



Impact of Cash Prescriptions And Use Of Affiliate Provider Identifiers On Measures of Opioid Use From Multiple Provider Measure

Ramachandran S¹, Inguva S¹, Banahan BF¹, Kirby TR², Noble S²

¹ MS-DUR Evidence-Based DUR Initiative, Center for Pharmaceutical Marketing and Management, University of Mississippi

² Pharmacy Bureau, Mississippi Division of Medicaid

BACKGROUND

The Pharmacy Quality Alliance (PQA) measure for use of opioids from multiple providers can be used as a quality measure for comparing data from different programs. This measure can be used also as a quality improvement tool to identify substance use disorder (SUD) high risk beneficiaries for potential intervention efforts. For both purposes, underestimates and misidentifications can occur when only administrative claims are available and beneficiaries pay cash for opioid prescriptions. Overestimates can also occur due to counting providers in the same practice site as multiple providers.

OBJECTIVES

The objectives of this study were to estimate the impact of including cash paid prescriptions and using affiliate provider IDs to identify beneficiaries using multiple providers for opioids based on the PQA quality measure for “Use of opioids from multiple providers or at high dosage in persons without cancer”.

METHODS

A retrospective analysis was conducted using Mississippi Division of Medicaid (DOM) 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 DOM and the Mississippi 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 or multi-store independents 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

A total of 26,796 beneficiaries were identified as having 2 or more opioid prescriptions for greater than 15 days supply and no cancer diagnosis -- provider shopping quality measure denominator (Table 1). Approximately ¾ of these beneficiaries were female. As would be expected in a Medicaid population, over half were 18-44 years of age and almost all others were 54-64 years of age.

Table 1: Demographics of Eligible Population

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%)

BASELINE - using only administrative claims:

- 6,354 (23.7%) used 4+ physicians
- 2,135 (8.0%) used multiple pharmacies
- 1,390 (5.2%) were classified as provider shopping

Using affiliate provider IDs

- 269 fewer classified as provider shopping ($p < 0.01$)

Using PMP cash payments

- 148 more classified as provider shopping ($p < 0.01$)

Using affiliate ID and PMP cash payments

- 131 fewer classified as provider shopping ($p < 0.01$)

Table 2: Using Multiple Providers For Opioids Quality Measure Performance

Characteristic		Without Cancer Exclusion	With Cancer Exclusion
TOTAL Beneficiaries With Opioid Prescriptions		30,134	26,796
Using Multiple Physicians (>=4)	BASELINE - Without PMP data & without affiliate ID	7,342 (24.4%)	6,354 (23.7%)
	With affiliate ID only*	5,956 (19.8%)	5,184 (19.3%)
	With PMP cash payments only*	7,678 (25.5%)	6,645 (24.8%)
	With affiliate ID and PMP cash payments*	6,285 (20.9%)	5,469 (20.4%)
Using Multiple Pharmacies (>=4)	BASELINE - Without PMP data & without affiliate ID	2,426 (8.1%)	2,135 (8.0%)
	With affiliate ID only*	2,133 (7.1%)	1,876 (7.0%)
	With PMP cash payments only*	2,695 (8.9%)	2,360 (8.8%)
	With affiliate ID and PMP cash payments*	2,399 (8.0%)	2,097 (7.8%)
Positive for Using Multiple Provider Measure	BASELINE - Without PMP data & without affiliate ID	1,594 (5.3%)	1,390 (5.2%)
	With affiliate ID only*	1,283 (4.3%)	1,121 (4.2%)
	With PMP cash payments only*	1,781 (5.9%)	1,538 (5.7%)
	With affiliate ID and PMP cash payments*	1,453 (4.9%)	1,259 (4.7%)

* indicates that the measure was significantly different ($p < 0.01$) when compared to the BASELINE case.

CONCLUSIONS

Inclusion of cash paid prescriptions and use of affiliate provider IDs makes a statistically significant change in the percentage of beneficiaries identified as “provider shopping”. Thus the potential impact on quality measure performance is limited. Even though the change in the number of beneficiaries identified as “provider shopping” is small, both of these adjustments can meaningfully improve identification of high risk beneficiaries. The additional beneficiaries identified when using cash payments should enhance quality improvement efforts since these beneficiaries are potentially at the highest risk. The use of affiliate provider IDs will reduce the number of false positives identified for possible intervention. Using both adjustments together will make targeting high risk beneficiaries much more efficient.

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 the Mississippi Division of Medicaid or the University of Mississippi.