

Impact of the Texas Pharmacy Closed Formulary

A Preliminary Report
Based on 12-month Injuries with 24-month Services
and Legacy Status

February 2015



Texas Department of Insurance

Workers' Compensation Research and Evaluation Group

Data and methods

- Injury months: 12 months (September–August)
- Injury years: 2009–2011
- Prescription months: 24 months maturity per claim
- Injuries in 2011 are new injuries that occurred after the implementation of the pharmacy closed formulary
 - Injury year from September 2011 to August 2012
 - Services covering from September 2011 to August 2013
- Not Recommended drugs (N-drugs) list: approximately 150 drugs that require carrier preauthorization
- Key measures:
 - Claim counts
 - Prescription costs
 - Prescription utilization patterns
 - Generic substitution rates
 - Cost and utilization by drug group
 - Most prescribed drugs

Summary of key findings: New claims

New claims with injuries that occurred on or after September 1, 2011 are subject to the implementation of the Pharmacy Closed Formulary.

- The number of injured employees receiving N-drugs fell by 65 percent.
- N-drug costs fell by 83 percent, and N-drug costs as a percentage of all drug costs decreased by 79 percent (from 17 percent of total to 3 percent of total).
- The number of injured employees receiving other drugs fell by 1 percent.
- The share of N-drug claims among all claims fell from 18 percent to 7 percent.
- The total number of prescriptions for N-drugs fell by 76 percent while it fell by 4 percent for other drugs.
- The average number of N-drug prescriptions per claim fell by 31 percent.
- The generic substitution rate for N-drugs increased from 61 percent in 2010 to 74 percent in 2011.
- The number of N-drug prescriptions fell by 65+ percent across all drug groups.
- The number of prescriptions for the ten most-prescribed N-drugs decreased by 82 percent.

Summary of key findings: Legacy claims

Legacy claims with injuries prior to September 1, 2011 are subject to the Pharmacy Closed Formulary beginning on September 1, 2013.

- Legacy claims accounted for 38 percent of the claims and 57 percent of the total pharmacy cost in September 2014.
- Legacy claims serviced in a month decreased from 35,604 in September 2011 to 12,215 in September 2014 (66 percent decrease), mainly because there are no new claims added.
- The average pharmacy cost per legacy claim dropped by 18 percent in the first month they became subject to the pharmacy closed formulary (September 2013).
- Total cost of N-drugs decreased from \$1.42 million in August 2013 to \$607,000 in September 2013 (57 percent decrease), and decreased to \$290,000 in September 2014.
- For legacy claims, the share of N-drug cost in the total cost dropped from 18.5 percent in August 2013 to 10.4 percent in September 2013 (44 percent decrease). N-drugs accounted for 6 percent of the total cost in September 2014.

New Claims

with Injury Dates on or after September 1, 2011

(Subject to the Pharmacy Closed Formulary
Beginning on September 1, 2011)

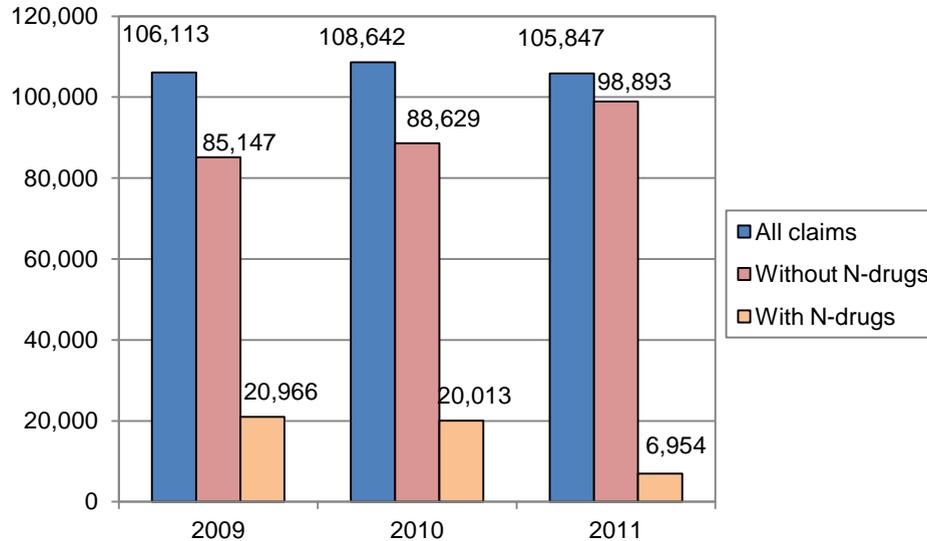
New Claims: Number of Claims

Number of claims receiving pharmaceuticals, by injury year (Sept.–Aug.)

	Injury year			2010-2011 percentage change
	2009	2010	2011	
All claims	106,113	108,642	105,847	-3%
N-drugs				
Number of claims	20,966	20,013	6,954	-65%
<i>Percent of all claims</i>	20%	18%	7%	-64%
Other drugs				
Number of claims with at least one Other drug	103,671	106,313	105,312	-1%
Number of claims with Other drugs only (no N-drugs)	85,147	88,629	98,893	12%
<i>Percent of all claims</i>	80%	82%	93%	15%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Number of claims, by injury year (Sept.–Aug.)



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

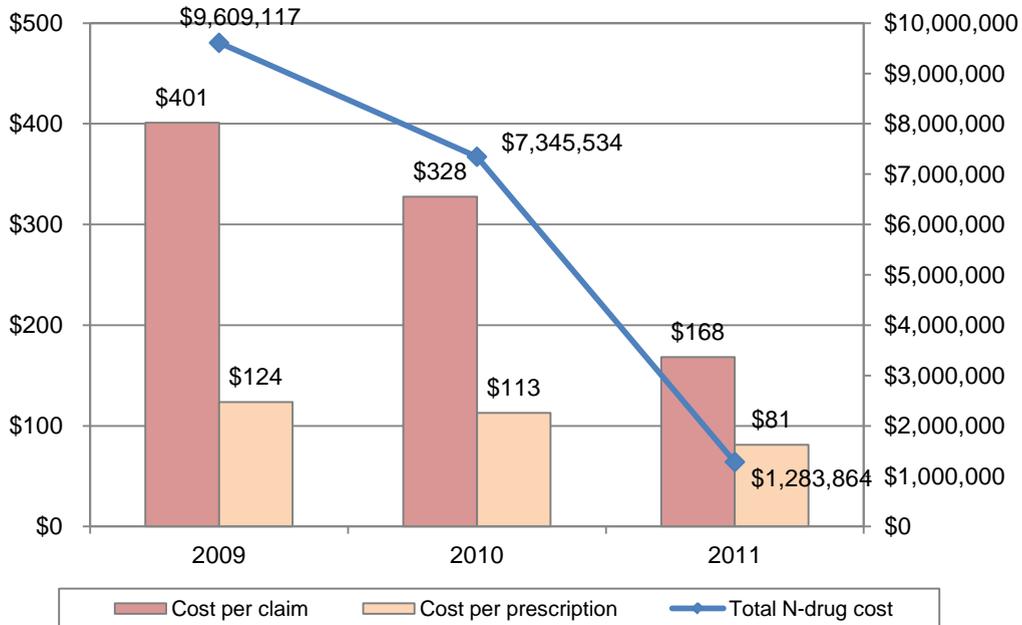
New Claims: Prescription Costs

Cost of N-drugs, by injury year (Sept.–Aug.)

	Injury year			2010-2011 percentage change
	2009	2010	2011	
Total cost	\$46,234,636	\$44,504,995	\$37,759,827	-15%
Total cost of N-drug prescriptions	\$9,609,117	\$7,345,534	\$1,283,864	-83%
<i>N-drug cost as a percentage of total drug costs</i>	21%	17%	3%	-79%
Total number of N-drug prescriptions	76,147	63,343	15,284	-76%
<i>Average cost per N-drug prescription</i>	\$126	\$116	\$84	-28%
Total number of N-drug claims	20,966	20,013	6,954	-65%
<i>Average N-drug cost per claim</i>	\$458	\$367	\$185	-50%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Total and average costs: N-drugs, by injury year (Sept.–Aug.)



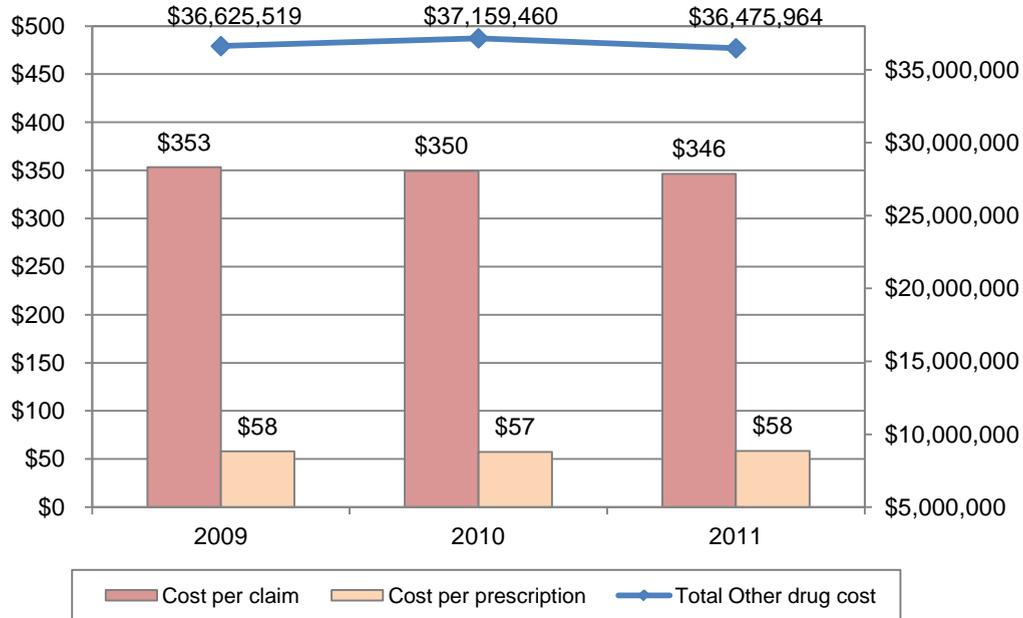
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Cost of Other drugs, by injury year (Sept.–Aug.)

	Injury year			2010-2011 percentage change
	2009	2010	2011	
Total cost	\$46,234,636	\$44,504,995	\$37,759,827	-15%
Total cost of Other drug prescriptions	\$36,625,519	\$37,159,460	\$36,475,964	-2%
<i>Other drug cost as a percentage of total drug costs</i>	79%	83%	97%	16%
Total number of Other drug prescriptions	632,739	648,672	624,676	-4%
<i>Average cost per Other drug prescription</i>	\$58	\$57	\$58	2%
Total number of Other drug claims	103,671	106,313	105,312	-1%
<i>Average Other drug cost per claim</i>	\$353	\$350	\$346	-1%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Total and average costs: Other drugs, by injury year (Sept.–Aug.)



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

New Claims: Prescription Patterns

Share of prescriptions by drug type, by injury year (Sept.–Aug.)

	Injury year			2010-2011 percentage change
	2009	2010	2011	
Total number of all prescriptions	708,886	712,015	639,960	-10%
N-drugs				
Number of prescriptions	76,147	63,343	15,284	-76%
<i>N-drug prescriptions as a percent of all prescriptions</i>	11%	9%	2%	-73%
Other drugs				
Number of prescriptions	632,739	648,672	624,676	-4%
<i>Other drug prescriptions as a percent of all prescriptions</i>	89%	91%	98%	7%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

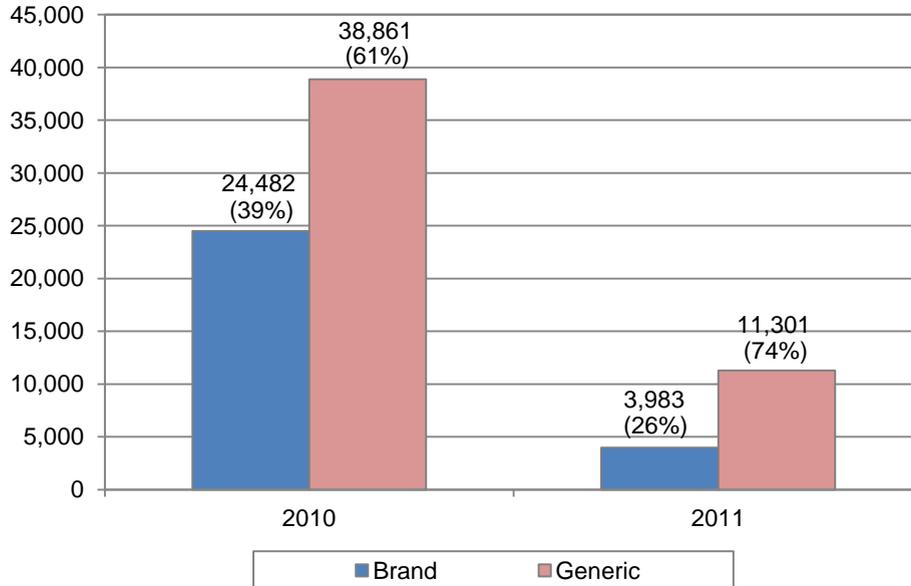
Number of prescriptions per claim, by injury year (Sept.–Aug.)

	Injury year			2010-2011 percentage change
	2009	2010	2011	
N-drugs				
Number of prescriptions	76,147	63,343	15,284	-76%
Total N-drug claims	20,966	20,013	6,954	-65%
<i>Number of prescriptions per claim</i>	3.63	3.17	2.20	-31%
Other drugs				
Number of prescriptions	632,739	648,672	624,676	-4%
Total Other drug claims	103,671	106,313	105,312	-1%
<i>Number of prescriptions per claim</i>	6.10	6.10	5.93	-3%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

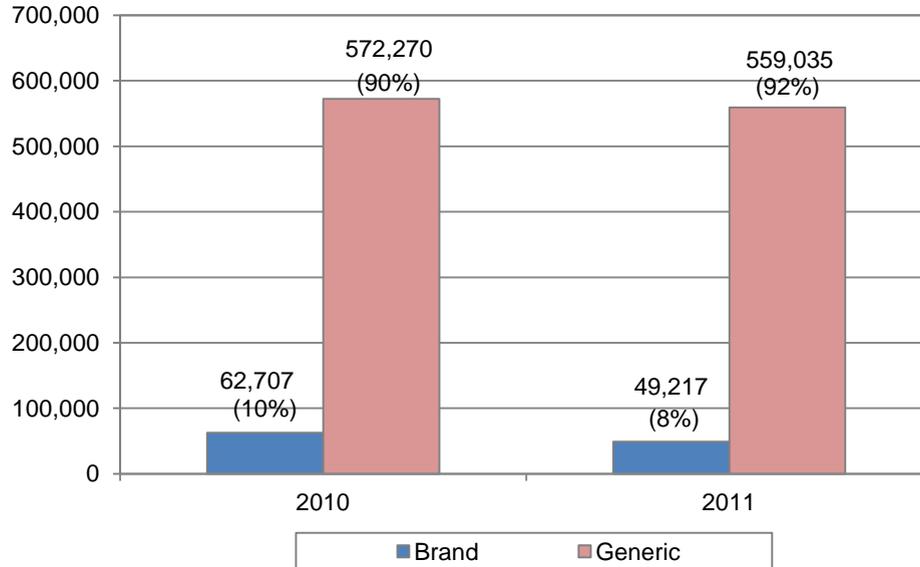
New Claims: Generic Substitution Rates

Generic substitution: prescriptions of N-drugs, by injury year (Sept.–Aug.)



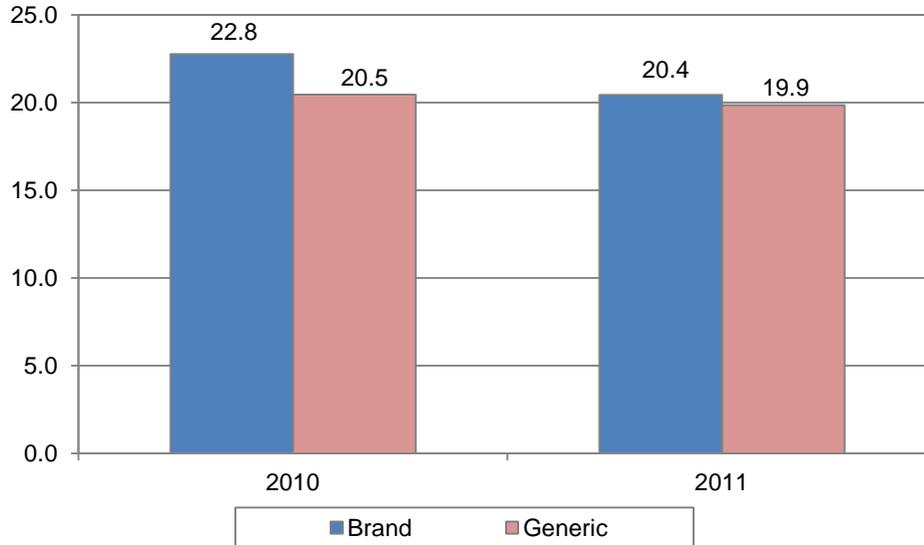
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Generic substitution: prescriptions of Other drugs, by injury year (Sept.–Aug.)



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Average number of N-drug prescription days by generic status, by injury year (Sept.–Aug.)



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

New Claims: Cost and Utilization by Drug Group

Number of prescriptions by drug group, by injury year (Sept.–Aug.)

N-drug Status	Drug group	Number of prescriptions 2010	Number of prescriptions 2011	2010 - 2011 percentage change
N-drugs	Analgesics - Anti-Inflammatory	15,138	3,455	-77%
	Analgesics - Opioid	8,188	2,875	-65%
	Central Nervous System Drugs	15,728	4,442	-72%
	Musculoskeletal Therapy Agents	13,300	1,703	-87%
	Others	10,989	2,809	-74%
	Total	63,343	15,284	-76%
Other drugs	Analgesics - Anti-Inflammatory	154,030	153,521	0%
	Analgesics - Opioid	231,971	209,989	-9%
	Central Nervous System Drugs	45,549	43,583	-4%
	Musculoskeletal Therapy Agents	90,891	90,787	0%
	Others	126,231	126,796	0%
	Total	648,672	624,676	-4%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Total cost by drug group, by injury year (Sept.–Aug.)

N-drug Status	Drug group	Total cost 2010	Total cost 2011	2010 - 2011 percentage change
N-drugs	Analgesics - Anti-Inflammatory	\$1,723,884	\$204,116	-88%
	Analgesics - Opioid	\$1,264,710	\$346,970	-73%
	Central Nervous System Drugs	\$1,025,308	\$285,451	-72%
	Musculoskeletal Therapy Agents	\$1,064,535	\$67,239	-94%
	Others	\$2,267,097	\$380,087	-83%
	Total	\$7,345,534	\$1,283,864	-83%
Other drugs	Analgesics - Anti-Inflammatory	\$9,755,521	\$9,535,053	-2%
	Analgesics - Opioid	\$7,651,679	\$6,489,643	-15%
	Central Nervous System Drugs	\$5,798,464	\$5,697,524	-2%
	Musculoskeletal Therapy Agents	\$5,539,819	\$5,032,235	-9%
	Others	\$8,413,977	\$9,721,508	16%
	Total	\$37,159,460	\$36,475,964	-2%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Average cost per claim by drug group, by injury year (Sept.–Aug.)

N-drug Status	Drug group	Number of claims		Cost per claims		
		2010	2011	2010	2011	2010 - 2011 percentage change
N-drugs	Analgesics - Anti-Inflammatory	8,444	2,328	\$204	\$88	-57%
	Analgesics - Opioid	2,978	1,267	\$425	\$274	-36%
	Central Nervous System Drugs	3,863	1,441	\$265	\$198	-25%
	Musculoskeletal Therapy Agents	4,816	969	\$221	\$69	-69%
	Others	4,538	1,737	\$500	\$219	-56%
Other drugs	Analgesics - Anti-Inflammatory	62,672	64,042	\$156	\$149	-4%
	Analgesics - Opioid	59,897	59,012	\$128	\$110	-14%
	Central Nervous System Drugs	8,109	7,922	\$715	\$719	1%
	Musculoskeletal Therapy Agents	34,763	35,761	\$159	\$141	-12%
	Others	46,642	47,271	\$180	\$206	14%

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

New Claims: Most Prescribed Drugs

Ten most frequently prescribed drugs, by injury year (Sept.–Aug.)

2010 rank by number of prescription	Drug name	Drug group	Number of prescriptions 2010	Number of prescriptions 2011
1	Hydrocodone/APAP	Analgesics - Opioid	158,576	138,468
2	Cyclobenzaprine	Musculoskeletal Therapy Agents	56,090	56,917
3	Naproxen	Analgesics - Anti-Inflammatory	49,775	50,186
4	Tramadol	Analgesics - Opioid	47,521	49,238
5	Ibuprofen	Analgesics - Anti-Inflammatory	47,167	49,846
6	Meloxicam	Analgesics - Anti-Inflammatory	20,493	21,913
7	Celebrex	Analgesics - Anti-Inflammatory	14,308	12,083
8	Gabapentin	Central Nervous System Drugs	12,774	13,861
9	Tramadol/APAP	Analgesics - Opioid	12,292	12,909
10	Methylpred	Others	10,606	11,425
Subtotal			429,602	416,846

Note: No N-drug was in the top ten most frequently prescribed drugs in 2010 and 2011.

These ten drugs accounted for 60 percent of total prescriptions in 2010, and 65 percent in 2011.

Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Ten most frequently prescribed N-drugs, by injury year (Sept.–Aug.)

2010 rank by number of Rx	Drug name	Drug group	Number of Rx in 2010	Number of Rx in 2011	2010-2011 percentage change
1	Carisoprodol	Musculoskeletal Therapy Agents	8,514	1,086	-87%
2	Diclofenac	Analgesics - Anti-Inflammatory	4,874	1,944	-60%
3	Ziposor	Analgesics - Anti-Inflammatory	3,867	465	-88%
4	Lidoderm	Others	3,829	744	-81%
5	Diazepam	Central Nervous System Drugs	3,314	771	-77%
6	Naprelan	Analgesics - Anti-Inflammatory	2,952	218	-93%
7	Hydrocodone/IBU	Analgesics - Opioid	2,541	660	-74%
8	Alprazolam	Central Nervous System Drugs	2,503	399	-84%
9	Flector	Others	2,454	338	-86%
10	Amrix	Musculoskeletal Therapy Agents	2,236	34	-98%
Subtotal			37,084	6,659	-82%

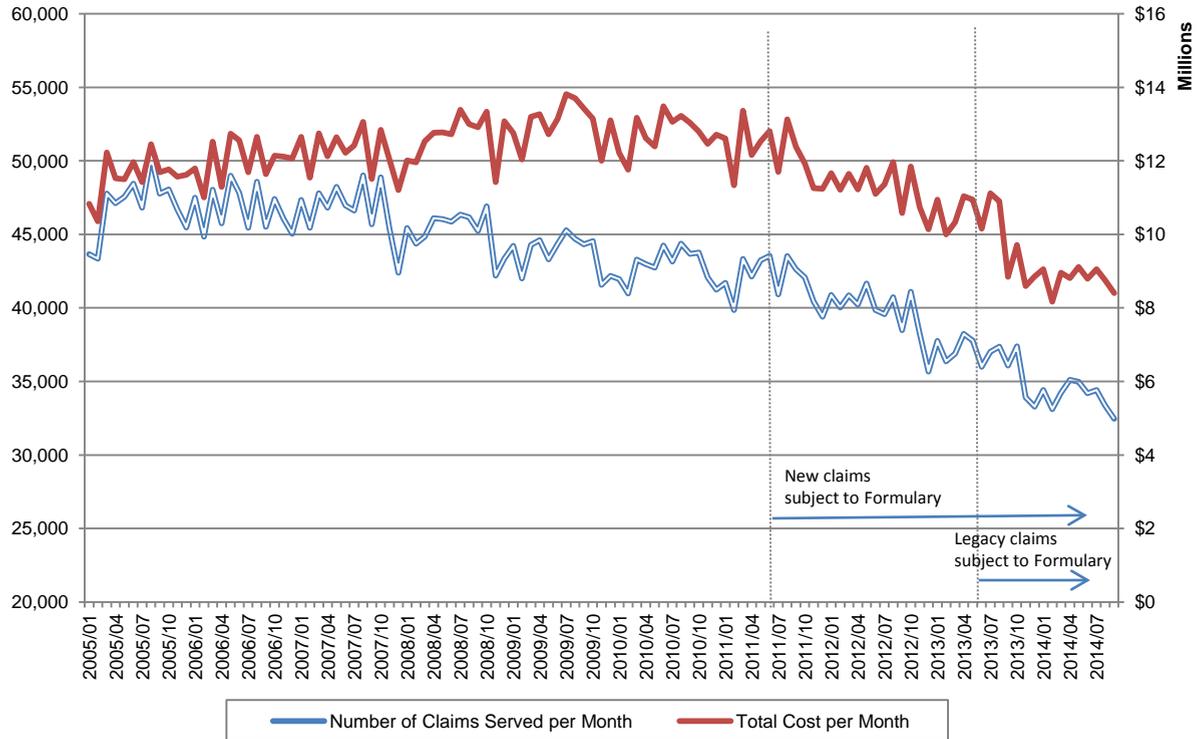
Note: These ten drugs accounted for 59 percent of total N-drug prescriptions in 2010, and 44 percent in 2011.
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Legacy Claims

with Injury Dates Prior to September 2011

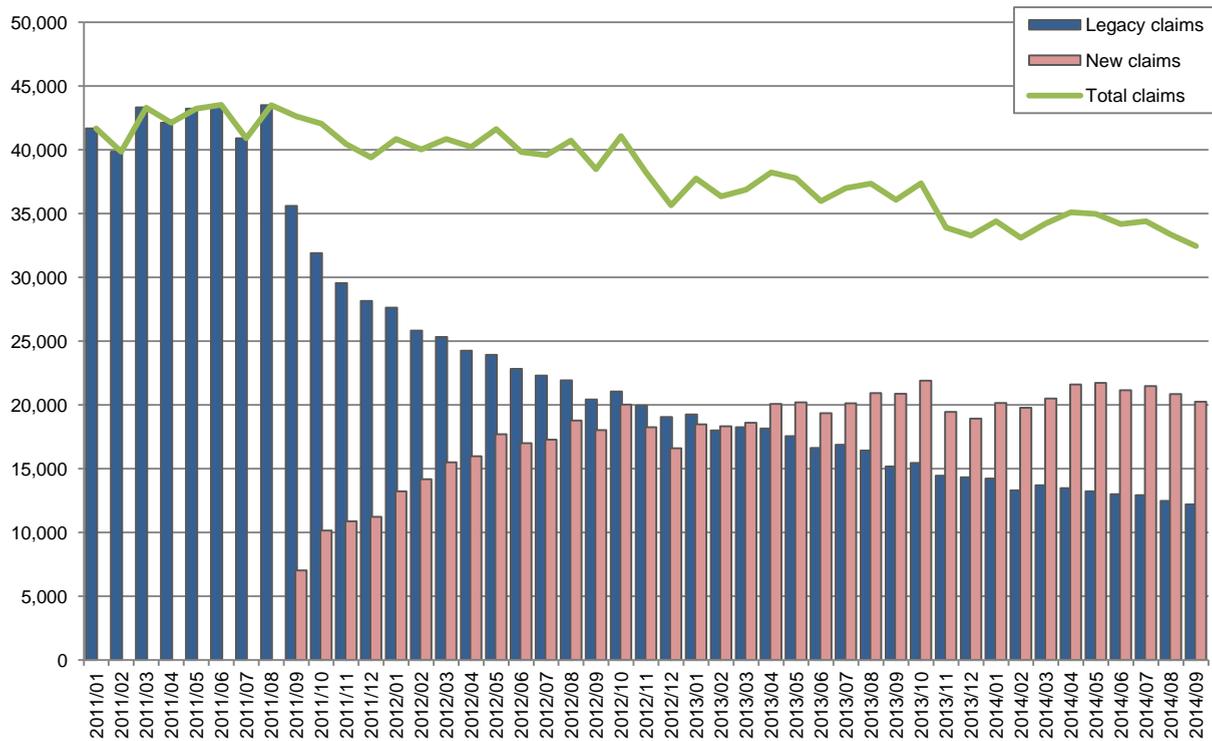
(Subject to the Pharmacy Closed Formulary
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All claims: Number of claims and total cost by service month



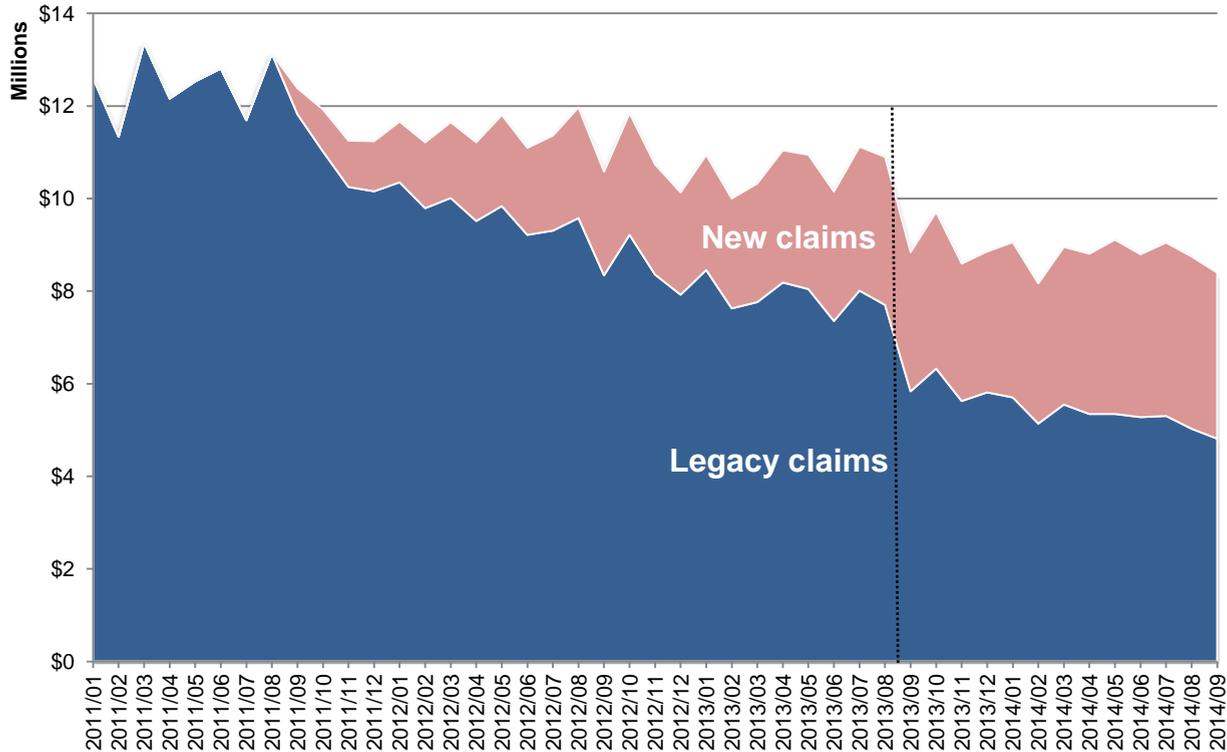
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Number of claims by claim type by service month



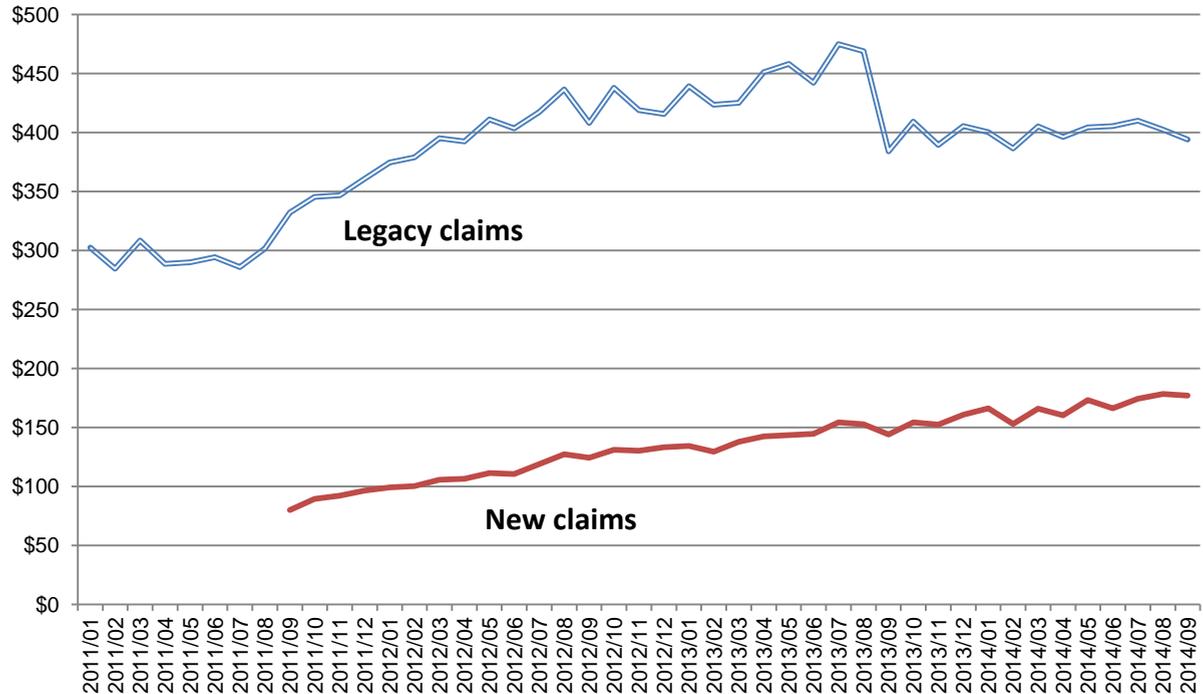
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Total pharmacy costs by claim type by service month



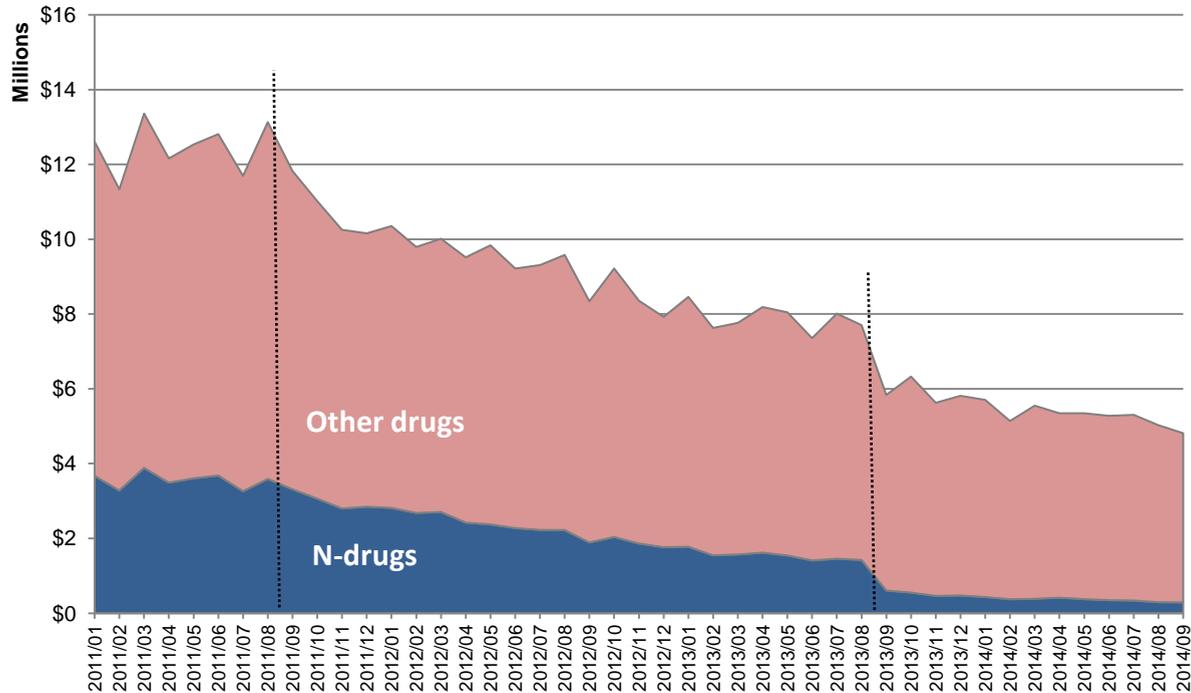
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Average pharmacy cost per claim by claim type by service month



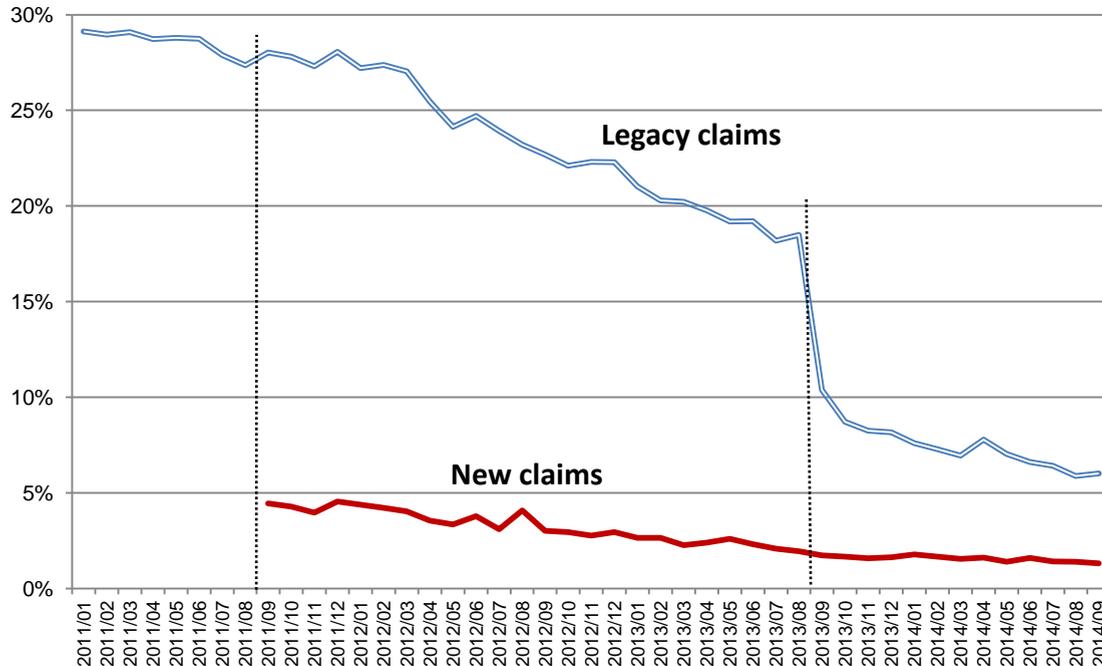
Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Legacy claims: Costs of N-drugs and other drugs by service month



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.

Share of N-drug cost in the total cost by claim type by service month



Source: Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2015.



Texas Department of Insurance
Workers' Compensation Research and Evaluation Group

REG's main Web page at the Texas Department of Insurance:
www.tdi.texas.gov/wc/regulation/roc

For more information, contact us at WCResearch@tdi.texas.gov.

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- the delivery of benefits;
- litigation and controversy related to workers' compensation;
- insurance rates and rate-making procedures;
- rehabilitation and reemployment of injured employees;
- the quality and cost of medical benefits;
- employer participation in the workers' compensation system;
- employment health and safety issues; and
- other matters relevant to the cost, quality, and operational effectiveness of the workers' compensation system.