

2018 Independent Medical Review (IMR) Report: Analysis of 2017 Data

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Table of Contents

Executive Summary.....	4
Introduction.....	5
About IMR	5
Analysis of 2017 IMR Data.....	6
IMR Program Enhancements in 2017	6
Applications	7
Ineligible IMR Applications	8
The IMR Timeline	9
Timeliness of IMR Decisions	9
Final Determinations Issued: Standard Case Decisions.....	10
Who Files for IMR?.....	11
Worker Representation	11
Year of Injury	11
Geographic Region	12
Other Demographic Information	12
Medical Treatment in Dispute	13
Disputed Treatment Request	13
Decisions by Treatment Category	14
Pharmaceuticals, Including Opioids	15
IMR Decisions and Application of MTUS Treatment Guidelines	17
Physician Reviewers	18
Conclusion and Future Directions.....	19
Appendices.....	20
Appendix A: The Independent Medical Review Process	20
Appendix B: IMR Applications Received by Month	21
Appendix C: Ineligible Applications by Month.....	22
Appendix D: Final Determination Letters (Case Decisions) Issued by Month	22
Appendix E: Geographic Regions Defined by Constituent Counties	23
Appendix F: Geographic Distribution of IMR Case Decisions	24

Appendix G: IMR Case-Level Results, Represented and Not Represented..... 24
Appendix H: Dates of Injury, Case Decisions Issued in 2017..... 24
Appendix I: IMR Decisions by Treatment Category (Clinical Services) 25
Appendix J: IMR Decisions for Treatment Requests by Drug Class 26
Appendix K: IMR Decisions for Opioid Treatment Requests 27
Appendix L: Expert Reviewer Relevant Specialty 29

Executive Summary

In September 2012, Governor Brown signed into legislation Senate Bill 863. This reform of the workers' compensation system in California included Independent Medical Review (IMR), which went into effect January 1, 2013. Now in its sixth year, IMR continues to provide expedient, efficient resolution of disputes over medical necessity in the California workers' compensation system.

In 2017, the Independent Medical Review Organization (IMRO) processed 248,251 applications, a slight decrease from 2016. Of those, 71% (175,118) were determined to be eligible for review. Concurrently, the IMRO issued 172,194 IMR determinations. At the end of 2016, the average length of time the IMRO took to issue a determination, after the receipt of all necessary medical records, was 15 days. By mid-2017, this decreased to a monthly average of 11 days.

Overall, the IMRO *overturned* 8.3% of the utilization review decisions that denied treatment requests made by physicians treating injured workers. Analysis of several variables, including the geographic region of the injured worker, the time elapsed since the worker's work-related injury occurred, and representation by an attorney or other entity acting on behalf of the injured worker, shows similar rates of overturned case decisions.

As in the previous three calendar years, requests for pharmaceuticals in 2017 comprised nearly half (42.6%) the issues in dispute, with opioids the most common drug class (29.3%). Diagnostic tests, including radiology, imaging, and pathology, were the second-most-requested treatment category (16.2%). Rehabilitation services—such as physical therapy, chiropractic, and acupuncture—were the third-most-requested category (14.1%). The treatment category most often overturned was evaluation and management (with a 16.3% overturn rate), which includes specialist consultations and dental services, followed by behavioral and mental health services, which had an overturn rate of 16.3%.

Enhancements that may aid the IMR program continued in 2017. Updates to the Medical Treatment Utilization Schedule (MTUS) included several updated and new chapters as well as the adoption of a formulary. The Division of Workers' Compensation (DWC) introduced its second online Physician Education Module.

The DWC website contains a search tool to assist the public in finding IMR determinations posted on the DWC's website. As of the end of 2017, there are over 660,000 IMR decisions. This tool enables the public to search case decisions using specific criteria, such as the category of treatment request and the date(s) of injury. In 2017, the site received over one thousand visits.

Introduction

In September 2012, Governor Brown signed into legislation Senate Bill 863. This reform of the workers' compensation system in California included Independent Medical Review (IMR), which went into effect January 1, 2013. IMR is an efficient, expedient process for resolving disputes over the appropriateness of medical treatment recommended by physicians for injured workers but rejected in the utilization review (UR) process. The expert reviewers follow the principles of evidence-based medicine to determine the medical necessity of the requested treatment. This report analyzes the progress in this program's fifth year.

About IMR

A UR decision delaying, modifying, or denying a treatment request because it is not medically necessary is final and in effect for one year unless it is overturned through IMR. The IMR process requires that appropriately qualified independent medical professionals determine the medical necessity of recommended treatment based on the [Medical Treatment Utilization Schedule \(MTUS\)](#).

To dispute a UR denial or modification on one or more requested treatments, injured workers or their legal representatives must, within 30 days, submit a signed IMR application that has been completed (except for the signature) by the UR claims administrator, along with a copy of the UR decision. Upon receipt of an eligible application, the Independent Medical Review Organization (IMRO) requests medical records from the claims administrator, the worker, the attorney if represented, and the requesting physician.

After medical records are received, the IMRO assigns the case to an expert physician reviewer. Unless the case is terminated or withdrawn during the process, it is resolved when the assigned physician reviewer communicates the IMR decision(s) to the worker or representative, employer or insurer, and requesting physician in a Final Determination Letter (FDL). Public copies of FDLs are available on the [DWC website](#).

The cost of IMR is borne by employers through direct payment to the IMRO. Maximus Federal Services has been the IMRO since the program's inception in 2013 and is under contract to provide IMR through 2019.

For further information on the IMR process, see Appendix A.

Analysis of 2017 IMR Data

The IMRO provides the DWC with data that include information from the IMR application, details on the types of treatments in review, and evidence cited by the expert reviewers for their decisions. Some information has been taken directly from the FDL, de-identified, and aggregated for review and analysis.

In 2017, all treatment requests were assigned service categories, increasing the plenitude of the evaluation of disputed treatment requests and their resolution.

Geographic regions were determined from the ZIP Code of the IMR application as listed in the case file. The ZIP Code was matched against the monthly US Postal ZIP Code Table identifying ZIP Codes by county. Counties were then grouped by region.

IMR Program Enhancements in 2017

- Effective December 1, 2017, DWC updated all chapters of the treatment guidelines in the MTUS. This includes the addition of new chapters related to work-related asthma and occupational interstitial lung disease. DWC also adopted a new drug formulary that was scheduled to go into effect at the beginning of 2018.
- As of the end of 2017, the DWC website contains the public copies of more than 660,000 IMR Final Determinations, representing 1.3 million treatment requests denied or modified in UR. The search tool was expanded in 2017 to include more specific search criteria on service categories.
- The IMRO expanded the claims administrator portal community from a pilot of four organizations and six users to more than 80 organizations and 1,000 registered users. Additional Web services allow interested organizations to send and receive IMR documents and data without logging directly into the system.

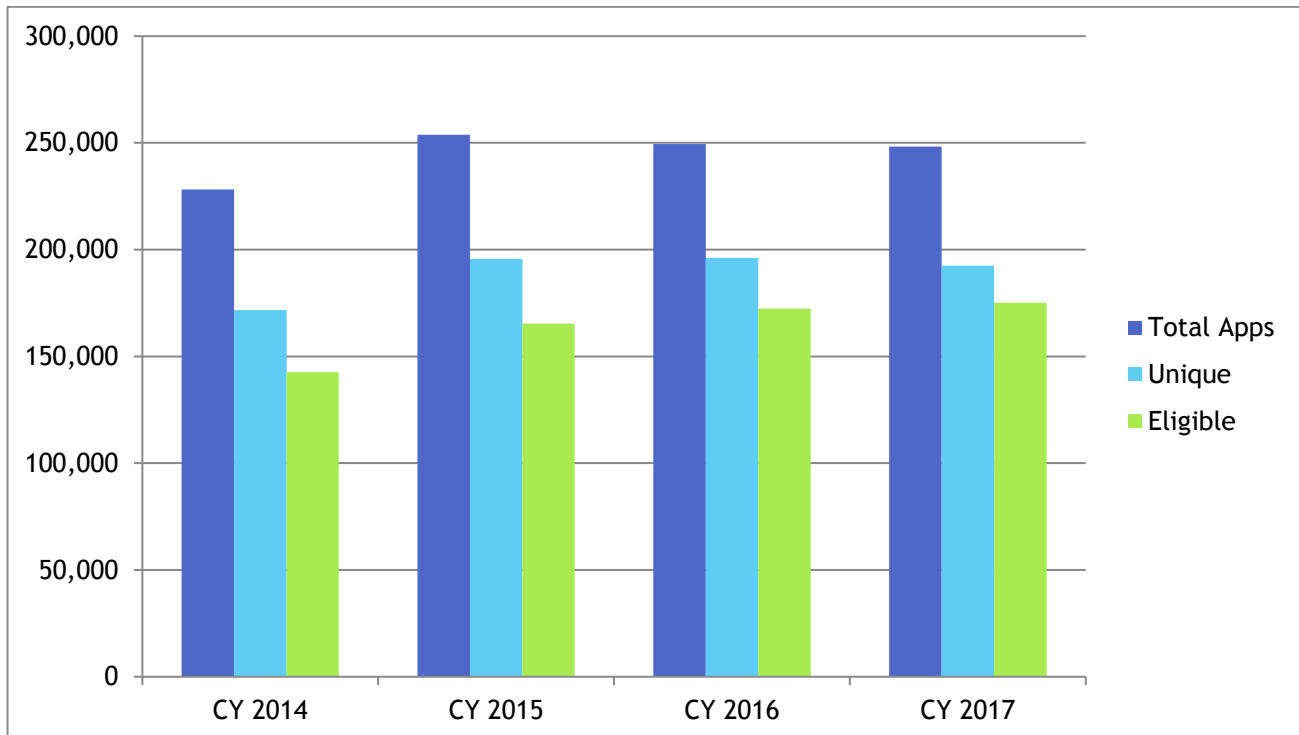
Applications

In 2017, the IMRO received a total of **248,251** IMR applications, slightly fewer than it received in 2016 (249,436) and 2015 (253,779), though higher than 2014 (228,207). Compared to previous years, the number of *eligible* IMR applications continues to increase. (See Figure 1.)

Of the applications filed in 2017, over one in five (22.4%) were duplicates of applications previously received. After subtracting duplicate applications, the number of “unique” IMR applications received was **192,538**, a monthly average of 16,044—consistent with 2016 (16,335) and 2015 (16,307), though higher than 2014 (14,309).

After an application is determined not to be a duplicate, it is screened for eligibility. In 2017, **175,118** eligible applications were processed by the IMRO, a monthly average of 14,593—continuing an increase from 2016 (14,371), 2015 (13,785), and 2014 (11,888).

Figure 1: IMR Applications Received by Year, 2014–2017

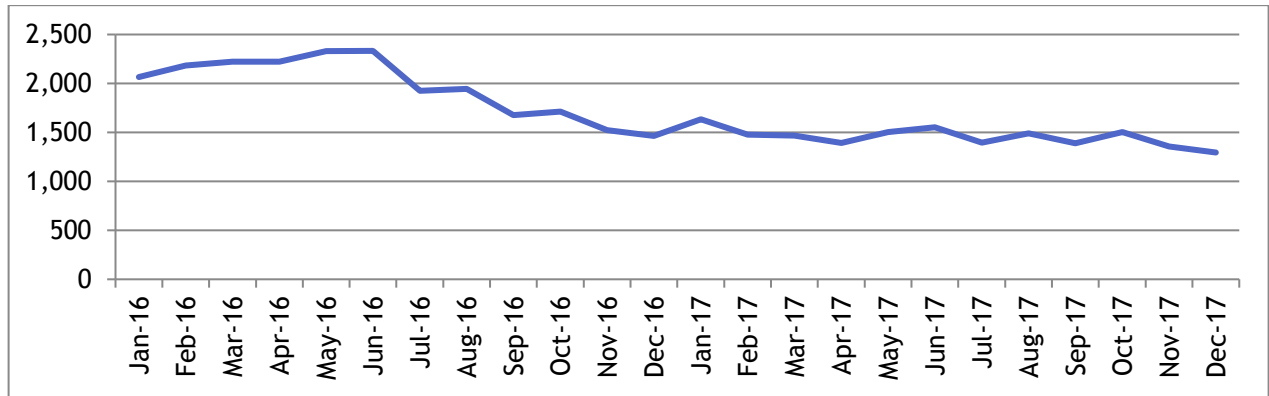


N = 248,251 IMR applications received in 2017, of which 192,538 were unique applications, and 175,118 were eligible applications. For numbers in previous years, see https://www.dir.ca.gov/dwc/imr/reports/2017_IMR_Annual_Report.pdf https://www.dir.ca.gov/dwc/imr/reports/2016_IMR_Annual_Report.pdf
Source: DWC.

Ineligible IMR Applications

In 2017, the number of applications determined to be ineligible (17,420) trended downward significantly from 2016 (23,605) and 2015 (30,320).

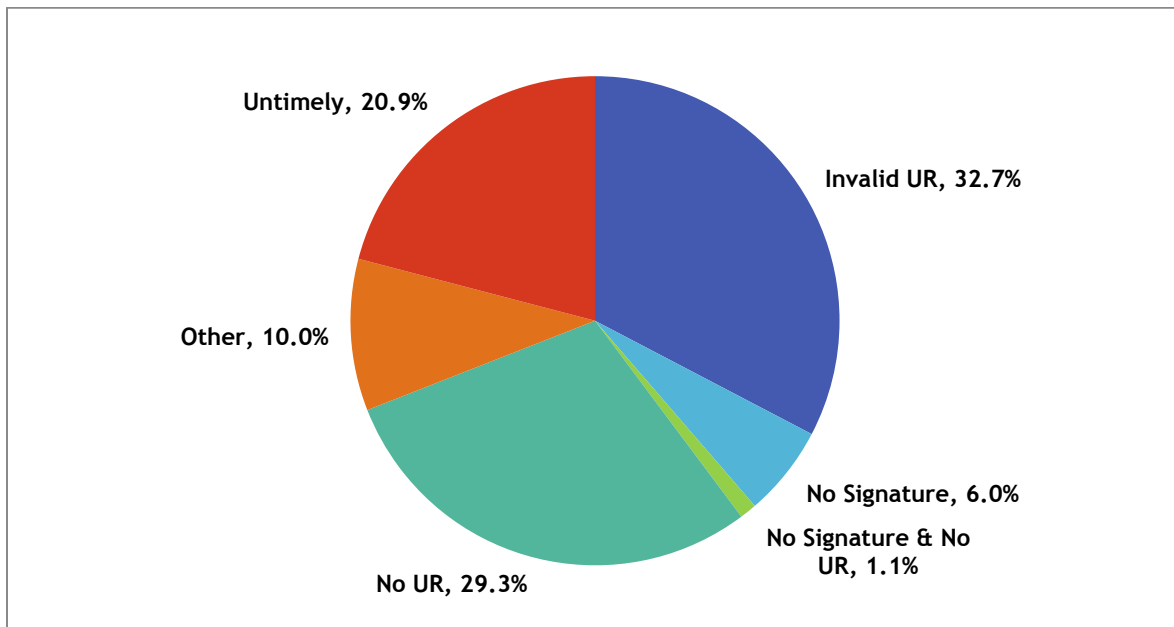
Figure 2a: IMR Applications Determined to Be Ineligible by Month, 2016–2017



An IMR application is ineligible (1) if it lacks the signature of the injured worker (or representative); (2) if it is not on time, that is, not submitted within 30 days of service of the written UR decision; (3) if the UR report is not attached to the application, or (4) if the UR is not valid (CNC, or conditionally noncertified).

See Appendix C for monthly totals by category.

Figure 2b: Reasons for IMR Ineligibility (All), 2017



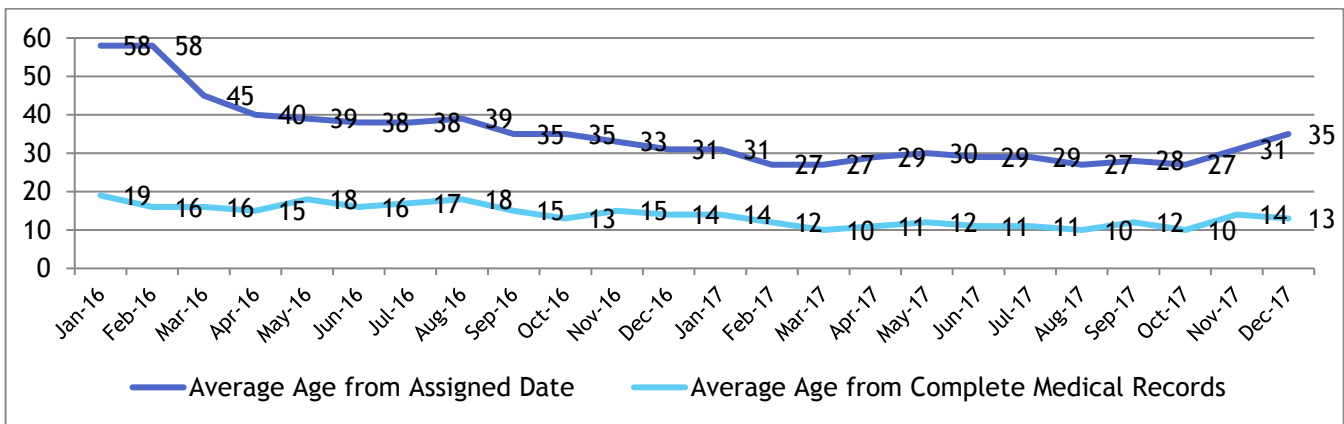
N = 248,251 IMR applications received in 2017, of which 17,420 (7.0%) were ineligible.
N = Source: DWC.

The IMR Timeline

Timeliness of IMR Decisions

Standard IMR decisions must be issued within 30 days of receipt of the medical records. Decisions for expedited applications are due within 72 hours. While the average length of time for issuance was steady overall, a slight increase in the monthly average toward the end of the year is attributed to two factors: (1) an increase in activity as claims administrators who started using the portal became aware of late cases requiring records, and (2) the implementation of new and updated guidelines added time needed to evaluate the guidelines and appropriately apply them to the treatment evaluations.

Figure 3: Average Number of Days to Complete Standard IMRs, 2016 & 2017



N = 348,114 IMR cases (standard determinations), January 2016–December 2017.
Source: DWC.

- The “**Average Age from Assigned Date**” line shows the average number of calendar days required to process an IMR from the mailing date of the Notice of Assignment and Request for Information (NOARFI) was mailed to the date the Final Determination Letter (FDL).
- The “**Average Age from Complete Medical Records**” line shows the average number of calendar days required to process an IMR from the date Maximus received all necessary records to the mailing date of the FDL.

Forty-nine (49) *expedited* cases were decided in 2017. The monthly average for length of time from receipt of application to issuance of decision was from one to three days.

Expedited Review: UR or IMR conducted when the injured worker’s condition is such that the injured worker faces an imminent and serious threat to his or her health, including, but not limited to, the potential loss of life, limb, or other major bodily function, or the normal timeframe for the decision-making process would be detrimental to the injured worker’s life or health or could jeopardize the injured worker’s permanent ability to regain maximum function. 8 CCR § 9792.6.1(j)

Final Determinations Issued: Standard Case Decisions

The IMRO issued 172,145 standard determinations in 2017, the first yearly decrease for the IMR program (a 2.2% decline from a 2016 peak). The IMRO issued 14,345 standard determinations each month on average in 2017. Of these case decisions, 38.9% (66,088) contained only pharmacy-related treatment requests, thus eligible for the lower application fee of \$345. (The standard application fee is currently \$390.)

Figure 4a: IMR Final Determination Letters (Standard Case Decisions) by Year, 2014–2017

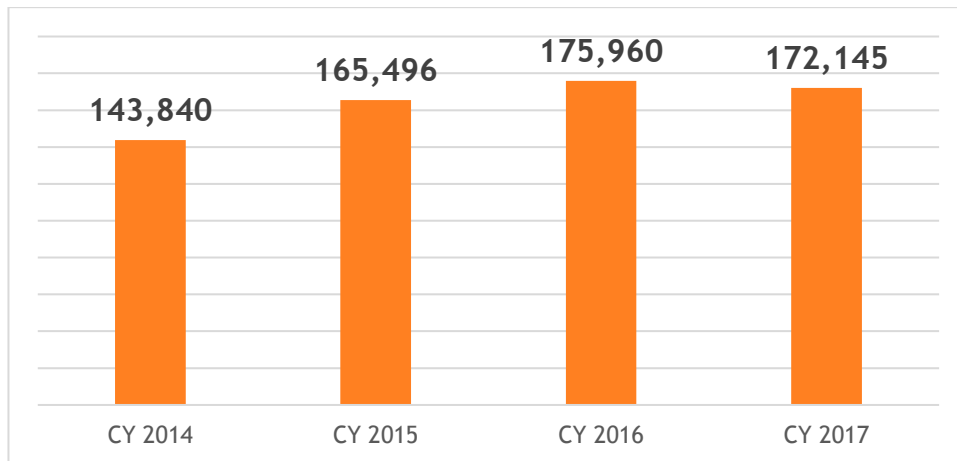
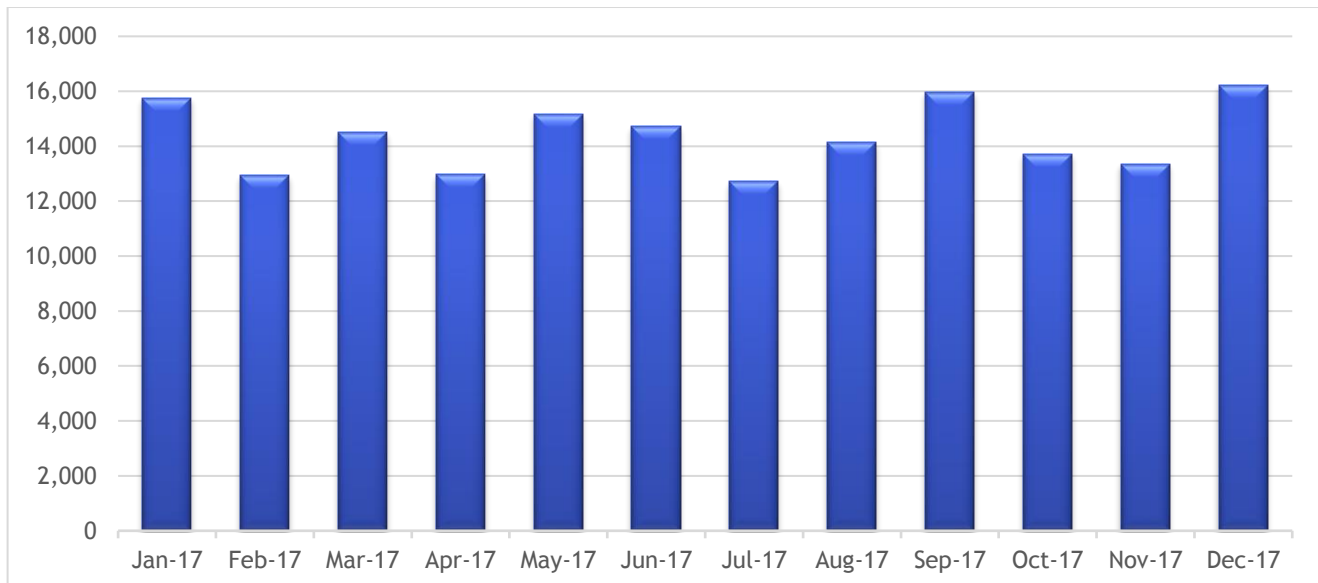


Figure 4b: IMR Final Determination Letters (All) by Month, 2017



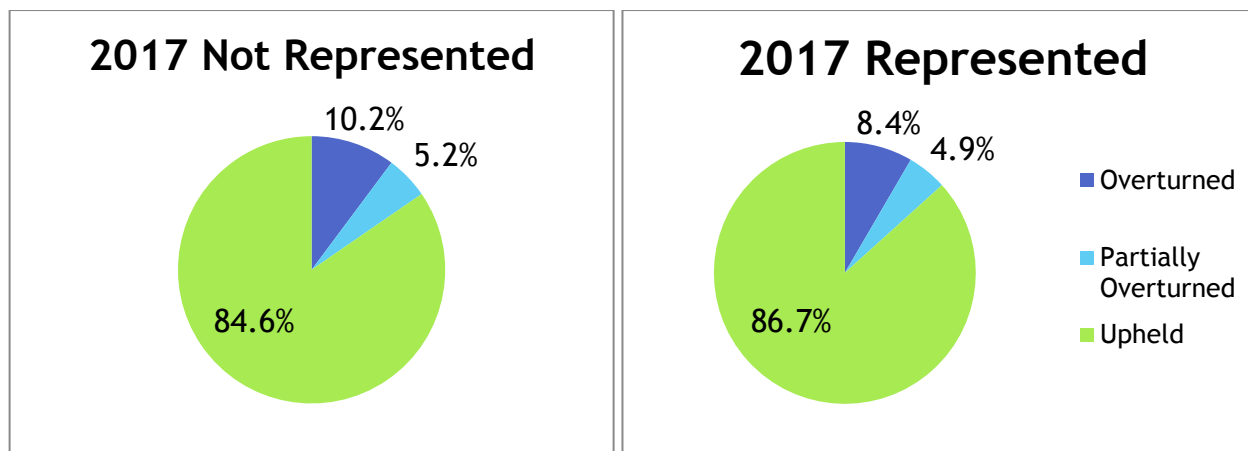
N = 172,194 IMR case decisions issued January–December 2017.
Source: DWC.

Who Files for IMR?

Worker Representation

In 2017, 163,760 (95.1%) of the 172,194 IMR decisions were for applications that listed representation for the injured worker—consistent with the previous year’s rate of 95.2%. Ratios of case outcomes were similar for represented and unrepresented applicants. The overall outcome of IMR reviews is at the case level; a case may contain one or more treatment requests.

Figure 5: Case Outcomes: Worker Representation Status



N = 172,194 IMR case decisions issued January–December 2017. Applications that listed representation for the injured worker comprised 95.1% (163,760) of the decisions. There were 8,434 non-represented cases with decisions.

Source: DWC.

Year of Injury

Case outcomes are also similar in terms of the age of the injury for which the IMR is filed. Cases in which the injury is recent, from a few years ago, and from several years ago were grouped into virtually equal sample sizes, and the case outcomes were very similar.

Table 1: Case Outcomes by Age of Injury

Date of Injury	Total	Overturned	Partially Overturned	Upheld	% Overturned	% Partially Overturned	% Upheld
CY 2016	27,519	2,310	1,285	23,924	8.4%	4.7%	86.9%
CY 2010-2012	27,472	2,354	1,388	23,730	8.6%	5.1%	86.4%
CY 1999-2006	27,315	2,342	1,448	23,525	8.6%	5.3%	86.1%

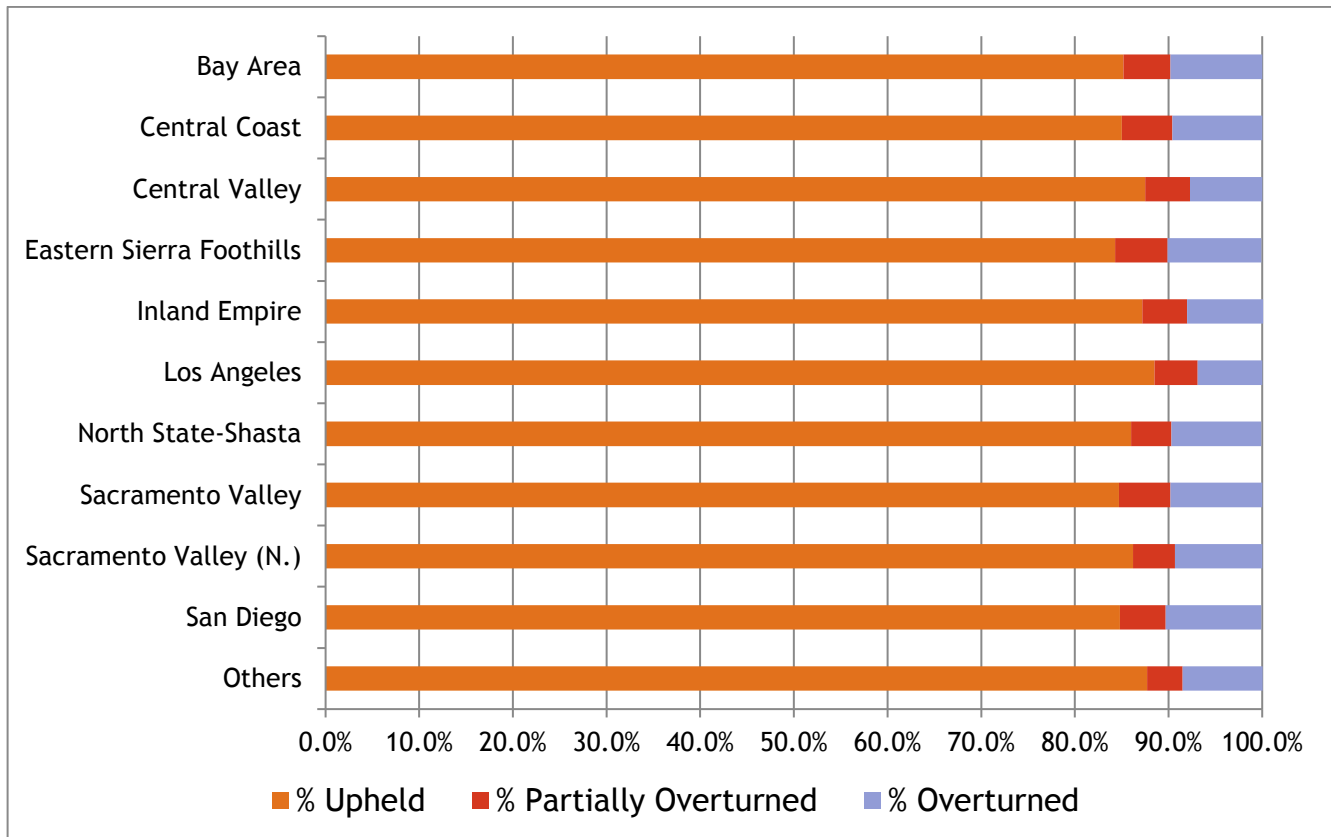
N = Stratified sample of 82,306 IMR case decisions issued January–December 2017.

Source: DWC.

Geographic Region

The number of IMRs issued in 2017 continues to be proportionate to the number of claims filed in each of the ten California geographic regions. As in past years, case decision outcomes were consistent across regions.

Figure 6: Case Outcomes: Geographic Region of Injured Worker, 2017



N = 172,194 IMR case decisions issued January–December 2017.
Source: DWC.

- **Overturned.** All the disputed items/services are medically necessary and appropriate.
- **Partially Overturned.** Some (not all) of the disputed items/services are medically necessary and appropriate.
- **Upheld.** None of the disputed items/services are medically necessary and appropriate.

Other Demographic Information

A sample of 3,000 IMR decisions analyzed concluded that applicants' age and sex are representative for the injured worker population. Out of the 3,000 randomly selected cases, the division between men and women was about even. The average age of injured workers in the sample is 52.

Table 2: Case Outcomes by Age and Sex of Injured Worker

Age		Sex	
Youngest	15	Female	1,501
Average	52	Male	1,491
Oldest	87	Not Listed	10

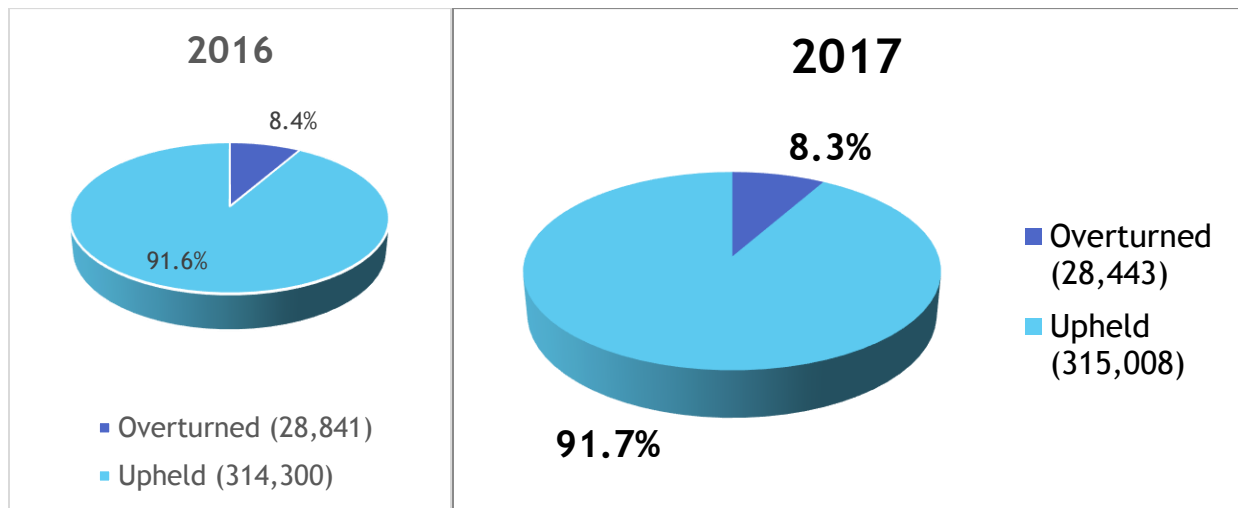
N = Random sample of 3,000 IMR case decisions issued January–December 2017.
 Source: DWC.

Medical Treatment in Dispute

Disputed Treatment Request

“Treatment request” refers to the medical treatment that was denied or modified in UR and challenged through the IMR process. IMR cases have one or more disputed treatments. In 2017, 343,451 treatment decisions were made in the 172,194 decided cases. Overall, 8.3% of these treatment request decisions were overturned, meaning the IMRO decided that the disputed service is medically necessary and appropriate. Conversely, a treatment request for a disputed service that is ultimately found not to be medically necessary and appropriate in IMR is “upheld.” The proportion of treatment request denials being overturned in IMR (vs. upheld) is consistent with that in the previous year.

Figure 7: All Treatment Request Outcomes, 2016 and 2017

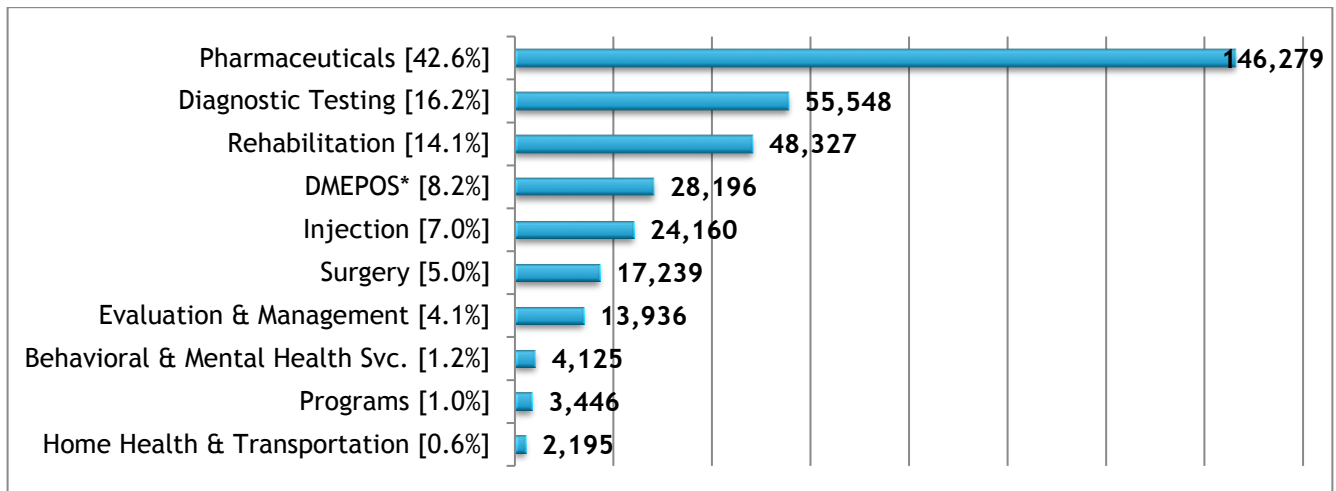


N = 343,451 treatment requests from 172,194 MR case decisions issued January–December 2017.
 Source: DWC.

Decisions by Treatment Category

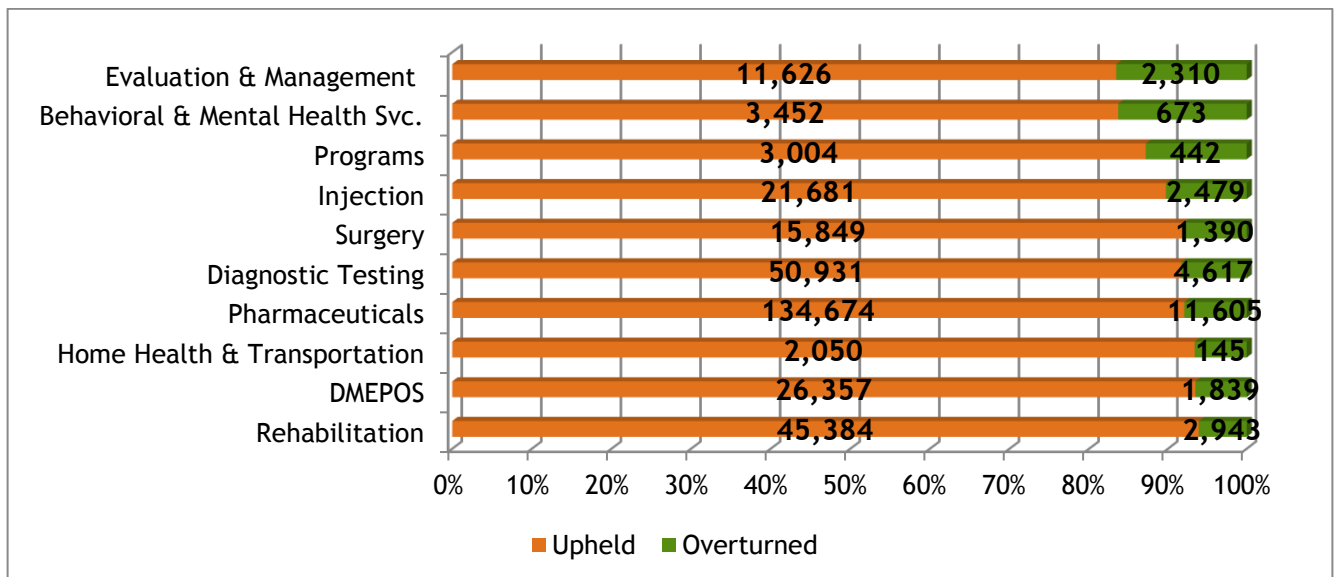
As in previous years, pharmaceuticals were the most common treatment category in 2017 (42.6%). Diagnostic testing was the second-most requested treatment review (16.2%). Requests for rehabilitation, which includes physical therapy, occupational therapy, chiropractic, and acupuncture services, is the third-largest category.

Figure 8a: Service Categories of Disputed Treatment Requests



* DMEPOS: Standard term for Durable Medical Equipment, Prosthetics, Orthotics and Supplies.

Figure 8b: IMR Decisions by Treatment Category, 2017



N = 343,451 treatment requests from 172,194 IMR case decisions issued January–December 2017.
Source: DWC.

Pharmaceuticals, Including Opioids

- Opioids are 29.3% of all pharmaceutical requests, followed by Topical Analgesics (15.5%) and Muscle Relaxants (12.8%).
- UR denials for Topical Analgesics (3.2%) and Muscle Relaxants (2.8%) are rarely overturned. In comparison, the rate of overturn for Opioids is 7.9%.
- Fewer opioid requests were submitted this year than last (42,983 vs. 44,981), but Topical Analgesics requests doubled (22,679 vs. 11,259).

Figure 9a: Most Requested Pharmaceuticals, 2016 and 2017

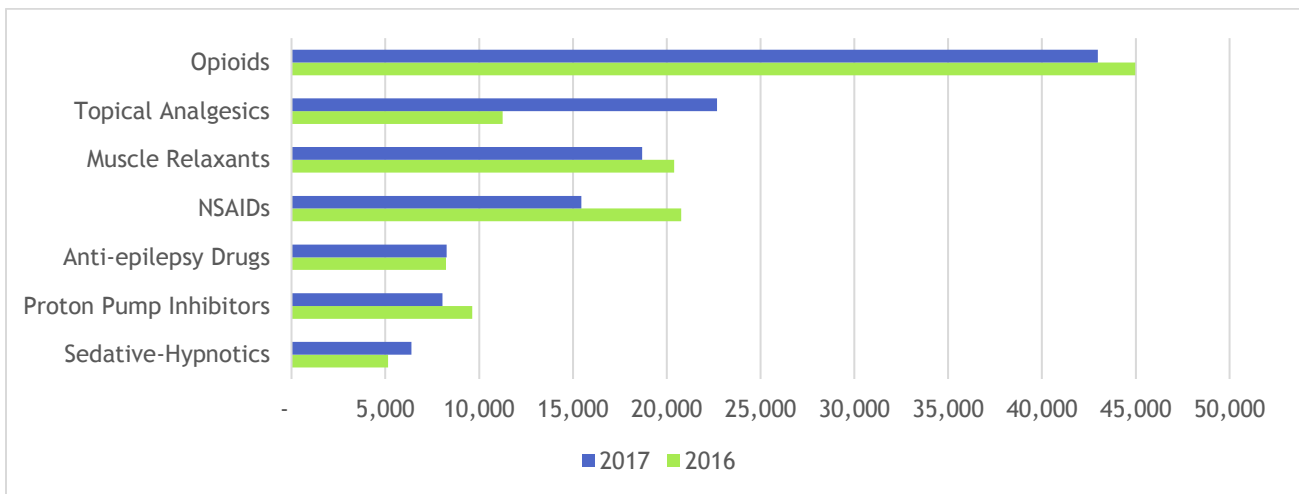
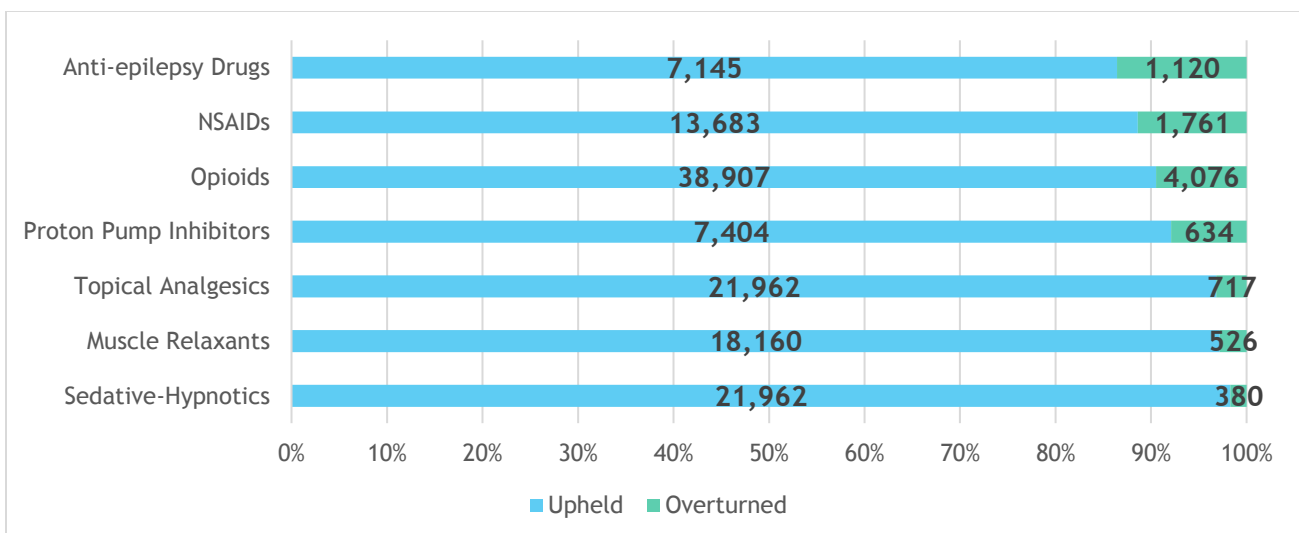


Figure 9b: IMR Decisions of Most Requested Pharmaceuticals, 2017



N = 146,279 treatment requests for pharmaceuticals January–December 2017.

Source: DWC

Note: See Appendix J for treatment request decisions for all other drug classes.

Opioid requests can be for generic or brand-name medications. The categories represent the narcotic active ingredient. Some may be combined with a non-prescription analgesic (such as Norco, which contains hydrocodone and acetaminophen) or an opioid antagonist to combat constipation, a common side effect of opioid use.

Hydrocodone (42.7%), Tramadol (24.1%), and Oxycodone (16.5%) comprise the majority of opioid treatment request evaluations. With 15,110 requests, Norco represents 35.5% of opioid requests. Morphine denials were overturned at the highest rate (13.1%). See Appendix K for details of specific brand-name opioids.

Figure 10a: Opioid Requests, 2017

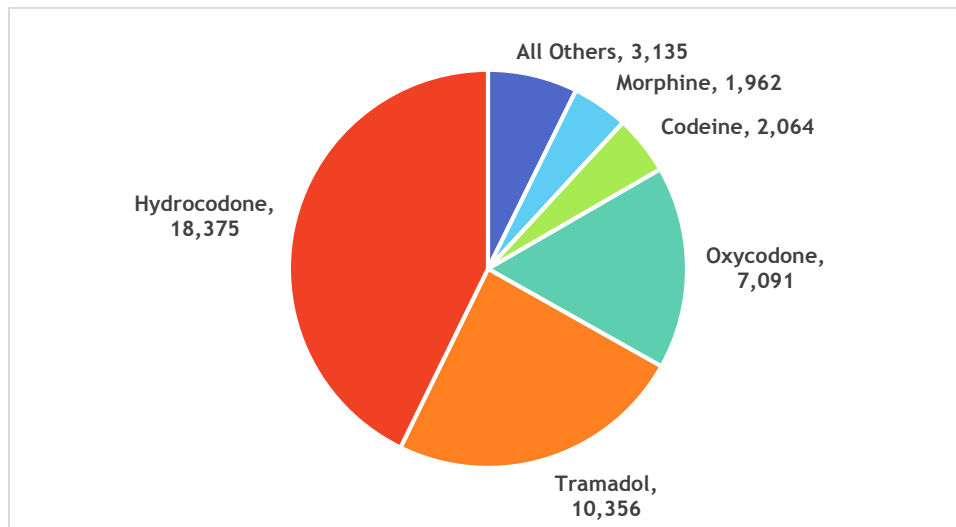
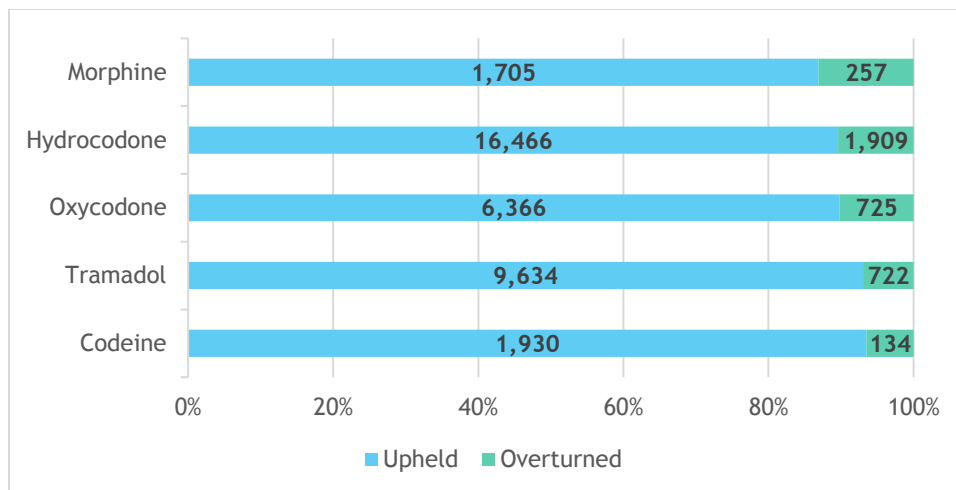


Figure 10b: IMR Decisions of Opioid Requests, 2017

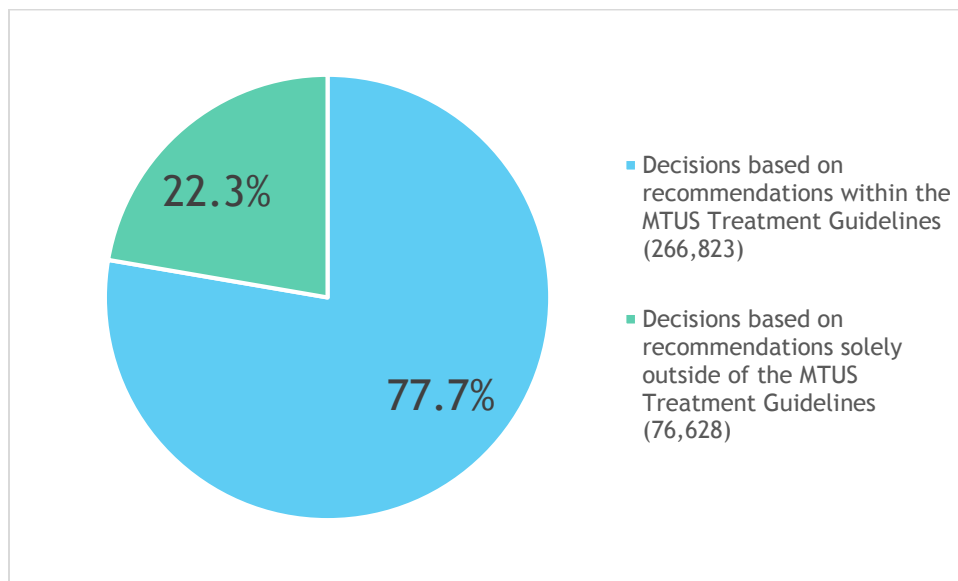


N = 42,983 treatment requests for opioids January–December 2017.
Source: DWC

IMR Decisions and Application of MTUS Treatment Guidelines

The MTUS provides medical treatment guidelines and a Medical Evidence Search Sequence and Methodology for Evaluating Medical Evidence to provide an analytical framework for the treatment of injured workers. The MTUS helps medical providers understand which evidence-based treatments have been effective in providing improved medical outcomes. The MTUS lays out treatments scientifically proven to cure illnesses or treat work-related injuries, based on the diagnosis. IMR reviewers apply the MTUS Medical Evidence Search Sequence and Methodology for Evaluating Medical Evidence in making a determination of medical necessity for a requested treatment. The new/updated MTUS went into effect December 1, 2017.

Figure 11: Application of MTUS Treatment Guidelines

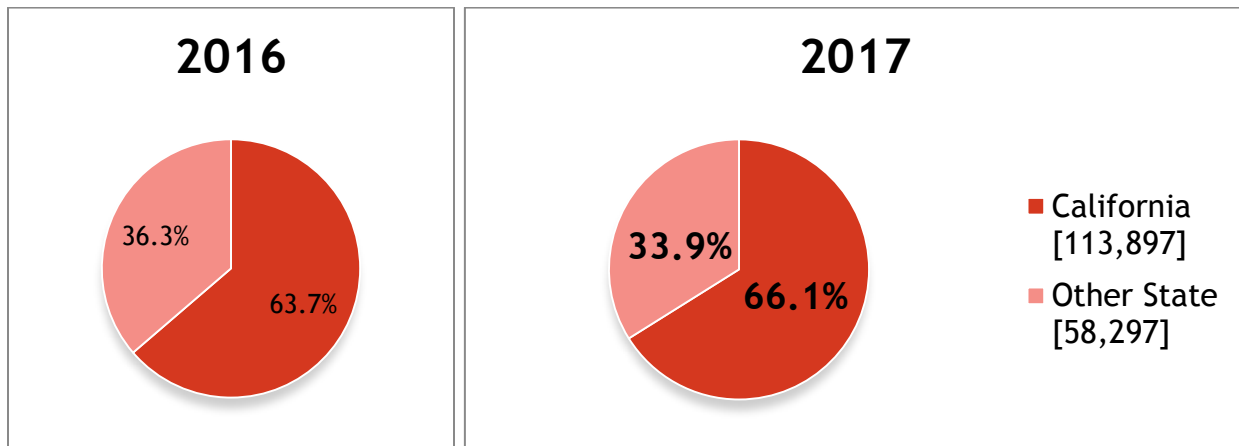


N = 343,451 treatment requests from 172,194 IMR case decisions issued January–December 2017.
Source: DWC.

Physician Reviewers

Expert reviewers licensed in the State of California evaluated two of every three cases in 2017, increasing the ratio of California reviewers slightly from 2016.

Figure 12: IMR Expert Reviewers by the State of License, 2017



N = 172,194 IMR case decisions issued January–December 2017.
 Source: DWC.

Although the expert reviewers may have more than one board certification, cases are assigned based on the *relevant* specialty of the reviewer, determined by the issues in dispute during preliminary review. The expert reviewer does not necessarily have the same board certification as the requesting physician but is knowledgeable and qualified to review the requested treatment. (See Appendix K for a complete list.)

Table 3: IMR Expert Reviewers by Board Certification/Relevant Specialty, 2017

Board Certification	Total	% of Case Decisions
Occupational Medicine	44,332	25.7%
Physical Medicine & Rehabilitation	31,671	18.4%
Family Practice	27,175	15.8%
Pain Management	13,989	8.1%
Orthopedic Surgery	12,247	7.1%
Internal Medicine	11,802	6.9%
Total	141,216	82.0%

N = 172,194 IMR case decisions issued January–December 2017.
 Source: DWC.

Conclusion and Future Directions

Now in its sixth year, IMR continues to provide expedient, efficient resolution of medical necessity disputes in the California workers' compensation system. Activity in the IMR program slightly decreased in 2017 compared to previous years. The IMRO continues to receive just under 250,000 applications and issue over 170,000 case decisions in a calendar year. Fewer applications are found to be ineligible, but over one in five applications are duplicates. This issue should be resolved with the full implementation of the portal (see below).

Reviews are completed an average of 10 to 14 days after the IMRO receives the medical records, well before the statutory maximum of 30 days. The average rate of overturn for treatment request denials is similar to that in previous years, and the types of treatments evaluated remain consistent from month to month.

DWC continues to post IMR decisions on the DWC website. Over 660,000 IMR decisions are available to review. Continued refinement of service categories has made the search tool more effective as a training and education resource.

For 2017, DWC plans for further program enhancements in the area of workers' compensation medical care created major changes in the MTUS. The MTUS treatment guidelines were updated to include recent ACOEM treatment guidelines, and a formulary was adopted.

- MTUS: <https://www.dir.ca.gov/dwc/MTUS/MTUS.html>
 - Webinar: <https://www.youtube.com/watch?v=k5P9nezVjUU>
- MTUS Formulary: <https://www.dir.ca.gov/dwc/MTUS/MTUS-Formulary.html>
 - Webinar: <https://www.youtube.com/watch?v=QkQwAd2B8Mg&feature=youtu.be>

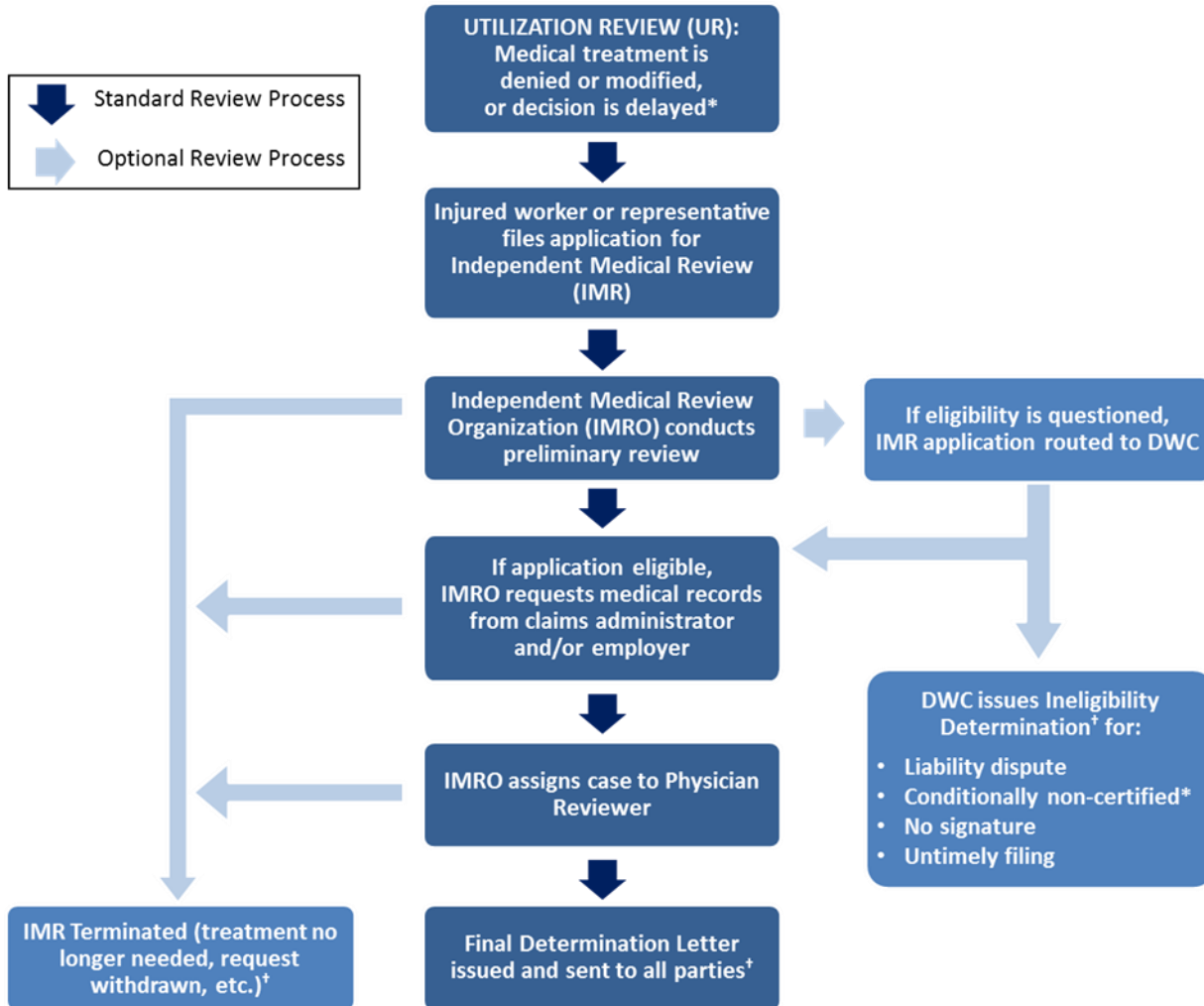
A third Physician Education Module is being developed to complement the existing modules that discuss Qualified Medical Evaluators and the MTUS

- <https://www.dir.ca.gov/dwc/CaliforniaDWCCME.htm>

The IMRO will continue to develop and deploy functionality of its portal to allow access for injured workers, their representatives, and treating physicians. The addition of dashboard reports, web-form IMR application requests, and invoicing for claims administrators will enhance the portal experience.

Appendices

Appendix A: The Independent Medical Review Process



* Treatment decisions may be delayed if physician or claims administrator has not provided the information requested. This is referred to as "conditionally non-certified."

† Closed cases

Appendix B: IMR Applications Received by Month

Month	Total Apps	Unique	Eligible
January	19,805	15,445	13,810
February	19,580	15,065	13,589
March	22,588	17,550	16,081
April	19,771	15,353	14,002
May	21,779	16,921	15,417
June	21,223	16,623	15,070
July	20,965	15,437	14,041
August	22,180	17,029	15,538
September	20,235	15,632	14,243
October	21,806	16,804	15,300
November	19,245	15,339	13,982
December	19,074	15,340	14,045

N = 248,251 IMR applications received in 2017, of which 192,538 were unique applications, and 175,118 were eligible applications.
Source: DWC.

Appendix C: Ineligible Applications by Month

Month	No Signature	No UR	No Sig and UR	Untimely	CNC*	Other	Totals
Jan	73	472	21	382	539	148	1,635
Feb	77	464	14	331	455	135	1,476
Mar	80	427	18	310	505	129	1,469
Apr	93	415	12	273	474	124	1,391
May	104	396	18	344	500	142	1,504
Jun	97	472	17	346	446	175	1,553
Jul	86	400	17	262	497	134	1,396
Aug	113	471	21	242	465	179	1,491
Sep	74	427	16	269	442	161	1,389
Oct	87	469	11	290	483	164	1,504
Nov	96	353	17	306	442	143	1,357
Dec	67	343	14	298	456	117	1,295
Total	1,047	5,109	196	3,653	5,704	1,751	17,460**
% of Total	6.0%	29.3%	1.1%	20.9%	32.7%	10.0%	

N = 248,251. IMR applications received in 2017, of which 17,420 were ineligible.

Source: DWC.

*CNC = Conditionally noncertified decision: A UR decision that has been denied because the treating physician has not provided the medical information requested by the claims administrator that is required to make a medical necessity determination on the treatment recommendation.

**Forty (40) applications deemed ineligible for dual reasons in preliminary review; unadjusted for count.

Appendix D: Final Determination Letters (Case Decisions) Issued by Month

Month	Total	Month	Total
January	15,755	July	12,728
February	12,938	August	14,135
March	14,501	September	15,973
April	12,963	October	13,728
May	15,183	November	13,354
June	14,720	December	16,216

N = 172,194 IMR case decisions issued January–December 2017.

Source: DWC.

Appendix E: Geographic Regions Defined by Constituent Counties

Region	County
Bay Area	Alameda
	Contra Costa
	Marin
	Napa
	San Francisco
	San Mateo
	Santa Clara
	Solano
	Sonoma
Central Coast	Monterey
	San Benito
	San Luis Obispo
	Santa Barbara
	Santa Cruz
	Ventura
Central Valley	Fresno
	Kern
	Kings
	Madera
	Merced
	San Joaquin
	Stanislaus
	Tulare
Eastern Sierra Foothills	Alpine
	Amador
	Calaveras
	El Dorado
	Inyo
	Mariposa
	Mono
	Nevada
	Placer
Tuolumne	

Region	County
Inland Empire	Imperial
	Orange
	Riverside
	San Bernardino
Los Angeles	Los Angeles
North State / Shasta	Del Norte
	Humboldt
	Lake
	Lassen
	Mendocino
	Modoc
	Plumas
	Shasta
	Sierra
	Siskiyou
Trinity	
Sacramento Valley - North	Butte
	Colusa
	Glenn
	Sutter
	Tehama
Sacramento Valley - South	Yuba
	Sacramento
San Diego	Yolo
	San Diego

Appendix F: Geographic Distribution of IMR Case Decisions

Region	Total	Upheld	Partially Overturned	Overturned
North State-Shasta	3,059	2,632	133	294
Bay Area	35,360	30,134	1,768	3,458
Central Coast	13,509	11,487	731	1,291
Central Valley	21,041	18,408	1,012	1,621
Eastern Sierra Foothills	3,930	3,312	220	398
Inland Empire	31,314	27,306	1,505	2,503
Los Angeles	39,082	34,579	1,796	2,707
Sacramento Valley	9,034	7,648	501	885
Sacramento Valley (N.)	3,295	2,839	149	307
San Diego	8,633	7,322	427	884
Others/Out-of-State	3,937	3,450	151	336
TOTAL	172,194	149,117	8,393	14,684

Appendix G: IMR Case-Level Results, Represented and Not Represented

Case Decision	Represented	Not Represented	Total
Overturn	13,824	860	14,684
Partial Overturn	7,957	436	8,393
Upheld	141,979	7,138	149,117
Total	163,760	8,434	172,194

Appendix H: Dates of Injury, Case Decisions Issued in 2017

Year of Injury	Total IMR Cases 2017	Year of Injury	Total IMR Cases 2017	Year of Injury	Total IMR Cases 2017
CY 2017	6,829	CY 2010	7,603	CY 2003	3,918
CY 2016	27,519	CY 2009	5,893	CY 2002	3,547
CY 2015	24,894	CY 2008	5,123	CY 2001	3,562
CY 2014	17,642	CY 2007	4,581	CY 2000	3,456
CY 2013	12,993	CY 2006	3,751	CY 1999	2,600
CY 2012	10,790	CY 2005	3,183	CY 1998	2,286
CY 2011	9,079	CY 2004	3,298	Before 1998	9,647

N = 172,194 IMR case decisions issued January–December 2017.
Source: DWC.

Appendix I: IMR Decisions by Treatment Category (Clinical Services)

Category/Subcategory	Number of Decisions	UR Overturned	% UR Overturned	UR Upheld	% UR Upheld
BEHAVIORAL AND MENTAL HEALTH SERVICES	4,125	673	16.3%	3,452	83.7%
- Evaluation & Management	2,131	339	15.9%	1,792	84.1%
- Therapies	1,993	334	16.8%	1,659	83.2%
DIAGNOSTIC TESTING	55,548	4,617	8.3%	50,931	91.7%
- EMG/NCV/NCS	7,155	672	9.4%	6,483	90.6%
- Imaging, Radiology	21,633	2,407	9.5%	19,586	90.5%
- Lab & Pathology	21,804	1,630	7.5%	20,174	92.5%
- Other Diagnostic Tests	4,956	268	5.4%	4,688	94.6%
DMEPOS	28,196	1,839	6.5%	26,357	93.5%
- Durable Medical Equipment	10,329	544	5.3%	9,785	94.7%
- Electrical Stimulation	6,611	528	8.0%	6,083	92.0%
- Prosthetics / Orthotics	5,276	392	7.4%	4,884	92.6%
- Supplies	5,980	375	6.3%	5,605	93.7%
EVALUATION & MANAGEMENT	13,936	2,310	16.6%	11,626	83.4%
- Dental Services	562	119	21.2%	443	78.8%
- Evaluation & Management	3,151	630	20.0%	2,521	80.0%
- Medical Specialties	10,223	1,561	15.3%	8,662	84.7%
HOME HEALTH/TRANSPORTATION	2,195	145	6.6%	2,050	93.4%
- Home Health	1,733	129	7.4%	1,604	92.6%
- Transportation	462	16	3.5%	446	96.5%
INJECTIONS	24,160	2,479	10.3%	21,681	87.9%
- Peripheral	934	76	8.1%	858	91.9%
- Spine	2,836	240	8.5%	2,596	91.5%
- Other Injection	20,390	2,163	10.6%	18,227	89.4%
PROGRAMS	3,446	442	12.8%	3,004	87.2%
REHABILITATION	48,327	2,943	6.1%	45,384	93.9%
- Acupuncture	7,610	454	6.0%	7,156	94.0%
- Chiropractic	5,770	349	6.0%	5,421	94.0%
- Physical Therapy / Occupational Therapy	27,074	1,611	6.0%	25,463	94.0%
- Other Therapies	7,873	529	6.7%	7,334	93.3%
SURGERY	17,239	1,390	8.1%	15,849	91.9%
- Adjunct Surgical Services	4,335	244	5.6%	4,091	94.4%
- Arthroscopic Surgery	4,078	301	7.4%	3,777	92.6%
- Non-arthroscopic Surgery	6,520	699	10.7%	5,821	89.3%
- Surgical Consult	2,306	146	6.3%	2,160	93.7%

N = 197,171 treatment requests for clinical services issued January–December 2017.

Source: DWC.

Appendix J: IMR Decisions for Treatment Requests by Drug Class

Category/Subcategory	Number of Decisions	UR Overturned	% UR Overturned	UR Upheld	% UR Upheld
Alpha-blocker	78	13	16.7%	65	83.3%
Androgens & Anabolic Steroids	86	9	10.5%	77	89.5%
Antacid	40	7	17.5%	33	82.5%
Anti-coagulant	105	13	12.4%	92	87.6%
Antidepressant	4,836	907	18.8%	3,929	81.2%
Antidiabetics	136	31	22.8%	105	77.2%
Antidiarrheals	29	4	17.2%	24	82.8%
Antiemetic	1,088	65	6.0%	1,023	94.0%
Anti-epilepsy drugs	8,265	1,120	13.6%	7,145	86.4%
Antihistamine	912	4	0.4%	908	99.6%
Antihypertensive	635	134	21.1%	501	78.9%
Anti-infectives	1,359	62	4.6%	1,297	95.4%
Antimigraine Agent	389	61	15.7%	328	84.3%
Antipsychotic	87	8	9.2%	79	90.8%
Asthma Medications	152	17	11.2%	135	88.8%
Atypical Antipsychotic	463	59	12.7%	404	87.3%
Barbiturates	51	1	2.0%	50	98.0%
Benzodiazepine	4,738	159	3.4%	4,579	96.6%
Bisphosphonates	11	2	18.2%	9	81.8%
Calcium Channel Blocker	15	1	6.7%	14	93.3%
Cannabinoids	96	0	0.0%	96	100.0%
Central Adrenergic Agonists	13	2	15.4%	11	84.6%
Cholinesterase Inhibitor	16	2	12.5%	14	87.5%
Corticosteroids	710	57	8.0%	653	92.0%
Dopamine Agonists	68	6	8.8%	62	91.2%
Erectile Dysfunction	355	48	13.5%	307	86.5%
Fibric Acid	13	1	7.7%	12	92.3%
GI Agents	237	24	10.1%	213	89.9%
Gout medications	5	0	0.0%	5	100.0%
H2 Blocker	2,018	210	10.4%	1,808	10.4%
Hormones	801	79	9.9%	722	90.1%
Laxative	1,417	209	14.7%	1,208	85.3%
Misc. Analgesics	890	62	7.0%	828	93.0%
Muscle Relaxants	18,686	526	2.8%	18,160	97.2%
NSAIDs	15,444	1,761	11.4%	13,683	88.6%
Nutritional Products	814	36	4.4%	778	95.6%
Opioid Antagonist	385	52	13.5%	333	86.5%
Opioids	42,983	4,076	9.5%	38,907	90.5%
Proton Pump Inhibitors	8,038	634	7.9%	7,404	92.1%
Prostaglandins	5	2	40.0%	3	60.0%
Sedative-hypnotics	6,393	380	5.9%	6,013	94.1%
Statin	94	20	21.3%	74	78.7%
Stimulants	382	15	3.9%	367	96.1%
Topical Analgesics	22,679	717	3.2%	21,962	96.8%
Topical Compounds	254	5	2.0%	249	98.0%
Tumor Necrosis Factor Modifier	7	3	42.9%	4	57.1%

N = 146,279 treatment requests for pharmaceuticals issued January–December 2017. Source: DWC.

Appendix K: IMR Decisions for Opioid Treatment Requests

Opioid / Brand	Number of Decisions	UR Overturned	% UR Overturned	UR Upheld	% UR Upheld
Buprenorphine	468	65	13.9%	103	86.1%
- Avinza	27	3	11.1%	24	88.9%
- Belbuca	129	15	11.6%	114	88.4%
- Suboxone	184	32	17.4%	152	82.6%
- Subutex	27	5	18.5%	22	81.5%
- Zubsolv	2	1	50.0%	1	50.0%
- Generic/Brand Unspecified	99	9	9.1%	90	90.9%
Butorphanol	2	0	0.0%	2	100.0%
- Stadol	2	0	0.0%	2	100.0%
Codeine	2,064	134	6.5%	1,930	93.5%
- Butalbital	14	0	0.0%	14	100.0%
- Fioricet	22	0	0.0%	22	100.0%
- Trezix	189	3	1.6%	186	98.4%
- Tylenol 3	1,620	109	6.7%	1,511	93.3%
- Generic/Brand Unspecified	219	22	10.0%	197	90.0%
Fentanyl	45	0	0.0%	45	100.0%
- Abstral	8	0	0.0%	8	100.0%
- Actiq	2	0	0.0%	2	100.0%
- Fentora	23	0	0.0%	23	100.0%
- Lazanda	1	0	0.0%	1	100.0%
- Subsys	4	0	0.0%	4	100.0%
- Generic/Brand Unspecified	7	0	0.0%	7	100.0%
Hydrocodone	18,375	1,909	10.4%	16,466	89.6%
- Hysingla	137	14	10.2%	123	89.8%
- Lortab	15	3	20.0%	12	80.0%
- Norco	15,110	1,593	10.5%	13,517	89.5%
- Vicodin	304	31	10.2%	273	89.8%
- Vicoprofen	122	7	5.7%	115	94.3%
- Zohydro	55	5	9.1%	50	90.9%
- Generic/Brand Unspecified	2,632	256	9.7%	2,376	90.3%
Hydromorphone	661	57	8.6%	604	91.4%
- Dilaudid	493	41	8.3%	452	91.7%
- Exalgo	37	5	13.5%	32	86.5%
- Generic/Brand Unspecified	131	11	8.4%	120	91.6%
Levorphanol	34	4	11.8%	30	88.2%
- Generic/Brand Unspecified	34	4	11.8%	30	88.2%
Meperidine	19	0	0.0%	19	100.0%
- Demerol	17	0	0.0%	17	100.0%
- Generic/Brand Unspecified	2	0	0.0%	2	100.0%
Methadone	572	57	10.0%	515	90.0%
- Generic/Brand Unspecified	572	57	10.0%	515	90.0%

Opioid / Brand (cont'd)	Number of Decisions	UR Overturned	% UR Overturned	UR Upheld	% UR Upheld
Morphine	1,962	257	13.1%	1,705	86.9%
- Butorphanol	2	0	0.0%	2	100.0%
- Embeda	33	2	6.1%	31	93.9%
- Kadian	99	21	21.2%	78	78.8%
- MS-Contin	868	103	11.9%	765	88.1%
- MSIR	92	9	9.8%	83	90.2%
- Oramorph	1	0	0.0%	1	0.0%
- Generic/Brand Unspecified	867	122	14.1%	745	85.9%
Oxycodone	7,091	725	10.2%	6,366	89.8%
- Endocet	29	4	13.8%	25	86.2%
- OxyContin	1,385	167	12.1%	1,218	87.9%
- OxyFast	2	0	0.0%	2	100.0%
- OxyIR	28	3	10.7%	25	89.3%
- Percocet	3,110	294	9.5%	2,816	90.5%
- Percodan	5	0	0.0%	5	100.0%
- Roxicodone	138	15	10.9%	123	89.1%
- Generic/Brand Unspecified	2,394	242	10.1%	1,233	89.9%
Oxymorphone	273	18	6.6%	255	93.4%
- Opana	228	17	7.5%	211	92.5%
- Generic/Brand Unspecified	45	1	2.2%	44	97.8%
Pentazocine	10	0	0.0%	10	100.0%
- Talwin	10	0	0.0%	10	100.0%
Sufentanil	5	0	0.0%	5	100.0%
- Generic/Brand Unspecified	5	0	0.0%	5	100.0%
Tapantanol	778	99	12.7%	679	87.3%
- Nucynta	775	99	12.8%	676	87.2%
- Generic/Brand Unspecified	3	0	0.0%	3	100.0%
Tramadol	10,356	722	7.0%	9,634	93.0%
- ConZip	10	0	0.0%	10	100.0%
- Synapryn	436	0	0.0%	436	100.0%
- Ultracet	552	47	8.5%	505	91.5%
- Ultram	1,417	102	7.2%	1,315	92.8%
- Generic/Brand Unspecified	7,941	573	7.2%	7,358	92.8%

N = 42,983 treatment requests for opioids issued January–December 2017.

Source: DWC.

Note: 268 unspecified/generalized opioid treatment requests omitted.

Appendix L: Expert Reviewer Relevant Specialty

Relevant Specialty	Reviewed Cases
Addiction Psychology	788
Anesthesiology	3
Cardiovascular Disease	7
Child & Adolescent Psychiatry	53
Chiropractic	521
Dentist	200
Dermatology	22
Emergency Medicine	7,446
Family Practice	27,175
Hand Surgery	156
Hospice & Palliative Medicine	1,944
Internal Medicine	11,802
Interventional Cardiology	4
Medical Oncology	2
Neurological Surgery	1,793
Neurology	14
Occupational Medicine	44,332
Ophthalmology	78
Oriental Medicine	1,172
Orthopedic Surgery	12,247
Otolaryngology	14
Pain Management	13,989
Physical Medicine & Rehabilitation	31,671
Plastic Surgery	219
Podiatrist	190
Preventive Medicine	1,468
Psychiatry	1,266
Psychology	1,808
Public Health & General Preventive Medicine	301
Pulmonary Disease	272
Rheumatology	3,781
Sleep Medicine	155
Sports Medicine	1,529
Surgery	90
Surgical Critical Care	2,649
Urology	33

N = 172,194 IMR case decisions issued January–December 2017.
Source: DWC.