



## Case Study

### The proactive review of prescription drug monitoring databases by pharmacists leads to increased member safety and cost savings

#### THE PROBLEM

One of the most dangerous drug therapies is the combination of (1) an opioid, (2) a benzodiazepine, commonly used to treat anxiety or seizures, and (3) a muscle relaxant, commonly dubbed the “Holy Trinity” or “Houston Cocktail.” If a member is to take all three of these drugs, the presence of the second and third drugs will intensify the effects of the already risky opioid, as well as increase the potential for overdose symptoms from respiratory depression.

Although the Drug Enforcement Administration (DEA) urges pharmacies against dispensing this combination, there are no laws or regulations to ensure it is prevented. In addition to the risks, the DEA has stated that there is no medical benefit of using this drug combination.

Because the combination can potentiate an opioid’s euphoric effects, it is often sought by those who are actively abusing opioids, sometimes from multiple prescribers. However, it is possible that a member is unaware of the combination’s effects and is taking it unintentionally. Some prescribers do not know much about the combination or its risk, so one or more prescribers may be prescribing each of the medications to the same member for separate reasons, unaware of the drug interaction occurring.

When Serve You DirectRx Pharmacy received a controlled substance prescription, one of our pharmacists reviewed the prescription drug monitoring program (PDMP) database and found that the member was prescribed all of the components of this dangerous combination, including:

- Fentanyl patches, a long-acting opioid used to give steady pain relief over a long period of time;
- Oxycodone, a short-acting opioid used for breakthrough pain;
- Clonazepam, a benzodiazepine; and
- Carisoprodol, a muscle relaxant.

The member’s drug therapy was especially risky because she was prescribed two different opioids. The biggest fear when a member is prescribed this combination is respiratory depression, where a member’s breathing is slowed or becomes irregular to the point where they are no longer receiving the amount of oxygen required for the body to function properly. This is the usual cause of opioid overdose-related deaths. In addition to the benzodiazepine and muscle relaxant increasing the effectiveness of the opioid, they can also increase sedation, which can cause extreme sleepiness to the point where the user is unable to be woken up.

#### ACTION TAKEN

Serve You DirectRx Pharmacy was dispensing the fentanyl patch and oxycodone to the member, but the PDMP database revealed that she was receiving the carisoprodol and clonazepam from a retail pharmacy, all four written by the same prescriber. The pharmacist called the prescriber to alert her of the combination prescribed and educate her about the risks, as well as to provide Serve You Rx’s reasoning as to why this combination should not be utilized. In this case, the prescriber agreed that the therapy was unnecessary and risky for the member. The prescriber decided to continue the member on the two opioids, but to slowly taper her off of the benzodiazepine and muscle relaxant. An abrupt stop was avoided to reduce the risk of withdrawal effects.

## **OUTCOME**

There are many positive outcomes associated with the decision reached for both the member and the plan. Most importantly, the risk of an opioid overdose had been decreased, which was crucial for the member's health and safety. The member and plan both saved money by no longer having to pay for the benzodiazepine and muscle relaxant. The reduced risk of an opioid overdose also decreased the potential of having to pay for hospital costs and opioid reversal agents, such as Naloxone. Additionally, Serve You Rx helped educate the member and prescriber about the dangers of the drug interaction, which has hopefully aided in reduced prescribing of the combination. Although PDMP review is not mandated by law in many states, Serve You Rx pharmacists review the information available on the databases as frequently as possible to avoid excessive and dangerous therapies in an attempt to ensure member safety, which ultimately also lowers costs.