



Children's Dental Services

## Dental Therapy in Minnesota: Data on Quality and Efficiency

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# CHILDREN'S DENTAL SERVICES

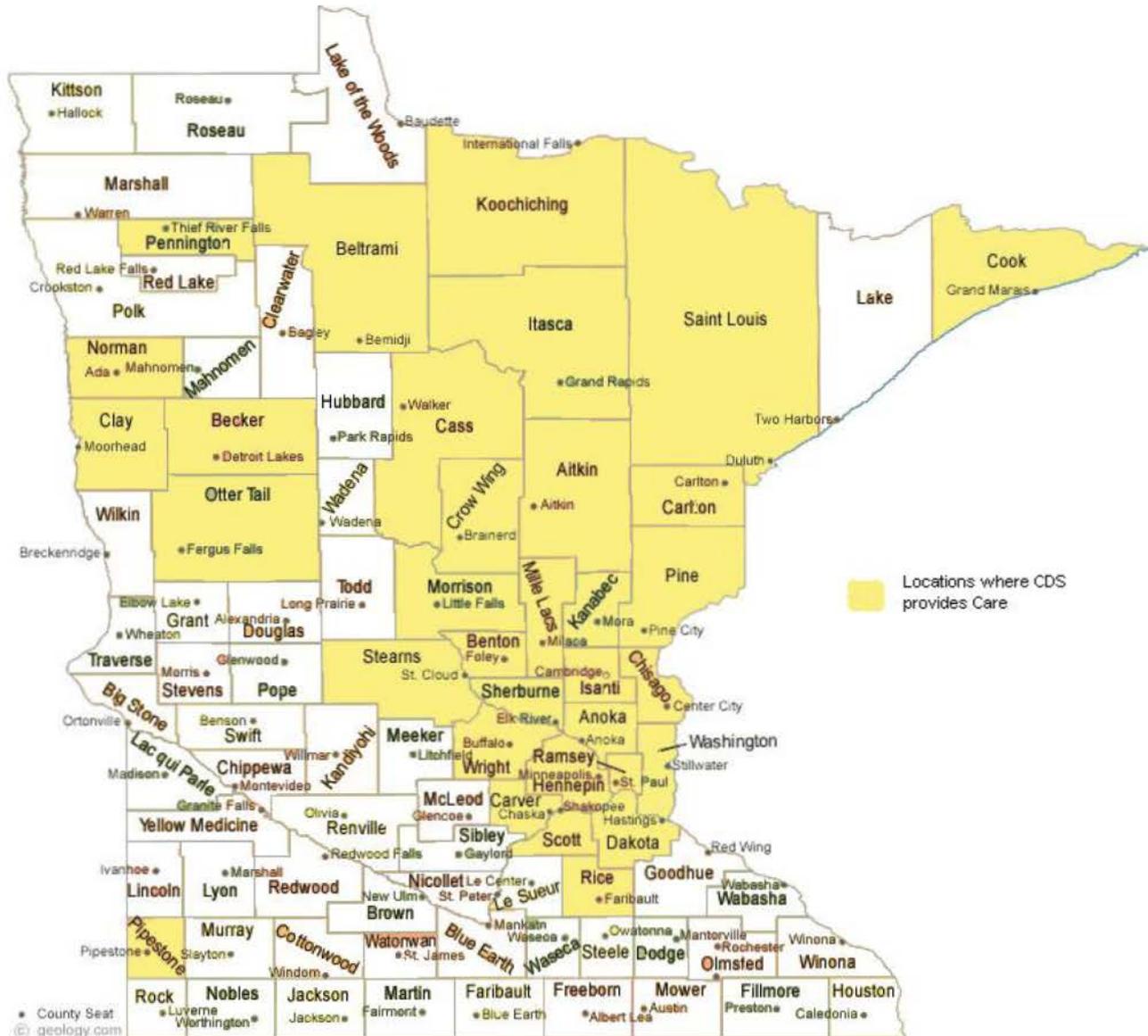
- **CDS Mission Statement:**  
*Since 1919 Children's Dental Services is dedicated to improving the oral health of children from families with low incomes by providing accessible treatment and education to our diverse community.*



Children's Dental Services



# Map of CDS' Service Area



# Why Advanced Dental Therapists are a solution?

- ◉ Community-based
- ◉ More continuously present than scarce dentists
- ◉ Engage patients
- ◉ Naturally integrate preventive care and education into patient visit
- ◉ Gain expertise on limited scope of restorative procedures
- ◉ Free dentists to practice at “top of license” and focus on complex cases

# Practice Settings for Minnesota ADTs

## **Subd. 2. Limited practice settings:**

An advanced dental therapist licensed under this chapter is limited to primarily practicing in settings that serve low-income, uninsured, and underserved patients or in a dental health professional shortage area.

# Characteristics of ADTs

- ◉ All ADT services can be provided under General Supervision.
- ◉ General Supervision is defined in Minnesota Rule 3100.0100: “The supervision of tasks or procedures that do[es] not require the presence of the dentist in the office or on the premises at the time the tasks or procedures are being performed, but requires that the tasks be performed with the prior knowledge and consent of dentist”.
- ◉ ADTs will therefore directly increase access to care by providing care in rural or low-income area where access is a huge problem.
- ◉ While ADTs are not required to undergo chart review by Dentists, CDS ADTs do consult and review cases in a collaborative manner.
  - Teledentistry and frequent communication enables these reviews for Dentists practicing in Minneapolis and St Paul and for ADTs practicing in Greater MN.

# PROCEDURES PERFORMED BY ADTs



## Oral Evaluation and Assessment

- OHI
- X-Rays
- Preliminary charting

## Non Surgical Extractions of Primary and Permanent teeth

- Dressing changes
- Administration of nitrous oxide
- Suture removal

## Restorations

- Placement of temporary restorations
- Atraumatic restorative therapy
- Administration of local anesthetic
- Application of desensitizing medication or resin
- Tissue conditioning and soft relines
- Tooth re-implantation

# PROCEDURES PERFORMED BY ADTs



Preventive	<ul style="list-style-type: none"><li>• Mechanical Polishing</li><li>• Application of topical preventive or prophylactic agents, including fluoride varnishes and sealants</li></ul>
Endo	<ul style="list-style-type: none"><li>• Pulp vitality testing</li><li>• Pulpotomies on primary teeth</li><li>• Indirect and direct pulp capping on primary and permanent teeth</li></ul>
Mouthguards	<ul style="list-style-type: none"><li>• Fabrication of athletic mouth guards</li><li>• Fabrication of soft occlusal guards</li></ul>

# HIRING: THE FIRST ADTs IN MINNESOTA

- Christy Jo Fogarty, a graduate of Metropolitan State University, was the first ADT hired and credentialed in Minnesota.
- Employed at CDS since December 2011.
- Became Minnesota's first licensed ADT in January 2013.



**CDS hired Elizabeth Branca, its third ADT from the Metropolitan State University Program, in June 2013.**

# Collaborative Management Agreements

- Collaborative Management Agreement (CMA): a formal agreement detailing roles and responsibilities for advanced dental therapist and supervising dentists
- Statute requires all advanced dental therapists to engage in a CMA
- Advanced dental therapist employers are required only to submit CMA to the Minnesota Board Of Dentistry (BOD) (*actual process requested by Board has been more involved than this*)

# Fitting into the Dental Team

According to the PEW Center on the States a team approach to dentistry has been found to be the most effective and provide the most access to dental care:

“In solo private dental practices—where most dentists work—adding new types of providers and dental hygienists produced gains in productivity and increased earnings by a range of 17 to 54 percent. Dentists who operate a practice by themselves can increase their pre-tax profits by six or seven percent by accepting more Medicaid-enrolled children and hiring either a dental therapist or a hygienist-therapist” .

# FITTING INTO THE DENTAL TEAM

Traditional team: DDS, RDH and LDA.

Today: DDS, ADT, Collaborative Practice RDH,  
RDH, LDA, Unlicensed DA.

Integrating ADT:

- Scheduling own column of patients
- Program producing highly skilled and qualified clinicians

**Quote of one CDS dentist about working with CDS ADT: “She completes fillings better than I do. I don’t know why I am checking her work.”**

# CDS' Data on Dental Therapy Care

- ◉ Since December of 2011, CDS' DTs and ADTs combined have provided care to over 5,000 patients.
- ◉ There have been 2 requests to see a dentist instead of a dental therapist.
- ◉ There have been no complaints or claims of poor quality.
- ◉ Over 90% of survey respondents state that they are satisfied or very satisfied with the quality of care received by a DT or ADT.

# Issues of Quality and Risk

- ◉ ADTs and DDS undergo the same licensure exams for procedures they both provide.
- ◉ Marsh Insurance provides professional liability coverage for ADTs currently licensed as dental hygienists and members of ADHA. The cost is approximately \$93/year.
- ◉ Professional malpractice insurance from various providers range in cost from \$564 to \$1,209 for CDS' dentists (average cost is \$775/year)

# CDS' Data on Dental Therapy Care

- ◉ Since December of 2011, CDS' DTs and ADTs combined have provided care to over 4,000 patients.
- ◉ There have been 2 requests to see a dentist instead of a dental therapist.
- ◉ There have been no complaints or claims of poor quality.
- ◉ Over 90% of survey respondents state that they are satisfied or very satisfied with the quality of care received by a DT or ADT.

# RESULTS: PRODUCTION 2011

## Production Summary August 2011

DDS Code	Total Production Charges	Total Hours Worked	Total Production
DR11 Endo Provider	10,040	24	\$418.33
DR01	55,165	136.8	\$403.25
DR20	4,178	11.5	\$363.30
DR12	47,261	148.85	\$317.51
DR24	36,518	120.16	\$303.91
DR36	45,898	161.53	\$284.15
DR38	37,646	144.96	\$259.70
DR42	26,105	116.7	\$223.69
DR04	878	4.65	\$188.85
DR41	7,301	40.09	\$182.12
DR43	8,739	51.45	\$169.85
DR44	3,616	24.2	\$149.42
DR30	7,678	51.83	\$148.14

# RESULTS: PRODUCTION 2012

Production Summary August 2012 (*CDS began tracking DT productivity in March. ADT productivity has consistently risen since that time.*)

DDS Code	Total Production Charges	Total Hours Worked	Total Production
DR11 Endo Provider	6,420	16	401.25
DR01	66,696	130.39	511.51
DR04	2,132	4.35	490.08
DR20	4,974	12	414.50
<b>ADT01</b>	<b>66,508</b>	<b>171</b>	<b>388.94</b>
DR12	43,978	150.66	291.90
DR36	43,562	162.35	268.32
DR43	22,946	85.95	266.97
DR44	43,219	174.65	247.46
DR38	27,094	111	244.09
DR42	20,757	85.94	241.53
DR24	23,861	110.2	216.52
<b>ADT02</b>	<b>9,390</b>	<b>52</b>	<b>180.58</b>
DR41	3,017	23.55	133.79

# RESULTS: PRODUCTION 2013

## Production Summary August 2013

DDS Code	Total Production Charges	Total Hours Worked	Total Production
DR11 Endo Provider	8,516	16	\$532.25
DR20	19,343	43.15	\$448.27
DR44	53,555	138.05	\$387.58
ADT01	46,755	123.5	\$378.58
DR24	53,507	144.91	\$361.45
DR36	42,304	140.05	\$302.06
DR01	41,008	144.96	\$299.66
DT01	4,277	16.3	\$262.39
DR43	3,382	4.65	\$207.48
DR12	57,856	171.87	\$203.46
DR53	10,676	62.74	\$170.16
DR04	487	3.05	\$159.67

# SUMMARY OF DENTAL TEAM PRODUCTION RESULTS WITH INTEGRATION OF DENTAL THERAPIST

- 2011: Average production of team is \$280.72/hr
- 2012: Average production of team is \$298.09/hr (\$292.13 adjusting for fee increase); Average production of DT/ADT is \$340.35/hr
- 2013: Average production of team is \$336.87 per hour (\$326.76 adjusting for fee increase); Average production of DT/ADT is \$365.04/hr

# RESULTS: FINANCIAL IMPACT

DDS Cost  
\$75/hr

ADT Cost  
\$45/hr

ADT provides  
restorative  
care to 1,500  
low-income  
children and  
pregnant  
women per  
year

Total Cost Savings  
using ADT Pubic  
Health Model:  
\$1,200/week  
\$62,400/year

Cost-Benefit Analysis based on 1 ADT providing services covered under the ADT statute for 40 hours/week in a public health dental clinic.

# Lessons Learned

- Graduated ADTs are in high demand for employment
  - The ability to do preventive care in school-based settings is useful.
  - The ability to practice under general supervision allows flexibility and frees clinic space for additional providers.
  - Supervising dentists find that quality of care is excellent.
  - The entire dental team is more efficient with integration of a DT or ADT.
  - There have been no patient complaints related to any dental therapy work.

# REFERENCES

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# THANK YOU

Questions?

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