

RESEARCH REPORT

Opioid Prescribing By TennCare Dentists:

**An updated review of the impact of Tennessee's
Medicaid policy change on opioid prescribing practices**

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In 2018, opioids were involved in roughly 70% of the 46,802 drug overdose deaths in the United States.

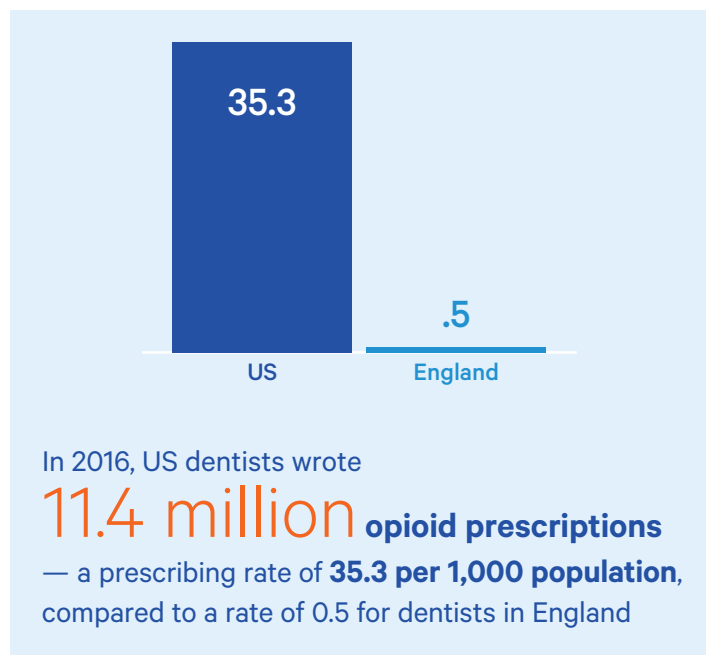
[Nearly 1 in 3 of these 2018 deaths](#) were linked to prescription opioids. The epidemic of opioid use disorder (OUD) has been cited as one of the factors that led to a decline in the [average life expectancy](#) of Americans between 2015 and 2017.

In 2016, U.S. dentists wrote more than [11.4 million opioid prescriptions](#) — a prescribing rate of 35.3 per 1,000 population, compared to a rate of 0.5 for dentists in England that same year. Encouraging dentists and other clinicians to reduce exposure to prescription opioids is [one strategy](#) that experts have called “crucial” for preventing OUD and opioid-related deaths.

Between 2017 and 2018, overall opioid-related overdose deaths in Tennessee rose slightly from 1,269 to 1,307. However, during the same period, deaths connected to prescription opioids [dropped by almost 15%](#). One reason for Tennessee’s decline could be a policy change adopted in January 2018 by TennCare, the state’s Medicaid program. Tennessee’s policy change was aimed at changing medical and dental providers’ practices to curb overexposure to opioids by reducing the dosage, number, and duration of opioid prescriptions for patients.

To better understand the impact of this major policy change on prescriptions by dental providers, TennCare partnered with its dental claims administrator, DentaQuest, and the DentaQuest Partnership for Oral Health Advancement in 2020 to evaluate and compare opioid prescribing patterns among patients and providers within their network. (For more details on the policy change, the evaluation’s methodology, and the initial findings, read the [August 2019 research brief](#).)

The results of our initial evaluation, presented in our first research brief, revealed an important decline in opioid prescriptions between 2017 and 2018. In our follow-up evaluation, we examined 2019 records to see if earlier trends have continued. By and large, overall prescription rates remained steady through 2019, while they continued to decline in key target areas. Although the total number of patients receiving a dental service through TennCare remained relatively unchanged (452,036 patients in 2018), the total number of opioid prescriptions fell by 42% in 2018, followed by a modest 6% drop in 2019.



More Evidence that Policy Matters

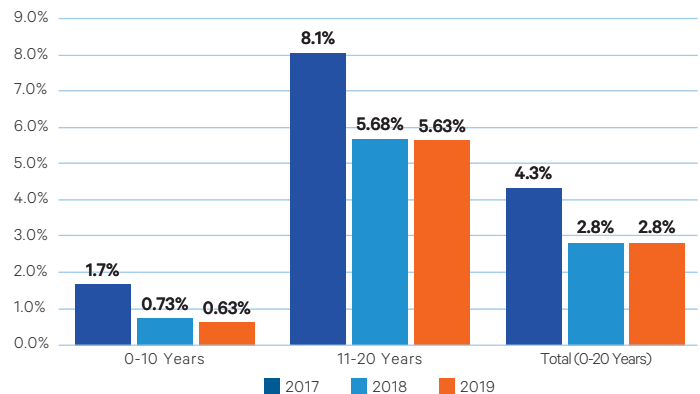
TennCare, DentaQuest, and the DentaQuest Partnership for Oral Health Advancement wanted to learn whether the trend observed in 2018 continued in 2019. So, we analyzed the most recent set of data on dental services among TennCare patients in the 0–20 age group, which is the only age group administered by DentaQuest. Our analysis of an additional year of data reinforces our conclusion that the state’s policy has led to sustained changes in dental providers’ prescribing practices for children and adolescents:

- The new data shows a continued trend of fewer opioid prescriptions by participating dentists. Based on an analysis of adjudicated claims, the total number of opioid medications prescribed (Table 1) in 2019 was virtually unchanged from the number recorded in 2018 after TennCare’s policy change. The number of opioids prescribed to children and adolescent dental patients in 2019 was 45% lower than the total prescriptions issued in 2017.
- In 2019, only 2.8% of TennCare patients in the 0–20 age group received an opioid prescription from a participating dentist (Figure 1) — well below the 4.3% of this age cohort that was prescribed opioids in 2017, the baseline year of this evaluation. This represents a 35% decline in the percentage of patients receiving such prescriptions.
- The [Centers for Disease Control and Prevention](#) urges providers to prescribe “the lowest possible effective dosage” to reduce the risk of Opioid Use Disorder (OUD). Dosage of opioid prescriptions is measured in morphine milligram equivalency (MMEs) per patient, per day. The percentage of TennCare dental patients who were prescribed opioids exceeding 60 MMEs fell from 9% in 2017 to just over 2% in 2018. New 2019 data shows a further decline to only 1.5% (Figure 2).

Table 1. TennCare Dental Summary Statistics

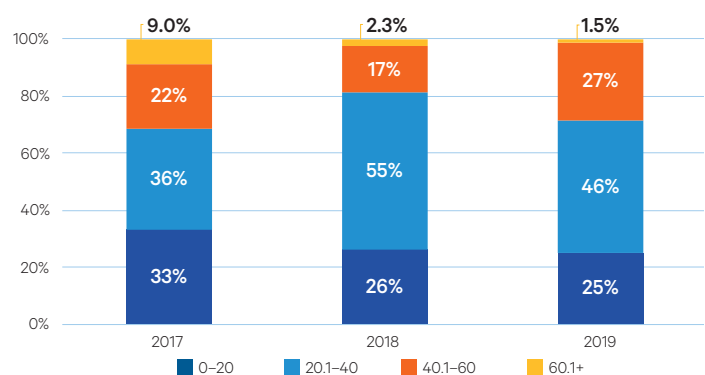
Year	2017	2018	2019
TennCare members receiving dental care	455,162	452,036	454,411
Opioid prescriptions associated with dental care	23,603	13,779	12,897
Percent of dental patients receiving an opioid	4.3%	2.8%	2.8%
Prescriptions per 100 dental patients	5.2	3.0	2.8
Prescriptions over 60 MME/ Day	2,129	322	188
Prescriptions over 3 day supply	10,018	4,478	1,105
Prescriptions for nonsurgical dental encounters	4,278	1,490	1,062
Codeine prescriptions for dental patients under age 12	2,441	0	0

Figure 1. TennCare Dental Patients Age 0–20 Receiving an Opioid Prescription by Age Group



Source: Author analysis of adjudicated dental and prescription drug claims.

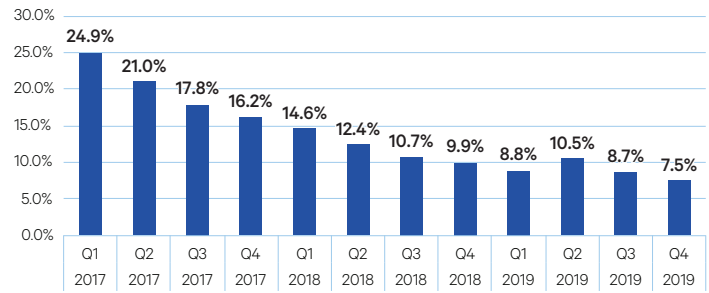
Figure 2. TennCare Opioid Prescriptions by Dosage Strength (MME/Day)



Source: Author analysis of adjudicated dental and prescription drug claims.

- The percentage of opioids prescribed for nonsurgical dental procedures has consistently decreased from 21% in 2017 to 12% in 2018 to only 9% in 2019. This represents a decline of 57% in nonsurgical opioid prescriptions over this 3-year period. (Figure 3 shows this steady decline by quarter.)
- In the first half of 2017, most opioid prescriptions for TennCare members aged 0-11 years contained codeine, which is associated with respiratory depression and other [potentially life-threatening complications](#) in children. In both 2018 and 2019, TennCare's data reveal that participating dentists did not prescribe a single opioid that contained codeine for children.

Figure 3. Percent of Opioid Prescriptions Given for Nonsurgical Procedures



Source: Author analysis of adjudicated dental and prescription drug claims.

Our new analysis reinforces findings from the [previous research brief](#), indicating that the policy change adopted by TennCare continues to have a positive impact in reducing member access to opioids, and may have contributed to the state's

15% decline in overdose deaths related to opioid prescriptions. Research and evaluative efforts will continue in Tennessee to better understand the opioid epidemic and continue educating providers, pharmacists, and patients about this challenge.

Opportunities for Other States

This research report underscores the importance of state leaders and their insurance claims administrators working collaboratively to implement and evaluate policy change. By exploring a similar partnership to the one in Tennessee, other states can seize opportunities to improve the health and quality of life of their residents. Beyond lowering the mortality rate from opioid overdoses, states have other compelling reasons to devise policies that reduce opioid access. Each year, hospital emergency departments (EDs) across the U.S. [treat thousands of people](#) for nonfatal opioid overdoses. Taking reasonable steps to reduce opioid access and dosage can curb the number of patients visiting EDs for this reason. This can reduce the stress on EDs, especially during a crisis like the coronavirus pandemic. Reducing the dosage, number, and duration of opioid prescriptions can also lower or help contain state Medicaid costs. A 2019 study estimated that [state Medicaid programs covered OUD-related costs](#) that exceeded \$72 billion over a 15-year period. States that want to improve the health of their people while containing costs can learn from TennCare's experience and explore similar policy changes.

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CareQuest Institute for Oral Health

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