



Children's Dental Services

A MULTI-FACETED ORAL HEALTH PROVIDER MODEL

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Mission: 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

Children's Dental Services History

- Grew out of 1919 Minneapolis charitable women's organization to serve destitute orphans when health safety nets were non-existent.
- First in Minnesota to apply dental sealants in 1966.
- First in nation to provide on-site services in Head Start centers.
- Has quadrupled in size since 2000 due to the growing numbers of low-income children and families. Headquarters doubled in 2007 to meet this need. Opened second headquarters in 2014 to support increased in needs in inner city Minneapolis.

Children's Dental Services Programs

- Target population is low-income children ages birth until 26 and pregnant women of all ages
- Is the single largest oral provider of on-site dental care in Minnesota schools and Head Start centers
- Provides care focused and adapted for blind, deaf, disabled, autistic, HIV positive, drug addicted or homeless, and culturally targeted programs to those from East African, Latino, Southeast Asian and Native American backgrounds

2015 Demographics

- In 2015 CDS treated 34,928 patients who were provided 72,684 procedures over the course of 45,620 visits
- Somali/East African (24%), Latino (24%), African American (19%), Caucasian (18%), Hmong/Southeast Asian (9%), and American Indian (6%)
- 59% female, 41% male
- 82% receive Medical Assistance (MA), 17% are uninsured and enrolled in sliding scale programs (80% of whom receive free care), and less than 1% have private insurance

Barriers in Providing Services

- ❑ Swelling population of underserved patients
- ❑ High numbers of untreated immigrants/refugees
- ❑ Lack of funding-Minnesota's Medical Assistance reimbursement rates lowest in nation (CDS 2013 uncompensated care write off exceeded \$4.5 million)
- ❑ Difficulty hiring and retaining dentists (DDS)
- ❑ Results: As of 2013 only 37% of Minnesota children receiving Medical Assistance were able to see dentist

Solutions Embraced by Children's Dental Services

- Portable, site-based care
- Use of telehealth (teledentistry)
- Integrating culturally targeted practices
- Supporting dental clinicians to practice “at top of their licenses”
- Utilization of mid-level providers

Portable Dental Care Program

- Enables full range of care to be provided on-site in community-based settings
- Equipment small enough to fit nearly anywhere
- Model supported by HRSA and MN Department of Health



Teledentistry Utilization

- Defined as the remote provision of dental care, advice, or treatment through the medium of information technology, rather than through direct, personal contact with patient.
- Accomplished via telecommunication technology, digital imaging and the Internet.
- Supported by Minnesota Department of Health Clinical Dental Education Innovations funding.



Culturally Targeted Dental Care

- ❑ Language fluency: CDS' staff speak 18 languages and hail from more than 20 countries
- ❑ Representing cultures served: Understanding the cultural norms, religious needs and diets of target communities, staff create culturally focused and translated curriculum for care in community-based settings



Performing at “Top of License”

- Utilizing registered dental hygienists practicing independently under collaborative practice agreements with supervising dentists
- Training dental hygienists and dental assistants in Expanded Functions
- Integrating mid-level providers into dental team.
- Supported by HRSA and Minnesota Department of Health

Integration of Mid-level Providers

- Minnesota passed legislation in 2009 authorizing use of Dental Therapists to provide some restorative services under general supervision of a dentist
- Children's Dental Services hired first graduate and provides clinical training for all dental therapy students
- Currently employs 1 Dental Therapist and 4 Advanced Dental Therapists
- Supported by HRSA and Minnesota Department of Health

Characteristics of Minnesota Mid-levels

- Can perform limited scope of restorative dental services including:
 - Oral evaluation and assessment
 - Non-surgical extractions of teeth
 - Restorations
 - Prevention
 - Some endodontia
 - Fabrication of Mouth Guards

- All Advanced Dental Therapy services can be provided under General Supervision, defined in Minnesota Rule 3100.0100: "...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".

- Advanced Dental Therapists can practice independently in rural or low-income regions where dentist shortage is most acute.

Practice Settings for Minnesota Mid-levels

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.

Initial Questions about Mid-levels

Dentists' primary source of information about field=local and national dental associations

- Questions arose:
- -quality of patient care
- -ability to handle uncooperative patients
- -impact on supervising dentist/liability

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).

Collaborative Management Agreements

- Formal agreement between dental therapists and supervising dentists
- Statute requires all advanced dental therapists to engage in a CMA
- No more than five dental therapists can enter into CMA with a single DDS
- CMAs must include:
 - Practice settings and populations to be served
 - Any limitations on services provided by supervised dental therapist
 - Age and procedure specific practice protocols
 - Dental records protocol
 - Plan to manage medical emergencies
 - Quality assurance plan
 - Protocol for dispensing and administering medications
 - Protocol for care to patients with special conditions or complex medical histories
 - Referral protocol

Data on Dental Therapy Care

- ❑ Since December of 2011, CDS' ADTs combined have provided care to over 14,000 patients.
- ❑ There have been 5 requests to see a dentist instead of a dental therapist.
- ❑ There have been no complaints of poor quality by ADTs; during the same period there were 3 complaints of poor quality against a dentist and 1 complaint against a hygienist.
- ❑ Overall appointment wait time has decreased by 2 weeks; overall patient time with provider has increased by 10 minutes.
- ❑ 97% of survey respondents state that they are satisfied or very satisfied with the quality of care received by an ADT, compared with 92% satisfaction with dentists and 97% satisfaction with hygienists.
- ❑ 35% increase in complex and hospital-based cases provided by dentists.

Results: Production 2011

NOTE: based on billing in community clinic setting with lower than average fees

Provider 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

Provider 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
ADT01	66,508	171	388.94
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
ADT02	9,390	52	180.58
DR41	3,017	23.55	133.79

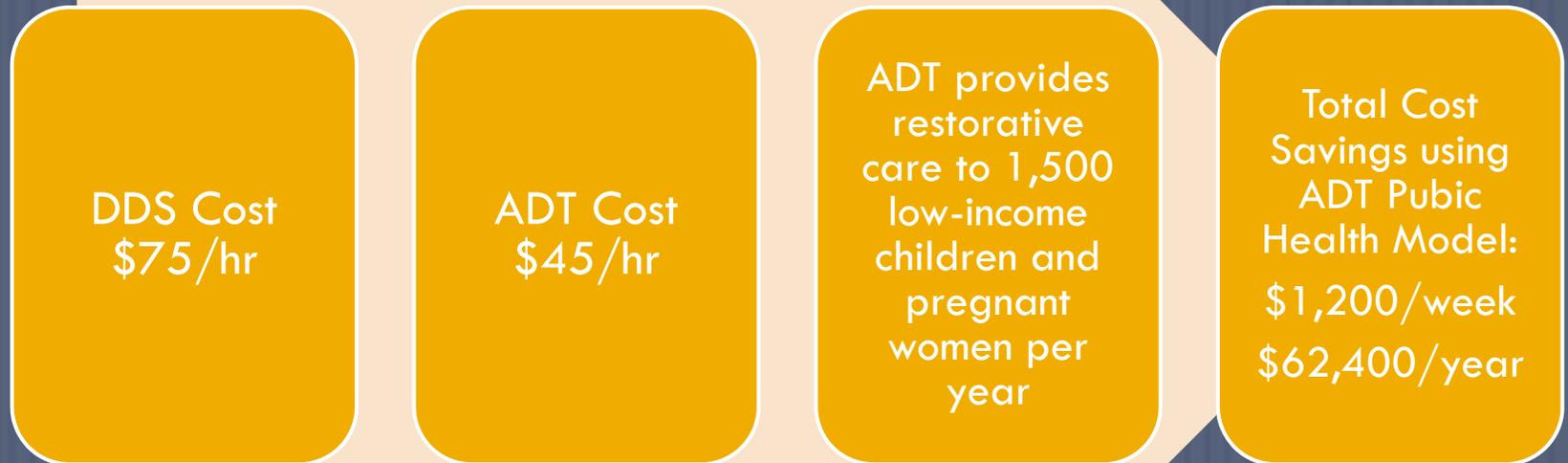
Results: Production 2013

Provider 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 integrating dental therapist (salaries: dentist = \$75/hr, dental therapist = \$39/hr, advanced dental therapist = \$45/hr; providers bill and paid same per procedure)

- 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 ADT is \$340.35/hr
- 2013: Average production of team is \$336.87 per hour (\$326.76 adjusting for fee increase); Average production of ADT is \$365.04/hr
- 2014-16: Average production of ADT is \$365.44/hr

Financial Impact



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

Effective Dental Teams

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”.

Summary-Dental Team Criteria for Success

- Greater reach via community-based portable settings
- Innovative accessibility via culturally targeted care, new technologies like teledentistry
- Diversity of workforce providers including DDS, ADT, Collaborative Practice RDH, RDH, LDA, Unlicensed DA, Community Health Worker

Results: -Higher levels of communication/coordination
-High patient satisfaction
-Expanded access to basic and complex care

References

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<http://www.dentalboard.state.mn.us/Portals/3/>

<http://www.dentalboard.state.mn.us/Portals/3/Licensing/Dental%20Therapist/ADT-CMA%2012-410approved.pdf>

THANK YOU

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