REDUCING THE OPIOID EPIDEMIC THROUGH POLICY CHANGE AND COLLABORATION: ONE STATE’S EXPERIENCE

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Wisconsin Oral Health Conference, Sept. 25th, 2019
ELEMENTS OF THE DENTAQUEST PARTNERSHIP

- GRANTMAKING
- THOUGHT LEADERSHIP
- RESEARCH
- CARE IMPROVEMENT INITIATIVES
The DentaQuest Partnership will continue to engage in grantmaking, research, care improvement initiatives, and thought leadership against the following areas of focus where DentaQuest can have the greatest impact:

- A single, national oral health measurement system
- Person Centered Care through value based care and inter-professional practice initiatives
- Advocate for public adult dental benefit to expand access
"The other thing that makes the opioid issue a little different, if not significantly different, is that many people who wind up addicted to opioids or heroin started with a prescription that was written for them by a doctor or a dentist …"
The Opioid Epidemic By the Numbers in 2017

- **2 million**: People misused prescription opioids for the first time\(^1\)
- **47,600**: People died from overdosing on opioids\(^2\)
- **11.4 m**: People misused prescription opioids\(^1\)
- **130+**: People died every day from opioid-related drug overdoses\(^3\) (estimated)
- **2.1 million**: People had an opioid use disorder\(^1\)

Source: 2017 Centers for Disease Control and Prevention
Dental Opioid Prescribing Patterns Contribute to the Crisis

- 215 Million opioid prescriptions in the United States (2016)
- 18.5 Million prescribed by dentists (2012)
- 6.4% prescribed by dentist (2012)
- $78.5 Billion economic burden (2013)
Dental Opioid Prescribing Patterns Decreased 1998-2012

PERCENTAGE OF TOTAL U.S. OPIOID PRESCRIPTIONS THAT ARE PRESCRIBED BY DENTISTS\(^1,2\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>15.5%</td>
</tr>
<tr>
<td>2002</td>
<td>12.2%</td>
</tr>
<tr>
<td>2009</td>
<td>8.0%</td>
</tr>
<tr>
<td>2012</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

In 2012, dentists accounted for 6.4% of total U.S. opioid prescriptions, or 18.5 million.\(^2\)
47,000 Opioid-Related Overdose Deaths in 2017

2017 Opioid-Involved Overdose Death Rates (per 100,000 people)

Wisconsin
The 2018 Numbers in Wisconsin

- 16.4% used a prescribed opioid
- 2,426 emergency room admissions
- 1,245 inpatient admissions
- 839 deaths due to opioids
- 51 in January 2019
Dentists Opioid Prescribing Patterns Among Patients with Private Dental Insurance

Cover Story
Opioid prescribing practices from 2010 through 2015 among dentists in the United States
What do claims data tell us?
Niodita Gupta, MD, MPH, PhD; Marko Vujicic, PhD; Andrew Blatz, MS

Original Contributions
Multiple opioid prescriptions among privately insured dental patients in the United States
Evidence from claims data
Niodita Gupta, MD, MPH, PhD; Marko Vujicic, PhD; Andrew Blatz, MS
2010-15 Dentists Opioid Rx Practices (per 1,000 patients)

- All dental patients:
  - 131% in 2010
  - 147% in 2015

- 11-18 year old’s:
  - 100% in 2010
  - 166% in 2015

% of all opioids prescribed:
- 68% prescribed during surgical dental visits
- 32% prescribed during nonsurgical dental visits
- 59% prescribed during oral & maxillofacial surgery
- 56% prescribed during restorative

- In 2010
- In 2015
Morphine Milligram Equivalent (MME) Potency Calibration

Morphine Milligram Equivalent (MME)

relative potencies

converts potency of prescribed opioid to morphine equivalent

MME/Day

Day's Supply

CDC MME Guidelines

- No safe threshold
- <20 MME/day: safer than dosages of 20–50 MME/day
- ≥ 50 MME/Day: increases overdose risk, no added benefits
- ≥ 90 MME/Day: significant risks

https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm
2010-15 Dentists Opioid Rx Practices Exceed 20 MME/Day

- Median Day’s Supply: 3 Days
- Median Daily Dose:
  - 33 MME (all ages)
  - 10.8 MME (<11 yrs. old)
  - 36 MME (11-18 yrs. old)
2010-15 Dentists Opioid Rx Practices

Opioid prescribing **increased** slightly from 2010 to 2015

**Largest increase** was among 11-through 18-year-olds

1/3 of opioid prescriptions written by dentists were associated with **nonsurgical** dental visits
Privately Insured Dental Patients Receive Multiple Opioid Rxs

- % of first prescriptions were dental related
  - 17% (all patients)
  - 24% (11-18 year old's)

- % of same day multiple prescriptions that had MME ≥ 50
  - 39%
Patients Receive Multiple Opioid Rxs > 20 MME/Day

- Median Day’s Supply: 3 days
- Median Daily Dose: 33 MME
- First RX:
  - ≥ 50 MME/day: 21%
  - ≥ 90 MME/day: 2.5%
Over Time Fewer Patients Receive Repeat Opioid Rxs.....

- Within 30 days: 81%
- Within 60 days: 71%
- Within 90 days: 64%
- Within 180 days: 52%
- Within 365 days: 41%

Decreasing over time, fewer patients receive repeat opioid prescriptions.
…But They Receive Higher Amounts of Opioids

<table>
<thead>
<tr>
<th>Median Opioid Dose on Hand</th>
<th>Total Quantity</th>
<th>Total MME Dose</th>
<th>Total Days Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 30 days</td>
<td>20</td>
<td>113</td>
<td>3</td>
</tr>
<tr>
<td>Within 60 days</td>
<td>20</td>
<td>120</td>
<td>3</td>
</tr>
<tr>
<td>Within 90 days</td>
<td>20</td>
<td>120</td>
<td>4</td>
</tr>
<tr>
<td>Within 180 days</td>
<td>21</td>
<td>150</td>
<td>4</td>
</tr>
<tr>
<td>Within 365 days</td>
<td>30</td>
<td>150</td>
<td>5</td>
</tr>
</tbody>
</table>
Multiple Opioid Rxs Among Privately Insured Dental Patients

Dental-related first prescriptions were highest for the age groups 11 through 18 years and 19 through 25 years.

The frequency of dental-related repeat prescriptions was the highest within 30 days of a dental-related first prescription.

Total quantity, MME and days supply increase over time.
Awareness and Prevention

Understand Rx Patterns
Partner with Stakeholders
Sponsor Prevention Activities
Opioid Focused CE
Educate Communities
TRENDS IN OPIOID PRESCRIPTIONS AMONG MEDICAID ENROLLED PATIENTS
Methods

- Data: IBM Watson National Medicaid claims data
  - 13 de-identified states
  - 2013 – 2017
- Prescriptions for Dental Visit:
  - Prescription within 3 days before or 3 days after dental visit.
    - CDT code
  - No medical or inpatient visit within the same 7-day timeframe
  - Removed Dual Eligible (65+ and others)
2013-17 Dentists Opioid Rx Practices

Opioid Rx rate per 1,000 dental patients

- 88 in 2013
- 95 in 2015
- 73 in 2017

% of all opioids prescribed in 2017

- 75% prescribed during surgical dental visits
- 25% prescribed during non-surgical dental visits

% of all dental visits with an opioid prescription in 2017

- 23% of surgical dental visits
- 1.2% of non-surgical dental visits

% of all opioids prescribed in 2017

- 88 in 2013
- 95 in 2015
- 73 in 2017

% of all dental visits with an opioid prescription in 2017

- 23% of surgical dental visits
- 1.2% of non-surgical dental visits
% of Dental Patients with an Opioid Prescription, by Age
IMPACT OF OPIOID PRESCRIBING POLICY CHANGES: THE TENNCARE DENTAL EXPERIENCE

Report:
https://www.dentaquestpartnership.org/learn/online-learning-center/resource-library/impact-opioid-prescribing-policy-changes-tenncare

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Dr. Victor Wu
TennCare Clinical Research Team
TennCare Opioid Policy

As of Jan. 16th, 2018:

**A healthcare practitioner may prescribe:**

1. **Up to 3-day opioid prescription**
   - 180 MME total dosage
   - No requirements before prescribing

2. **Up to 10-day opioid prescription**
   - 500 MME total dosage
   - Check the CSMD
   - Conduct a thorough evaluation of the patient
   - Document consideration of alternative treatments for pain and why an opioid was used
   - Obtain informed consent
   - Include the ICD-10 code in the patient's chart and on the prescription

3. **Up to 30-day opioid prescription**
   - 1200 MME total dosage
   - After trial and failure or documenting contraindication of a non-opioid treatment, healthcare practitioner may prescribe for medical necessity.

Initial fill no more than half of total prescribed amount

[Link to TennCare Opioid Policy](http://www.dentaquest.com/getattachment/State-Plans/Regions/Tennessee/TennCare-Dentist-Page/Provider-Resources/Opioid-Tool-Kit/Opioid-Strategy-Dental-Provider-s-FAQ.pdf/?lang=en-US)
Analysis Goal and Methodology

• Goal: Understand changes in opioid prescriptions by dental providers from 2017 to 2018.

• Methods:
  1. Link opioid prescription data from TennCare with dental claims data from DentaQuest.
     - Limited to children ages 0-20.
     - Excluded Meperidine HCL and Morphine Sulfate Solutions
  2. Conduct top-line analysis of trends
## Changes in Opioid Prescriptions: 2017-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Patients</th>
<th>Opioid Rx</th>
<th>Prescribed Patients</th>
<th>% Receiving Opioids</th>
<th>Opioids per 100 Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>455,152</td>
<td>23,603</td>
<td>19,670</td>
<td>4.3%</td>
<td>5.19</td>
</tr>
<tr>
<td>2018</td>
<td>451,802</td>
<td>12,936</td>
<td>12,788</td>
<td>2.8%</td>
<td>2.86</td>
</tr>
<tr>
<td>Change</td>
<td>-3,350</td>
<td>-10,667</td>
<td>-6,882</td>
<td>-1.5%</td>
<td>-2.32</td>
</tr>
<tr>
<td>% Change</td>
<td>-0.7%</td>
<td>-45.2%</td>
<td>-35.0%</td>
<td>-34.5%</td>
<td>-44.8%</td>
</tr>
</tbody>
</table>
Prescriptions Per 100 Patients by County in 2017

In 2018…
% of Patients Receiving an Opioid Prescription by Year

- All Ages: 2.8% (2017 National Medicaid Avg), 2.8% (2017 Tennessee), 2.8% (2018 Tennessee)
- Ages 0-10: 0.4% (2017 National Medicaid Avg), 1.7% (2017 Tennessee), 0.7% (2018 Tennessee)
- Ages 11-20: 6.0% (2017 National Medicaid Avg), 8.0% (2017 Tennessee), 5.7% (2018 Tennessee)

National Average Data Source – DentaQuest Partnership Analysis of 2017 IBM Watson Medicaid Marketscan Data
Prescriptions in Excess of TennCare Policy Limits

% Over 60 MME/Day

- 2017Q1: 10%
- 2017Q2: 10%
- 2017Q3: 11%
- 2017Q4: 5%
- 2018Q1: 3%
- 2018Q2: 2%
- 2018Q3: 2%
- 2018Q4: 2%

% Over 3 Day Supply

- 2017Q1: 37%
- 2017Q2: 38%
- 2017Q3: 42%
- 2017Q4: 57%
- 2018Q1: 54%
- 2018Q2: 52%
- 2018Q3: 17%
- 2018Q4: 15%
Prescriptions Per 100 Patients by Gender

- **Female:**
  - 0-10: 1.7 (2017), 0.7 (2018)
  - 11-20: 1.9 (2017), 0.8 (2018)
  - 2017: 11.2
  - 2018: 6.4

- **Male:**
  - 0-10: 8.6 (2017), 5.0 (2018)
Number of Opioid Prescriptions Per Patient by Year

- **2017**
  - 1 Opioid Rx: 87%; 17,045
  - 2 Opioid Rx: 10%; 1,989
  - 3 or More Opioid Rx: 3%; 636

- **2018**
  - 1 Opioid Rx: 99%; 12,643
  - 2 Opioid Rx: 1%; 143
  - 3 or More Opioid Rx: 0%; 3
% of Opioid Prescriptions Containing Codeine Among Ages 0-10

- 2017Q1: 73.5%
- 2017Q2: 62.1%
- 2017Q3: 7.4%
- 2017Q4: 0.0%
- 2018Q1: 0.0%
- 2018Q2: 0.0%
- 2018Q3: 0.0%
- 2018Q4: 0.0%
On April 20, 2017 the Food and Drug Administration issued a safety announcement restricting use of codeine in children under 18 years.

- Codeine and tramadol are not approved for use in children less than 18 years
- Serious breathing issues and other complications result from use
- Reducing opiate medication use in this population is a priority in reducing effects of the epidemic
Distribution of Prescriptions by MME per Day by Year

<table>
<thead>
<tr>
<th>Ages 0-10</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages 0-10</td>
<td>94%; 4,537</td>
<td>91%; 1,734</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ages 11-20</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages 11-20</td>
<td>11%; 2,125</td>
<td>62%; 6,785</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Range</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20</td>
<td>20%; 2,220</td>
<td>3%; 319</td>
</tr>
<tr>
<td>20.1-40</td>
<td>28%; 5,231</td>
<td>44%; 8,191</td>
</tr>
<tr>
<td>40.1-60</td>
<td>17%; 3,244</td>
<td>15%; 1,697</td>
</tr>
<tr>
<td>60.1+</td>
<td>44%</td>
<td>11%</td>
</tr>
</tbody>
</table>

0% - 10% - 20% - 30% - 40% - 50% - 60% - 70% - 80% - 90% - 100%
Discussion

• Reductions in number of prescriptions suggests that not all of these prescriptions were necessary.

• Reducing unnecessary prescriptions in this age group is vital as:
  • For many individuals under 20, dental surgery is the first exposure to opiate or narcotic pain medications.
  • 54% of all prescriptions provided for a dental procedure or surgery remain unused by the patient.

• Highlights the important role of dentists in reducing the number of opioids available for use and misuse.
What Can Providers Do?

• Reduce:
  • “The combination of 400 mg of ibuprofen plus 1,000 mg of acetaminophen was found to be superior to any opioid-containing medication or medication combination studied.”

• Check:
  • Check the appropriate CORE Guidelines for the procedure: https://www.solvethecrisis.org/dental-guidelines
  • Use CDC app to determine if the intended prescription is within clinically recommended guidelines: https://www.cdc.gov/drugoverdose/prescribing/app.html
  • If available, check the Prescription Drug Monitoring Program in your state for the patient.
Partnership to Tame the Epidemic