



NCCI Holdings, Inc.

by Barry Llewellyn and Jim Stevens
of NCCI's Regulatory Services Division

Workers Compensation Prescription Drug Study— 2004 Update

Background

NCCI's 2003 study—"Prescription Drugs: Comparison of Drug Costs and Patterns of Use in Workers Compensation and Group Health Plans"—examined the cost and use of prescription drugs in workers compensation (WC).

That study showed that prescription drugs' share of total medical costs increased substantially from 1997 to 2001; utilization had a greater impact on WC drug costs than price; and since WC was already doing a good job prescribing generic equivalents when available, there was little opportunity for savings from increasing the use of generics. The complete study is available on ncci.com.

This 2004 update looks at the effects of more mature data on these issues and examines the nature of the states' efforts to control prescription drug (Rx) reimbursement levels in WC.

Prescription Drug Study 2004 Update—Key Findings

- Payment patterns by accident year^a show continued growth in WC prescription drugs' share of total medical costs (estimated ultimate share rising from 10.1% in 1997 to 12.1% in 2002)
- Drug price increases had a slightly greater impact on WC drug costs than utilization increases for 2002 over 2001
- Twenty-eight states were identified as having prescription drug fee schedules—all use average wholesale price (AWP) as a mechanism for reimbursement
- Although creating pharmacy benefit managers (PBMs)^b initially looks promising as a cost containment strategy, additional factors will need to be assessed and addressed

Discussion

Prescription Drugs' Share of Medical Costs

As expected, prescription drugs' share of total WC medical costs by accident year continues to grow. This share is estimated to be 12% at ultimate development for Accident Year 2002 com-

pared with approximately 10% for Accident Year 1997. This 20% growth in the prescription drug share is noteworthy because it occurred over a period during which total medical costs for workers compensation have risen substantially.

Accident Year Drug Costs/Total Medical (Estimated at Ultimate)

| Injury Year | Accident Year % Rx |
|-------------|--------------------|
| 1997 | 10.1% |
| 1998 | 10.6% |
| 1999 | 11.1% |
| 2000 | 11.5% |
| 2001 | 11.8% |
| 2002 | 12.1% |

Drug Costs Breakdown

For the first time in several years, we see drug price slightly outpacing the utilization^c impact in drug costs from 2001 to 2002. Notwithstanding this recent result, most knowledgeable observers agree that utilization is the more important driver of medical costs. Any successes achieved from efforts to control costs through price reduc-

a WC looks at costs by accident year (the year of injury) because insurance coverage continues (potentially for many years) following the date of injury in WC. This "long tail" feature of WC is distinct from most other lines of insurance coverage, which are normally confined to the 12-month calendar year (or service year) for which premium is charged. As a result, other types of insurance coverage are much more sensitive to short-term increases in costs, while WC is subject to substantial long-term cost pressures.

The "long tail" nature of WC is critical and underscores the need for further research. Substantial quantities of medical service are routinely delivered for many years following the occurrence of a WC claim. As a result, estimates of the annual costs and reserves on serious claims must fully account for the compounding effect of medical inflation. For example, if the annual cost of a fixed regimen of medical treatment is \$10,000 in the first year following a claim and annual medical cost inflation is at 10%, the cost for these services in the eighth year following the claim will be nearly double the first year's cost.

b Pharmacy benefits managers are companies that provide a service to covered entities that facilitates the provision of prescription drug benefits to covered individuals, including negotiating

pricing and other terms with drug manufacturers and retail pharmacies. "Pharmacy benefits management" may include any or all of the following:

- (1) Claims processing, retail network management, and payment of claims to pharmacies for prescription drugs dispensed to covered individuals
- (2) Clinical formulary development and management services
- (3) Rebate contracting and administration
- (4) Certain patient compliance, therapeutic intervention, and generic substitution programs
- (5) Disease management programs

c Utilization includes movement toward new or more powerful drugs and an increase in the number of prescriptions. Price impact represents the unit price change for a fixed-market basket of prescriptions.

tion alone will be diluted or eliminated if utilization is not effectively controlled. One of the factors contributing to this year's cost change may be that companies are focusing more attention on drug utilization due to continued reports of the rise in prescription drugs' share of total medical costs. It will be interesting to see if this change is just a one-time occurrence or the beginning of a new trend. NCCI will continue to monitor these issues.

Although prescription drugs' share of total medical costs continued to grow, as detailed below, the overall rate of cost growth slowed compared to the three previous years.

Factors Affecting Change in WC Drug Costs

| Years | Drug Price Impact | Utilization Impact | Total Impact |
|-----------|-------------------|--------------------|--------------|
| 1997–1998 | 1.07 | 1.06 | 1.13 |
| 1998–1999 | 1.12 | 1.21 | 1.35 |
| 1999–2000 | 1.07 | 1.16 | 1.25 |
| 2000–2001 | 1.08 | 1.22 | 1.31 |
| 2001–2002 | 1.08 | 1.07 | 1.15 |

Prescribing Patterns

The percentage of times a generic drug prescription was written when a generic drug was available rose from 79% in 2001 to 86% in 2002. Consistent with that increase, the remaining potential for savings from generic drugs decreased from 8% of total WC prescription drug costs in 2001 to 7% in 2002. A total of 53% of the 2002 WC Rx costs were associated with drugs that have no generic equivalent, compared to 56% in 2001.

The update also showed that the top three types of Rx by total paid in WC remained the same with only slight changes in percentages of total paid.

(1997-2002 Data)

| Drug Group | % Total Rx Paid |
|------------------|-----------------|
| Painkillers | 54 |
| Muscle Relaxants | 18 |
| Antidepressants | 15 |

The top 10 drugs in the 2004 update represented almost 43% of total prescription drugs paid. There was little change in rank by total paid from the 2003 study. The muscle relaxant Soma® dropped from the list, moving from 9th in the original study to 15th in the update, and was replaced by antiinflammatory Naproxen at 10th. Five of the top 10 drugs had no generic equivalent available in 2002.

Drugs Showing Rising Rankings in Workers Compensation

Several drugs showed significant increase in rank by total paid from the initial 2003 study (1997–2001 data) to the 2004 update (1997–2002 data):

Bextra®—A painkiller used to relieve joint pain, inflammation, and stiffness associated with osteoarthritis and adult rheumatoid arthritis moved from #1,852 to #19 in the update. Note: Bextra® was not approved by the Food and Drug Administration (FDA) until 11/01.

Ultracet®—A painkiller used to help relieve the pain (for a short period of time—usually 5 days or fewer) from acute conditions such as sprains, strains, joint pain flares, and post-operative pain received FDA approval in 8/01 and moved from #212 in last year's study to #31 in the update.

Actiq®—An opioid analgesic (painkiller) used only for the management of breakthrough cancer pain (a flare of severe cancer pain that breaks through the

| Top 10 Prescribed Drugs by Total Paid in WC (1997–2002) | % of Total Rx Paid | Brand vs. Generic |
|---|--------------------|---------------------------------|
| Celebrex® (antiinflammatory) | 7.6% | Brand (generic not available) |
| Oxycontin® (painkiller) | 6.6% | Brand (generic not available)* |
| Vioxx® (antiinflammatory) | 5.6% | Brand (generic not available) |
| Hydrocodone (painkiller) | 5.4% | Generic |
| Neurontin® (painkiller) | 4.9% | Brand (generic not available)** |
| Carisoprodol (muscle relaxant) | 3.2% | Generic |
| Ultram® (painkiller) | 2.9% | Brand (generic available 6/02) |
| Cyclobenzaprine (muscle relaxant) | 2.4% | Generic |
| Ambien® (sedative) | 2.1% | Brand (generic not available) |
| Naproxen® (antiinflammatory) | 2.1% | Generic |

medication that is being administered at regular intervals for persistent cancer pain). Although Actiq® received FDA approval in 1998, it moved in rank from

* Generic versions of OxyContin® (oxycodone hydrochloride extended-release tablets) received FDA approval in 3/04.
 ** Generic for Neurontin® received FDA approval in 9/03.

#224 in the 1997–2001 data to #47 in the 1997–2002 data.

Tizanidine HCL and Tramadol HCL—

Generic forms of the muscle relaxant (Zanaflex®) and painkiller (Ultram®), respectively, received FDA approval in mid-2002. Tizanidine HCL ranked #34 and Tramadol HCL #39 in this year's update. Intuitively, we would expect to see a decrease in the share of total Rx costs that a brand represents when generics are introduced into the market for that particular drug (i.e., the substitution effect). That theory held true for one of these two particular drugs. The share of total Rx paid that Ultram® represents decreased from 4.49% in the 2003 study to 2.92% in the update, while the share of total Rx paid that Zanaflex® represents increased from 0.87% in last year's study to 0.89% in the update.

Current Events/Cost Containment

As prescription drug costs continue to rise and represent an increasingly larger share of medical cost in WC, states continue to search for ways to control these costs. This section examines several new developments in the area of prescription drug cost containment.

Prescription Drug Fee Schedules

There are currently 28 states that have some type of WC prescription drug reimbursement schedule (see Appendix). The following is a summarization of the key components of these fee schedules:

- All 28 states use average wholesale price (AWP)^d as a mechanism for Rx reimbursement
- Eleven states differentiate in some way (majority have higher dispensing fee for generics) between generic and brand for reimbursement—the other 17 states use the same formula in calculating brand and generic reimbursements

- Nine states reimburse up to a level **above** AWP (range 4% to 40%), 11 states reimburse **up to** AWP, and 8 states reimburse up to a level that is **below** AWP (range –5% to –15%)

Note: Most states also include a dispensing fee as part of Rx reimbursement.

California WC Pharmacy Fee Schedule Change

As mentioned in our previous study, fee schedules can be part of an effective cost containment strategy. Many states that don't already have Rx fee schedules are considering establishing them, and some of those states that do have Rx fee schedules are reviewing them to determine the appropriateness of the current levels of reimbursement.

The 2003 California WC reform included mandatory generic substitution and changed the California pharmacy fee schedule to 100% of Medi-Cal (California Medicaid) pharmacy payments (AB 227 and SB 228). The previous California WC Rx fee schedule was:

Brand name drugs:

1.1 x AWP x Quantity + \$4.00 dispensing fee

Generic drugs:

1.4 x AWP x Quantity + \$7.50 dispensing fee

The Medi-Cal pharmacy schedule¹ (effective for CA WC 1/1/04) pays 95% of the lesser of:

(AWP – 10% + \$3.55), or (MAC^e + \$3.55), or usual and customary fee.

The Workers Compensation Insurance Rating Bureau (WCIRB) in California estimates pharmaceutical cost savings from the provisions of AB 227 and SB 228 to be 1.7% of medical costs or 1% of total WC costs (a savings of \$249 million based on a \$24.9 billion estimate of the total cost of statewide benefits).²

It should be noted that, as with any change to the WC system, there is always concern for the effect of changes on access to care for injured workers. Lawmakers face a constant struggle to strike a balance between lowering costs as much as possible while maintaining adequate access to care.

For example, although its recommendations were not incorporated in the final bill, a Department of Industrial Relations, Division of Workers' Compensation study¹ included a survey of pharmacies and commercial insurers in the state on the change in the pharmacy fee schedule. Pharmacies clearly indicated that there is a potential for loss of pharmacy access for WC clients. To mitigate the negative effects of implementing the new payment program (i.e., restricting access to care), the study recommended modifying the program, either by phasing it in more slowly (such as eliminating the last 5% off the payment rates), or by providing some protections for the independent pharmacies (since they will have less ability than chain pharmacies to shift losses to others and renegotiate new rates).

The study also suggested that “combining this type of fee schedule with other cost containment policies through the use of the negotiating power of pharmacy benefits managers (PBMs) should achieve the kind of necessary cost containment in the pharmaceutical benefit sector of workers compensation, without disrupting access to drugs for workers compensation patients.”

AccessRx Act of 2004

The Council of the District of Columbia (DC) approved the AccessRx Act of 2004 on March 2, 2004. The Act creates a new program intended to reduce prescription drug prices for low-income, elderly, and uninsured city residents.

^d Average wholesale price (AWP) is the most commonly used price benchmark for ingredient cost. The total price of a prescription is: Ingredient Cost (which includes the costs of R&D, marketing and profit) + Dispensing Fee + Tax. AWP's are reported by drug manufacturers to organizations that publish the data in compendia (e.g., Red Book), which are used by Medicare and other third parties to calculate Rx reimbursement. The AWP is not the acquisition cost paid by suppliers and physicians, as it does not reflect rebates and discounts. AWP is not defined by law or regulation.

^e Maximum Allowable Cost (MAC) is an overriding fixed price used in lieu of the AWP basis. The MAC is the highest price that will be paid for a drug or its equivalent.

¹ Pharmaceutical Care in the California Workers' Compensation Insurance System, Department of Industrial Relations, Division of Workers' Compensation, March 24, 2004.

² Cost Impact of Assembly Bill No. 227 and Senate Bill No. 228 as adopted by the Legislature on September 12, 2003, as amended November 3, 2003, California Workers Compensation Insurance Rating Bureau (WCIRB).

Title II of the Act, entitled, “Transparent business practices among pharmacy benefits managers,” has caused some controversy. This section of the Act focuses on establishing “transparent business practices” between PBMs and the covered entity. Some of the requirements set forth in Title II are that PBMs must:

- Show the quantity and net cost of drugs purchased by the entity, including rebates, discounts, and other similar payments (on a drug-by-drug basis if requested)
- Disclose all financial terms and arrangements for remuneration of any kind that apply between the PBM and any prescription drug manufacturer or labeler, including formulary management and drug substitution programs, educational support, claims processing, and data sales fees
- Transfer in full to the covered entity any benefit or payment received as a result of a prescription drug substitution

Critics of PBMs say that companies sometimes keep payments from drug companies in return for promoting certain drugs, often the new, brand-name drugs, in place of lower-priced generic versions.³

The Pharmaceutical Care Management Association (PCMA) filed suit to block enforcement of Title II of the AccessRx Act of 2004. PCMA is a national association that represents pharmacy benefits managers whose membership includes three of the nation’s largest PBMs. The PCMA contends that Title II will result in higher prescription drug costs for DC residents and is unconstitutional.⁴ Pharmacy benefit managers say they need the confidentiality in their transactions to increase competition and obtain lower prices for drugs.⁵

A study⁶ (prepared for PCMA) by PricewaterhouseCoopers estimates

that drug costs for individuals in PBM-managed plans would rise by 5.2% (\$8.2 billion) in 2005 and 7% (\$225 billion) over the 2005–2014 period.

Nonprofit PBMs

Legislators from the nine-state National Legislative Association on Prescription Drug Prices (NLARx) are developing a nonprofit group to manage Rx costs and limit drug manufacturers’ ability to sell states their most expensive drugs. The goal of the program is to cut out the middleman (for-profit PBMs), which many states use to negotiate prices and manage pharmacy benefits for Medicaid recipients and state employees, to ensure that payments and rebates from drug companies benefit the states. The group would also develop a preferred drug list based on effectiveness and cost and obtain rebates from companies whose drugs are included on the list.⁶

Comments on Cost Containment Strategies

Pharmacy Benefits Management—Discounts From Sticker Price or Long-Term Cost Reduction?

As the WC industry continues to search for strategies and techniques to control prescription drug costs, interest has increased in the potential use of PBMs for WC. Many studies and articles have highlighted the savings achieved through the use of PBMs. Few question the bargaining power of these large companies and their ability to secure discounts from full-billed prices. In fact, prices paid by cash-paying customers and even Medicaid programs in many states are higher than those that individuals in PBM-managed plans would typically pay.⁷ The apparent conclusion may be that PBMs are the answer to curbing the continually increasing Rx costs in WC.

However, obtaining a discount on Rx AWP, or sticker price, does not neces-

sarily translate into a reduction in costs for the WC system. Utilization plays a major role in driving WC costs, and AWP can be a moving target when used as a benchmark for calculating discounts. Although the expanded use of PBMs in WC could result in an initial drop in overall Rx prices, the year-to-year and long-term effects on reducing medical costs in the WC system are not certain.

Theoretically, the techniques used by PBMs should work, and some successes have been documented. However, prescription drug expenditures continue to rise. This suggests that this specific cost containment mechanism is not singularly sufficient to contain costs and that there are other factors driving cost increases that need to be assessed and addressed. The following are some possible examples:⁷

- Generic substitution policies have increased the use of generics when available, but the use of higher-priced new drugs has diluted the impact of generic drugs on overall costs
- Use of low-cost Rx providers (e.g., mail service pharmacies) has decreased emphasis on assessing appropriate (cost-effective) drug selection and sound, well-informed drug use by consumers
- Since rebates are typically provided for new, brand-name drugs, the potential use of older, low-cost generics as effective alternatives may not be getting the necessary attention

NCCI will continue to monitor and report on prescription drugs and other important issues that affect the WC industry.

Credits

Barry Lipton, John Robertson, Brett King, Chun Shyong, and Satya Arya of Actuarial and Economic Services, and Francesca Paterek and Bob Reilly of Regulatory Services contributed to this study.

³ Rx law dispute, *The Common Denominator*, July 12, 2004.

⁴ Pharmaceutical group files suit to block D.C. law, *Washington Business Journal*, June 28, 2004.

⁵ The Value of Pharmacy Benefit Management and the National Cost Impact of Proposed PBM Legislation, PricewaterhouseCoopers, July 2004.

⁶ Pharmaceutical Bulk Purchasing: Multi-state and Inter-agency Plans, 2004, National Conference of State Legislatures, July 12, 2004.

⁷ Cost Control for Prescription Drug Programs: Pharmacy Benefit Manager PBM Efforts, Effects, and Implications, Sonderegger Research Center, University of Wisconsin School of Pharmacy, August 8, 2000.

Appendix Prescription Drug Fee Schedules

(as of 7/13/04)

| State | Maximum Prescription Drug Reimbursement |
|------------|--|
| Alabama | BRAND: AWP + 5% + \$6.88 GENERIC: AWP + 5% + \$8.94 |
| Arizona | DRUGS AND SUPPLIES (only those dispensed by a doctor): (AWP x QT) + 15% |
| Arkansas | AWP + \$5.13 DISPENSING FEE; OR PROVIDER'S USUAL CHARGE |
| California | The maximum reasonable fee is 100% of the fee prescribed in the relevant Medi-Cal Payment system; currently, 95% of the lesser of: (AWP - 10% + \$3.55), or (MAC + \$3.55), or (usual and customary fee) (As of 3/24/04) |
| Colorado | ALL DRUGS: (AWP x QT) + \$6.00 All prescriptions shall be filled with bio-equivalent generic drugs unless DAW COMPOUNDING PHARMACIES REIMBURSEMENT: the cost of the materials plus 20%, \$50.00 per hour for the pharmacist's documented time, AND actual cost of any mailing and handling |
| Florida | AWP + \$4.18; OR the contracted amount arranged between provider and carrier, WHICHEVER IS LESS |
| Georgia | BRAND & GENERIC: AWP x 1.2 + \$4.00 dispensing fee |
| Hawaii | PRESCRIPTIVE DRUGS: AWP (American Druggist Red Book) + 40% (of the AWP when sold by a physician, hospital, pharmacy, or provider of service other than a physician) |
| Kansas | BRAND: AWP - 10% + \$4.00 dispensing fee GENERIC: AWP - 10% + \$5.00 dispensing fee |
| Kentucky | DISPENSED BY PHARMACIST: Reimbursed in the amount of the equivalent drug product AWP of the lowest priced therapeutically equivalent drug the dispensing pharmacist has in stock, at the time of dispensing, plus a \$5.00 dispensing fee plus assessment: AWP + \$5.00 If an employee's prescription is marked DAW, the dispensing pharmacist shall be entitled to reimbursement in an amount equal to the brand-name drug wholesale price, at the time of dispensing, plus a \$5.00 dispensing fee plus any applicable federal or state tax or assessment: AWP + \$5.00 + TAX If an injured worker prefers a brand-name drug, the worker is responsible for payment of the difference between the equivalent drug product wholesale price of the lowest priced therapeutically equivalent drug the dispensing pharmacist has in stock and the brand-name drug wholesale price at the time of dispensing: BRAND AWP - GENERIC AWP |

Key:

AWP = Average Wholesale Price.
BLP = Baseline Price—derived by calculating the mean average for all NDCs (National Drug Code) in a specific product group, determining the standard deviation, and calculating a new mean average using all prices within one standard deviation of the original mean average. "Baseline price" is a drug pricing mechanism developed and updated by First Data Bank.
DAW = Dispense as Written—a generic brand of therapeutic equivalence must be dispensed unless physician orders "DAW," by which the generic drug cannot substitute for a brand-name drug.
MAC = Maximum Allowable Cost.
OTC = Over-the-Counter.
QT = Quantity.

Louisiana
 BRAND: the provider's usual charge; a provider/insurer contracted charge; OR AWP + 10% + dispensing fee (equal to the Medicaid dispensing fee set by the State of Louisiana, Department of Health and Hospitals); WHICHEVER IS LESS
 GENERIC: the provider's usual charge; a provider/insurer contracted charge; OR AWP + 40% + dispensing fee (equal to the Medicaid dispensing fee set by the State of Louisiana, Department of Health and Hospitals); WHICHEVER IS LESS
 (The AWP's for brand-name and generic pharmaceuticals will be the AWP listed in the most recent monthly update of the Annual Pharmacists' Reference Red Book)

Massachusetts
 LESSER OF: Federal upper limit of the drug + \$3.00 dispensing fee; MA upper limit of the drug + \$3.00 dispensing fee; Red Book AWP x 84.8% + \$3.00 dispensing fee; OR usual and customary

Michigan
 PRESCRIPTION MEDS: AWP + \$4.00 dispensing fee as determined by the Red Book
 OTCs: dispensed by a provider other than a pharmacy, shall be dispensed in 10-day quantities and shall be reimbursed at the AWP, as determined by the Red Book, OR \$2.50, WHICHEVER IS GREATER
 MEDICAL EQUIPMENT & SUPPLIES (including prefabricated splints):
 AWP + not more than 50%; OR the provider's usual and customary charge, whichever is less

Minnesota
 SMALL HOSPITAL: paid at 100% of the usual and customary charge
 OUTPATIENT: AWP + \$5.14 dispensing fee
 INPATIENT: LARGE HOSPITAL: limited to 85% of the usual and customary charge

Montana
 Insurers are liable only for the purchase of GENERIC-NAME DRUGS (unless unavailable); home healthcare is paid in terms of usual and customary fees
 DRUGS: (AWP x QT) + \$5.50 dispensing fee
 SUPPLIES: \$30.00 OR (AWP x QT) + 30%, WHICHEVER IS LESS
 If an injured worker prefers a brand-name drug, the worker may pay directly to the pharmacist the difference in the reimbursement rate between the brand-name drug and the generic-name product; BRAND AWP – GENERIC AWP

Nevada
 DRUGS: (AWP x QT) + \$6.00; usual and customary price; OR contracted amount between the provider of healthcare and insurer; WHICHEVER IS LESS, except those provided to an injured employee occupying a bed in the hospital
 A physician or advanced practitioner of nursing shall prescribe a GENERIC DRUG in lieu of a drug with a brand name, except when the generic drug is higher in cost OR it is not beneficial to the health of the employee

New Mexico
 BRAND: AWP x 1.04 + \$6.50
 GENERIC: AWP x 1.04 + \$8.06

Key:
 AWP = Average Wholesale Price.
 BLP = Baseline Price—derived by calculating the mean average for all NDCs (National Drug Code) in a specific product group, determining the standard deviation, and calculating a new mean average using all prices within one standard deviation of the original mean average. "Baseline price" is a drug pricing mechanism developed and updated by First Data Bank.
 DAW = Dispense as Written—a generic brand of therapeutic equivalence must be dispensed unless physician orders "DAW," by which the generic drug cannot substitute for a brand-name drug.
 MAC = Maximum Allowable Cost.
 OTC = Over-the-Counter.
 QT = Quantity.



NCCI Holdings, Inc.

901 Peninsula Corporate Circle
Boca Raton, Florida 33487