



Dental Public Health Project/Activity Descriptive Report Form

Please provide a detailed description of your **successful dental public health project/activity** by fully completing this form. Expand the submission form as needed but within any limitations noted.

NOTE: Please use Verdana 9 font.

CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS
<p>Name: Marty Milkovic MSW</p> <p>Title: Director</p> <p>Agency/Organization: Connecticut Dental Health Partnership</p> <p>Address: 195 Scott Swamp Road; Farmington CT 069032</p> <p>Phone: 860-507-2302</p> <p>Email Address: marty.milkovic@ctdhp.com</p>
PROVIDE CONTACT INFORMATION FOR ONE ADDITIONAL PERSON WHO COULD ANSWER QUESTIONS REGARDING THIS PROGRAM
<p>Name: Leigh-Lynn Vitukinas RDH MSDH</p> <p>Title: Outreach Coordinator</p> <p>Agency/Organization: Connecticut Dental Health Partnership</p> <p>Address: 195 Scott Swamp Road; Farmington CT 069032</p> <p>Phone: 860-507-2315</p> <p>Email Address: leigh.vitukinas@ctdhp.com</p>

SECTION I: ACTIVITY OVERVIEW

Title of the dental public health activity:

Connecticut Perinatal and Infant Oral Health Project

Public Health Functions*: Check one or more categories related to the activity.

"X"	Assessment
X	1. Assess oral health status and implement an oral health surveillance system.
	2. Analyze determinants of oral health and respond to health hazards in the community
	3. Assess public perceptions about oral health issues and educate/empower them to achieve and maintain optimal oral health
Policy Development	
X	4. Mobilize community partners to leverage resources and advocate for/act on oral health issues
X	5. Develop and implement policies and systematic plans that support state and community oral health efforts
Assurance	
	6. Review, educate about and enforce laws and regulations that promote oral health and ensure safe oral health practices
X	7. Reduce barriers to care and assure utilization of personal and population-based oral health services
	8. Assure an adequate and competent public and private oral health workforce
X	9. Evaluate effectiveness, accessibility and quality of personal and population-based oral health promotion activities and oral health services
X	10. Conduct and review research for new insights and innovative solutions to oral health problems

***[ASTDD Guidelines for State and Territorial Oral Health Programs that includes 10 Essential Public Health Services to Promote Oral Health](#)**

Healthy People 2020 Objectives: Check one or more key objectives related to the activity. If appropriate, add other national or state HP 2020 Objectives, such as tobacco use or injury.

"X"	Healthy People 2020 Oral Health Objectives	
X	OH-1	Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth
X	OH-2	Reduce the proportion of children and adolescents with untreated dental decay
X	OH-3	Reduce the proportion of adults with untreated dental decay
X	OH-4	Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease
	OH-5	Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis
X	OH-6	Increase the proportion of oral and pharyngeal cancers detected at the earliest stage
X	OH-7	Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year
X	OH-8	Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year
	OH-9	Increase the proportion of school-based health centers with an oral health component
	OH-10	Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health component
X	OH-11	Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year

	OH-12	Increase the proportion of children and adolescents who have received dental sealants on their molar teeth
	OH-13	Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water
X	OH-14	Increase the proportion of adults who receive preventive interventions in dental offices
	OH-15	Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips and cleft palates to craniofacial anomaly rehabilitative teams
	OH-16	Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system
	OH-17	Increase health agencies that have a dental public health program directed by a dental professional with public health training
"X"	Other national or state Healthy People 2020 Objectives: (list objective number and topic)	

Provide 3-5 Key Words (e.g. fluoride, sealants, access to care, coalitions, policy, Medicaid, etc.) These will assist those looking for information on this topic:

perinatal, infant, fluoride, Medicaid, coalitions, partnerships, medical-dental integration, access to care, pregnant women, early childhood tooth decay, fluoride varnish, prevention, children services

Executive Summary: Complete after Section II: Detailed Activity Description. Please limit to 300 words in one or two paragraphs.

Provide a brief description of the dental public health activity. Include information on: (1) what is being done; (2) who is doing it and why; (3) associated costs; (4) outcomes achieved (5) lessons learned, both positive and negative.

Before 2009, dental utilization by perinatal women and infants in the HUSKY Health (Medicaid/CHIP) program in Connecticut was low. The Project works to improve the oral health of perinatal women and infants in HUSKY Health through four goals:

1. Increase the dental utilization of perinatal women
2. Increase the dental utilization of infants
3. Increase the number of children < four years who receive an oral assessment and/or an application of fluoride varnish by a pediatric health care provider
4. Establish and maintain a Perinatal and Infant Oral Health Work Group as an advisory committee to the Project

To achieve these outcomes the Project focuses on these activity areas:

- Develop materials for perinatal women, parents of infants, Obstetricians and Gynecologists (OB/GYN), pediatric Primary Care Physicians (PCP) and community agency staff
- Ensure the adequacy of the dental network for perinatal women
- Outreach to OB/GYNs
- Outreach to Pediatric PCPs
- Outreach to community agencies
- Measurement of outcomes using claims and enrollment data
- Coordination of perinatal and infant oral health stakeholders

The Project is integrated into the overall care coordination and outreach function of the HUSKY Health dental program, so direct cost information is not available. However, administration is about 4-5% of the overall costs. In September 2013, Connecticut was awarded a \$750,000 HRSA Perinatal and Infant Oral Health Quality Improvement grant for a four-year period, through March 2018.

Dental utilization for perinatal women increased from 29.8% in 2005 to 57.6% in 2017. Dental utilization for infants increased from 27.3% in 2009 to 55.7% in 2016. Oral assessments by pediatric medical providers for children under four increased from 4,310 in 2012 to 16,105 in 2017 (+274%) and fluoride varnish applications went from 1,993 to 10,511 (+427%).

The successes of the Project were achieved through intensive outreach to clients, medical/dental providers and community agencies.

SECTION II: DETAILED ACTIVITY DESCRIPTION

Provide detailed narrative about the dental public health activity using the headings provided and answering the questions. Include specifics to help readers understand what you are doing and how it's being done. References and links to information may be included.

****Complete using Verdana 9 font.**

Rationale and History of the Activity:

1. What were the key issues that led to the initiation of this activity?

Unique New Model

In 2000, legal aid organizations in Connecticut filed a lawsuit against the State of Connecticut alleging that the State's Medicaid program was violating Federal law and regulation by providing poor access to dental care for children and adults. At the time Connecticut's Medicaid program was operated under a managed care model with multiple Managed Care Organizations (MCOs) and a slightly lower number of Dental Benefit Management companies who operated the dental portion of Medicaid under contracts with the MCOs. The lawsuit was settled in 2007 and in 2008 the State created a dental "carve out" by establishing the Connecticut Dental Health Partnership (CTDHP).

The Connecticut Perinatal and Infant Oral Health Project is an effort of the CTDHP, which is the HUSKY Health (Medicaid/CHIP) dental program for the state. BeneCare Dental Plans operates CTDHP under a contract from the Connecticut Department of Social Services (DSS).

This dental carve-out was designed as an Administrative Service Organization (ASO) model, where CTDHP did not assume any risk for the amount of care provided. This is different than where an MCO model risk is assigned to the MCO by paying a capitated (per person) amount for all care. The state pays a fixed amount per person for all costs related to providing care over a period, usually a month. The MCO assumes the risk of having to pay more than the average (capitated) amount per person. Conversely, they receive the reward of paying less. In an MCO model it is important for the state to provide oversight for the quality, adequacy and appropriateness of care provided.

In contrast, an ASO model, sometimes called "managed fee-for-service," the state pays the ASO to administer the program on a fee basis. No risk is assigned to the ASO, all risk is assumed by the state.

Low Utilization

Dental utilization for children in HUSKY Health was low under the MCO system, reported at 30.8% in the 2005 CMS-416 report filed with the Centers for Medicare and Medicaid Services (CMS) by the State of Connecticut. Likewise, as reported below, dental utilization for perinatal women and infants was low.

In 2009 CTDHP management decided to focus outreach efforts on perinatal women and children as part of the overall effort to improve the HUSKY Health dental program. In addition to low utilization rates, anecdotal information indicated that many dentists were not seeing perinatal women. The rate of fluoride varnish applications by medical providers was low and the concepts of the Dental Home and the Age One Dental Visit that were gaining acceptance nationally were not part of the HUSKY Health dental program.¹

¹ Definition of Dental Home, American Academy of Pediatric Dentistry, 2005, <https://www.aapd.org/research/oral-health-policies--recommendations/Dental-Home/accessed/2/13/2019>

Availability of Data

In 2008, the four-remaining medical MCOs in the HUSKY Health program all had initiatives to identify perinatal women in their membership. They identified about 9,000 of the approximately 14,000 annual HUSKY Health births and were willing to provide that information to CTDHP. It is challenging to identify prenatal women using medical claims data; usually billing for prenatal medical services and for the birth are combined into a single lump-sum claim filed after the birth. The MCOs used claims for prenatal vitamins and their own outreach efforts to identify prenatal women. A subsequent analysis conducted by CTDHP found that 62% of perinatal women could be identified through prenatal vitamin claims, 66.7% could be identified using any maternal care claims and that 96% could be identified post-partum through delivery claims.

In addition, the consolidation of the HUSKY Health dental program in CTDHP, the dental carve-out, included creating a single database of dental claims and a single dental provider database. The State of Connecticut already had a single database for HUSKY Health clients/members. This allowed improved and more timely analysis of dental information.

Outreach Capacity

The design of the CTDHP included capacity to perform much more outreach than was done under the prior MCO model. A staff of Dental Health Care Specialists (DHCS) was available, including six that lived and worked in regions of the state. One additional specialist supported clients with special health care needs. In 2014, an additional DHCS was hired. These specialists spend about half of their time doing outreach and about half doing one-on-one care coordination. DHCS are trained by CTDHP on the job and are recruited for skill and experience in community outreach, casework and/or dental knowledge.

The establishment of CTDHP in August 2008 and the completion of the hiring of the initial DHCS in late 2009 was an opportunity to implement a new state-wide outreach effort. Perinatal women and infants were chosen because of community interest in working with those populations and their low dental utilization rates.

2. What rationale/evidence (may be anecdotal) did you use to support the implementation of this activity?

Limitation of Traditional Outreach

CTDHP began working with perinatal clients in late 2009, obtaining lists of identified pregnant members from the four Managed Care Organizations in Connecticut Medicaid. Traditional telephone and mail outreach were utilized to reach the women, with limited results. Of the approximately three-fourths of identified women who had not had a preventative dental exam or cleaning in the prior year, traditional outreach only resulted in 8% getting of them into preventative care (CTDHP internal data, 2009). Lack of physical access was not a factor as all contacted women were referred to dentists near them who would see pregnant patients. At that time, CTDHP had a good network of dentists. Transportation assistance, appointment assistance, bi-lingual staff and/or translation services and other assistance were available. After analysis, the two primary barriers identified were inability to contact the women due to bad telephone numbers (about 56% of the women) and lack of follow-through or refusal (about 34% of the women, most of the balance of women were no longer enrolled in the program).

A New Model

To overcome those barriers, an innovative approach was attempted, which was to reach out to women through trusted community agencies where they were already going to receive non-dental services. The city of Norwich was chosen as the site to pilot the concept. Five community agencies were selected: the United Community & Family Services (UCFS, the Federally Qualified Health Center), the Thames Valley Council for Community Action (TVCCA, the Community Action Agency), the City of Norwich Social Services Department, Madonna Place (multi-service agency serving women) and Thames River Community Services (a transitional housing program for women and their children). Memorandums of Understanding (MOU) were signed with all of the agencies other than the City of Norwich Social Services Department and UCFS, to allow for the sharing of client protected health information. UCFS already had a business associate relationship with CTDHP and the City of Norwich did not wish to share the information.

The approach had two components. First the staff of the agency would be trained in the importance of oral health for pregnant women and all of their clients. They were given outreach materials including referral tear-off pads with information about CTDHP and its phone number, MCHB perinatal brochure, posters, and other materials. The CTDHP Dental Health Care Specialist (DHCS) did a presentation to each agency's staff. All of the agencies participated in this step. Second, the DHCS asked the agencies for the telephone numbers of those perinatal clients for whom CTDHP only had wrong numbers. The City of Norwich did not participate in this component as they did not sign an MOU.

The results were successful. Forty-four percent of the non-utilizing women got into preventive care during the pilot, as compared to only 8% that had gotten in preventive care with traditional outreach (CTDHP internal data, 2009). Of that group, some were reached through the agency number, but most either called CTDHP without any contact or were finally reached through the number in the Medicaid/CTDHP system. We postulate that those women in the later groups had received the "importance of oral health" message at the agencies and responded. We do not have any data to confirm that.

The results were replicated in a second pilot in Norwich with a larger group of women. This time 40% of the non-utilizing women got into preventative dental care.

In 2012 CTDHP added two additional efforts to reach perinatal women, and their children, through trusted people with whom they regularly interact. In an approach similar to intensive outreach with community agencies, CTDHP targeted pediatric PCP offices and OB/GYN offices in Connecticut.

Linking Maternal and Child Oral Health

The links between maternal and perinatal oral health with child oral health are well established. The children of mothers with a regular source of dental care, have better oral health.²

The Project focused on both perinatal oral health and the oral health of infants from the beginning. Children under the age of three, sometimes referred to as "very young children," are an appealing target group because of the ability to prevent future restorative needs through early intervention. In theory, if good oral health, good oral hygiene and regular dental care can be established early, then future problems can be avoided.

3. What month and year did the activity begin and what milestones have occurred along the way? (May include a timeline.)
 - CTDHP began as the HUSKY Health dental program in August 2008.
 - Work on perinatal and infant outreach began in late 2009.
 - Fluoride varnish became a billable service in 2009.
 - A pilot to test and intensive community outreach model was conducted in 2011.
 - Outreach to OB/GYN and pediatric primary care physicians began in 2012.
 - In September 2013, DSS and CTDHP were awarded a \$750,000 Perinatal and Infant Oral Health Quality Improvement (PIOHQI) grant for a four-year period. The grant was eventually extended until March 2018.
 - Multiple reports were produced during the grant:

Date	Title	Explanation	Data Source
10/1/2014	Dental Care for New Mothers in HUSKY A	Baseline data for 2005 & 2010, perinatal dental utilization	DPH Birth Certificate Database, DSS HUSKY Health Claims Database – obtained by CT Voices
10/1/2014	Dental Care for Young Children in HUSKY A	Baseline data for 2009-2012, children 0-2 dental utilization	DSS HUSKY Health Claims Database – obtained by CT Voices

² (Linking Mother Access to Dental Care and Child Oral Health, Community Dent Oral Epidemiol. 2009 Oct; 37(5): 381–390, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4821416/>, accessed 2/12/2019)

10/1/2014	Using HUSKY A Claims Data to Identify Pregnant Women and New Mothers for Outreach	Compares identifying perinatal women by birth certificate matching vs. prenatal vitamins and birth claims	DSS HUSKY Health Claims Database – obtained by CT Voices
6/2015	Dental Care for Young Children in HUSKY A	2013 update of baseline	DSS HUSKY Health Claims Database – obtained by CT Voices
8/2015	Oral Health Care for Young Children in the HUSKY Program	Fluoride varnish applications by pediatric PCP's, 2008-2013	DSS HUSKY Health Claims Database – obtained by CT Voices
2/2016	Using PRAMS Data for Evaluation of Connecticut's PIOHQI Project	Reviews limitations of using PRAMS data	DPH PRAMS Database – obtained by CT Voices
3/2016	Using Data from NSCH for Evaluation of Connecticut's PIOHQI Project	Reviews limitations of using NSCH data	National NSCH Database – obtained by CT Voices
5/2016	PIOHQI: Monitoring the HUSKY Program's Capacity for Caring for Pregnant Women and Infants	Analysis of 2012 and 2015 surveys of CTDHP dental providers regarding their capacity to see pregnant women and infants.	CTDHP Dental Provider Survey Database
7/1/2016	Oral Health Care in the HUSKY Program: Dental Care for Women	Shows dental utilization for all women 2005-2013, compares to 2003 Pregnancy Risk Assessment Tracking System (PRATS) (pre-PRAMS) and 2013 PRAMS	DSS HUSKY Health Claims Database – obtained by CT Voices
7/2016	Identifying Pregnant Women for Targeted Outreach to Improve Oral Health	Compares the perinatal women identified by CHNCT with the linked DPH birth certificate data. Shows that the CHNCT data has about 70 % of those identified by birth records.	CHNCT perinatal database – provided to CTDHP; DPH Birth Certificate Database
5/2017	Pregnancy Risk Assessment Monitoring System Data for Evaluation	Review 2003 PRATS data and 2012-2013 PRAMS data	PRATS and PRAMS data provided by DPH
9/2017	Dental Care for Pregnant Women in HUSKY A	Shows CT Voices birth-certificate-based perinatal dental utilization using DSS medical claims data for 2005 & 2010 and CTDHP perinatal dental utilization using similar methodology with claims data for 2014 & 2015. Trend is upward	DSS HUSKY Health Claims Database – obtained by CTDHP
1/2018	Dental Care for Very Young Children in the HUSKY Program: 2009-2016	Provides historical dental utilization for 2009-2016 for children under 3 years of age in the HUSKY Health program	DSS HUSKY Health Claims – CTDHP analysis

(Note: Reports available by contacting CTDHP)

- Project continues after HRSA grant ends in March 2018.

The sections below follow a logic model format. For more information on logic models go to: [W.K. Kellogg Foundation: Logic Model Development Guide](#)

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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1. What resources were needed to carry out the activity? (e.g., staffing, volunteers, funding, partnerships, collaborations with various organizations, etc.)

Staffing

Regular CTDHP staff (2009-present) - part of regular CTDHP budget

- Director of Care Coordination & Outreach (10% time on project)- oversees Project
- Outreach Coordinator (25%)- oversees outreach
- Six regional Dental Health Care Specialists (15%)- perform outreach in their regions of the state
- One in-office Dental Health Care Specialist (15%)- fill-in
- One Dental Health Care Specialist for clients with special health care needs (5%)- assists clients with SHCN
- Director of Operations and Compliance (5%)- data analysis

HRSA Grant (9/2013 to 3/2018):

- Outreach Coordinator (25% paid during grant)- as above
 - Project Lead (100% paid during grant)- managed grant
 - Evaluator (contractor as needed)- performed data analysis, completed reports

Funding

- HRSA Grant (9/2013 to 3/2018):
 - \$725,000
- CTDHP Budget – staff and operational support
 - Regular Medicaid/CHIP funding

Collaborative Partners

- Perinatal and Infant Oral Health Work Group
 - Connecticut Oral Health Initiative
 - CT Chapter, American Academy of Pediatrics
 - Connecticut Department of Public Health, MCH
 - Milford Board of Health
 - Branford Early Childhood Collaborative
 - The Maria Seymour Brooker Memorial, Inc.
 - Connecticut Department of Public Health, Office of Oral Health
 - Hartford Hospital
 - Southwestern AHEC Inc.
 - March of Dimes
 - Community Health Center, Inc., Medical Department
 - Center for Women’s Health & Midwifery
 - UCONN Health
 - Stamford Hospital
 - Greater Hartford Legal Aid
 - Community Health Center Association of CT
 - Circle for Life Midwifery Group
 - Staywell Health Center
 - Southwest Community Health Center, Inc.
 - Mansfield OB/GYN Associates
 - Connecticut State Dental Association

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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2. Please provide a detailed description the key aspects of the activity, including the following aspects: administration, operations, and services.

Administration and Operations

The Project is overseen by the CTDHP Director of Care Coordination and Outreach. Outreach activities are directed by the Outreach Coordinator. Financial activities are conducted by the CTDHP financial office. Data analysis is conducted by the CTDHP Director of Compliance and Operations.

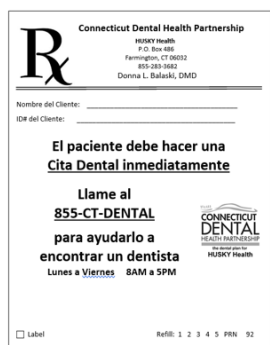
Activities

Develop materials for perinatal women, parents of infants, OB/GYN’s, pediatric PCP’s and community agency staff

A variety of outreach materials have been developed for the Project. The key piece is the oral health kit containing a toothbrush, toothpaste, floss and a flyer, all placed in an envelope with the CTDHP toll-free telephone number on the front along with reasons to see a dentist and a space to write down their appointment information. The kits are produced in several versions including one for perinatal women and one for the caregivers of infants. The infant kit (right) includes two toothbrushes, a fingertip version for use by the caregiver and a small first toothbrush for the child. That kit does not contain floss. The flyer in each kit has one side devoted to oral health information for that target group and the other side with information on how to brush and floss.



Infant oral health kits are distributed at pediatric PCP offices and community agency sites as part of DHCS outreach to those locations. Perinatal oral health kits are distributed to OB/GYN offices and some community agencies.



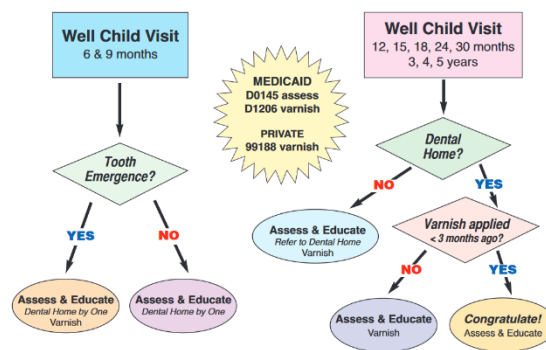
Another important outreach material is the referral pad. The physician pad is designed to look like a prescription pad and is intended for use by medical providers. It has the CTDHP telephone number and text that suggests urgency. The assumption is that a referral made by a medical provider with presentation of the page from the pad might increase patient follow-through.

There is a generic version of the pad used with community agencies.

Outreach packets are also prepared for both OB/GYNs and pediatric primary care physician (PCP) offices. The OB/GYN packet includes Connecticut’s perinatal oral health guidelines produced jointly by the Connecticut State Dental Association and the Connecticut Section of the American College of Obstetricians and Gynecologists a piece on oral and systemic health, a list of medications impacting oral health and other materials.³ All of these materials and others are available at [CTDHP’s website](#).

The pediatric PCO packet includes information on Connecticut’s ABC fluoride varnish program including a flow chart to assist the medical provider (see image to the right), information about training to perform an oral assessment and apply fluoride varnish, summary information about billing and other material. All of these materials and others are available at [CTDHP’s website](#).

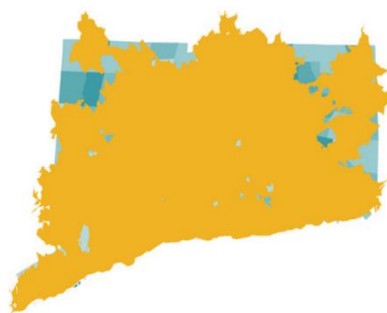
FLUORIDE VARNISH, ASSESSMENT, AND EDUCATION ALGORITHM



AAP Clinical Report June 2014: Fluoride use in caries prevention in the primary care setting. USPHS May 2014: Children From Birth Through Age 6 Years. The USPHS recommends that primary care clinicians apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption. Grade B. ©F O'Callahan, MD, PhD, FAAP. cdc.gov

Ensure the adequacy of the dental network for perinatal women

CTDHP has a robust network of dental offices and dentists. According to the American Dental Association’s Health Policy Institute (HPI), Connecticut may have the best geographic access for Medicaid children in the country. In a 2017 study by HPI, nearly 100% of Medicaid children had a dentist within a 15-minute drive (see image to the left). About 20% of HUSKY Health births in Connecticut are to women under the age of twenty-one, they are children in the HUSKY Health program. For the 80% of birth mothers who are adults, about half of the dental network see adults with a widespread distribution, such that 100% of HUSKY Health adults have a dentist accepting new patients within 20 miles.



99% OF PUBLICLY INSURED CHILDREN LIVE WITHIN 15 MINUTES of a Medicaid dentist.

99% of HUSKY Health children live in areas where there is at least one Medicaid dentist per 2,000 publicly insured children within a 15-minute travel time

Geographic access to Dental Care: Connecticut, American Dental Association Health Policy Institute, <https://www.ada.org/en/science-research/health-policy-institute/geographic-access-to-dental-care?source=PromoSpots&medium=ADAHPIRotator&content=GeographicAccess>. Accessed 2018-02-26

At the beginning of the Project, there was anecdotal information that dentists enrolled in the HUSKY Health network would not see prenatal

³ (<https://www.csdh.com/docs/default-source/dental-resources/considerations-for-treating-pregnant-patients.pdf?sfvrsn=2>)

patients. In 2011, DHCS began outreach to all of the approximately one thousand dental offices enrolled in HUSKY Health. They encouraged offices to see prenatal women and delivered a copy of Connecticut's perinatal oral health guidelines produced jointly by the Connecticut State Dental Association and the Connecticut Section of the American College of Obstetricians and Gynecologists.⁴ They also provided a copy of the American College of Obstetricians and Gynecologists clinical guidelines, Oral Health Care During Pregnancy and Through the Lifespan (<https://www.ctdhp.com/documents/OralHealthCareDuringPregnancyandThroughtheLifespan.pdf>) . In 2012 CTDHP in its annual survey of dental offices, included questions regarding care provided to prenatal patients. That information is included in the CTDHP provider look-up tool used in our call center and by DHCS. They can easily see whether a dental office accepts prenatal patients.

Outreach to OB/GYN's

DHCS regularly visit about 180 OB/GYN offices to encourage them to talk to their patients about oral health, give them oral health kits to distribute during a patient appointment and refer them to CTDHP or a dental office if they do not have a dental home. During the initial visit they distribute the oral health packet and ask to do a presentation on the importance of oral health at a staff meeting. See above for the materials provided. An original list of about 220 OB/GYN offices was created in 2011 of offices that appeared to have high numbers of HUSKY Health patients as determined from claims data. The number of offices reduced due to GYN only office, address errors and a few refusals to participate. DHCS strive to maintain an ongoing relationship with the OB/GYN office in order to support their inclusion of oral health.

Outreach to Pediatric PCPs

DHCS regularly visit about 250 pediatric PCP offices to encourage them to talk to their patients about oral health, give them oral health kits to distribute during a patient appointment and refer them to CTDHP or a dental office if they do not have a dental home. During the initial visit they distribute the oral health packet and ask to do a presentation on the importance of oral health at a staff meeting. They encourage the office to participate in the ABC Program, the oral assessment and fluoride varnish application initiative. Information on training, billing and implementation are provided. See above for the materials provided. An original list of about 300 pediatric offices was created in 2011 of offices that appeared to have high numbers of HUSKY Health patients as determined from claims data. The number of offices reduced due to address errors and a few refusals to participate. DHCS strive to maintain an ongoing relationship with the pediatric PCP office in order to support their inclusion of oral health.

Outreach to community agencies

DHCS regularly visit a variety of community agencies as part of their outreach work. Many of these agencies serve perinatal clients and the caregivers of infants. It is difficult to parse out the numbers of HUSKY Health clients who use these agencies, so we are making some assumptions about the impact of the outreach to that target population. DHCS educate agency staff as to the importance of oral health, encourage them to talk to our mutual clients about oral health and encourage them to refer them to us or to a dental office. Posters, pregnancy and oral health brochures in English and in Spanish, infant oral health brochures in English and in Spanish, generic referral pads and other materials are provided.⁵ Sometimes oral health kits are provided, depending on the agency.

Measurement of outcomes using claims and enrollment data

During the Project, CTDHP developed claims and enrollment analyses to measure project activities and outcomes. Activities, outreach and material distribution are recorded by DHCS in a proprietary software system developed by CTDHP. Reporting from the data provides the activities measurements. Three of the Project goals are measured through dental claims, client enrollment data and provider enrollment data.

⁴ <https://www.csda.com/docs/default-source/dental-resources/considerations-for-treating-pregnant-patients.pdf?sfvrsn=2>

⁵ <https://www.mchoralhealth.org/PDFs/pregnancybrochure.pdf>,
https://www.mchoralhealth.org/PDFs/pregnancybrochure_sp.pdf,
<https://www.mchoralhealth.org/PDFs/babybrochure.pdf> and
https://www.mchoralhealth.org/PDFs/babybrochure_sp.pdf

Over the term of the Project, perinatal dental utilization was measured in two ways. Until July of 2016, Connecticut Voices for Children (CT Voices), an independent non-profit organization, under a contract with the State of Connecticut Department of Social Services measured perinatal utilization in HUSKY Health. Data points for 2005 and 2010 were measured by CT Voices. They used a methodology that involved first analyzing birth certificate data obtained from the Department of Public Health, matching that with HUSKY Health client enrollment data from the Department of Social Services to get a list of the HUSKY Health women who gave birth in the year being studied. Dental utilization was measured for that list of women.

In 2016, due to budget cuts, the CT Voices contract was ended. From that point, CTDHP took up the effort and hired the CT Voices staff person who had coordinated the prior effort. That person and the CTDHP Director of Compliance and Operations devised a claims-based methodology that identifies HUSKY Health women who gave birth retrospectively. It used medical claims for the birth to identify the women. The new methodology was compared to the old and was found to produce similar results. Data points after 2016 were produced with the new methodology. Alternate methodologies were also examined. See **Availability of Data** above and the HRSA grant report "Identifying Pregnant Women for Targeted Outreach to Improve Oral Health" mentioned above and available from CTDHP.

Dental utilization for infants was achieved by much simpler analysis of dental claims data and client enrollment data. Data for the provision of oral health assessment and fluoride varnish application was obtained from medical claims data.

Coordination of perinatal and infant oral health stakeholders

As part of the HRSA PIOHQI grant, an Administrative Team of perinatal and infant oral health stakeholders was created to oversee and advise on the operation of the program. Over time, the team became the Perinatal and Infant Oral Health Work Group, a committee of the Connecticut Coalition for Oral Health. That move was part of the sustainability plan of the grant. The Work Group has membership from the organizations listed in the Inputs section above. It meets two to five times per year.

Services

In addition to the extensive outreach described above, CTDHP operates a call center for HUSKY Health clients with bilingual (Spanish-English) staff, access to a language line for all other languages, TTY access and offers referrals, assistance with benefits, transportation assistance and more. The CTDHP website (www.ctdhp.com) provides a wealth of information and HUSKY Health clients can log in and use a provider look-up tool.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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3. What outputs or direct products resulted from program activities? (e.g., number of clients served, number of services units delivered, products developed, accomplishments, etc.)

In 2017 as part of the Project, DHCS distributed:

- 9,572 perinatal oral health kits
- 8,699 infant oral health kits
- 379 Rx referral pads
- 1,063 pregnancy brochures, English
- 810 pregnancy brochures, Spanish

- A total of 71,991 materials including the above

In 2017 as part of the Project, DHCS performed outreach to:

- 63 Family Medicine Offices
- 186 OB/GYN Offices

- 290 Pediatrician Offices
 - 18 Community Action Agencies
 - 58 Head Start Locations
 - 4 Healthy Start Locations
 - 10 Nurturing Families Locations
 - 8 Basic Needs Agencies
 - 34 Family Services Agencies
 - 63 WIC Offices
 - 29 Schools
- A total of 994 contacts including the above.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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4. What outcomes did the program achieve? (e.g., health statuses, knowledge, behavior, care delivery system, impact on target population, etc.) Please include the following aspects:
- a. How outcomes are measured
 - b. How often they are/were measured
 - c. Data sources used
 - d. Whether intended to be short-term (attainable within 1-3 years), intermediate (achievable within 4-6 years), or long-term (impact achieved in 7-10 years)

1. Increase the dental utilization of HUSKY Health perinatal women

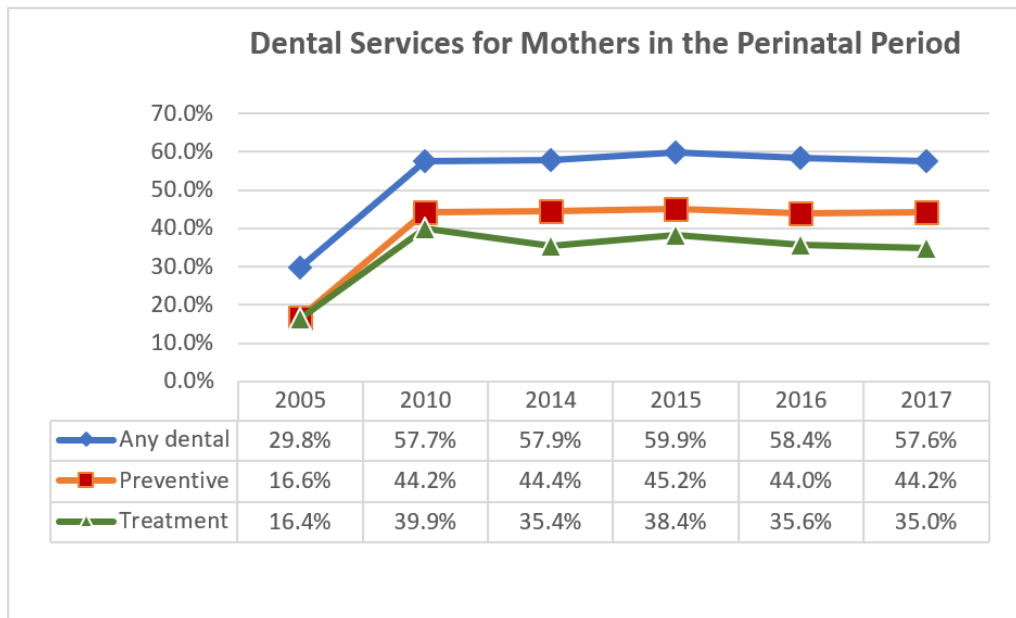
Perinatal dental utilization data sources and methodology are described above in 'Measurement of outcomes using claims and enrollment data'. Perinatal dental utilization rose sharply in 2010 and more slowly after that. Preventive care rose while treatment service dropped slightly, a good outcome.

Denominator: Women in HUSKY Health who gave birth during a calendar year

Numerator: Women who gave birth in a calendar year with dental claims six months prior to the birth and twelve months after

Data sources:

Denominator – before 7/2016 Birth Certificate database from the Connecticut Department of Public Health and HUSKY Health client enrollment data from the Connecticut Department of Social Services; - after 7/2016 HUSKY Health Medical claims database obtained by CTDHP;
 Numerator – HUSKY Health dental claims database



Discussion

Perinatal dental utilization rose sharply from 2005 to 2010. We believe this was due to increased outreach efforts of this Project including outreach to dental offices, combined with a modest increase in adult fees. The data has been flat since 2010, but compares favorably to slight decreases (not shown) for all HUSKY Health women.

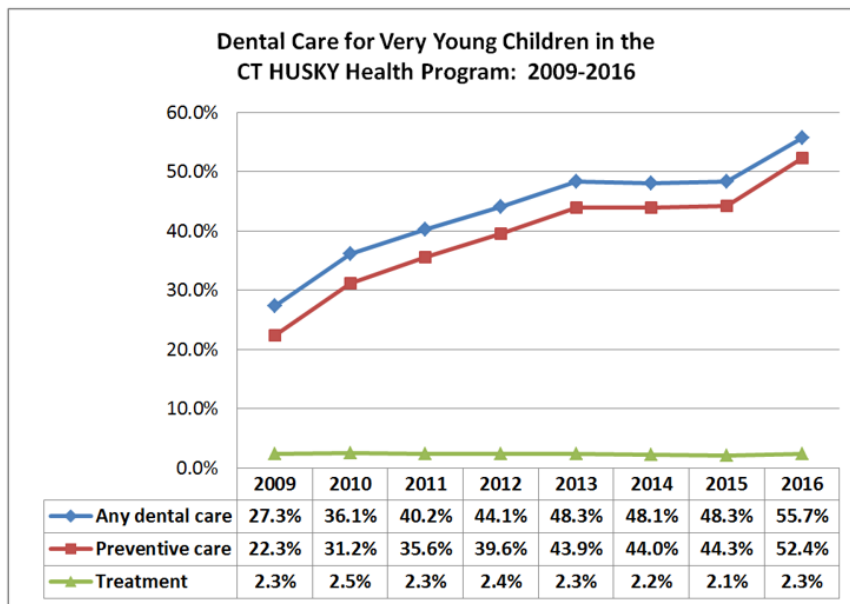
2. Increase the dental utilization of HUSKY Health infants

Dental utilization for infants, defined as children less than three years old is measured directly from HUSKY Health dental claims data and client enrollment data.

Denominator: Children in HUSKY Health under the age of three during a calendar year

Numerator: Children in HUSKY Health under the age of three during a calendar year with dental claims during the year

Data sources: Denominator –HUSKY Health client enrollment data obtained by CTDHP;
 Numerator – HUSKY Health dental claims database



Continuously enrolled children under age 3 (as of 12/31) in HUSKY A, B, C or D. Over the 8-year period, changes in program policy and procedures for determining new eligibility and renewal may have affected the number of children continuously enrolled from year to year. By definition, continuously enrolled infants were born in January. Source: Analysis by CT DHP for PIOHQIP evaluation, September 2017

Discussion

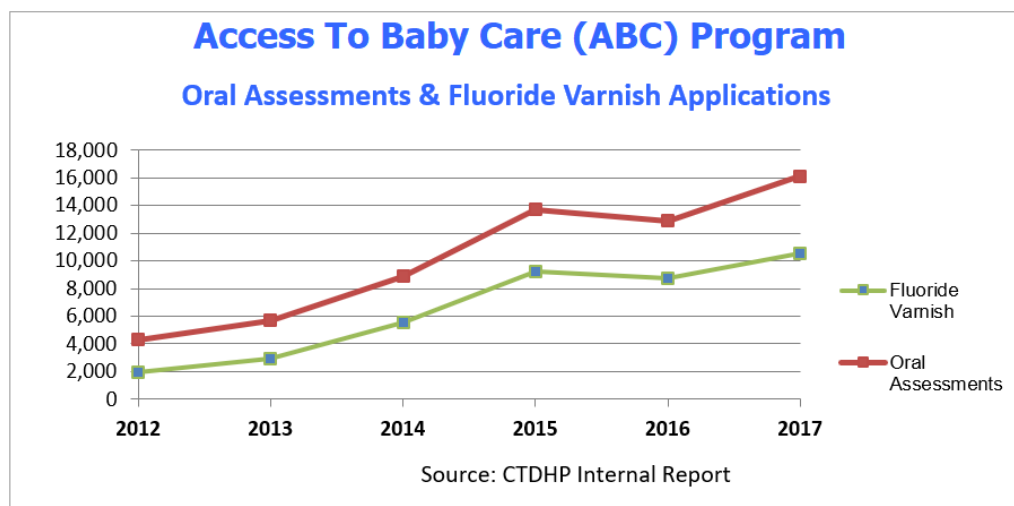
Dental utilization for infants/very young children has risen consistently over the life of the Project. Of particular note is that preventive treatment has risen while treatment services have remained low and flat. This is the desired result.

3. Increase the number of HUSKY Health children under the age of four who receive an oral assessment and/or an application of fluoride varnish by a pediatric health care provider

Oral Assessments and fluoride varnish applications have risen over the past five years of the Project.

Measure: claims for oral assessment and fluoride varnish application

Data sources: HUSKY Health medical claims database



Discussion

The outcome is positive, even with the dip in 2016. We cannot account for the decrease in that year.

4. Establish and maintain a Perinatal and Infant Oral Health Work Group as an advisory committee to the Project

Established in late 2013 under the HRSA PIOHQI grant mentioned above. Continued under the HRSA grant until early 2018 when the grant ended. Became a work group under Connecticut Coalition for Oral Health (CTCOH) in 2015 to present. Sixteen meetings held during that time.

Measurement: Count of meetings held.

Data Source: Agendas and Minutes on file at CTDHP.

Discussion

While there have been regular meetings, it is a challenge to keep a wide array of stakeholders involved. More work needs to be done to maintain the work group.

Name	Jurisdiction	Year	# Meetings
Administration Team	HRSA Grant	2014	5
Perinatal & Infant Oral Health Work Group	HRSA/CTCOH	2015	3
	HRSA/CTCOH	2016	2
	HRSA/CTCOH	2017	3
	HRSA/CTCOH	2018	2
	CTCOH	2019 to 3/1	1

Budgetary Information:

NOTE: Charts and tables may be used to provide clarity.

1. What is the annual budget for this activity?
2. What are the costs associated with the activity? (Including staffing, materials, equipment, etc.)
3. How is the activity funded?

A separate budget for perinatal and infant activity has not been maintained. The Project received a HRSA Perinatal and Infant Oral Health Quality Improvement (PIOHQI) grant from September 2013 to September 2017 with an extension to March 2018. Year One of the grant was for \$200,000 and years Two to Four were for \$175,000 each. Funds were used to pay for a full-time Implementation Lead, 25% of the Outreach Coordinator’s time, purchase of oral health kits (about \$1.25 each) and travel for outreach activities and participation in the grant’s learning collaborative.

Staffing time allotments were/are as follows:

- Regular CTDHP staff (2009-present):
 - part of regular CTDHP budget
 - o Director of Care Coordination & Outreach (10% time on project)
 - oversees Project
 - o Outreach Coordinator (25%)
 - oversees outreach
 - o Six regional Dental Health Care Specialists (15%)
 - perform outreach in their regions of the state
 - o One in-office Dental Health Care Specialist (15%)
 - fill-in
 - o One Dental Health Care Specialist for clients with special health care needs (5%)
 - assists clients with SHCN
 - o Director of Operations and Compliance (5%)
 - data analysis
- HRSA Grant (9/2013 to 3/2018):

- Outreach Coordinator (25% paid during grant)
- as above
- Project Lead (100% paid during grant)
- managed grant
- Evaluator (contractor as needed)
- performed data analysis, completed reports

4. What is the plan for sustainability?

The Project is integrated into the regular CTDHP budget and has achieved sustainability. CTDHP has maintained most of the project's activities within existing resources including staffing of the Perinatal and Infant Oral Health Work Group, outreach to OB/GYN's and pediatric Primary Care Physicians and the distribution of both perinatal and infant oral health kits. Senior management within CTDHP and the Connecticut Department of Social Service agreed during the course of the HRSA grant (three years) that these efforts could be integrated into the regular CTDHP budget.

Lessons Learned and/or Plans for Addressing Challenges:

1. What important lessons were learned that would be useful for others looking to implement a similar activity? Was there anything you would do differently?

Dental utilization for Medicaid/CHIP clients is impacted by multiple factors of which physical or geographic access is but one. Certainly, having physical access is a necessary condition for someone to get care, but it is not sufficient. In Connecticut, we have excellent physical access to dentists, yet child utilization is 'only' about 65% and perinatal women's dental utilization is 'only' about 50%. We believe that there are other significant barriers and that many of them are on the 'demand side'. It is well known that dental anxiety is a significant barrier to getting dental care. Fear of cost can also be a factor, although in HUSKY Health there are no co-pays and few services that are not covered. We think that a lack of understanding of the importance of oral health is the biggest barrier. Our society as a whole does not value oral health highly, so we should expect that our clients would reflect that attitude. Addressing access to dental care is important, but do not neglect the other barriers.

Social determinants of health are also barriers to getting to a dentist. Medicaid/CHIP clients, and poor people in general face many daily obstacles to obtaining care. It is easy to prioritize food and shelter above oral health in your daily life, especially if oral health is not considered important anyway. So, consideration of social determinants of health should be considered.

In looking at dental care access for a population, remember, you don't need all of the dentists in their geographic area, you only need enough. Consider what ratio of clients to dentists you want to achieve. One thousand clients to each dentist might be a point to start.

2. What challenges did the activity encounter and how were those addressed?

In our initial pilot of intensive community outreach for perinatal women, we attempted to get accurate client telephone numbers from the community agencies with whom we partnered. While this was a successful strategy in our small pilot, the logistics of doing that on a larger scale were overwhelming. We ultimately decided to stop that activity.

Convincing people that oral health is important is the major challenge. This includes policy makers, medical professionals, bureaucrats, clients and almost everyone. Overcoming this challenge is the focus of the entire project. Outreach and relationship building with these groups is based upon convincing them that oral health is important. The content of materials, the curriculum of training and presentations and outlines for relationship building interactions all include information and advocacy enhancing that point. The 'Trusted Person' model is based on the principal that we must first convince that person of the importance of oral health.

Available Information Resources:

Share any models, tools, and/or guidelines developed by the program specifically for this activity that may be useful to others seeking additional information. Hyperlink resources if possible.

Hyperlinks and references above.

TO BE COMPLETED BY ASTDD	
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