of more than 12 percent. Los Angeles County also saw an increase of about 2,700 letters. But on a percentage basis, the biggest increase was in San Diego where IMR letter volume rose 18.3 percent in 2018. The number of IMR letters going to the Central Coast and the Northern Counties and Sierras fell last year, though in both cases letter volume was only down about 2 to 3 percent in these regions compared to 2017.

Exhibit 5: Volume and Percent Change in IMR Letters from 2017 to 2018 by Region



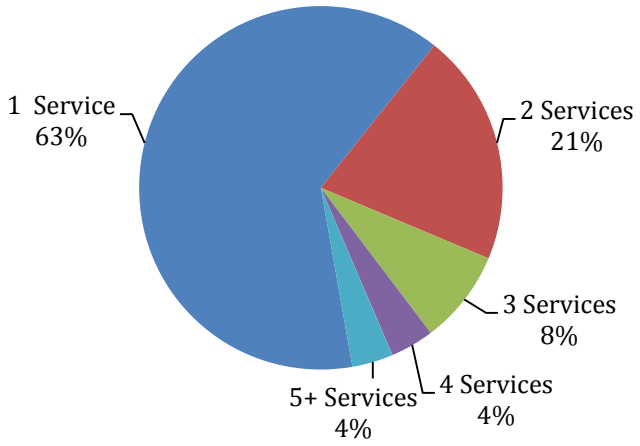


Number of Decisions per Determination Letter

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 pre-operative 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 6 shows the distribution of the 2018 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, 63 percent of the IMR determination letters issued in 2018 involved a decision on a single medical service request, while the other 37 percent had decisions on multiple services. The average number of decisions per letter was 1.7, down from 1.8 in 2017. The authors attribute this decrease primarily to the improved identification of associated services.

Exhibit 6: Distribution of 2018 IMR Letters by Number of Medical Service Decisions in the Letter



IMR Uphold Rates

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, and then issues a determination upholding or overturning the decision of the UR physician. The high uphold rates shown in Exhibit 7 offer evidence that UR decision-making typically adheres to the relevant guidelines. At the same time, in 2018 about one out of nine UR decisions was 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 7: IMR Uphold and Overturn Rates, Primary Services, Jan. 2015 – Dec. 2018 Determination Letters

	Number of Primary Service Decisions				Percent of Decisions			
Result	**2015**	**2016**	**2017**	**2018**	**2015**	**2016**	**2017**	**2018**
Upheld UR	255,839	284,551	274,758	270,891	88.4%	91.2%	91.0%	88.6%
Overturned UR	33,479	27,452	27,287	34,726	11.6%	8.8%	9.0%	11.4%
Total	**289,318**	**312,003**	**302,045**	**305,617**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

IMR Distribution and Uphold Rates by Medical Service Category

Since IMR was first implemented in January 2013, the mix of service types that undergo the process has remained fairly consistent, with pharmaceuticals remaining the highest volume category, accounting for 46.3 percent of all services reviewed in 2018. Physical therapy; injections; DME, prosthetics, orthotics, and supplies; and MRI/CT/PET scans also remain among the highest volume categories. Comparing the 2017 and 2018 IMR distributions by service category shows that injections; acupuncture; and DME, prosthetics, orthotics, and supplies registered the biggest year-to-year increases. In 2018, these three service categories played the most significant role in driving up IMR volume.

Exhibit 8: IMR Distribution & Uphold Rates by Medical Service Category, Jan. 2015 – Dec. 2018

	2015	2016	2017	2018	2015	2016	2017	2018
Service Requested	**% of Service Requests**				**% Upheld**			
Pharmaceuticals	49.5%	48.8%	47.3%	46.3%	89.7%	92.5%	91.9%	89.3%
Physical Therapy	9.1%	9.5%	10.3%	10.5%	92.4%	93.4%	93.7%	91.3%
Injections	6.9%	7.5%	8.3%	9.2%	87.4%	89.4%	89.5%	89.1%
DME/Prosth/Ortho/Supplies	7.8%	7.1%	6.7%	7.1%	90.1%	91.9%	91.9%	88.9%
MRI/CT/PET	4.2%	4.5%	4.7%	4.5%	86.4%	88.6%	89.2%	87.6%
Diagnostic Test / Measure	3.4%	3.5%	3.4%	3.4%	84.6%	91.3%	91.3%	89.0%
Surgery	3.6%	3.2%	3.2%	3.1%	86.7%	88.9%	90.7%	88.1%
Acupuncture	2.2%	2.3%	2.5%	3.0%	91.6%	93.6%	93.9%	92.7%
Laboratory Services	2.8%	3.2%	3.2%	2.5%	83.0%	88.5%	86.5%	82.9%
Evaluation/Management	2.3%	2.2%	2.2%	2.0%	68.0%	77.2%	77.8%	75.8%
Chiropractic Manipulation	1.6%	1.7%	1.6%	1.7%	90.7%	92.0%	93.8%	92.2%
Psych Services	1.4%	1.4%	1.3%	1.2%	83.2%	85.3%	84.4%	78.8%
Other	5.1%	5.0%	5.4%	5.3%	85.7%	88.1%	87.4%	84.4%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**88.4%**	**91.2%**	**91.0%**	**88.6%**

Since 2015, uphold rates have been fairly stable across all service categories, with 9 of the 13 categories having less than a 4 percentage point difference between the highest uphold rate year and the lowest uphold rate year.

The difference in uphold rates is also fairly consistent across most service categories, with 11 of the 13 categories ranging from 83 percent to 93 percent in 2018. As was the case in the three prior years, the 2018 data show the IMR uphold rate was lowest (75.8 percent) for evaluation/management services, which are primarily requests for office visits and consultations. As noted in Exhibit 8, however, requests for evaluation/management services accounted for only 2.0 percent of the services submitted for IMR in 2018.

Overall, the IMR uphold rate across all medical service categories fell by 2.4 percentage points last year, declining from 91.0 in 2017 to 88.6 percent in 2018. Comparing IMR outcomes by treatment category shows that between 2017 and 2018 uphold rates declined across all categories, with the most significant decrease being a 5.6 percentage point drop in the uphold rate for psychological services. Results for the top three service categories, which together accounted for two-thirds of the 2018 IMR volume, show a 2.6 percentage point drop in the uphold rate for pharmaceuticals, a 2.4 percentage point drop in the uphold rate for physical therapy, but only a 0.4 percentage point drop 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 contra-indications with other prescribed medicines. All of these factors are considered by UR and IMR physicians. Nearly 140,000 prescription drug requests went through IMR in 2018. In 89.3 percent of those cases, the IMR physicians upheld the UR physicians' modification or denial.

Exhibit 9 shows the distribution of the pharmaceutical IMR decisions by drug category and the uphold rates for the UR physicians' service modification or denial. As in the past, requests for opioid painkillers topped the list in 2018, accounting for 32.2 percent of all pharmaceutical IMR decisions – up from 29.5 percent in 2017. Requests for compounded drugs accounted for only 2.1 percent of the IMRs in 2018, down from 4.3 percent of the IMRs in 2017. Modifications and denials of the compounded drug requests were upheld by the IMR physicians in more than 99 percent of the cases in both years.

Exhibit 9: Distribution & Outcomes of Rx IMR Decisions by Drug Type, Jan. 2015 – Dec. 2018

	2015	2016	2017	2018	2015	2016	2017	2018
Rx Drug Category	% of Rx Drug Requests				% Upheld			
Analgesics-Opioid	30.3%	28.9%	29.5%	32.2%	88.0%	90.3%	90.1%	89.5%
Musculoskeletal Therapy	11.9%	12.6%	12.9%	14.3%	96.1%	96.9%	97.2%	95.8%
Dermatologicals	9.5%	10.3%	11.3%	10.7%	94.8%	96.2%	96.5%	94.6%
Anticonvulsants	5.0%	5.4%	6.0%	8.1%	80.4%	86.8%	87.5%	80.5%
Anti-Inflammatory	7.5%	8.7%	9.7%	7.5%	80.5%	89.3%	88.2%	83.5%
Antidepressants	3.6%	3.9%	4.0%	4.9%	73.0%	83.3%	81.8%	75.8%
Ulcer Drugs	7.3%	7.3%	7.1%	4.7%	89.0%	93.0%	91.8%	88.3%
Hypnotics	3.9%	3.7%	3.1%	2.7%	97.4%	98.2%	97.7%	97.2%
Antianxiety	2.7%	2.7%	2.6%	2.4%	96.3%	97.2%	95.1%	94.4%
Analgesics - Non-Narcotic	1.1%	1.4%	1.8%	2.2%	88.6%	92.5%	91.8%	91.6%
Compounded	8.5%	6.7%	4.3%	2.1%	99.3%	99.4%	99.2%	99.1%
Other	8.8%	8.4%	7.7%	8.2%	87.5%	90.7%	89.3%	85.4%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**89.7%**	**92.5%**	**91.9%**	**89.3%**

Notably, both anticonvulsants and antidepressants accounted for an increasing percentage of the prescription drug requests submitted for IMR in 2018, and the IMR uphold rate for both of these drug categories showed relatively large declines (7.0 and 6.0 percentage points, respectively). These results track with the findings of Institute research published in February 2019 that showed that over the past decade, anticonvulsants' share of California workers' compensation prescriptions more than doubled to 9.7 percent, while antidepressants' share increased from 3.9 percent to 6.0 percent.[8] These shifts in the distribution and outcomes of the prescription drug IMR decisions coincided with changes in the MTUS, including the adoption of new opioid and chronic pain guidelines in late 2017, and the implementation of the workers' compensation prescription drug formulary in January 2018.

[8] Young, B., Hayes, S. "California Workers' Compensation Prescription Drug Utilization & Payment Distributions, 2009-2018: Part 1," CWCI Research Update, February 2019.

The February 2019 study also revealed that as opioids and compounded drugs have accounted for a diminishing share of California workers' compensation prescription dollars, dermatologicals have consumed an increasing share. The study noted two factors that fueled the growth of dermatologicals: increased use of topical diclofenac sodium (a nonsteroidal anti-inflammatory drug) that comes in many different strengths and formulations and is exempt from prospective UR on the MTUS formulary drug list; and the increased prevalence of mass-produced, high-cost, private-label topicals that are marketed to physicians either for in-office dispensing or mail order. The private-label topicals usually contain one or more active ingredients commonly found in over-the-counter topical analgesics (*e.g.*: capsaicin, lidocaine, methyl salicylate, and/or menthol). Additional detail on the IMR distributions and outcomes for opioids and dermatologicals can be found in the Appendix.

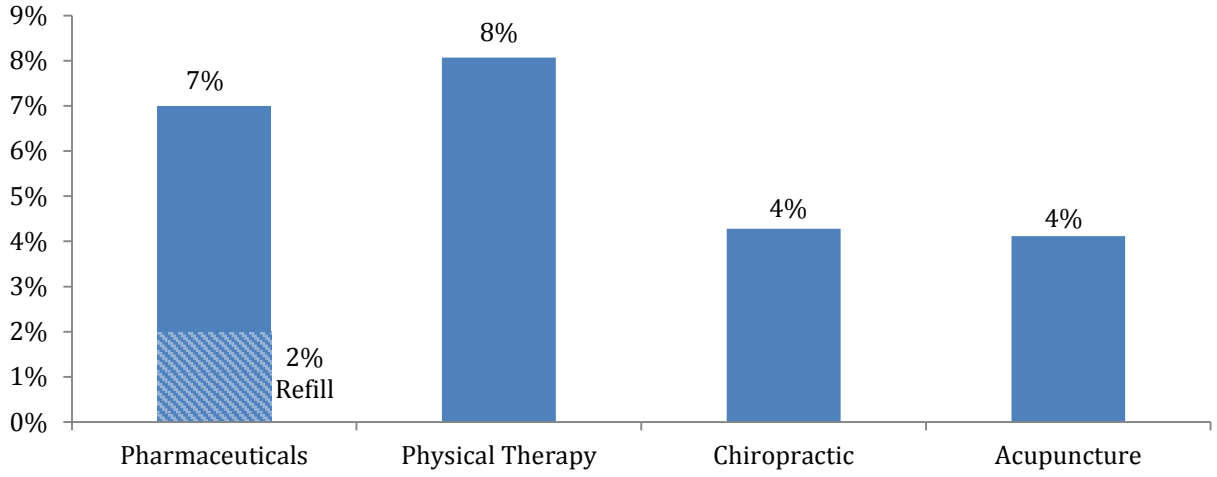
IMR Reviews for UR Modifications of Quantity

Under current policies, any UR modification of a service is eligible for IMR review. This includes modifications where the UR physician approved the medical necessity of a service but reduced the requested quantity to levels consistent with the MTUS. A common example of this is when a provider requests eight physical therapy (PT) visits, but the UR reviewer only approves six, since the guidelines for most PT other than post-operative cases typically call for a six-visit trial period to see if the treatment is helpful. In this case, the provider can make the request for the additional visits after determining if the PT is working.

The authors were able to make a minimum estimate of the percentage of IMRs that involved reductions in the requested quantity of pharmaceuticals, physical therapy, acupuncture, and chiropractic services by looking for the words "remaining IMR eligible portion" within the decision rationale.

Exhibit 10 shows that physical therapy had the highest proportion of these types of modifications (8 percent of the PT determinations), while 4 percent of both the chiropractic and acupuncture IMR decisions involved modifications that approved fewer services than had been submitted on the request. Among the pharmaceutical IMR decisions, 7 percent were modifications to the requested quantity of the medication, of which nearly a third (2 percent of all pharmaceutical IMR decisions) contained the phrase "remaining IMR eligible portion" plus the word "refill." Future CWCI research will integrate UR and IMR data and take a deeper look at IMR decisions in which the UR physician deemed the medical service necessary but reduced the quantity of the requested service in order to comply with the MTUS guidelines.

Exhibit 10: Estimated Percentage of Reviewed Services for UR Quantity Modifications



IMR Decisions by Age of Claim

About half of all 2018 IMR decisions involved medical services for claims in which more than five years had elapsed between the date of injury and the IMR letter date. As in prior research,[9] uphold rates for the 2018 IMRs did not vary much based on the age of the claim, but the mix of requested services was very different. Exhibit 11 shows that as claims age, prescription drug requests account for an increasing share of the IMRs, while other services account for a decreasing share. Among 2018 IMR decisions, pharmaceutical requests represented just 26.2 percent of the disputed services on first-year claims, but 61.2 percent of the disputed services on claims that were more than 11 years old.

Exhibit 11: Percent of 2018 Service Decisions by Claim Age – Pharmaceuticals vs Medical Services

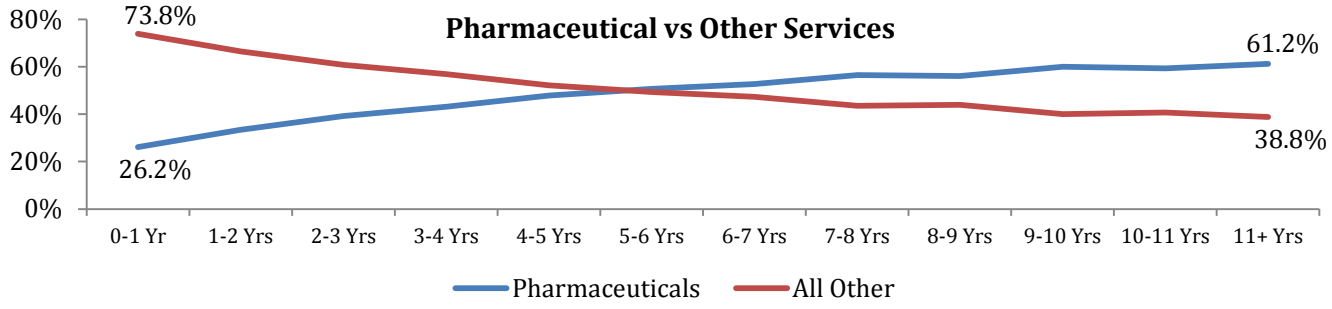
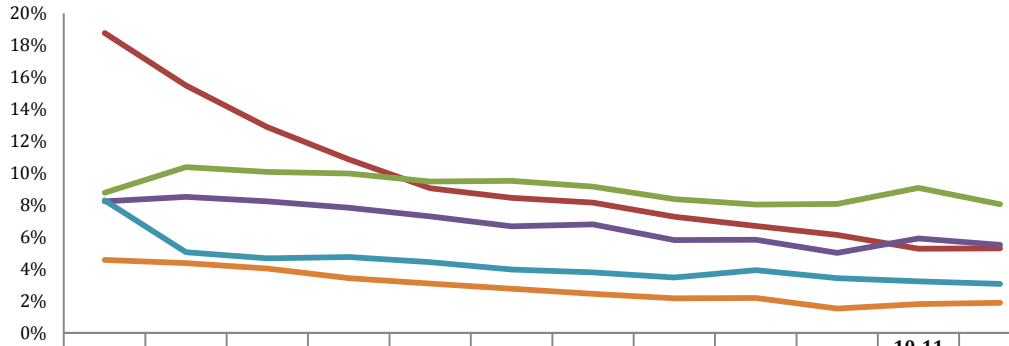


Exhibit 12 offers more detail on how the mix of medical services that undergo IMR changes as claims age, showing the distribution of 2018 IMR decisions for the top 5 non-pharmaceutical medical service categories for claims of different ages. IMRs involving PT showed the largest drop off as claims age, declining from almost 19 percent of IMRs for first-year claims to 5 percent of IMRs for the oldest claims. IMRs involving surgery requests also showed a sharp drop off, declining from 4.6 percent of the IMRs on first-year claims to less than 2 percent of the IMRs on claims that are more than 9 years old; while disputes over MRI, CT scan, and PET scan requests declined from 8.3 percent of IMRs on first-year claims to 3.1 percent of the IMRs involving claims that were more than 11 years old.

Exhibit 12: Percent of 2018 Service Decisions by Claim Age – Other Top Services



	0-1 Yr	1-2 Yrs	2-3 Yrs	3-4 Yrs	4-5 Yrs	5-6 Yrs	6-7 Yrs	7-8 Yrs	8-9 Yrs	9-10 Yrs	10-11 Yrs	11+ Yrs
Physical Therapy	18.8%	15.5%	12.9%	10.9%	9.1%	8.4%	8.2%	7.3%	6.7%	6.1%	5.3%	5.3%
Injections	8.8%	10.4%	10.1%	10.0%	9.5%	9.5%	9.1%	8.4%	8.0%	8.1%	9.1%	8.1%
DME/Prosth/Ortho/Supplies	8.2%	8.5%	8.2%	7.8%	7.3%	6.7%	6.8%	5.8%	5.8%	5.0%	5.9%	5.5%
MRI/CT/PET	8.3%	5.0%	4.7%	4.7%	4.4%	4.0%	3.8%	3.5%	3.9%	3.4%	3.2%	3.1%
Surgery	4.6%	4.4%	4.0%	3.4%	3.1%	2.8%	2.4%	2.2%	2.2%	1.5%	1.8%	1.9%

[9] Bullis, R., David, R. "Independent Medical Review Decisions, January 2014 Through June 2018," CWCI Research Update, September 2018.

Concentration of IMR Determinations Among High-Volume Providers

A review of the IMR letters issued in 2018 revealed a total of 12,193 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 2018, with the top 50 providers listed on 28.3 percent of the IMR letters. Exhibit 13 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 13: Top Providers, Jan. 2014 – Dec. 2018 Determinations

	2014	2015	2016	2017	2018
Providers	% of Service Requests				
Top 10	12.4%	11.9%	11.3%	12.3%	9.5%
Top 25	20.6%	20.7%	20.3%	21.2%	18.1%
Top 50	29.7%	29.9%	30.0%	30.4%	28.3%
Top 1% (122)	45.5%	45.4%	45.3%	44.8%	44.2%
Top 10% (1,219)	84.1%	85.4%	85.1%	84.6%	84.6%

Concentration of IMR Determinations Among Top 10 Providers

Exhibit 14 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 2018, 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 – specialists in physical medicine/rehab, pain management, orthopedics, and one general practitioner – were associated with 15,145 IMR service decisions rendered in 2018, which is 9.5 percent of all IMR determinations. Furthermore, comparing the top 10 provider lists from 2017 with 2018 shows that 7 of the 10 individual providers with the highest number of IMR requests in 2017 remained on the top 10 list in 2018.

Exhibit 14: 2018 IMR Letters and Decisions – Top 10 Providers

Requesting Provider	# of IMR Decision Letters	# of Medical Service Decisions	% of Total Medical Service Decisions	% of UR Decisions Upheld by IMR	Rank in 2017	Requesting Physician Specialty	Requesting Provider Region
Provider 1	2,800	4,441	1.5%	84.6%	2	Phys Med & Rehab	NCAL
Provider 2	2,033	3,289	1.1%	85.9%	3	Phys Med & Rehab	NCAL
Provider 3	1,577	3,279	1.1%	86.9%	10	Pain Management	SCAL
Provider 4	1,718	3,097	1.0%	91.6%	9	Pain Management	NCAL
Provider 5	858	2,704	0.9%	92.9%	7	Orthopedist	NCAL
Provider 6	1,799	2,691	0.9%	84.6%	8	Pain Management	NCAL
Provider 7	1,159	2,662	0.9%	86.6%	16	Phys Med & Rehab	SCAL
Provider 8	1,062	2,382	0.8%	95.1%	6	Orthopedist	SCAL
Provider 9	1,249	2,233	0.7%	90.6%	21	General Practice	NCAL
Provider 10	890	2,195	0.7%	87.8%	23	Pain Management	NCAL
Top 10	**15,145**	**28,973**	**9.5%**	**88.3%**			

Discussion

In enacting IMR as an integral piece of the workers' compensation dispute resolution process, state policymakers expected that as time went on there would be fewer UR modifications and denials as physicians became more familiar with the MTUS. Instead, the volume of UR decisions reviewed through IMR has consistently been much higher than anticipated and has increased in three of the last four years, including a 7.3 percent increase from 2017 to 2018, as the number of IMR determination letters climbed to a record 184,733 letters. The distribution of the 2018 IMR letters by region indicates that there is a geographic component to the recent growth, most notably in San Diego, where IMR letter volume showed a year-over-year increase of more than 18 percent, and in the San Francisco Bay Area, where the volume of letters increased more than 12 percent.

At the same time, IMR response times continue to improve, with the median number of days from the receipt of an IMR application to the issuance of a decision letter falling to a new low of 32 days in 2018, with 25 percent of the determination letters sent within 28 days, and 75 percent issued within 36 days, all of which were well within the statutory requirements.

As in the Institute's past analyses of IMR activity, the 2018 results again found that much of the IMR activity last year involved treatment requests from a small number of physicians who continue to request a high volume of medical services that go through IMR. The top 10 percent of physicians based on IMR volume (1,219 doctors) were identified in 84.6 percent of the 2018 disputed service decisions, while the top 1 percent (122 providers) were involved in 44.2 percent of the service decisions. A closer look at the IMR experience of the 10 individual doctors with the highest IMR volume shows these 10 providers alone accounted for nearly one out of every 10 medical disputes determined by IMR in 2018 – a total of 28,973 medical service decisions. In 88.3 percent of those decisions, the UR modification or denial of the treatment was upheld. This finding underscores that in nearly nine out of ten treatment disputes, these high-volume providers failed to adhere to the evidence-based medicine guidelines; furthermore, their practices did not change despite the IMR outcomes, as 7 of the top 10 providers in 2018 were also on the top 10 list in 2017.

In addition to looking at the high-volume providers, for the first time the authors identified the law firm representatives who submitted the IMR applications for which determination letters were issued in 2018. The results showed that the IMR submissions were heavily concentrated among a small number of high-volume law firms. There were 541 law firms that were identified in 50 or more IMR letters in 2018, and the top 10 firms accounted for 15.0 percent of all IMR volume, the top 25 accounted for 25.0 percent, and the top 50 accounted for 35.4 percent. Furthermore, IMR volume became even more concentrated among the high-volume law firms between 2017 and 2018, as the overall volume of submissions from these firms increased between 8.2 percent and 8.7 percent, exceeding the 7.3 percent increase in total IMR volume over the same period.

In terms of service mix, disputes over pharmaceutical requests continue to account for the largest share of the IMR activity – 46.3 percent of the service requests that went through IMR in 2018. In addition, the authors found that as claims age, prescription drugs represent a much greater share of the disputes that undergo IMR, with prescription drug IMRs increasing from 26.2 percent of all IMRs on first-year claims to 61.2 percent of the IMRs on claims older than 11 years.

Despite the age of many of the claims for which pharmaceutical IMRs are conducted, and the fact that the MTUS guidelines do not recommend the use of opioids for chronic pain, as in the past, opioid requests were by far the leading drug category submitted for IMR. These opioid requests accounted for nearly a third of all pharmaceutical IMRs in 2018, even though the denial or modification of the opioid request continued to be upheld about 90 percent of the time. Physical therapy (10.5 percent); injections (9.2 percent); DME/Prosthetics/Orthotics and supplies (7.1 percent); and MRIs, CT scans and PET scans (4.5 percent) rounded out the top five medical service categories for 2018 IMR disputes.

The outcomes data show that in 2018, 88.6 percent of the IMR decisions upheld the UR physicians' denial or modification of the requested service; which was down from 91.0 percent in 2017, with uphold rates ranging from a low of 75.8 percent for evaluation and management requests to a high of 92.7 percent for acupuncture services. In 11.4 percent of all IMR decisions issued last year, the independent medical reviewer overturned the UR physician and deemed the service medically necessary and appropriate.

Under the current medical dispute resolution process, any UR modification of a service request can be challenged through IMR, and the study identified a significant number of IMRs where the requested service was approved by UR but modified for a lesser quantity than requested in order to stay within the MTUS guidelines. The authors estimate that in 2018, about 7 percent of all prescription drug IMRs, 8 percent of all physical therapy IMRs, and 4 percent of all chiropractic and acupuncture IMRs were submitted solely on the basis of a reduction in the number of services allowed, even though provision of the initial or trial service was approved. Thus, consideration should be given to whether it is appropriate for these types of modifications to remain eligible for IMR review.

Over the course of this year, CWCI will be taking a deeper look at the dispute resolution process by connecting IMR data with transaction-level UR and medical services data. This will allow us to look at the end-to-end process of review and service delivery by service type and drug group and by different dimensions, including the age of the claim, top providers, top law firms, and region.

Appendix: Pharmacy Detail - IMR Distribution and Uphold Rates

Distribution & Outcomes of Opioid IMR Decisions by Drug Ingredient(s), Jan. 2015 – Dec. 2018								
	2015	2016	2017	2018	2015	2016	2017	2018
Drug Ingredient(s)	% of Opioids				% Upheld			
Hydrocodone-Acetaminophen	41.2%	39.0%	38.6%	41.0%	87.7%	89.2%	89.0%	89.3%
Tramadol	18.2%	20.2%	22.9%	22.5%	88.7%	92.4%	93.2%	91.1%
Oxycodone-Acetaminophen	6.8%	7.2%	7.9%	8.3%	86.9%	90.3%	90.0%	88.3%
Oxycodone	9.3%	9.0%	8.6%	7.9%	89.8%	91.1%	89.1%	88.8%
Morphine	4.9%	4.7%	4.7%	4.5%	86.3%	89.3%	86.8%	87.9%
Buprenorphine	2.5%	3.2%	3.0%	2.9%	85.6%	87.9%	87.5%	86.1%
Codeine-Acetaminophen	1.1%	1.3%	2.0%	2.7%	90.1%	92.5%	92.9%	92.6%
Fentanyl	3.0%	2.6%	2.0%	1.8%	89.2%	90.5%	89.3%	88.6%
Tapentadol	1.9%	2.1%	1.9%	1.7%	86.9%	89.1%	87.2%	87.9%
Tramadol-Acetaminophen	2.6%	2.9%	1.7%	1.5%	88.2%	88.5%	90.1%	90.8%
Hydrocodone	2.8%	2.5%	2.3%	1.5%	88.2%	91.6%	91.0%	90.3%
Hydromorphone	1.8%	1.6%	1.5%	1.4%	89.6%	92.2%	91.0%	87.5%
Methadone	1.9%	1.9%	1.4%	1.4%	89.2%	90.8%	90.3%	89.7%
Oxymorphone	1.2%	0.9%	0.7%	0.3%	85.2%	87.5%	93.4%	88.7%
Other	0.8%	0.8%	0.8%	0.6%	89.4%	92.9%	94.3%	95.3%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**88.0%**	**90.3%**	**90.1%**	**89.5%**

Distribution & Outcomes of Dermatological IMR Decisions by Drug Category, Jan. 2015 – Dec. 2018								
	2015	2016	2017	2018	2015	2016	2017	2018
Drug Class	% of Dermatologicals				% Upheld			
Local Anesthetics – Topical	32.5%	34.2%	35.2%	38.9%	95.0%	96.6%	97.1%	95.7%
Anti-inflammatory – Topical	23.7%	27.5%	32.1%	32.5%	92.1%	93.8%	95.0%	92.4%
Manufactured Topical	32.8%	29.8%	24.1%	20.6%	97.7%	98.6%	98.4%	97.0%
Corticosteroids – Topical	0.3%	0.5%	2.3%	1.8%	86.8%	87.8%	97.8%	94.3%
Liniments	4.5%	4.0%	2.0%	2.0%	87.2%	93.7%	91.1%	89.9%
Other	6.3%	4.0%	4.3%	4.4%	95.0%	95.8%	94.2%	91.5%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**94.8%**	**96.2%**	**96.5%**	**94.6%**

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California Workers' Compensation Institute

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