ORAL HEALTH AND THE OPIOID EPIDEMIC

August 29, 2019
Learning Objectives

By the end of this webinar, participants will be able to:

1. Recognize the unique characteristics of opioid prescribing and pain management in dentistry.
2. Understand the relative efficacy of NSAIDs and acetaminophen when treating acute inflammatory pain.
3. Identify national trends in opioid prescriptions by dentists.
4. Understand strategies a dental carrier performs to reduce opioid abuse.
5. Understand how policy changes at the state Medicaid level can impact opioid prescribing patterns.
Housekeeping

- All lines will remain muted to avoid background noise.
- A copy of the slides and a link to the recording will be shared after the webinar concludes.
- In order to receive CE credit you must fill out the webinar evaluation, which will be shared at the end of the presentation. The evaluation must be completed by **EOD Thursday, September 5** to receive CE credit.

The DentaQuest Partnership is an ADA CERP Recognized Provider. This presentation has been planned and implemented in accordance with the standards of the ADA CERP.

*Full disclosures available upon request*
Q&A Logistics

After the presentations we hope to have some time for Q&A

Two ways to engage:

• Use the raise hand feature and we will unmute you

• Type your question in the chat box
Presenters:

Dr. Paul Moore  
Professor, University of Pittsburgh School of Dental Medicine

Dr. Linda Vidone  
VP, Clinical Management & Sr. Dental Director, Delta Dental of Massachusetts

Dr. Eric Tranby  
Manager, Data and Impact, DentaQuest Partnership for Oral Health Advancement
Disclosures: Paul A. Moore

In the last twenty years, Dr. Moore has served as a research consultant to several companies including Dentsply Pharm., Kodak Dental Systems, Septodont USA, St Renatus, Novalar Inc. and Novocol of Canada Inc. His serves have involved pharmacovigilance of marketed local anesthetic products as well as research protocol development of new local anesthetics for dentistry. Additionally, he has also served as a principal investigator for FDA required Phase II, Phase III and Phase IV clinical research contracts awarded to the University of Pittsburgh by Wyeth Consumer Healthcare, Novocol of Canada Inc. and Novalar Pharmaceutical Inc.

He currently has had no affiliations with any pharmaceutical company for the last seven years.
USS Homestead Mill - 1966

http://pgdigs.tumblr.com/
Unintentional Drug Overdose: 1999-2010

Prescriptions vs Heroin
# Top Prescription in US

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total*</td>
<td>4,014</td>
<td>4,155</td>
<td>4,236</td>
<td>4,325</td>
<td>4,368</td>
</tr>
<tr>
<td>1. levothyroxine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>105</td>
<td>112</td>
<td>117</td>
<td>120</td>
<td>121</td>
</tr>
<tr>
<td>2. lisinopril (Zestril® and Prinivi®)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>89</td>
<td>99</td>
<td>102</td>
<td>104</td>
<td>106</td>
</tr>
<tr>
<td>3. APAP/hydrocodone (Vicodin®, Norco® and Lorcet®)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>137</td>
<td>136</td>
<td>129</td>
<td>119</td>
<td>97</td>
</tr>
</tbody>
</table>

*millions of prescriptions

Medicines Use and Spending in the U.S.
IMS Institute for Healthcare Informatics, April 2016.

Paul A. Moore
Third Wave of Epidemic

Prescription Opioids and Overdose Death

Figure Source: National Institute on Drug Abuse Data Source: CDC Wonder
Potent Synthetic Opioids
Decreasing Prescriptions Rates

➢ Amount of prescription opioids peaked in 2010 (782 MME per capita).
➢ Amount prescribed in 2015 is four times higher than Europe.
➢ Declines are due to State legislation, Federal Laws, CDC reports, education and use of PDMPs.
➢ Four of five heroin addicts initiated their abuse with prescription opioids.
➢ Overdose deaths continue due to illicit opioids.

Schular A et al. CDC report. JAMA July 6, 2017
# Opioid Prescriptions by Nations

## Daily doses of opioids in the 20 most populous countries per million people (2013-15)

<table>
<thead>
<tr>
<th>Country</th>
<th>Dose (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>47,580</td>
</tr>
<tr>
<td>Germany</td>
<td>30,780</td>
</tr>
<tr>
<td>Japan</td>
<td>1,220</td>
</tr>
<tr>
<td>Vietnam</td>
<td>1,100</td>
</tr>
<tr>
<td>Turkey</td>
<td>700</td>
</tr>
<tr>
<td>Iran</td>
<td>460</td>
</tr>
<tr>
<td>Brazil</td>
<td>460</td>
</tr>
<tr>
<td>China</td>
<td>240</td>
</tr>
<tr>
<td>Thailand</td>
<td>170</td>
</tr>
<tr>
<td>Mexico</td>
<td>160</td>
</tr>
<tr>
<td>Russia</td>
<td>120</td>
</tr>
<tr>
<td>Egypt</td>
<td>93</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>49</td>
</tr>
<tr>
<td>Indonesia</td>
<td>44</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>36</td>
</tr>
<tr>
<td>India</td>
<td>21</td>
</tr>
<tr>
<td>Phillipines</td>
<td>20</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1</td>
</tr>
<tr>
<td>DR Congo</td>
<td>1</td>
</tr>
</tbody>
</table>

ATLAS: Data International Narcotics Control Board. 2015-17
Opioid Prescribing: U.S. vs England


➢ Dentists in England only prescribe dihydrocodeine. Dentists in US prescribe hydrocodone (62%), codeine (23%), oxycodone (9%), and tramadol (5%)

➢ Dentists in the US write 37 times more opioid prescriptions than dentists in England. (U.S. = 58 per clinician; England = 1.2 per clinician)

Suda KJ et al. JAMA Network Open. May 24, 2019
Quantities Dispensed

Preferred Centrally-Acting Analgesics

“Please complete the following prescription for the centrally-acting analgesic you prescribed most often in the past month.”

<table>
<thead>
<tr>
<th>Analgesic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocodone / APAP</td>
<td>64.0%</td>
</tr>
<tr>
<td>Oxycodone / APAP</td>
<td>20.2%</td>
</tr>
<tr>
<td>Hydrocodone / ibuprofen</td>
<td>4.6%</td>
</tr>
<tr>
<td>Codeine / APAP</td>
<td>4.3%</td>
</tr>
<tr>
<td>Promethazine / meperidine</td>
<td>3.7%</td>
</tr>
<tr>
<td>Propoxyphene / APAP</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Centrally-Acting Analgesics: South Carolina

South Carolina PDMP 2012-2013 by Dentists. 653,650 opioid prescriptions. 99.9% were for immediate release formulations. People younger than 21 year was 11.2%. Refills represent only 3.8%.

<table>
<thead>
<tr>
<th>Drug Combination</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocodone / APAP</td>
<td>76.1%</td>
</tr>
<tr>
<td>Oxycodone / APAP</td>
<td>12.2%</td>
</tr>
<tr>
<td>Codeine / APAP</td>
<td>6.8%</td>
</tr>
<tr>
<td>Hydrocodone / ibuprofen</td>
<td>3.0%</td>
</tr>
<tr>
<td>Meperidine</td>
<td>1.2%</td>
</tr>
</tbody>
</table>
The American Dental Association revised its statement on the Use of Opioids in the Treatment of Dental Pain.*

“Dentists should consider nonsteroidal anti-inflammatory analgesics (NSAIDs) as the first-line therapy for acute pain management.

*Adopted by the House of Delegates 2016
1. Continuing Education
“The ADA supports mandatory continuing education in prescribing opioids and other controlled substances.”

2. Dosage and Duration
“The ADA supports statutory limits on opioid dosage and duration of no more than seven days for the treatment of acute pain, consistent with the Centers for Disease Control and Prevention evidence-based guidelines.”

3. Prescription Drug Monitoring
“The ADA supports dentists registering with and utilizing Prescription Drug Monitoring Programs (PDMPs) to promote the appropriate use of opioids and deter misuse and abuse.”
Frank E. Bingaman
Oral Surgery Model: Opioid Combinations

![Graph showing pain intensity difference scores over hours for different opioid combinations.](image-url)
Ibuprofen and APAP

Paracetamol is acetaminophen (Tylenol)
NNTs for Analgesic Agents

- Ibuprofen 200 + paracetamol 500
- Etoricoxib 120
- Codeine 60 + paracetamol 1000
- Dipyrone 500
- Ibuprofen 600
- Piroxicam 20
- Celecoxib 400
- Naproxen 500/550
- Diclofenac 50
- Ibuprofen 400
- Oxycodone 10 + paracetamol 650
- Tramadol 75 + paracetamol 650
- Dexketoprofen 20/25
- Ketoprofen 50
- Aspirin 1000
- Paracetamol 1000
- Codeine 60 + paracetamol 600/650
- Tramadol 100
- Ibuprofen 200
- Paracetamol 600/650

NNT for at least 50% maximum pain relief (95% CI)
Stepwise Guidelines

**Mild Pain**
Ibuprofen 200-400 mg  
q 4-6 hours: as needed (p.r.n.) pain

**Mild-Moderate Pain**
Ibuprofen 400-600 mg  
q 4-6 hours: fixed interval for 24 hours

**Moderate - Severe Pain**
Ibuprofen 400-600 mg plus APAP 500 mg  
q 6 hours: fixed interval for 24 hours

**Severe Pain**
Ibuprofen 400 mg plus APAP 650/hydrocodone 10 mg  
q 6 hours: fixed interval for 24-48 hours
Opioid-Sparing Pharmacotherapy

✓ Preventive NSAIDs (naproxen sodium 550 mg, or ibuprofen 600 mg)
✓ Long-acting local anesthesia/analgesia: 0.5% bupivacaine with 1:200,000 epinephrine.
✓ Corticosteroids (dexamethasone 8 mg i.m. or i.v.)
✓ Reliance on NSAIDs analgesics as the first-line of therapy. (ADA)
✓ Consider the combination of ibuprofen (400 mg) and acetaminophen (500 mg) as an opioid alternative.
✓ A two or three day supply of opioids analgesics is usually sufficient. (CDC)
Thank you for your attention

Aaron Huey, NatGeo Photographer
Opioid Epidemic in Massachusetts

Linda Vidone DMD
Vice President and Chief Clinical Officer
Delta Dental of Massachusetts
47,000 Opioid-Related Overdose Deaths in 2017

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

National Average:
14.9 per 100,000

Massachusetts:
28.2 per 100,000

https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state
Opioid Related Deaths in Massachusetts

5 people die every day from opioid related overdoses in MA

2000-2018: Massachusetts lost 17,500 people to overdose deaths from opioids

Source: Massachusetts Department of Public Health, November 2018 update
An Overdose Left Him With Brain Damage. Now What?

By Danieia J. Lamas
Dr. Lamas is a pulmonary and critical care physician at Brigham and Women’s Hospital in Boston.

Aug. 18, 2016

Magnitude of the Problem in Massachusetts

• Since 2011, MA has averaged 33,700 people unable to work due to opioid misuse
• Lost productivity from absenteeism and presenteeism is more than $ 2.5 billion annually
• On average $14,712 more in healthcare costs per employee per year
• Opioid-related ED visits increasing at an alarming rate of 24% per year reaching 52,000- in 2017
Neonatal Abstinence Syndrome

Incidences of Neonatal Abstinence Syndrome per 1,000 Births in Massachusetts
Opioid-Related Overdose Deaths In Massachusetts, By Type: 2000-2017

Fentanyl is the number one cause of opioid-related deaths in MA

https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state
Massachusetts Prescribes Less Than Most States

National: 66 per 100 persons
Massachusetts: 47.1 per 100 persons

Chapter 55 – Key Findings from PDMP Linkage

• Compared to the general population, those who received three months of prescribed opioids are four times as likely to die from an opioid-related overdose within one year, and 30 times as likely to die of an opioid-related overdose within five years.

• 58% of those who died of an opioid-related overdose had an active Rx opioid in the previous 12 months.

• The use of 3 or more prescribers within a 3 month period is associated with a 7-fold increase in risk of fatal opioid overdose

• Having a concurrent prescription for opioids and benzodiazepines results in a four-fold increased risk of opioid-related death.
“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 ...”

- Boston Magazine ‘Catching up with Charlie Baker’ by Garrett Quinn pp 43-7 February 2016
A Strong Call to Action

March 14, 2016: Governor Baker Signs Landmark Opioid legislation into law

- 7 day prescription limit
- Discuss risks, benefits and alternatives
- Patients option to fill lesser amount
- Must take CEU to renew licensure
- Mandatory use of PMP (Practitioners Monitoring Program) 10/15/2016.

H.3947- An Act relative to substance use treatment, education and prevention
Delta Dental of Massachusetts: The Opioid Connection to Oral Health
“Oral Health Initiatives to Combat the Opioid Crises in Massachusetts”

A Conversation with US Surgeon General Jerome Adams, MD, MPH
Awareness and Prevention

- Pinpoint Prescription Patterns of Dentists
- Opioid Focused Continuing Education to Dentists
- Partnering with MA Medical and Dental Societies
- Sponsor Prevention and Treatment Activities
- Educate Communities through events, materials and media

Decrease Opioid Overdose And Mortality
Patient Education

Opioid Fact Sheet

44,000 overdoes of all types mentioned in the USA in 2016
45,000 people die each year from drug overdose
80% of opioid patients go on to need prescription opioids

The Opioid Epidemic by the Numbers in 2016

115 people die every day from opioid-related drug overdoses
2.1 million severe opioid prescription opioids for the first time
Each day, 1,000 people are treated in emergency departments for opioid misuse
504 billion in economic costs

Opioids can be addictive even if only taken for a short period of time
Combines detoxification and withdrawal

Ask Your Doctor Before Taking an Opioid

- "is it really necessary?"
- "is this the appropriate dose?"
- "is it clear how much the patient needs?"
- "can I get a prescription for my patient?"
- "do I have a history of addiction?"
- "is there a possibility of abuse?"
- "is the dose changing over time?"

Safeguard Principles: While Taking an Opioid

- "prevention is better than cure"
- "prescribe the least amount of medication that will achieve the desired effect"
- "monitor the patient closely for signs of overdose"
- "monitor the patient for signs of withdrawal"
- "educate the patient on the need for safe disposal"
- "educate the patient on the need for safe storage"

Safe Storage of Opioid Medication

- Keep your medications out of reach of children
- Store your medications in a cool, dry place
- Do not keep medication near the bed
- Do not keep medication in the bathroom
- Do not keep medication in the kitchen
- Do not keep medication in the car

Safe Disposal

- Dispose of unused medication safely
- Do not flush medication down the toilet
- Do not throw medication in the trash
- Do not share medication with others

Prescription Opioid Use: Safety Tips

- Talk to your doctor about the risks and benefits of opioid use
- Be aware of the side effects of opioid use
- Be aware of the potential for abuse
- Be aware of the potential for addiction
- Be aware of the potential for overdose

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Provider Guidelines

ADA American Dental Association®

Statement on the Use of Opioids in the Treatment of Dental Pain

1. When considering prescribing opioids, dentists should conduct a medical and dental history to determine current medications, potential drug interactions and history of substance abuse.
2. Dentists should follow and continually review Centers for Disease Control and State Licensing Boards recommendations for safe opioid prescribing.
3. Dentists should register with and utilize prescription drug monitoring program (PDMP) to promote the appropriate use of controlled substances for legitimate medical purposes, while deterring the misuse, abuse and diversion of these substances.
4. Dentists should have a discussion with patients regarding their responsibilities for preventing misuse, abuse, storage and disposal of prescription opioids.
5. Dentists should consider treatment options that utilize best practices to prevent exacerbation of or relapse of opioid misuse.
6. Dentists should consider nonsteroidal anti-inflammatory analgesics as the first-line therapy for acute pain management.
7. Dentists should recognize multimodal pain strategies for management of acute postoperative pain as a means for sparing the need for opioid analgesics.
8. Dentists should coordinate interaction with other treating doctors, including pain specialists when prescribing opioids for management of chronic orofacial pain.
9. Dentists who are practicing in good faith and who use professional judgment regarding the prescription of opioids for the treatment of pain should not be held responsible for the willful and deceptive behavior of patients who successfully obtain opioids for non-dental purposes.
10. Dental students, residents and practicing dentists are encouraged to seek continuing education in addictive disease and pain management as related to opioid prescribing.
Collaboration With Medical

TUFTS Health Plan
November 8, 2017

Dear [NAME],

Tufts Health Plan and Delta Dental of Massachusetts share your commitment to improving the oral health and overall health of our members. As you know, the opioid abuse epidemic is growing across the United States. According to the Centers for Disease Control and Prevention:

- Opioid deaths now surpass deaths from car accidents.
- The rate of drug overdose deaths from opioids tripled between 2010 and 2014.
- Deaths from opioid pain relievers alone increased 9 percent in 2014.
- Opioids were involved in more than 20,000 deaths (51 percent) of all drug overdose deaths in 2014.
- More than 80 percent of people who misuse prescription drugs are using medications prescribed to someone else.
- This crisis touches everyone, all ages, genders, races and economic backgrounds.

In 2014, Massachusetts saw 1,351 opioid-related deaths, representing a 29 percent increase from 2010. This trend has continued to intensify, with 1,670 confirmed opioid-related deaths in 2015 and 1,990 in 2016, representing a 19 percent increase since 2014. It’s estimated that four people are dying in Massachusetts every day from overdoses related to opioid abuse.

A 2011 study in the Journal of the American Dental Association estimates that dentists are responsible for 12 percent of prescriptions for restricting opioid pain relievers, surpassing only by general practitioners and internal medicine doctors. Opioid addiction can begin with extraction of wisdom teeth, a common dental procedure that 3.5 million young adults undergo annually. Many dentists prescribe opioids following this procedure, despite evidence that a combination of non-opioid medications and acupuncture may provide more effective treatment for post-extraction pain.

While there has been an overall decrease in opioid prescribing over the years, there remain opportunities to continue to reduce unnecessary opioid prescriptions further. To help combat this crisis, Tufts Health Plan and Delta Dental of Massachusetts are committed to review and ensure opioid prescriptions written by dental professionals, as healthcare providers, we all have an obligation to retain education about safe prescribing practices as well as ways to identify potential abuse, have candid conversations with patients, and recommend help.


Delta Dental of Massachusetts is an Independent Licensee of the Delta Dental Plans Association, a registered trade name of the Delta Dental Plans Association.
New Dental Reimbursement Code

D9613

Investing in Solutions

An Initiative to End the Opioid Epidemic

RIZE Massachusetts is an independent nonprofit foundation working to end the opioid epidemic in Massachusetts and reduce its devastating impact on people, communities, and our economy.

By tapping the commitment and resources of the private sector, we make informed investments in innovative and comprehensive evidence-based treatments that can be scaled, expedited, and made accessible to people suffering from opioid use disorder across the Commonwealth.

We forge partnerships between the business community, the health care sector, research institutions, and community leaders to disrupt the status quo on prevention and treatment of opioid use disorder, raise awareness that it is a chronic disease, and reduce stigma that impedes recovery.
### Opioid Prescribing Rates Down for Massachusetts Dentists

<table>
<thead>
<tr>
<th>Dentists General Practice¹</th>
<th>CY 2015 Quarter 1</th>
<th>CY 2018 Quarter 1</th>
<th>Percent Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescription Count</td>
<td>45,801</td>
<td>24,420</td>
<td>-46.7</td>
</tr>
<tr>
<td>Solid Quantity</td>
<td>693,907</td>
<td>314,644</td>
<td>-54.7</td>
</tr>
<tr>
<td>Total MME</td>
<td>4,594,274</td>
<td>1,951,536</td>
<td>-57.5</td>
</tr>
<tr>
<td>Days Supply per Patient</td>
<td>3.8</td>
<td>3.2</td>
<td>-15.5</td>
</tr>
<tr>
<td>Number of Prescribers²</td>
<td>2,817</td>
<td>2,255</td>
<td>-20.0</td>
</tr>
</tbody>
</table>

¹ Includes both DDS and DMD (General Dentists)

² Based on a combination of prof degree specified in the DEA file and self reported specialty in MassPAT

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<table>
<thead>
<tr>
<th>Days Supply Range</th>
<th>Number of Prescriptions CY 2015 Quarter 1</th>
<th>Number of Prescriptions CY 2018 Quarter 1</th>
<th>Percent Prescriptions CY 2015</th>
<th>Percent Prescriptions CY 2018</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 days or less</td>
<td>30,826</td>
<td>19,179</td>
<td>67.3%</td>
<td>78.6%</td>
<td>16.8%</td>
</tr>
<tr>
<td>4-7 days</td>
<td>14,283</td>
<td>5,008</td>
<td>31.2%</td>
<td>20.5%</td>
<td>34.3%</td>
</tr>
<tr>
<td>8-10 days</td>
<td>394</td>
<td>94</td>
<td>0.9%</td>
<td>0.4%</td>
<td>55.6%</td>
</tr>
<tr>
<td>11-15 days</td>
<td>86</td>
<td>37</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>&gt; 15 days (Max = 30)</td>
<td>212</td>
<td>94</td>
<td>0.5%</td>
<td>0.4%</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

¹ Includes both DDS and DMD (General Dentists)

Source: MDPH MA PMP
OPIOID PRESCRIPTIONS TO CHILDREN BY TENNCARE DENTISTS, 2017-2018
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

REPORT CONTRIBUTORS

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Dr. Brent Martin

TennCare
Dr. Crystal D. Manners
Dr. James A. Gillrist
Dr. Victor Wu
TennCare Clinical Research Team
TennCare Opioid Policy

- Effective Jan 16th, 2018, TennCare implemented a new policy for opioid prescriptions on all outpatient, first-time, non-chronic prescriptions, such that:
  - First-fill prescriptions are limited to a 5 day supply (revised to 3-day supply on July 1st, 2018) at 60 MME per day.
  - Additional days supply and higher MME limits require pre-authorization and ICD-10 codes containing diagnostic justification.
- Policy has since become state law and covers all providers.

What is Morphine Milligram Equivalent (MME)?

• Morphine Milligram Equivalent (MME) is a value assigned to opioids to represent their relative potencies.
  
  • **MME** is determined by using a conversion factor to calculate a dose of morphine that is equivalent to the prescribed opioid.

  • **MME/Day** = Strength per Unit X (Number of Units/ Days Supply) X MME conversion factor
Analysis Goal and Methodology

• Goal: Understand changes in opioid prescriptions by dental providers from 2017 to 2018.
  • Develop methods for assessing outlying providers
• 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
  3. Assess prescriptions significantly outside of the norm.
## 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

National Average Data Source – DentaQuest Partnership Analysis of 2017 IBM Watson Medicaid Marketscan Data

- 2017 National Medicaid Avg
- 2017 Tennessee
- 2018 Tennessee
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%
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%
Number of Prescriptions by MME per Day by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>0-20</th>
<th>20.1-40</th>
<th>40.1-60</th>
<th>60.1+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>7,781</td>
<td>8,457</td>
<td>5,236</td>
<td>2,129</td>
</tr>
<tr>
<td>2018</td>
<td>3,431</td>
<td>6,960</td>
<td>2,224</td>
<td>321</td>
</tr>
</tbody>
</table>
Distribution of Prescriptions by MME per Day by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Ages 0-10</th>
<th>Ages 11-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>94%; 4,537</td>
<td>6%; 266</td>
</tr>
<tr>
<td>2018</td>
<td>91%; 1,734</td>
<td>9%; 175</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Ages 0-10</th>
<th>Ages 11-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>11%; 2,125</td>
<td>3%; 319</td>
</tr>
<tr>
<td>2018</td>
<td>17%; 3,244</td>
<td>15%; 1,697</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Ages 0-10</th>
<th>Ages 11-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>28%; 5,231</td>
<td>17%; 3,244</td>
</tr>
<tr>
<td>2018</td>
<td>44%; 8,191</td>
<td>15%; 1,697</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Ages 0-10</th>
<th>Ages 11-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>62%; 6,785</td>
<td>15%; 1,697</td>
</tr>
<tr>
<td>2018</td>
<td>20%; 2,220</td>
<td>3%; 319</td>
</tr>
</tbody>
</table>
Distribution of Prescriptions by MME per Day by Year, Compared to National Medicaid Average

<table>
<thead>
<tr>
<th>Year</th>
<th>0-10</th>
<th>11-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017 Tennessee</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>2017 National Medicaid Avg</td>
<td>89%</td>
<td>10%</td>
</tr>
<tr>
<td>2018 Tennessee</td>
<td>91%</td>
<td>9%</td>
</tr>
<tr>
<td>2017 Tennessee</td>
<td>44%</td>
<td>17%</td>
</tr>
<tr>
<td>2017 National Medicaid Avg</td>
<td>28%</td>
<td>11%</td>
</tr>
<tr>
<td>2018 Tennessee</td>
<td>49%</td>
<td>7%</td>
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<tr>
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<td>26%</td>
<td>19%</td>
</tr>
<tr>
<td>2017 National Medicaid Avg</td>
<td>20%</td>
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</tr>
<tr>
<td>2018 Tennessee</td>
<td>15%</td>
<td>3%</td>
</tr>
</tbody>
</table>

National Average Data Source – DentaQuest Partnership Analysis of 2017 IBM Watson Medicaid Marketscan Data
Discussion

• The differences in the number of prescriptions suggest 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 I Do as Provider?

• 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
QUESTIONS?
Webinar Evaluation

https://www.surveymonkey.com/r/DQPAug29Webinar

*Must complete by EOD Thursday, September 5 in order to receive CE credit*
Next Webinar

Silver Diamine Fluoride
Thursday, September 19 1-2 p.m. ET

Click here to register
DentaQuest
Partnership
for Oral Health Advancement