

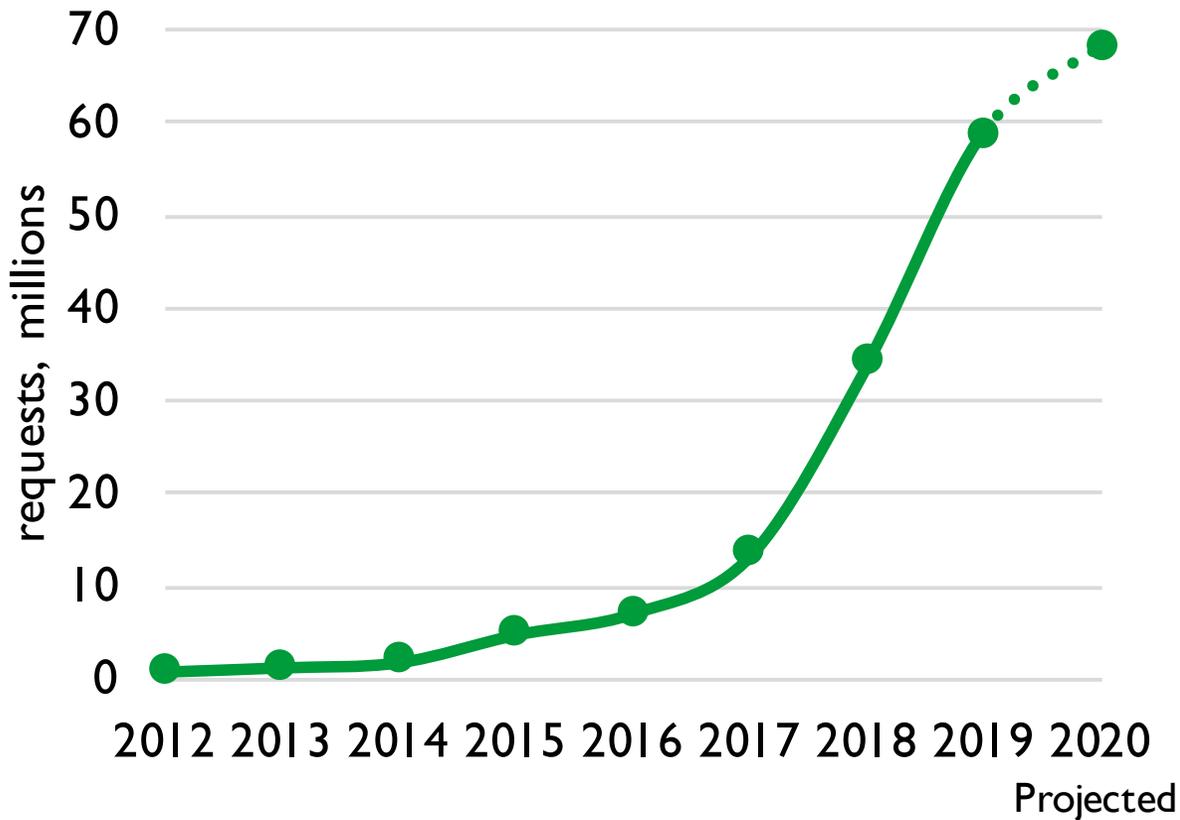
Quarterly Report January 1-March 31, 2020 2020Q1

Virginia Prescription Monitoring Program

Key Findings for the Fourth Quarter (2020Q I)

- Enhancements to the PMP are ongoing and improvements to ease of use have contributed positively to overall utilization. Requests for a patient's prescription history exceed 17 million and rose 4% since the previous quarter.
- Prescribers queried the patient's prescription history before issuing 1,994,746 new opioid or benzodiazepine prescriptions this quarter. This was an increase of 7% from the previous quarter and 41% since 2019Q I.
- Through this period, 29,438 prescribers wrote at least one prescription for an opioid medication dispensed by a Virginia-licensed pharmacy (unchanged).
- Over five percent of Virginians, or 439,218 residents, received an opioid prescription. This excludes individuals who received buprenorphine products.

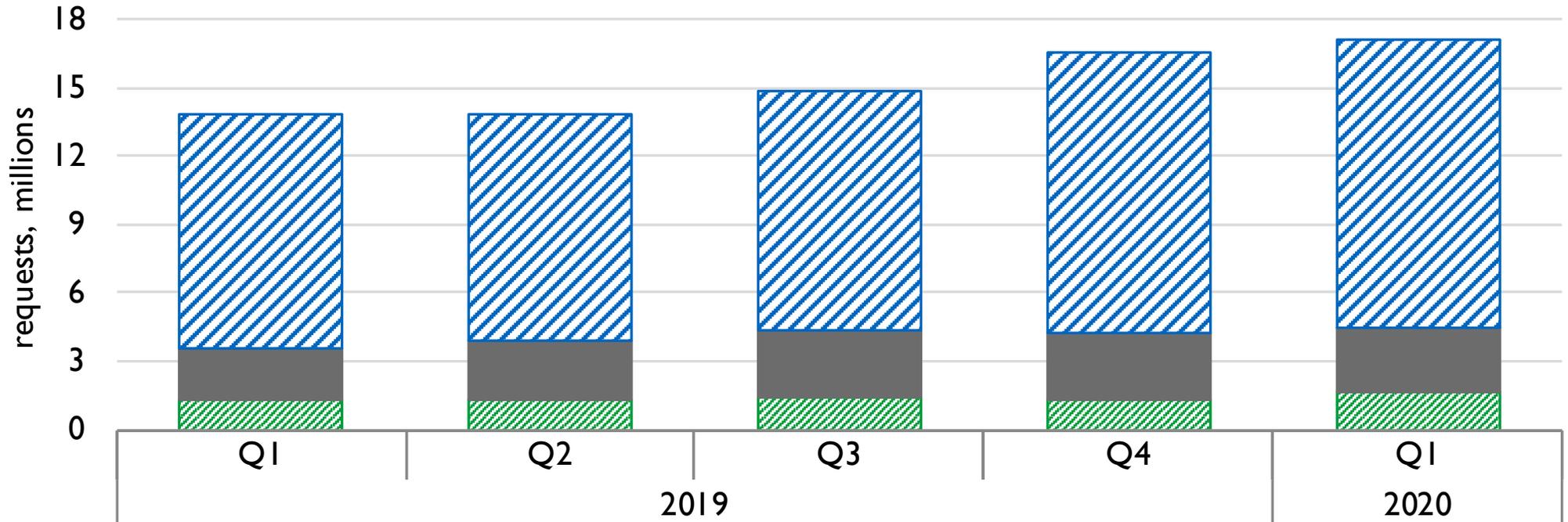
Increasing PMP utilization



- Requests for a patient's prescription history grow exponentially each year
- Increased 24% in 2020Q1 compared to 2019Q1 and 4% from the previous quarter
- Rapid rise in utilization of the PMP is primarily the result of expansions in integration within the electronic health record and pharmacy software applications
 - 74% of total requests are through an integrated application

Increasing PMP utilization

Prescription history requests by type, 2019Q1-2020Q1



Gateway (in state)	10,293,612	9,838,711	10,512,500	12,360,177	12,656,690
PMPi	2,304,254	2,631,224	2,997,430	2,833,550	2,873,530
NarxCare	1,275,636	1,332,175	1,396,875	1,359,457	1,614,970

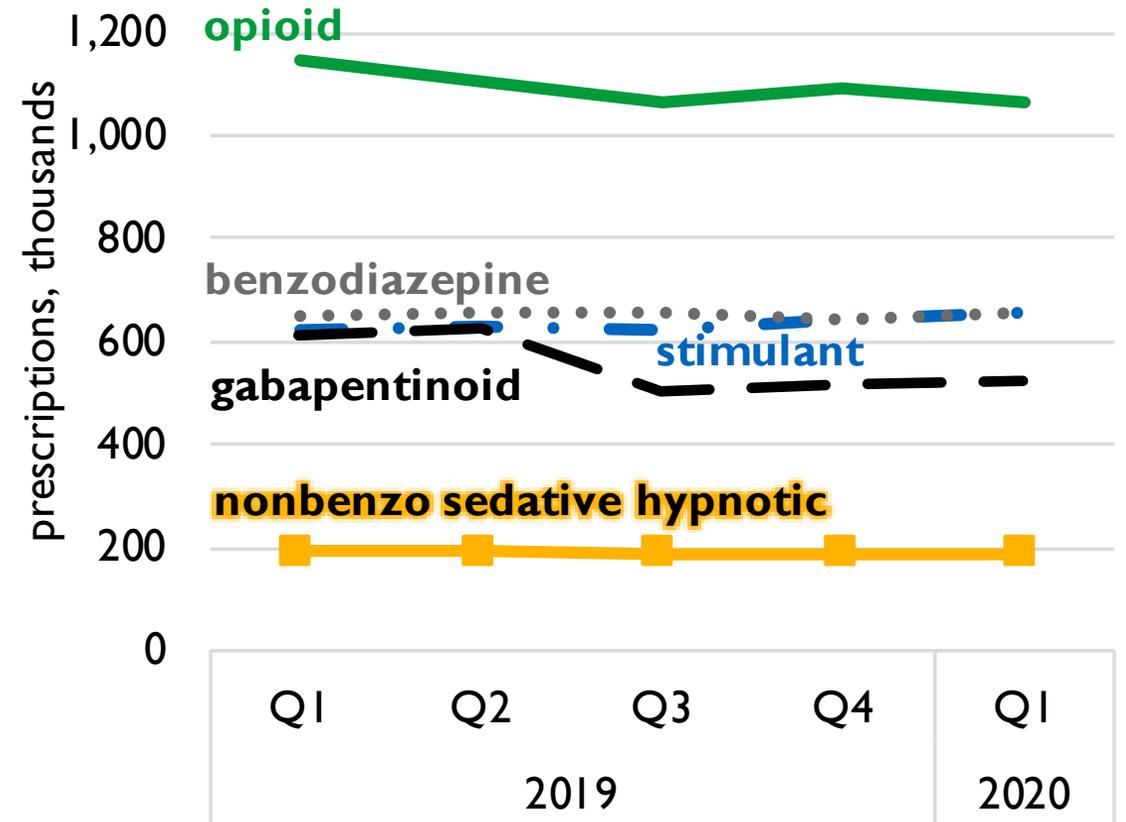
- Gateway: integrates PMP data within health record clinical workflow
- NarxCare (previously AWA Rx E): web-based application
- PMPi: interoperability among states' PMPs

Drug class

Percent change by drug class 2019Q1-2020Q1

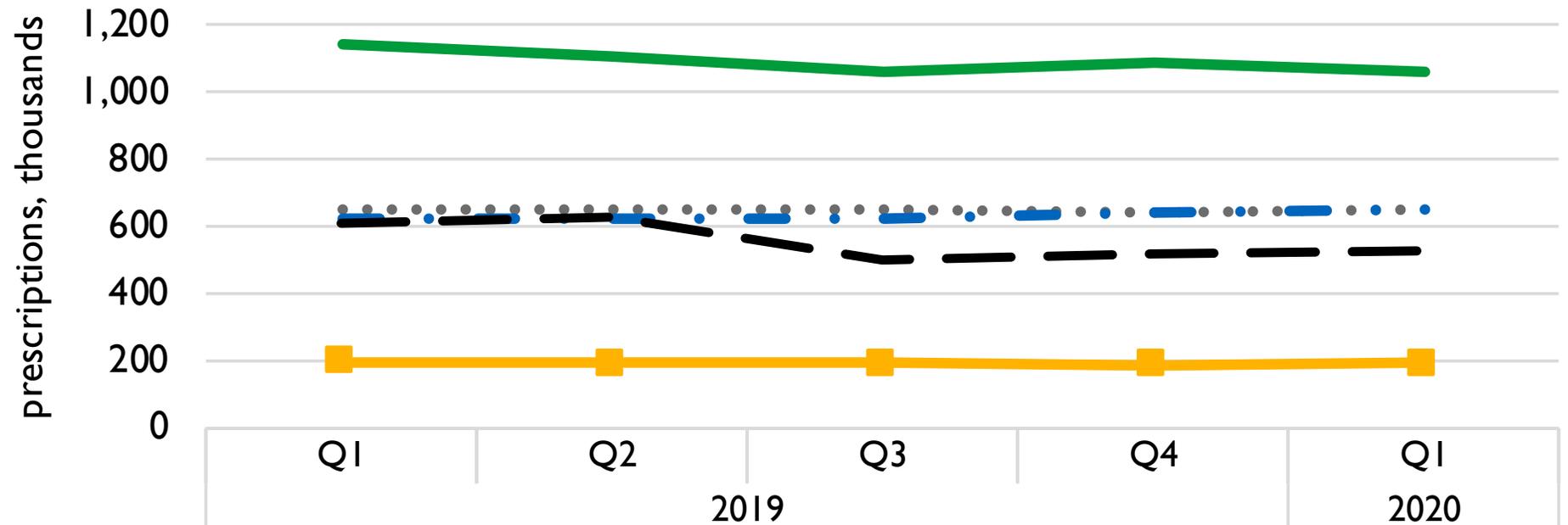
Opioid*	↓ 9%
Benzodiazepine	no change
Stimulant	↑ 5%
Gabapentinoid	↑ 1%
Nonbenzo sedative hypnotics	↓ 2%

Prescriptions dispensed by drug class, 2019Q1-2020Q1



*All opioids, including drugs not typically used in outpatient settings or otherwise not critical for calculating dosages in MME, such as cough and cold formulas including elixirs, and combination products containing antitussives, decongestants, antihistamines, and expectorants; opiate partial agonists (e.g., buprenorphine) is excluded

Prescriptions dispensed by drug class, 2019Q1-2020Q1



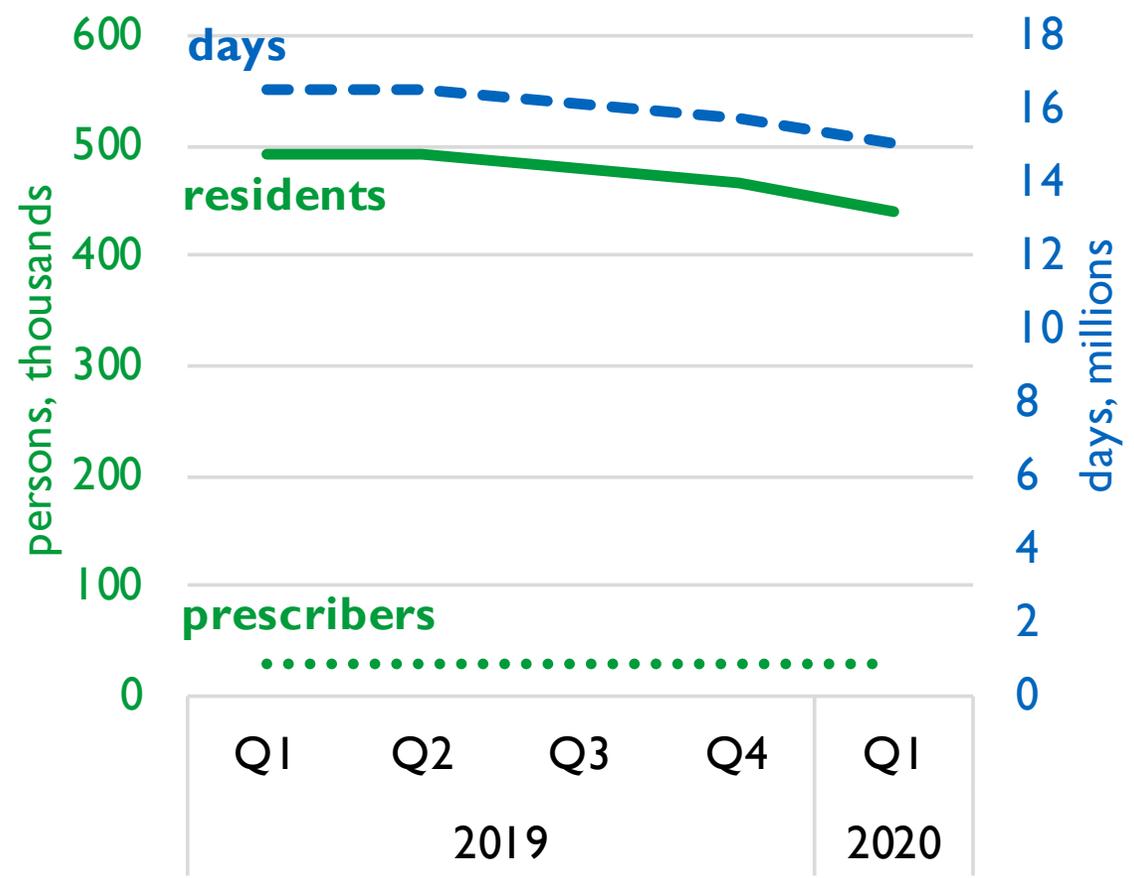
	Q1	Q2	Q3	Q4	Q1
	2019				2020
— opioid	1,143,469	1,103,293	1,064,619	1,089,898	1,065,206
•••• benzodiazepine	652,621	654,493	654,057	643,239	654,955
—• stimulant	624,121	627,412	619,779	641,573	654,359
— gabapentinoid	612,037	623,280	502,199	520,480	526,641
—■ nonbenzo sedative hypnotic	194,179	191,287	190,267	188,852	189,704

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Opioid prescriptions

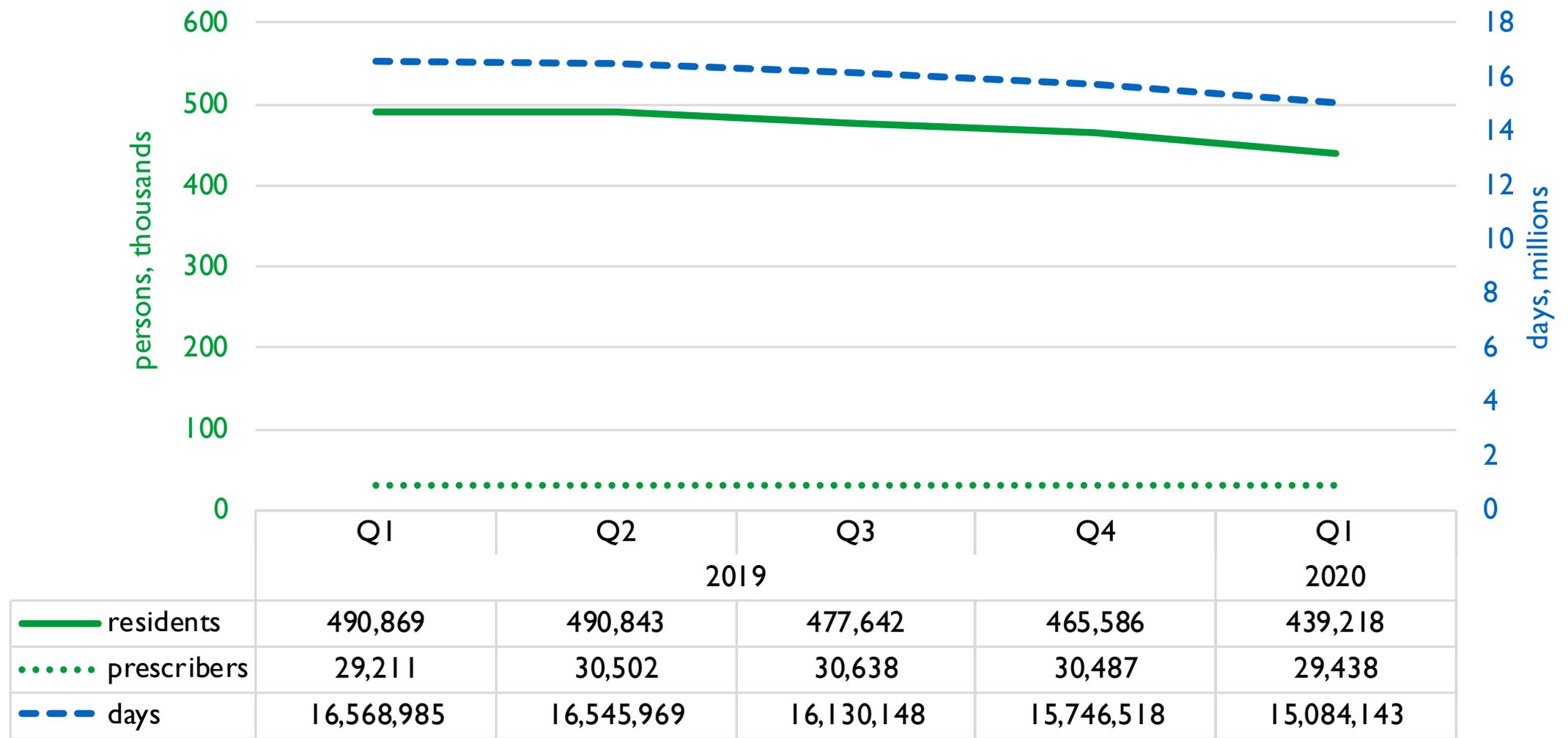
- 439,218 Virginia residents received an opioid prescription in 2020Q1 from 29,438 unique prescribers
- 15,084,143 opioid prescription days for commonwealth residents during 2020Q1
- Prescription days or days' supply refers to the number of days of medication prescribed

Opioid prescriptions for Virginia residents, 2019Q1-2020Q1



*CDC-defined opioids, excludes: 1) drugs not typically used in outpatient settings or otherwise not critical for calculating dosages in MME, such as cough and cold formulas including elixirs, and combination products containing antitussives, decongestants, antihistamines, and expectorants; 2) opiate partial agonists (e.g., buprenorphine)

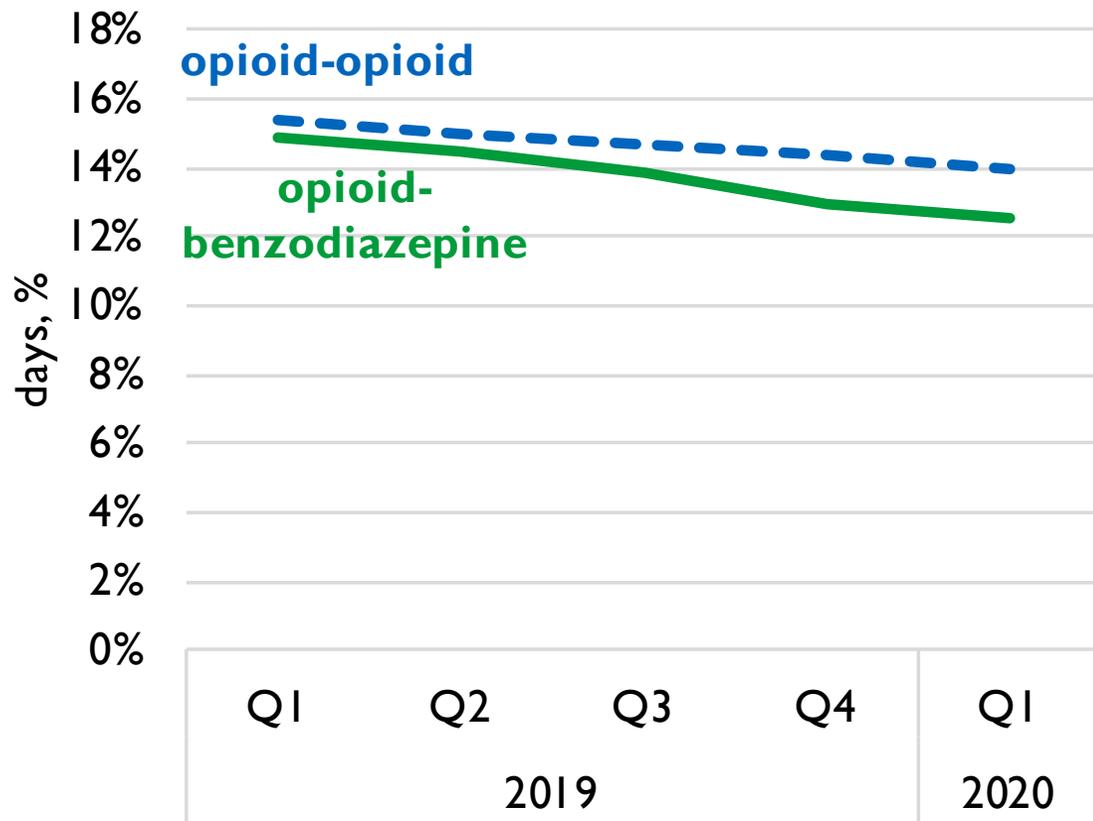
Opioid prescriptions



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Overlapping prescriptions

Overlapping opioid and opioid-benzodiazepine prescription days, 2019Q1-2020Q1



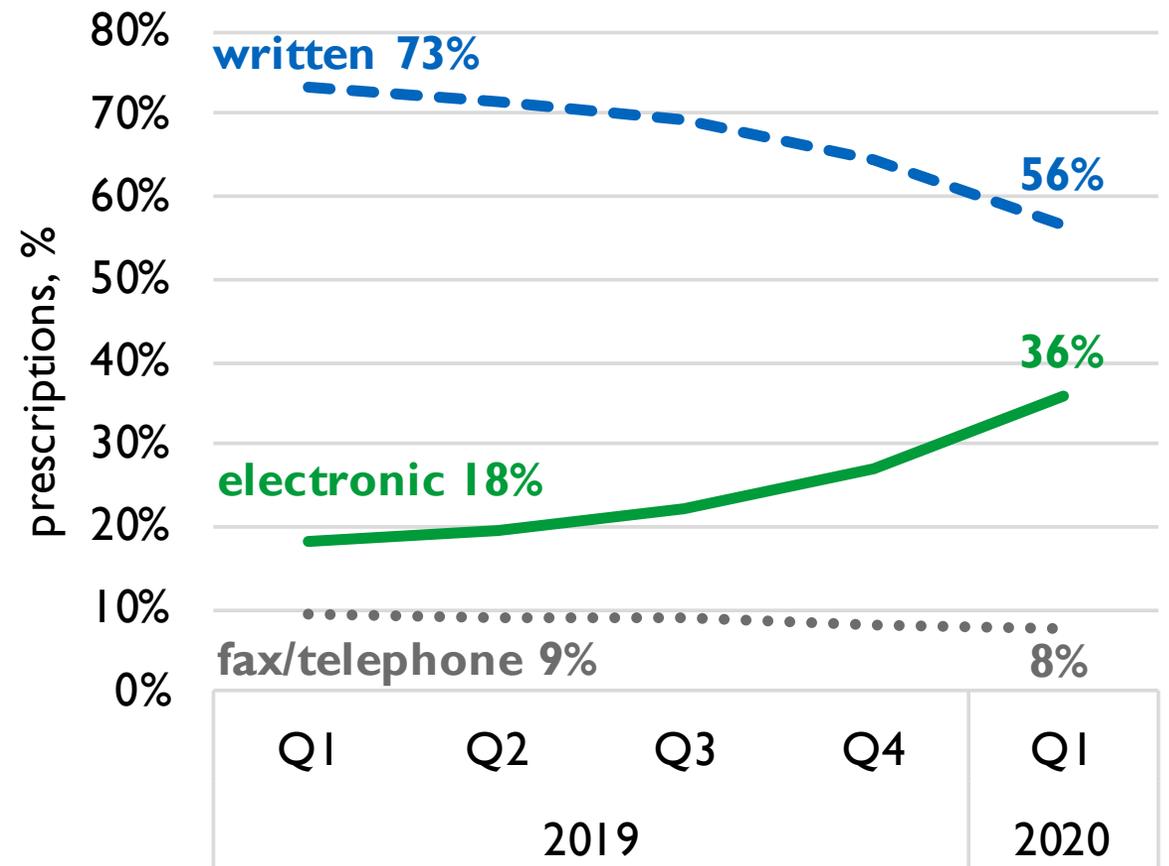
- Overlapping **opioid** prescriptions, which increase a patient's MME, and concurrent **opioid and benzodiazepine** prescribing increases the risk of overdose
- **Opioid-benzo** days decreased from 15% to 13% since 2019Q1
- Trend in **opioid-opioid** days decreased minimally from 15% to 14% since 2019Q1

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Electronic prescribing for opioids

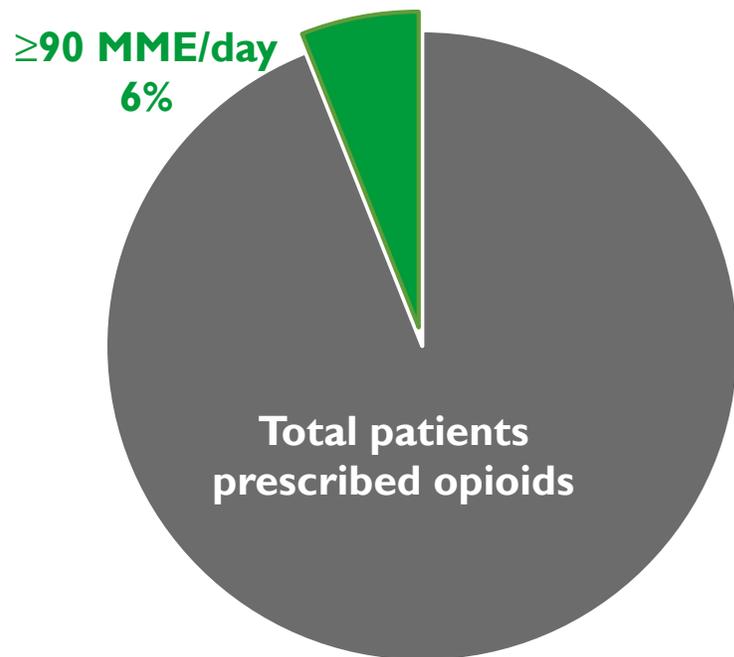
- Beginning July 1, 2020 any prescription containing an opioid must be transmitted electronically from the prescriber to the dispenser (*Code of Virginia § 54.1-3408.02*)
- 36% of opioid prescriptions were **electronic** in 2020Q1
 - Doubled since 2019Q1

Opioid prescriptions by transmission type, 2019Q1-2020Q1



Patients receiving ≥ 90 MME/day

Patients receiving ≥ 90 MME/day, 2020Q1



- Morphine milligram equivalent (MME) allows comparison between the strength of different types of opioids
 - CDC guidelines specify dosages of ≥ 90 /day should be avoided due to risk for fatal overdose
- 6% of opioid prescription recipients had an average dose ≥ 90 MME/day (2020Q1)

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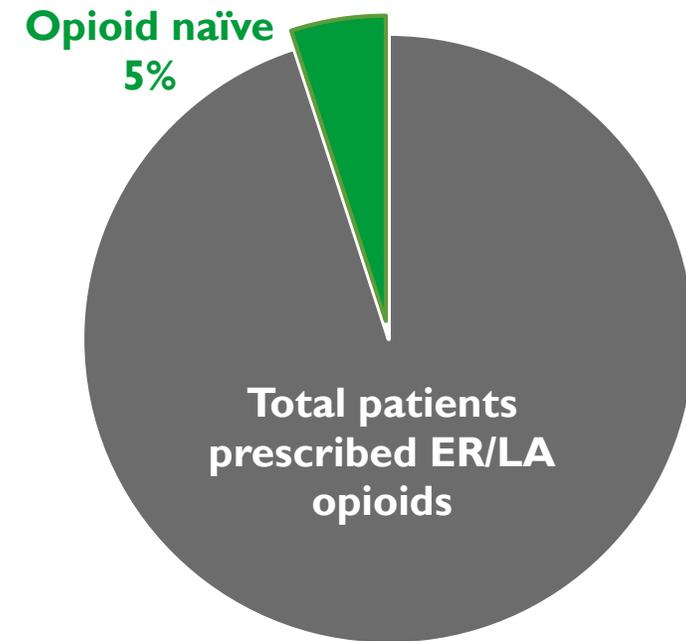
Reference: Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016. MMWR Recomm Rep 2016;65(No. RR-1):1–49.

DOI: <http://dx.doi.org/10.15585/mmwr.rr6501e1>

Opioid naïve patients receiving ER/LA opioids

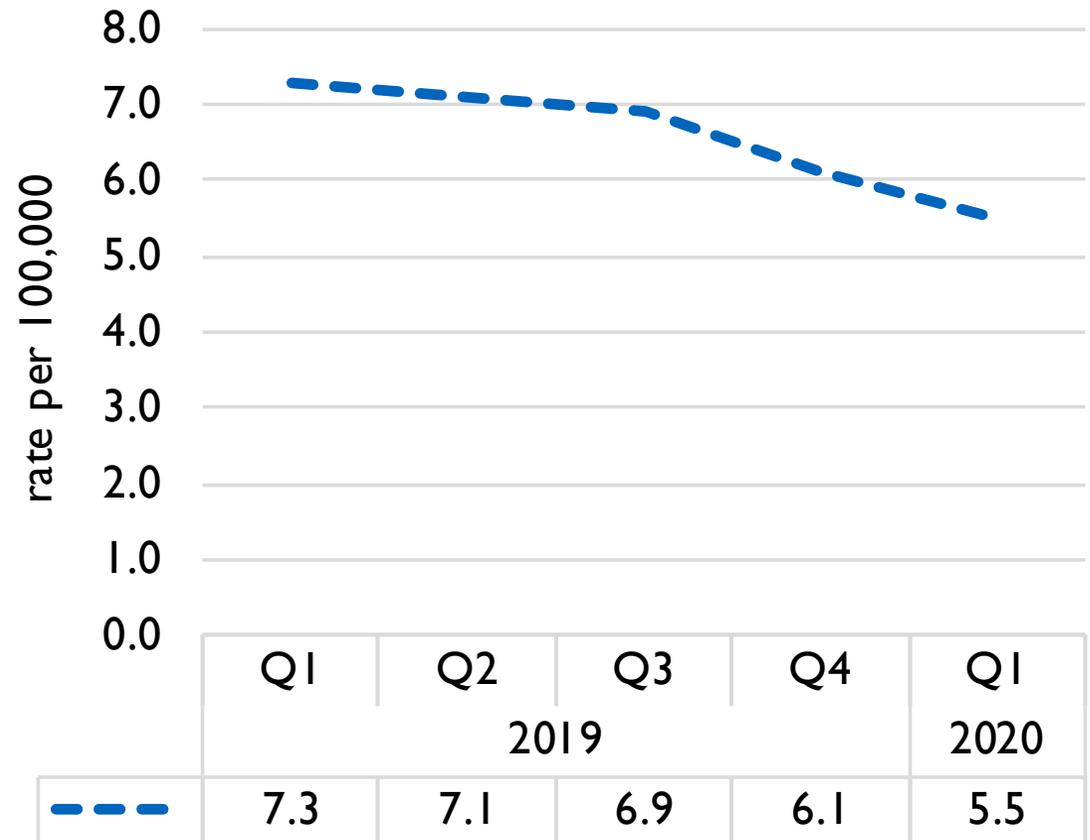
- Extended-release or long acting (ER/LA) opioids put patients at greater risk of respiratory depression and overdose compared to immediate-release (IR)
 - Opioid naïve patients are at particularly high risk of overdose from ER/LA opioids
- Opioid naïve refers to patients who have not taken an opioid medication within the previous 45 days

Opioid naïve patients receiving ER/LA opioids, 2020Q1



Multiple provider episodes for opioids

- ≥ 5 prescribers and ≥ 5 pharmacies in a 6 month period
- Can be an indicator of doctor shopping and/or inadequate care coordination
- Dropped from 7.3 to 5.5 per 100,000 residents in since 2019Q1



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Opioid prescriptions exceeding 120 MME/day

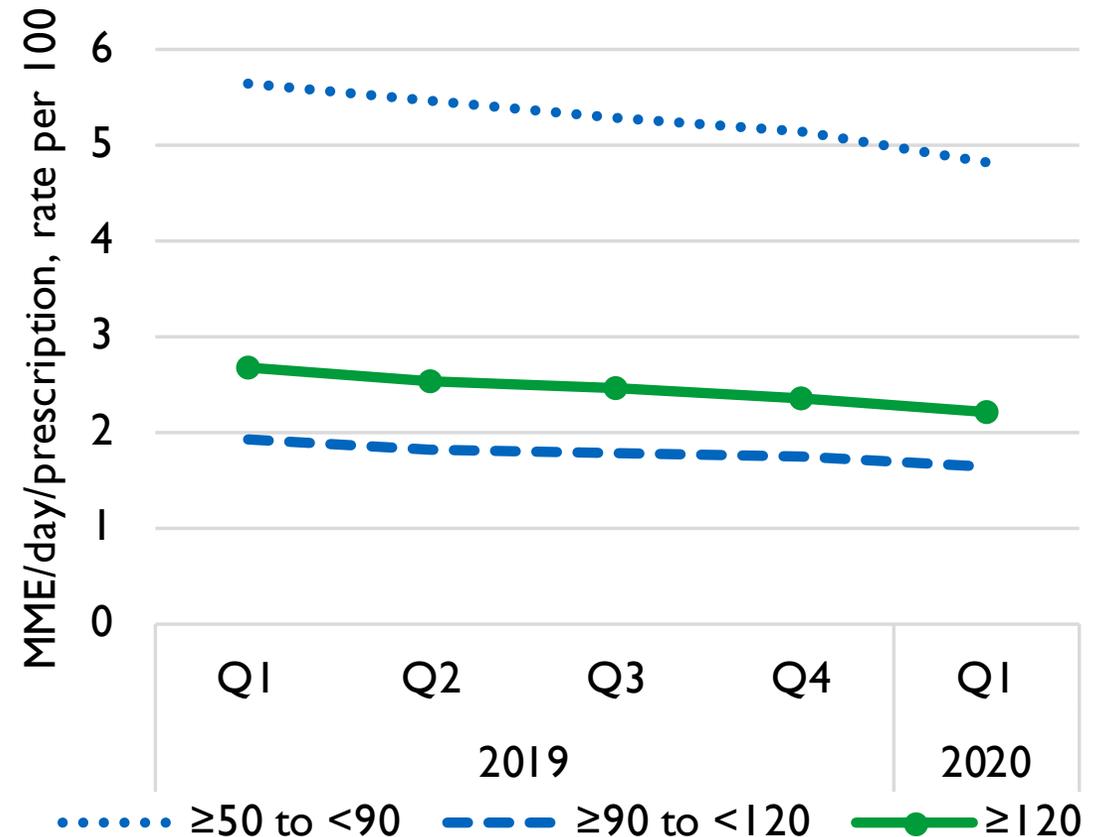
- *Regulations Governing Prescribing of Opioids and Buprenorphine (18VAC85-21-70)*

- Specific requirements of prescribers if exceeding 120 MME/d

- % change, 2019Q1-2020Q1

.....	≥50 to <90	-15%
----	≥90 to <120	-14%
—●—	≥120	-17%

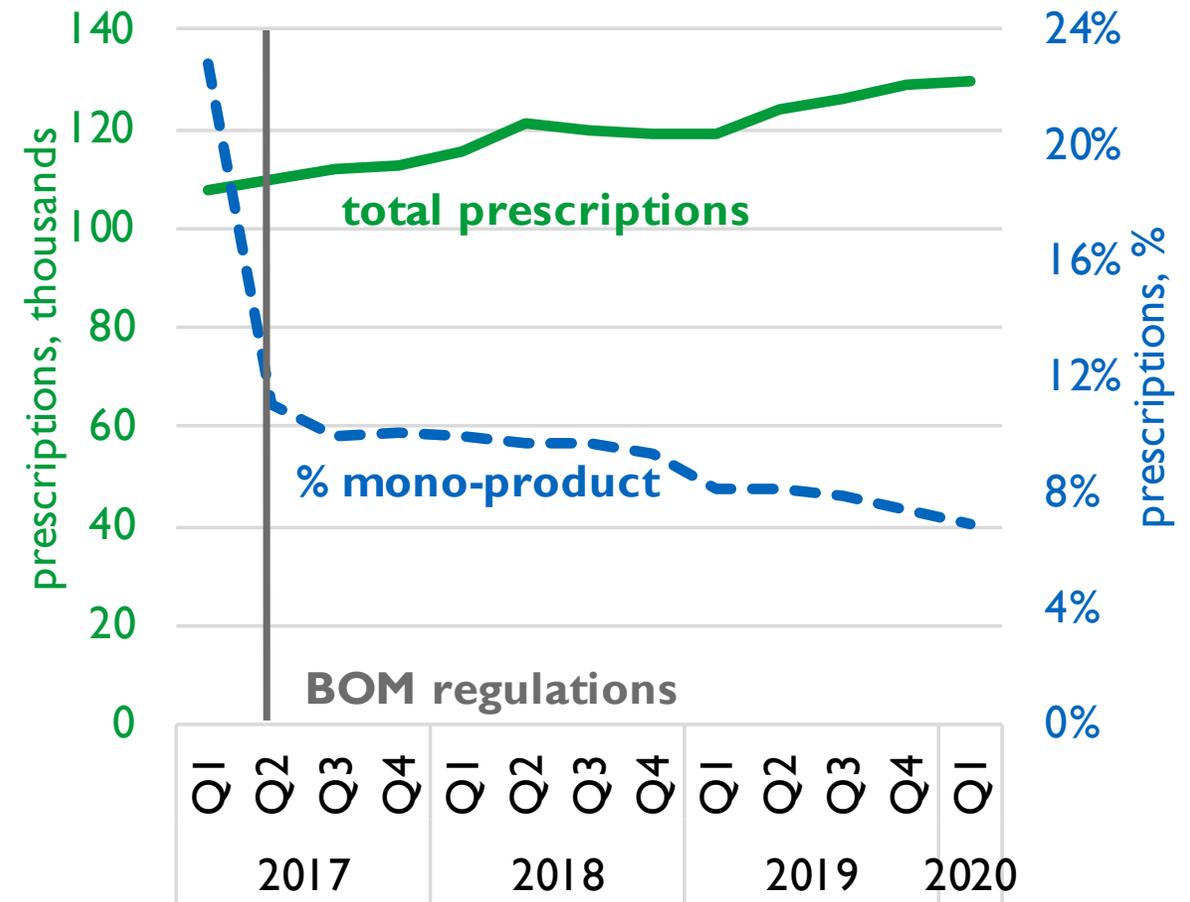
Opioid prescriptions by MME/day, 2019Q1-2020Q1



Buprenorphine

- *Regulations Governing Prescribing of Opioids and Buprenorphine (18VAC85-21-10, effective March 2017)*
 - Limited prescribing buprenorphine without naloxone (mono-product) for opioid use disorder (OUD)
- Buprenorphine is an opiate receptor partial agonist
- Immediate decline in mono-product prescriptions that has since stabilized (7% in 2020Q1)

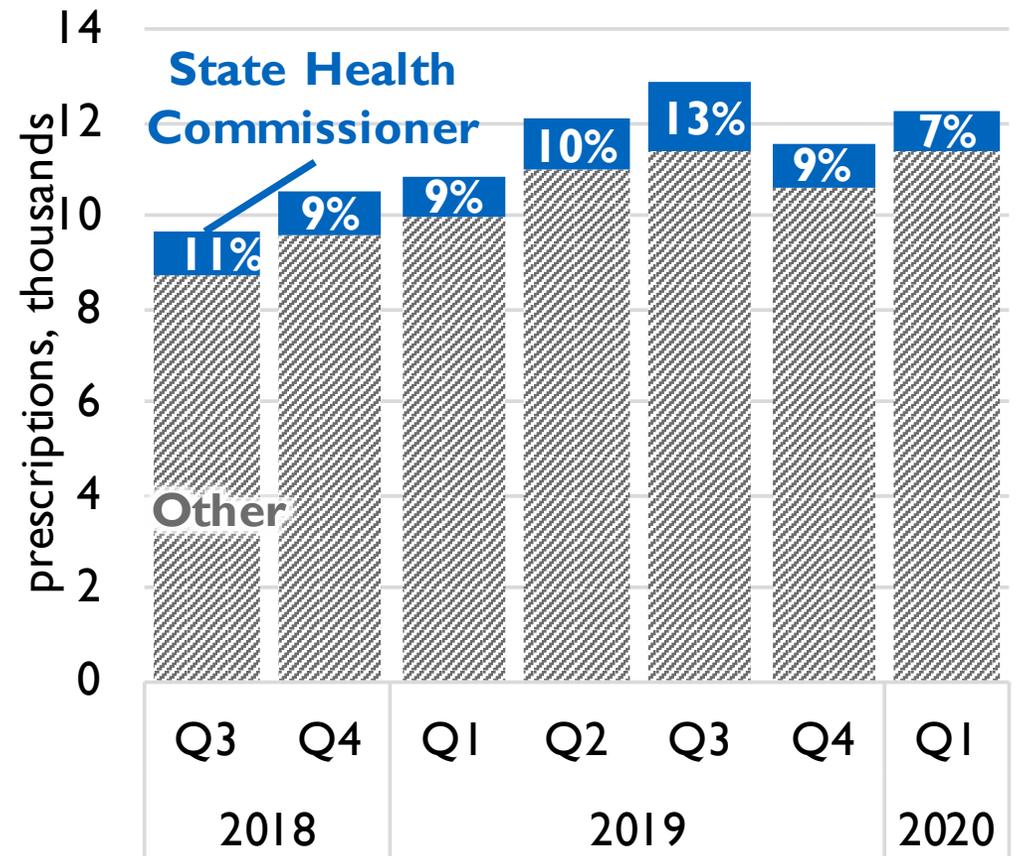
Buprenorphine prescribing for OUD, 2017Q1-2020Q1



Naloxone

- State Health Commissioner's standing order authorizes Virginia pharmacies to dispense naloxone without a prescription
- 7% of total dispensations in 2020Q1 were dispensed using the standing order
- Naloxone became reportable to PMP as of July 1, 2018
 - Narcan[®] accounts for 98% of total naloxone dispensations

Naloxone prescriptions dispensed in pharmacies by prescriber, 2018Q3-2020Q1





Technical notes

- Covered substances
 - Schedule II-V medications, naloxone
 - Gabapentin is a Schedule V in Virginia
 - Cannabidiol and THC-A oils from in state pharmaceutical processor
- 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.
- Quarters referenced are based upon the calendar year.
- Buprenorphine is an opiate receptor partial agonist and is excluded from the opiate receptor full agonist analyses (i.e., “opioid”)
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<https://virginia.pmpaware.net/login>