

# Estimates of financial impact to workers' compensation costs

## Overview

- Cannabinoids: potential cost reductions or the “next Oxycodone?”
- Overview of opioid epidemic
- Discussion of off-label prescriptions
- Discussion of financial impacts



# Background on opioid epidemic

## Development of epidemic

- Schedule 2 opioids
- Public health epidemic
  - Reaction to conservative approach used in the past for opioids
  - Driven by increased off-label prescription activity
  - High costs to public health systems and society
- Per Columbia University study:
  - **380%** increase in schedule 2 opioid prescriptions between 1998-2008
  - **200%** increase in prescription opioid deaths



# Background on opioid epidemic

## WC perspective

- Opioids are a major contributor to WC medical costs.
- Based on *Workers Compensation Prescription Drug Study: 2013 Update* by NCCI:
  - Prescription drug costs make up 18% of medical payments at ultimate.
  - Opioids make up 34% prescription drug spend.
- In 2011, \$30b in WC medical payments were made (based on National Academy of Social Insurance, which includes self-insured and government programs).
- This gives an estimate of **\$2b** in opioid spend per year.



# Background on opioid epidemic

## WC perspective

- Opioids, while effective for pain relief, have detrimental side effects on injured workers.
  - Addiction
  - Liver failure
  - Overdose
  - Death
- Use of opioids related to WC claims varies by state.
  - The worst states are New York and Louisiana: almost one in six injured workers are classified as longer term users of opioids per Workers' Compensation Research Institute study.
- Medications purchased with WC dollars are being sold on the black market.



# Off-label use

- Use of FDA-approved drug for non-FDA-approved purpose
  - Very common and completely legal
  - Prerogative of the physician
  - Per First Script study, pharmaceutical companies were fined **\$4b** since 2010 for advertising off-label use of their drugs
- Examples
  - Aspirin
  - Cymbalta
  - Schedule 2 opioids
  - Cannabinoids?



# Estimates of financial impact to WC costs

## Risks of FDA-approved cannabinoids

- Risks of abuse
  - Recreational use
  - Per Alice, “Sativex® rarely produces intoxication outside of early-on dose titration.”
  - Potential for resale on black market
- Pharmaceutical cannabinoids as preferable to smokable marijuana
- **“The next Oxycodone?”**



# Cannabinoids as a supplement or replacement to schedule 2 opioids

- Physicians are in need of non-opioid alternatives to pain relief.
  - Current alternatives such as Cymbalta carry other risks.
- Cannabinoid and opioid compounds are shown to be more effective than stand-alone opioid therapy.
  - There is **27%** additional pain reduction possible over stand-alone opioid therapy, per American Society for Clinical Pharmacology and Therapeutics study.
- As a replacement, there is an avoidance of side effects associated with optimized opioid use.
  - Physicians may have preference for cannabinoids given opioid epidemic.



# Cannabinoids as a supplement or replacement to schedule 2 opioids

- Per MS Society of Canada, Sativex<sup>®</sup> comes with average cost of **\$12.25** per day, based on dosage of five sprays per day.
- Per Express Scripts, Oxycodone is most costly drug on per user, per year basis.
- Significant impact to WC medical costs due to cannabinoid prescription will come only with off-label activity.





# Estimates of financial impact to WC costs

## Medical reserves outstanding by year

| Accident year | P&C industry medical reserves by year | Estimated opioid reserves |
|---------------|---------------------------------------|---------------------------|
| 2004          | \$ 2,231,279                          | \$ 136,554                |
| 2005          | 2,419,770                             | 148,090                   |
| 2006          | 2,879,911                             | 176,251                   |
| 2007          | 3,186,634                             | 195,022                   |
| 2008          | 3,406,116                             | 208,454                   |
| 2009          | 3,311,291                             | 202,651                   |
| 2010          | 3,706,358                             | 226,829                   |
| 2011          | 4,255,068                             | 260,410                   |
| 2012          | 5,040,046                             | 308,451                   |
| 2013          | 7,739,812                             | 473,676                   |
| <b>Total</b>  | <b>\$ 38,176,285</b>                  | <b>\$ 2,336,388</b>       |

- Potential impact to outstanding reserves is significant.
- Reduction in this category of reserves is desirable.
- Reduction in indemnity reserves may also occur with cannabinoid supplement or replacement of opioids.

\* Amounts in \$ billions

\* Does not include ancillary costs due of opioid usage (addiction, liver failure, fatality)

▶ Values based on P&C Industry Schedule P data, using Countrywide NCCI factors to develop ultimate estimate



# Conclusion

- Is FDA approval of cannabinoids going to bring us the “next Oxycodone” in Workers Compensation? Probably not.
- Potential cost reductions and reserve takedowns as a result of opioid supplement or replacement are more than just conjecture.
- Developments of the next few months will give us a clearer understanding of the potential financial impacts.

