WISCONSIN DENTAL PAIN PROTOCOL

Opioids, Teeth, and the Wisconsin Dental Pain Protocol (WDPP)

Introductory Presentation

Learning Objectives

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Review the **Wisconsin Dental Pain Protocol** (WDPP) and Proof of Concept

Introduce the **WDPP Implementation and On-Shift Clinical Tools**

WDPP Advisory Group

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- **Russ Dunkel**, DDS, FPFA, FICD, FACD / Wisconsin State Dental Director, WI DHS
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- **David F. Gundersen**, DDS, MPH / WDPP Developer
- **Debi DeNure**, RDH, BAS / WDPP Developer

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The Problem

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The Problem

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21,000

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WDPP | Background

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- In 2014–2015, a group of health care, ED/UCC, dental, and public health leaders convened to address NTDP presentations with the goals of:
  - **Establishing effective intake, treatment, and discharge protocols**
  - **Minimize use of opioids**
  - **Direct patients to definitive treatment for emergent oral health issues and prevent recidivism**
- Developed the NTDP ED/UCC Protocol, implemented February of 2015

WDPP | The Big Picture

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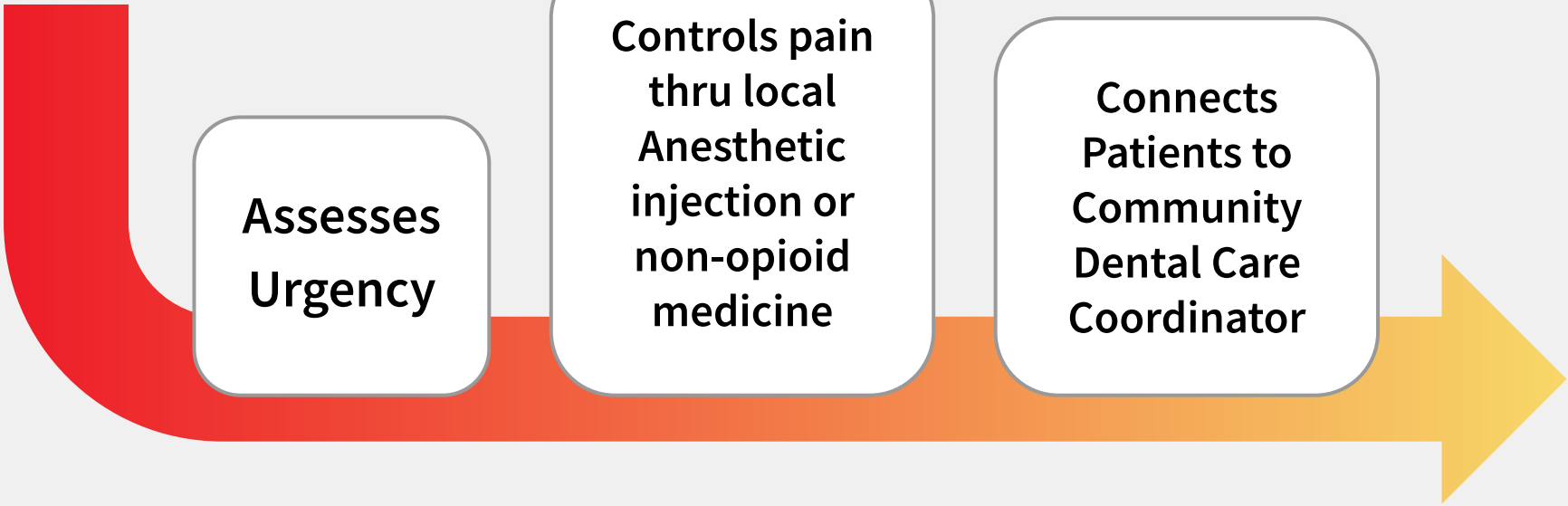
ED Provider



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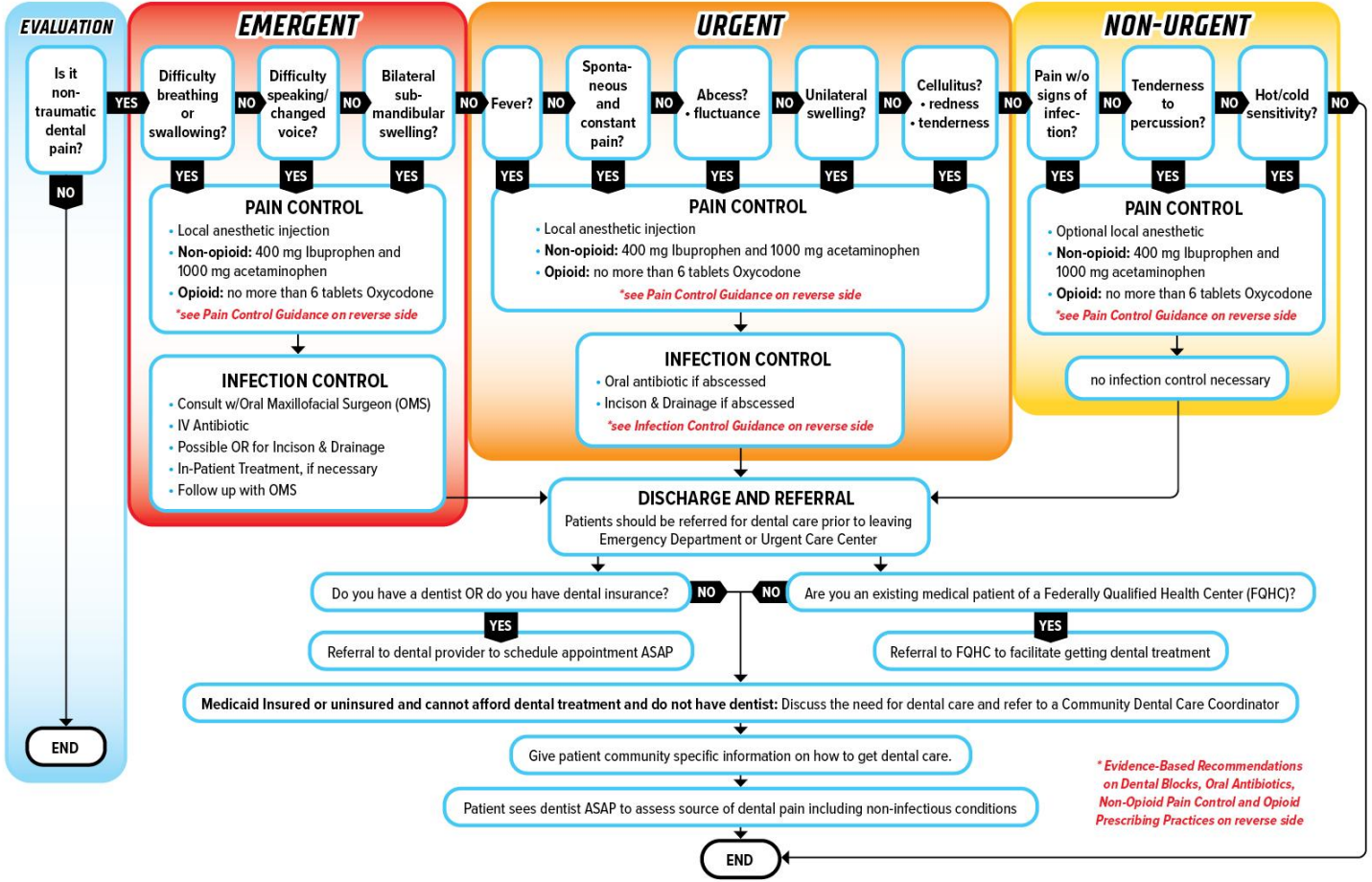
CLINICAL ALGORITHM

This algorithm was developed by Public Health Madison Dane County and is a public domain resource.



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EVIDENCE-BASED TREATMENT RECOMMENDATIONS

This algorithm was developed by Public Health Madison Dane County and is a public domain resource.

It is expected that all recommendations are subject to provider modification based on patient need and protocols for pain and infection control. The following dental pain and infection control recommendations are based on clinical best practices. Providers should prescribe based on their assessment of patient health history and clinical circumstance.

ONLINE RESOURCES

It is strongly recommended that providers receive training on injection technique prior to utilizing local anesthetic injections. In addition, the link below offers a webinar titled, *Management of Dental Pain in the Emergency Room.* The following time stamps offer targeted information and guidance for your immediate review and use.

Link: www.youtube.com/watch?v=spwoD4x79Tw

Time Stamps:

I. Opioid Prescribing and Its Impact (2:52)
II. Local Anesthetic and Use of Vasoconstrictors (7:32)
III. Anesthetics for Dental Pain (14:52)
IV. Anesthesia Injection Techniques (25:35)
V. Delivering Local Anesthetic Demonstration (29:05)
VI. Types of Analgesia (46:08)
VII. Dental Infection and Antibiotic Selection (1:02:28)

PAIN CONTROL GUIDANCE

As identified in the Clinical Algorithm, providers should utilize the following non-opioid and opioid pain control regimens:

1. 400 mg of Ibuprofen and 1000 mg of Acetaminophen every 4–6 hours PRN for pain. Provider may increase dosages at their discretion.
2. If in the provider's judgement the patient requires opiate pain control, patient should be given no more than 6 tablets of Oxycodone and informed there will be no refills.

LOCAL ANESTHETIC GUIDANCE

Provider should offer immediate pain control through local anesthetic injection. Injection dose of 1.8 cc is standard. Maximum amounts dictated by type of anesthetic, patient weight and health history.

- **General Use:** 2% Lidocaine with 1:100,000 epinephrine can be used for all types of injections.
- **Inferior Alveolar Nerve Block:** 2% Lidocaine with 1:100,000 epinephrine coupled with .5% Bupivacaine with 1:200,000 epinephrine.
- **Infiltration at Source of Pain:** 4% Septocaine with 1:100,000 epinephrine coupled with .5% Bupivacaine with 1:200,000 epinephrine
- **Infected Areas (Exudate or Severe Swelling Present):** Add 2% Mepivacaine with 1:200,000 Neo-Cobefrin

INFECTION CONTROL GUIDANCE

Per the webinar, the following antibiotic regimens are recommended:

Mild Infections (no visible swelling, exudate or pain on palpation present)

- Amoxicillin 500 mg – 1 gram loading dose, then BID
- Keflex 500 mg – 1 gram loading dose, then QID
- Azithromax (Z-Pak) 250 mg – 2 tabs first day, then 1 tab till gone (5 days)

Moderate Infections

- Amoxicillin 500 mg – 1 gram loading dose, then BID plus Metronidazole 500 mg BID
- Clindamycin 300 mg, QID with 450 mg loading dose
- Augmentin 500 mg, 1 gram loading dose then TID

The 5–7 days is the average with 10 days max.

WDPP | Discharge

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Essential to get patient into **definitive care** to address current problem but also prevent recidivism for same condition.

"You need to see a dentist soon to get the treatment you need. If not, the pain and infection will keep coming back."

WDPP | The Big Picture

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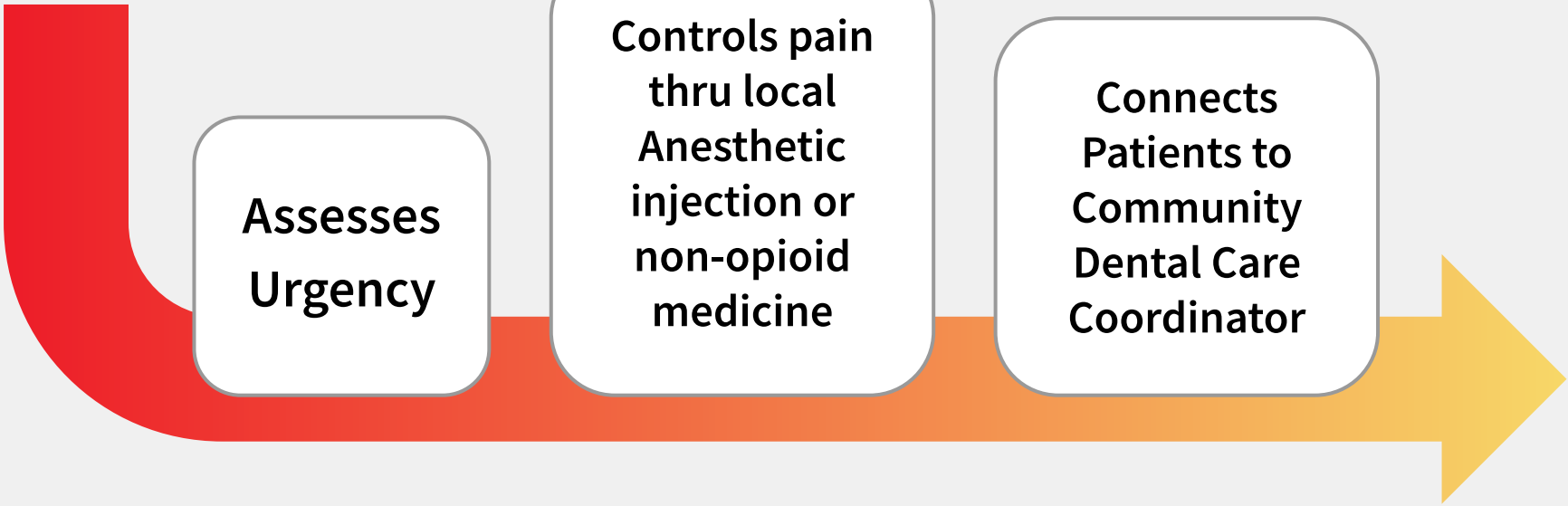
ED Provider



Clinical Hands-On Training

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- Syringe and Manikin Station
- Oral Landmark Station
- Skull Anatomy Station

WDPP | Outcomes to Date

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In Dane County

- Repeat dental pain visits have shown a decline since 2016 in all participating hospital EDs and urgent care centers (UCCs).
- The number of ED visits for dental pain has been cut by more than half since 2014, dropping from 2,405 to 1,123 visits in 2018.
- There is also a similar drop in Urgent Care visits.
- The combination of this initiative, continued collaboration, and an increase in local dental resources may have contributed to this positive outcome.

Total Providers Trained

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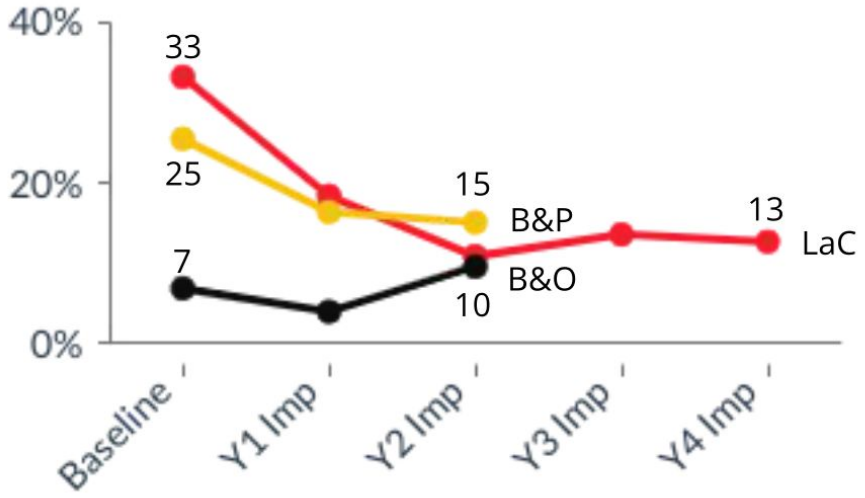
Opioid Prescribing after Implementation

The % of **visits prescribed an opioid** for NTDP **trends lower** with longer implementation.



Readiness to Launch Checklist

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Wisconsin Dental Pain Protocol (WDPP)

Implementation Checklist

- ❑ **Clinical algorithm** jointly agreed upon by participating health care organizations (HCOs)
- ❑ **Clinical training** provided to emergency care providers that includes hands-on training on local anesthetics and dental blocks and review of the WDPP clinical algorithm
- ❑ **Dental providers** willing to provide dental care to those referred from emergency settings
- ❑ **Care coordination** identified by agency/individual to provide between patients, reporting to emergency settings for non-traumatic dental pain, and dental providers
- ❑ **Referral mechanism** developed and agreed upon by participating dental providers

Online Resources

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www.widentalpain.org