Dental Therapy: Growing State Activity and the Evidence Base for Improving Access to Care for the Underserved

Jane Koppelman
Research Director, Pew Dental Initiative
UCSF School of Dentistry
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Our Mission

The Pew Dental Campaign strives for cost-effective policies that will mean millions more people get the basic dental care they need to lead healthy lives.
Overview

• Why Dental Therapy?
• CODA DT Guidelines
• Evidence Re Quality, Access, Cost-Efficiency, Patient Outcomes
• How are U.S. Practices Using DTs?
• Update on State/Tribal Activity
“Good health requires good oral health, yet millions of Americans lack access to basic oral health care.”

-Institute of Medicine, 2011
The Problem: Access to Care

@75 million lack dental insurance—
>57 million in dentist shortage areas
@2/3 of dentists don’t take Medicaid
Public Clinics at Capacity

Mission of Mercy clinic in Cape Girardeau,
Missouri on May 3, 2013. dental care.
>57 million live in dentist shortage areas
Children on Medicaid Struggle

32% of dentists accepted public insurance in 2018.

48% of children on Medicaid did **NOT** see a dentist in 2017.
# 2011 – 16 Untreated Tooth Decay Rates

**Children (2-5)**
- > 200% fpl: 6%
- <200% fpl: 14%

**Adults (20-64)**
- > 200% fpl: 18%
- <200% fpl: 41%

**Seniors (65+)**
- > 200% fpl: 10%
- <200% fpl: 29%

Figure 3: Percentage of Children Ages 2-18 with a Dental Visit in the Year for Select Income Groups, 2000-2013

Source: American Dental Association Health Policy Institute analysis of the Medical Expenditure Panel Survey, AHRQ. October 2015.
Figure 4: Percentage of Adults Ages 19-64 with a Dental Visit in the Year for Select Income Groups, 2000-2013

Source: American Dental Association Health Policy Institute analysis of the Medical Expenditure Panel Survey, AHRQ. October 2015.
Big gaps in the system

“If you live in the suburbs, if you have a car, plenty of money, dental insurance, and no dental disease, we have the perfect delivery system for you.”

– Charles Bertolami, Dean
New York University College of Dentistry
Expensive and Inadequate Care

In 2016, there were 2.2 million ER visits for dental conditions at a total cost of $2.4 billion
Total national health expenditures, US $ Billions, 1970-2017

Source: Kaiser Family Foundation analysis of National Health Expenditure (NHE) data • Get the data • PNG
One Way to Improve the Delivery System
What are Dental Therapists?

- Midlevel dental providers similar to physician assistants
- Work under the supervision of a licensed dentist
- Provide preventive and routine restorative care (i.e. filling cavities, nonsurgical extractions, placing temporary and preformed crowns)
Why Employ Dental Therapists?

• Improve the productivity and efficiency of dental practices
• Help practices serve more Medicaid patients
• Make community-based care models more economically sustainable
CODA Releases DT Guidelines

- CODA: sole national accrediting agency for all dental-related education programs
- Approved accreditation standards for DT education programs in August 2015
- After extensive research, input and deliberations, CODA concluded that:
  - Need exists in U.S. for a mid-level dental provider
  - DTs can be trained to provide safe and high quality care
  - There is public and professional support for the new profession
CODA DT Guidelines: Education

• **Degree Awarded**: No degree specified. Educational programs can determine this.

• **Program Length**: At least three academic years post-high school. May be shorter for dental assistants and dental hygienists granted advanced standing for coursework already completed.

• **Hygiene credential requirement**: None
Supervision levels will be set by states, and can include dental therapists working in locations different from their supervising dentists.
CODA DT Guidelines: Procedure Examples

Evaluative Procedures:
• Comprehensive charting of the oral cavity
• Exposing radiographic images

Preventive Procedures:
• Oral health instruction and disease prevention education, including nutritional counseling and dietary analysis
• Teeth cleaning and polishing, including scaling below the gums
• Applying topical fluoride agents and sealants
Restorative Procedures:

• emergency palliative treatment of dental pain limited to CODA-listed procedures
• preparation and placement of direct restoration in primary and permanent teeth
• fabrication and placement of single-tooth temporary crowns
• preparation and placement of preformed crowns on primary teeth
• simple extraction of erupted primary teeth
CODA DT Guidelines: Procedure Examples

Other Procedures:

• administering local anesthetic
• suture removal
• minor adjustments and repairs on removable prostheses
Evidence on Care Quality Provided by Dental Therapists
Evidence on safety of dental therapists

Review of 1,100 documents show that dental therapists deliver safe, effective care
Audit of 640 Irreversible Procedures:

- alloy restorations
- posterior composite restorations
- extractions

No Difference in Complication Rates between DTs and Dentists

Bolin, Kenneth Anthony, “Assessment of Treatment Provided by Dental Health Aide Therapists in Alaska: A Pilot Study, Journal of the American Dental Association, 2008;139;1530-1535
appropriately trained midlevel providers are capable of providing **high-quality services**, including **irreversible procedures** such as restorative care and dental extractions.”

- American Dental Association

  Council on Scientific Affairs, 2013
Improving Access with Dental Therapists
MN: Increasing Access to Care

- Over 3 years, 13 clinics responding to survey saw nearly 7,000 new patients
- @84% of patients seen by DTs are on public insurance
- Reduced travel times and wait times for patients, especially in rural areas
- Higher proportion of DTs in rural areas than other health professions
- DTs work at 370 mobile dental sites
Impacts in Alaska

Since 2005, 40,000 people in 81 previously un/underserved communities now have regular access to dental care.
The Business Case for Dental Therapy
Case Studies in Minnesota

Main Street Dental (private practice in rural MN)

- Additional $24,000 profit in DT’s 1st year
- Served additional 200 Medicaid patients
- Overall patient visits up 27%

Midwest Dental (private practice in rural MN)

- Average monthly revenue up by $10,000
- 71% of DT’s patients publicly insured
- 83% of procedures by DT restorative

HealthPartners (nonprofit healthcare provider/insurer)

- DT productivity only 9% lower than dentists
- Compensation package for dentists almost 3X that of DTs
Case Studies in Minnesota

People’s Center FQHC (Minneapolis)

- DT conducted 1,756 patient visits in 1 year
- Medicaid revenue exceeded her employment costs by $30,000

Apple Tree Dental DT offsite in nursing home

- 71-87% of charges for care w/in scope of DT/ADT
- $52,000 in annual savings by employing DT

Apple Tree Dental DT in rural hospital-based dental clinic

- Daily gross production 94% of dentists
- 78% of DT patients publicly insured
- 64% of DT procedures restorative
How are Practices Using Dental Therapists?
Utilization Examples

- MN FQHC dentist able to accommodate increase in emergency visits by having DT offer routine care to clinic patients
- One practice in Saskatchewan has DT seeing all children
- DTs deployed to nursing facilities, schools, programs for people w/disabilities – DTs in MN working in 370 mobile clinic sites
- Dentists hire DTs to offload routine restorative procedures and make room to provide more complex procedures
Main Street Dental Care: Private Practice, MN

% Change in Procedures Performed by dentist in DT’s 1st year

- Composite Restorations
- Surgical Extractions
- Root Canals
- Implants
- Exams
Do Dental Therapists Improve Oral Health?
Outcomes in Alaska

• Study of DHATs serving communities in the Bethel Service Area of the YK Delta from 2006-2015

• Results showed that high exposure to DHATs was associated with fewer extractions and increases in preventive care for children and adults

Source: Donald L. Chi, Dane Lenaker, Lloyd Mancl, Matthew Dunbar, and Michael Babb, “Dental Utilization for Communities Served by Dental Therapists in Alaska’s Yukon Kuskokwim Delta: Findings from an Observational Quantitative Study” (Aug. 11, 2017).
Average # of Required Fillings for Students Declined 50% over 6 years of DTs working in schools

State/Tribal Activity

Dental Therapy: A Growing Profession
U.S. Models

- Dental therapist (hygiene based)
- Dental Therapist (non-hygiene based)
Dental Therapy

*without a dental hygiene degree*

- **Tribal**
  - Alaska
  - Oregon
  - Washington
  - Idaho

- **Statewide**
  - Minnesota
  - Michigan
Dental Therapy

*with a dental hygiene degree*

- Minnesota
- Maine
- Vermont
- Arizona
- New Mexico
- Connecticut
- Nevada
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<tbody>
<tr>
<td>Provider Name</td>
<td>Dental Health Aide Therapist</td>
<td>Dental Health Aide Therapist</td>
<td>Dental Health Aide Therapist</td>
<td>Dental Therapist</td>
<td>Advanced Dental Therapist</td>
<td>Dental Therapist</td>
<td>Dental Therapist</td>
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<tr>
<td>Supervision Level</td>
<td>General supervision</td>
<td>General supervision</td>
<td>General supervision</td>
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<tr>
<td>Required Preceptorship</td>
<td>400 hours or three months, whichever is longer, under direct supervision</td>
<td>400 hours or three months, whichever is longer, under direct supervision</td>
<td>400 hours or three months, whichever is longer, under direct supervision</td>
<td>None</td>
<td>2,000 hours under direct or indirect supervision</td>
<td>2,000 hours under supervised practice</td>
<td>1,000 hours under direct supervision</td>
<td>1,000 hours under direct supervision</td>
<td>500 hours under direct supervision</td>
<td>To practice full scope under general supervision: 2,000 hours under indirect supervision (or 1,500 hours for a DT with 5 or more years of dental hygiene experience)</td>
<td>500 hours under direct supervision</td>
<td>1,500 hours under direct supervision</td>
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<tr>
<td>Collaborative Management Agreement Required</td>
<td>No; definition of general supervision is to practice under &quot;standing orders&quot;</td>
<td>No; definition of general supervision is to practice under &quot;standing orders&quot;</td>
<td>No; definition of general supervision is to practice under &quot;standing orders&quot;</td>
<td>Written collaborative management agreement</td>
<td>Written collaborative management agreement</td>
<td>Written practice agreement</td>
<td>Collaborative agreement</td>
<td>Written practice agreement</td>
<td>Dental therapy practice agreement</td>
<td>No</td>
<td>Written practice agreement</td>
<td>Collaborative agreement</td>
</tr>
<tr>
<td>Education Requirements</td>
<td>Education program certified by Community Health Aide Program Certification Board (CHAPCB); CHAPCB requires that education standards must meet or exceed CODA dental therapy standards or the standards of the Alaskan DHAT Educational Program</td>
<td>Must be accredited by a national dental accreditation program or be approved by the Minnesota Board of Dentistry</td>
<td>CODA accredited education program</td>
<td>CODA accredited education program</td>
<td>CODA accredited education program</td>
<td>Accredited by the MI Board of Dental Practice which includes but is not limited to meeting CODA standards</td>
<td>CODA accredited education program</td>
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<td>CODA accredited education program</td>
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<td>Degree Requirement</td>
<td>Minimum degree not specified</td>
<td>Minimum degree not specified</td>
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<td>Minimum bachelor's</td>
<td>Minimum master's</td>
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<tr>
<td>Hygiene Requirement in Statute</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Restrictions on Practice Settings/Populations Served</td>
<td>Limited to tribal lands</td>
<td>Limited to tribal lands</td>
<td>Approved pilots are limited to tribal lands</td>
<td>Limited to public health settings or settings where at least 50% of DT's patient base is on public insurance or underserved</td>
<td>Limited to public health settings or settings where at least 50% of DT's patient base is on public insurance or underserved</td>
<td>None</td>
<td>None</td>
<td>Limited to public health settings or private practices that serve patients of record of a community health center</td>
<td>Limited to public health settings or settings with at least 50% of DT's patient base is on public insurance or underserved</td>
<td>Limited to public health settings</td>
<td>Limited to tribal lands</td>
<td>Limited to public health settings or settings with at least 50% of DT's patient base is on public insurance or underserved</td>
</tr>
<tr>
<td>Non-Surgical Permanent Teeth Extractions Allowed</td>
<td>Yes (after consultation with dentist)</td>
<td>Yes (after consultation with dentist)</td>
<td>Yes (after consultation with dentist)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
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1. Direct or indirect supervision.
2. Private practices.
3. Limited to public health facilities.
4. Limited to public health settings or settings with at least 50% of DT's patient base is on public insurance or underserved.
5. Limited to public health settings or settings with at least 50% of DT's patient base is on public insurance or underserved.
6. Limited to public health facilities.
7. Limited to public health settings or settings with at least 50% of DT's patient base is on public insurance or underserved.
Need for National Consistency

Current Laws Vary In:

- Educational/Licensure Requirements
- Supervision Levels
- Allowable Procedures
What’s at Stake?

- Longer than necessary ed requirements drive up cost of training & cost of delivering care

- Overly-restrictive supervision rules drive up cost of delivering care & hamper efforts to place DTs in community locations

- Varying credentialing standards make it hard for DTs to move to different states

- Lack of a portable credential limits recruitment of DTs to underserved communities
NATIONAL MODEL ACT FOR LICENSING OR CERTIFICATION OF DENTAL THERAPISTS

Evidence-based policies for licensing or certification of Dental Therapists based on emerging national standards for the profession.

January 2019

National Dental Therapy Standards Consortium
I. DT Education Requirements

- CODA accredited program, or approved by dental board
- CODA length of education and no specified degree
- No requirement for clinical preceptorship
- No requirement for dual hygiene credential
II. Supervision

A. Written supervision agreement with dentist

B. General supervision as allowed by supervising dentist:
   (no prior exam or dentist diagnosis required)

C. No quota on # of agreements
III. Scope of Practice

Services listed in CODA’s accreditation Standards, with revision on CODA language re “identification” of dental conditions

*Diagnose*
Scope of Practice (Cont.)

B. *Additional services beyond CODA*

- Nonsurgical extractions of permanent teeth under limited conditions
- Pulpotomy on primary teeth
- Tooth reimplantation and stabilization
- Recement permanent crown
- Administration of nitrous oxide
- Placement of space maintainers (CODA lists removal but not placement)
- Reading X-rays (CODA lists “exposing” but not ”reading”)
- Direct pulp capping of primary teeth (CODA lists indirect but not direct)
- Fabricating soft occlusal guards
- Other related services and functions
Questions?

Jane Koppelman
Research Director
jkoppelman@pewtrusts.org