



Post-Reform Study of Repackaged Drug Reforms

Presented by:

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CASE Fall Meeting
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Atlanta, Georgia

Agenda

Summary & Background

Georgia

South Carolina

Colorado

Connecticut

Tennessee

Illinois

Control States

Background

- Most states have workers compensation (WC) Rx fee schedules that are based on the average wholesale price (AWP)
- Fee schedules specify the maximum amount to be reimbursed for the service provided
- AWP-based Rx fee schedules specify a Maximum Amount Reimbursable (MAR) per script as:

$$\text{MAR} = \text{Units} \times \text{AWP} \times \text{Multiplier} + \text{Dispensing Fee}$$

- Multipliers vary, but are in the range of 80% to 140%
- Dispensing fees vary, but are in the range of \$0 to \$12

What Is AWP?

Average
Wholesale
Price

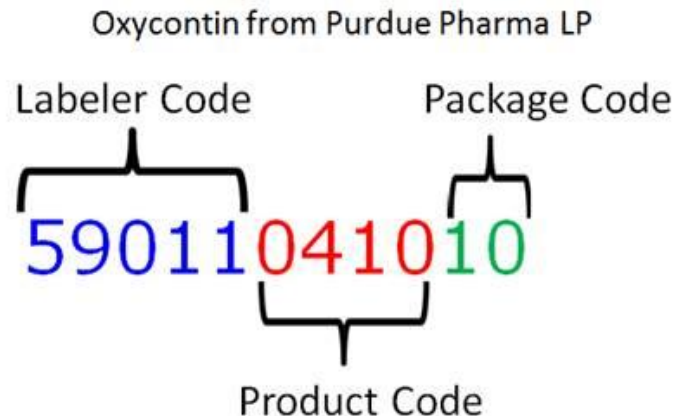
Wholesale
Acquisition
Cost

Suggested
Wholesale
Price

Ain't What's
Paid

NDC CONFIGURATION

- What is a National Drug Code (NDC)?
 - A unique 3-segment number used to identify drugs
 - The 3 segments of the NDC identify:
 - Labeler - Any firm that manufactures, repackages or distributes the drug
 - Product - Specific to strength, dosage form, and formulation of a drug
 - Packaging - Package size and type



- All drug data representation is based on NDC reported drugs

Repackaging Prescription Drugs

- Repackaging involves removing the drug from the original container and packaging it in a new, often smaller, container
- Repackaging firms will purchase drugs from manufacturers and supply distributors such as physicians with the repackaged drugs
- A repackaged drug is given a new NDC number and, consequently, a new AWP
 - The AWP of the repackaged drug is usually higher than the AWP of the non-repackaged drug

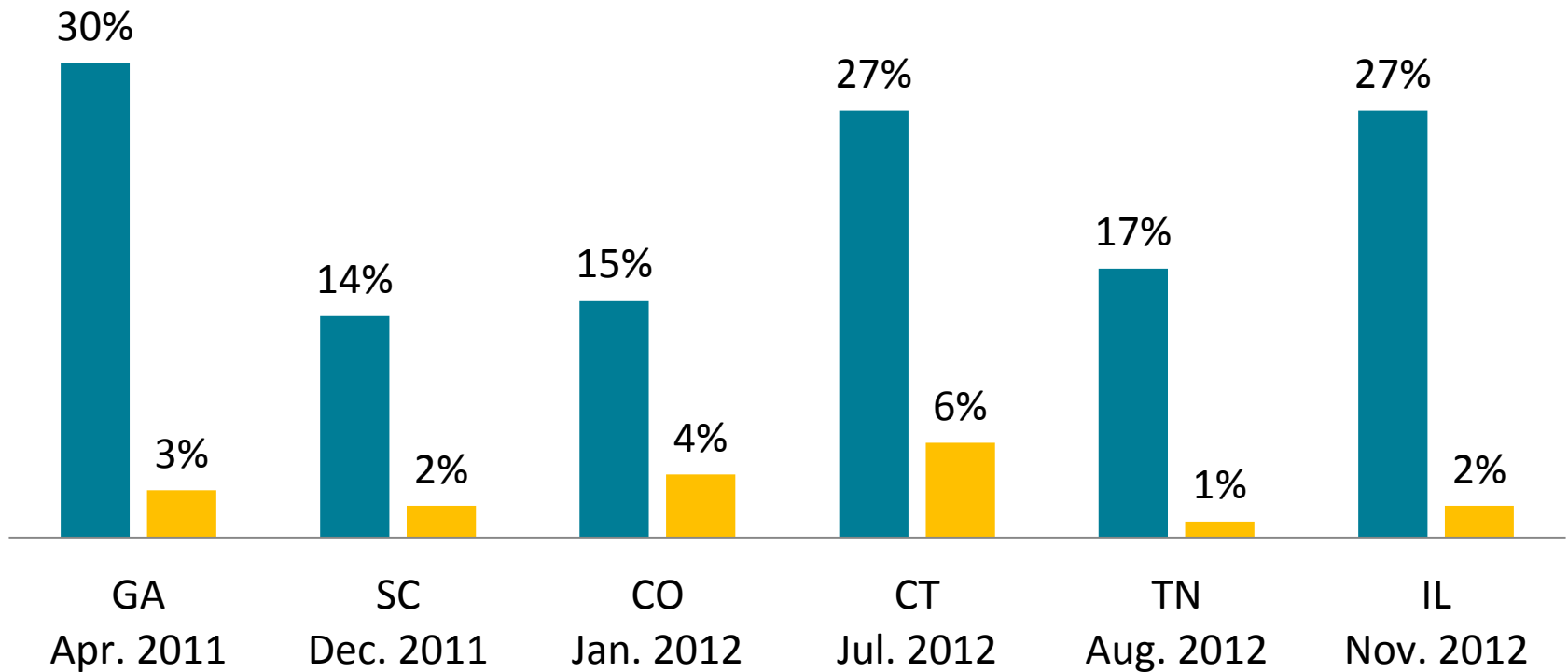
Summary of Research

- Reviewed results for 6 states (GA, SC, CO, CT, TN, IL) that enacted reforms via legislation or rule changes targeting repackaged drugs
- Reviewed results for 3 control states (LA, NM, VA) that did not enact reform targeting repackaged drugs during same timeframe

Summary of Results – Reform States

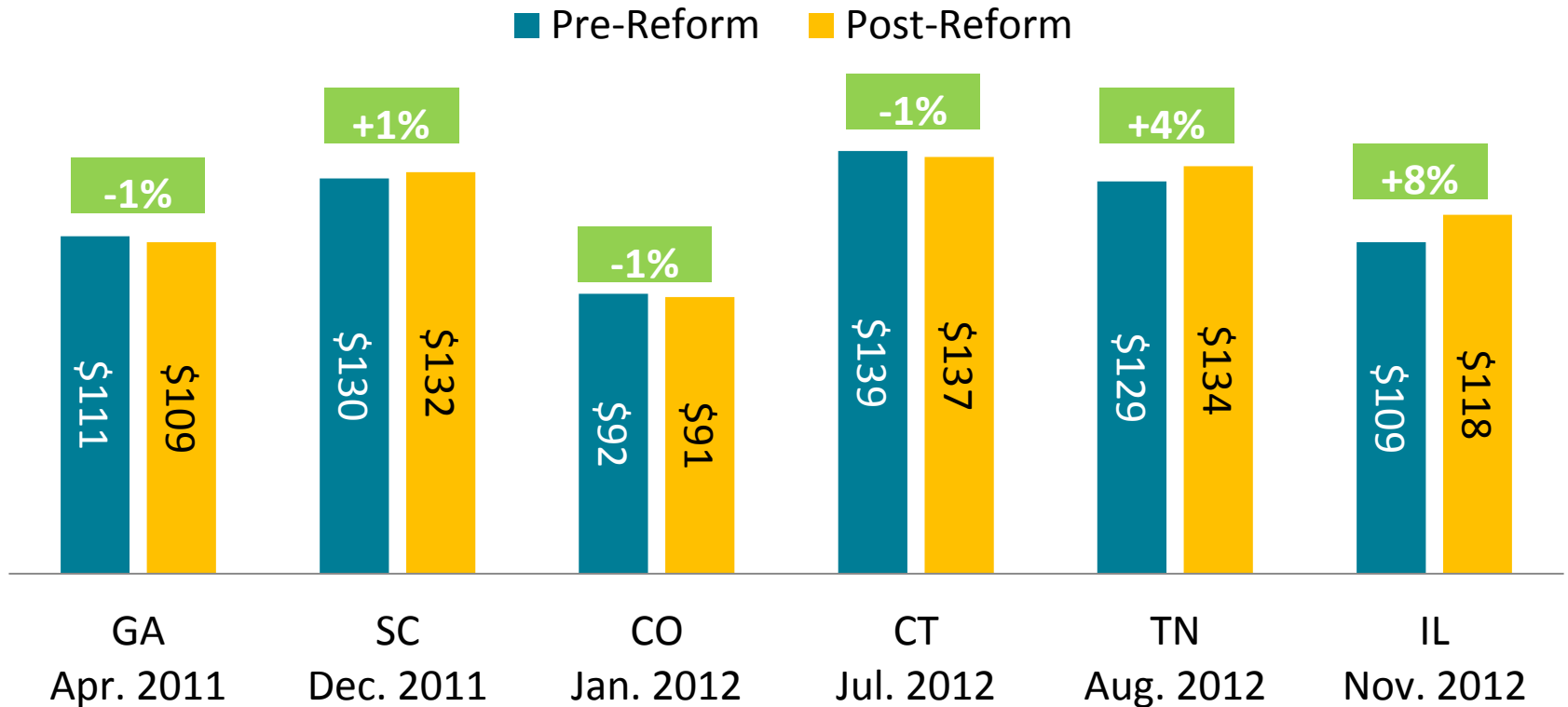
Repackaged Drugs As % of Total Drug Payments

■ Pre-Reform ■ Post-Reform



Summary of Results – Reform States

Observed Change in Average Payment per Prescription



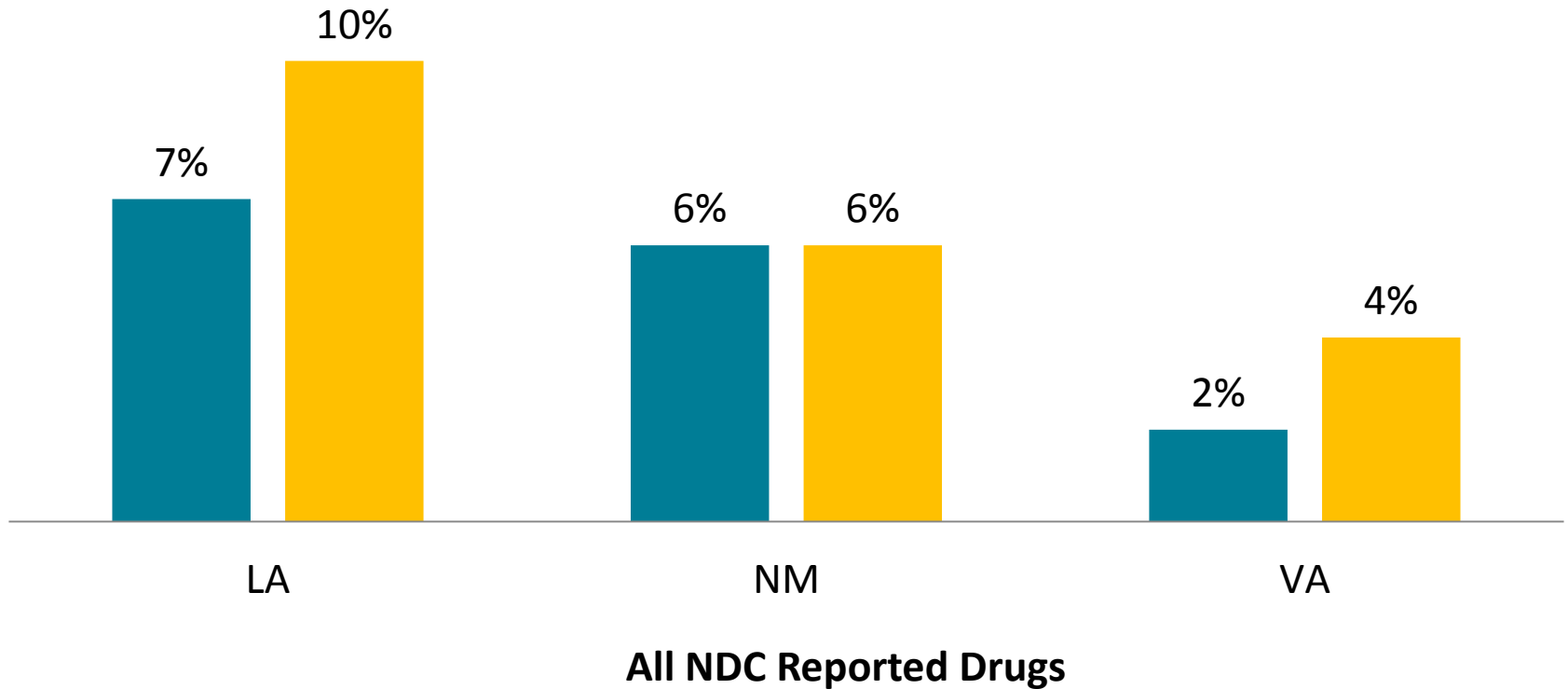
All NDC Reported Drugs



Summary of Results – Control States

Observed Change in Average Payment per Prescription Over Service Years 2011 to 2013

■ 2011/12 ■ 2012/13



Data and Methodology

- Data Source: Medical Data Call for Service Years 2010, 2011, 2012 and 2013
- Data was separated into a 9 month pre-reform period, 9 month post-reform period and 3 month interim period for each state
- Data cleansed for reporting irregularities
- No controls for mix of diagnosis, mix of drugs, or severity of claims between service years
- Inflation adjustment of 3% is based on the U.S. prescription component of the medical consumer price index (MCPI)

Definition of Repackaged Drugs

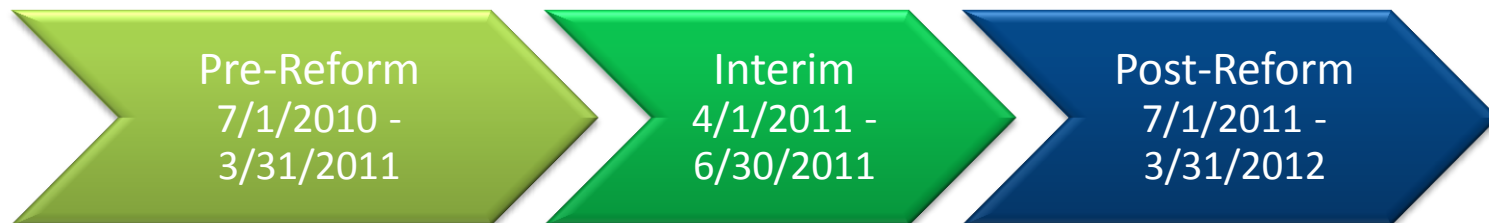
- For purposes of this analysis, drugs that are “**repackaged**” are those drugs reported with, and for which reimbursement is based off of, a National Drug Code (NDC) associated with a drug repackager
- Those that are “**not repackaged**” are those reported with, and for which reimbursement is based off of, the original manufacturer’s NDC

Georgia

- On April 1, 2011, Georgia adopted a fee schedule aimed at reducing the cost of drug repackaging by setting the reimbursement equal to the average wholesale price (AWP) of the underlying drug
- The dispensing fee is revised to \$6.15 for generic drugs and \$4.11 for brand name drugs
- Reimbursement for repackaged drugs shall be based on the Average Wholesale Price (AWP) of the original National Drug Code (NDC) used in the repackaging process
- Previously, all prescription drugs were reimbursed at the AWP plus a dispensing fee of \$6.08 for generic drugs, and \$4.06 for brand name drugs. There were no limitations on AWP for repackaged or relabeled prescription drugs

Georgia Timeframes

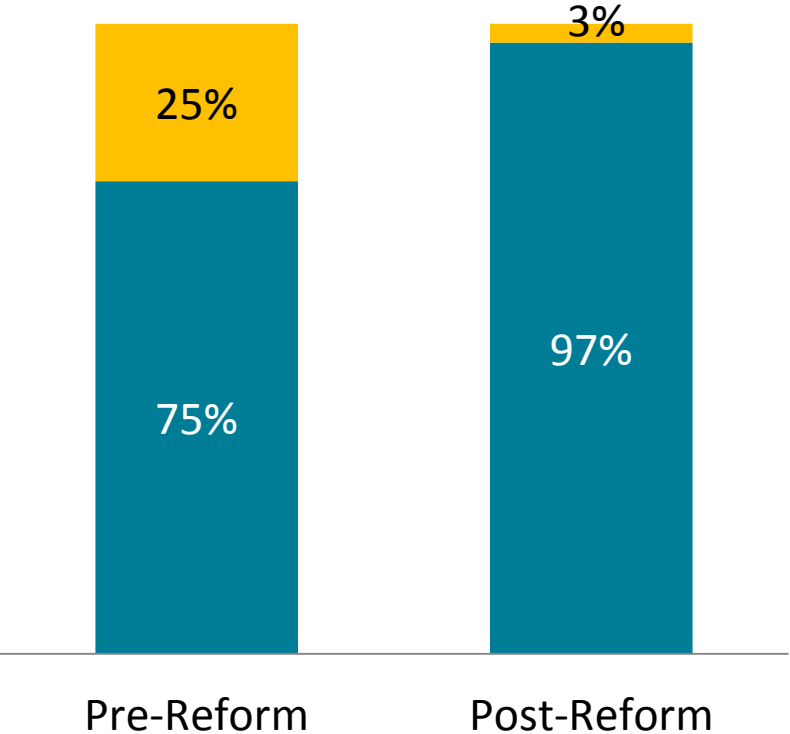
- The pre-reform period is defined as the 9 month period immediately preceding the change in the law, namely from 7/1/2010 – 3/31/2011
- The post-reform period is defined as the 9 month period from 7/1/2011 – 3/31/2012
- Data from 4/1/2011 to 6/30/2011, the interim period, was excluded from the study
- Data from the post-reform period, 7/1/2011 to 3/31/2012, is expected to fully reflect the 4/1/2011 changes



Results for Georgia

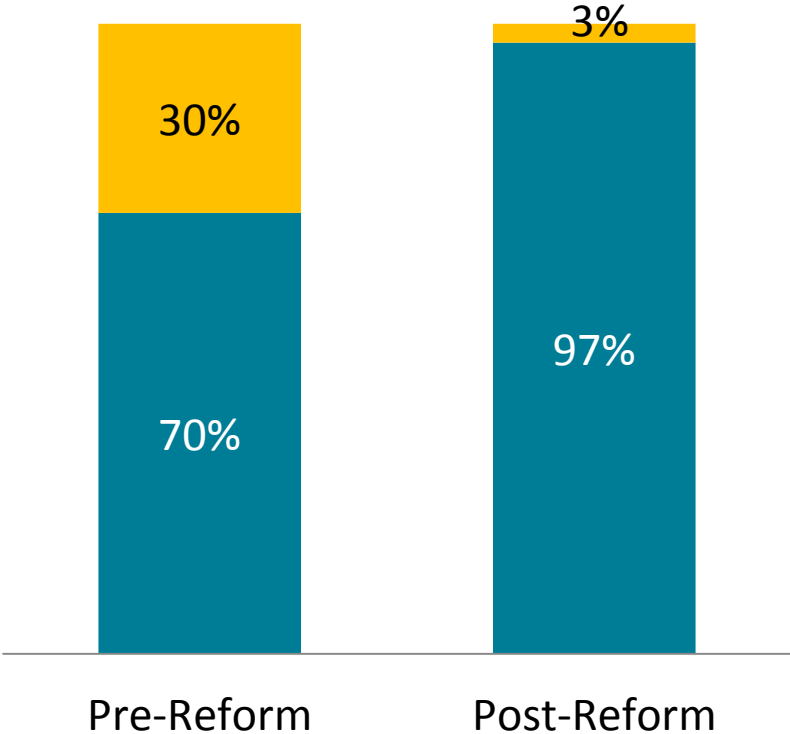
Prescription Counts

■ Non-repackaged ■ Repackaged



Prescription Payments

■ Non-repackaged ■ Repackaged



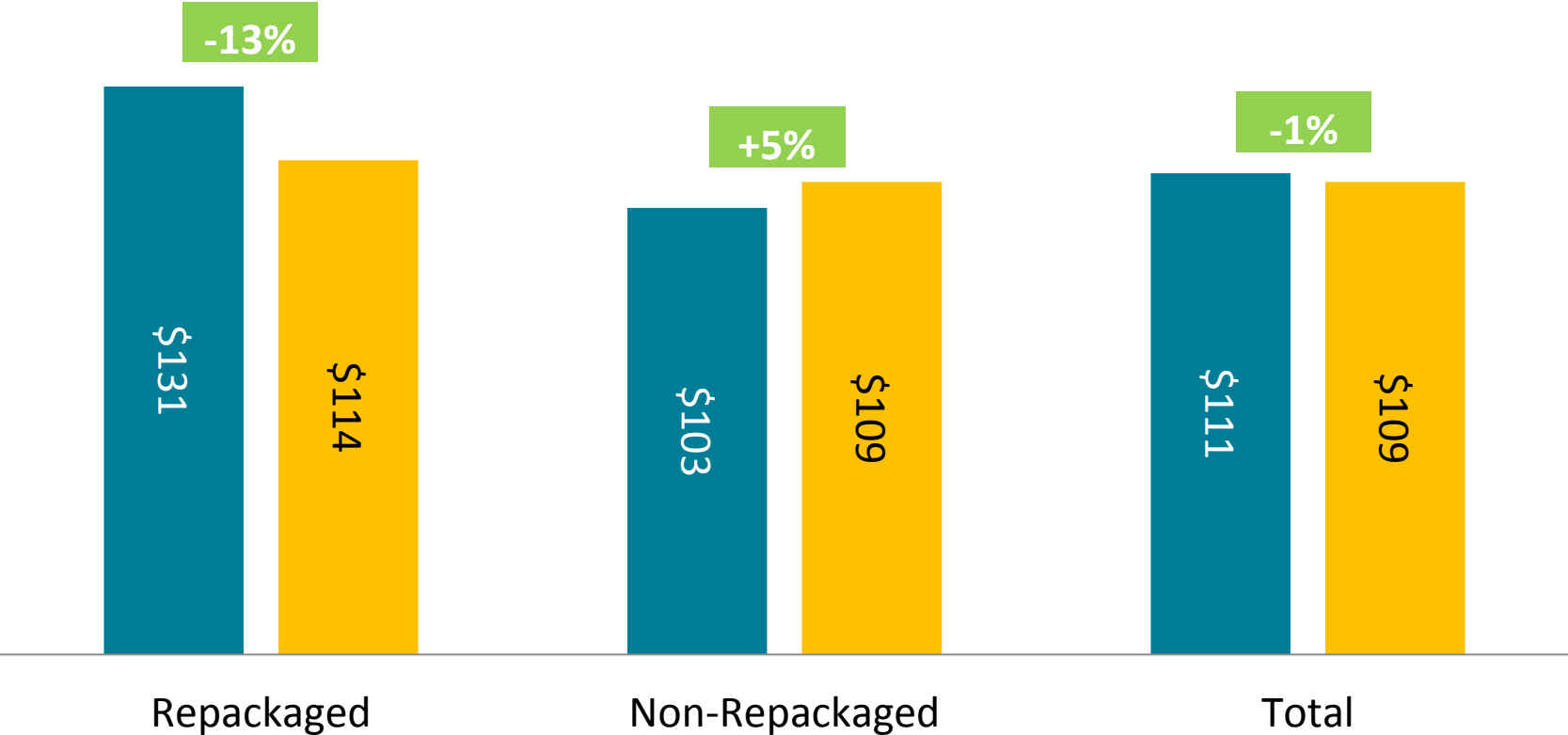
Results for Georgia

	Change in Average Cost per Prescription for Repackaged Drugs			
Repackaged Drugs	Pre-Reform	Post-Reform	% Change	Inflation Adjusted % Change
Prescriptions	52,948	6,613	-88%	
Payments	\$6,950,248	\$751,415	-89%	
Paid per Prescription	\$131	\$114	-13%	-16%

Results for Georgia

Observed Change in Average Payment per Prescription

■ Pre-Reform ■ Post-Reform



Results for Georgia

Average Number of Prescriptions Per Claim with at Least One Prescription

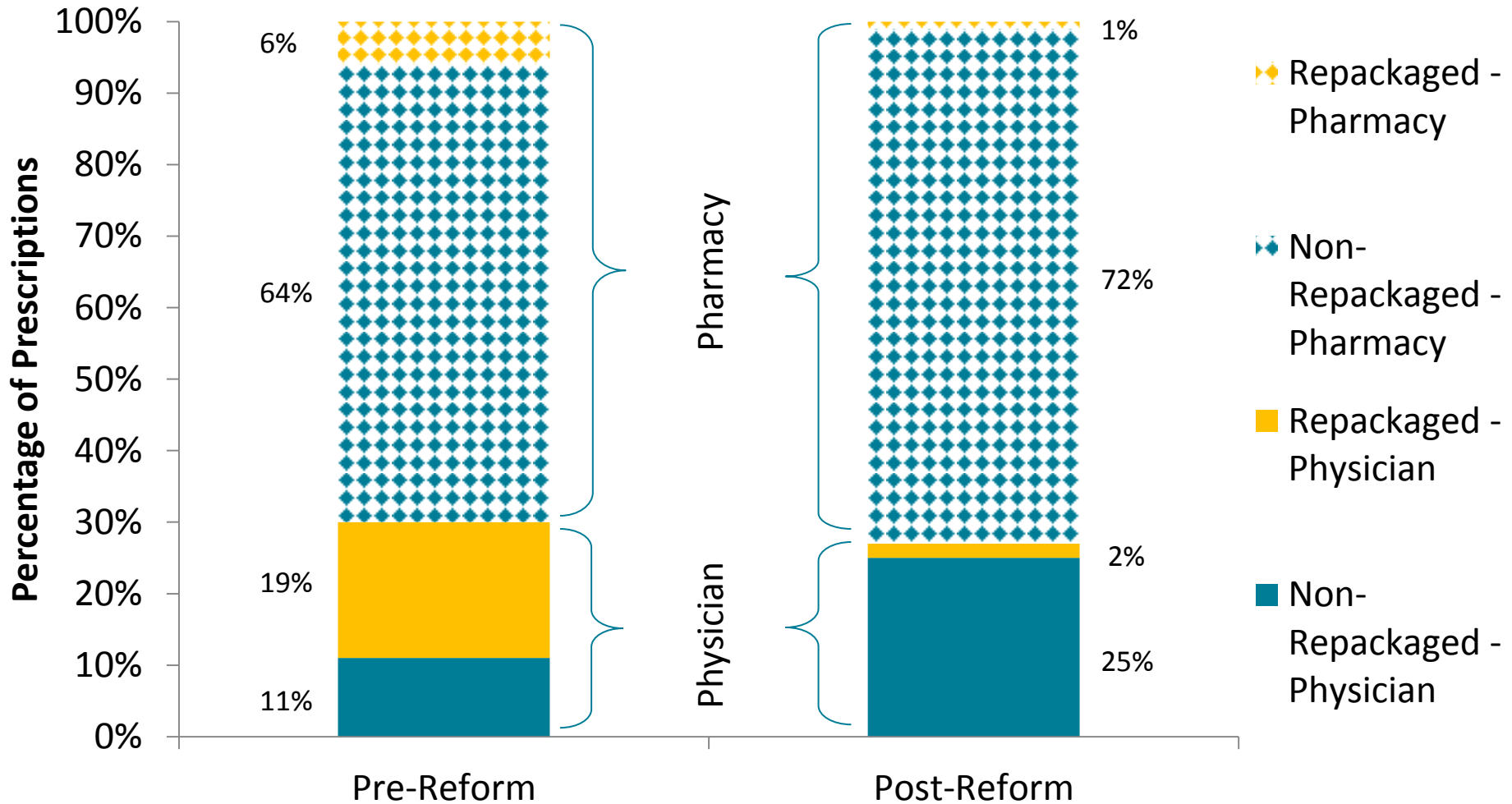
Pre-Reform	Post-Reform	% Change
7.01	7.02	-

Total Average Prescription Drug Cost per Claim (Includes Repackaged and Non-Repackaged)

Pre-Reform	Post-Reform	% Change	Inflation Adjusted % Change
\$775	\$767	-1%	-4%

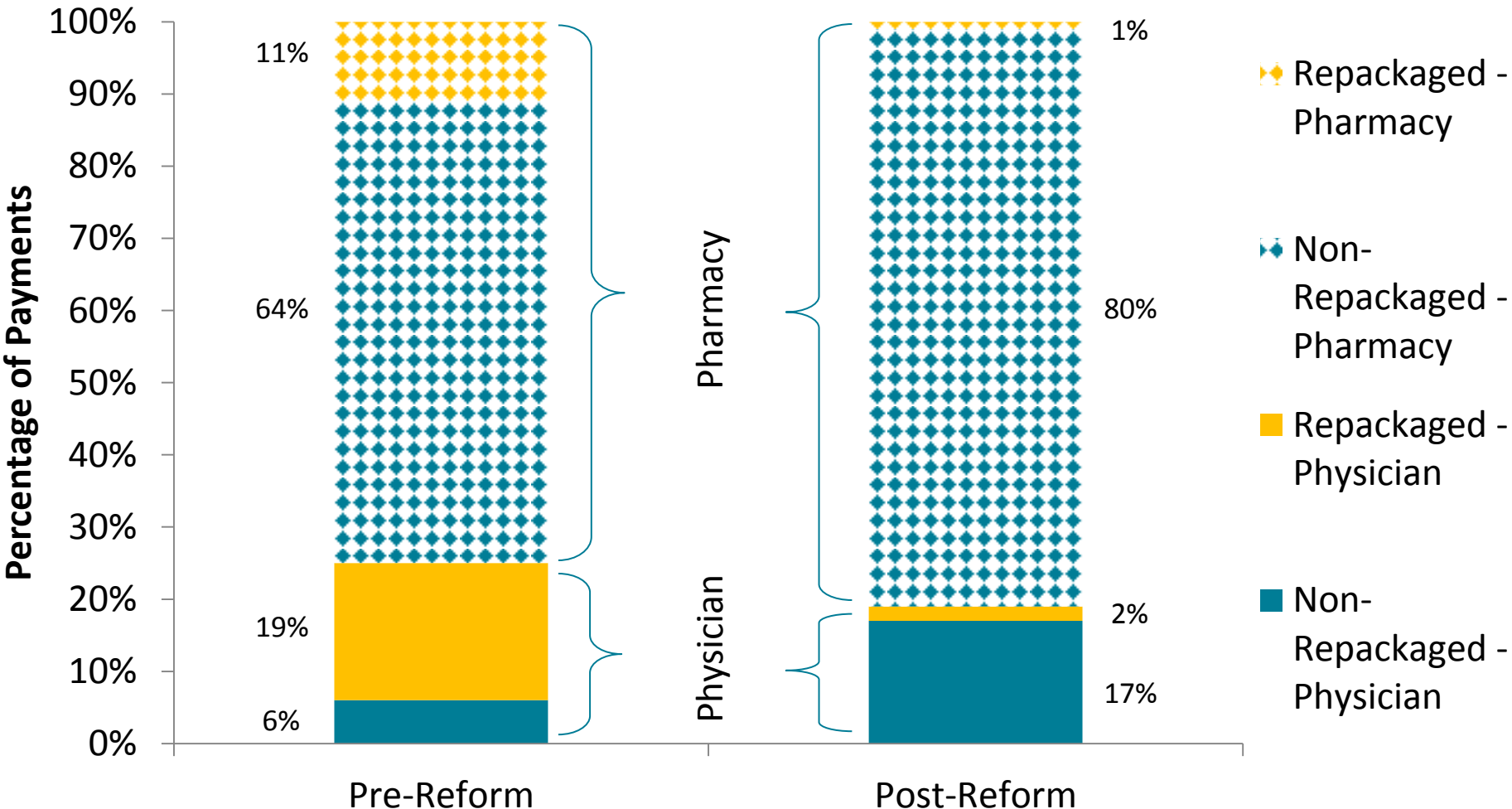
Results for Georgia

Percentage Share of Number of Prescription Pharmacy-Dispensed vs. Physician Dispensed



Results for Georgia

Percentage Share of Prescription Drug Payments Pharmacy-Dispensed vs. Physician Dispensed



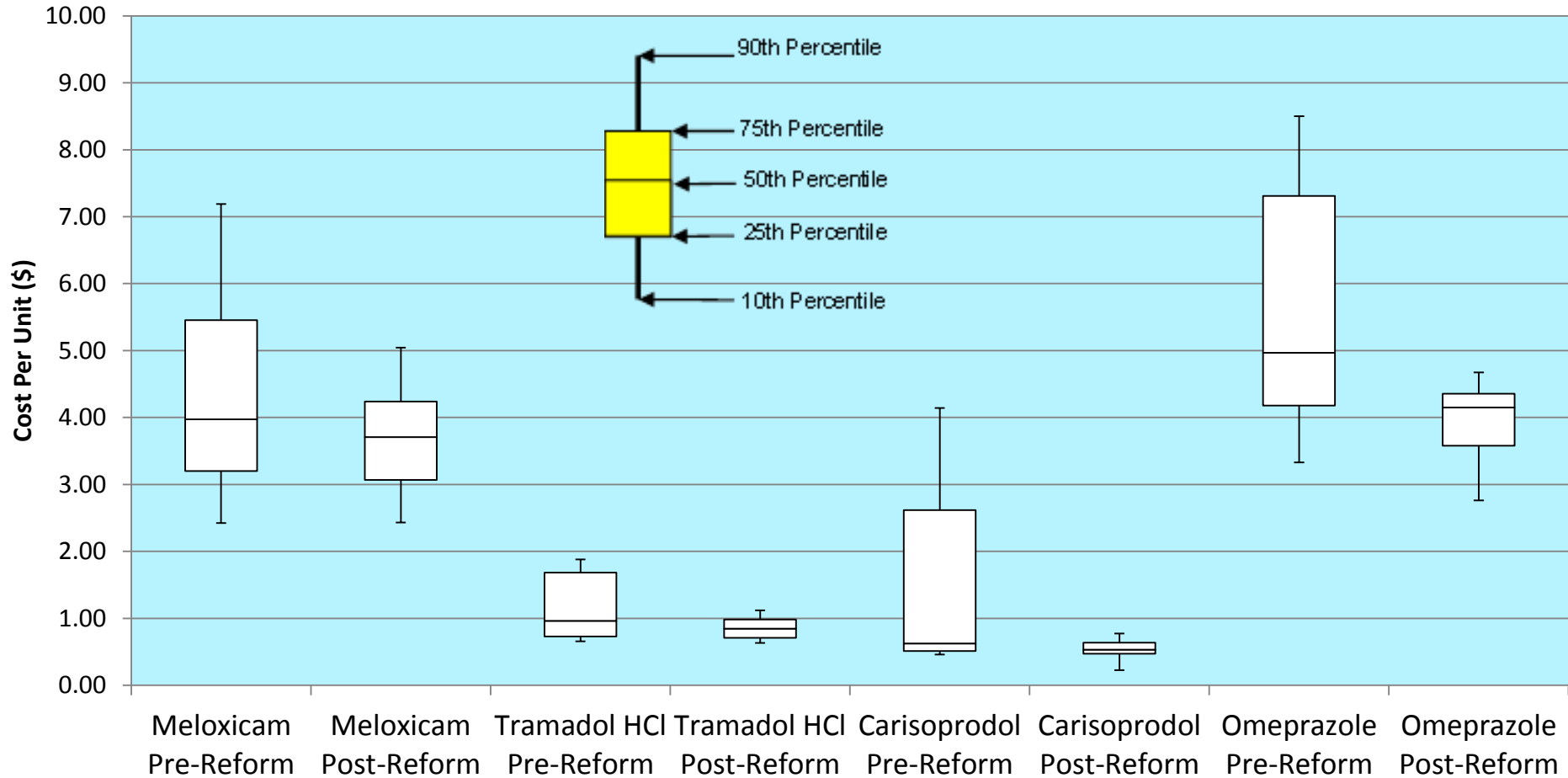
Top 10 Repackaged Drugs – Georgia

Rank	Name of Drug	Type	Pre-Reform		
			% of Total Prescription Drug Paid	% of Drug that was Repackaged	Repackaged as % of Total Prescription Drug Paid
1	Meloxicam	Generic	5.7%	69.4%	4.0%
2	Hydrocodone-Acetaminophen	Generic	4.8%	46.9%	2.2%
3	Tramadol HCl	Generic	3.1%	63.9%	2.0%
4	Gabapentin	Generic	4.6%	39.8%	1.8%
5	Carisoprodol	Generic	2.3%	79.7%	1.8%
6	Lidoderm®	Brand Name	4.6%	36.5%	1.7%
7	Omeprazole	Generic	1.9%	83.2%	1.6%
8	Lyrica®	Brand Name	3.7%	27.5%	1.0%
9	Zolpidem Tartrate	Generic	1.9%	54.0%	1.0%
10	Tizanidine HCl	Generic	1.9%	49.0%	0.9%

Top 10 Repackaged Drugs – Georgia

Rank	Name of Drug	Percent of Total Drugs Paid (Includes Repackaged and Non-Repackaged)		Average Price Per Unit (Includes Repackaged and Non-Repackaged)		
		Pre-Reform	Post-Reform	Pre-Reform	Post-Reform	% Change
1	Meloxicam	5.7%	5.4%	\$4.19	\$3.42	-18%
2	Hydrocodone-Acetaminophen	4.8%	3.9%	\$0.67	\$0.55	-18%
3	Tramadol HCl	3.1%	2.5%	\$1.09	\$0.79	-27%
4	Gabapentin	4.6%	4.6%	\$1.75	\$1.48	-15%
5	Carisoprodol	2.3%	0.8%	\$1.53	\$0.63	-59%
6	Lidoderm®	4.6%	3.8%	\$8.34	\$7.77	-7%
7	Omeprazole	1.9%	1.8%	\$5.42	\$3.80	-30%
8	Lyrica®	3.7%	3.3%	\$3.00	\$3.01	0%
9	Zolpidem Tartrate	1.9%	2.0%	\$4.32	\$3.89	-10%
10	Tizanidine HCl	1.9%	1.9%	\$1.49	\$1.30	-13%

Cost Per Unit Variation – Georgia Selected Drugs



Unintended Consequences

- While the reform resulted in a decrease in market share and cost per unit for some repackaged drugs between the pre-reform and post-reform period, it also appeared to result in an increase in market share and cost per unit for other drugs
- For example, in some states the share of total paid for Dendracin Neurodendraxin and Terocin, pain-relieving lotions, increased as did the cost per unit
- In Georgia, for example, the share of total paid for Dendracin Neurodendraxin increased from 0.4% to 1.9%, while the cost per unit appeared to increase beyond that of inflation (from \$2.78 to \$2.97).
- For the control states that did not enact repackaged legislation during this same timeframe, the share of Dendracin Neurodendraxin was relatively small or did not show the same growth as observed in Georgia

South Carolina

- Effective December 19, 2011, South Carolina adopted regulations aimed at limiting the price differential between what physicians and pharmacies were paid for the same drug
- As a result of the change, reimbursements were capped at the original manufacturer's AWP of the underlying drug, plus a \$5.00 dispensing fee

South Carolina Timeframes

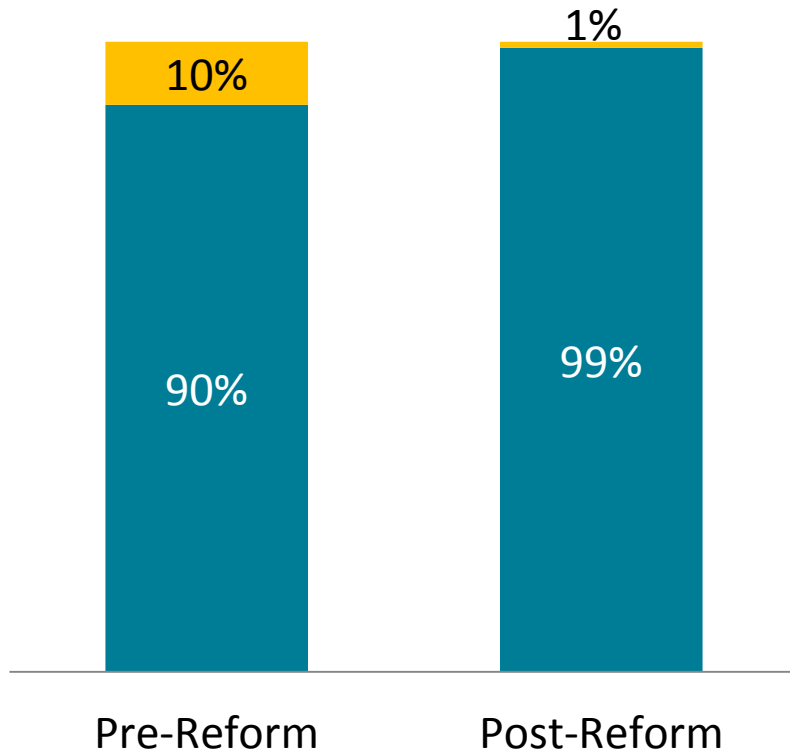
- The pre-reform period is defined as the 9 month period immediately preceding the change in the law, namely from 3/1/2011 – 11/30/2011
- The post-reform period is defined as the 9 month period from 3/1/2012 – 11/30/2012
- Data from 12/1/2011 to 2/28/2012, the interim period, was excluded from the study
- Data from the post-reform period, 3/1/2012 to 11/30/2012, is expected to fully reflect the 12/19/2011 changes



Results for South Carolina

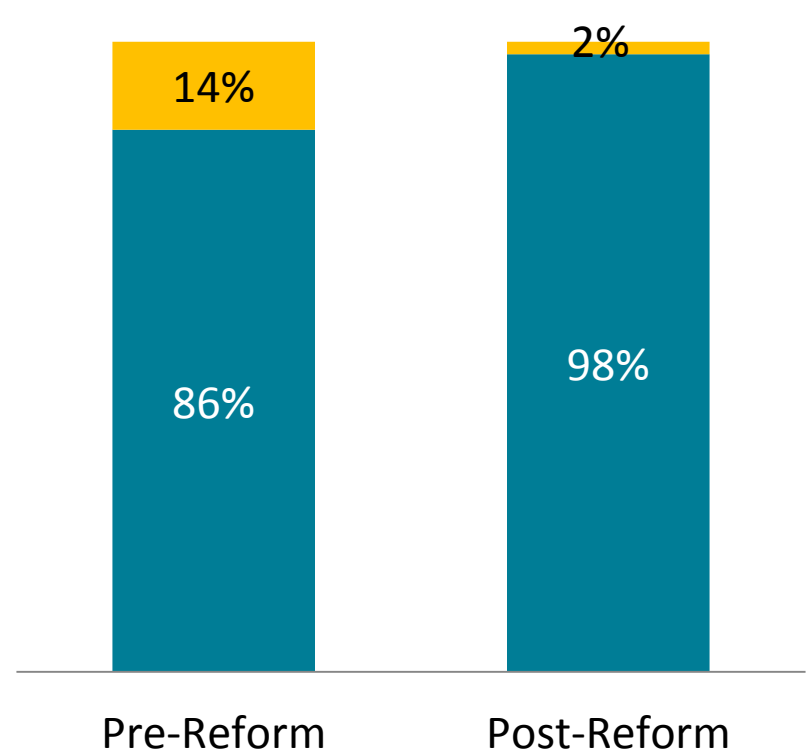
Prescription Counts

■ Non-repackaged ■ Repackaged



Prescription Payments

■ Non-repackaged ■ Repackaged



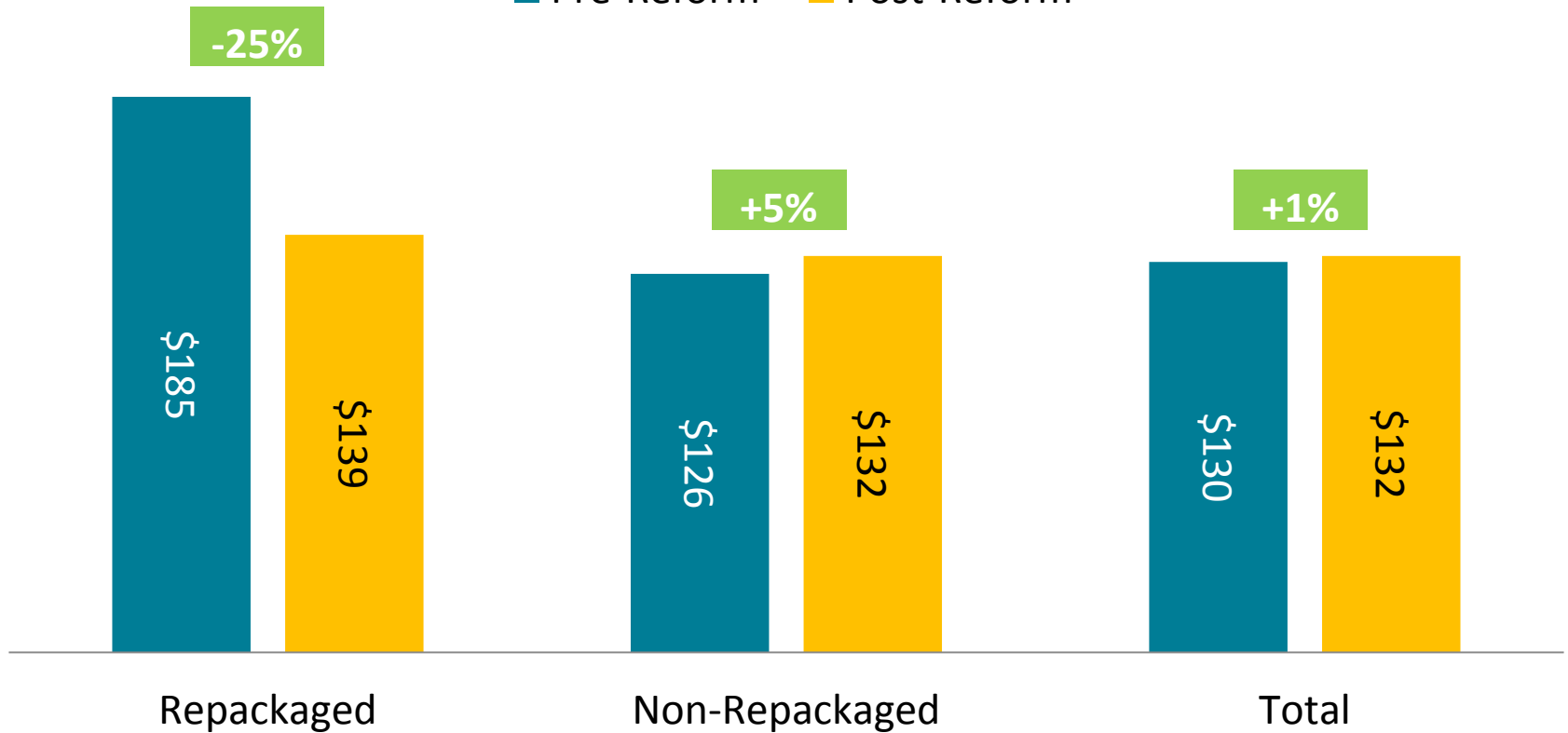
Results for South Carolina

Change in Average Cost per Prescription for Repackaged Drugs				
Repackaged Drugs	Pre-Reform	Post-Reform	% Change	Inflation Adjusted % Change
Payments	\$ 2,060,136	\$ 246,450	-88%	
Prescriptions	11,138	1,775	-84%	
Paid per Prescription	\$185	\$139	-25%	-27%

Results for South Carolina

Observed Change in Average Payment per Prescription

■ Pre-Reform ■ Post-Reform



Colorado

- On January 1, 2012, Colorado updated its pharmaceutical fee schedule to require that reimbursement for repackaged or relabeled drugs be based on the Average Wholesale Price (AWP) of the original manufacturer plus a dispensing fee of \$4.00, for prescriptions written after thirty days from the date of injury
- All Prescriptions written within thirty days from the date of injury shall be reimbursed at the AWP plus \$4.00
- The rule also revised reimbursement for compounded drugs, with the reimbursement fee varying based on 4 different categories
- Previously, there were no limitations on AWP for repackaged or relabeled prescription drugs



Colorado Timeframes

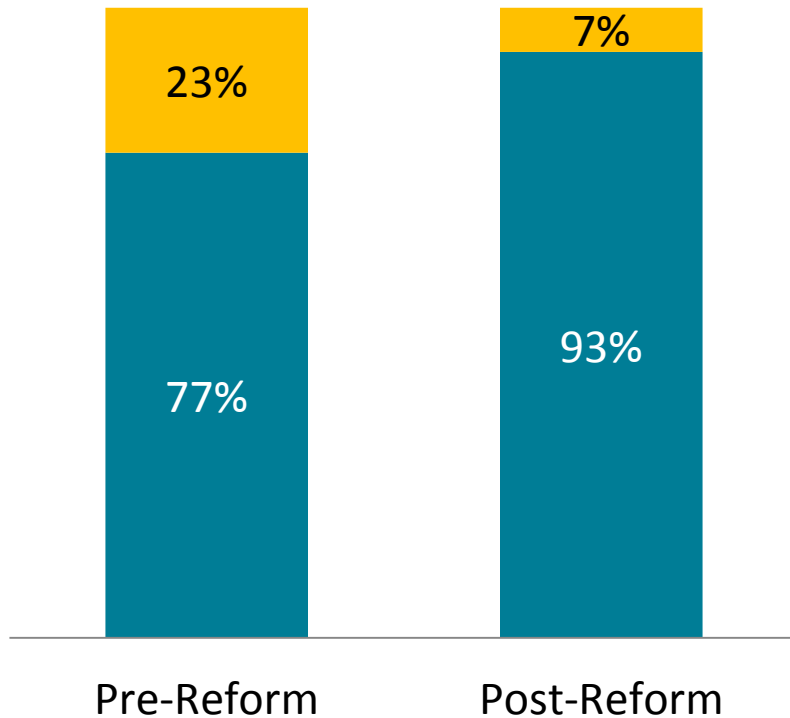
- The pre-reform period is defined as the 9 month period immediately preceding the change in the law, namely from 4/1/2011 – 12/31/2011
- The post-reform period is defined as the 9 month period from 4/1/2012 – 12/31/2012
- Data from 1/1/2012 to 3/30/2012, the interim period, was excluded from the study
- Data from the post-reform period, 4/1/2012 to 12/31/2012, is expected to fully reflect the 1/1/2012 changes



Results for Colorado

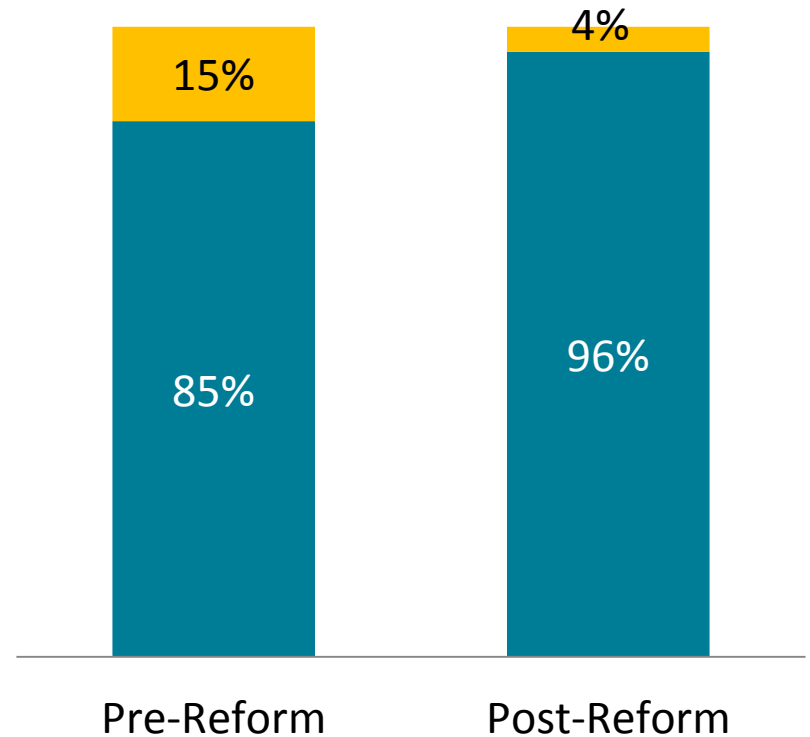
Prescription Counts

■ Non-repackaged ■ Repackaged



Prescription Payments

■ Non-repackaged ■ Repackaged



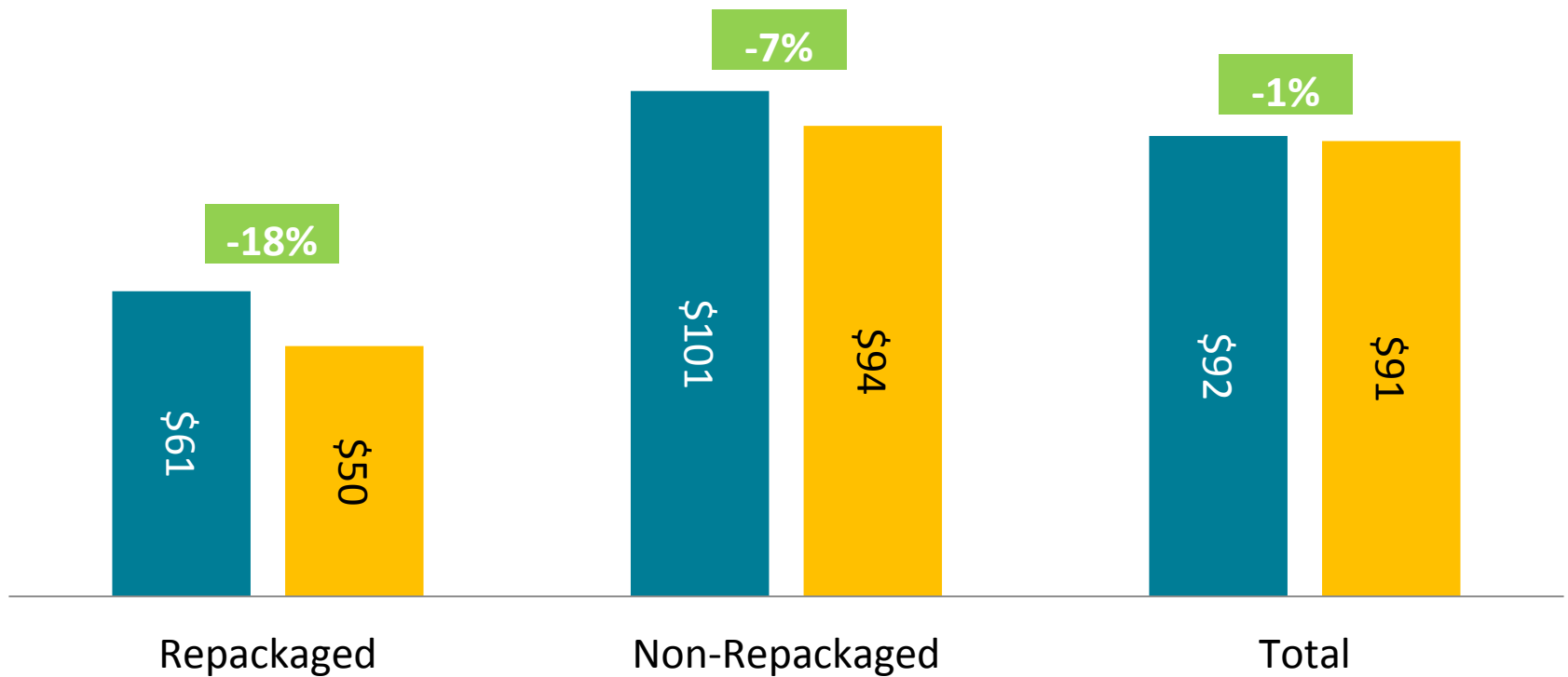
Results for Colorado

	Change in Average Cost per Prescription for Repackaged Drugs			
Repackaged Drugs	Pre-Reform	Post-Reform	% Change	Inflation Adjusted % Change
Payments	\$ 2,382,628	\$ 568,579	-76%	
Prescriptions	39,066	11,430	-71%	
Paid per Prescription	\$61	\$50	-18%	-21%

Results for Colorado

Observed Change in Average Payment per Prescription

■ Pre-Reform ■ Post-Reform

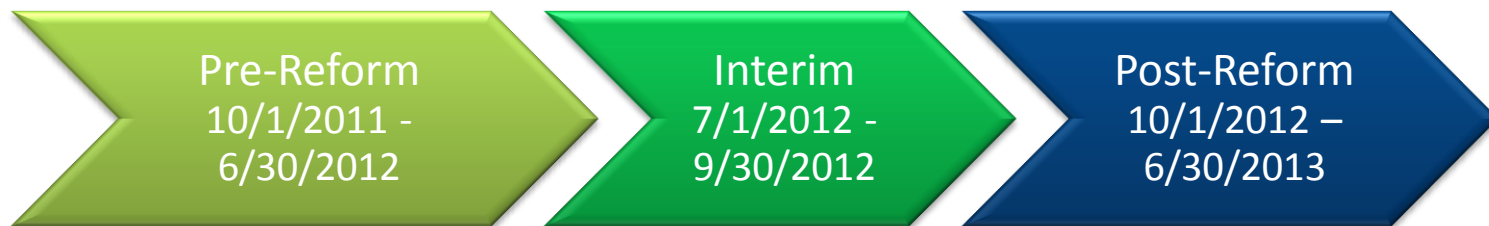


Connecticut

- On July 15, 2012, Connecticut adopted rules limiting reimbursements for repackaged or relabeled drugs to the AWP of the original manufacturer or the therapeutic equivalent drug
- Previously, there were no limitations on AWP for repackaged or relabeled prescription drugs. The formula used to determine maximum reimbursement remained unchanged at AWP plus a dispensing fee for all prescription drugs

Connecticut Timeframes

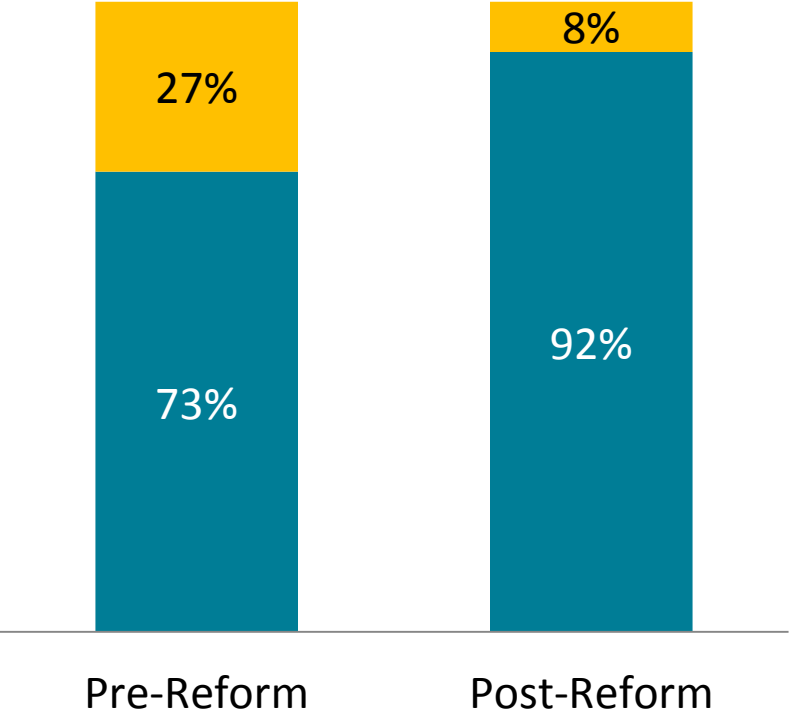
- The pre-reform period is defined as the 9 month period immediately preceding the change in the law, namely from 10/1/2011 – 6/30/2012
- The post-reform period is defined as the 9 month period from 10/1/2012 – 6/30/2013
- Data from 7/1/2012 to 9/30/2012, the interim period, was excluded from the study
- Data from the post-reform period, 10/1/2012 to 6/30/2013, is expected to fully reflect the 7/15/2012 changes



Results for Connecticut

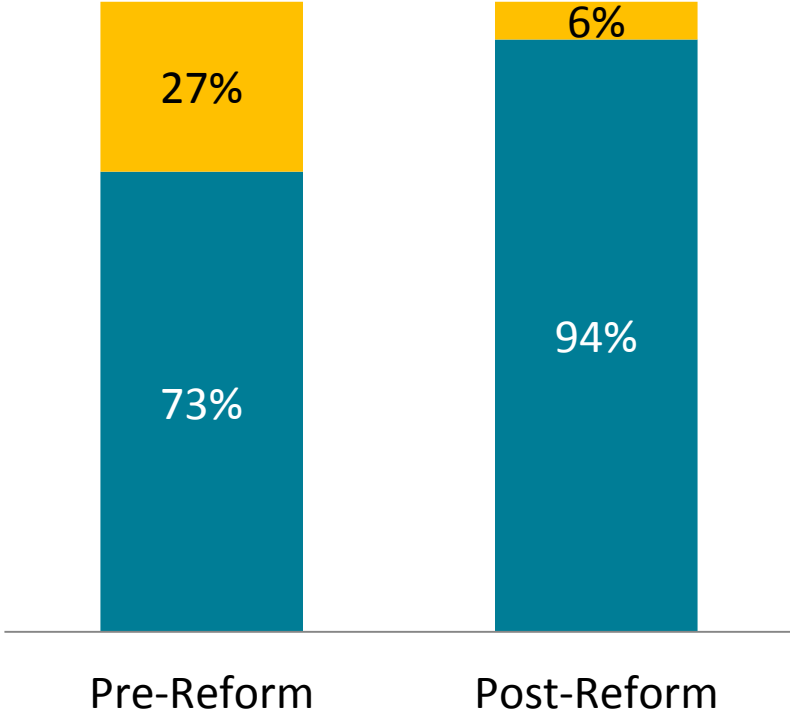
Prescription Counts

■ Non-repackaged ■ Repackaged



Prescription Payments

■ Non-repackaged ■ Repackaged



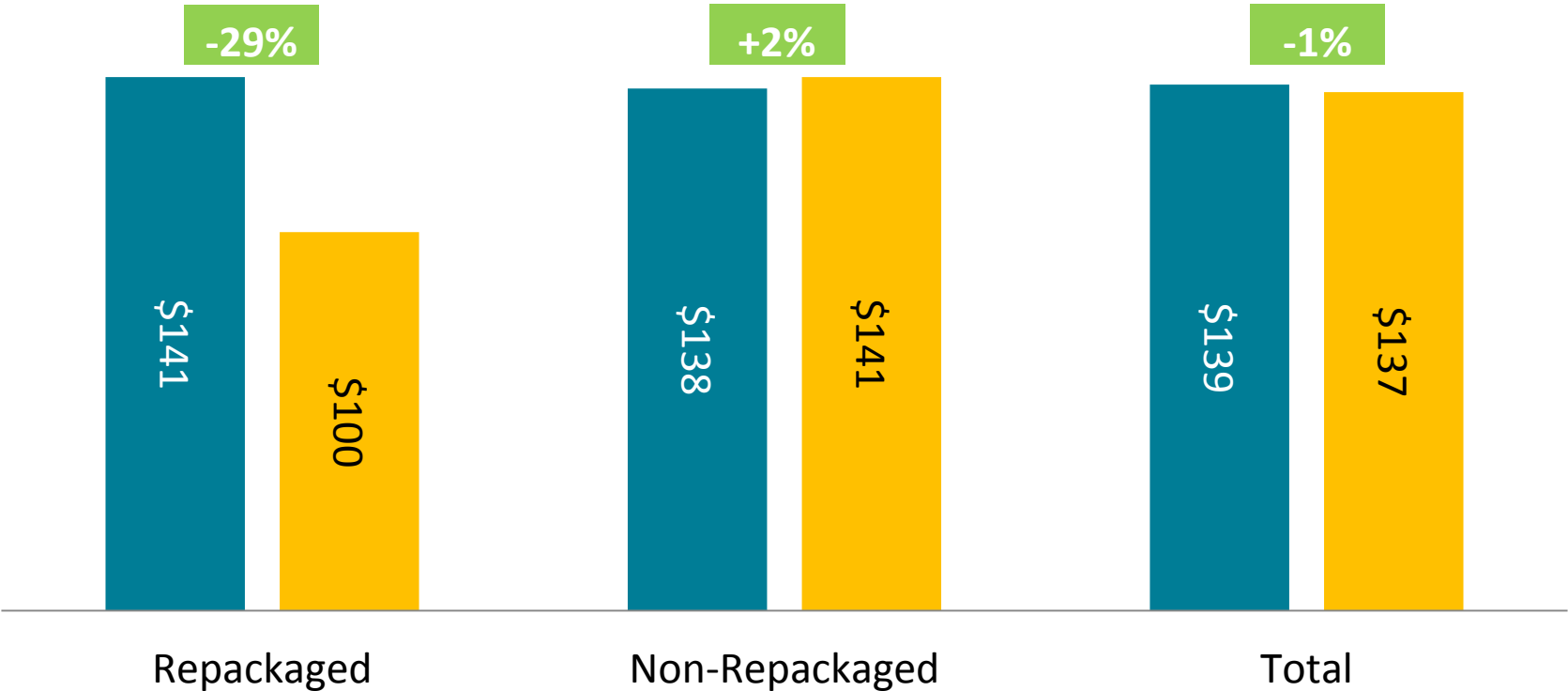
Results for Connecticut

Change in Average Cost per Prescription for Repackaged Drugs				
Repackaged Drugs	Pre-Reform	Post-Reform	% Change	Inflation Adjusted % Change
Payments	\$ 2,971,690	\$ 675,200	-77%	
Prescriptions	21,135	6,769	-68%	
Paid per Prescription	\$141	\$100	-29%	-31%

Results for Connecticut

Observed Change in Average Payment per Prescription

■ Pre-Reform ■ Post-Reform

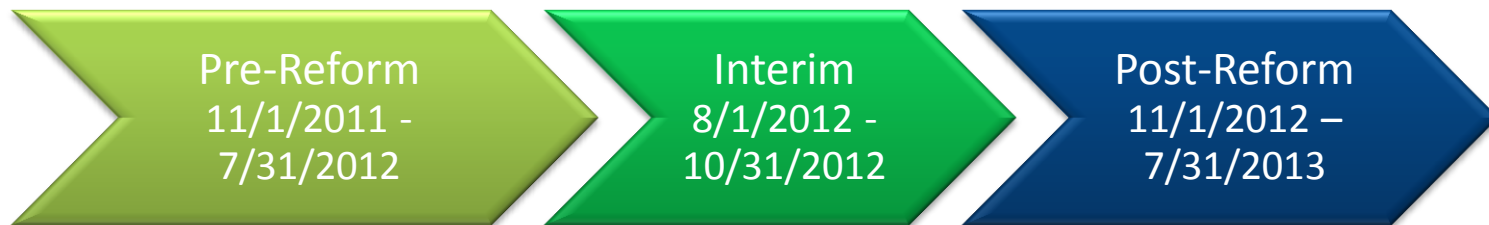


Tennessee

- On August 9, 2012, Tennessee adopted regulations limiting the price differential between what physicians and pharmacies were paid for the same drug
- Reimbursements were changed such that the AWP for repackaged or compounded drugs shall be limited by the AWP of the manufacturer's product or ingredient, calculated on a per unit basis
- Previously, there were no limitations on the AWP specific to repackaged or compounded drugs. The formula for determining maximum reimbursement for prescription drugs remains unchanged
- If dispensed from a pharmacy, AWP plus a dispensing fee of \$5.10
- If dispensed by a physician, AWP (no dispensing fee)

Tennessee Timeframes

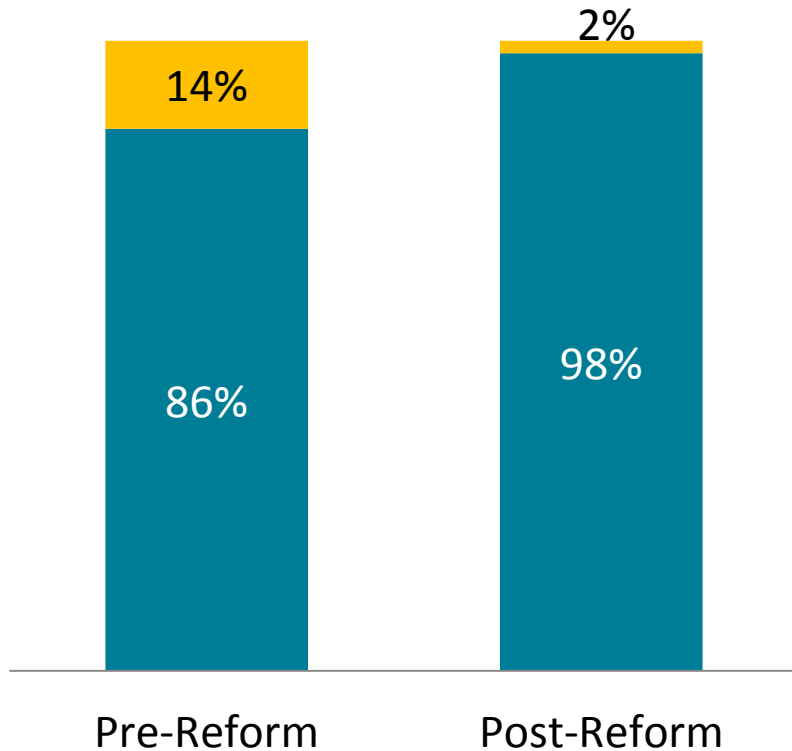
- The pre-reform period is defined as the 9 month period immediately preceding the change in the law, namely from 11/1/2011 – 7/31/2012
- The post-reform period is defined as the 9 month period from 11/1/2012 – 7/31/2013
- Data from 8/1/2012 to 10/31/2012, the interim period, was excluded from the study
- Data from the post-reform period, 11/1/2012 to 7/31/2013, is expected to fully reflect the 8/9/2012 changes



Results for Tennessee

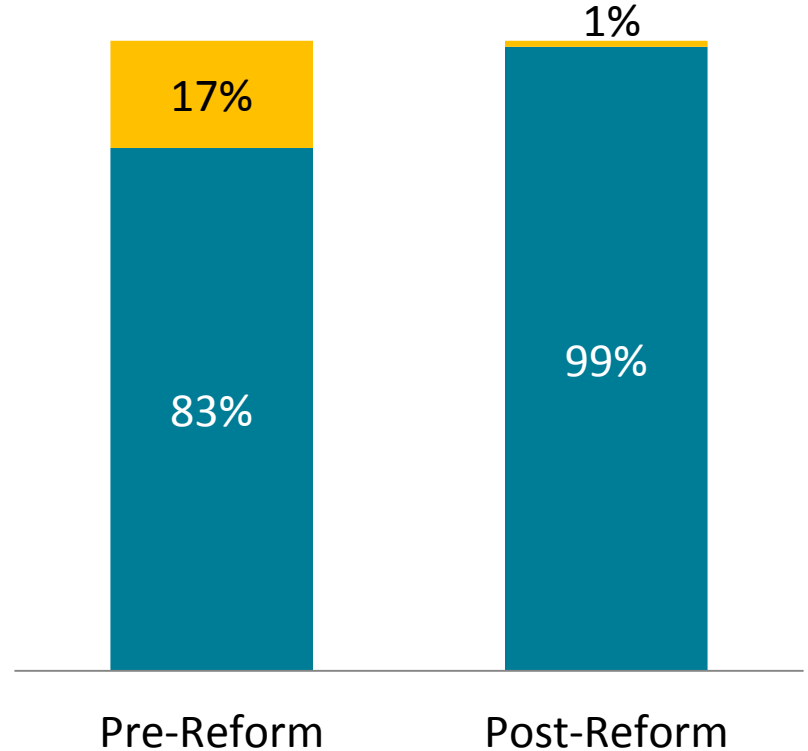
Prescription Counts

■ Non-repackaged ■ Repackaged



Prescription Payments

■ Non-repackaged ■ Repackaged



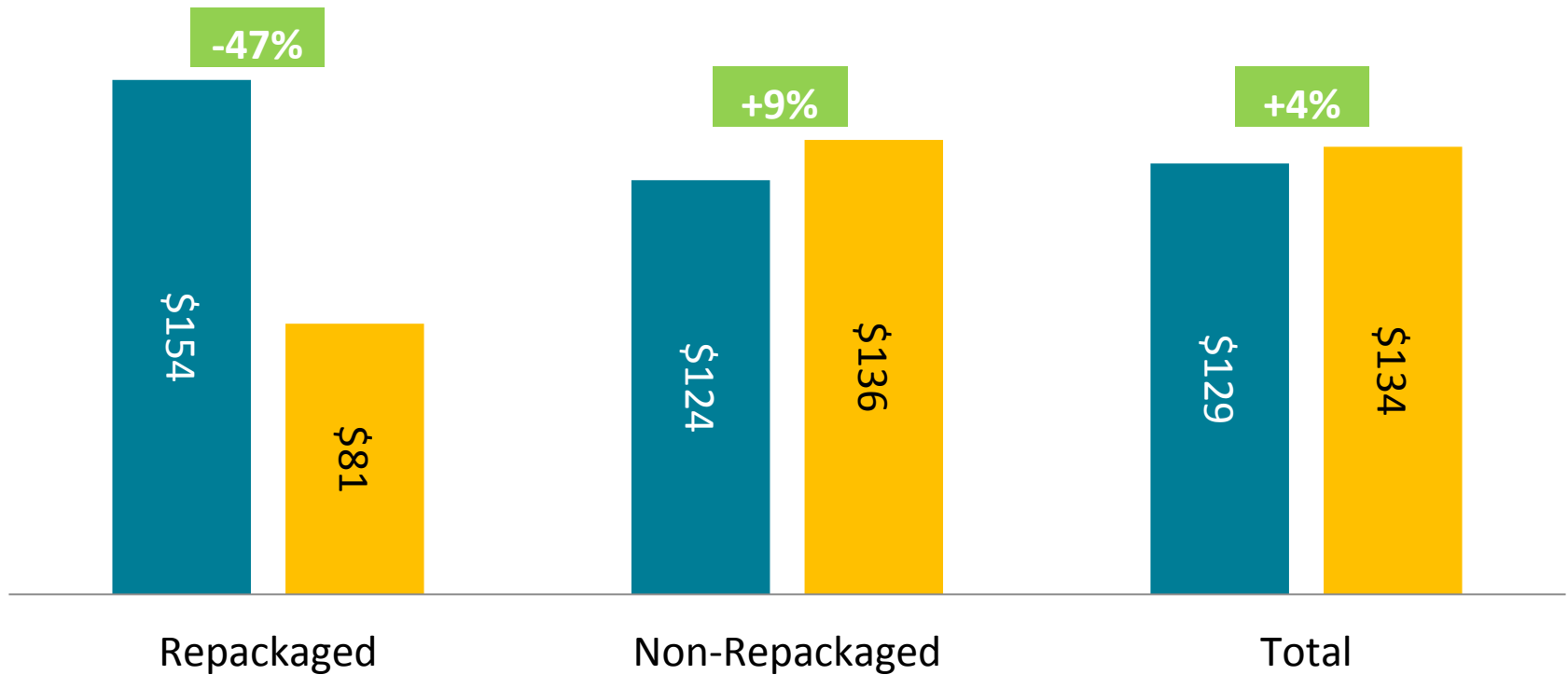
Results for Tennessee

Change in Average Cost per Prescription for Repackaged Drugs				
Repackaged Drugs	Pre-Reform	Post-Reform	% Change	Inflation Adjusted % Change
Payments	\$ 4,684,994	\$ 439,746	-91%	
Prescriptions	30,455	5,406	-82%	
Paid per Prescription	\$154	\$81	-47%	-49%

Results for Tennessee

Observed Change in Average Payment per Prescription

■ Pre-Reform ■ Post-Reform



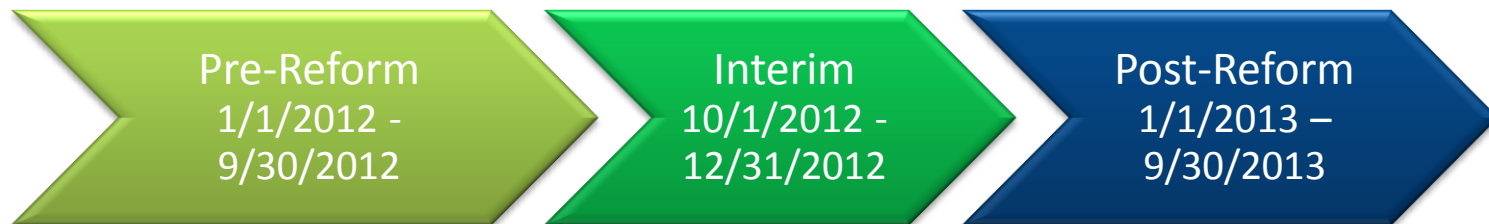
Illinois

- On November 20, 2012, Illinois adopted reforms aimed at reducing the cost of drug repackaging¹
- The revised pharmaceutical fee schedule requires that reimbursement for repackaged or relabeled drugs be based on the Average Wholesale Price (AWP) of the original manufacturer
- Previously, there were no limitations on AWP for repackaged or relabeled prescription drugs. The formula used to determine maximum reimbursement remains unchanged at AWP plus a \$4.18 dispensing fee for prescription drugs dispensed outside of a pharmacy

¹House Bill (HB) 1698, which became effective September, 1, 2011, was a previous attempt at addressing the issue of repackaged drugs in Illinois, which resulted in modest impacts. HB 1698 provided that prescriptions filled and dispensed outside of a licensed pharmacy shall be subject to a fee schedule which shall not exceed the Average Wholesale Price (AWP) plus a dispensing fee of \$4.18. Previously, there was no pharmaceutical fee schedule in Illinois (paid at the usual & customary rate (UCR))

Illinois Timeframes

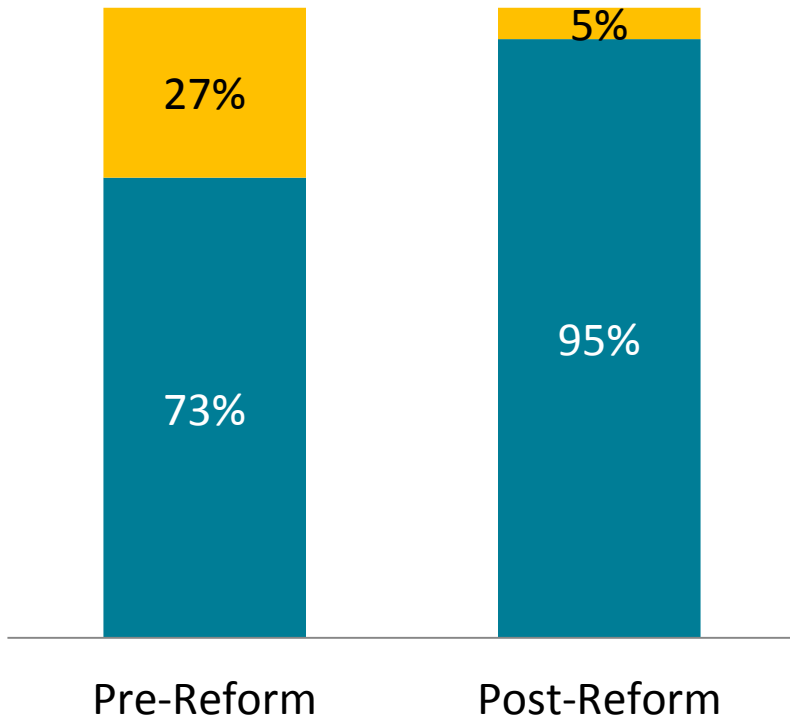
- The pre-reform period is defined as the 9 month period immediately preceding the change in the law, namely from 1/1/2012 – 9/30/2012
- The post-reform period is defined as the 9 month period from 1/1/2013 – 9/30/2013
- Data from 10/1/2012 to 12/31/2012, the interim period, was excluded from the study
- Data from the post-reform period, 1/1/2013 to 9/30/2013, is expected to fully reflect the 11/20/2012 changes



Results for Illinois

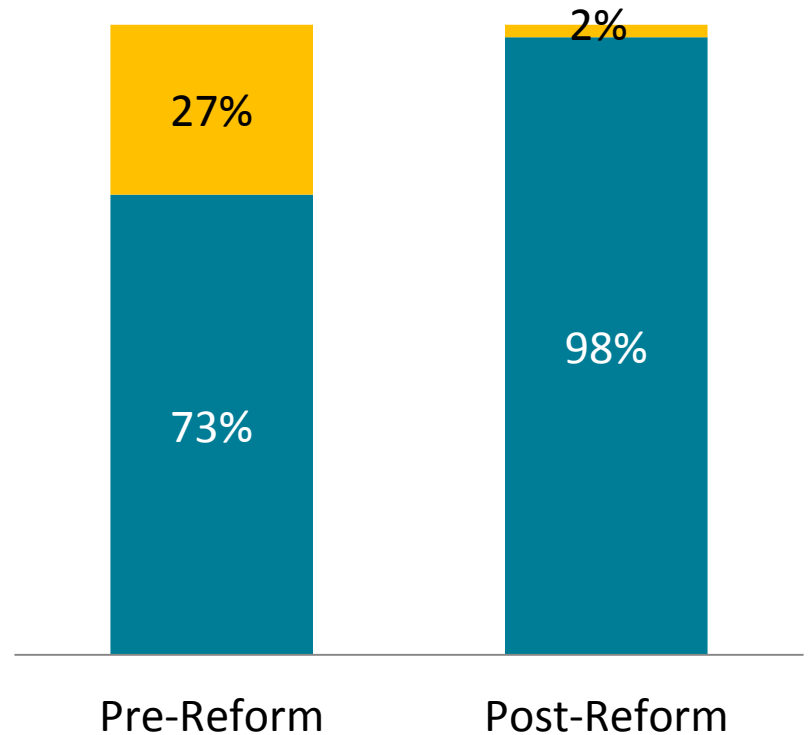
Prescription Counts

■ Non-repackaged ■ Repackaged



Prescription Payments

■ Non-repackaged ■ Repackaged



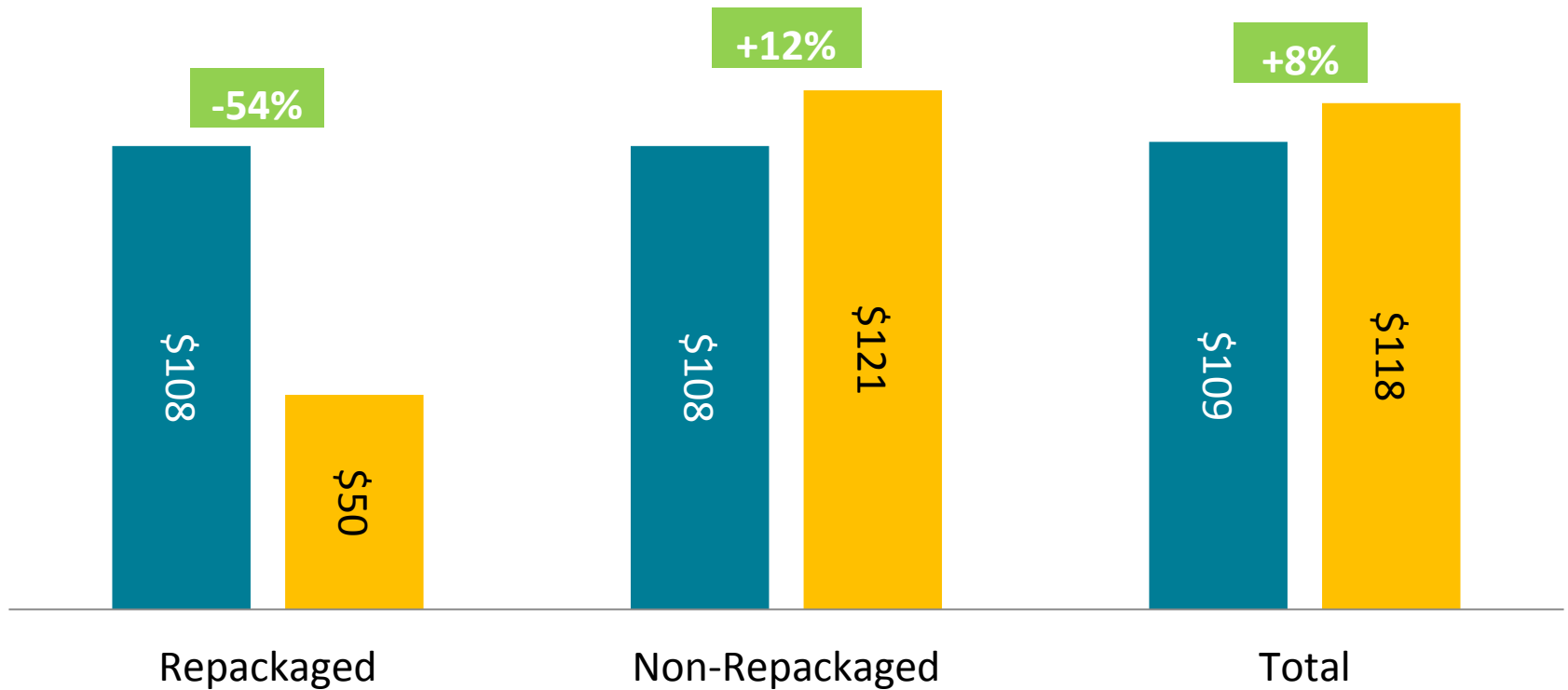
Results for Illinois

	Change in Average Cost per Prescription for Repackaged Drugs			
Repackaged Drugs	Pre-Reform	Post-Reform	% Change	Inflation Adjusted % Change
Payments	\$ 6,350,302	\$ 500,013	-92%	
Prescriptions	58,534	10,018	-83%	
Paid per Prescription	\$108	\$50	-54%	-55%

Results for Illinois

Observed Change in Average Payment per Prescription

■ Pre-Reform ■ Post-Reform



Results for Control States

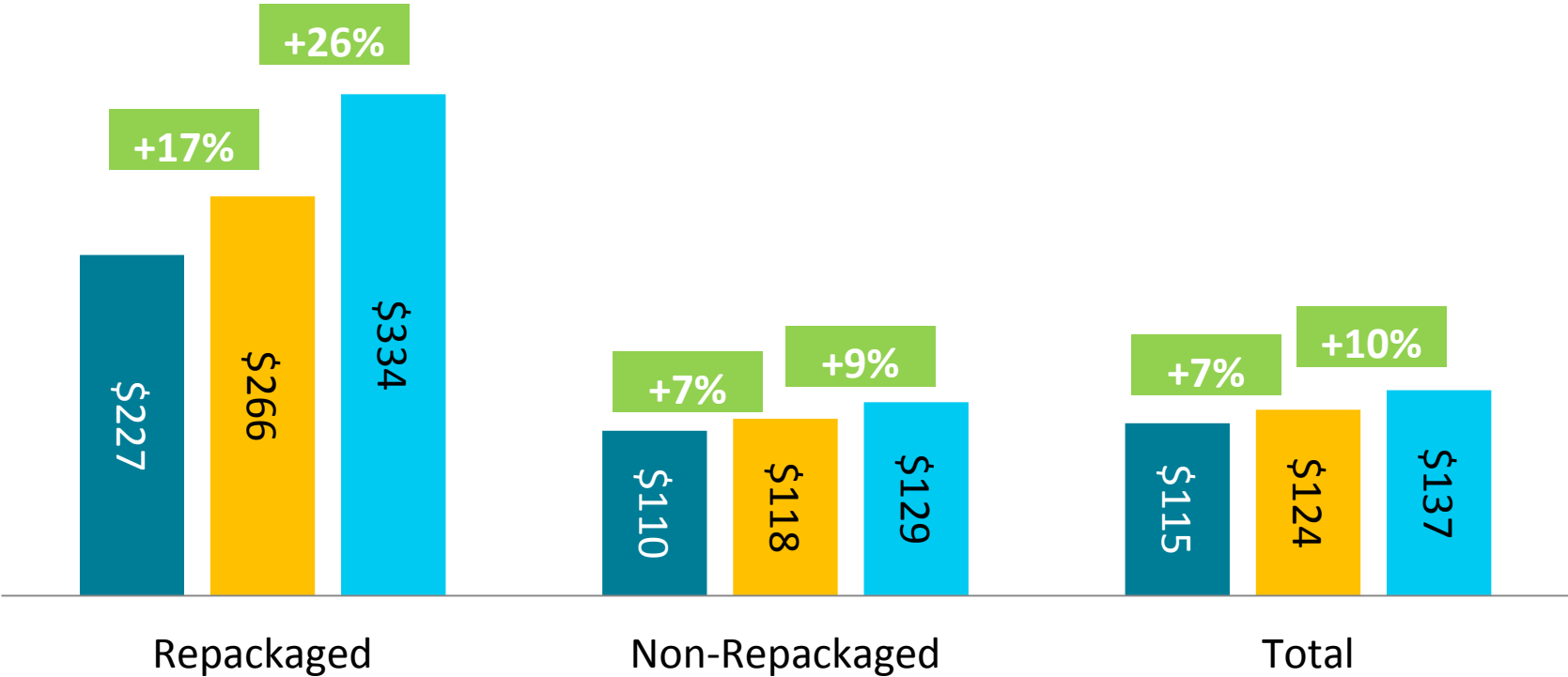
Drug Category	% of Prescriptions			% of Drug Payments		
	SY 2011	SY 2012	SY 2013	SY 2011	SY 2012	SY 2013
L O U I S I A N A						
Repackaged	4%	4%	4%	8%	8%	9%
Non-Repackaged	96%	96%	96%	92%	92%	91%
N E W M E X I C O						
Repackaged	8%	8%	6%	4%	4%	2%
Non-Repackaged	92%	92%	94%	96%	96%	98%
V I R G I N I A						
Repackaged	3%	2%	2%	4%	4%	5%
Non-Repackaged	97%	98%	98%	96%	96%	95%



Results for Control States – LOUISIANA

Observed Change in Average Cost Per Prescription

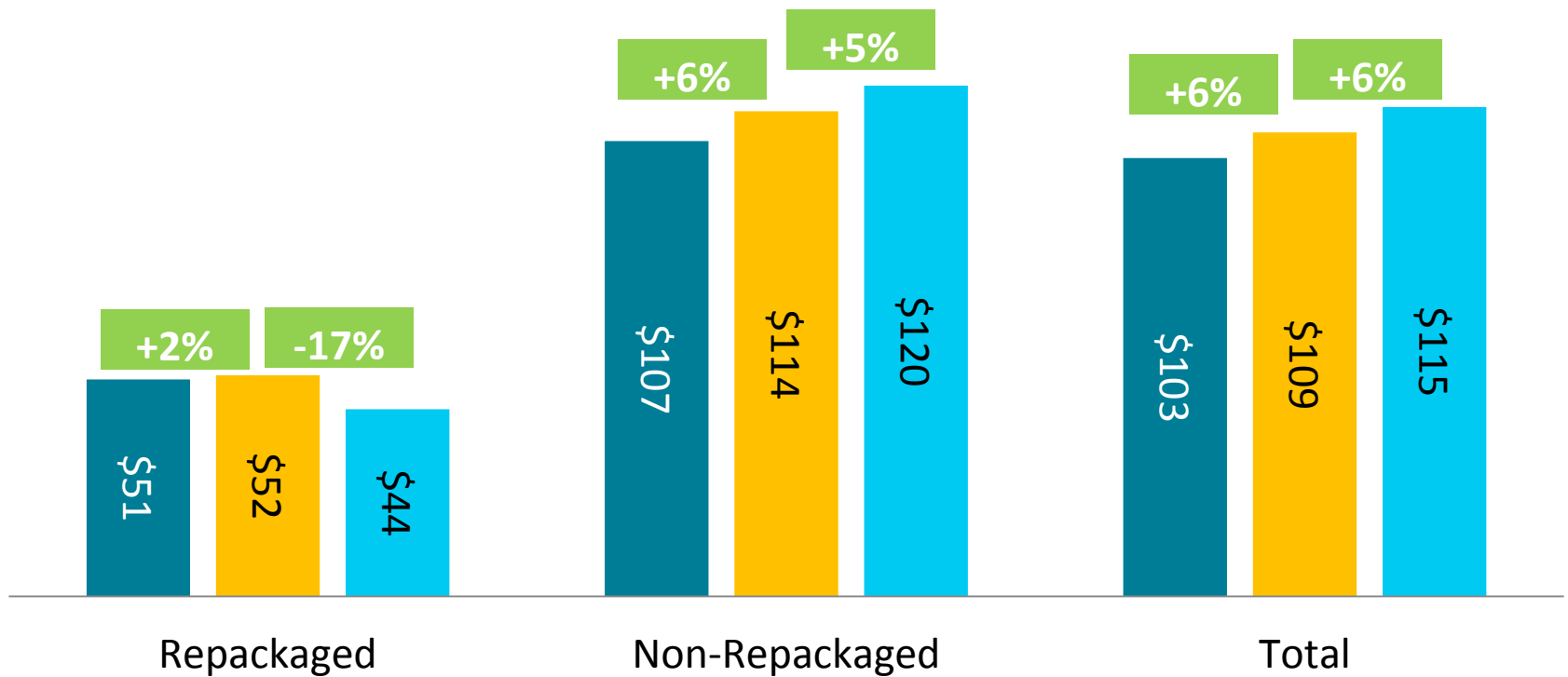
■ 2011 ■ 2012 ■ 2013



Results for Control States – NEW MEXICO

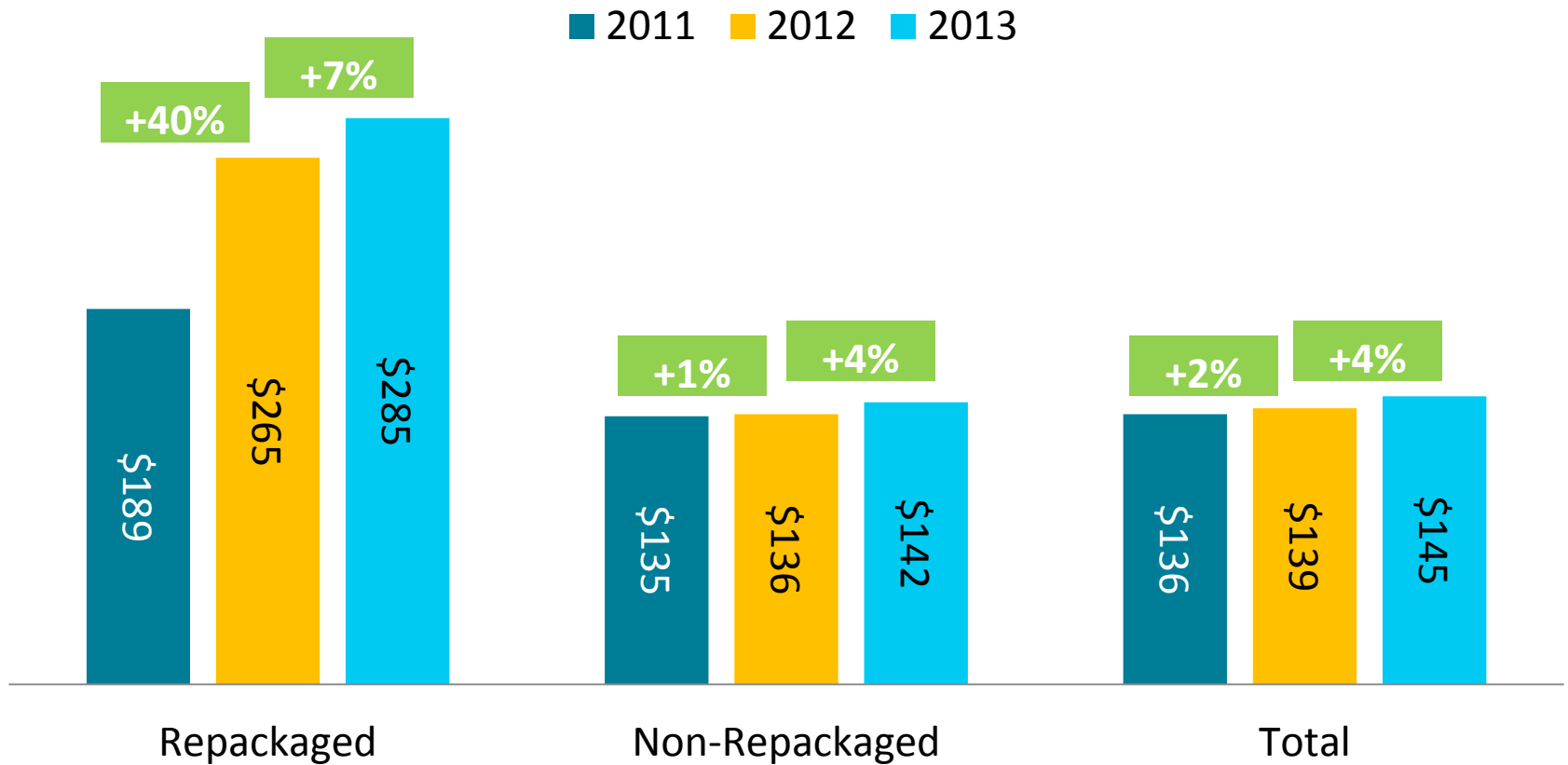
Observed Change in Average Cost Per Prescription

■ 2011 ■ 2012 ■ 2013



Results for Control States – VIRGINIA

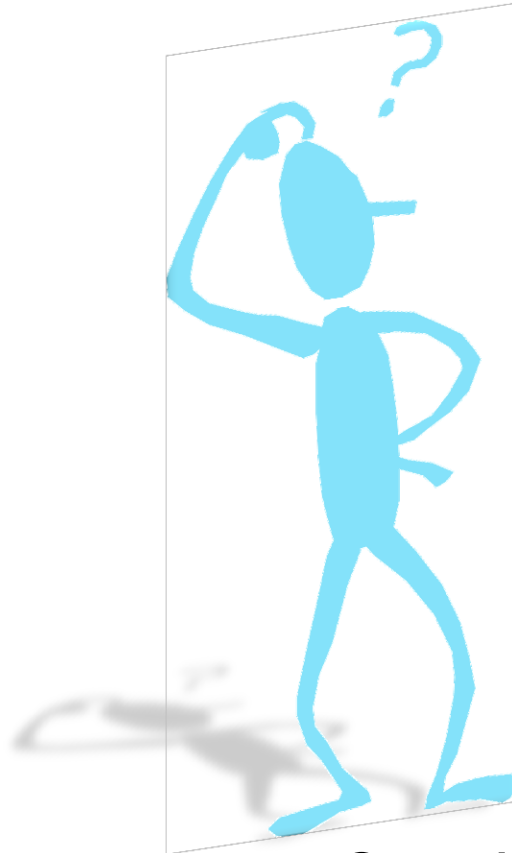
Observed Change in Average Cost Per Prescription



Ask me now ...

Thanks to: Robert Moss, Kaya Robertshaw, Patrick O'Brien

Or ask me later!



At 561.893.3486

Or raji_chadarevian@ncci.com