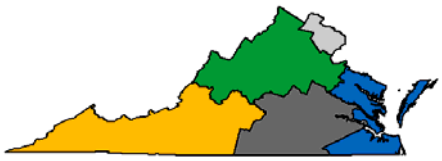
VIRGINIA PRESCRIPTION MONITORING PROGRAM

QUARTERLY REPORT

January 1-March 31, 2019



THE Virginia Prescription Monitoring Program (PMP) is a 24/7 database containing information on dispensed Schedule II-V prescriptions, naloxone, drugs of concern, and cannabidiol oil or THC-A oil from an in state pharmaceutical processor. The primary purpose of the PMP is to promote safe prescribing and dispensing practices for covered substances by providing timely and essential information to healthcare providers. The law governing Virginia's PMP is found in *Code of Virginia* §54.1-25.2 and applicable regulations at 18VAC76-20.

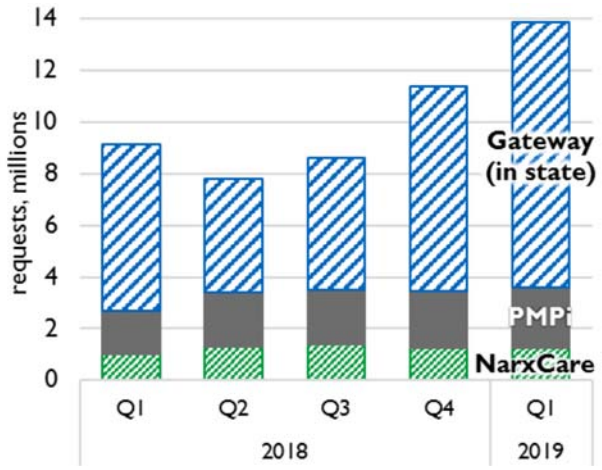
Key Findings for the First Quarter (2019Q1)

- Utilization of the PMP by prescribers, pharmacists, and their delegates as a risk management tool has increased steadily over time. Enhancements to PMP are ongoing and improvements to ease of use have contributed positively to overall utilization. Compared to the previous quarter, requests for a patient's prescription history increased by 22%, from 11,401,441 to 13,873,502.
- Prescribers conducted 1,418,771 PMP requests before issuing a new opioid or benzodiazepine prescription this quarter. This was an increase of 13% from the previous quarter and 78% since 2018Q1.
- Over six percent of Virginians, or 537,967 residents, received an opioid prescription.
- Through this period, 30,528 prescribers wrote at least one prescription for an opioid medication dispensed by a Virginia-licensed pharmacy.
- Long acting or extended-release opioids put patients at greater risk of respiratory depression and overdose compared to immediate-release. Patients who have not taken an opioid medication within the previous 45 days, referred to as opioid naïve, are at particularly high risk of overdose from these types of opioids. Of the 53,802 patients prescribed long acting/extended-release opioids, 5,449 or 10% were opioid naïve.

Database Utilization

Authorized users of the PMP are able to search within the database for a patient's prescription history; each search is referred to as a request. There are three types of requests: NarxCare (previously AWARxE), interoperability (PMPi), and integration (Gateway). NarxCare requests are those that are submitted via the web-based application. PMPi facilitates interoperability and interstate data sharing among states' PMPs. Gateway integrates PMP data into electronic health records and is viewable within the clinical workflow. Integration within the workflow is a significant advancement in ease of use and efficiency and has contributed positively to increasing utilization. In 2019Q1, total requests increased by 22% over the previous quarter and 52% since 2018Q1. Quarterly Gateway integration requests exceeded 10 million for the first time.

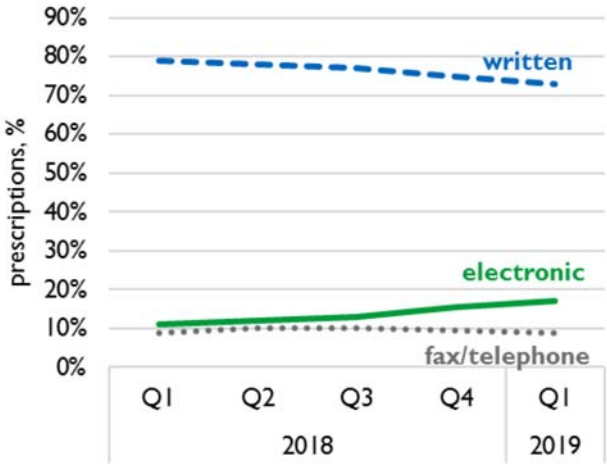
Prescription history requests by type, January 2018-March 2019



Electronic Prescribing for Opioids

Pursuant to *Code of Virginia* § 54.1-3408.02, beginning July 1, 2020 any prescription containing an opioid must be transmitted electronically (e-prescribing) from the prescriber to the dispenser. Currently, prescriptions for Schedule II controlled substances (opioids, stimulants) must be written (§ 54.1-3410) or electronic. Though the percentage of opioid prescriptions transmitted electronically is gradually increasing, only 17% (among prescriptions with a mode of transmission reported) were electronic in 2019Q1. By comparison, 55% of gabapentin prescriptions are transmitted electronically. Because gabapentin is not classified as a controlled substance, the electronic transmission of gabapentin is not subject to the same technological security standards applicable to opioids. While many practitioners are using e-prescribing, fewer are able to e-prescribe controlled substances.

Opioid prescriptions by transmission type, January 2018-March 2019



Multiple Provider Episodes for Opioids

Multiple provider episodes (MPEs), defined as five or more prescribers and five or more pharmacies in a six month period, can be an indicator of doctor shopping and/or

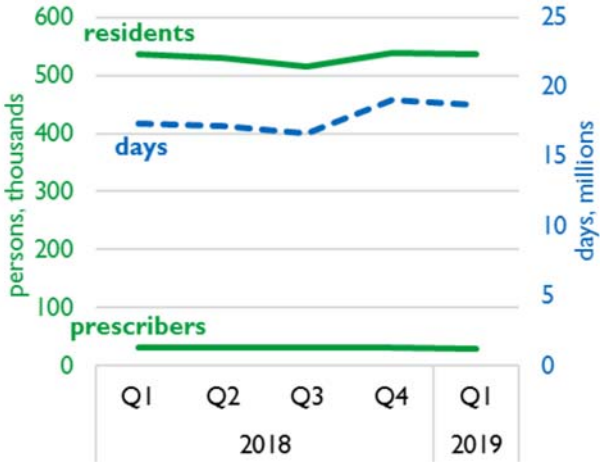
inadequate care coordination. MPEs occurred at a rate of 8.6 per 100,000 residents throughout the quarter. This rate remained stable throughout 2018 to present.

Opioid Prescriptions

The Virginia PMP recorded 537,967 Virginia residents received an opioid prescription in 2019Q1 from 30,528 prescribers. Both the number of residents and prescribers has remained stable.

The Virginia PMP recorded 18,738,843 opioid prescription days for commonwealth residents during 2019Q1. This is a decrease of 2% from the previous quarter but an 8% increase since 2018Q1. Prescription days or days' supply refers to the number of days of medication prescribed. This quantity is enough for every Virginia resident to have a two day supply of opioid medications.

Opioid prescriptions for Virginia residents, January 2018-March 2019

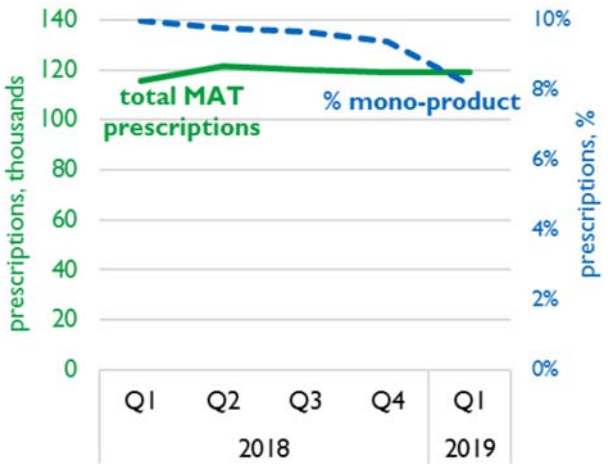


Morphine milligram equivalent (MME) is a way to calculate the total amount of opioids and account for differences in opioid drug type and strength. As MME increases, overdose risk increases. The Centers for Disease Control and Prevention (CDC) guidelines specify that dosages of 90 MME per day or greater should be avoided due to risk for fatal overdose. Among Virginians receiving opioid prescriptions, 7% of patients had an average dose at or above 90 MME per day. The average MME per day for state residents was 43. Buprenorphine used to treat opioid dependence or addiction is excluded.

Buprenorphine for Opioid Use Disorder

Medication-assisted treatment (MAT) is the use of medications, like buprenorphine, in combination with counseling and behavioral therapies to treat opioid use disorders and prevent opioid overdose. Increasing numbers of buprenorphine prescriptions in general indicates increased treatment usage (3% since 2018Q1); however buprenorphine without naloxone (mono-product buprenorphine) may be abused. Therefore, the pronounced decline in mono-product buprenorphine prescriptions (16% since 2018Q1) indicates improved prescribing practices.

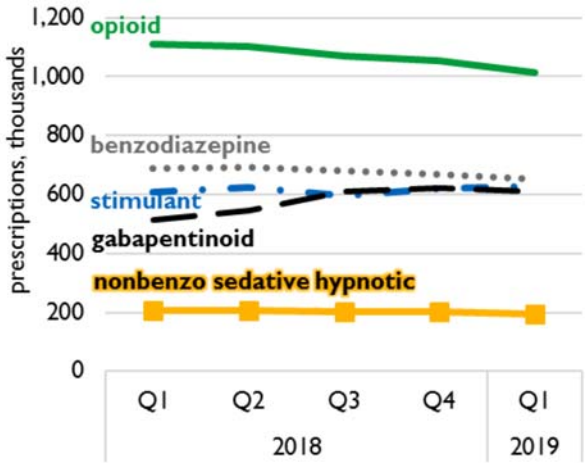
Buprenorphine prescribing for MAT, January 2018-March 2019



Drug Class

Five drug classes (opioid, benzodiazepine, stimulant, gabapentinoid, and nonbenzodiazepine sedative hypnotics) represent 89% of all dispensations reported to PMP in 2019Q1. Nonbenzodiazepine sedative hypnotics are sleeping medications such as zolpidem (Ambien®). Prescriptions for stimulants and gabapentinoids increased in 2019Q1 compared to the same quarter in 2018 by 3% and 19%, respectively. In contrast, benzodiazepine (5%), nonbenzodiazepine sedative hypnotics (6%), and opioid (9%) prescriptions each decreased.

Prescriptions dispensed by drug class, January 2018-March 2019



Methods, Considerations, and Limitations

This quarterly report represents a snapshot of data as of May 15, 2019. The PMP relies on pharmacies and other dispensers to submit accurate, timely information. Dispensers can correct or submit post-dated data at any time; therefore, PMP data is expected to change. Components of this report may not be comparable to previous publications due to case definition revisions or reporting artifacts. Quarters referenced are based upon the calendar year.

Please direct questions concerning this report to pmp@dhp.virginia.gov.