

Evaluation of the addition of prescriber restrictions to a state Medicaid's pharmacy-only patient review and restriction program

Shellie Keast, Pharm.D., Ph.D.¹, Timothy Pham, Pharm.D.¹, Ashley Teel, Pharm.D.²

¹University of Oklahoma College of Pharmacy, ²Pharmacy Management Consultants



Background

- Patient Review and Restriction (PRRs) programs limit members with suspected patterns of opioid misuse and/or abuse to Medicaid services from designated providers, such as to a single pharmacy.¹
- In July 2014, Oklahoma Medicaid (MOK) modified its PRR program by limiting members to up to three prescribers to complement its single-pharmacy restriction.
- However, little is known about the impact of these policies on opioid and health care resources utilization.^{2,3}

Objectives/Specific Aims

- Evaluate the addition of prescriber limitations to the MOK PRR program on enrolled members' pharmacy and health care resources utilization in calendar year 2014.

Methods

- A cross-sectional pre and post study design was used.
- Members who were enrolled in the new program in 2014 were included for analysis.
- Each members' pharmacy and medical claims data were extracted and analyzed.
- Utilization was presented in terms of mean per member per month (PMPM) prescription and healthcare utilization.
- Costs were defined as direct pharmacy and medical dollar amounts reimbursed by MOK as reported in pharmacy and medical claims data.
- Descriptive statistics summarized members' demographics and case-mix (i.e. age, sex, race, rural residence, Charlson Comorbidity Index [CCI], and comorbidities related to opioid addiction).
- Prescription utilization was defined as utilization and dollar amounts reimbursed for long-acting opioids, short-acting opioids, and benzodiazepines.
- Health care utilization was defined as number of prescribers seen, emergency department visits, and overall medical costs.
- Utilization was compared between six months before (pre-period) and six months after (post-period) implementation of the physician restriction with the Wilcoxon Signed Rank Test for nonparametric dependent means.

Results

Table 1. Patient Review and Restriction Member Characteristics, 2014 (n = 128)

	Number (%)
Age, years (mean ± SD)	40.3 ± 10.7
Female Sex	101 (78.9%)
Race	
White	93 (72.7%)
Black/African-American	16 (12.5%)
American Indian/Alaska Native	16 (12.5%)
Other	3 (2.3%)
Rural or Micropolitan Residence	21 (24.2%)
Charlson Comorbidity Index (mean ± SD)	1.3 ± 2.0
Comorbidities Related to Addiction	
Substance Abuse (non-opioid)	72 (56.3%)
Opioid Dependence	43 (33.6%)
Mental Health	106 (82.8%)
HIV/AIDS	1 (0.78%)
Skin Infections	33 (25.8%)
Gastrointestinal Bleeding	45 (35.2%)
Cirrhosis	6 (4.7%)
Hepatitis A, B, or C	10 (7.8%)
Pancreatitis	3 (2.3%)
Sexually Transmitted Disease	12 (9.4%)
Burns	5 (3.9%)
Trauma	94 (73.4%)
Motor Vehicle Accident	13 (10.2%)
Poisonings	17 (13.3%)

Results

Table 2. Comparison of 6-month Pre- and Post-Restriction Periods in Mean Per Member Per Month Healthcare Utilization, 2014 (n=128)

	Pre-Restriction Period	Post-Restriction Period	Total Change	% Change	p-value ¹
Total Prescriptions					
Claims	3.98	3.71	-0.27	-7	0.0007
Costs (US\$)	342.95	238.41	-104.54	-30	0.4242
Total OPs					
Claims	1.01	0.74	-0.27	-27	<0.001
Costs (US\$)	69.50	53.71	-15.79	-12	0.0255
Daily MED	77.53	52.87	-24.66	-32	0.0530
Long-acting OPs					
Claims	0.14	0.18	0.04	29	0.0024
Costs (US\$)	28.07	24.46	-3.60	-13	0.1529
Quantity	8.25	9.65	1.40	15	0.3274
Short-acting OPs					
Claims	0.87	0.56	-0.31	-55	<0.0001
Costs (US\$)	41.44	29.27	-12.17	-29	0.0009
Quantity	71.41	53.61	-17.79	-25	<0.0001
Total BZDs					
Claims	0.44	0.37	-0.07	-16	0.0936
Costs (US\$)	4.05	2.26	-1.79	-44	<0.0001
Medical Costs (US\$)	1869.42	1519.37	-350.05	-19	0.0009
No. of Prescribers³	1.00	0.61	-0.39	-39	<0.0001
No. of Pharmacies	0.78	0.55	-0.23	-29	<0.0001
Early Refill Attempts	0.08	0.05	-0.03	-38	0.0376
Emergency Department Visits	1.24	1.29	0.05	4	1.00

Figure 1. Mean Per Member Per Month Opioid Utilization in the Patient Review and Restriction Program, 2014

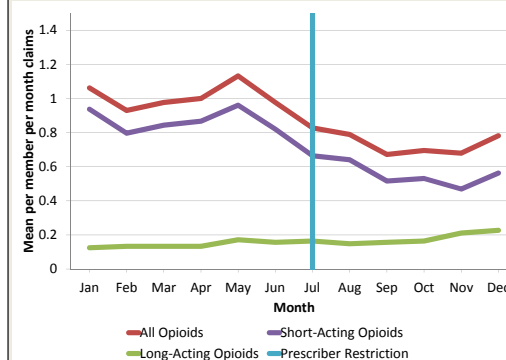
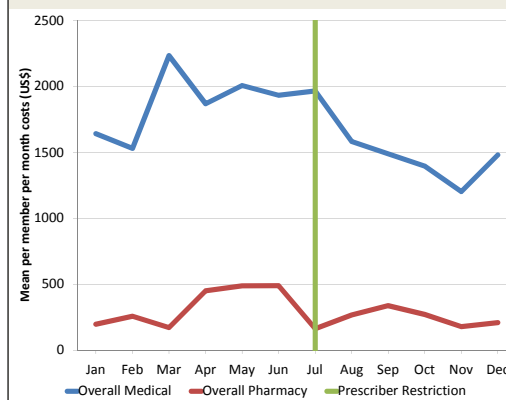
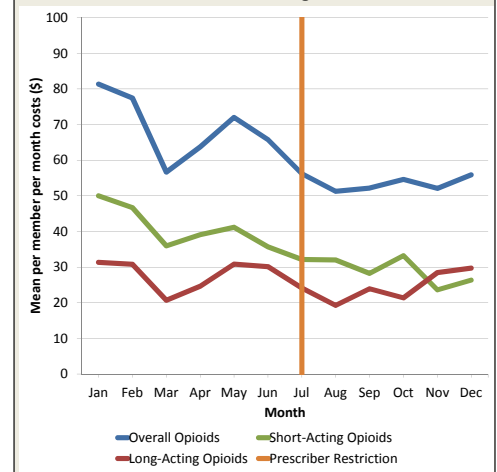


Figure 2. Mean Per Member Per Month Overall Pharmacy and Medical Costs in the Patient Review and Restriction Program, 2014



Results

Figure 3. Mean Per Member Per Month Opioid Costs in the Patient Review and Restriction Program, 2014



Conclusions

- Mean PMPM opioid utilization significantly decreased in the six months after institution of the prescriber restriction addition and was mainly driven by the decrease in short-acting opioids.
- Mean PMPM opioid costs decreased significantly in the six months after institution of the prescriber restriction addition, driven by the significant decrease in costs for the short-acting opioids.
- Overall mean PMPM medical costs, prescribers seen per month, and pharmacies visited per month decreased significantly after the prescriber restriction intervention.
- The policy change was associated with decreased opioid utilization and some aspects of medical utilization.
- Further research on the effectiveness of these programs is needed to establish causal links between policy and outcomes.

Limitations

- Small sample size may limit generalizability and decrease precision in estimates.
- Claims data may not capture all aspects of prescription opioid and health care resource utilization.

References

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Disclosure Statement

Shellie Keast, Timothy Pham, and Ashley Teel disclose contractual employment with the Oklahoma Health Care Authority.

