Impact of a Concurrent Drug Utilization Review Edit Designed to Curb Opioid Misuse

B. Erdman,[1] C.I. Starner,[1] A. DeMedicis,[2] R.A. Zabinski[1] [1]Prime Therapeutics LLC, Eagan, MN, United States [2]Blue Cross and Blue Shield of Alabama, Birmingham, AL, United States.

No external funding provided for this research

Background

- Since 2000, the rate of deaths from drug overdoses has increased 137 percent, including a 200 percent increase in the rate of overdose deaths involving opioids. In 2014, 61 percent of drug overdose deaths involved some type of opioid.[1]
- In 2013, the Centers for Medicare & Medicaid Services (CMS) implemented the opioid overutilization monitoring system (OMS) to identify potential opioid overuse on a quarterly basis. The OMS targets those using more than 120 milligrams morphine equivalent dose (MED) daily for at least 90 consecutive days with four or more prescribers and four or more pharmacies for their opioids during a 12 month period.[2]
- Plan sponsors utilize several tools to reduce opioid overuse including: 1) appropriate claim controls at point-of-sale (POS) for opioids, including safety edits and quantity limits; 2) improved retrospective drug utilization review (DUR); 3) case management with appropriate prescribers followed by beneficiary-specific POS edits to prevent Part D coverage of opioid overutilization, if necessary; and 4) data-sharing between Part D sponsors regarding identified beneficiary opioid overutilization.[2]
- From 2011 through 2014, there was a 26 percent decrease — or 7,500 fewer — Medicare Part D beneficiaries identified as potential opioid over-utilizers.[2]
- Although there has been a substantial decrease in the number of members identified as potential opioid over utilizers, opportunity still exists to curb opioid overuse before a beneficiary is identified via the OMS for case management.

Goal

- To assess the effectiveness of a concurrent drug utilization review (DUR) edit designed to alert pharmacists of potential opioid misuse/abuse (OPMISUSE).

Methods/Program Description

- OPMISUSE was defined as members who, between Aug. 31, 2015 and March 26, 2016, used more than 100 milligrams MED per day for at least 60 consecutive days with more than two prescribers and more than two pharmacies for their opioids.
- OPMISUSE edit criteria
  - Maximum daily morphine equivalent dose: 100 milligrams
  - Maximum number of consecutive days allowed: 60
  - Maximum number of prescribers allowed: 2
  - Maximum number of pharmacies allowed: 2
- The OPMISUSE soft edit was implemented in one Medicare plan with approximately 120,000 lives.
- The edit was configured to soft reject from Oct. 30, 2015 through Jan. 28, 2016.
- All opioid claims from Aug. 31, 2015 through March 26, 2016 were included in the MED calculations and the time period for MED was run from Aug. 31, 2015 through March 26, 2016.
- Soft rejects provide a warning message in response to the submitted claim, but do not reject claims from payment.
- All network pharmacies in the affiliated states were sent a fax with details of the edit and instructions on how to override the edit.
- Members identified via the CMS OMS at the same time as the edit were enrolled in case management followed by beneficiary-specific POS edits, if necessary, and bypassed the edit.
- Morphine equivalent dose was calculated for all opioid claims in the analysis by dividing quantity dispensed by days supply and then multiplying by the drug strength and conversion factor for morphine equivalents.[3]
- Member behavior following the edit was examined to determine any impact (i.e., delayed claims) and cross over with the OMS member list.
- Call center data were used to assess impact (i.e., complaints) on members and network pharmacies.

Observations

- 40 Medicare members (three per 10,000) had at least one claim stopped by the OPMISUSE edit.
- Seven of these members have been identified for case management through CMS OMS. Three of the seven members were identified in the most recent CMS OMS quarter.
- The 33 members who are not being case managed had 546 claims from Aug. 31, 2015 through March 26, 2016.
- Four of 33 members (12 percent) had cancer claims in their history.
- 14 of 33 members (42 percent) had a delayed or altered claim when the edit was hit.
- 19 of 33 members (58 percent) had appropriate override codes entered by the dispensing pharmacist.
- Using the same time frame for analysis of Aug. 31, 2015 through March 26, 2016, none of the members would have met CMS OMS criteria of MED greater than 120 for 90 days and more than three pharmacies and more than three prescribers.
- One member was found to be using buprenorphine/naloxone along with opioids despite plans to discontinue opioids per clinical review notes, see highlights.
- One member subsequently enrolled in an opioid dependence treatment plan using buprenorphine, see highlights.

Limitations

- Members may have paid for opioid claims out-of-pocket or obtain them through friends and family. This could have resulted in underestimation of the number of members hitting our OPMISUSE edit.
- Data are limited to one Medicare plan; therefore findings may not be generalized to commercial, Medicaid or other Medicare populations.
- This analysis lacked a comparison group and therefore all findings should be considered descriptive.
- A direct cause-effect link cannot be made between the OPMISUSE edit and outcomes.
- Identification and authorization of use for 100 percent of cancer patients in the process was not feasible.

Findings/Recommendations

- These data suggest a concurrent DUR opioid misuse edit was effective at delaying or altering opioid prescriptions for members with potential overutilization.
- The edit identifies members at the time they are trying to submit their opioid prescription and before the majority are identified by the OMS.
- Operationally, the OPMISUSE concurrent DUR edit worked as designed based on the number of members hitting the edit and members identified by OMS case management bypassed the edit.
- Clinically, the OPMISUSE concurrent DUR edit is working as intended and delaying claims where appropriate. Furthermore, one member appears to have enrolled in opioid dependence treatment.
- Regulatory compliance questions exist with respect to how such a point-of-sale edit could be implemented in a manner that would be compliant with the current draft regulations.
- Prevention and detection of opioid overutilization is a high priority for health insurers, and our pilot results suggest continued use of the OPMISUSE edit may help reduce the number of members identified for case management.

References

1. CDC. Increases in Drug and Opioid Overdose Deaths — United States, 2000–2014. January 1, 2016 / 64(50);1378–82. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm.
2. CMS.gov. Medicare Part D Overutilization Monitoring System (OMS) Summary. Nov 2015. Available at: https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-11-03.html.
3. Opioid Morphine Equivalent Conversion Factors. Available at: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/Opioid-Morphine-EQ-Conversion-Factors-March-2015.pdf.

Table 1. Members Identified by the Soft Reject OPMISUSE Edit Oct. 30, 2015 through Jan. 28, 2016

Member	Aug. 31, 2015 through March 26, 2016 (209 days) consecutive days greater than 100 mg morphine equivalent dose (MED)	Unique pharmacies	Unique prescribers	Opioid claims	Case management	Average morphine equivalent dose
1	144	4	4	13	no	139
2	120	3	3	12	no	225
3	61	5	7	13	no	282
4	114	3	3	13	no	171
5	37	4	6	15	no	245
6	68	4	6	17	no	201
7	60	3	4	10	no*	204
8	114	3	2	10	yes	141
9	143	2	3	13	no*	267
10	59	4	3	14	no	204
11	88	3	5	9	no	136
12	81	3	5	14	no*	420
13	53	6	6	16	yes	244
14	192	5	3	14	yes	341
15	60	2	4	14	no	325
16	58	2	1	8	no	244
17	31	4	3	15	no	174
18	58	4	4	10	no	194
19	90	4	2	9	no	186
20	60	2	4	7	no	183
21	131	8	3	18	no	273
22	70	3	4	13	no	139
23	90	3	3	16	no	309
24	119	4	6	19	no	200
25	88	3	2	12	no	162
26	179	3	4	20	yes	163
27	119	3	3	14	no	166
28	89	2	3	15	no	188
29	79	3	3	23	no	246
30	59	3	3	9	no	185
31	119	4	4	10	no	164
32	110	5	3	14	yes	236
33	111	3	4	16	no*	573
34	108	2	4	22	no	238
35	132	3	5	11	no	295
36	100	5	5	13	no	229
37	194	4	3	15	no	221
38	175	3	3	16	no	449
39	117	3	5	11	yes	133
40	117	6	3	13	yes	247

*members with a cancer pharmacy claim

NOTE: Concurrent DUR includes cough/cold opioid containing products. Soft rejects provide a warning message in response to the submitted claim, but did not reject claims from payment. Members identified via the CMS OMS at the same time as the edit were enrolled in case management and had beneficiary-specific POS edits applied, if necessary.

Table 2. Daily Morphine Equivalent Dose on All Claims Aug. 31, 2015 through March 26, 2016

Daily morphine equivalent dose per claim	Claims	%
10 – 29	35	6.4%
30 – 39	62	11.4%
40 – 49	78	14.3%
50 – 69	112	20.5%
70 – 99	46	8.4%
100 – 199	173	31.7%
200 +	40	7.3%
Overall	**546**	**100.0%**

Morphine equivalent dose calculated by dividing quantity dispensed by days supply and then multiplying by the drug strength and conversion factor for morphine equivalents.

Figure 1: Medicare Members With Delayed or Altered Claims Following the OPMISUSE Soft Edit Oct. 30, 2015 through Jan. 28, 2016

OPMISUSE was defined as members who, between Aug. 31, 2015 and March 26, 2016, used more than 100 milligrams MED per day for at least 60 consecutive days with more than two prescribers and more than two pharmacies for their opioids.

Highlights — Member #3

- Member 3 was found to be using buprenorphine/naloxone along with opioids despite plans to discontinue opioids per clinical review notes.

Seven unique prescribers
- Internal medicine
- Anesthesiology
- Specialist
- Specialist
- Internal medicine
- Family medicine
- Dentist

JUNE 2015
- **June 12, 2015** — clinical review notes for buprenorphine/naloxone prior authorization
  - Approved for six months, renewal prior authorization.
  - Doctor notes patient is compliant with elements of treatment plan and monitored through prescription drug monitoring program.
  - Appeared at that time the member had discontinued opioids.

SEPT. 2015
- **Sept. 12, 2015** — TRAMADOL HCL TAB 50 MG
- **Sept. 22, 2015** — BUPRENORPHINE HCL-NALOXONE HCL SL FILM 8-2 MG
- **Sept. 25, 2015** — HYDROCODONE-ACETAMINOPHEN TAB 10-325 MG

OCT. 2015
- **Oct. 22, 2015** — BUPRENORPHINE HCL-NALOXONE HCL SL FILM 8-2 MG
- **Oct. 28, 2015** — TRAMADOL HCL TAB 50 MG

NOV. 2015
- **Nov. 3, 2015** — LEVORPHANOL TARTRATE TAB 2 MG
- **Nov. 6, 2015** — HYDROCODONE-ACETAMINOPHEN TAB 10-325 MG
- **Nov. 16, 2015** — OXYCODONE W/ ACETAMINOPHEN TAB 7.5-325 MG
- **Nov. 25, 2015** — OXYCODONE HCL TAB 5 MG
- **Nov. 28, 2015** — OXYCODONE HCL TAB ER 12HR DETER 10 MG

DEC. 2015
- **Dec. 17, 2015** — clinical review notes for buprenorphine/naloxone prior authorization
  - Doctor notes patient is compliant with elements of treatment plan and monitored through prescription drug monitoring program.
  - Patient has unspecified pain in limb, femoral vein phlebitis and thrombophlebitis, and diverticulosis of small intestine.
  - It was noted that OxyContin and oxycodone were prescribed as one-time treatment and the patient would be discontinuing use before starting buprenorphine/naloxone.
- **Dec. 18, 2015** — BUPRENORPHINE HCL-NALOXONE HCL SL FILM 8-2 MG

JAN. 2016
- **Jan. 22, 2016** — HYDROCODONE-ACETAMINOPHEN TAB 5-325 MG
- **Jan. 27, 2016** — HYDROCODONE-ACETAMINOPHEN TAB 7.5-325 MG

Highlights — Member #36

- Member 36 appears to have enrolled in an opioid dependence treatment plan. Member stopped opioids and began buprenorphine therapy.

Five unique prescribers
- Internal medicine
- Emergency medicine
- Anesthesiology
- Plastic surgery
- Surgery

SEPT. 2015
- **Sept. 3, 2015** — TRAMADOL HCL TAB 50 MG
- **Sept. 19, 2015** — HYDROCODONE-APAP TAB 7.5-325 MG
- **Sept. 21, 2015** — METHADONE HCL TAB 10 MG

OCT. 2015
- **Sept. 22, 2015** — TRAMADOL HCL TAB 50 MG
- **Oct. 15, 2015** — TRAMADOL HCL TAB 50 MG
- **Oct. 20, 2015** — METHADONE HCL TAB 10 MG

NOV. 2015
- **Nov. 19, 2015** — METHADONE HCL TAB 10 MG
- **Nov. 30, 2015** — TRAMADOL HCL TAB 50 MG

DEC. 2015
- **Dec. 1, 2015** — HYDROCODONE- APAP TAB 7.5-325 MG
- **Dec. 15, 2015** — FENTANYL TD PATCH 72HR 25 MCG/HR

Notes from clinical review on buprenorphine/naloxone prior authorization
- Approve buprenorphine for six months – initial evaluation for opioid dependency.
- Prescriber is a qualified physician. Patient compliant with treatment plan and prescriber confirmed patient was not diverting medication.
- Monitored using state prescription drug monitoring program.

- **Dec. 31, 2015** — BUPRENORPHINE HCL SL TAB 8 MG

JAN. 2016
- **Jan. 15, 2016** — BUPRENORPHINE HCL SL TAB 8 MG

FEB. 2016
- **Feb. 5, 2016** — BUPRENORPHINE HCL SL TAB 8 MG

4085-D © Prime Therapeutics LLC 05/16
1305 Corporate Center Drive, Eagan, MN 55121
AMCP, April 2016, San Francisco, CA, USA

Catherine Starner, 800.858.0723, ext. 5073
cstarner@primetherapeutics.com

03002201-A