



WORKERS COMPENSATION AND PRESCRIPTION DRUGS: 2016 Update

INTRODUCTION

Prescription drug (Rx) costs represent a significant portion of workers compensation (WC) medical costs and is one of the most active subjects of WC-related legislative activity. NCCI estimates that for every \$100 paid for medical services provided to workers injured in 2014, \$17 will be paid for prescription drugs. Furthermore, the prescription drugs portion of medical costs increases rapidly as claims age. For every \$100 of medical services paid on claims older than 10 years, approximately \$45 to \$50 will be for prescription drugs.

Past NCCI studies on the use of prescription drugs in WC have shown that utilization changes have been a major contributor to prescription drug cost changes; however, prescription drug price changes have also contributed to prescription drug cost changes. These studies have also reported on trends affecting prescription drug costs such as physician dispensing and the use of opioids. This update examines the most recent trends in the use of prescription drugs in WC. We also look at the possible savings that would result from implementation of drug formularies in certain states.

The major topics covered in this study are:

- The estimated Accident Year 2014 prescription drug share of WC medical costs
- The impact of price and utilization changes on prescription drug costs
- Potential prescription drug cost savings from a drug formulary
- Controlled substances
- Physician dispensing
- Brand name and generic drugs

KEY FINDINGS

- Prescription drug costs per active claim continue to grow
- The projected prescription drug share of total medical costs for Accident Year 2014 is 17%
- The prescription drug share of total medical costs increases rapidly as claims age
- In 2014, prescription drug prices increased 11%—substantially greater than the 10-year average increase of 4%
- In 2014, prescription drug utilization declined by 4%, resulting in growth in prescription drug costs per active claim of 6%
- In many states, introduction of a drug formulary has the potential to reduce WC prescription drug costs by 10% or more
- In 2014, controlled substances' prices increased 16%, while utilization decreased 7%
- Both physician-dispensed prescription drug prices and utilization increased 4% in 2014
- The share of prescription drug costs for generic drugs increased in 2014

STUDY DATA

The data source used in this study is NCCI's Medical Data Call (MDC). The MDC captures transaction-level detail on WC medical bills processed on or after July 1, 2010, including dates of service, charges, payments, procedure codes, and diagnosis codes. Carriers are not required to report transactions for services provided more than 30 years after the date of the injury.

For this study, we used MDC experience evaluated as of March 2015 for:

- Services provided between January 1, 2011, and December 31, 2014
- The states AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MN, MO, MS, MT, NC, NE, NH, NJ, NM, NV, NY, OK, OR, RI, SC, SD, TN, UT, VA, VT, and WI

State-specific results are based on state of jurisdiction.

TERMINOLOGY

Terms used throughout this study include:

- Rx—Unless otherwise noted, a prescription drug identified with a National Drug Code (NDC). Drugs that are bundled with other services and included in codes such as Hospital Revenue Codes, Healthcare Common Procedure Code System (HCPCS), or Current Procedural Terminology (CPT) are generally not included.
- Service Year—The year in which a medical service is provided.
- Accident Year—The year in which the injury occurred.
- Active claim—A claim with at least one medical service provided during the service year.
- Units—One unit is a capsule, tablet, ounce, etc.
- Cost—The total dollars paid per claim (Cost = Price x Utilization).
- Price—What is paid for individual services.
- Utilization—The intensity of services provided per claim. This includes:
 - The number of units (tablets, capsules, etc.) of prescription drugs provided per claim.
 - The mix of prescription drugs provided on a claim, e.g., OxyContin versus Ibuprofen.¹
- Controlled substances—Prescription drugs classified as Schedule II and III by the Drug Enforcement Administration (DEA).
- Countrywide—Aggregated results based on states included in the study: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MN, MO, MS, MT, NC, NE, NH, NJ, NM, NV, NY, OK, OR, RI, SC, SD, TN, UT, VA, VT, and WI.
- Closed formulary—A list of drugs with an associated reimbursement status.

¹ The following hypothetical example shows that a change in the mix of prescription drugs can change the overall average cost per claim:

Year 1:

- 7 claims are prescribed 30 tablets of Ibuprofen at \$0.40 a tablet
- 3 claims are prescribed 10 tablets of OxyContin at \$7.00 a tablet
- Average Prescription Cost per Claim = \$29 = $[(7 \times 30 \times \$0.40) + (3 \times 10 \times \$7.00)] / 10$

Year 2:

- 7 claims are prescribed 10 tablets of Ibuprofen at \$0.40 a tablet
- 3 claims are prescribed 30 tablets of OxyContin at \$7.00 a tablet
- Average Prescription Cost per Claim = \$66 = $[(7 \times 10 \times \$0.40) + (3 \times 30 \times \$7.00)] / 10$

The change in the average prescription cost per claim from Year 1 to Year 2 is $128\% = \$66 / \$29 - 1$. In each year, the number of claims and the price per tablet for each type of drug remained the same. However, the change in the average prescription cost per claim from Year 1 to Year 2 increased because of the mix of drugs (i.e., more OxyContin prescribed).

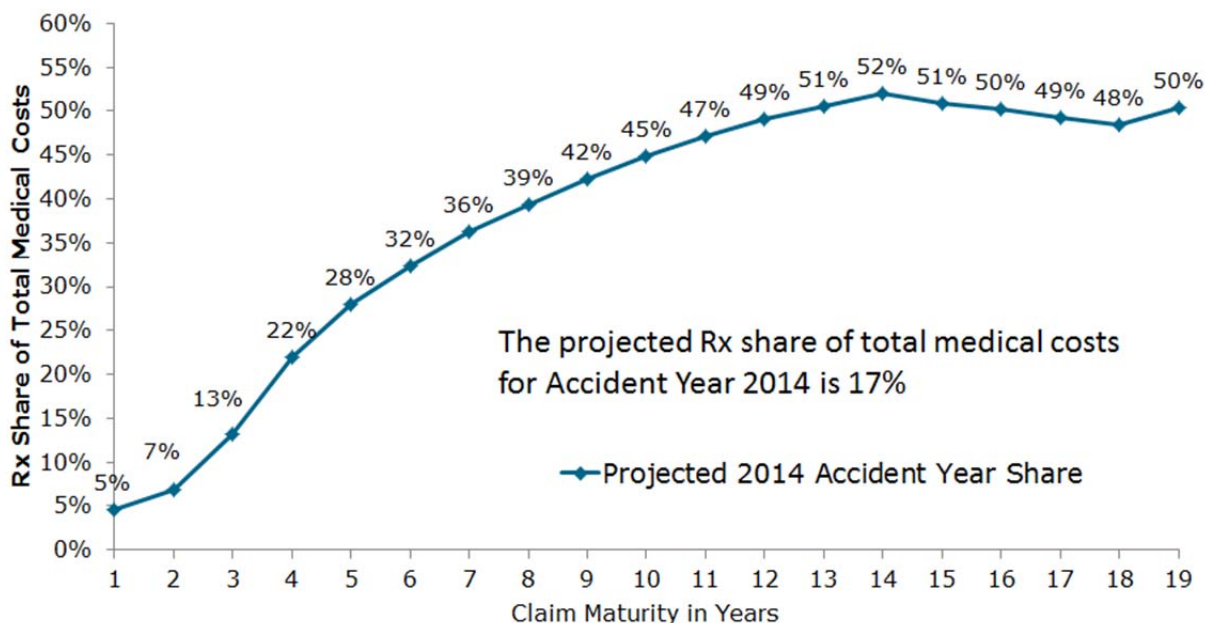
PRESCRIPTION DRUG SHARE OF TOTAL MEDICAL

Workers compensation is among the lines of insurance classified as “long-tailed” because, for many claims, the ultimate cost is unknown for many years. As such, it is important that WC insurance companies accurately estimate their ultimate liability for their policies. Prescription drug costs represent a significant portion of WC medical costs—the projected prescription drug share of total medical costs for Accident Year 2014 is 17%.²

Exhibit 1 displays the projected prescription drug share of total medical costs at different claim maturities. This exhibit shows that the portion of medical costs attributed to prescription drug costs increases rapidly as claims age. For claims open for less than one year, the prescription drug share of total medical costs is 5%. This is mostly due to the relatively more expensive medical services that claimants undergo early on, such as surgeries and emergency room visits.

Conversely, as claims age, there is a shift from treating the medical condition to alleviating its symptoms, especially pain. Consequently, for claims that have been open for more than 10 years, the prescription drug share of annual medical costs increases to approximately 45% to 50%—this range persists beyond 19 years.

The Incremental Rx Share of Total Medical Costs Increases Rapidly as Claims Age



NCCI analysis based on Medical Data Call, for prescriptions provided in Service Years 2011 to 2014.

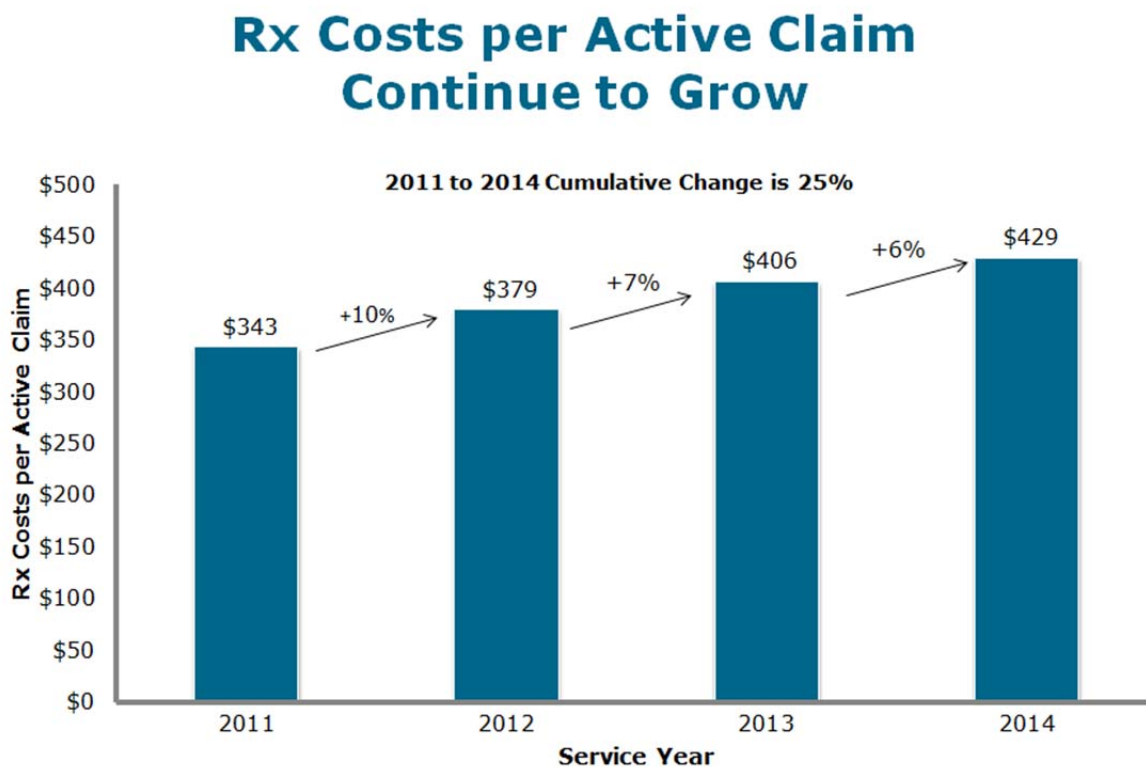
Rx shares shown are the projected shares for Accident Year 2014. For example, we project that Rx will be 22% of medical costs paid in 2017 (Year 4) for injuries that occurred in 2014. Data used with permission.

Exhibit 1

² The estimated ultimate share for Accident Year 2014 is based on the observed and projected incremental shares of Rx paid to total medical paid and on an estimated payout pattern for total medical. This projection includes all drugs that are bundled with other services and included in codes such as Hospital Revenue Codes, HCPCS, or CPT.

PRESCRIPTION DRUG PRICE, UTILIZATION, AND COSTS

Prescription drug costs per active claim continue to grow. Exhibit 2a displays the prescription drug costs per active claim by service year. Here, an active claim is a claim with at least one medical service provided during the service year. Prescription drug costs per active claim increased by 25% from 2011 to 2014, reaching \$429 in Service Year 2014. For comparison, overall medical costs per claim grew about 7.5% from Accident Year 2011 to Accident Year 2014 [1].



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2011 to 2014. Active claim is a claim with at least one medical service during the service year. Data used with permission.

Exhibit 2a

The yearly change in prescription drug costs per active claim is affected by changes in:

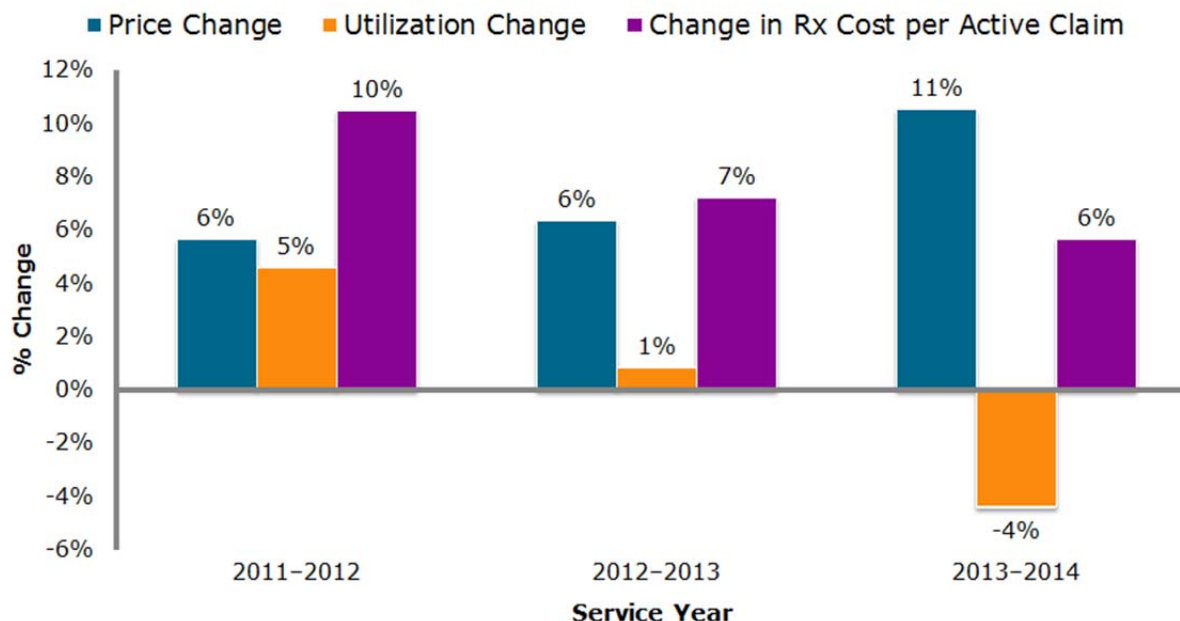
- **Price**—The portion of the total cost change that can be attributed to changes in prescription drug prices of the drugs relative to the previous year.
- **Utilization**—The difference between the total cost change and the price change. The change in utilization includes changes in the number of prescription drugs per claim and the impact of changes in the mix of prescription drugs (e.g., from previously used prescription drugs to more costly alternatives).

Exhibit 2b shows the year-to-year changes in price, utilization, and prescription drug costs per active claim. This exhibit allows us to identify the price and utilization contributions to the year-to-year changes in prescription drug costs per active claim. Between 2011 and 2014, price changes have had a larger effect on prescription drug costs per active claim than utilization changes. This is a departure from previous studies, which showed that utilization changes generally had a larger effect on prescription drug costs per active claim [2]. For years 2011 to 2014, the 11% price change between 2013 and 2014 is the largest annual change observed. This change in WC prescription drug prices exceeds the consumer price index's 2.4% change in total medical care as reported by the US Bureau of Labor Statistics [3].

Further discussion on the 2014 change in prescription drug prices may be found below in the section 2014 Change in Prices.

Rx Prices Increased 11% and Utilization Decreased 4% in 2014

All Rx: Changes in Price, Utilization, and Rx Cost per Active Claim



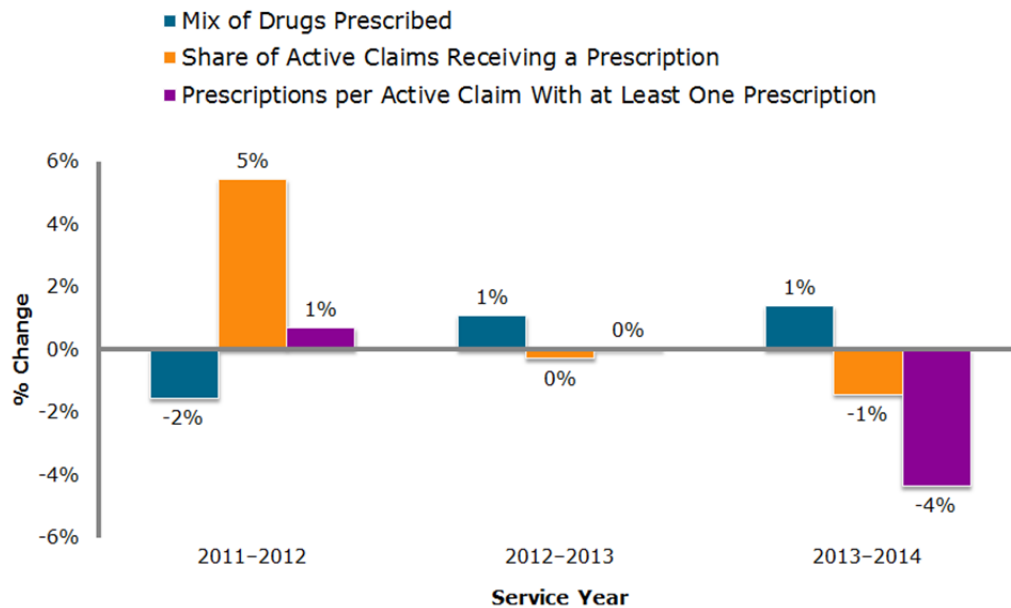
NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2011 to 2014. Price changes are based on a Fisher index. Data used with permission.

Exhibit 2b

Partially offsetting the 2014 increase in prices, utilization decreased by 4%—resulting in prescription drug costs per active claim increasing 6%, as shown in Exhibit 2b. Exhibit 2c decomposes the utilization change into three contributors: (1) the change in the mix of drugs prescribed, (2) the change in the share of active claims receiving a prescription, and (3) the change in the number of prescriptions per active claim with at least one prescription. This exhibit shows that the utilization contributors vary from year to year. In 2014, the primary reason for the observed decrease in utilization was the 4% reduction in the number of prescriptions for claims with at least one prescription.

While \$429 is the 2014 countrywide average for prescription drug costs per active claim, Exhibit 3 shows that state average prescription drug costs per active claim could be lower or higher. Prescription drug costs per active claim ranged from \$124 to \$858 for the states included in this study.

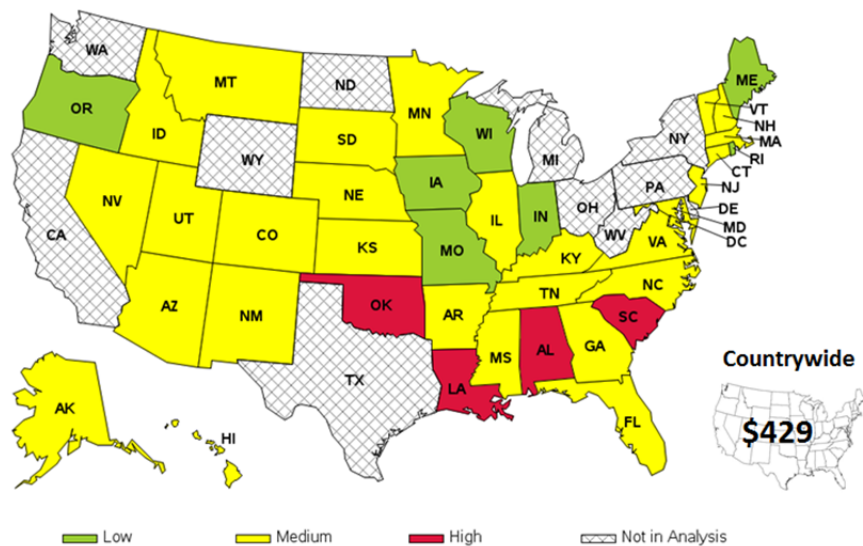
Rx Utilization Components



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2011 to 2014. Data used with permission.

Exhibit 2c

2014 Rx Costs per Active Claim



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Year 2014. High > \$582 and Low < \$202. Ranges are based on the arithmetic mean $\pm$ one standard deviation. Data used with permission.

Exhibit 3

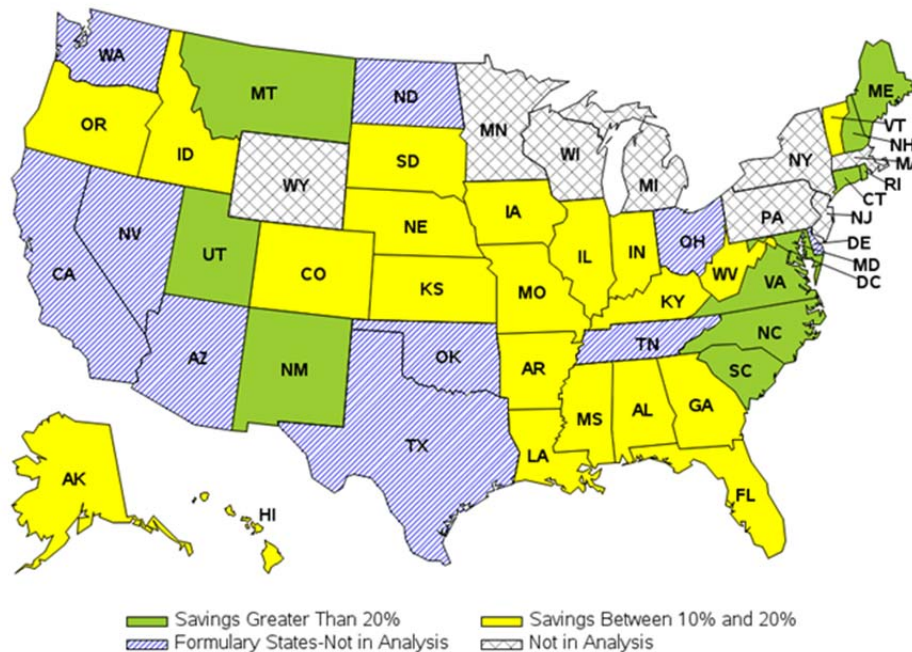
PRESCRIPTION DRUG COST CONTAINMENT AND FORMULARIES

Workers compensation stakeholders are actively addressing the high cost of prescription drugs. Insurers seek to control prescription drug costs with the use of pharmacy benefit managers (PBMs), pharmacy networks, and utilization reviews, while providing necessary and appropriate medications to claimants. In addition, many states have various forms of regulation to control prescription drug costs such as prescription drug fee schedules, monitoring programs, formularies, and treatment guidelines.

Drug formularies have received attention as an effective approach to control prescription drug costs. A closed formulary is a list of drugs with an associated reimbursement status. For example, the *Official Disability Guidelines (ODG³)*—adopted by Texas in 2011, Oklahoma in 2014, and Arizona and Tennessee in 2016—has statuses “Y” for preauthorized for use and “N” for not allowed or needs authorization.⁴ On average, 24% of drug costs and 17% of prescriptions in a service year are for N drugs. The intent of formularies is to use evidence-based guidelines to reduce over-prescribing (of opioids, in particular), to maximize healing, to improve return-to-work outcomes, and to contain drug costs. Exhibit 4 shows NCCI’s estimates for potential drug cost savings from the ODG formulary for a number of states. In many states, the introduction of the ODG formulary has the potential to reduce WC prescription drug costs by 10% or more. As evidence-based guidelines tend to be more restrictive when dealing with opioids, states with higher opioid use tend to produce the largest estimated savings.

ODG Formulary Could Reduce WC Rx Costs by 10% or More

Potential Rx Cost Savings From ODG Formulary



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Year 2014. The ODG Drug Formulary is a product of the Work Loss Data Institute. Data used with permission. Formulary States—Not in Analysis are states with a formulary as of July 1, 2016.

Exhibit 4

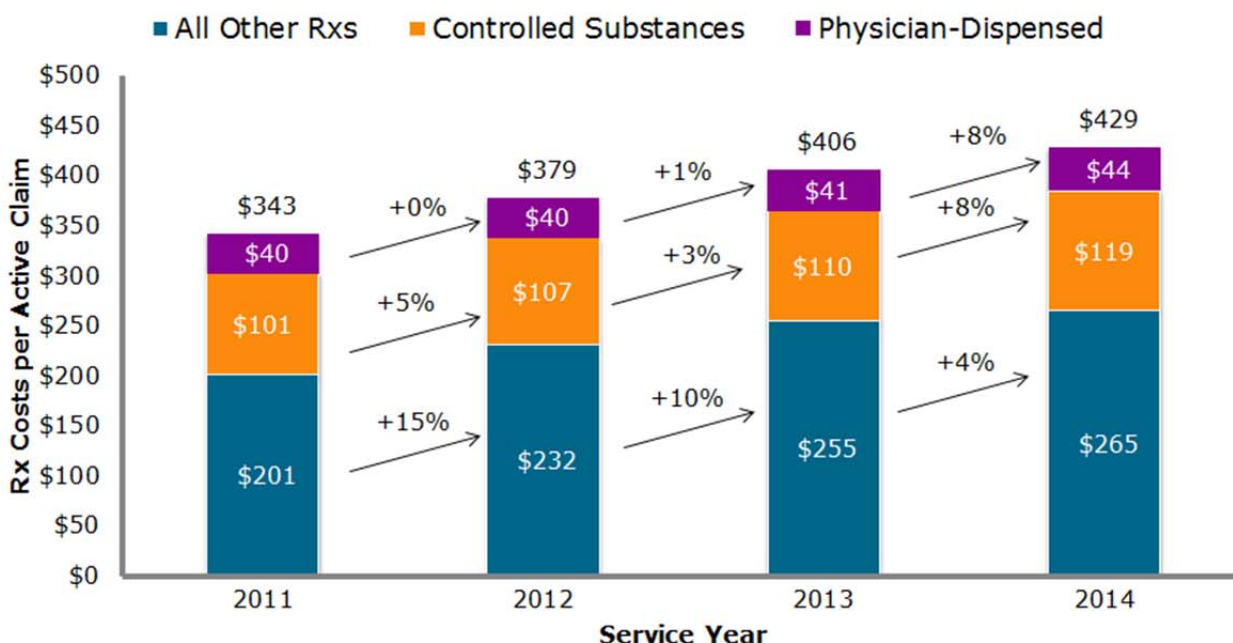
³ The ODG Drug Formulary is a product of the Work Loss Data Institute.

⁴ Both “Y” and “N” are possible depending on the intended purpose.

CONTROLLED SUBSTANCES AND PHYSICIAN DISPENSING

Exhibit 5 itemizes the prescription drug costs per active claim, shown in Exhibit 2a, into physician-dispensed drugs, controlled substances, and all other prescription drugs. In this exhibit, controlled substances are prescription drugs classified by the Drug Enforcement Administration as either Schedule II or Schedule III prescription drugs that are not dispensed by a physician. Physician-dispensed drugs and controlled substances overall showed less growth in costs per claim than other prescription drugs in 2012 and 2013. However, in 2014, physician-dispensed drugs and controlled substances both grew faster than other prescription drugs.

Rx Costs per Active Claim Continue to Grow



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2011 to 2014. Controlled substances are Rx's classified as Schedule II and III by the Drug Enforcement Administration, not dispensed by a physician. Physician-Dispensed includes controlled substances. Data used with permission.

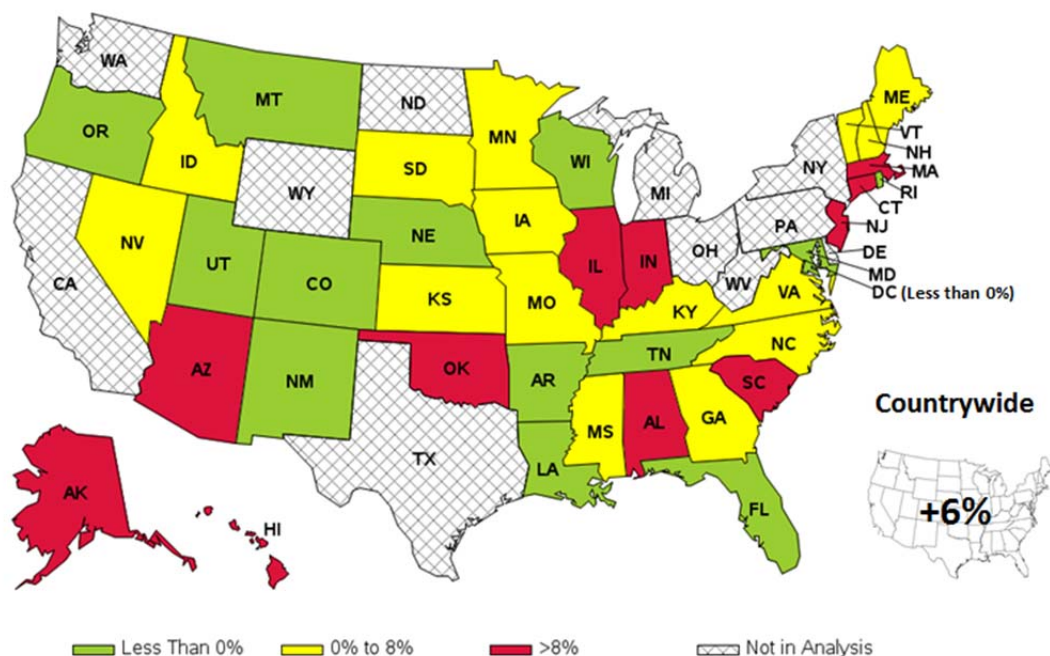
Exhibit 5

Exhibit 6a shows the 2014 change in prescription drug costs per active claim by state. For the states included in this study, prescription drug costs per active claim increased 6% overall. However, costs decreased in 14 states and increased by more than 8% in 11 states.

Exhibits 6b and 6c look at the 2013 and 2014 prescription drug costs per active claim for selected states. Exhibit 6b shows two states that had a decrease in 2014 prescription drug costs per active claim. In Oregon and Arkansas, where physician dispensing is highly regulated and generic substitutions are mandated, the prescription drug costs per active claim were lower than the overall prescription drug costs per active claim for the states included in this study.

Exhibit 6c shows two states that had an increase in 2014 prescription drug costs per active claim. In Illinois, while the 2014 prescription drug costs per active claim increased, they continued to be lower than the overall prescription drug costs per active claim for the states included in this study. In Arizona, more than half of the 2014 increase in prescription drug costs per active claim was due to an increase in controlled substance costs.

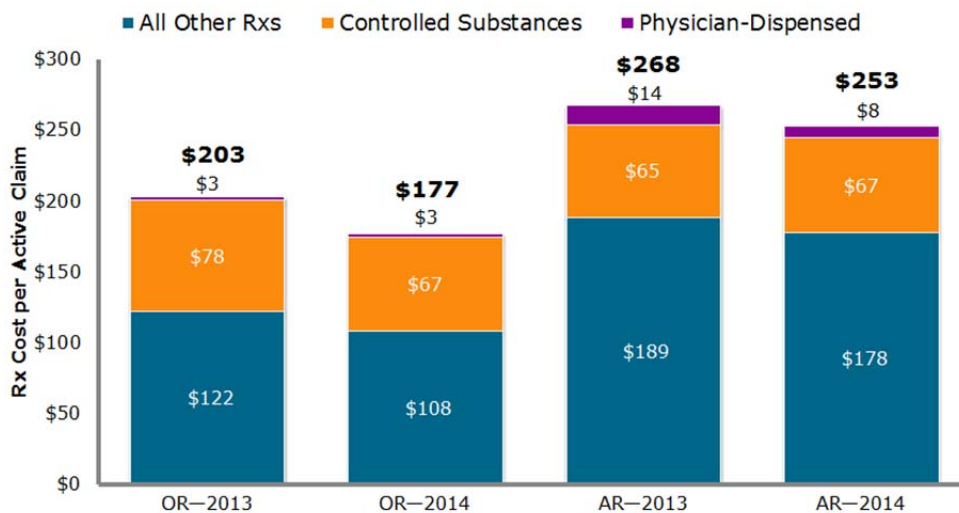
2014 Change in Rx Costs per Active Claim



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2013 to 2014. Data used with permission.

Exhibit 6a

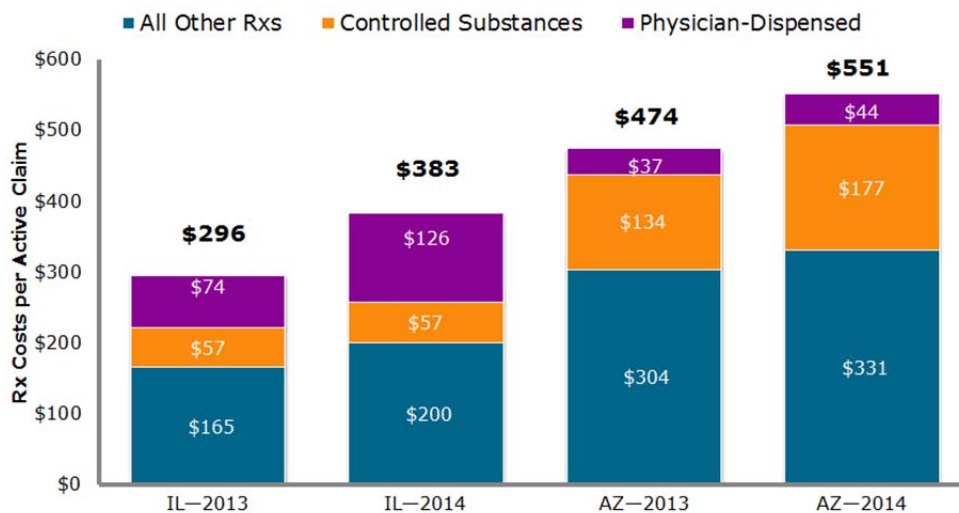
States With a Decrease in 2014 Rx Costs per Active Claim



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2013 and 2014. Controlled substances are Rx classified as Schedule II and III by the Drug Enforcement Administration, not dispensed by a physician. Physician-Dispensed includes controlled substances. Data used with permission.

Exhibit 6b

States With an Increase in 2014 Rx Costs per Active Claim



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2013 and 2014. Controlled substances are Rx classified as Schedule II and III by the Drug Enforcement Administration, not dispensed by a physician. Physician-Dispensed includes controlled substances. Data used with permission.

Exhibit 6c

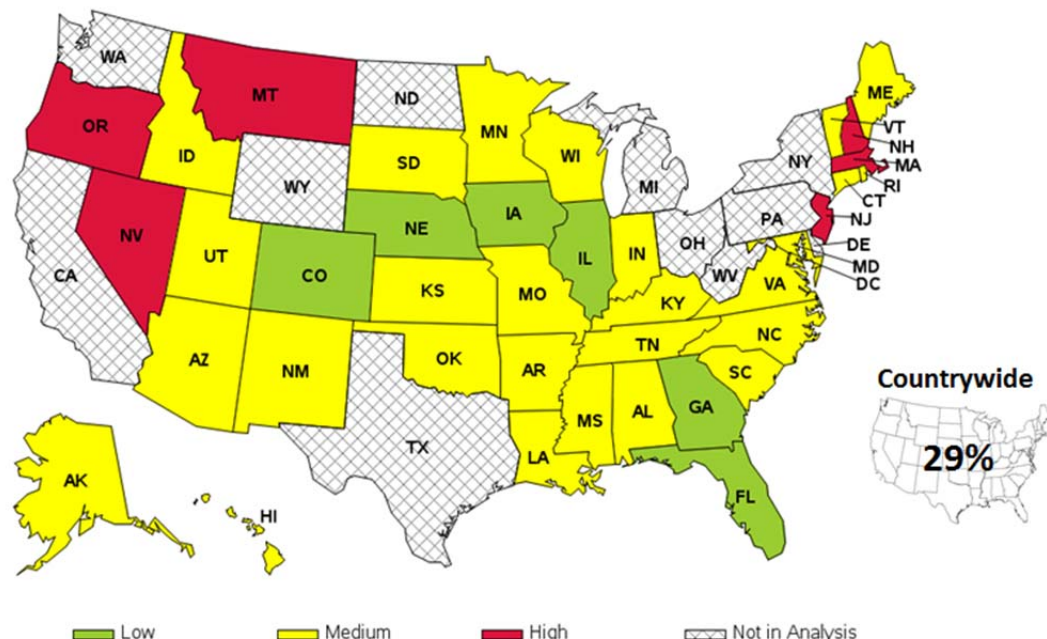
Controlled Substances

According to the Centers for Disease Control and Prevention [4]:

- In 2014, almost two million Americans abused or were dependent on prescription opioids
- As many as one in four people who receive prescription opioids for chronic pain (other than from cancer) in a primary care setting struggle with addiction
- Every day, more than 1,000 people are treated in emergency departments for misusing prescription opioids

Controlled substances are a significant share of WC prescription drug costs. Exhibit 7a shows the 2014 controlled substances' share of prescription drug costs for the states included in this study. In 2014, the countrywide controlled substances' share of prescription drug costs was 29%. This share has consistently ranged between 28% and 31% during the four-year period of this study. Meanwhile, the controlled substances' share of prescription drugs costs has varied substantially by state. In 2014, across state this share ranged from 16% to 41%.

2014 Controlled Substances' Share of Rx Costs



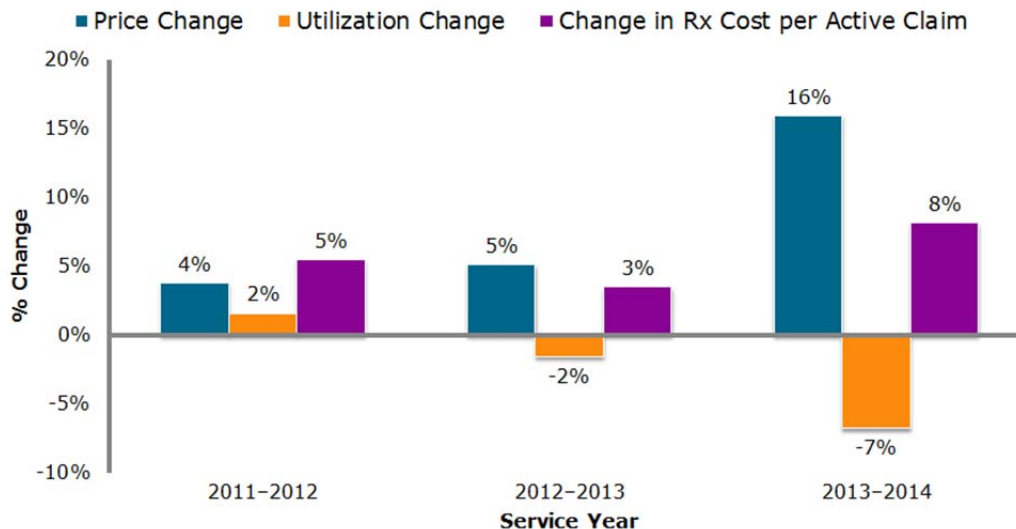
NCCI analysis based on Medical Data Call, for controlled substances with a National Drug Code provided in Service Year 2014. Controlled substances are Rx classified as Schedule II and III by the Drug Enforcement Administration. High > 35.0% and Low < 22.5%. Ranges are based on the arithmetic mean $\pm$ one standard deviation. Data used with permission.

Exhibit 7a

Controlled substance costs per active claim continue to grow. Exhibit 7b shows that costs grew 8% in 2014 due to a 16% increase in prices and a 7% decrease in utilization. Notably, the 2014 decline in utilization marks the second consecutive year of utilization decreases for controlled substances. The primary drivers of the utilization decreases observed in 2013 and 2014 were declines in both (1) the share of active claims receiving a controlled substance and (2) the number of controlled substances per active claim receiving at least one controlled substance. These component changes are shown in Exhibit 7c.

Controlled Substances Prices Increased 16% and Utilization Decreased 7%

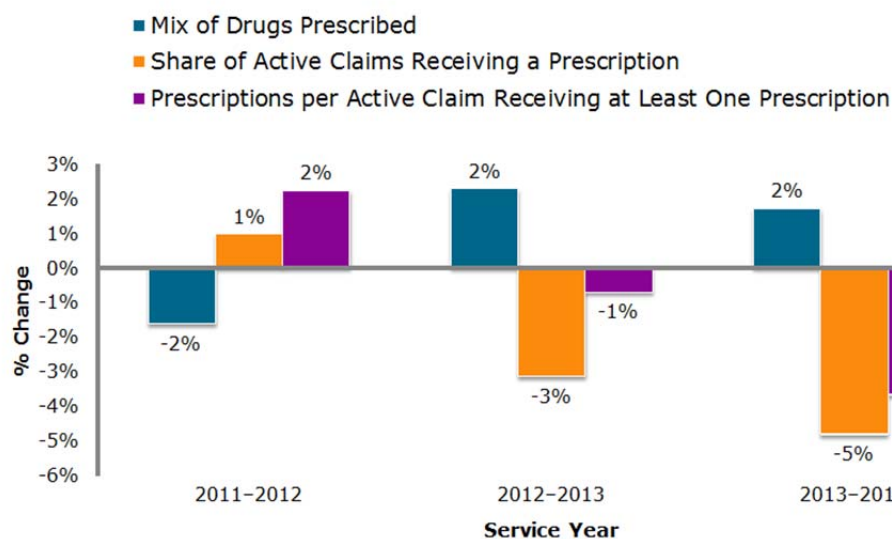
Controlled Substances: Changes in Price, Utilization, and Rx Cost per Active Claim



NCCI analysis based on Medical Data Call, for controlled substances with a National Drug Code provided in Service Years 2011 to 2014. Controlled substances are Rxs classified as Schedule II and III by the Drug Enforcement Administration, not dispensed by a physician. Price changes are based on a Fisher index. Data used with permission.

Exhibit 7b

Controlled Substances' Utilization Components



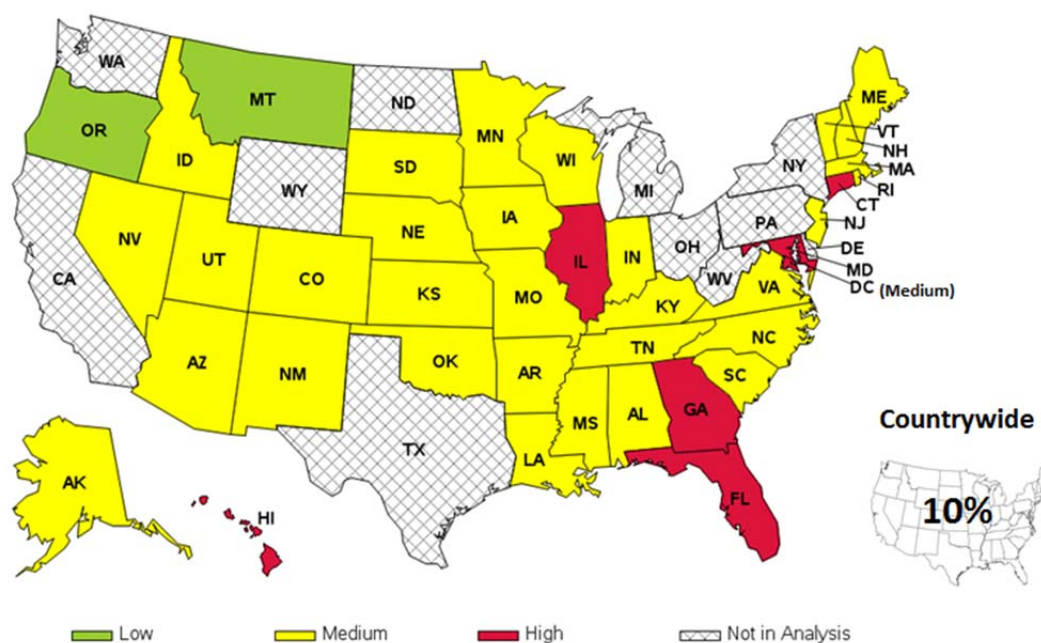
NCCI analysis based on Medical Data Call, for controlled substances with a National Drug Code provided in Service Years 2011 to 2014. Controlled substances are Rxs classified as Schedule II and III by the Drug Enforcement Administration, not dispensed by a physician. Data used with permission.

Exhibit 7c

Physician Dispensing

Usually when doctors prescribe a drug for a patient, the patient obtains the drug from a pharmacy. However, sometimes the doctors fill the prescription in their own office. We refer to this as physician dispensing. The cost per unit of physician-dispensed drugs is often higher than the cost per unit of the same drug dispensed by a pharmacy [2]. Exhibit 8a shows the 2014 physician-dispensed share of prescription drug costs for the states included in this study. The countrywide 2014 physician-dispensed share of prescription drug costs was 10%. In states where physician dispensing is highly regulated, the physician-dispensed share of prescription drug costs was less than 2%. In contrast, in some states where physician dispensing is not highly regulated, the physician-dispensed share of prescription drug costs exceeded 20%.

2014 Physician-Dispensed Share of Rx Costs



NCCI analysis based on Medical Data Call, for physician-dispensed prescriptions with a National Drug Code provided in Service Year 2014. High > 16.2% and Low < 1.7%. Ranges are based on the arithmetic mean $\pm$ one standard deviation. Data used with permission.

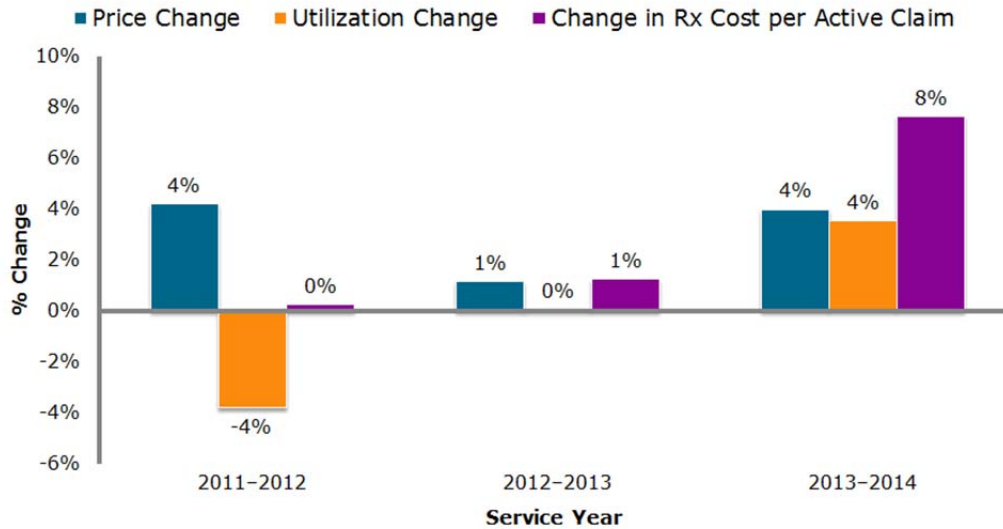
Exhibit 8a

Exhibit 8b shows the year-to-year changes in price, utilization, and prescription drug costs per active claim for physician-dispensed prescription drugs. While Exhibit 2b shows that in 2014 utilization decreased by 4% for prescription drugs overall, Exhibit 8b shows that in 2014 utilization increased by 4% for physician-dispensed prescription drugs. The 2014 increase in utilization combined with the 4% increase in prices resulted in an 8% increase in the physician-dispensed prescription drug costs per active claim.

The change in utilization is a major contributor to the change in physician-dispensed prescription drug costs per active claim. Exhibit 8c shows the physician-dispensed utilization components. This exhibit shows that changes in the mix of prescription drugs are a major contributor to changes in utilization for physician dispensing. In 2014, despite the decreases in both (1) the share of active claims receiving a physician-dispensed prescription drug and (2) the number of physician-dispensed prescription drugs per active claim, the changes in the mix of physician-dispensed prescription drugs were responsible for the overall increase in utilization.

Both Physician-Dispensed Rx Prices and Utilization Increased 4% in 2014

Physician-Dispensed Rx: Changes in Price, Utilization, and Rx Cost per Active Claim

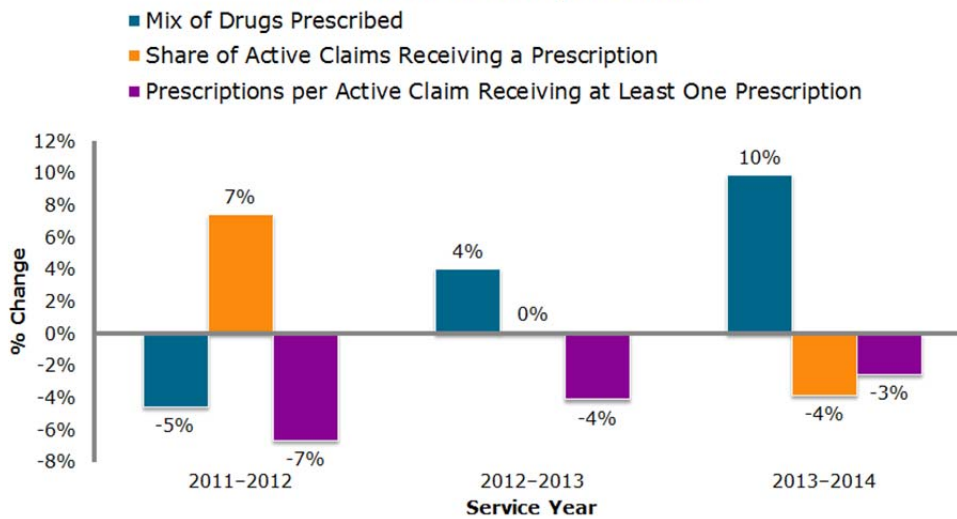


NCCI analysis based on Medical Data Call, for physician-dispensed prescriptions with a National Drug Code provided in Service Years 2011 to 2014. Price changes are based on a Fisher index. Data used with permission.

Exhibit 8b

Mix of Rxs Is a Major Contributor to Utilization for Physician Dispensing

Utilization Components



NCCI analysis based on Medical Data Call, for physician-dispensed prescriptions with a National Drug Code provided in Service Years 2011 to 2014. Data used with permission.

Exhibit 8c

TOP DRUGS IN WORKERS COMPENSATION—TOTAL COST AND CONTRIBUTION TO PRICE CHANGE

Top Drugs

Exhibit 9 lists the top 10 drugs in WC, ranked by dollars paid during 2014. These drugs account for more than one-third of total prescription drug costs. As in NCCI's 2013 prescription drug update, OxyContin, Lyrica, and Gabapentin are among the top prescription drugs in WC [2]. However, in 2014, two prescription drugs moved up sharply in the WC cost rankings:

- Duloxetine HCL is the generic formulation of Cymbalta, which is often used to treat pain. Cymbalta's patent expired December 11, 2013. Cymbalta's rank dropped from 3rd to 47th between 2013 and 2014, while its generic formulation's rank moved up from 132nd to 6th.
- Lidocaine is the generic formulation of Lidoderm, which is often used to treat pain. Lidoderm's patent expired September 15, 2013. Lidoderm's rank dropped from 5th to 34th between 2013 and 2014, while its generic formulation's rank moved up from 24th to 7th.

Top Drugs by Cost

Drug Name	Brand Name/ Generic	Therapeutic Class	2013 Cost Ranking	2014 Cost Ranking	2014 Share of Total Rx Costs
OXYCONTIN	Brand Name	Analgesics	1	1	6.2%
LYRICA	Brand Name	CNS Drugs	2	2	5.5%
GABAPENTIN	Generic	CNS Drugs	4	3	4.7%
OXYCODONE-ACETAMINOPHEN	Generic	Analgesics	9	4	3.8%
CELEBREX	Brand Name	Antiarthritics	6	5	3.4%
DULOXETINE HCL	Generic	Psychotherapeutic	132	6	2.9%
LIDOCAINE	Generic	Anesthetics	24	7	2.9%
MELOXICAM	Generic	Antiarthritics	8	8	2.8%
HYDROCODONE-ACETAMINOPHEN	Generic	Analgesics	7	9	2.7%
OXYCODONE HCL	Generic	Analgesics	14	10	2.0%

NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2013 and 2014. Data used with permission.

Exhibit 9

2014 CHANGE IN PRICES

Exhibit 10 shows the top 10 contributors to the 11% increase in prescription drug prices in 2014. In fact, these 10 prescription drugs are responsible for more than half of the 2014 total percentage change in prices.

Brand name prescription drug manufacturers have patents that protect their formulation from competition. As such, it is not unusual for brand name prescription drug manufacturers to increase brand name prescription drug prices. By contrast, generic prescription drug manufacturers are more exposed to competition and are more cautious when increasing prices. However, in 2014, many generic prescription drug manufacturers increased prices for generic prescription drugs such as oxycodone-acetaminophen, oxycodone HCL, baclofen, morphine sulfate ER, and ibuprofen. This might be due, at least in part, to less competition resulting from mergers and acquisitions of generic prescription drug manufacturers.

10 Drugs Account for More Than Half of the 2014 Total Percentage Change in Prices

Drug Name	Brand Name/ Generic	DEA Schedule	2013 Price Paid per Unit*	2014 Price Paid per Unit	2014 Change in Price Paid per Unit
OXYCODONE- ACETAMINOPHEN	Generic	II	\$1.19	\$1.61	35%
LYRICA	Brand Name	V	\$3.74	\$4.54	21%
OXYCODONE HCL	Generic	II	\$0.63	\$1.01	60%
CELEBREX	Brand Name	None	\$5.63	\$6.92	23%
OXYCONTIN	Brand Name	II	\$6.73	\$7.27	8%
DUEXIS	Brand Name	None	\$6.05	\$10.40	72%
BACLOFEN	Generic	None	\$0.65	\$1.22	86%
PERCOCET	Brand Name	II	\$7.15	\$9.18	28%
MORPHINE SULFATE ER	Generic	II	\$2.35	\$2.94	25%
IBUPROFEN	Generic	None	\$0.30	\$0.43	44%

NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code (NDC) provided in Service Years 2013 and 2014.

*2013 price paid per unit based on 2014 NDC distribution. Data used with permission.

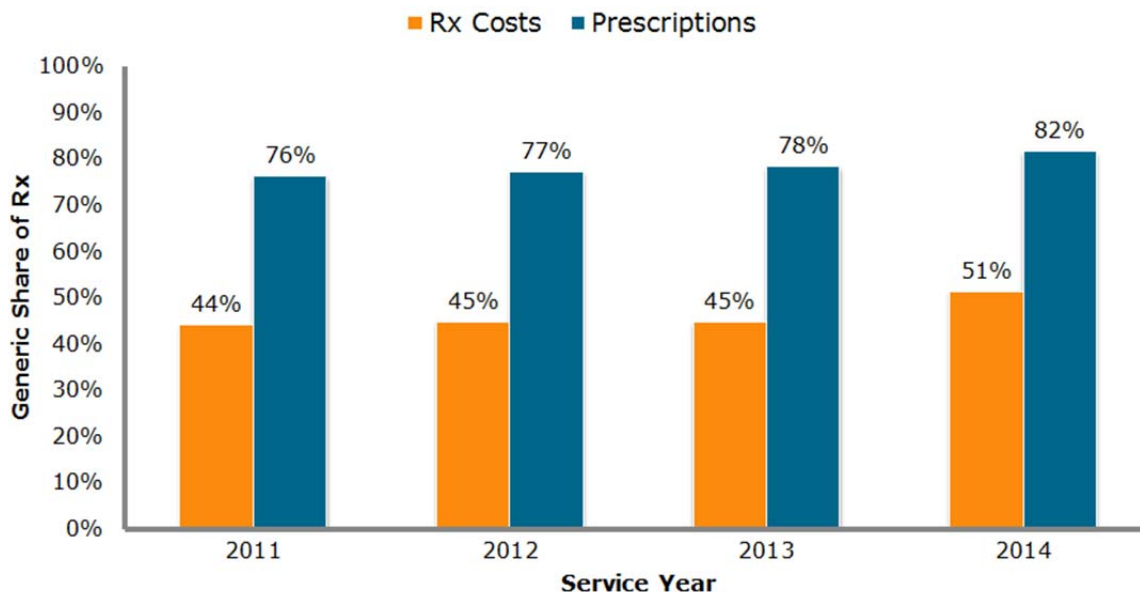
Exhibit 10

GENERICIS

Generic prescription drug formulations are typically less expensive than their equivalent brand name formulation. As such, many states have established regulation to promote the use of generic prescription drugs when available. Exhibit 11a shows that since 2011, more than 75% of WC-dispensed prescription drugs were from a generic formulation. However, since generic prescription drugs tend to be less expensive than brand name prescription drugs, the generic shares of prescription drug costs were less than 50% from 2011 to 2013. In 2014, however, the generic share of prescription drug costs—at 51%—exceeded the brand name share of prescription drug costs.

Three prescription drugs account for 85% of the 2014 total percentage change in the generic share of prescription drug costs (see Exhibit 11b). For Duloxetine HCL and Lidocaine formulations, prices paid per unit increased 4% and 13%, respectively. Therefore, most of the cost contribution from these two drugs was due to an increase in utilization because of patents expiring in 2013 for the brand name equivalents. However, the overall 2014 increase in price paid per unit for oxycodone-acetaminophen was 74%. Since the generic formulation of oxycodone-acetaminophen is among the top prescription drugs by cost in WC, its 2014 price increase had a significant effect on the 2014 change in the generic share of prescription drug costs.

Generic Share of Rx Costs and Prescriptions Both Increased in 2014



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2011 to 2014. Data used with permission.

Exhibit 11a

Three Drugs Account for Most of the 2014 Total Percentage Change in the Generic Share of Rx Costs

Drug Name	2013 Price Paid per Unit	2014 Price Paid per Unit	2014 Change in Price Paid per Unit	Contribution	Recent Events
DULOXETINE HCL	\$5.47	\$5.70	4%	38%	The brand name equivalent formulation's (Cymbalta) patent expired on 12/11/2013
LIDOCAINE	\$6.08	\$6.89	13%	27%	The brand name equivalent formulation's (Lidoderm) patent expired on 9/15/2013
OXYCODONE-ACETAMINOPHEN	\$0.92	\$1.61	74%	20%	Price increased

NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2013 and 2014. Data used with permission.

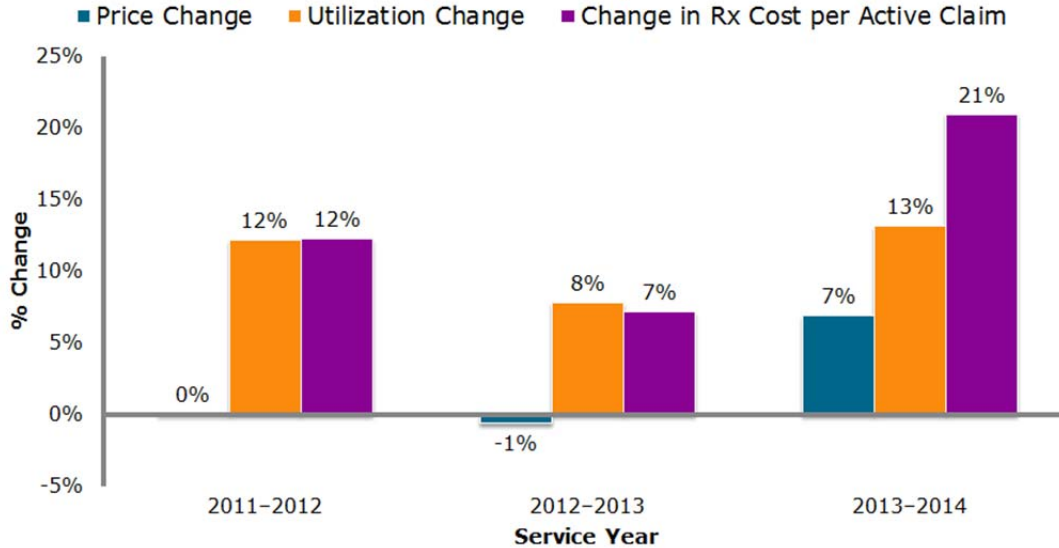
Exhibit 11b

Exhibit 12a shows the year-to-year changes in price, utilization, and prescription drug cost per active claim for generic prescription drugs. As mentioned earlier, many states promote the use of generic prescription drugs in WC through regulation. Exhibit 12a reflects the ongoing effect of these efforts as seen by increases in the utilization of generic prescription drugs for each of the years 2012 through 2014. In 2014, the 21% increase in generic prescription drug costs per active claim was due to an increase of 13% in utilization and an increase of 7% in drug prices.

A utilization increase in generic prescription drugs typically correlates with a utilization decrease in brand name prescription drugs. Exhibit 12b shows how brand name prescription drug utilization decreased between 2012 and 2014. Most notable is the 2014 decrease of 18%. Despite the 2014 increase of 14% in brand name prescription drug prices, the brand name prescription drug costs per active claim decreased 7%.

Generic Rx Utilization Increased 13% and Prices Increased 7% in 2014

Generic Rx: Changes in Price, Utilization, and Rx Cost per Active Claim

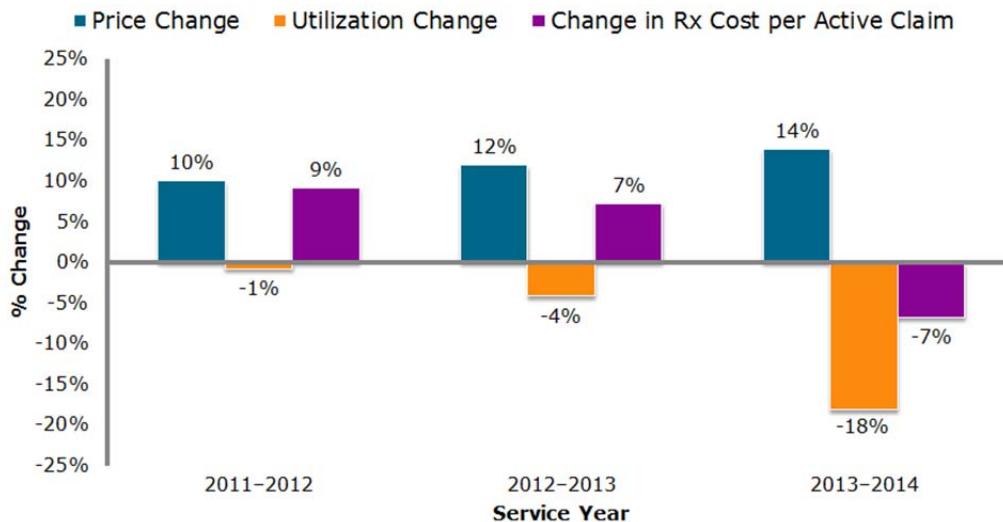


NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2011 to 2014. Price changes are based on a Fisher index. Data used with permission.

Exhibit 12a

Brand Name Rx Utilization Decreased 18% and Prices Increased 14% in 2014

Brand Name Rx: Changes in Price, Utilization, and Rx Cost per Active Claim



NCCI analysis based on Medical Data Call, for prescription drugs with a National Drug Code provided in Service Years 2011 to 2014. Price changes are based on a Fisher index. Data used with permission.

Exhibit 12b

OVERALL MEDICAL SEVERITY

In contrast to the relatively rapid recent rate of growth of Rx costs per claim, the rate of growth of overall medical severity has been less pronounced. In fact, total medical severity grew 3% in Accident Year 2014, and declined by 1% in Accident Year 2015 [1]. The 1% drop in medical severity in Accident Year 2015 is the first time since Accident Year 1993 that workers compensation medical severity has declined. Drivers of the cost changes for overall medical severity are the subject of current NCCI research.

CLOSING REMARKS

Prescription drugs continue to be a significant share of workers compensation costs, largely due to increasing prices. Legislative reforms and other cost containment efforts have contributed to dampened utilization of prescription drugs in WC. The question is: Will formularies, physician-dispensing laws, and other reform efforts have the intended impact on WC experience? With many emerging themes in the dynamic world of prescription drugs and WC—such as choice of pharmacy, the role of pharmacy benefit managers, and prescription drug monitoring programs—NCCI will continue to monitor and provide information to assist WC stakeholders to make the informed decisions necessary to foster a healthy WC system.

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