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Patterns of Opioid Use in the Ohio Workers' Compensation System

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Summary of Literature Review: 10 WC Studies, 6 Health Plan Studies

Studies	Prevalence	Average Daily MED
Combined Average –WC	31.8%	47.8 mg/day
Ohio Average - WC	19.2%	57.5 mg/day
Non-WC Studies	17.9%	41.8 mg/day

Source: Dembe, Wickizer, et al. 2011, American Journal of Industrial Medicine

Risk of Fatal Overdose:

Dose (mg/day MED)	Annual Fatality Rate	Elevated Risk of Death
1 – 20	0.2%	------
50 – 99	0.7%	3.7 times the risk
More than 100	1.8%	8.9 times the risk

Source: Dunn et al, 2010, Annals of Internal Medicine

Dosage Distribution:

	Lowest Value Cut Point (mg)	Mean (mg)
1st quintile (0 – 20%)	0	16.1
2nd quintile (20 – 40%)	23	28.3
3rd quintile (40 – 60%)	34	39.3
4th quintile (60 – 80%)	47	55.8
5th quintile (80 – 100%)	72	188.3

A small proportion of claims (0.2%) had exceptionally high doses exceeding 1,000 mg/day MED.

Source: Dembe, Wickizer, et al. 2011, American Journal of Industrial Medicine

Relationship to Lost Workdays:

	Avg. Opioid Prevalence
1 or more lost workdays	22.7%
14 or more lost workdays	32.6%
180 or more lost workdays	57.4%

Source: Dembe, Wickizer, et al. 2011, American Journal of Industrial Medicine

Duration of Active Claims:

Claim Duration	Had Been Open at Least 6 Years	Had Been Open at Least 10 Years
Active Claims Involving Opioid Use*	45.3%	22.9%
Active Claims Not Involving Opioid Use*	28.5%	12.1%

* claims active between July 1, 2007 and June 30, 2009

Source: Dembe, Wickizer, et al. 2011, American Journal of Industrial Medicine

Pharmacies Used by Claimants to Fill Opioid Prescriptions:

	Percent Distribution	Mean daily MED (mg)
One pharmacy	72.2	33.4
Two pharmacies	17.6	46.8
Three pharmacies	5.9	87.6
Four pharmacies	2.3	100.5
Five pharmacies	1.0	135.9
Six or more pharmacies	0.9	235.6

Source: Dembe, Wickizer, et al. 2011, American Journal of Industrial Medicine

Recent Opioid-Control Efforts in Ohio's Workers' Compensation Program

A formulary was created in March 2011, focusing on skeletal muscle relaxants, opioids, and proton pump inhibitors.

Opioid utilization was limited as of February 2012 by using a tiered approval process for access to sustained release opioids. Patients must first start with morphine sulfate extended-release tablets and can move to Tier 2 drugs only after a documented therapeutic failure or allergic reaction.

Proton pump inhibitors restrictions were enacted November 2012. No brand name prescription strength PPIs are reimbursable. Only one generic, Omeprazole – is authorized.

A lock-in program is still in its formative period. An injured worker can be restricted to a single prescriber only if a drug-related statute has been violated. The Ohio BWC can lock in an injured worker to a single pharmacy based on high drug utilization history.

The Ohio Automated Rx Reporting System (OARRS) has recently been tied into the Ohio BWC lock-in and drug utilization review procedures.

A program has been established to develop an opioid utilization trending report, in conjunction with the state's pharmacy benefit manager. The focus is on identifying claims above 60 mg MED/day for at least 90 days.

BWC Efforts to Identify High Dosage Opioid Users

Average mg MED dose per day	Workers with at least one opioid prescription in 2012 (%) n= 42,943	Workers with at least one prescription of any type in 2012 (%) n= 60,391
≥60	13.7%	9.7%
≥200	3.6%	2.6%
≥500	0.6%	0.4%
≥1000	0.12%	0.08%

Potential Policy Strategies

CDC has cited 120 mg daily MED as indicating a dosing threshold that warrants medical evaluation and potential referral to a pain specialist

Inclusion of specific criteria for opioid use and management in consensus treatment guidelines (e.g., ACOEM's, 2008; and the Washington State Agency Medical Directors' Group, 2010).

Use of predictive modeling algorithms to spot unusual trends at an early stage.

Potential Policy Strategies (continued)

Timely interventions, such as assignment of a case manager familiar with opioid therapy, patient and provider education, and referral protocols to behavioral health professionals,

Increased coordination between state drug monitoring programs and workers' compensation agencies regarding opioid use.

FDA's Opioids Risk Evaluation and Mitigation Strategy requires manufacturers to develop educational materials for medical providers about safe use of long-acting and extended-release opioids.

Institute of Medicine Report (July 2011)
Relieving Pain in America

Key Recommendations:

Care by a comprehensive pain management team.

Patient and provider education.

Drug utilization monitoring.

Care coordination and referral, when needed to specialists.

Enhanced pain prevention.

Development of safer drug formulations.

Tighter regulation of opioid distributors.

Expanded use of evidence-based clinical guidelines.

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160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
MED(mg)
0
1
2
3
4
5
6
7
Year Post Accident
Ever had LA and had LA that year
Ever had LA and had SA that year
Only had SA and had SA that year