USE OF MULTIPLE PROVIDERS FOR OPIOIDS: IMPACT OF CASH PRESCRIPTIONS AND AFFILIATE PROVIDER IDENTIFIERS ON IDENTIFYING AT RISK BENEFICIARIES

BACKGROUND

In 2015, The Pharmacy Quality Alliance (PQA) approved the quality measure "Use of Opioids from Multiple Providers." This is a measure of the proportion of individuals without cancer receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies during the year being reported. People who see multiple prescribers or use multiple pharmacies have an increased risk of dying from a drug overdoses.[1] Data from the California Prescription Drug Monitoring Program indicates that people with higher daily dosages are more likely to see multiple prescribers or go to multiple pharmacies.[2]

During the February 2015 DUR Board Meeting, the board recommended and approved an educational intervention program to be implemented by MS-DUR based on the quality measures being developed by PQA at that time. The previous educational activity was directed at notifying prescribers when suspected doctor/pharmacy shopping was occurring. This intervention primarily addressed possible abuse and safety problems that could occur from lack of coordination among prescribers.

At the January 2016 DUR Board Meeting, it was recommended that MS-DUR initiate an education intervention based on the Multiple Provider measure. Each month beneficiaries filling an opioid prescription during the previous month are identified if they exceed the criteria of having opioid prescriptions from four (4) physicians and four (4) pharmacies during the previous six months. ALL prescribers and pharmacies involved in the prescriptions contributing to the exception are notified. MS-DUR will also be using the components of this measure, along with other factors, to prepare a quarterly report for DOM identifying benericiaries with a high risk of opioid overdose. This report will be used by DOM Program Integrity (PI) to identify beneficiaries who might benefit from a lock-in program or through enrollment in a medication assisted drug abuse treatment program.

The PQA multiple provider measure can be used as a quality measure for not only comparing programs but also as a quality improvement tool for identifying high-risk beneficiaries for potential intervention efforts. When used as a quality measure, the official technical specifications must be followed. However, when a measure is being used for quality improvement, modifications can be made to improve the utility of the measure.

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[1] Paulozzi, et al. A History of Being Prescribed Controlled Substances and Risk of Drug Overdose Death. Pain Medicine 2011.

[2] Han H, Kass PH, Wilsey BL, Li C-S (2012) Individual and County-Level Factors Associated with Use of Multiple Prescribers and Multiple Pharmacies to Obtain Opioid Prescriptions in California. PLoS ONE 7(9): e46246. doi:10.1371/journal.pone.0046246

This analysis examines two potential sources of error when using the measure for quality improvement:

- Underestimates can occur when only administrative claims are available and cash paid prescriptions are not included.
- Overestimates can also occur due to counting providers in the same practice site as multiple providers when individual provider identifiers (IDs) are used.

In an effort to more efficiently identify high-risk beneficiaries for provider notices and for PI review, MS-DUR has evaluated the inclusion of cash prescription for opioids and the use of affiliate provider IDs that count providers in the same facilities as one provider.

METHODS

A retrospective analysis was conducted using Mississippi Medicaid pharmacy administrative claims, linked with Mississippi Prescription Monitoring Program (MPMP) data for the period July 1, 2015 - June 30, 2016. MPMP data were obtained through a memorandum of agreement between Mississippi Medicaid and the Board of Pharmacy. Affiliate provider IDs were created linking prescribers in the same physical practice setting to a single ID and pharmacies in networked chains in the same zip code to a single ID. The PQA measure for use of opioids from multiple providers was calculated according to the measure specifications. Beneficiaries were identified as “provider shopping” (using 4+ prescribers and pharmacies), both with and without the inclusion of cash prescriptions and affiliate provider IDs.

RESULTS

As shown in Table 1, 30,124 beneficiaries were identified as having 2 or more opioid prescriptions for greater than 15 days supply and 26,796 of these beneficiaries had no cancer diagnoses. As quality measure excludes beneficiaries with cancer diagnoses; therefore, our focus is primarily on the results for these beneficiaries. Table 1 reports the results for all beneficiaries meeting the opioid use requirement, with and without the cancer exclusion, thus showing the number of beneficiaries with cancer that are excluded.

- When only administrative claims data *without affiliate provider IDs* was used, 1,390 (5.2%) of beneficiaries were classified as using multiple providers. Including cash payments added 148 (0.6%, p <0.001) more beneficiaries.
- As compared to using only administrative claims without affiliate IDs*, using affiliate provider IDs* reduced the number of beneficiaries meeting the measure criteria 269 (1.0%, p < 0.001).

Table 1: Using Multiple Providers For Opioids Measure: Demographics of Eligible Population and Quality Measure Performance

Characteristic		Without Cancer Exclusion	With Cancer Exclusion
TOTAL Beneficiaries With Opioid Prescriptions		**30,134**	**26,796**
Gender	Female	22,286 (74.0%)	20,037 (74.8%)
	Male	7,848 (26.0%)	6,759 (25.2%)
Race	Caucasian	12,360 (41.0%)	10,898 (40.7%)
	African American	15,401 (51.1%)	13,894 (51.9%)
	Hispanic	99 (0.3%)	89 (0.3%)
	American Indian	46 (0.2%)	44 (0.2%)
	Other	2,228 (7.4%)	1,871 (7.0%)
Age	18 to 44 years	15,596 (51.8%)	14,636 (54.6%)
	45 to 64 years	14,336 (47.6%)	11,993 (44.8%)
	65 years and older	202 (0.7%)	167 (0.6%)
Using Multiple Provider Measure	Without PMP data & without affiliate ID	1,594 (5.3%)	1,390 (5.2%)
	Without PMP data & with affiliate ID*	1,283 (4.3%)	1,121 (4.2%)
	With PMP data & without affiliate ID*	1,781 (5.9%)	1,538 (5.7%)
Using Multiple Physicians (>=4)	Without PMP data & without affiliate ID	7,342 (24.4%)	6,354 (23.7%)
	Without PMP data & with affiliate ID*	5,956 (19.8%)	5,184 (19.3%)
	With PMP data & without affiliate ID*	7,678 (25.5%)	6,645 (24.8%)
Using Multiple Pharmacies (>=4)	Without PMP data & without affiliate ID	2,426 (8.1%)	2,135 (8.0%)
	Without PMP data & with affiliate ID*	2,133 (7.1%)	1,876 (7.0%)
	With PMP data & without affiliate ID*	2,695 (8.9%)	2,360 (8.8%)

** indicates that the measure was significantly different when compared to the case without PMP data and without affiliate ID.*

CONCLUSIONS

Inclusion of cash paid prescriptions and use of affiliate provider IDs makes a statistically significant, although very small numerical difference when identifying beneficiaries using multiple providers for opioids. The small percentage change, although statistically significant, is minimal when used as a quality measure. However, the additional beneficiaries identified by using cash prescriptions may represent some of the higher risk beneficiaries. Similarly, when using affiliate IDs, the reduction in the number of beneficiaries identified as using multiple providers is small and may have little impact on quality measures. However, these beneficiaries represent "false positives" when the measure is being used to identify at risk beneficiaries. MS-DUR plans to use both cash prescriptions and affiliate IDs when identifying beneficiaries at risk of opioid overdose, abuse, and/or diversion.