

## Overview

Every day in the United States an estimated 115 people die from an opioid overdose – quadrupling the rate observed in 1999.<sup>1</sup> In Virginia, fatalities from opioid overdoses more than doubled from 2011 to 2017.<sup>2</sup> Although use of heroin and other illicit opiates are responsible for much of the recent increase in overdoses, both federal and state governments have taken a number of actions to reduce opioid prescribing, including more stringent guidelines and limits on prescribing.

Efforts to decrease prescribing of members enrolled in Medicaid are especially important since they are four times more likely than people with private insurance to have ever used heroin or been dependent on pain relievers.<sup>3</sup> Opioid prescribing rates are substantially higher among members enrolled in Medicaid compared to privately insured patients.<sup>4</sup>

This brief examines trends in prescribing of opioid pain medications to Virginia Medicaid members since 2012.

## Key Findings

- The average number of days supplied for opioid pain medications for Virginia Medicaid members declined sharply after 2016, after the state took significant action to limit opioid prescribing.
- There is substantial regional variations in opioid prescribing rates, with the highest rates in far Southwest Virginia.
- While downward trends in prescribing are seen across most chronic conditions, rates remain highest for patients with musculoskeletal conditions, mental health disorders, and diseases of the nervous system.

## Key Actions to Limit Opioid Prescribing Practices

- **January 2016:** All new pharmacists and prescribers in Virginia are automatically enrolled in the Prescription Monitoring Program for schedule II-IV drugs.
- **March 2016:** The Center for Disease Control (CDC) issues a voluntary set of guidelines for providers to consider when prescribing an opioid for chronic pain.
- **November 2016:** The governor and state health commissioner in Virginia declare the opioid abuse epidemic a public health emergency.
- **March 2017:** The Virginia Board of Medicine issues regulations based on CDC guidelines that limit opioid prescriptions to 7 days for acute pain and 14 days for post-operative care. Also, prescribers are required to complete a full patient history and review the electronic Prescription Monitoring Program before prescribing an opioid.

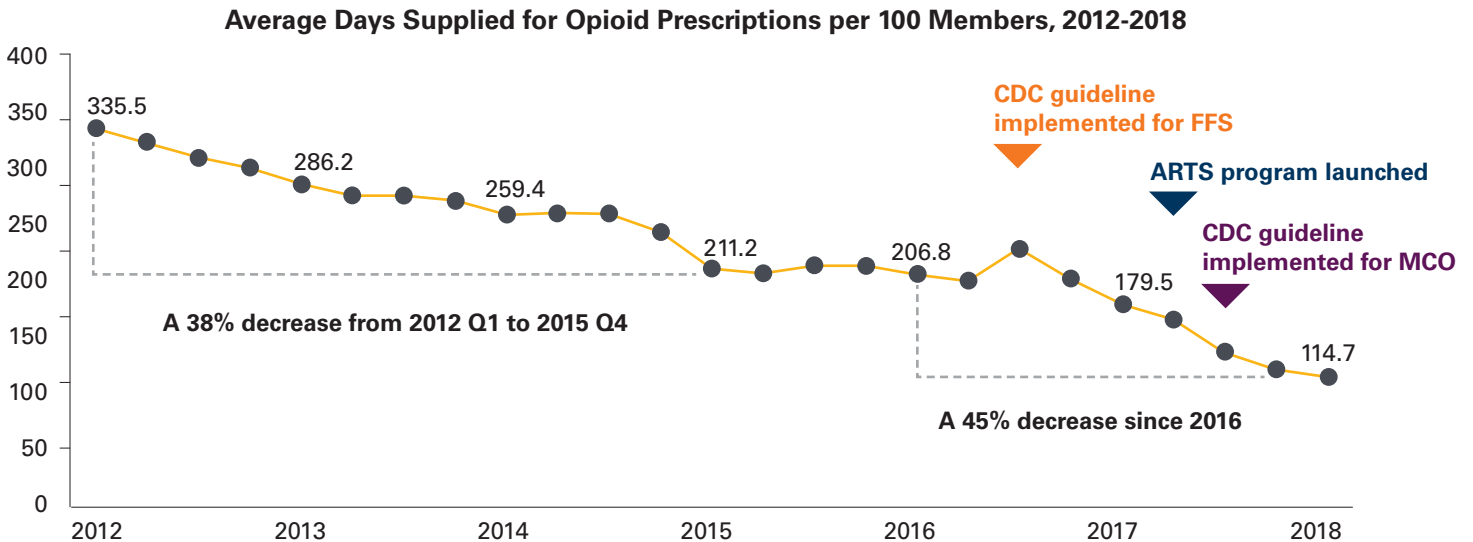
**In addition to these statewide actions, the Department of Medical Assistance Services (DMAS) adopted several actions that affected Virginia Medicaid members.**

- **July 2016:** Virginia Medicaid implements CDC Guidelines for Prescribing Opioids for Chronic Pain for all Medicaid Fee-for Service members including prior authorizations and quantity limits.
- **December 2016:** Consistent with CDC guidelines, prior authorization requirements and quantity limits are implemented for new opioid prescriptions for members enrolled in Medicaid managed care health plans
- **April 2017:** Virginia implements the Addiction and Recovery Treatment Services (ARTS) program to increase access to substance use disorder services for Medicaid members.
- **July 2017:** Virginia Medicaid extends prior authorization requirements to apply to all Medicaid members in managed care health plans.



## Trends in Days Supplied of Prescription Opioids

Opioid prescribing has been declining among Virginia Medicaid members since at least 2012. Between 2012 and 2018, there was a substantial decrease in average days' supply of filled opioid prescriptions for Medicaid members. From the first quarter of 2012 to the first quarter of 2018, average days' supply of prescription opioids dropped from 335.5 days per 100 members to 114.7 days per 100 members – a decrease of 66 percent. The pace of decline has accelerated since 2016 after the implementation of new guidelines and restrictions by the state and federal governments. The average annual rate of decrease between 2016 and 2018 (22 percent) was more than double that of the annual rate of decrease between 2012 and 2016 (10%).

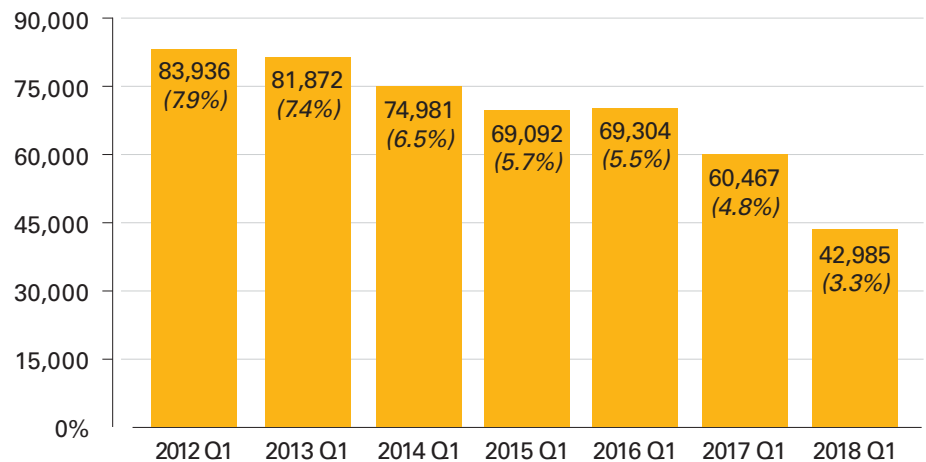


The number of Medicaid members receiving an opioid prescription also decreased between the first quarter of 2012 and 2018, with the decrease accelerating beginning in 2016. During the first quarter of 2018, 42,985 members were prescribed an opioid medication (3.3 percent of all members), compared to 69,304 members receiving prescriptions in the first quarter of 2016 (5.5 percent of members) and 83,936 members in the first quarter of 2012 (7.9 percent of members). The percent decrease in the number of members receiving an opioid prescription between 2012 and 2018 (49 percent) was somewhat smaller than the percent decrease in average days supplied (66 percent), suggesting the new regulations affected the quantity of opioid prescribing per member more than the number of members receiving such prescriptions.

In addition to an overall decrease in the number of prescription, members also received prescriptions from fewer prescribers. In the first quarter of 2018, there were 1.3 prescribers for each member who received prescription opioids, down from 1.4 prescribers

in the first quarter of 2016 and 1.5 prescribers in the first quarter of 2012 (a 15 percent decrease). This suggests less "doctor shopping" among members for prescription opioids, which may increase the potential for addiction.

### Number and Percentage of Members Received an Opioid Prescription During the First Quarter, 2012-2018



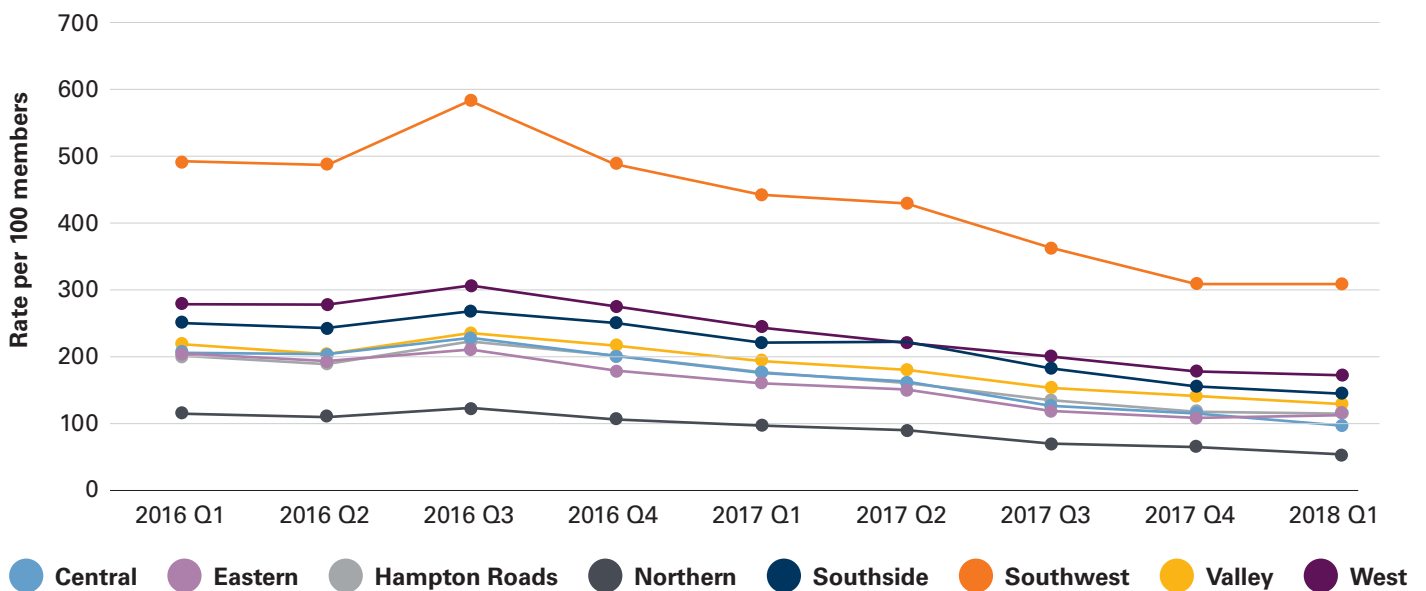
## More Co-Prescribing of Naloxone

While fewer members are receiving opioid prescriptions, more members with opioid prescriptions are also receiving prescriptions for naloxone, an “opioid antagonist” that is used to rapidly reverse the effects of opioid overdose. CDC recommends co-prescribing of Naloxone for some high dosage prescriptions and for patients at higher risk of an overdose.<sup>5</sup> Almost no Medicaid members with opioid prescriptions received naloxone prescriptions in the first quarter of 2016. However, by the first quarter of 2018, more than 1,000 members who received opioid prescriptions were also prescribed Naloxone.

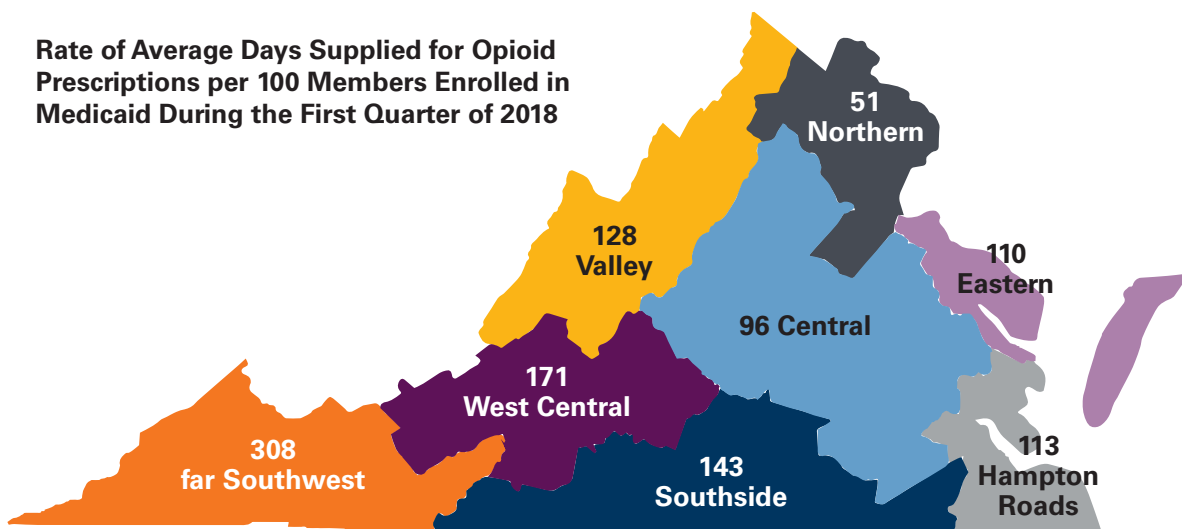
## Regional Trends in Opioid Prescribing

There are substantial regional variations in opioid prescribing among Medicaid members across Virginia. Although the far Southwest region experienced the greatest decrease in days’ supply of opioids since 2016, prescribing remained high compared to other regions. In 2018, average days supplied for opioid pain prescriptions was nearly 3 times higher in far Southwest region (308 days per 100 members) than the average rate of all other regions (111 days per 100 members).

**Rate of Average Days’ Supply of Prescription Opioids Among Members by Region, 2016-2018**



**Rate of Average Days Supplied for Opioid Prescriptions per 100 Members Enrolled in Medicaid During the First Quarter of 2018**



## Characteristics of Members Who Received an Opioid Prescription

Among Virginia Medicaid members who received an opioid prescription between 2012 and 2018, nearly two-thirds were female, half were white (51 percent), one-third were African-American (33 percent), and around 70 percent were non-elderly adults (21-64 years). Additionally, more than one-third of those who received an opioid prescription were disabled (37%). There were no significant changes in the demographic characteristics of members that received an opioid prescription over the 7 year timeframe, except in that the share of youths (younger than 20) that received a prescription decreased slightly – from 19% in 2012 to 14% in 2018.

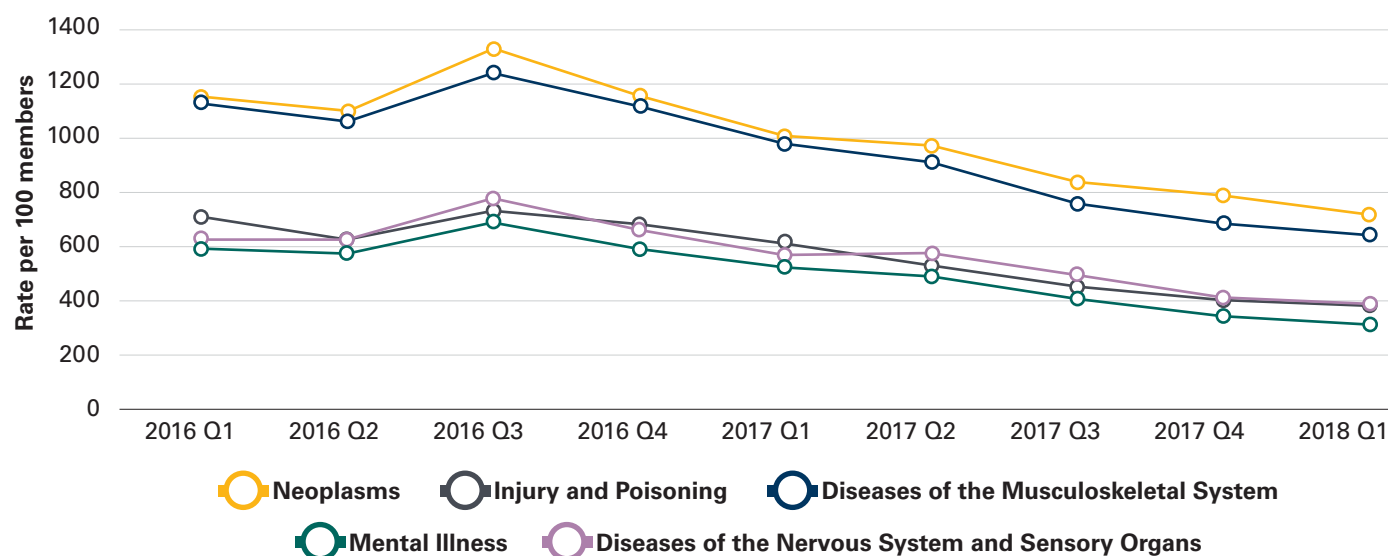
Quarter Year	Q1 2012	Q1 2013	Q1 2014	Q1 2015	Q1 2016	Q1 2017	Q1 2018
Female, %	65%	67%	66%	65%	65%	64%	61%
White	55%	54%	54%	54%	53%	53%	51%
African-American	34%	35%	35%	35%	34%	34%	33%
Disabled	39%	39%	39%	39%	38%	38%	37%
Youth (less than 20 years)	19%	18%	16%	15%	15%	14%	14%
Non-Elderly (20-64)	69%	71%	73%	72%	72%	71%	69%
Elderly (65+)	5%	4%	3%	5%	4%	4%	4%

## Opioid Prescribing and Chronic Conditions

Prior research has shown that a number of chronic conditions are associated with higher rates of opioid prescribing, including mental disorders and cancer.<sup>6</sup> Among members with chronic conditions defined by the Agency for Healthcare Research and Quality,<sup>7</sup> opioid prescribing rates were highest for those with musculoskeletal diseases (53%), followed by members with mental health disorders (49%). Notably, results from Virginia were closely in line with national data, which had suggested that as many as half of the individuals' receiving prescription opioids have a mental illness (50%).

Although the rate of opioid prescribing has declined for members with these identified conditions, except conditions originating in the perinatal period, the decreases were more substantial among 'high prevalence' conditions and cancer. Specifically, the prescribing rate decreased by 48 percent for members with respiratory diseases, 47 percent for mental illness, 46 percent for injury and poisoning, 43 percent for musculoskeletal diseases, and 37 for percent for member with neoplasms.

Rate of Average Days Supplied of Prescription Opioids Among Members by Disease Categories



## Conclusions

Despite large decreases in opioid prescribing, opioid-related overdose fatalities continue to increase in Virginia, reaching more than 1,200 deaths in 2017.<sup>8</sup> Beginning in 2015, deaths due to illicit opioids, such as heroin and fentanyl, now surpass those due to prescription opioids. Fentanyl alone contributed to more than half of the fatal opioid-related overdoses in 2017.<sup>8</sup>

The decrease in opioid prescribing among Virginia Medicaid members is consistent with the downward trends reported for Virginia residents overall.<sup>9</sup> Furthermore, decreased opioid prescribing rates became even more pronounced since major regulations and policies began to be implemented in 2016. However, even as prescribing rates have decreased over the last few years, opioid prescribing remains disproportionately high for vulnerable populations with certain chronic conditions, such as mental illness. There is also a high degree of geographic variation in opioid prescribing to Medicaid members, with the highest rates observed in far Southwest Virginia.

Although numerous efforts have been made by state and federal governments, continued monitoring and management of opioid prescribing among individuals with mental illness and others who are at higher risk to develop dependence is warranted, especially in areas of the state that continue to experience high rates of prescribing. This is especially important with Virginia set to expand Medicaid coverage to adults beginning in January, 2019. Medicaid expansion will provide more Virginians with greater access to addiction treatment services, but also greater access to prescription medications, including opioids. Despite concerns about increased access to opioid medications in other states that expanded Medicaid, a recent study showed that opioid prescribing did not increase significantly in states that have already expanded Medicaid, while access to treatment of opioid use disorders did increase.<sup>10</sup> More stringent guidelines and limits on opioid prescribing in Virginia in recent years – combined with efforts to increase addiction treatment services for Medicaid members through the ARTS program – should help to ensure a similar experience with Medicaid expansion in Virginia.

This Policy Brief was prepared by **Yaou (Flora) Sheng**, MPH; **Peter Cunningham**, PhD; **Augustus White**; **Lauryn Saxe Walker**, RN, MPH and **Andrew Barnes**, PhD at Virginia Commonwealth University, Department of Health Behavior and Policy. Lauryn Saxe Walker is Senior Advisor at the Department of Medical Assistance Services. Her work on this report was completed while she was a Graduate Research Assistant at Virginia Commonwealth University. We would like to thank the Department of Medical Assistance Services for providing their technical expertise.

## Virginia Commonwealth University ARTS Update

### ARTS Overview

Virginia implemented the Addiction & Recovery Treatment Services (ARTS) program in April, 2017 to increase access to evidence-based treatment for Medicaid members with opioid or other substance use disorders. ARTS benefits cover a wide range of addiction treatment services which are based on American Society of Addiction Medicine criteria. ARTS services include the following: inpatient withdrawal management, residential treatment,

partial hospitalization, intensive outpatient programs, opioid treatment, care coordination, and peer recovery supports. ARTS services are carved into Medicaid managed care plans to support full integration of behavioral and physical health.

### ARTS Evaluation

The Department of Medical Assistance Services contracted with Virginia Commonwealth University to conduct an independent evaluation of the ARTS program.

<sup>1</sup>Data extracted from CDC Opioid Overdose, Understand the Epidemic, <https://www.cdc.gov/drugoverdose/epidemic/index.html>. <sup>2</sup>Data extracted from Kaiser Family Foundation Opioid Overdose Deaths, <http://www.kff.org/other/state-indicator/opioid-overdose-deaths-by-raceethnicity> and the Virginia Department of Health's Office of the Chief Medical Examiner, <http://www.vdh.virginia.gov/medical-examiner/forensic-epidemiology/>. <sup>3</sup>MACPAC June 2017 Report to Congress on Medicaid and CHIP, Chapter 2: Medicaid and the opioid epidemic. <sup>4</sup><https://www.cdc.gov/drugoverdose/opioids/prescribed.html>. <sup>5</sup>Center for Disease Control and Prevention. CDC Guideline for Prescribing Opioids for Chronic Pain. [https://www.cdc.gov/drugoverdose/pdf/guidelines\\_at-a-glance-a.pdf](https://www.cdc.gov/drugoverdose/pdf/guidelines_at-a-glance-a.pdf) <sup>6</sup>Cox C, Rae M, and Sawyer B (2018). A look at how the opioid crisis has affected people with employer coverage. A Kaiser Family Foundation Report. <https://www.healthsystemtracker.org/brief/a-look-at-how-the-opioid-crisis-has-affected-people-with-employer-coverage/#item-start>. <sup>7</sup>Beta Chronic Condition Indicator (CCI) for ICD-10-CM, [https://www.hcup-us.ahrq.gov/toolssoftware/chronic\\_icd10/chronic\\_icd10.jsp](https://www.hcup-us.ahrq.gov/toolssoftware/chronic_icd10/chronic_icd10.jsp). <sup>8</sup>Fatal drug overdose quarterly report (2018). Virginia Department of Health. <http://www.vdh.virginia.gov/medical-examiner/forensic-epidemiology> <sup>9</sup>Virginia Prescription Monitoring Program Quarterly Report (2018). Virginia Department of Health Professions. [https://www.dhp.virginia.gov/dhp\\_programs/pmp/pmp\\_reports.asp](https://www.dhp.virginia.gov/dhp_programs/pmp/pmp_reports.asp) <sup>10</sup>Saloner B, Levin J, Change HY, Jones C, and Alexander GC (2018). Changes in Buprenorphine-Naloxone and Opioid Pain Reliever Prescriptions after the Affordable Care Act Medicaid Expansion. *JAMA Network Open* 2018;1(4):e181588. doi:10.1001/jamanetworkopen.2018.1588

