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Impact of a Pilot Outreach Program upon Provider Awareness and Prescribing of a Concerning Opioid Combination Regimen

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BACKGROUND

- From 2000 to 2014, the rate of overdose deaths involving opioids in the United States increased by 200%.[1] Between 1996 and 2013, the number of overdoses involving anxiety medications increased by 300%.[2]
- Drug utilization review within a large Medicaid population revealed the co-prescribing of opioids with benzodiazepines (BZDs), gabapentin, and stimulants was seen in over 500 members. The concomitant use of these agents is associated with numerous health risks, including additive central nervous system depression, potential for misuse and abuse, and overdose.[3]
- Given the safety concerns regarding the concomitant use of these medications, a telephonic prescriber outreach (TPO) program was developed to assess prescriber awareness about the concomitant use of these medications.

OBJECTIVES

- To evaluate prescriber awareness of the presence and risks of this medication combination among members under their care.
- To evaluate changes to members' regimens 180 days post-intervention and compare drug overdose/drug-related hospitalizations (OD/DRH) 180 days pre- and post-intervention.

METHODS

Pharmacy and medical claims histories for each Medicaid fee-for-service member that had paid claims for a combination of opioids, BZDs, gabapentin, and stimulants for ≥120 days during a 180-day period between March 1, 2015 and August 31, 2015 were included.

- **Pharmacy claims data evaluated included:**
  - Medication name, strength and days' supply
  - Calculated morphine equivalent dose per day (MED) of the opioid
- **Medical claims data evaluated included:**
  - Behavioral health, pain and substance use diagnoses, including substance use disorder (SUD)-related diagnoses
  - Medical services rendered for these diagnoses, including hospitalizations, emergency room visits, and office visits
- **Inclusion criteria:**
  - Age ≥18 years
  - Active coverage during study period
  - Continued combination treatment at the time of outreach
- **Exclusion criteria:**
  - Disruptions in Medicaid coverage, including the presence of third party insurance coverage during the study period
  - Pregnancy
  - Prescription filled for buprenorphine or buprenorphine/naloxone from the beginning of the study period to the time of TPO
- **TPO was conducted with each prescriber who prescribed any component of the regimen. Discussion focused upon:**
  - Prescriber awareness of the combination regimen (if not sole prescriber)
  - Safety concerns with the use of this combination of medications
  - Indications for use of each medication in the regimen
  - Potential for changing the regimen and alternative medications considered and/or prescribed
  - Rationale for chronic benzodiazepine use in the absence of an antidepressant for the management of anxiety
  - Pain Medicine or other specialist involvement
  - Future treatment plans

RESULTS

A total of 521 unique members had continuous pharmacy claims for ≥120 days of therapy with opioids, BZDs, gabapentin, and stimulants. Interruptions in Medicaid coverage and regimen changes were the most common reasons for exclusion. (Figure 1)

There were 64 unique prescribers (Figure 2) for the 39 unique members included in the study, resulting in contact with at least one prescriber for 32 of 39 members (82%).

Contact was achieved with 47 of 64 prescribers (73%).

Upon TPO, 36 of 47 prescribers contacted were aware of the member's entire regimen or were the sole prescriber (77%) and 12 prescribers were unaware of the member's entire regimen (26%). One prescriber was counted twice, as they were not aware of the combination regimen in all members under their care. (Figure 3)

Pharmacy claims analysis 180 days post-intervention revealed 14 of 32 (44%) members who had at least one prescriber contacted had a dose reduction or discontinuation of at least one targeted medication ("positive change"). (Figure 4)

There was a reduction in OD/DRH by one event from the pre-intervention to post-intervention period.

The majority of members were on opioids at MED <100 mg (56%), 8% of members were on MED 100 to 200 mg, and 13% of members were on MED >200 mg. The remaining 23% were taking tramadol, which was not converted to MED.

SUD diagnoses were relatively common, as 38% of members had a SUD diagnosis in their medical claims history.

Figure 1:
Study Population (Members)

Figure 2:
Prescriber Types (%)

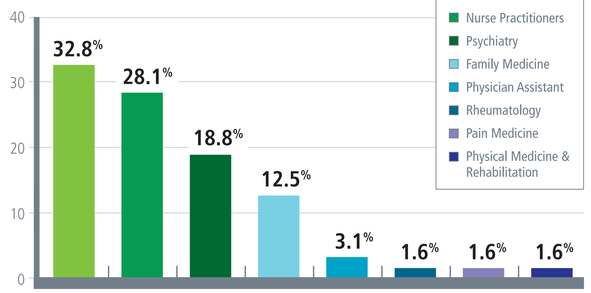
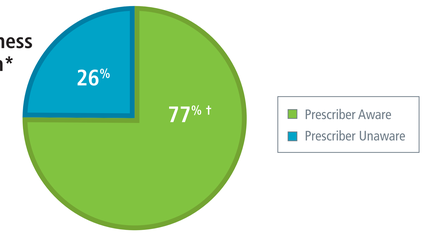
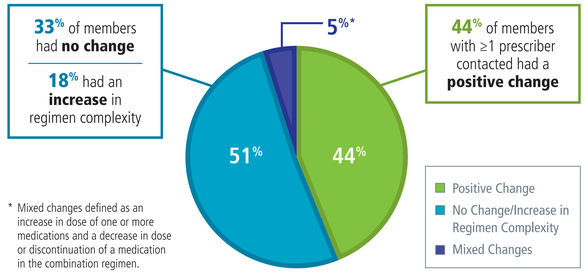


Figure 3:
Prescriber Awareness of Entire Regimen*



* Of prescribers with whom contact was achieved.
† 19% of prescribers were the sole prescriber for the entire regimen.

Figure 4:
Regimen Changes 180 Days Post-Intervention



* Mixed changes defined as an increase in dose of one or more medications and a decrease in dose or discontinuation of a medication in the combination regimen.

DISCUSSION

- A total of 44% of members had "positive changes" to their regimen 180 days post-intervention. There were 51% of members with no change or an increase in regimen complexity (i.e., dose increases or addition of another medication of concern), which included 33% of members overall with no changes 180 days post-intervention.
- Upon outreach, the most common reasons prescribers indicated they would not make changes to the combination regimen were stability on the regimen (38%) and lack of control over the prescribing abilities of other providers (24%).
- Sole prescribers were generally receptive to considering changes to the regimen after TPO, as 67% of these prescribers made "positive changes" to regimens 180 days post-intervention.
- While OD/DRH outcomes were not significantly reduced in the post-intervention period compared to the pre-intervention period, a TPO program may represent a value for managed care organizations by increasing prescriber awareness of medication regimens, which may represent a health risk for members. Outreach programs may also benefit from TPO occurring earlier in the course of a member receiving a concerning combination of medications to limit the amount of members that are "stabilized" on such a regimen.

LIMITATIONS

- The sample size was relatively small which may limit the generalizability of the results.
- Pharmacy claims are not necessarily indicative of the way medications are utilized.
- Members may have been excluded from the study if out-of-pocket payments were made as investigators did not have access to the prescription monitoring program; therefore, the true sample size for this Medicaid population may be underestimated.
- Not all prescribers were successfully contacted, often due to inaccurate workplace listings or contact numbers.
- SUD diagnoses were derived from billed medical claims which are occasionally prone to coding errors. This could have resulted in overestimation of SUD diagnoses in this population.

CONCLUSIONS

- The TPO program alerted 26% of prescribers contacted that the member was on the targeted medication combination.
- Although over 40% of members who had at least one prescriber contacted had a "positive change" in their regimen, there was no change in OD/DRH outcomes.
- Further study in a larger sample size is warranted to assess the impact of improving awareness of the concerning combination of opioids, BZDs, gabapentin, and stimulants upon OD/DRH outcomes, including the use of additional interventions.

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DISCLOSURES/ACKNOWLEDGMENTS

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