Are You Counting Prescription Medication Utilization Correctly?

Athavale AS[a], Banahan III, BF[a,b], Hardwick SP[c], Clark JP[c]
[a] *Center for Pharmaceutical Marketing and Management*
[b] *Department of Pharmacy Administration, University of Mississippi, University, MS*
[c] *Mississippi Division of Medicaid, Jackson, MS*

MS|DUR Evidence-Based DUR Initiative
The University of Mississippi School of Pharmacy

Mississippi Division of Medicaid
Quality Health Care Services, Improving Lives

BACKGROUND

- The study of issues surrounding the utilization of pharmaceuticals forms the premise of numerous pharmacoepidemiologic, pharmacoeconomic, and health outcomes studies.[1,2,3,4]
- Most of the current research about medication utilization deals with pharmaceuticals administered via either the oral or other self-administration routes.[1,2]
- Several disease conditions such as most cancers, multiple sclerosis, rheumatoid arthritis, etc. require medications to be administered by a physician or another health care professional.[3,4]
- Office administered medications can be billed as medical claims or pharmacy claims and processed through two separate payment systems.
- When medical claims include J-codes, the billing amount is supposed to be the charge for the drug itself. However, double billing or misuse of J-codes without billing for the product can occur.
- These situations may lead to the occurrence of pharmaceutical product claims in both the medical claims file and the prescription drug claims file for the same drug event.
- If care is not taken while calculating utilization for such drugs, incidences of potential duplicate counts may arise.

OBJECTIVE

The objective of this study was:

- To evaluate the potential for duplicate counting of injectable prescription medication utilization for products that can be billed through both medical and prescription claims.

METHODS

Study Design

- A retrospective observational study was conducted to meet the stated objective.

Data

- Mississippi Division of Medicaid prescription and medical claims data for the year 2008 to 2011 were used.

Data Management / Analysis

- Medical claims with J-codes for injectable medications were extracted from the medical claims file (medical file).
- J-codes for injectable medications present in the medical file were matched with those in Multum Lexicon to identify NDCs associated with those medications.
- Pharmacy claims were extracted for all beneficiaries identified in the medical file having NDCs associated with the J-codes on claims in the medical file (pharmacy file).
- The medical and pharmacy files were stacked and sorted by beneficiary ID, drug ID (obtained from Multum Lexicon) and date of service.
- Claims from the medical and pharmacy files for the same drug were paired as potential duplicate counts/claims for the same drug event when the prescription claim fill date was within 7 days of the medical claim service date (duplicate file).
- The Medicaid maximum allowable cost was identified for the J-code in each paired situation as an estimated Medicaid payment amount.
- Paired claims were evaluated as potential duplicate claims based on whether (1) the amount paid for the medical claim was 80% or greater than the maximum allowable cost for one J-code unit and (2) the medical paid amount was 80% or greater than the corresponding prescription paid amount .

RESULTS

- 1,813,251 medical and pharmacy claims were identified for injectable products.
- 1,443 of paired drug claims were classified as potential duplicate claims/counts (0.08%).
- These claims were associated with 849 Mississippi Medicaid beneficiaries.

Table I

Is the amount paid by MS Medicaid for medical claims…		…80% or greater than the amount paid by MS Medicaid for Rx?		Total
		No	Yes	
…80% or greater than the maximum allowable amount?	No	A – 139 (9.63%)	B – 19 (1.32%)	158 (10.95%)
	Yes	C – 764 (52.95%)	D – 521 (36.11%)	1,285 (89.05%)
Total		903 (62.58%)	540 (37.42%)	1,443 (100.00%)

- The results in Table 1 suggest that:
  - 139 paired claims in cell A (10%) have a high likelihood of being misuse of J-codes to document injection of a product rather than product costs.
  - It is difficult, if not impossible, to determine whether double billing has taken place using only claims data. However, 521 paired claims in cell D (36%) have the highest likelihood of being duplicate billings and counts since the paid amounts are similar and likely reflect payments for drug cost in the medical claim.
  - 764 paired claims in cell C (53%) have a high likelihood of being actual drug claims for additional drug to be used with the product covered by the prescription claim.

CONCLUSIONS

- Researchers need to use caution when counting medication events for injectable products reimbursed using both medical claims and prescription medication claims.
- These findings are of utmost importance to researchers computing adherence and compliance measures using medication possession-based algorithms.
- The error from over-counting at the population level, though present, should be small, but could have a significant impact on utilization and adherence estimates for individual patients; failure to account for duplicate counts could lead to patient-level inflation in such measures.

REFERENCES

1. Peng CC, Glassman PA, Fowler C, et al. Retrospective Drug Utilization Review: Incidence of Clinically Relevant Potential Drug-Drug Interactions in a Large Ambulatory Population. *J Manag Care Pharm* 2003;9(6):513-22.
2. Yin W, Basu, A, Zhang JX, et al. The Effect of the Medicare Part D Prescription Benefit on Drug Utilization and Expenditures. *Ann Intern Med* 2008;148;169-77.
3. Asche CV, Singer ME, Jhaveri M, et al. All-Cause Health Care Utilization and Costs Associated with Newly Diagnosed Multiple Sclerosis in the United States. *J Managed Care Pharm* 2010;16(9):703-12.
4. Halbert RJ, Zaher C, Wade S, et al. Outpatient Cancer Drug Costs. *Cancer* 2002;94:1142-50

ACKNOWLEDGEMENT

The work reported was conducted by the MS-DUR program in the Center for Pharmaceutical Marketing and Management as part of the retrospective drug use analysis activities conducted under contract with the Mississippi Division of Medicaid. The views expressed are those of the authors and do not necessarily reflect those of Mississippi Division of Medicaid or the University of Mississippi.

Contact email: aathaval@olemiss.edu