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RESEARCH

Third-party reimbursement for generic prescription drugs: The prevalence of below-cost reimbursement in an environment of maximum allowable cost–based reimbursement

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ABSTRACT

Objectives: To examine average prescription gross margin (GM) for prescriptions and to evaluate the prevalence of below-cost reimbursement for generic prescriptions across different third-party payers and therapeutic categories.
Design: A retrospective descriptive study using 2015 dispensing data from a single independently owned pharmacy in Iowa. To calculate GM, the pharmacy's actual acquisition cost was subtracted from the third-party reimbursement rate for each generic prescription. The frequency of negative GMs was calculated for the top 6 plans and the top 10 therapeutic categories by prescription volume.
Setting: A single, independently owned community pharmacy in Iowa.
Participants: Prescription dispensing records for the pharmacy's largest private and public payers by prescription volume.
Intervention: Gross margins were calculated on a payer and United States Pharmacopeia (USP) medication category level.
Main outcome measures: GM for generic prescriptions reimbursed under cost for specific payers and USP medication categories.
Results: The 2015 prescription volume for the study pharmacy was 70,866 prescriptions, of which 88% were generic. For all prescriptions, the mean GM was $6.63 per prescription, and the median GM was $3.49 per prescription. Generic medications had a mean GM of $4.66 (median, $2.86), and brand name medications had a mean GM of $21.83 (median, $16.15). The percentage of generic prescriptions paid below acquisition cost was 15.1% overall and ranged from 4.1% for Iowa Medicaid to 25.9% for one of the private payers. The most common USP medication category by prescription volume was cardiovascular agents, representing 25.2% of generic prescriptions. For the 10.9% of these prescriptions reimbursed below cost, the mean GM was −$6.80. The 2 USP medication categories with the largest negative mean GM for generic prescriptions were analgesics and anticonvulsants, with mean GMs of −$10.10 and −$11.30, respectively.
Conclusion: The current maximum allowable cost–based reimbursement system often results in inadequate payment for generic prescription drugs. The amount of underpayment varies substantially by payer and therapeutic class.

Pharmacy reimbursement and gross profit for third-party prescriptions have changed significantly over the past 40 years.[1-3] According to the 2016 National Community Pharmacy Association (NCPA) Digest, the percentage of generic prescriptions dispensed has increased in recent years, from 76% in 2011 to 82% in 2015[4]; therefore, it is especially important to examine generic drug reimbursement. Third-party payers typically reimburse pharmacies for prescription drugs by paying them an estimated acquisition cost that is intended to cover the pharmacy's cost to acquire the drug, and a dispensing fee that is intended to cover the cost of dispensing the drug. For generic drugs, third-party payers create maximum allowable cost (MAC) lists that determine the upper limit or maximum amount that a specific plan will pay for generic drugs or brand name drugs with generic equivalents. MAC lists set the estimated acquisition cost for generic

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Key Points

Background:

- Community pharmacy reimbursement continues to decline.
- Maximum allowable cost lists play an important role in community pharmacy reimbursement for generic drugs.
- Pharmacy benefit managers are responsible for the implementation and utilization of some maximum allowable cost lists.

Findings:

- There is variation in reimbursement among payers and medication categories.
- A significant portion of generic prescriptions are being reimbursed below the average acquisition cost and the average cost of dispensing.
- Research is needed to understand how additional components of pharmacy reimbursement (e.g., rebates, direct and indirect remuneration fees) are affecting community pharmacy reimbursement.

prescriptions, and this reimbursed amount might not align with a pharmacy's actual acquisition cost. MAC lists have been used to control drug spending for over 4 decades, with references to these lists existing in Medicare since 1976[5] and Medicaid programs as early as 1987.[6]

MAC lists typically are developed by pharmacy benefit managers (PBMs). There has been growing concern that PBMs are currently using MAC pricing as a revenue mechanism with little transparency.[7] PBMs contract with plan sponsors or insurers to manage pharmacy reimbursement in a variety of ways. The Pharmaceutical Care Management Association states that these managerial responsibilities include reducing prescription drug costs, improving convenience and safety for patients, decreasing medication waste, and improving adherence.[8] According to the NCPA, PBMs were initially created to do just what the Pharmaceutical Care Management Association claimed, but they have recently used this position to take control of reimbursement.[9] It has been suggested that PBMs are using practices that generate revenue, potentially at the expense of pharmacies and employers.[7]

To our knowledge, this is the first study to examine generic prescription drug reimbursement and accompanying gross margins (GMs) in the current MAC environment and to explore the differences in generic prescription drug reimbursement across United States Pharmacopoeia (USP) medication categories. While commentary on community reimbursement exists,[3] this study is unique in that it formally examines generic drug reimbursement by comparing the pharmacy's actual acquisition cost (AAC) for generic prescription drugs to the amount that the community pharmacy was reimbursed. The research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Objectives

The objectives of this study were to examine average prescription gross margin for prescriptions and to evaluate the prevalence of below-cost reimbursement for generic prescriptions across different third-party payers and therapeutic categories.

Methods

This study was a retrospective, cross-sectional, descriptive analysis of 2015 dispensing data from a single independent community pharmacy in central Iowa. The pharmacy was in a community with a population of approximately 5000 people. All patient identifiers were removed from the dispensing data; therefore, the University of Iowa's Institutional Review Board deemed the study to be not human subject research.

The GM for each prescription was calculated by subtracting the pharmacy's AAC from the third party's total reimbursement. The total reimbursement included the third-party payment plus the patient payment. The AAC was the pharmacy's average acquisition cost as verified with wholesaler invoices. Prescriptions with GMs greater than or equal to $100 or less than or equal to −$100 were considered outliers and were excluded from analysis.[1] These outliers accounted for 1.3% of total prescription volume. Immunizations, compounded prescriptions, durable medical equipment (DME), and prescriptions paid for in cash also were excluded.

Mean and median GMs were calculated separately for brand name and generic prescriptions. For the evaluation of below-cost reimbursement, only generic prescription drugs were included because they are most likely to be subject to MAC-based reimbursement. We calculated the percentage of generic prescriptions for which the total reimbursement was less than the pharmacy's AAC, sometimes referred to as *underwater prescriptions*. These prescriptions had a GM less than $0. It is thought that the use of MAC-based reimbursement is a main driver of below-cost prescription reimbursement. We also calculated the percentage of generic prescriptions for which the GM was less than the $11.73 average cost of dispensing for Iowa pharmacies in 2015, as determined by the Iowa Department of Human Services Pharmacy Dispensing Fee for the Medicaid program.[10]

Generic prescriptions from the top 2 private insurers by prescription volume, the top 3 Medicare Part D payers by prescription volume, and Iowa Medicaid were selected for analysis. The percentage of prescriptions reimbursed below cost, along with their mean and median GMs, were calculated for each of the top 6 payers. Next, the generic prescriptions were sorted by their USP medication category list. The percentage of prescriptions reimbursed below cost, along with their mean and median GMs, was calculated for each of the top 10 USP medication categories by volume.

Analysis of variance was used to compare the statistical significance of differences in mean GMs across third-party payers and the top 10 USP medication categories. Post hoc Bonferroni pairwise comparisons were used to determine the statistical significance of differences in mean GMs between specific third-party payers. Overall alpha was set at 0.05, but because there were 6 pairwise comparisons, the alpha was set at 0.008 for each comparison. All descriptive and statistical analyses were performed using SPSS software (version 25.0; IBM, Armonk, NY).