



# Physician Dispensing: Latest Research From WCRI

November 17, 2017

# About WCRI

- Independent, not-for-profit research organization
- Diverse membership support
- Studies are peer-reviewed
- Resource for public officials & stakeholders
  - Content-rich website: [www.wcrinet.org](http://www.wcrinet.org)
  - Over 600 WC studies published

# WCRI Approach

- Mission:

“Be a catalyst for improving workers compensation systems by providing the public with high-quality, credible information on important public policy issues”
- Do not make recommendations or take positions on issues



# **2017 Study Looking At Physician Dispensing In 26 States (2011–2014)**

# Key Question Addressed In 2017 Study

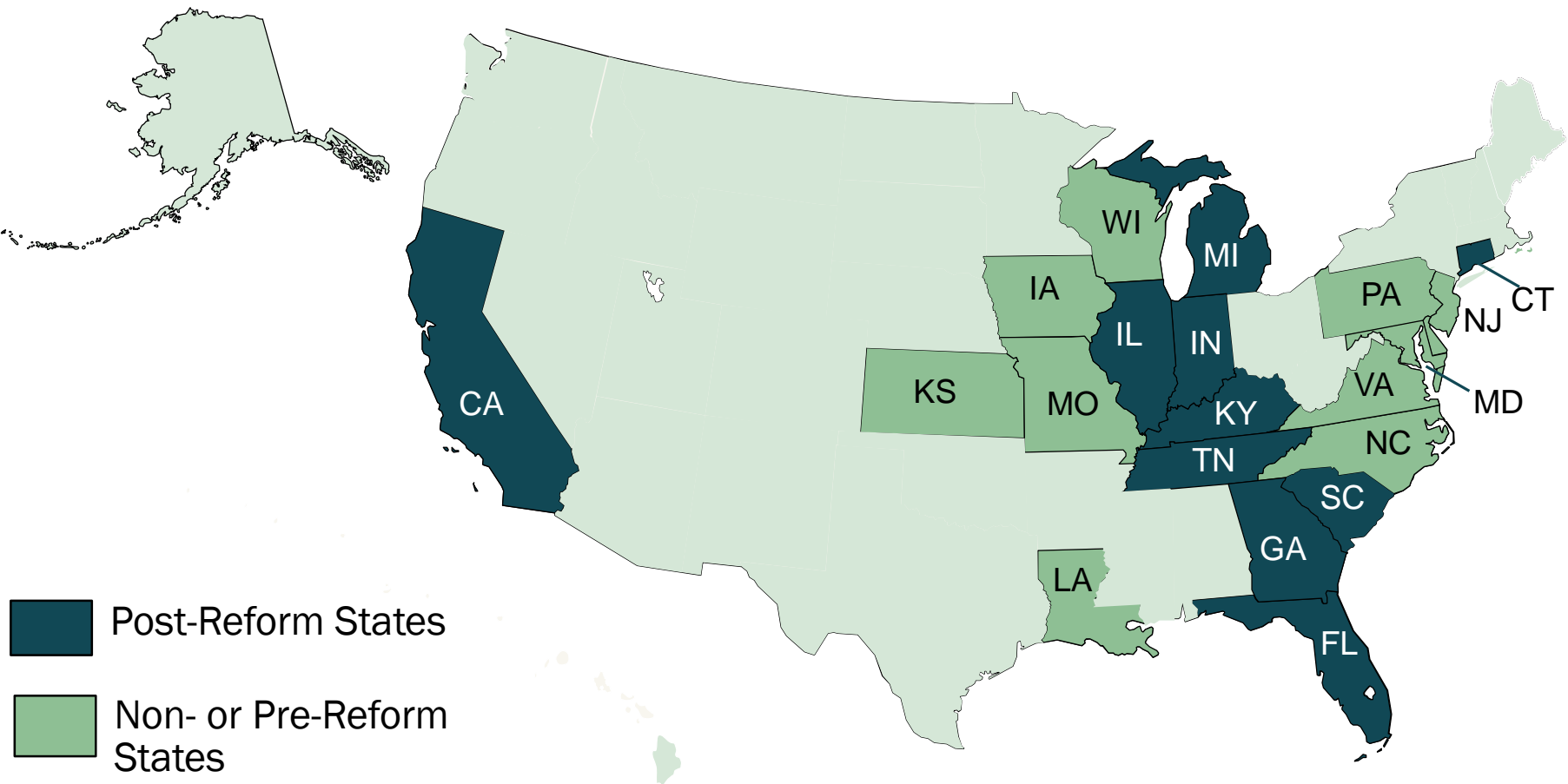
- Did reforms achieve their intended goals?
- 2 categories of reforms
  - Price-focused reforms
    - Target higher-priced, repackaged drugs—capped at AWP
    - Intended to reduce workers' compensation costs
  - Limiting reforms
    - Limit the types of drugs that can be dispensed or limit dispensing to a short time frame
      - E.g. limits on dispensing controlled substances in FL, KY, LA, NV, NC, PA, and TN; one-week time limit in IN
    - Intended to place limits; reduce costs and promote drug safety

AWP: Average wholesale price of original drug. Source: *A Multistate Perspective on Physician Dispensing, 2011–2014* (2017)

# What Do We Look At To Assess Whether Reforms Met Intended Goals?

- We look at:
  - Prices
  - Frequency
  - Cost share (physician-dispensed drugs relative to all prescription drug costs)
  - Patterns
- We compare measures between states that have had reforms with those that have not had reforms or with states where we observed pre-reform data

# Post-Reform And Non- Or Pre-Reform States



# Overall Findings

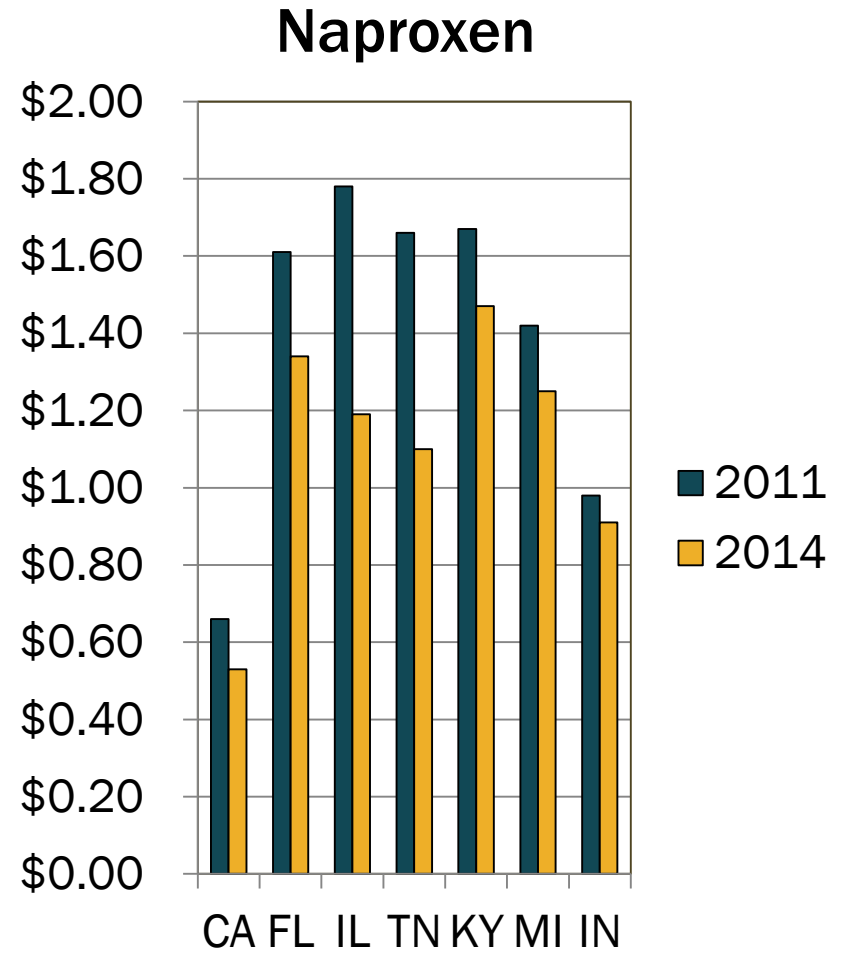
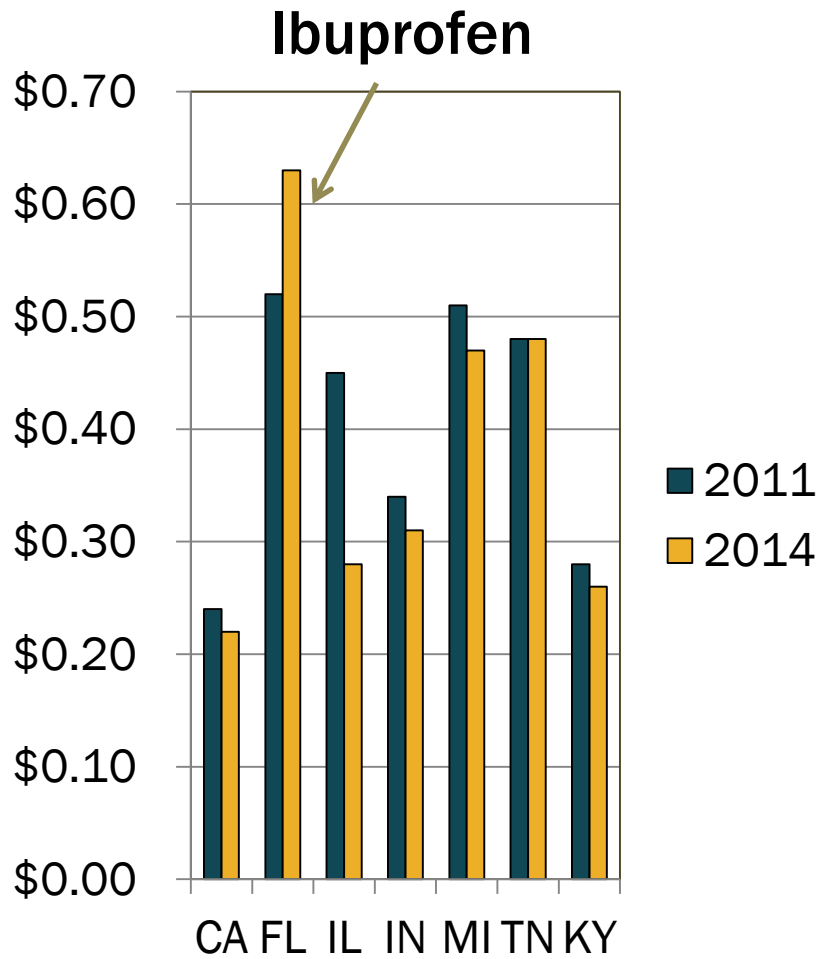
- Prices of many the most common physician-dispensed drugs decreased
- Physicians dispensed fewer prescriptions in 2014 than in 2011
- Combination of decreased prices and frequency reduced the cost share of physician-dispensed drugs in many states
  - CA, FL, and IL were exceptions
- Despite decreases, in 2014 physician dispensing was still common in several states
- Noticeable shift in pattern of dispensing from opioids to non-opioids as a result of the limiting reforms



The background of the slide features a faint, stylized line graph. The graph has a vertical y-axis on the left with numerical labels: \$0, \$200, \$400, \$600, \$800, and \$1,000. The horizontal x-axis represents time, with labels for years from 2000 to 2020. Three distinct lines are plotted: a blue line with circular markers, an orange line with square markers, and a grey line with circular markers. All three lines show an overall upward trend, with some fluctuations. The blue line starts around \$250 in 2000 and rises to nearly \$1,000 by 2020. The orange line starts around \$150 and reaches about \$700. The grey line starts around \$100 and reaches about \$800. The title text is overlaid on the middle section of the graph.

# **The Impact Of Price-Focused Reforms On Prices Of Physician- Dispensed Drugs**

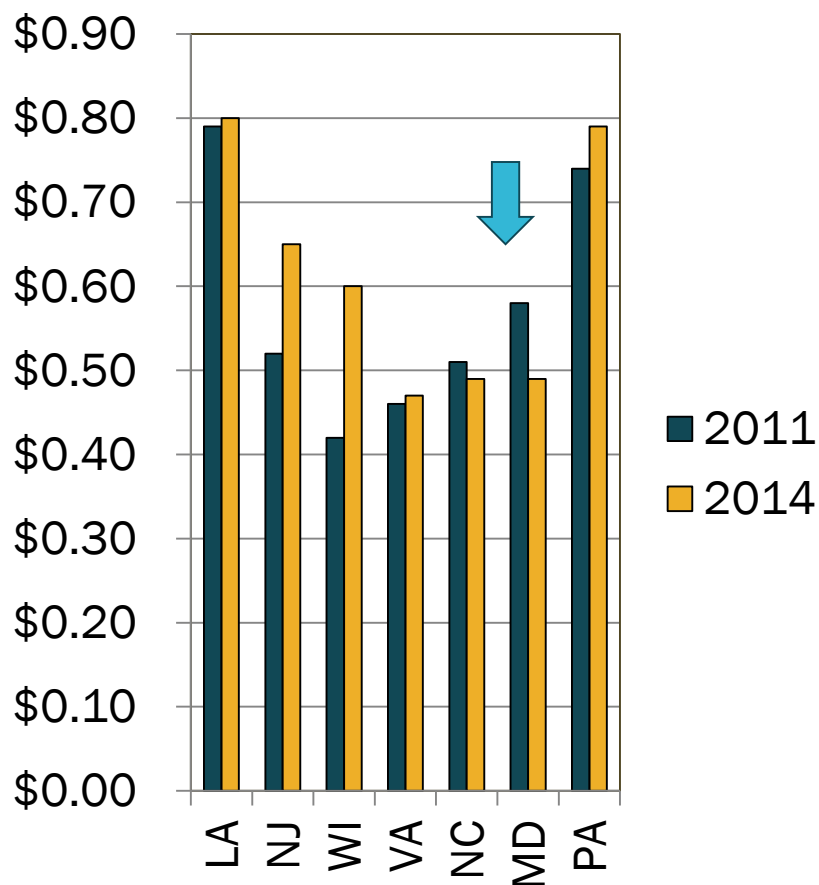
# Prices Of Frequently Dispensed Drugs Decreased In Post-Reform States



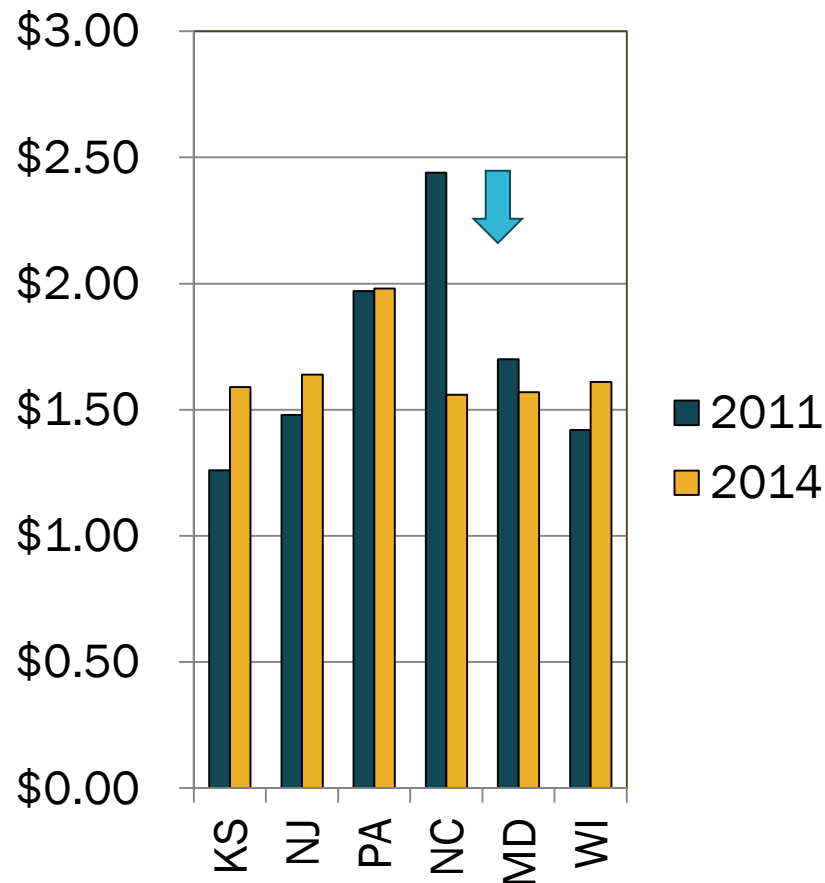
These are average prices per pill. We saw price decreases of up to 39%.

# Prices Were More Static Or Increased In Non-Or Pre-Reform States

## Ibuprofen

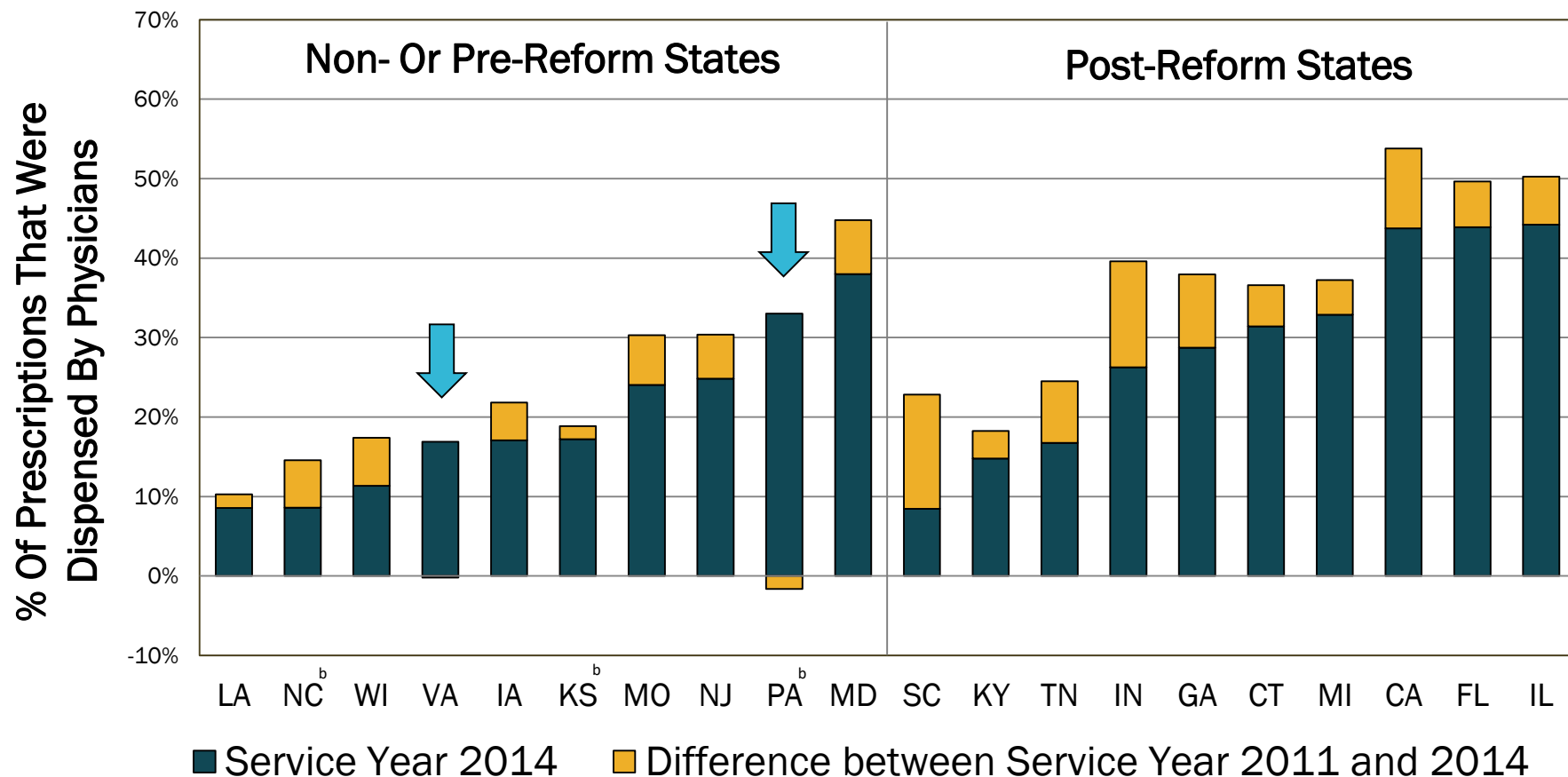


## Naproxen



In contrast we saw price increases as high as 42%. MD and NC were exceptions. NC had some post-reform data.

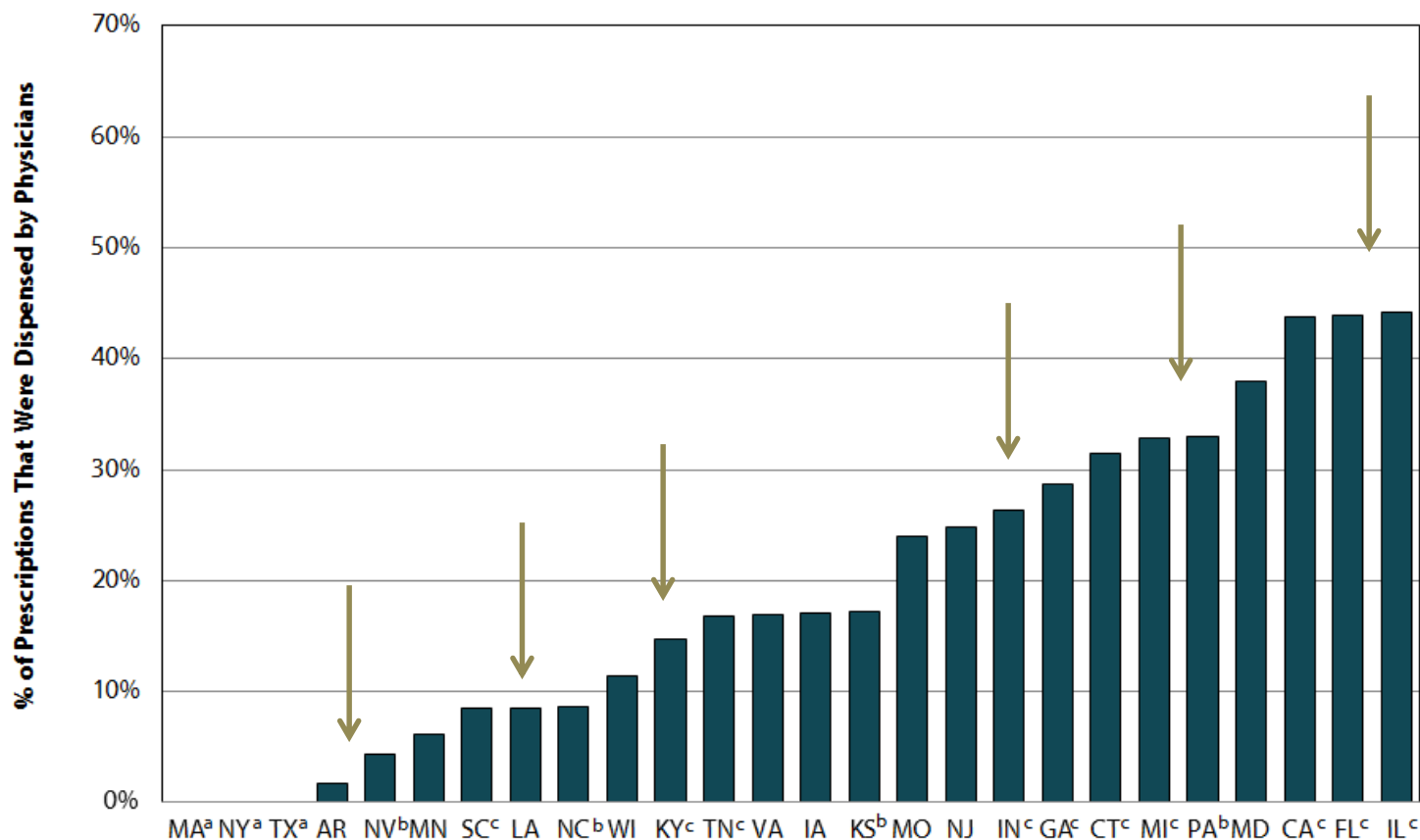
# Physicians Dispensed Fewer Prescriptions In 2014 In Most States

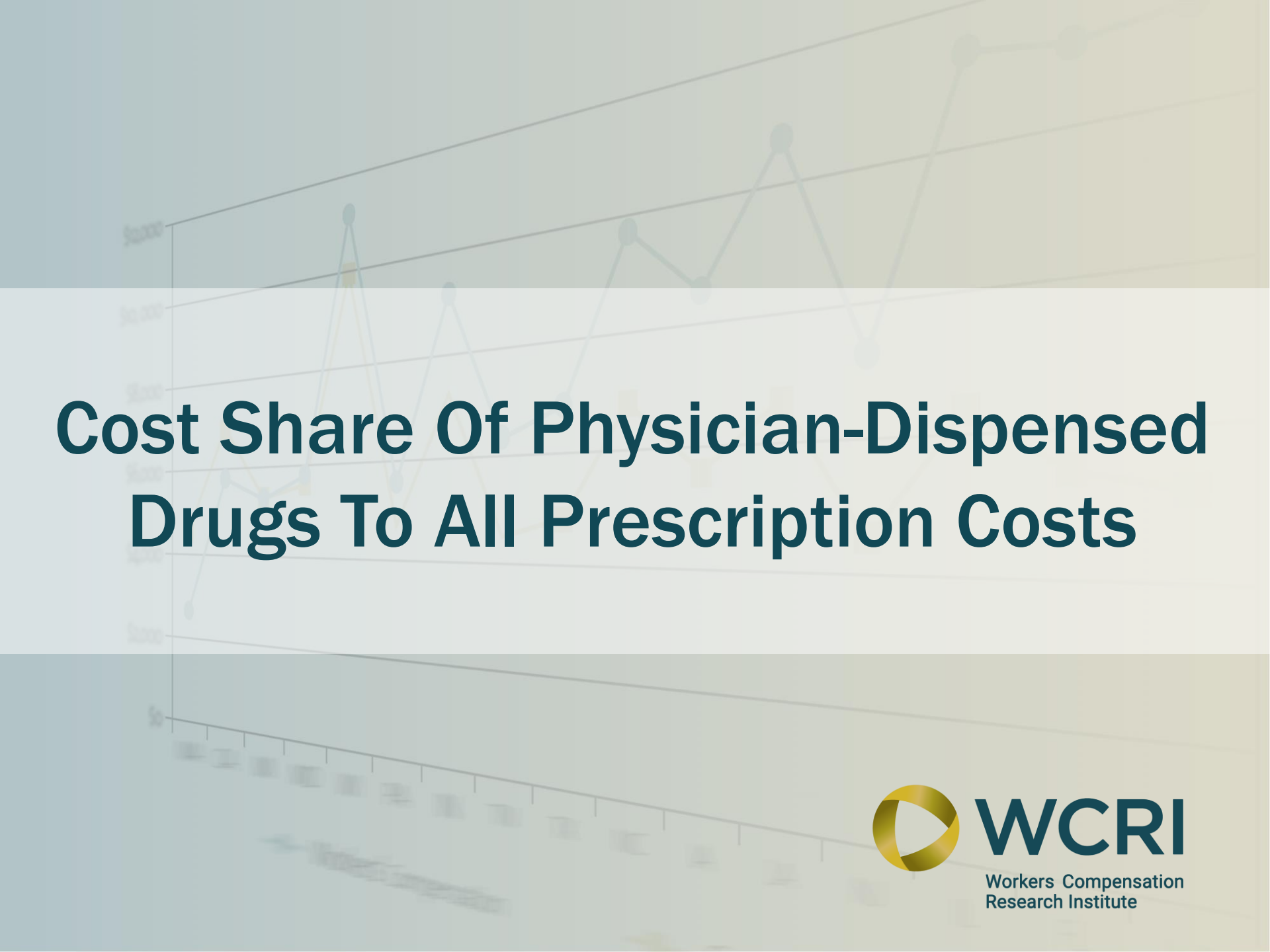


63% decrease in SC and 30% decrease in TN and IN. PA and KS are both pre-reform; NC data is a mix of pre- and post-reform.

# Physician Dispensing Still Common in 2014

**Figure 3.1 Percentage of All Prescriptions That Were Dispensed by Physicians, Service Year 2014**

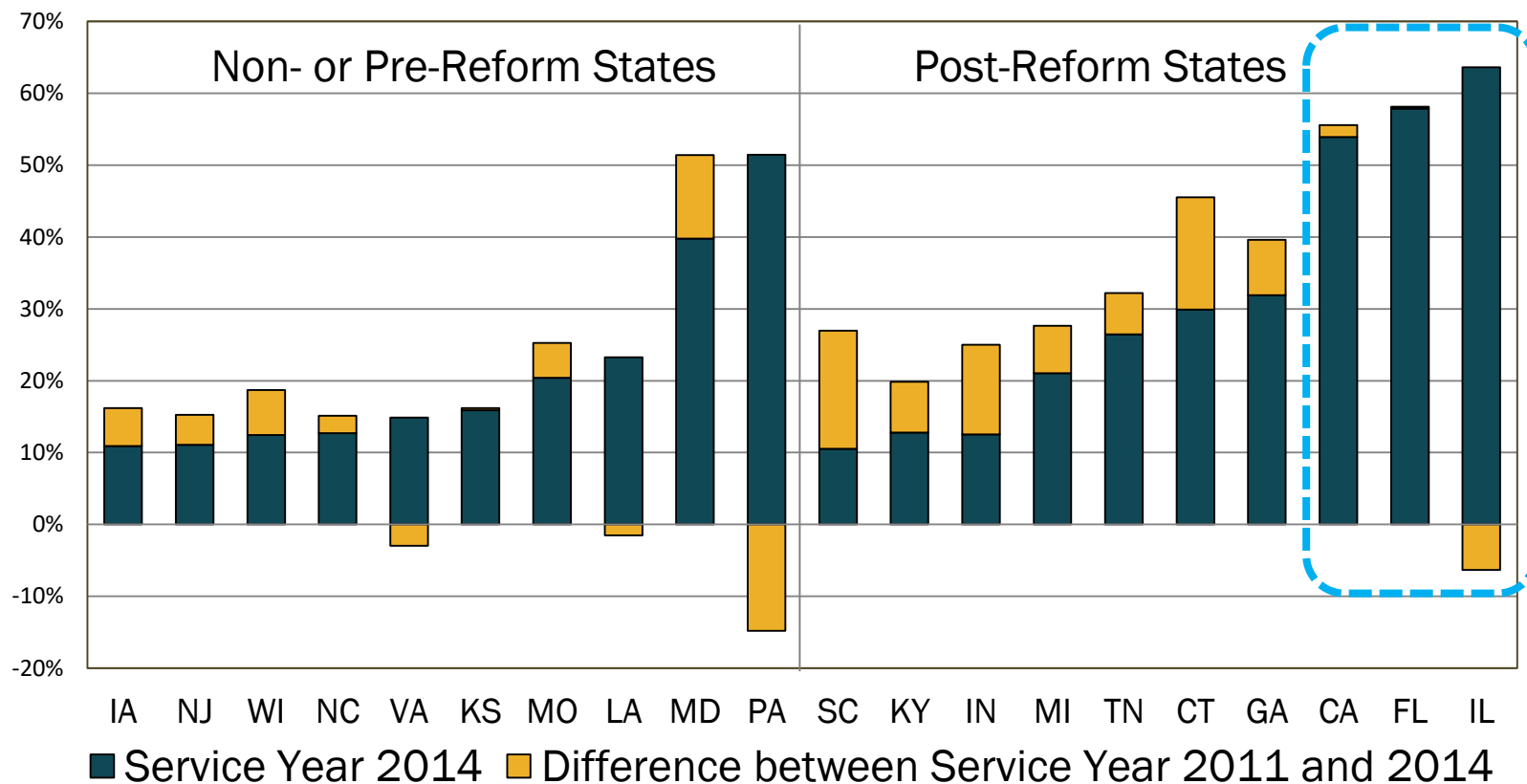


The background of the slide features a faint, stylized line graph. It has a vertical y-axis on the left with numerical markers at 0, 1000, 2000, 3000, 4000, and 5000. The horizontal x-axis represents time, with labels for years from 2000 to 2020. Several data series are plotted as lines with circular markers. One series shows a steady upward trend from approximately 1000 in 2000 to 4500 in 2020. Another series shows more volatility, starting around 1500, peaking near 4000 around 2005, dipping, and then rising again towards 4000 by 2020. A third series starts low, around 500, and rises to about 3000 by 2020. The overall aesthetic is professional and data-oriented.

# Cost Share Of Physician-Dispensed Drugs To All Prescription Costs

# Cost Share Changed Little Or Increased In CA, FL, And IL

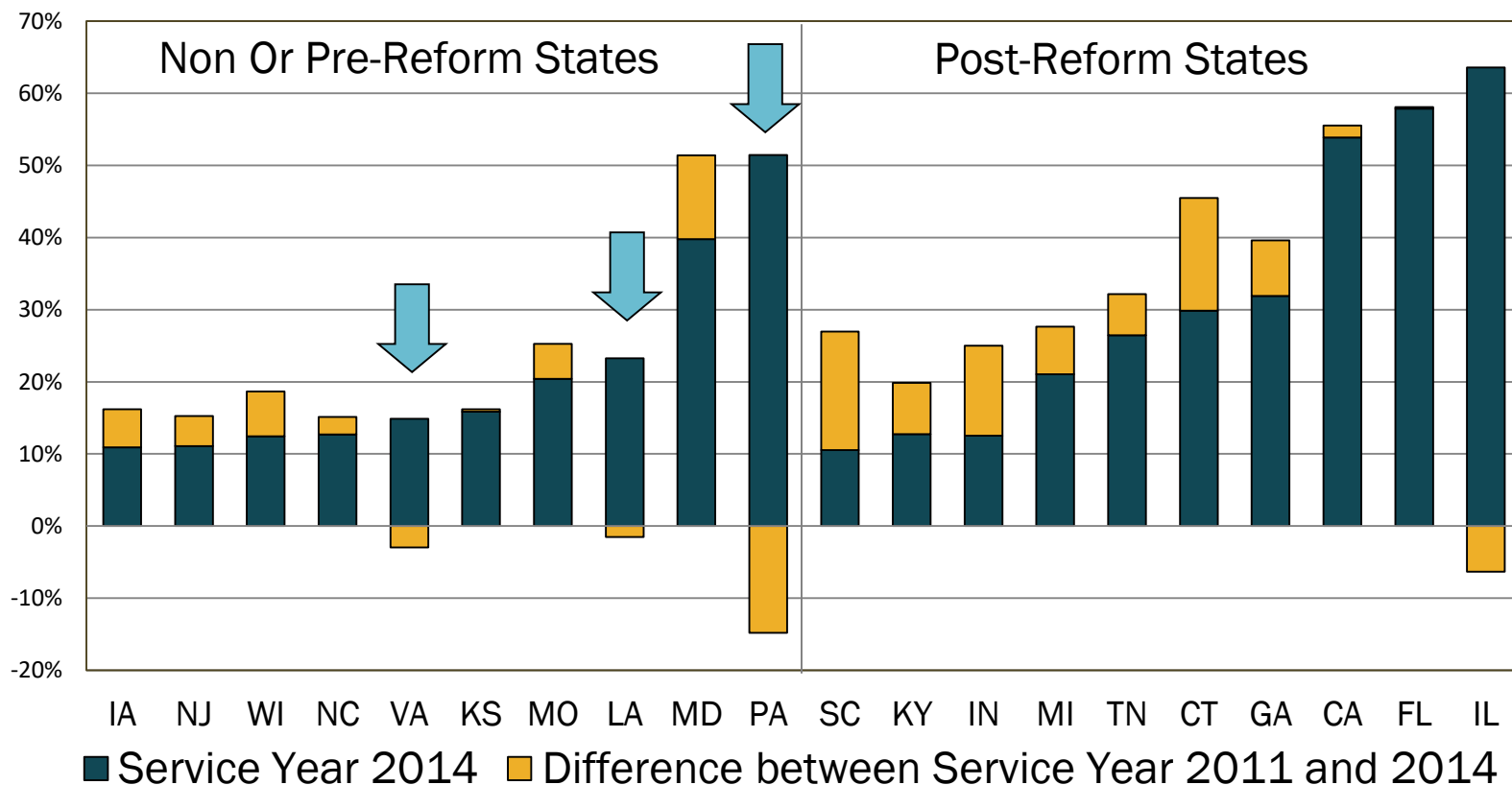
% Of Prescription Payments That Were Paid For Physician-Dispensed Prescriptions



We saw a decrease in cost share of over 30% in CT, IN, KY, and SC;

# Unsurprisingly, Cost Share Also Increased In Some Non- And Pre-Reform States

% Of Prescription Payments That Were Paid For Physician-Dispensed Prescriptions



Pennsylvania and Kansas are pre-reform and North Carolina is a mix of pre- and post-reform data.



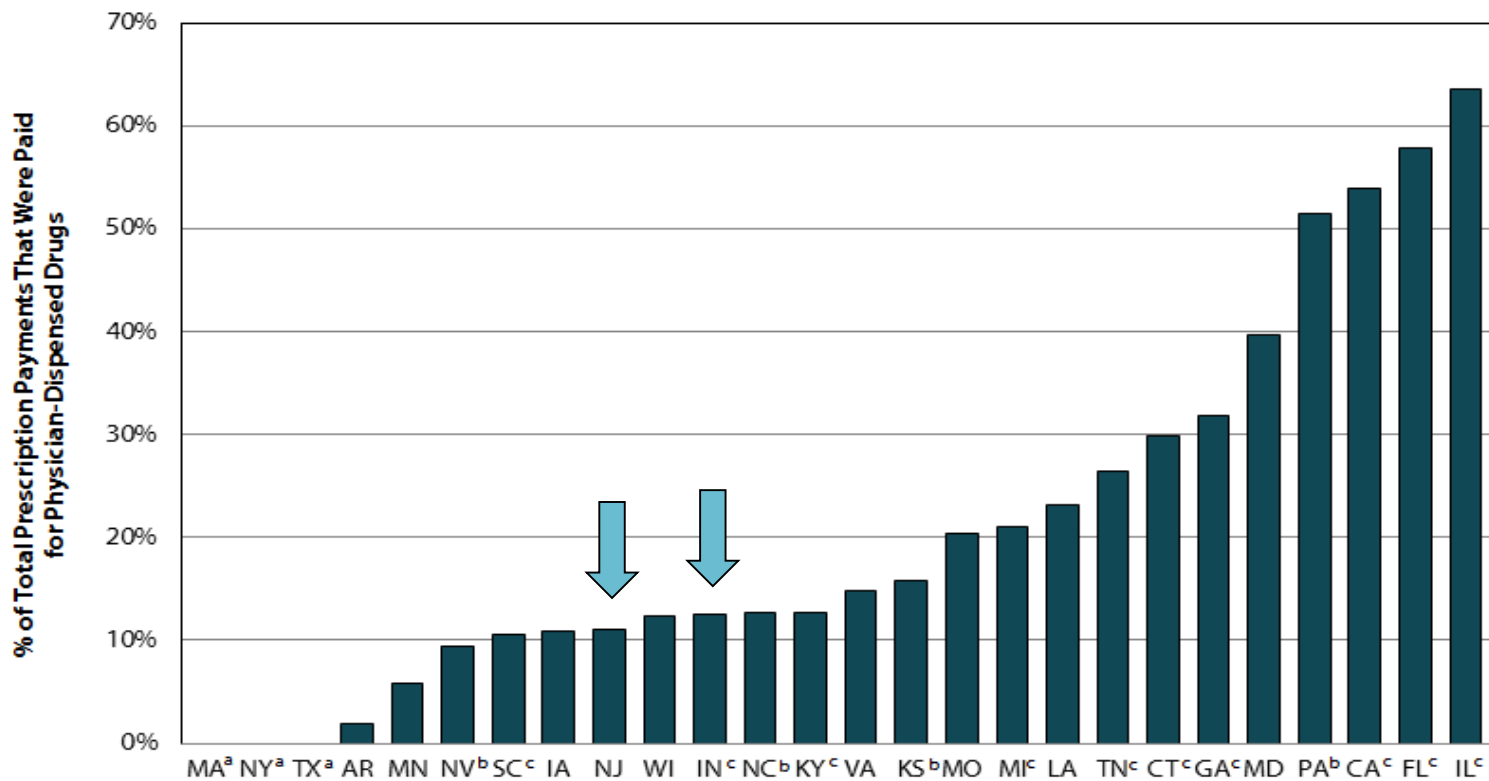
# What Happened To Cost Share In Illinois, California, And Florida?

- We saw **increased** physician dispensing of higher-priced new drug strengths/formulations of certain existing drugs
  - 7.5 mg Cyclobenzaprine HCL (Flexeril)
  - 150 mg extended release Tramadol HCL (Ultram)
  - 2.5-325 mg Hydrocodone-Acetaminophen (Vicodin)
  - Lidocaine-menthol (new formulation of pain patch)
- The increased dispensing of these new, higher-priced drugs offset the other reductions in CA, FL, and IL

These new strength drugs represented 22–26% of all physician-dispensed drugs in these states and were introduced into the market between 2011 and 2013.

# 54–64% Of Total Prescription Payments To Physician Dispenser In CA, FL, And IL

**Figure 3.2 Percentage of Total Prescription Payments That Were Paid for Physician-Dispensed Drugs, Service Year 2014**



PA: 51%, MD: 40%



# Higher-Priced, New Strength Drugs Offset Effects Of Price-Focused Reforms In Some States

# High Prices Of New Strength Drugs Not Affected By Price-Focused Reforms

- New drug strengths of existing drugs
  - 7.5 mg Cyclobenzaprine HCL (Flexeril)
  - 150 mg extended release Tramadol HCL (Ultram)
  - 2.5-325 mg Hydrocodone-Acetaminophen (Vicodin)
  - Lidocaine-menthol (new formulation of pain patch)
- New drug strengths from generic manufacturers = new NDC = new original AWP, often much higher than existing strengths of same drug
- These drugs strengths are rarely seen filled at pharmacies

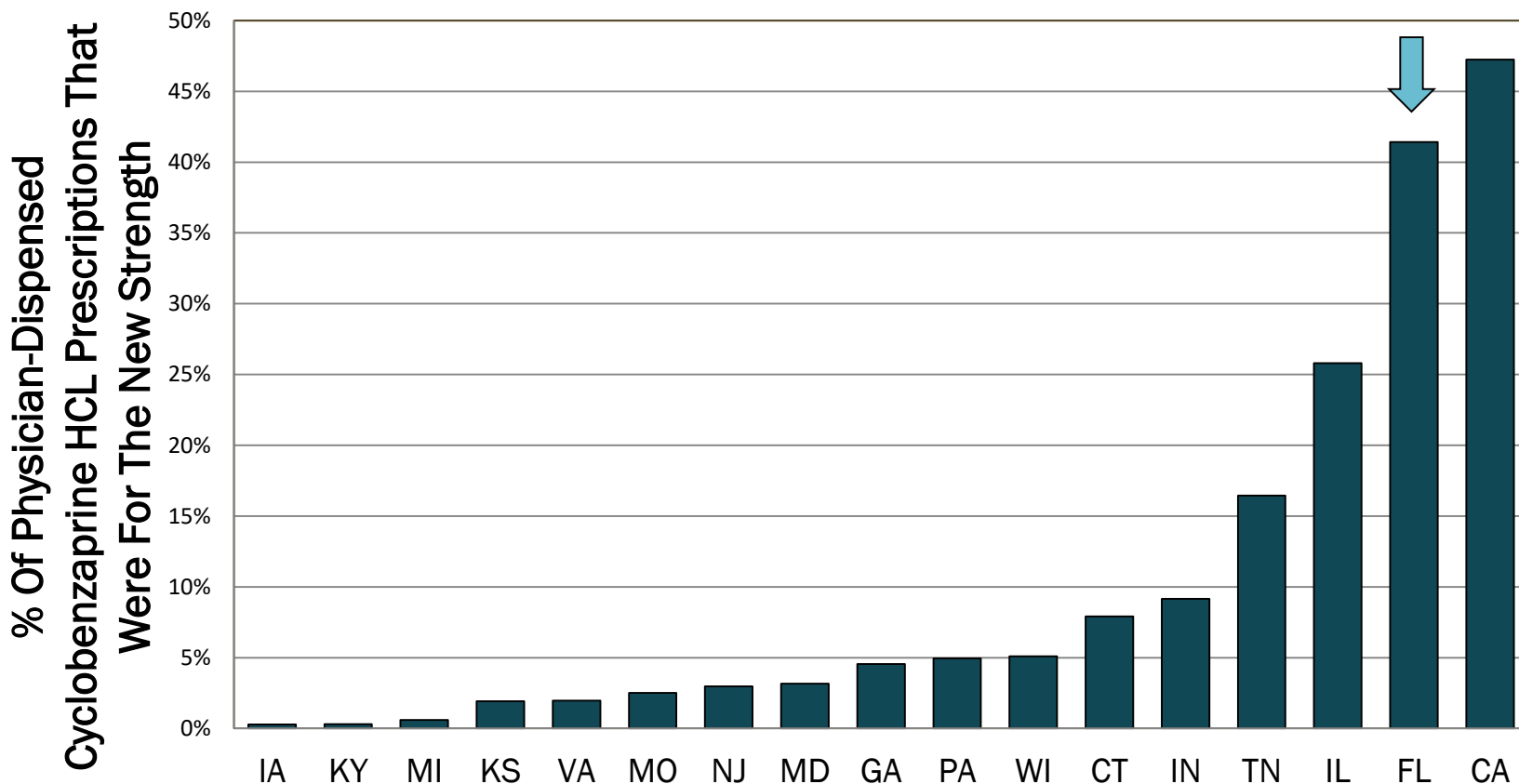
Key: AWP: Average wholesale price. NDC: National drug code.

# Florida And Cyclobenzaprine HCL (Flexeril)

- Prior to 2012, physicians wrote and dispensed cyclobenzaprine at 5 and 10 mg strengths
- The new 7.5 mg strength was introduced in 2012 with a much higher AWP than existing 5 and 10 mg strengths of cyclobenzaprine (\$4.24 compared to \$1.43)
- By 2014, when physicians dispensed cyclobenzaprine, 41% of the prescriptions were the new strength
- By contrast, the 7.5 mg was rarely prescribed to be filled at a pharmacy, which suggests that some dispensing physicians had an economic incentive

Key: AWP: Average wholesale price. NDC: National drug code.

# % Of New Strength Cyclobenzaprine\* Dispensed By Physicians



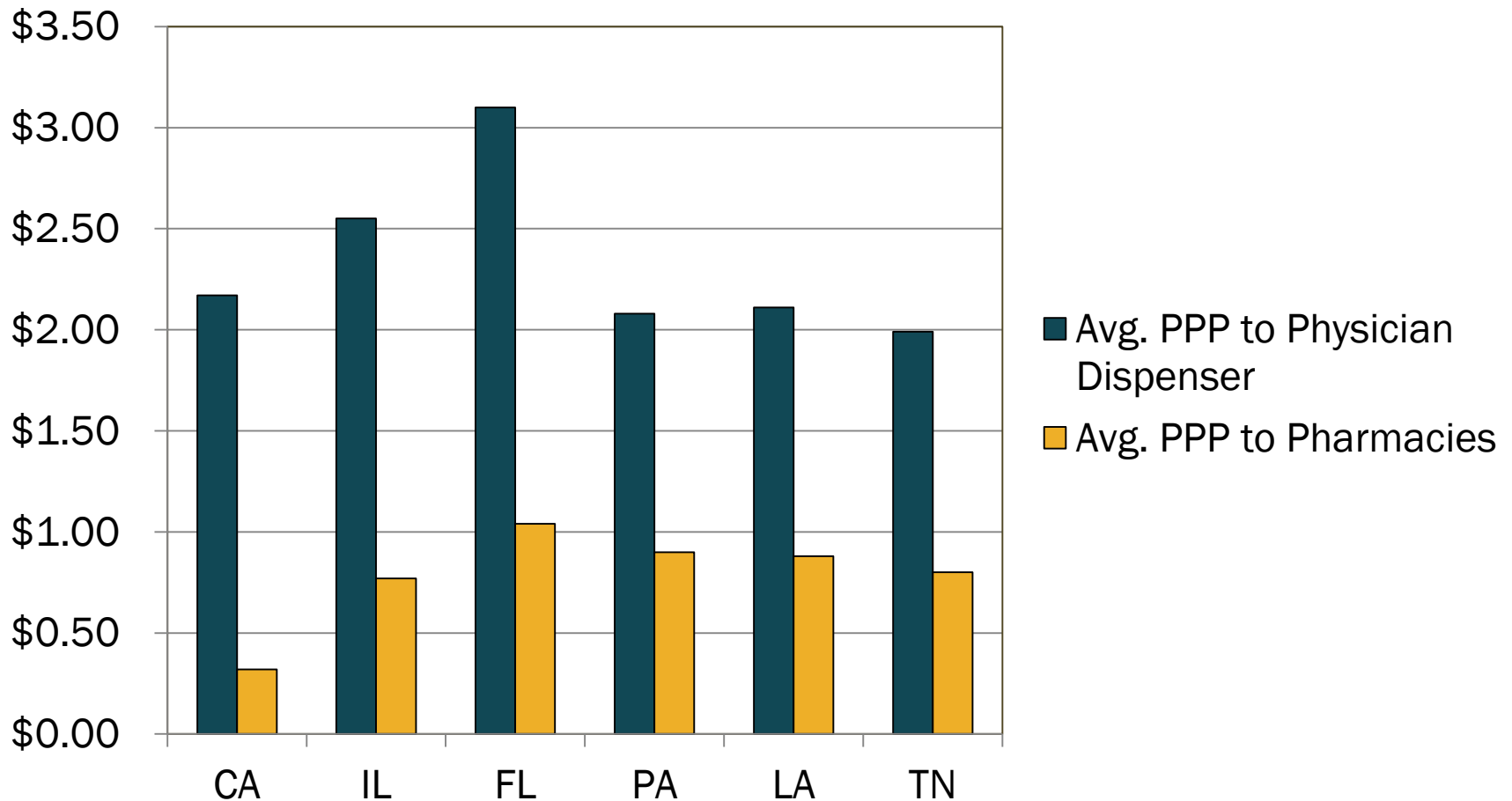
This is the percentage of new strength 7.5 mg dispensed by physicians relative to all strengths of Cyclobenzaprine dispensed by physicians. We also saw some of the effects of the new strengths in TN.

# Similar Price Differentials With Other New Strength Drugs In 2014

- Tramadol Extended Release 150 mg HCL
  - The average price per pill (ppp) ranged from **\$7.49–\$10.72**
  - The average ppp of 50 mg ranges from **\$0.23–\$1.59**
- Hydrocodone-Acetaminophen 2.5–325 mg
  - This is the lowest dosage of this drug combination
  - Yet the average ppp was 2–3 times higher than the existing higher strengths

Again, these new strengths were rarely seen filled at pharmacies.

# Large Difference Between Prices Paid To Physician Dispensers And Pharmacies For Cyclobenzaprine HCL



CA has a very large differential in part due to the low pharmacy fee schedule.





# Shift In Pattern Of Dispensing As A Result Of Limiting Reforms

# Shift From Opioids To Non-Opioids In 2014

## ➤ Kentucky

Down 12% (limits on dispensing Schedule II and II drugs)

## ➤ Indiana

Down 9% (physicians can only dispense in first 7 days after injury)

## ➤ Tennessee

Down 9% (several limitations on dispensing controlled substances)

## ➤ Florida

2011 legislation banned physicians from dispensing Schedule II and III opioids, so 0% hydrocodone-acetaminophen dispensed in 2014



# Physician Dispensing Reforms Enacted After Study Period

# Physician Dispensing Reforms In Effect After Study Period

## ➤ **Pennsylvania** (Effective December 2014)

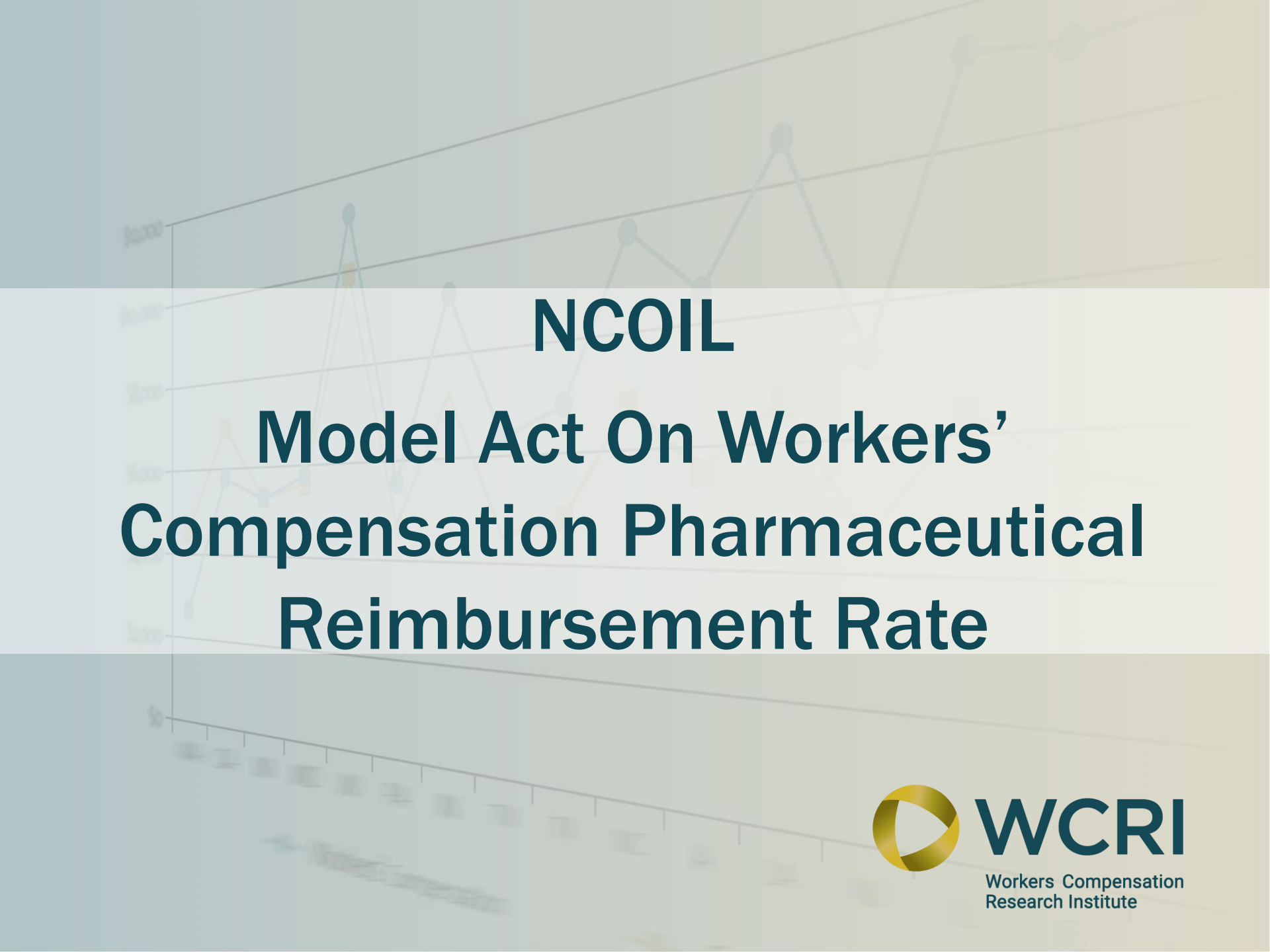
- Reimbursement capped at 110% of AWP of original drug
- Reimbursement of OTC drugs limited to pharmacies
- Time limits for dispensing of opioids and other drugs

## ➤ **Kansas** (Effective January 2015)

- Prior authorization from employer or carrier required
- Physician-dispensed drugs reimbursed at same level as pharmacies

## ➤ **North Carolina** (Effective August 2014)

- Reimbursement capped at 100% of AWP of least expensive therapeutic equivalent
- Reimbursement of schedule II-IV controlled substances limited to initial 5-day supply



# **NCOIL**

## **Model Act On Workers' Compensation Pharmaceutical Reimbursement Rate**

# NCOIL Model Act – Incorporates Elements Of Many State Reforms

- Ties reimbursement to original manufacturer's NDC number and its AWP
- Also has provision for states with fee schedule
- Provides for alternative if NDC number is not provided in the bill = AWP of lowest priced therapeutically equivalent drug
- Contains a limiting reform provision by limiting the physician dispensing of repackaged or over-the-counter (OTC) drugs to 7 days from dates of employee's initial treatment

Key: AWP: Average wholesale price. NDC: National drug code.

# Conclusions

- Fewer prescriptions were dispensed by physicians in all post-reform and most non- and pre-reform states
- Reimbursement rules in many states did help to reduce prices
- However, increased physician dispensing of higher-priced new strengths offset or even outweighed those price reductions
  - This was especially seen in CA, FL, and IL
- We did observe a shift in dispensing patterns from opioids to non-opioids as a result of limiting reforms

# Thank You!

- For comments/questions about the findings:

Kathleen Fisher  
Assistant Director of  
External Engagement  
[kfisher@wcrinet.org](mailto:kfisher@wcrinet.org)  
617-661-9274

Dongchun Wang  
Economist  
[dwang@wcrinet.org](mailto:dwang@wcrinet.org)  
617-661-9274

- Follow us on social media:

