



California Workers' Compensation Institute
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Estimated Savings from Enhanced Opioid Management Controls through 3rd Party Payer Access to the Controlled Substance Utilization Review and Evaluation System (CURES)

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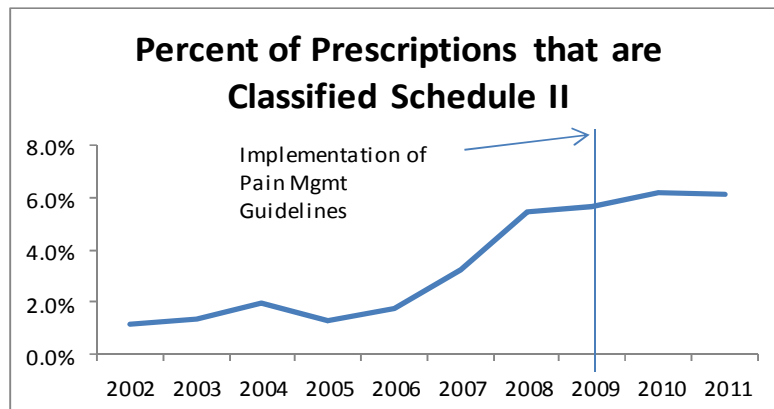
January 2013

Background

Excessive opioid utilization has become a national public health issue as well as a known cost driver in the California Workers' Compensation System. Studies have documented the increase in opioid prescriptions and the association of graduated opioid use and adverse outcomes, including delayed recovery for injured workers, added claims costs, and high rates of litigation.¹

In 2009, in an effort to establish controls on opioid utilization, the Division of Workers' Compensation implemented a chronic pain management guideline within the Medical Treatment Utilization Schedule. However, recent research that measured the use of Schedule II opioids in California workers' compensation through June of 2011 found that utilization of these narcotic painkillers continued to increase following the implementation of the pain management guideline.² Though the study also included preliminary data from the 3rd and 4th quarters of 2011 that indicated a recent reduction in the use of Schedule II opioids, utilization still remained significantly higher than evidence-based guideline recommendations (Exhibit 1).

Exhibit 1. Percent of Prescriptions that are Classified Schedule II



In contrast, the Texas Department of Insurance, Division of Workers' Compensation recently adopted a closed formulary pharmacy rules in an attempt to better control pharmaceutical utilization and their associated cost. In a preliminary report on the impact of the closed formulary that was effective on claims

¹ Swedlow, A., Gardner, L., Ireland, J., Genovese, E. Pain Management and the Use of Opioids in the Treatment of Back Conditions in the California Workers' Compensation System. Report to the Industry. CWCI. June 2008

² Swedlow, A., Ireland, J., Gardner, L. Analysis of Medical and Indemnity Benefit Payments, Medical Treatment and Pharmaceutical Cost Trends in the California Workers' Compensation System. CWCI June 2012.

after August, 2011, Texas reported not only a marked decrease in the use of brand drugs but also a nine percent drop in the use of opioids and a 57 percent reduction in opioids requiring preauthorization.³

Among the factors contributing to the rapid escalation in the use of Schedule II opioids in the California workers' compensation system are the structural limitations of the medical cost controls. Unlike federal programs and most group health plans, the California workers' compensation system has fewer supply-and-demand-side controls to manage the utilization and cost of pharmaceuticals. The lack of such control mechanisms as co-payments, deductibles, closed formularies and limited generic substitution restrict third-party payers' ability to adequately manage pharmaceutical costs. In addition, because workers' compensation accounts for less than 5% of the total California healthcare economy, monitoring potential abuses by patients and physicians across other payment systems is limited.

Some California workers' compensation stakeholders have suggested that enabling third-party payer access to the Controlled Substance Utilization Review and Evaluation System (CURES) would improve quality of care, utilization and cost controls and assist employer and payer efforts to more effectively address prescription drug fraud and abuse. The CURES system currently lacks an operational budget and seeks funding before July 2013, when the system will be taken off-line. In an effort to provide an analysis on the value of appropriate funding of CURES as a viable tool for controlling the utilization and cost of opioids, the authors have compiled data and constructed a model to estimate the:

- current volume of California workers' compensation claims in which opioids are prescribed;
- level of opioid use for claims with prescriptions opioids; and
- estimated savings that could be generated by integrating 3rd party payer access to the CURES database with other medical cost containment strategies.

Estimating Claims with Opioid Utilization

Exhibit 2 shows the estimated number of California work injury claims from accident year 2011 in which opioids were prescribed and the distribution of claims based on the number of Schedule II and Schedule III opioid prescriptions filled within the first 24 months of injury.

Exhibit 2. Estimated Number of AY 2011 California WC Claims with Opioid Prescriptions and Distribution by Number of Opioid Prescriptions Dispensed at 24 Months Post-Injury

Total Claim Count (AY 2011)	500,000	
Percentage of Claims with Opioids	23.1%	
Total Opioid Claims	115,447	
# of Opioid Prescriptions @ 24 Months	% of Claims	Estimated Number of AY 2011 Claims w/ Opioids
1 prescription	41.1%	47,434
2-3 prescriptions	24.7%	28,508
4-7 prescriptions	13.6%	15,745
>7 prescriptions	20.6%	23,760
Total Opioid Claims	100.0%	115,447

³ Impact of the Texas Pharmacy Closed Formulary, A Preliminary Report, 2012, Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, October, 2012

There were approximately 500,000 California workers' compensation claims in accident year 2011.⁴ To estimate the proportion of those claims that involved opioid prescriptions, the authors analyzed a sample of 417,508 claims with 2007-2009 dates of injury from the California Workers' Compensation Institute (CWCI) Industry Claims Information System⁵ (ICIS) database and identified 23.1 percent (96,400 claims) that included a payment record for at least one opioid prescription in the first 24 months following the date of injury. The authors then applied that percentage to the estimated 500,000 claims from AY 2011 to derive an estimated population of 115,447 claims from AY 2011 that involved opioid prescriptions.

The authors also categorized the opioid claims from the ICIS sample into four groupings based on the number of prescriptions that had been dispensed in the first two years. The resulting distribution showed that 41.1 percent of the claims involved a single opioid prescription; 24.7 percent had 2 to 3 prescriptions; 13.6% had 4 to 7 prescriptions; and 20.6 percent had more than 7 opioid prescriptions. Those percentages were then applied to the 115,447 opioid claims estimated for AY 2011 to produce the distribution shown in Exhibit 2.

Estimating System-wide Savings through 3rd Party Payer Access to CURES

Prior studies have documented the high proportion of California workers' compensation claims with opioid use that is not supported by the evidence-based medical literature and the workers' compensation medical treatment utilization schedule (MTUS). CWCI has estimated that almost half of all claims with Schedule II opioids fall outside the pain management medication recommendations included in the evidence-based medical literature.⁶ Many workers' compensation payers, as well as other stakeholders, believe that access to the CURES system, coupled with enhanced medical cost containment strategies including medical provider networks (MPN) monitoring and utilization review (UR) – could significantly reduce the average number of prescriptions and the average dose levels of workers' compensation claims that utilize opioids.

In Exhibit 3, the authors' produced a conservative estimate of the potential savings available through access to CURES data. The model used the estimated number of opioid claims within each of the four opioid utilization categories (noted in Exhibit 2) and applied a cost-reduction savings factor against the average medical and indemnity benefit payments per claim.⁷

⁴ The estimated total number of claims was based on information compiled by the California Workers' Compensation Insurance Rating Bureau. This estimate accounts for insured and self-insured employers.

⁵ ICIS is a proprietary database maintained by the California Workers' Compensation Institute that contains detailed information, including employer and employee characteristics, medical service information, and benefit and other administrative cost information on more than 4 million workplace injuries with dates of injury between 1993 and 2011.

⁶ Swedlow, A., Ireland, J., Johnson, G. Prescribing Patterns of Schedule II Opioids in California Workers' Compensation. Research Update, CWCI. March 2011

⁷ The authors adjusted the 2008 study's average cost per claim by prescription category to 2011 levels with a 28.2 percent medical inflation factor and a 20.6 percent indemnity inflation factor. (Inflation factors derived from 2008 – 2011 average medical and indemnity payments from "Analysis of Medical and Indemnity Benefit Payments, Medical Treatment and Pharmaceutical Cost Trends in the California Workers' Compensation System", CWCI June 2012)

Exhibit 3. Potential Workers' Compensation Savings from Enhanced Opioid Management Controls Via CURES

Claims by Opioid Scripts	Claim Count	Average Paid Benefits from 2008 Study		Estimated Total Benefits Paid on 2011 Claims		Est. % Savings	Potential Savings		
		Med Ben	Indem Ben	Medical Benefits	Indemnity Benefits		Medical Benefits	Indemnity Benefits	Tot Benefits
1	47,434	\$3,909	\$4,351	\$185,398,901	\$206,391,638	-	-	-	-
2-3	28,508	5,321	5,781	\$151,700,753	\$164,807,267	3.0%	\$4,551,023	\$4,944,218	\$9,495,241
4-7	15,745	7,640	8,709	\$120,292,830	\$137,119,795	5.0%	\$6,014,641	\$6,855,990	\$12,870,631
>7	23,760	9,132	11,813	\$216,976,537	\$280,677,161	7.0%	\$15,188,358	\$19,647,401	\$34,835,759
Total	115,447	\$5,820	\$6,777	\$674,369,021	\$788,995,861		\$25,754,022	\$31,447,609	\$57,201,631
								Est. CURES Operating Budget:	\$3,700,000
								Workers' Comp Return-on-Investment	\$15.5 : \$1

The authors estimate that the enhanced opioid management controls offered by 3rd party payer access to CURES data would produce no cost savings for claims with only one opioid prescription, but estimate a 3 percent reduction in total benefits paid on claims with 2 to 3 opioid prescriptions; a 5 percent reduction in payments on claims with 4 to 7 opioid prescriptions; and a 7 percent reduction in payments on claims with more than 7 opioid prescriptions. Under this scenario, the total estimated cost savings on AY 2011 claims is \$57.2 million.

Return-on-Investment

The operating budget for the CURES system is estimated at \$3.7 million⁸. Should the California workers' compensation system cover the cost of the entire CURES system operating budget, the return-on-investment is estimated at \$15.5:\$1.

Actual savings and ROI will depend upon several factors, including access to CURES system data; medical and pharmaceutical cost trends; injury mix; medical cost containment/utilization review intervention; and applicable workers' compensation statutes, rules and regulations.

About CWCI

The California Workers' Compensation Institute, incorporated in 1964, is a private, non-profit organization of insurers and self-insured employers conducting and communicating research and analyses to improve the California workers' compensation system.

⁸ CURES 2.0: An Integrated Approach to Preventing Prescription Drug Abuse and Diversion. California Department of Justice. December 2012