

First Teeth First Program Evaluation



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FIRST THINGS FIRST
Ready for School. Set for Life.



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Table of Contents

| | |
|---|-----------|
| Acknowledgements | 1 |
| Introduction..... | 6 |
| Background..... | 6 |
| Approach to the Evaluation | 9 |
| Implementation Evaluation | 10 |
| Program Description | 10 |
| Start- Up Activities..... | 11 |
| Organizational Background | 11 |
| First Things First Funding | 11 |
| Service Delivery | 12 |
| Training | 15 |
| Data Collection and Reporting..... | 15 |
| First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice | 16 |
| Program Informational Materials..... | 16 |
| Oral Health Educational Materials..... | 17 |
| Challenges and Barriers to Program Implementation..... | 18 |
| Achievements | 18 |
| Outcome Evaluation | 20 |
| Service Delivery and Oral Health Outcomes..... | 20 |
| Surveys | 27 |
| Community Partner Survey Findings..... | 27 |
| Perceived Program Impact and Suggestions for Improvement..... | 29 |
| Registered Dental Hygienist Survey Findings | 30 |
| Program Operations | 30 |
| Training | 31 |
| Program Strengths and Suggestions for Improvement..... | 32 |
| Bilingual Site Assistant Survey Findings..... | 34 |
| Training | 34 |



| | |
|---|-----------|
| Program Operations | 34 |
| Program Strengths and Suggestions for Improvement..... | 36 |
| Parent Satisfaction Survey | 37 |
| Follow-Up Study | 39 |
| Future Directions and Opportunities | 42 |
| Appendices | 44 |
| Appendix 1 | 45 |
| Literature Review Annotated Bibliography | 45 |
| Appendix 2 | 57 |
| Arizona Oral Health Programs Funded by First Things First..... | 57 |
| Appendix 3 | 64 |
| Arizona Oral Health Programs Funded by First Things First: Interview Summaries. | 64 |
| Appendix 4 | 80 |
| Community Partner Survey | 80 |
| Appendix 5 | 85 |
| Site Assistant Survey | 85 |
| Appendix 7 | 90 |
| Parent Satisfaction Survey - English | 90 |
| Parent Satisfaction Survey - Spanish..... | 91 |
| Appendix 8 | 92 |
| Fidelity Assessment Plan..... | 92 |



Table of Exhibits

| | |
|---|----|
| Exhibit 1. Arizona First Things First Regions in Maricopa County (Northwest, Southwest, North and Northeast) | 6 |
| Exhibit 2. First Teeth First Program Clinic Sites | 13 |
| Exhibit 3. Sample Oral Health Educational Brochure | 18 |
| Exhibit 4. Target Service Numbers | 20 |
| Exhibit 5. Number of Children who Received Oral Health Screenings from First Teeth First, December-June 2012 | 21 |
| Exhibit 6. Percentage of Children Served by First Teeth First who Experienced Urgent Dental Needs, Untreated Decay, and ECC..... | 21 |
| Exhibit 7. Number of Children in the North Region who Received Oral Health Services | 22 |
| Exhibit 8. Percentage of Children Served in the North Region who Experienced Urgent Dental Needs, Untreated Decay, and ECC..... | 22 |
| Exhibit 9. Number of Children in the Northeast Region who Received Oral Health Services | 23 |
| Exhibit 10. Percentage of Children Served in the Northeast Region who Experienced Urgent Dental Needs, Untreated Decay, and ECC. | 24 |
| Exhibit 11. Number of Children in the Northwest Region who Received Oral Health Services | 24 |
| Exhibit 12. Percentage of Children Served in the Northwest Region who Experienced Urgent Dental Needs, Untreated Decay, and ECC. | 25 |
| Exhibit 13. Number of Children in the Southwest Region who Received Oral Health Services | 26 |
| Exhibit 14. Percentage of Children Served in the Southwest Region who Experienced Urgent Dental Needs, Untreated Decay, and ECC. | 26 |
| Exhibit 15. Community Partner Experience with the First Teeth First Program..... | 28 |
| Exhibit 16. Level of Satisfaction with First Teeth First Program Operations, Registered Dental Hygienists (n=6) | 31 |
| Exhibit 17. Registered Dental Hygienists' Rating of First Teeth First Training (n=7) | 32 |
| Exhibit 18. Bilingual Site Assistants' Rating of First Teeth First Training (n=5) | 34 |
| Exhibit 19. Level of satisfaction with First Teeth First Program Operations, Bilingual Site Assistants (n=6) | 35 |
| Exhibit 20. How did you Hear about the Preventative Dental Services your Child(ren) Received Today? (n=279) | 37 |
| Exhibit 21. Parent Experience with the First Teeth First Program..... | 38 |
| Exhibit 22. Parent Perceptions of the Most Important Thing They Learned..... | 38 |
| Exhibit 23. Race and Ethnicity Comparisons between All Program Children and Children with Repeat Visits | 39 |
| Exhibit 24. Location Type: | 40 |
| Exhibit 25. Region: | 40 |
| Exhibit 26. Percentage of Second Visit Locations where the First Visit was in the North | |



| | |
|--|----|
| Region. | 41 |
| Exhibit 27. Percentage of Children Served with Repeat Visits who Experienced Urgent Dental Needs, Untreated Decay, and ECC..... | 42 |



Introduction

In collaboration with Arizona First Things First, the Maricopa County Department of Public Health, Office of Oral Health (MCOOH) implemented First Teeth First. First Teeth First is an initiative to reduce the incidence of childhood caries in Maricopa County, the fourth largest county in the nation. Program components include dental screenings and fluoride varnish applications for children through five years of age, and oral health education for families and pregnant women. The program received funding to serve four Arizona First Things First Regions in Maricopa County (Northwest, Southwest, North and Northeast), as illustrated in Exhibit 1.

Exhibit 1. Arizona First Things First Regions in Maricopa County (Northwest, Southwest, North and Northeast)



The MCOOH First Teeth First initiative incorporates a public health model for service delivery that utilizes partnerships with community organizations serving children ages 0-5 including Maricopa County's Women, Infants, and Children (WIC); Immunization Programs; Peoria, Deer Valley, and other School Districts; Delta Dental of Arizona Foundation; Quality First Child Care Centers; and other programs.

Background

Early childhood caries (ECC), better known as "baby bottle tooth decay," is one of the most common diseases affecting infants and young children. ECC is a severe, rapidly developing form of tooth decay in infants and young children (under 3 years). It is a multi-factorial disease linked to diet and oral hygiene. ECC is now recognized as an infectious disease, and decayed teeth require professional treatment to remove the

infection and restore tooth function. Dental caries, which includes ECC, is the most common chronic infectious disease among US children. This preventable health problem begins early; it is estimated that 48% of children age 2 to 4 years old have already experienced decay. Among children age 5-17, it is five times more common than asthma (59% vs. 11%).¹

There is a disproportionate distribution of ECC, with higher levels occurring in racial and ethnic minority groups and in communities with lower socioeconomic status.² Multiple interrelated social and demographic factors, including income, race, and parent's educational attainment can impact children's access to preventive dental care and contribute to these disparities.³ For example, it is well documented that low-income children are only half as likely to access preventive dental services as middle or high-income children. They are also two to three times more likely to suffer from untreated dental disease than their non-poor peers.⁴

Unfortunately, U.S. populations with the greatest burden of dental caries are the least likely to access dental care. According to a report by the PEW Center, in 2009 47% of Arizona's Medicaid (AHCCCS)-enrolled children were receiving dental care compared to the national average of 38.%. Among low-income children in the United States, almost 50% of tooth decay remains untreated, and may result in needless pain and suffering, oral dysfunction, low weight, and poor appearance. These are all problems that can reduce a child's ability to succeed in the educational environment. Moreover, dental caries results in increased costs of care and loss of school days. Without access to regular preventive dental services, dental care for many children is postponed until symptoms, such as toothache and facial abscess, become so acute that care is sought in hospital emergency departments.⁵ This consequence of failed prevention is not only wasteful and costly to the health care system, but it rarely addresses the problem, as few emergency departments deliver definitive dental services.⁶

Additionally, the health problems associated with ECC extend beyond the mouth. The Infant Oral Health Subcommittee of the American Association of Pediatric Dentistry

¹ Oral Health in America: A Report of the Surgeon General.2000. Available from URL: <http://www.surgeongeneral.gov/library/oralhealth/>.(accessed 97.22.11)

² Oral Health in America: A Report of the Surgeon General.2000. Available from URL: <http://www.surgeongeneral.gov/library/oralhealth/>.(accessed 97.22.11)

³ Edelstein, Burton. Disparities in Oral Health and Access to Care: Findings of National Surveys. *Ambul Pediatr* Mar-Apr. 2002; 2(2) ; Supplement.

⁴ Kenney Genevieve, Ko Grace: Ormond Barbara. Gaps in Prevention and Treatment: Dental Care for Low-Income Children. *The Urban Institute*. Accepted for publication; *American Journal of Public Health*.

⁵ Pettinato, Erika, Webb Michael, Scale N. Sue, A comparison of Medicaid reimbursement for non-definite pediatric dental treatment in the emergency room versus periodic preventive care. *Pediatric Dent* 2000; 22(6); 463-8.

⁶ CDHP Policy Brief: Cost Effectiveness of Preventive Dental Services.



notes that ECC can lead to a variety of problems such as decreased growth and deadly infection of the facial spaces. These children suffer from severe ECC because they lack access to simple, effective preventive dental treatments such as fluoride varnish applicants, referrals to dental homes and regular dental visits. Their lack of access has another, indirect impact on the children's oral health. Without oral health counseling and education, parents lack an understanding of the importance of maintaining proper care of baby teeth through appropriate dietary and oral hygiene practices.

As research continues to expand the knowledge base for the effectiveness of dental interventions in preschool children, fluoride varnishes, along with patient and parent education, are rapidly becoming integral components of prevention-based programs.⁷ According to the American Academy of Pediatric Dentistry and the American Association of Pediatrics, early screenings present an opportunity to educate parents about the medical, dental, and cost benefits of preventive care over restorative care, and may be more effective in reducing early childhood caries than traditional infectious disease models. Additionally, recruiting mothers during pregnancy improves the likelihood that they will participate in the assessment program.⁸ A comprehensive infant and oral care program includes: 1) risk assessments at regularly scheduled dental visits, 2) preventive treatments such as fluoride varnishes or sealants, 3) parental education on the correct methods to clean the baby's mouth, and 4) incentives to encourage participation in ongoing educational programming.

An annotated bibliography was composed by LeCroy & Milligan Associates in order to provide up to date best practice research to the First Teeth First staff. This is included in Appendix 1.

Another background component was a review of all Arizona Oral Health Programs funded by First Things First. The programs are summarized in Appendix 2, and the interview summaries with key staff at each of these sites is included in Appendix 3. These summaries along with the annotated bibliography were provided to the First Things First staff in Winter/Spring 2012 in order to help guide changes to their procedures.

⁷ Weintraub, J. A., et al, Fluoride varnish efficacy in preventing early childhood caries. J. Dent Res 2006; 85(2); 172-6.

⁸ Ramos-Gomez, Francisco J., Clinical Considerations for an Infant Oral Health Program, Compendium, Vol.26, No. 5 May 2005.

Approach to the Evaluation

Maricopa County Department of Public Health, Office of Oral Health contracted with LeCroy & Milligan Associates to assist with a program evaluation for the First Teeth First Program. The evaluation of the First Teeth First Program assesses the achievement of project goals and objectives that reduce the incidence of childhood caries:

- Provide dental screenings, fluoride varnish, and education to families of a target population of children birth through five years of age and screening and oral health education to pregnant women in the four Arizona First Things First Regions.
- Provide referrals to AHCCCS, KidsCare, and low cost dental clinics for uninsured children with urgent dental needs and untreated tooth decay.

To assess the extent that the program goals and objectives were achieved, the evaluation was organized into two parts: an Implementation Evaluation and an Outcomes Evaluation.

The implementation evaluation describes the First Teeth First program. This evaluation assesses the organizational context of the project, whether it was implemented as intended, and describes the preventative dental services received by children, families, and pregnant women. The purpose is to assist First Teeth First with an analysis of the effectiveness, efficiency and reach of the program through monitoring of key performance indicators, tracking of process objectives, and included recommended performance improvement strategies. Additionally, the implementation evaluation examines the extent that the First Teeth First Program meets the *First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice*.⁹

The outcomes evaluation was designed to assist MCOOH in establishing a foundation for examining programmatic outcomes for First Teeth First, including children returning for follow up screenings and fluoride varnish. The Evaluation Report includes findings, conclusions and recommendations based on services provided from July 1, 2011 through June 30, 2012. Additional follow-up information is reported through February 12, 2013.

⁹Grantee Agreements, Oral Health Funding Agreement between the Northwest Maricopa and Southwest Maricopa Regional Partnership Councils, Arizona Early Childhood Development and Health Board and Maricopa County Department of Public Health, Office of Oral Health, p.31-33.,(September, 2010) Oral Health Funding Agreement between the North Phoenix and Northeast Maricopa Regional Partnership Councils, Arizona Early Childhood Development and Health Board and Maricopa County Department of Public Health, Office of Oral Health p. 44-47. (July, 2011)



Implementation Evaluation

The purpose of the implementation evaluation is to provide an understanding of how the (MCDPH-OOH) First Teeth First Program works and of the factors influencing service delivery. The Implementation evaluation is needed for replication of the project, and supports the outcomes evaluation by establishing the context within which the impact findings can be interpreted. The implementation evaluation includes two related components:

- A program description that documents the process of planning, implementing and operating the MCOOH First Teeth First program
- An implementation evaluation to measure the extent to which the MCOOH First Teeth First Program was implemented as planned

Information sources documenting the program implementation for the MCDPH-OOH First Teeth First Program included Quarterly Narrative and Data Submission Reports prepared for First Things First, proposals and contracts, web site content, program brochures, and training materials. Additional information was also obtained through site visits to First Teeth First clinics, surveys, and project status meetings. These documents, meetings, visits, and the survey served to provide information regarding program implementation, including:

- Program history and evolution
- Start-up activities
- Organizational structure
- Collaboration and partnerships
- Program budget and funding
- Staffing
- Service delivery
- Quality assurance
- Data collection and reporting
- Training
- Challenges and barriers to program implementation/delivery
- Achievements and recent changes

Program Description

The MCOOH First Teeth First initiative utilizes a public health model for service delivery. First Teeth First partners with community organizations that serve children



ages 0-5 including Maricopa County's Women, Infants, and Children (WIC); Immunization Programs; Peoria, Deer Valley, and other School Districts; Delta Dental of Arizona Foundation; Quality First Child Care Centers; and other programs. By partnering with these community organizations, First Teeth First is able to provide preventive dental care to children in four Arizona First Things First regions in Maricopa County.

Start- Up Activities

The focus of the first year (FY 2011) was on program development which included: development of processes and protocols; creation of Program Coordinator and Program Assistant Positions; solicitation of dental professionals, bilingual site assistants , and program evaluation; database planning for clinical reporting; developing a referral process with pediatric dental care providers; and building capacity for First Teeth First. FY 2012 was the first full year of program implementation. ¹⁰

Organizational Background

The Maricopa County Department of Public Health (MCDPH) administers First Things First (FTF) grants in eight program areas, including injury prevention and education, child care health consultation, nurse-family partnerships, prenatal services, and oral health services. The Maricopa County Office of Oral Health (MCOOH) programs include the Dental Sealant Program, The Tobacco Use Prevention Program for Dental Professionals, the Ryan White Part A Dental Insurance Program, and the First Things First, First Teeth First Program.

First Things First Funding

Maricopa County Department of Public Health-Office of Oral Health received \$700,000 in funding in FY 2011 from First Things First to implement an oral health initiative for children 0-5 and pregnant women from two First Things First Regional Councils:

- Northwest Maricopa Regional Partnership Council \$500,000
- Southwest Maricopa Regional Partnership Council \$200,000

Additional funding was received for FY 2012 in the amount of \$1,260,852 from four First Things First Regional Councils:

- Northeast Maricopa Regional Partnership Council \$193,906
- North Phoenix Regional Partnership Council \$484,765

¹⁰ First Things First, Renewal Grant Agreement/2012 Contract Awarded # GRA-Multi-11-0077-01-Y2.



- Northwest Maricopa Regional Partnership Council \$413,349
- Southwest Maricopa Regional Partnership Council \$168,832

Service Delivery

The Maricopa County WIC Program is one of the largest in the United States, serving 80,000 people. The Office of Community Health Nursing participates in the Vaccine for Children program, a federally funded program providing vaccines at no cost to children who might not otherwise be vaccinated due to inability to pay. During FY 2012 MCDPH-OOH collaborated with the Maricopa County's WIC and Immunization Programs to provide standardized dental screenings and fluoride varnish to children 0-5 years of age at five WIC Sites and one Immunization clinic in the four target First Things First (FTF) Regions. These services were conducted by registered dental hygienists and bilingual site assistants.

MCOOH also subcontracted with Delta Dental of Arizona Foundation to provide screenings and fluoride varnish to preschool students in two Northwest Maricopa School Districts. First Teeth First staff collaborated with community organizations and child care centers to schedule First Teeth First clinics and educational events. Child Care Centers were a major focus for outreach and worked with Maricopa County Child Care Nursing Consultants. Exhibit 2 presents an overview of the First Teeth First Program clinic sites.



Exhibit 2. First Teeth First Clinic Site

| <i>Exhibit 2. First Teeth First Program Clinic Sites</i> | | | | |
|---|-------------------------------------|---------------------|---------------------------|------------------|
| Sites | Schedule | Host Site Partner | First Things First Region | Established |
| Maricopa County Avondale WIC 950 E Van Buren St # B Avondale, AZ 85323 | Monday-Thursday 8am- 3:30 pm | Maricopa County WIC | Southwest Maricopa | December, 2011 |
| Maricopa County Glendale WIC 5141 West La Mar Road Glendale, AZ 85301 | Monday-Thursday 8am- 3:30 pm | Maricopa County WIC | Northwest Maricopa | January 9, 2012 |
| Maricopa County North Valley WIC 19401 N. Cave Creek Rd # 8 Phoenix, AZ 85024 | Monday-Thursday 8am- 3:30 pm | Maricopa County WIC | North Phoenix | January 11, 2012 |
| Maricopa County Sunnyslope WIC 8828 N. Central Ave Phoenix, AZ 85021 | Monday-Thursday 8am- 3:30 pm | Maricopa County WIC | North Phoenix | January 17, 2012 |
| Maricopa County Thunderbird WIC 5422 W. Thunderbird Rd # 6 Glendale, AZ 85306 | Monday-Thursday 8am- 3:30 pm | Maricopa County WIC | North Phoenix | January 23, 2012 |



Exhibit 2. First Teeth First Program Clinic Sites

| Sites | Schedule | Host Site Partner | First Things First Region | Established |
|---|--|--|--|--|
| <p>Maricopa County Dept of Public Health Immunization</p> <p>6666 W. Peoria Ave # 113</p> <p>Glendale, AZ 85302</p> | <p>Monday, Wednesday and Thursday</p> <p>8:30am - 4:30pm</p> | Maricopa County Immunization | Northwest Maricopa | January 30, 2012 |
| <p>Delta Dental of Arizona Foundation</p> <p>Deer Valley and Peoria School Districts</p> | Varied Sites | Community Foundation | Northwest Maricopa | October, 2011 |
| Quality Child Care Centers | Varied Sites | First Things First Quality Child Care Centers | <p>Northwest Maricopa</p> <p>Southwest Maricopa</p> <p>Northeast Maricopa</p> | <p>FY 2012</p> <p>4th Quarter</p> |
| <p>Community Events</p> <p>Examples include:</p> <p>Hope Feast</p> <p>Gila Bend Resource Center</p> <p>Benevilla Campus (Surprise)</p> <p>Well Child Screening Fair</p> | Varied Sites | Community Health Centers, Health Fairs, Municipal Libraries etc. | <p>Northeast Maricopa</p> <p>Northwest Maricopa</p> <p>Southwest Maricopa</p> <p>County-Wide</p> | <p>FY 2012</p> <p>3rd Quarter</p> <p>4th Quarter</p> |



Training

The Maricopa County Department of Public Health contracted with a temporary employment agency for the program's bilingual site assistants. The program's registered dental hygienists were contracted directly through the county to provide services. First Teeth First Staff provided training to registered dental hygienists and bilingual site assistants in quarterly group sessions and through individual instruction on site. The First Teeth First Policy and Procedures Manual provided the framework and content for the training. Topics included program updates, procedures, supplies, data collection, and materials

Data Collection and Reporting

In addition to collecting programmatic reporting information on key measures, the program used a nationally recognized, data collection protocol developed by the Association of State and Territorial Dental Directors (ASTDD), the standardized basic screening survey to record data on oral health status: Caries Management by Risk Assessment (CAMBRA).¹¹ This information, along with consent forms, treatment records, and oral health findings were recorded using paper instruments at the various sites. A database was created by MCDPH to support First Teeth First. With the completion of the database, data can be entered using laptops at the various sites. Creation of the comprehensive data management system aids in providing continuity for patients and preventing duplication of services.



¹¹ From ADA "Professionally Applied Topical F1:EB Clinical Recs", Caries Management by Risk Assessment (CAMBRA), and the American Academy of Pediatric Dentistry Caries Risk Assessment Tool (CAT).

First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice

The program fidelity standards, *First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice*,¹² guided the implementation of the MCDPH-OOH First Teeth First Program. This included, but was not limited to:

- Staff qualifications
- Staff training
- Staff supervision
- Collaborative evaluation and monitoring that includes feedback from staff, families, and community members
- Parent education content
- Fluoride varnish
- Screening

Appendix 8 outlines a plan to conduct a fidelity assessment based on the *First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice*. The fidelity assessment is feasible when the program has reached the full implementation stage and the necessary data sources are developed and available.

Program Informational Materials

Development of program informational materials was a critical component of the program implementation of the First Teeth First Program. The materials were designed to provide information on the importance of oral health for young children and pregnant women, screening and fluoride varnish for young children, the availability of the program, site information, and opportunities for community partnerships. A variety of media were used for program materials including a website (www.firstteethfirst.org), brochures, flyers, and posters. Additional program materials such as models of teeth, large toothbrushes, books and toys depicting oral health for children, and giveaways such as toothbrush kits were utilized at clinic sites as well as outreach events such as health fairs.

¹²**Sources:** “Policy on Early Childhood Caries (EDD): Classifications, Consequences, and Preventive Strategies.” American Academy of Pediatric Dentistry and the American Academy of Pediatrics, Revised 2008. AAPHD Resolution on Fluoride Varnish for caries prevention, January 2008 American Academy of Public Health Dentistry (AAPHD)



Oral Health Educational Materials

Educational programs were developed for use in oral health education for children and pregnant mothers. Two books are utilized in the Oral Health Education sessions for young children when First Teeth First staff hold the screening and varnish program in child care centers. These books were specially ordered and include contact information for the Maricopa County Department of Public Health, and acknowledge First Things First on the inside cover page.

First Teeth First staff members read the books to the children, and also leave them with the child care center staff for future reading and reference. Examples include:

- *The Tooth Book* by Dr. Seuss, 1981.
- *Show Me Your Smile! A Visit to the Dentist*, by Christine Ricci, Simon Spotlight, 2005. Based on the TV series Dora The Explorer on Nickelodeon



In addition, auxiliary dental models, a large scale toothbrush, and dinosaur were ordered to use during these educational sessions and in the clinics

Oral Health Educational brochures such as the sample below (Exhibit 3) were developed for pregnant women that include a healthy teeth checklist for soon to be moms and a fun board game style follow along for them and their new babies. This publication was designed to be provided in both English and Spanish to pregnant women who come to the sites and attend the classes provided at the WIC sites. The program materials were tested and used in nine educational sessions offered during the program year.

Exhibit 3: Sample Oral Health Educational Brochure



Challenges and Barriers to Program Implementation

- Elimination of continuing funding for FY 2013 from the North Maricopa Partnership Council was perceived as a setback for the program and resulted in the closure of two First Teeth First WIC sites in the North Phoenix First Things First Region.
- Distance is a barrier to the provision of services in outlying communities such as Gila Bend located in the Southwest Maricopa First Things First Region where the nearest restorative dental services are located more than 34 miles away.
- Without WIC clinics located in the Northeast Maricopa First Things First Region, First Teeth First staff were not able to utilize the service delivery model which has worked so well in the other regions. First Teeth First Outreach Staff searched for similar types of venues in the Northeast Region to station a hygienist and site assistant on a regular basis. They continued to collaborate with community service locations such as Paiute Neighborhood Center, Scottsdale School District, Scottsdale Public Library, and Boys and Girls Clubs to reach the population within the region.

Achievements

- The collaboration with WIC and Immunization Clinics has proven to be beneficial in setting up First Teeth First Clinic sites for the target population.
- Child Care Nursing Consultants were instrumental in collaborating with First

Teeth First in the Northwest, Southwest and Northeast Regions to schedule First Teeth First events at Child Care Centers.

- Although identifying resources for uninsured children with urgent dental needs remains an ongoing challenge, the First Teeth First Program has experienced some success in key collaborations to provide follow-up services to these children. First Teeth First collaborated with Maricopa Integrated Health Services (MIHS) to serve children in need of urgent dental care. As more children were referred to MIHS, the First Teeth First Program developed procedures to follow up and track the status of referrals. Upon receiving referrals, MIHS utilized clinics with pediatric dentists to provide treatment to children in the program. A partnership with John C. Lincoln Desert Mission Children's Dental Clinic to treat children in Sunnyslope and the North Valley proved to be a beneficial resource for the community. Unfortunately, the Sunnyslope First Teeth First Clinic was closed due to budgetary constraints with the elimination of continuation funding from the North Phoenix First Things First Regional Council. Another referral partnership was also developed with St. Vincent de Paul's Children's dental clinic to provide an additional referral resource.



Outcome Evaluation

Performance Measures required by Arizona First Things First for Oral Health program funding provided the framework for the overall plan for implementing procedures to measure performance, efficiency, and quality assurance.¹³ Target service numbers are displayed below for the program period ending June 30, 2012. All data reported in this section are based on services provided between December 2011 and June 2012.

Exhibit 4. Target Service Numbers

| Oral Health Service | Target Number of Service Recipients | |
|---|--|--|
| | Northwest & Southwest Maricopa FTF Regions | North Phoenix & Northeast Maricopa FTF Regions |
| Oral Health Screenings & Fluoride Varnish Applications for Children | 5,725 | 6,000 |
| Screenings & Education for Pregnant Women | 350 | 750 |

Service Delivery and Oral Health Outcomes

Children recruited to participate in the First Teeth First program were eligible for oral health kits, oral health screenings, and a fluoride varnish application. Staff also provided pregnant women with oral health kits.

While all participating children were recruited to receive oral health kits, screenings, and varnish, some parents elected for their child to receive only one or two of these services. A total of 9,756 children received an oral health kit. Of those children who received an oral health kit, 9,701 (99%) also received an oral health screening and 9,541 (98%) received a fluoride varnish application.

Exhibit 5 shows the total number of children who received screening from First Teeth First between December 2011 and June 2012. The highest number of screenings occurred in February and March, while very few screenings occurred in December (256), at which point screenings were only taking place in the Southwest Region.

¹³ FIRST TEETH FIRST EVALUATION PLAN MATRIX, Exhibit 4, Serial @ PH RFP 12-006, Evaluator for First Teeth First Program, Maricopa County Department of Public Health .



Exhibit 5. Number of Children who Received Oral Health Screenings from First Teeth First, December-June 2012

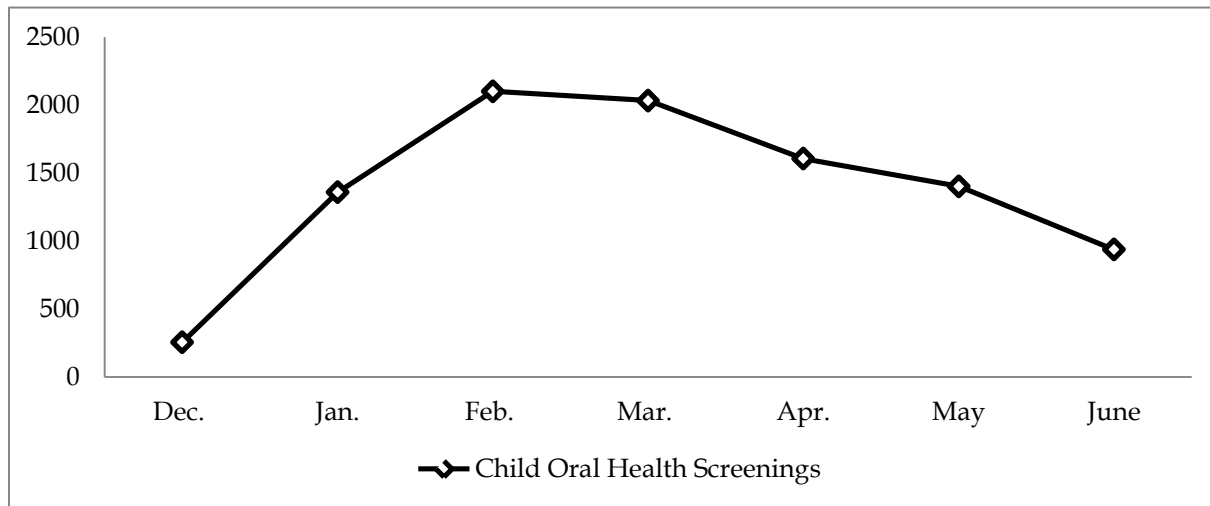
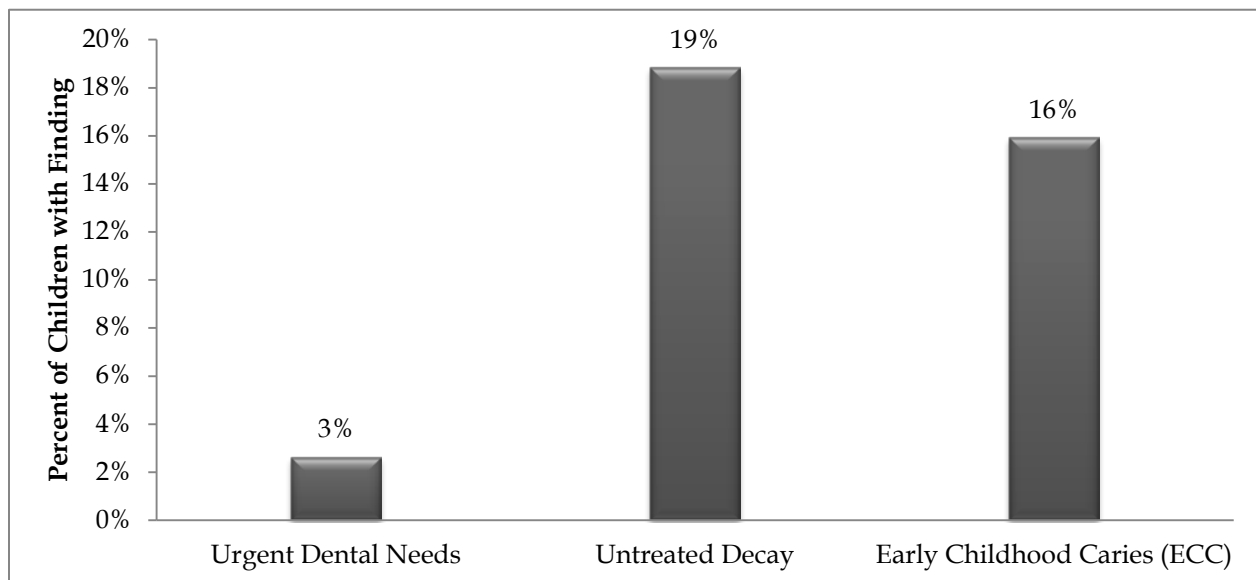


Exhibit 6 summarizes the clinical findings of children who received oral health screenings. A total of 19% of service recipients had untreated tooth decay and 16% had Early Childhood Caries (ECC). Three percent of these children had urgent dental needs, meaning they needed dental care within 24 to 48 hours because of symptoms including pain, infection, or swelling.

Exhibit 6. Percentage of Children Served by First Teeth First who Experienced Urgent Dental Needs, Untreated Decay, and ECC.



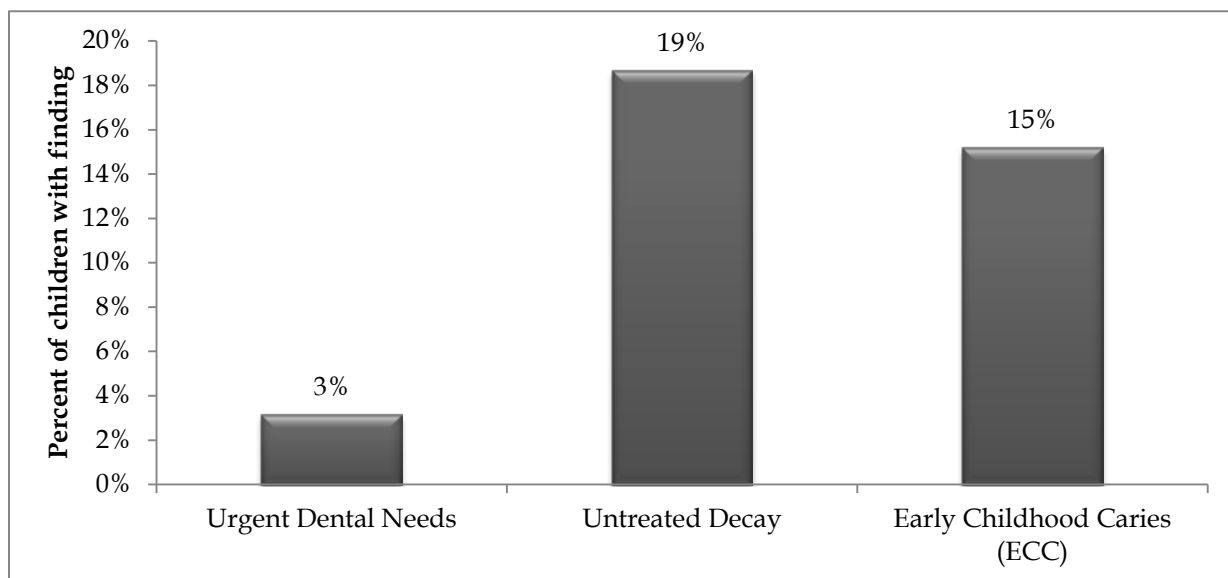
North Phoenix Region

First Teeth First oral health services occurred at three WIC (Women, Infants and Children) clinics in the North Phoenix Region: Sunnyslope, North Valley, and Thunderbird. Exhibit 7 displays the number of children and pregnant mothers who received the offered services at these WIC locations. Oral health screenings revealed that 19% of children served in the North Region had untreated tooth decay, 15% were experiencing ECCs, and 3% had urgent dental needs. Exhibit 8 illustrates the findings of the oral screening in the North Region.

Exhibit 7. Number of Children in the North Region who Received Oral Health Services

| Oral Health Service Provided | Number of Recipients |
|---------------------------------|----------------------|
| Oral Health Screenings | 4847 |
| Fluoride Varnish Applications | 4804 |
| Child Oral Health Kits | 4868 |
| Pregnant Women Oral Health Kits | 439 |

Exhibit 8. Percentage of Children Served in the North Region who Experienced Urgent Dental Needs, Untreated Decay, and ECC.



Northeast Phoenix Region

Establishing program sites was particularly challenging in the Northeast region, as there are no WIC clinics in that region. To overcome this barrier, program staff collaborated with community service locations to reach the population in the region. The strategy for this region was to schedule oral health events at various sites every six months where young children visit regularly, including preschools, childcare centers, and libraries. A total of 15 events were held in the Northeast region between February and June 2012. Partners included: McDonald's, Scottsdale Unified School District, Cave Creek Unified School District, the Scottsdale Library, the Civic Center Library, the Fort McDowell Indian Community, childcare centers, and the Paiute Neighborhood Center. Exhibit 9 displays the total number of children served at these 15 events. Of the 204 children who received oral health screenings, 2% had urgent dental health needs. Exhibit 10 shows the results of oral health screenings in the Northeast Region.

Exhibit 9. Number of Children in the Northeast Region who Received Oral Health Services

| Oral Health Service Provided | Number of Recipients |
|---------------------------------|----------------------|
| Oral Health Screenings | 204 |
| Fluoride Varnish Applications | 196 |
| Child Oral Health Kits | 210 |
| Pregnant Women Oral Health Kits | 0 |



Exhibit 10. Percentage of Children Served in the Northeast Region who Experienced Urgent Dental Needs, Untreated Decay, and ECC.



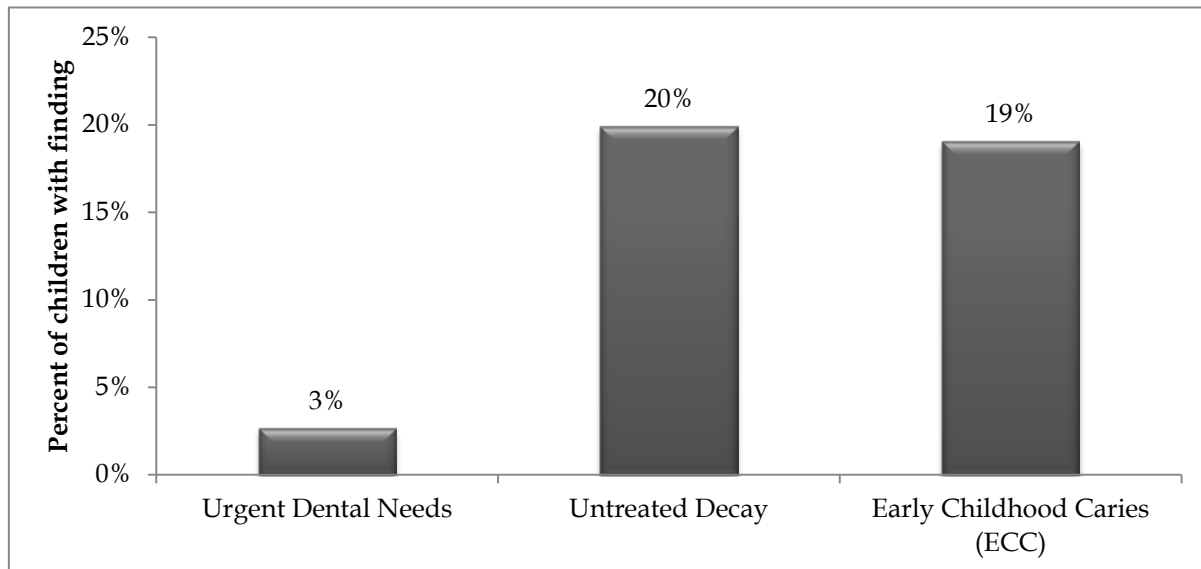
Northwest Phoenix Region

Exhibit 11 shows the number of adults and children who received oral health services from First Teeth First in the Northwest Phoenix region. Services took place at two program sites between January and June 2012: the Glendale WIC and the West Immunization Clinic. Oral health screenings revealed that 20% of children who received services in the Northwest region had untreated tooth decay. Exhibit 12 displays the results of the oral health screenings in the Northwest Region.

Exhibit 11. Number of Children in the Northwest Region who Received Oral Health Services

| Oral Health Service Provided | Number of Recipients |
|---------------------------------|----------------------|
| Oral Health Screenings | 3069 |
| Fluoride Varnish Applications | 3046 |
| Child Oral Health Kits | 3080 |
| Pregnant Women Oral Health Kits | 85 |

Exhibit 12. Percentage of Children Served in the Northwest Region who Experienced Urgent Dental Needs, Untreated Decay, and ECC.



In addition to the program services provided at the clinics, The Northwest Region collaborated with Delta Dental of Arizona Foundation and held four one-time oral health events in order to broaden their reach into the community. Delta Dental of Arizona Foundation provided services to school-aged children in the Peoria and Deer Valley school districts. Through its partnership with Delta Dental Foundation, First Teeth First provided 797 children with oral health kits, 782 children with oral health screenings, and 628 children with fluoride varnish applications.

First Teeth First also held four one-time oral health events in the Northwest Region, at which program staff provided oral health kits, screenings, and fluoride applications. Two of these events took place in collaboration with Benevilla Campus in Surprise, Arizona, one with HopeFest, and another with Tutor Time childcare center in Glendale. A total of 107 children received oral health kits, screenings, and varnish applications between these four events.

Southwest Phoenix Region

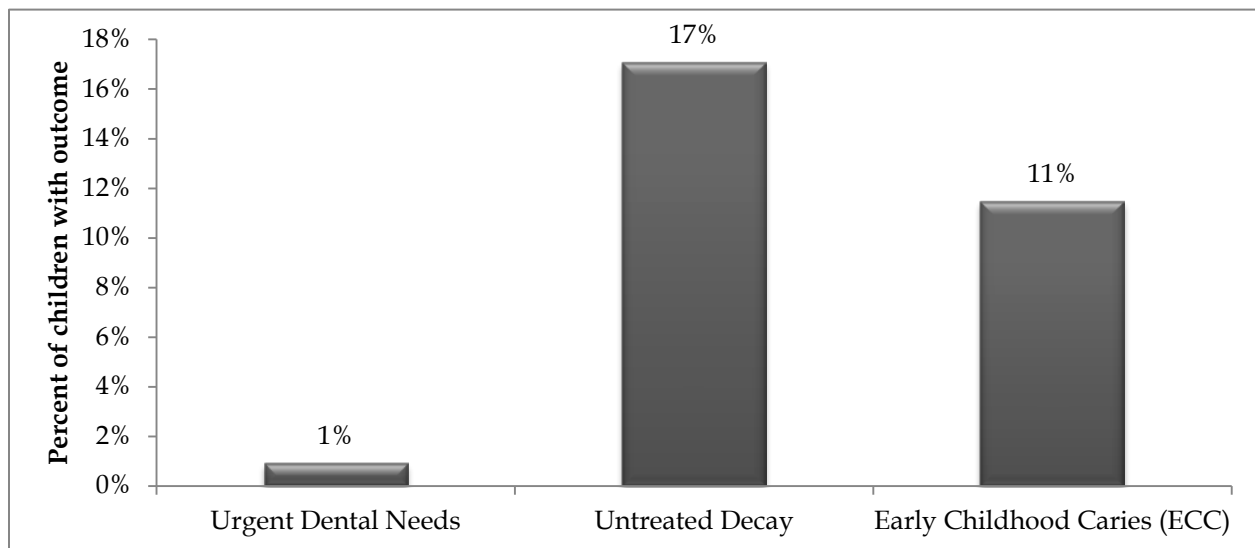
First Teeth First provided services in the Southwest region at the Avondale WIC office between December 2011 and June 2012. Exhibit 13 summarizes the services provided at this location.

Exhibit 13. Number of Children in the Southwest Region who Received Oral Health Services

| Oral Health Service Provided | Number of Recipients |
|---------------------------------|----------------------|
| Oral Health Screenings | 1535 |
| Fluoride Varnish Applications | 1510 |
| Child Oral Health Kits | 1558 |
| Pregnant Women Oral Health Kits | 109 |

Exhibit 14 illustrates the results of oral health screenings in the Southwest Region. Negative oral health findings were slightly less prevalent in the Southwest Region.

Exhibit 14. Percentage of Children Served in the Southwest Region who Experienced Urgent Dental Needs, Untreated Decay, and ECC.



As was the case of the Northwest Region, the Southwest Region also held oral health events. The first of these was held in Buckeye in April 2012, where oral health kits, screenings, and fluoride applications were provided to eight children. Through this event, First Teeth First was able to partner with the Adelante Healthcare Clinic. The other oral health event held in the Southwest Region occurred in May 2012, at the Care1st Gila Bend Resource Center. Services were provided to 15 children in the outlying Gila Bend region.

Surveys

In addition to the data collected within each region on the services provided and oral health needs of the children seen, surveys were used to collect additional information regarding the program. Four survey instruments were utilized to solicit feedback from stakeholders about program implementation: Community Partner Survey, Dental Hygienist Survey, Site Assistant Survey, and Participant Survey. Copies of the questions used in these surveys are included in the Appendix. Results from each of these surveys are presented in this section.

Community Partner Survey Findings

Community partners completed a survey in July 2012 to provide input on the collaborative partnerships established for the First Teeth First Program. A total of eight community partners completed the survey. Community partner respondents include: two respondents from WIC, two respondents from public libraries, one respondent from a childcare center, one respondent from a community center, one respondent from a faith-based preschool, and one respondent from a private school.

"We couldn't be happier with the presence of your program in our clinic. I can't speak highly enough about what a great cooperative effort we have going here at the Avondale clinic. I look forward to an extended opportunity where we can work together to ensure healthy, happy children here in the Avondale area."

Respondents were asked to indicate the extent to which they agree or disagree on a range of items presented in Exhibit 15 below. Response options are on a four point scale from Strongly Agree to Strongly Disagree, and also included a "Not Sure" option. For clarity, the categories Strongly Agree and Agree as well as Strongly Disagree and Disagree are combined. Overall, community partners indicated a positive collaborative relationship with the First Teeth First program.

Exhibit 15. Community Partner Experience with the First Teeth First Program

| | Agree | Disagree | Not Sure |
|--|--------------|-----------------|-----------------|
| Access to dental care is a serious problem among children 0-5. (n=8) | 88% (7) | 12% (1) | -- |
| First Teeth First and my organization have similar missions and goals. (n=8) | 88% (7) | -- | 12% (1) |
| Parents are generally receptive to the dental screening and varnish services offered by First Teeth First. (n=8) | 100% (8) | -- | -- |
| Sufficient information on First Teeth First was made available to my organization. (n=8) | 88% (7) | 12% (1) | -- |
| First Teeth First program information is easily accessible on the website (firstteethfirst.org). (n=8) | 75% (6) | -- | 25% (2) |
| First Teeth First Program schedules (days and hours) are adequate to meet the demand for service. (n=8) | 88% (7) | -- | 12% (1) |
| First Teeth First Program days and hours are convenient for most families served at my site(s). (n=8) | 100% (8) | -- | -- |
| The First Teeth First Program has adequate space at my site(s). (n=8) | 88% (7) | 12% (1) | -- |
| The First Teeth First Program is disruptive to the primary services provided by my organization. (n=8) | 12% (1) | 88% (7) | -- |
| Services provided by First Teeth First are beneficial to parents and children. (n=8) | 100% (8) | -- | -- |
| Communication with the First Teeth First Program Staff occurs on a regular basis. (n=8) | 63% (5) | 25% (2) | 12% (1) |
| First Teeth First Program operations are efficient. (n=8) | 100% (8) | -- | -- |
| First Teeth First Program Staff act professionally at all times. (n=7) | 100% (7) | -- | -- |
| The physical environment is a good setting for First Teeth First. (n=7) | 86% (6) | 14% (1) | -- |
| First Teeth First Program staff use techniques that engage young children. (n=7) | 86% (6) | -- | 14% (1) |
| First Teeth First Program staff communicate effectively with parents. (n=8) | 100% (8) | -- | -- |
| Joint planning with First Teeth First Staff for events and distribution of materials works well. (n=8) | 100% (8) | -- | -- |

Perceived Program Impact and Suggestions for Improvement

In addition to the scaled survey items, community partner respondents were asked two open-ended questions. Responses to each of these questions are presented below.

How has the First Teeth First program impacted the target populations served by your organization?

Seven of the eight surveyed community partners responded to the question. Six of the seven respondents indicated that the program improved the knowledge and/or provided needed services to the populations they serve. One respondent, however, indicated that the upper-middle income population it serves was not impacted much by the program since it already receives these services. Responses are displayed below.

"The First Teeth First Program was one of the experts at one of our Knowing & Growing programs, Stay & Play, at various library sites that I was involved with while presenting the formatted programs."

"Our population is mostly middle and upper middle class with families who mostly have health care insurance and already regularly go to the dentist, so this program is not impacted much by the program."

"It has significantly increased parents' knowledge about dental care for their babies and young children."

"Very well! Only about 10% of our enrolled students did not participate in the program."

"Teaches parents importance of taking care of oral health begins earlier than most people are aware of."

"I believe that the program has raised awareness among our families for the importance of dental health for our clinic population."

How could the collaboration between your organization and the First Teeth First program be improved?

Two out five respondents indicated an area for improving collaboration with their organizations. One respondent commented that the physical space of First Teeth First was too small. Another suggested more frequent communication with patients between oral health screenings.

"To no fault of either program, space for First Teeth First is too small."

"It's been great - Just keep coming back! Thank you!"

"Probably not. The staff was extremely helpful, easy to work with and professional."

"We have a wonderful collaboration and would love more opportunities to work together for the benefit of our families."

"More frequent communication between varnish screenings."

Registered Dental Hygienist Survey Findings

A survey was administered to seven registered dental hygienists in June 2012. Respondents represented 100% of the hygienist staff in the First Teeth First program. The survey asked respondents to rate their level of satisfaction with First Teeth First program operations and the training that they received.

Program Operations

Exhibit 16 summarizes responses to survey questions about program operations. All registered dental hygienist respondents (n=6) ¹⁴ indicated they were either highly satisfied or satisfied with training, the clinic site facility, the availability of equipment, compensation, and interaction with children and parents at the clinic. There was some dissatisfaction regarding the availability of supplies, communication with project staff, scheduling, workload, site assistant support, and performance feedback.

¹⁴ One dental hygienist did not answer any survey questions on the first page of the survey, but completed the second page.



Exhibit 16. Level of Satisfaction with First Teeth First Program Operations, Registered Dental Hygienists (n=6)

| | Highly Satisfied | Satisfied | Neither | Dissatisfied | Highly Dissatisfied |
|--|------------------|-----------|---------|--------------|---------------------|
| First Teeth First training | 66% (4) | 34% (2) | -- | -- | -- |
| Clinic site (facility) | 34% (2) | 67% (4) | -- | | -- |
| Availability of equipment (head lights, screen, table, chairs, teeth models) | 67% (4) | 34% (2) | -- | -- | -- |
| Availability of supplies (toothbrush kits, forms, fluoride varnish, gloves, brochures) | 84% (5) | -- | -- | -- | 16% (1) |
| Communication with FTF Project administrative staff | 84% (5) | -- | -- | 16% (1) | -- |
| Clinic schedule provides coverage for clients | 33% (2) | 50% (3) | -- | 17% (1) | -- |
| Supervision by program coordinator | 67% (4) | 17% (1) | 17% (1) | -- | -- |
| Overall workload | 33% (2) | 50% (3) | | 17% (1) | -- |
| Receipt of policy information | 50% (3) | 33% (2) | 17% (1) | -- | -- |
| Compensation | 50% (3) | 50% (3) | -- | -- | -- |
| Support from site assistant | 33% (2) | 33% (2) | 17% (1) | 17% (1) | -- |
| Interaction with children at clinics | 67% (4) | 34% (2) | -- | -- | -- |
| Interaction with parents at clinics | 50% (3) | 50% (3) | -- | -- | -- |
| Feedback on my performance | 33% (2) | 33% (2) | -- | 33% (2) | -- |
| Level of resources for program | 33% (2) | 50% (3) | 17% (1) | -- | -- |
| Patient record requirements | 33% (2) | 50% (3) | 17% (1) | -- | -- |
| Materials and handouts for parents | 17% (1) | 66% (4) | 17% (1) | -- | -- |

Training

Exhibit 17 shows hygienist respondents' (n=7) rating of First Teeth First training. All hygienists indicated that they received training on all seven of the program areas included in the survey. Respondents were also asked to rate the level of helpfulness of each area for which they received training. Survey results suggest that training on administering parental consent forms was most helpful to the hygienists, with all

respondents indicating this are training was “very helpful.” On all other training areas, respondents indicated the training was either very helpful or somewhat helpful, except for the “maintaining confidentiality” training area, for which one respondent indicated “not helpful.”

Exhibit 17. Registered Dental Hygienists' Rating of First Teeth First Training (n=7)

| Training Subject | Received Training | Extent Training Opportunities were helpful in work with First Teeth First. | | |
|---|-------------------|--|------------------|-------------|
| | | Very Helpful | Somewhat Helpful | Not Helpful |
| FTF Program orientation and procedures | 100% (7) | 71% (5) | 29% (2) | -- |
| Parental consent form | 100% (7) | 100% (7) | -- | -- |
| Maintaining confidentiality | 100% (7) | 57% (4) | 29% (2) | 14% (1) |
| Providing oral health education and instruction | 100% (7) | 71% (5) | 29% (2) | -- |
| Dental screening procedures | 100% (7) | 71% (5) | 29% (2) | -- |
| Fluoride varnish process | 100% (7) | 71% (5) | 29% (2) | -- |
| Completion of treatment record | 100% (7) | 71% (5) | 29% (2) | -- |

Program Strengths and Suggestions for Improvement

Registered dental hygienists were also asked two open-ended questions in addition to the scaled survey items. Responses to each of these questions are presented below.

Question: Describe an aspect of the First Teeth First program that works well.

Respondents (n=5) expressed praise for several aspects of the program’s structure including: site mobility, education for parents and children, program forms, and staffing. The hygienist responses are presented below.

"Mobility and ease of setup and breakdown."

"This preventive program works for kids and parents as well. The education we provide to them help them to prevent cavities on their own kid. The same time it helps kids in understanding that we are there to help them."

"Having site assistants to help with paperwork in busy locations"

"The consent form gives us a lot of great information about our patients, allowing us to give parents good oral health education."

"I love the program. It is so important that we are getting out to children! The forms work smoothly at the site as well as the interaction between the hygienist and assistant."

Question: Tell us what you think in your own words. How can the First Teeth First program be improved?

Respondents (n=5) recommended the following improvements: expanding the program to more participants; an improved participant tracking system; enhanced communication and coordination among staff; and improving the supply distribution process. The responses to the question are presented below.

"Making available for other locations."

"Putting more of a word out in the community about the availability of the program to the public."

"Keeping track of what patients have been seen, which ones have not, and how long it has been. Some WIC centers take the WIC book at the very beginning and only give it back at the very end. Making it hard to keep track."

"It would be helpful to have better communication between administration and staff scheduling and the future of the program were areas that need improving. In addition, the process of getting supplies could run more smoothly."

"This program needs a clinical dental hygienist leader."



Bilingual Site Assistant Survey Findings

A survey was administered to First Teeth First Program bilingual site assistants in June 2012 as well. All six bilingual site assistants completed the survey. The survey asked respondents to rate their level of satisfaction with First Teeth First program operations and training.

Training

All bilingual site assistant respondents (n=5)¹⁵ received training in each of the training areas listed in the survey. Moreover, all respondents indicated “very helpful” for training on FTF program orientation and procedures, the parental consent form, maintaining confidentiality, fluoride varnish process, and completion of treatment record. The majority (80%) of the bilingual site assistants indicated the dental screening process component of the FTF Training was very helpful, while one respondent indicated this component was “somewhat helpful.” Bilingual site assistants (100%) indicated there were no outstanding training needs.

Exhibit 18. Bilingual site assistants' Rating of First Teeth First Training (n=5)

| | Received Training | Extent Training Opportunities were helpful in work with First Teeth First. | | |
|--|-------------------|--|------------------|-------------|
| | | Very Helpful | Somewhat Helpful | Not Helpful |
| FTF Program orientation and procedures | 100% (5) | 100% (5) | -- | -- |
| Parental consent form | 100% (5) | 100% (5) | -- | -- |
| Maintaining confidentiality | 100% (5) | 100% (5) | -- | -- |
| Dental screening process | 100% (5) | 80% (4) | 20% (1) | -- |
| Fluoride varnish process | 100% (5) | 100% (5) | -- | -- |
| Completion of treatment record | 100% (5) | 100% (5) | -- | -- |

Program Operations

All bilingual site assistants indicated “highly satisfied” or “satisfied” on all survey items in Exhibit 19, with the exception of two items concerning work hours. Regarding satisfaction with the number of hours of work per week, two respondents indicated they were neither satisfied nor dissatisfied and one respondent indicated “highly

¹⁵ One Site Assistant did not answer the back page of the survey.



dissatisfied.” Similarly, two respondents indicated they were neither satisfied nor dissatisfied with the scheduling of work hours. These results likely reflect the unpredictability of the temporary work arrangement sites established for bilingual site assistants.

Exhibit 19. Level of satisfaction with First Teeth First Program Operations, Bilingual Site Assistants (n=6)

| | Highly Satisfied | Satisfied | Neither | Dissatisfied | Highly Dissatisfied |
|--|------------------|-----------|---------|--------------|---------------------|
| First Teeth First (FTF) training | 100% (6) | -- | -- | -- | -- |
| Clinic site (facility) | 83% (5) | 17% (1) | -- | -- | -- |
| Clinic set-up/take-down process | 83% (5) | 17% (1) | -- | -- | -- |
| Communication with FTF hygienists | 100% (6) | -- | -- | -- | -- |
| Working with FTF hygienists | 100% (6) | -- | -- | -- | -- |
| Working with “host” site staff | 83% (5) | 17% (1) | -- | -- | -- |
| Supervision by program coordinator | 100% (6) | -- | -- | -- | -- |
| Number of hours of work per week | 33% (2) | 17% (1) | 33% (2) | -- | 17% (1) |
| Compensation | 50% (3) | 50% (3) | -- | -- | -- |
| Scheduling of work hours | 50% (3) | 17% (1) | 33% (2) | -- | -- |
| Overall workload (while at the clinic) | 66% (4) | 34% (2) | -- | -- | -- |
| Paperwork requirements | 66% (4) | 34% (2) | -- | -- | -- |
| Interaction with children at clinics | 66% (4) | 34% (2) | -- | -- | -- |
| Interaction with parents at clinics | 66% (4) | 34% (2) | -- | -- | -- |
| Materials and handouts for parents | 66% (4) | 34% (2) | -- | -- | -- |
| Feedback on my performance | 83% (5) | 17% (1) | -- | -- | -- |
| Level of resources for program | 66% (4) | 34% (2) | -- | -- | -- |
| Completing daily reports | 66% (4) | 34% (2) | -- | -- | -- |

Program Strengths and Suggestions for Improvement

Bilingual site assistants were also asked the same two open-ended questions as dental hygienists. Responses to each of these questions are presented below.

Question: Describe an aspect of the First Teeth First program that works well.

"The treatment record works great because it explains everything good but in short words."

"Telling parents about the program and how it benefits their children."

"The communication between each other helps with cavities."

"The information and preventative care that we provide for parents and children. Most parents are unaware and "scared" of fluoride and its benefits; this program helps 'spread the word.' ☺"

Question: Tell us what you think in your own words. How can the First Teeth First program be improved?

One bilingual site assistant indicated that limited clinic hours likely reduce the number of children who can participate in First Teeth First. Another suggested tracking participants using a database, echoing two nurse respondents' suggestion for an improved participant tracking system. Responses are presented below.

"Nothing, really. I think everything is great."

"I personally think that nothing really needs to be improved. Parents are happy when they receive results and to know that there are programs like this to help children with taking care their dental health. But it would great if the immunization clinic would open more days because the times I have worked there we usually see a lot more kids."

"Bring database will help keep track of children."

"More sites becoming available. I am dissatisfied with 'hrs per week' due to my site closing. I am unsure I will continue to be employed and it is stressful. ☹"

"Don't know. I love how the program First Teeth First works."

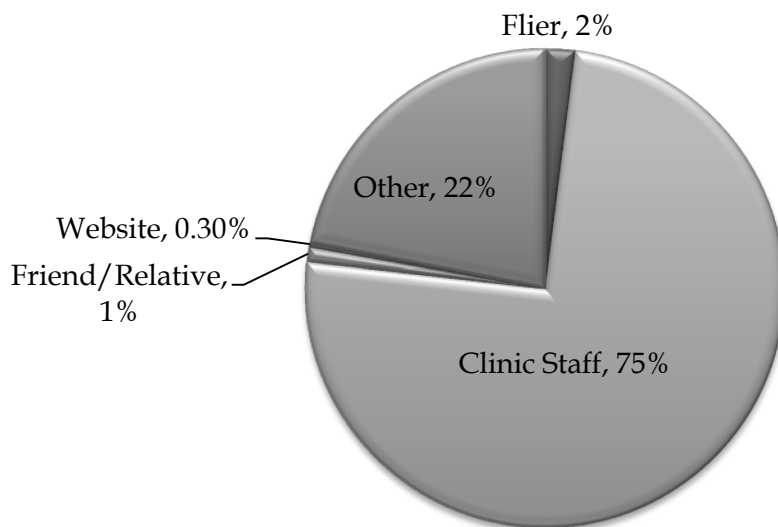


Parent Satisfaction Survey

The Participant Satisfaction Survey was administered to parents whose children received screenings and fluoride varnish at one of the First Teeth First clinics. The survey contains six questions and was available in both Spanish and English. Overall, a total of 294 surveys were completed between April 10th, 2012 and June 28th, 2012 at five clinic locations. A total of 78% of the surveys were completed in English, and 22% in Spanish.

Exhibit 20 shows that most respondents heard about the preventative dental services available from clinic staff, accounting for 75% of the responses. Another 22% stated that they heard from another source, and 97% of those who responded “other” indicated that they heard about it through the clinic/office they were visiting that day.

Exhibit 20. How did you Hear about the Preventative Dental Services your Child(ren) Received Today? (n=279)



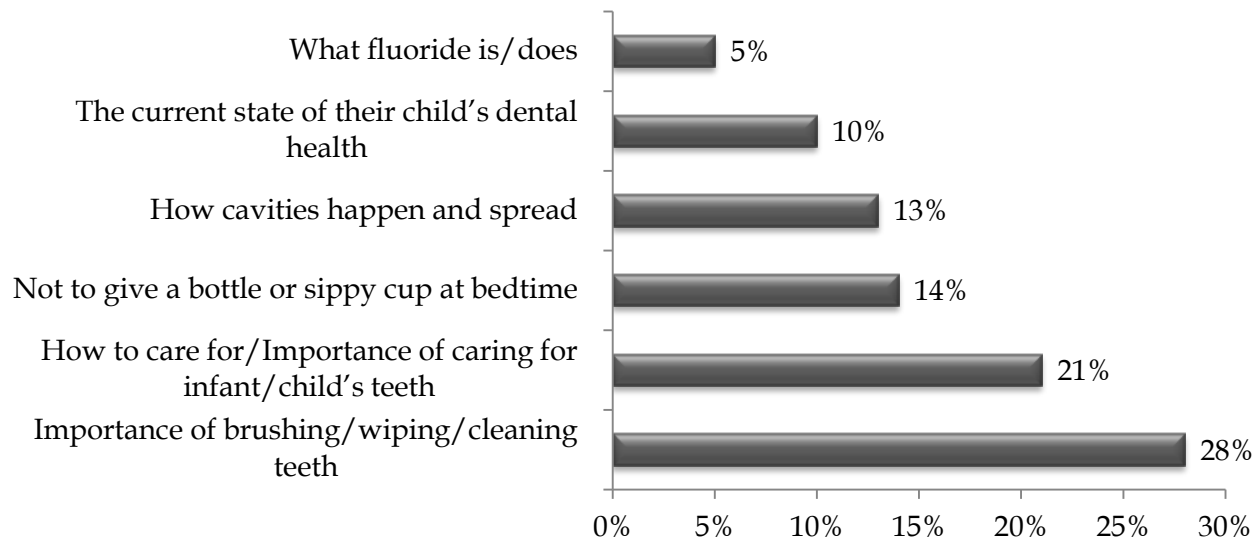
Parents were asked a series of yes or no questions on the Participant Satisfaction Survey. Responses to these questions are summarized in Exhibit 21. Of particular interest, the number of parents who abstained from the question on bringing their child back again in six months (n=11) was much higher than the other questions. This finding is particularly curious given that responses to all other questions indicate a high level of satisfaction with the services they and their children received. The lower response rate for this question could possibly indicate either a lack of knowledge about the availability of these services in the future, or barriers to accessing these services that deserve further investigation.

Exhibit 21. Parent Experience with the First Teeth First Program

| Survey Question | Yes | No |
|---|-------------|----------|
| The paperwork was easy to understand. (n=290) | 99.7% (289) | 0.3% (1) |
| The information given to me on my child's dental health was helpful. (n=290) | 100% (290) | -- |
| I would recommend this program to others with young children. (n=291) | 99.7% (290) | 0.3% (1) |
| I plan to bring my child back in 6 months for a dental screening and/or fluoride varnish. (n=283) | 99% (279) | 1.4% (4) |

The survey also asked “What was the most important thing you learned today?” A total of 79% of the parents (n=233) responded to this question. Exhibit 22 displays the most prominent themes that emerged from analysis of parent responses.

Exhibit 22. Parent Perceptions of the Most Important Thing They Learned



Follow-Up Study

One primary area of interest for the First Teeth First program was information regarding repeated visits for screenings and fluoride varnish. In order to address this, data was collected through February 12, 2013 to allow time for follow-up visits to be captured in the database. This section of the report will focus on a comparison between all children seen between December 5, 2011 and February 12, 2013 and those with repeat visits.

Between December 5, 2011 and February 12, 2013, a total of 15,177 children were screened and had records entered into the First Teeth First database. Out of these children, 822 were seen twice, and 46 were seen three times. One of the areas of interest to the First Teeth First program was the characteristics of the children that return to receive a follow-up screening and varnish. These children were compared to all children seen to determine any patterns.

The average age of all children served was 2.36 years, with a slightly lower average age of 1.99 years for children with repeat visits. The race and ethnicity of children with repeat visits were representative of the overall First Teeth First children. See Exhibit 23 for race and ethnicity percentages.

Exhibit 23. Race and Ethnicity Comparisons between All Program Children and Children with Repeat Visits

| Race/Ethnicity | All Children | Children with Repeat Visits |
|-----------------------------------|---------------------|------------------------------------|
| Asian | 1.89% | 1.73% |
| Black/ African American | 7.67% | 6.57% |
| Hispanic | 50.50% | 50.00% |
| Native American/ Alaskan Native | 1.36% | 0.92% |
| Pacific Islander/ Hawaiian Native | 0.35% | 0.46% |
| Two or More Races | 12.27% | 13.13% |
| Unknown | 5.26% | 4.38% |
| White/ Caucasian | 20.71% | 22.81% |

Among all children screened between December 2011 and February 2013, 96.4% of them received a varnish application. Among the children with repeat visits only one child did not receive varnish on either visit for a 99.9% varnish application rate. Forty-four children received three varnish applications; 811 received two applications, and twelve received one application.



WIC locations accounted for nearly 78% of all children seen. For children with repeat visits, the WIC locations accounted for nearly 93% of initial visits. At the second visit, approximately 89% of those visits occurred again at a WIC location. At the third visit just over 93% of the visits were at a WIC location. See Exhibit 24 for details.

Exhibit 24. Location Type:

| Location | All Children | Repeat Children First Visit | Repeat Children Second Visit | Repeat Children Third Visit |
|-------------------|--------------|-----------------------------|------------------------------|-----------------------------|
| WIC | 77.76% | 92.86% | 88.71% | 93.48% |
| Immunization | 15.48% | 6.22% | 8.99% | 6.52% |
| Child Care Center | 3.25% | 0.69% | 0.69% | -- |
| Pre-School | 2.87% | 0.00% | 1.38% | -- |
| Community Event | 0.64% | 0.23% | 0.23% | -- |

The regional differences are shown in Exhibit 25 below. At their first visit, the percentages of children with repeat visits seen in the Northwest and North Regions are similar to those of all children. In the Southwest Region, the percentage was larger, most likely due to the limited availability in the South Phoenix and Northeast Regions.

Exhibit 25. Region:

| Region | All Children | Repeat Children First Visit | Repeat Children Second Visit | Repeat Children Third Visit |
|---------------|--------------|-----------------------------|------------------------------|-----------------------------|
| Northwest | 47.75% | 46.31% | 62.79% | 78.26% |
| North | 27.19% | 24.31% | 7.26% | 8.70% |
| Southwest | 16.09% | 29.15% | 28.11% | 13.04% |
| South Phoenix | 6.61% | 0.00% | 1.61% | -- |
| Northeast | 2.37% | 0.23% | 0.23% | -- |

However, it is interesting to note that there was a large amount of movement from the North Region to the Northwest Region between the first and second visit.

Approximately 71% of children who received their first visit in the North region went on to have their second visit in the Northwest Region. The change in children receiving services in the North Phoenix region to the Northwest was due to boundary changes in First Things First. One of the permanent sites (Thunderbird) moved from the North Phoenix Region to the Northwest Maricopa Region. There was little movement in any of the other regions. See Exhibit 26 for details.

Exhibit 26. Percentage of Second Visit Locations where the First Visit was in the North Region.

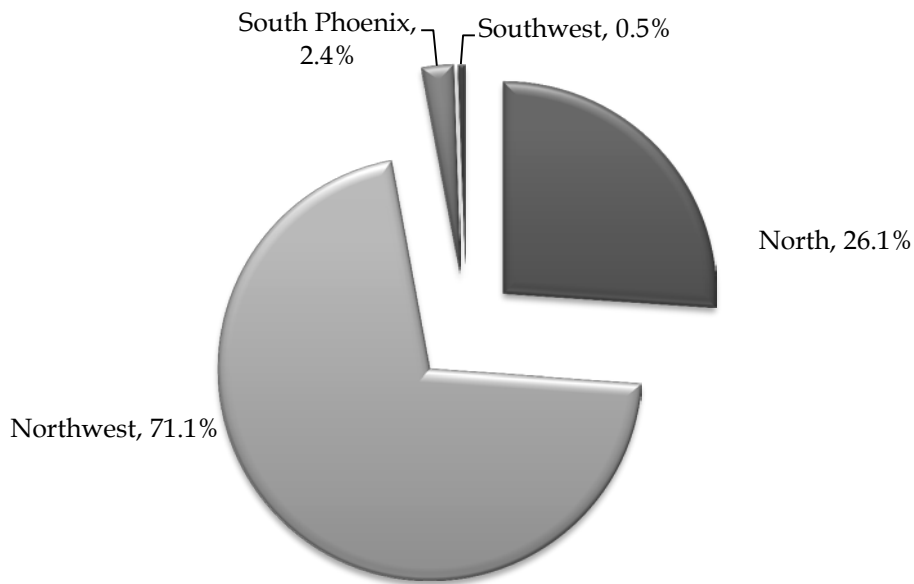
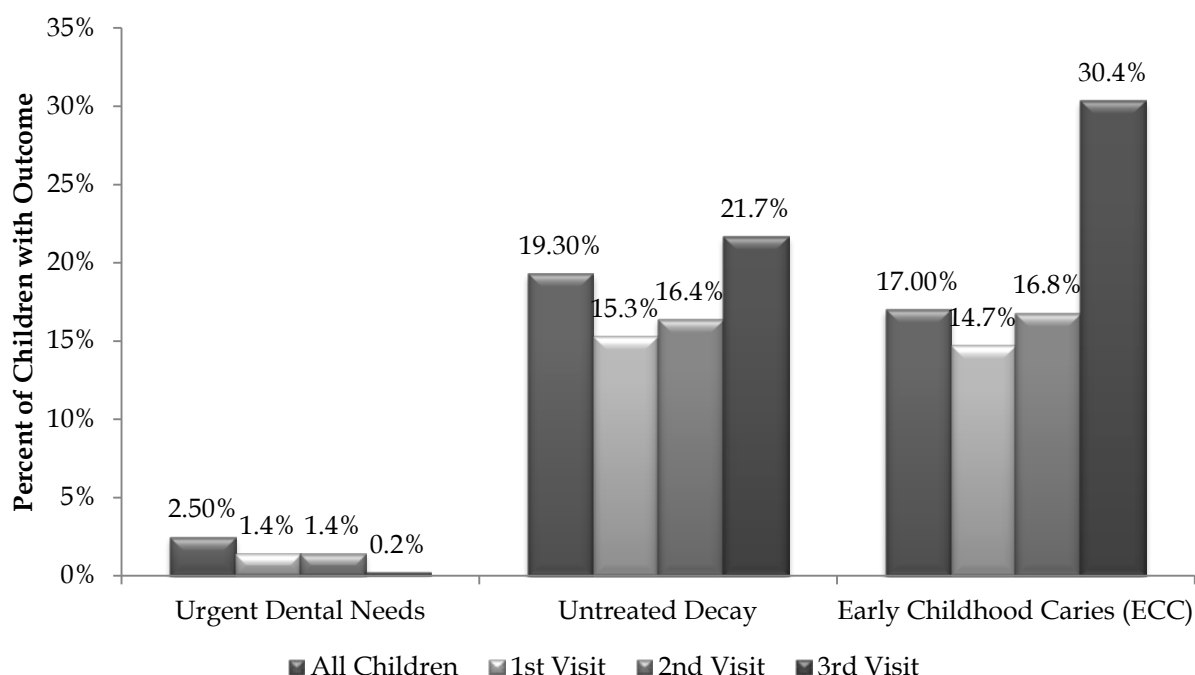


Exhibit 27 shows the percentage of all children seen between December 2011 and February 2013, along with children with repeat visits who had urgent dental needs, untreated decay, and early childhood caries. Overall, for children with repeat visits, the number of negative outcomes was lower than for all children. The percentages remain lower at the second visit, although there was a small increase of negative outcomes within the repeat visit children.

The small number of children who were seen three times provides an opportunity to look more closely at changes over time. For the forty-six children who received three visits, only two children changed from no or early dental needs to urgent dental needs. Seven children had untreated decay for all three visits, and four children showed untreated decay only on the third visit. Eight children had previously been recorded with untreated decay, but had none by the third visit. The remaining children had no untreated decay at any visit. A total of fourteen children had early childhood caries at their third visit, eleven of which had them at previous visits. The remaining children had none at any visit.

Exhibit 27. Percentage of Children Served with Repeat Visits who Experienced Urgent Dental Needs, Untreated Decay, and ECC.



Overall, the data indicate that children are more likely to be seen a second or third time at WIC centers, making them slightly younger than the population of children as a whole. Most children were seen on a repeat visit in the Northwest Region, including those originally seen in the North Region. Children seen twice have less negative oral health outcomes. This may indicate that parents are more likely to bring their child in a second time if they did not have oral health issues identified in the first visit, or it may be indicative of something inherently different in the WIC clients. It is recommended to continue to collect the data over time and review changes seen in children at subsequent visits.

Future Directions and Opportunities

Several key opportunities are available to the MCDPH –OOH First Teeth First Program as the program reaches full implementation. As the database is now complete and operating at full capacity, the program evaluation tasks can be expanded and further developed. Potential opportunities for the First Teeth First Program to assess and evaluate critical program components for program planning and improvement are listed below.

One recommendation is to conduct a more detailed study on the impact of the program. An impact study will help First Teeth First establish baseline data and a formative framework for a longitudinal study. An Impact Study design could address the following research questions:

- Did the First Teeth First program increase access to dental care for children 0-5? In other words, were more children seen in dental clinics?
- What facilitates parents bringing their children back for follow-up visits for subsequent fluoride varnishes?

There are several potential limitations in the design of the Impact Study, including the following:

- Parents may not bring their children back to the same locations (or a First Teeth First site) for services.
- Information regarding dental care is based on developing reciprocal relationships with dental providers and an appropriate method of tracking the children.
- Strategies that will need to be developed to increase the ability to include data on follow up dental care provided to children served by First Teeth First. This will allow for the measurement of increases in access to dental care for children 0-5 in future years of the program.

In an effort to build sustainability into the First Teeth First Program Model, the Maricopa County Office of Oral Health should continue to work on method to identify all AHCCCS-eligible children served. AHCCCS may be able to provide funding for dental screening and varnish services for eligible children in the future.

As First Things First and other funding resources become available, the program could expand to other sites and locations in Maricopa County. The community partnerships with WIC, Immunization Clinics and Child Care Centers appear to have been successful throughout this project. Strengthening these partnerships, while finding additional partners, will be important in reaching the target population of children 0 through 5.

Appendices

Appendix 1. Annotated Bibliography

Appendix 2. Arizona Oral Health Programs funded by First Things First

Appendix 3. Arizona Oral Health Programs funded by First Things First:
Interview Summaries

Appendix 4. Community Partner Survey

Appendix 5. Site Assistant Survey

Appendix 6. Dental Hygienist Survey

Appendix 7. Parent Satisfaction Survey

Appendix 8. Fidelity Assessment Plan



Appendix 1

Literature Review Annotated Bibliography

A review of the literature was conducted on recent oral health studies concerning children under the age of five. The following search terms were used: dental screenings for children 0-5, early childhood caries, oral health for children 0-5 and fluoride varnish. Those articles most relevant to the Maricopa County Office of Oral Health (MCOOH) First Teeth First program are summarized in this annotated bibliography.

American Academy of Pediatric Dentistry, Council on Clinical Affairs, Infant Oral Health Subcommittee. (2011). *Guideline on Infant Oral Health Care* (Reference Manual Vol. 33 No. 6).

These guidelines put forth by the American Academy of Pediatric Dentistry (AAPD) propose preventative strategies, oral health risk assessment, anticipatory guidance and therapeutic interventions for infant oral health.

Parent Oral Health. All primary health care professionals should educate parents on the etiology and prevention of ECC. Primary care professionals should refer all pregnant women for a comprehensive oral exam. If parents undergo professional oral health care, the chances of transferring bacteria that cause ECCs to the infant are minimized. Parents should also receive education on those foods that encourage caries. Parents should utilize a fluoride regimen.

Infant Oral Health. Every infant should receive an oral health risk assessment. Parents should establish a dental home for infants by 12 months of age including a dental visit, a tooth brushing demonstration and prophylaxis and fluoride treatment. Treatment of teething symptoms should be limited to chilled rings but topical anesthetics should not be used. Oral hygiene routine should be established by the eruption of the first tooth. High-sugar foods and drinks should be avoided as well as night-time bottle feeding. A fluoride regimen should be established. Non-nutritive oral habits should be discussed with an oral health professional early on.

Angelos, G., Brown, J., McMahon, D., Kishore, S. (1999). *Evaluation of a program to prevent early childhood caries*. San Antonio, TX: Brownsville Community Health Center and Department of Community Dentistry University of Texas Health Science Center at San Antonio.

The researchers assessed caries development among 190 predominantly Mexican American children ages 2-3 who had no caries at the start of the program. The program consisted of instruction administered to the parent not to put the baby to bed with a bottle and to engage in daily tooth brushing for their children as well as fluoride varnish application at dental visit. The program was implemented by a bilingual community health dentist. The study was not a clinical control trial. Instead, results of those who completed the program were compared with those who did not complete the program.

The study found that 19% of those who completed the program (118) developed caries whereas 43% of those who did not complete the program (37) developed caries and 35 people were lost to follow-up. After controlling for the number of dental visits, the researchers determined that the likelihood of developing caries was 3.5 times higher in those children who did not complete the program.

Arizona State Board of Nursing (2011, January). *Advisory Opinion: Fluoride varnish: oral health screening.* Phoenix, AZ.

This document outlines the general requirements and course of instruction for oral health screenings and fluoride varnish applications as mandated by the Arizona State Board of Nursing.

Arizona Department of Health Services, Division of Public Health Services, Office of Oral Health. (2005, November). *The oral health of Arizona's children: current status, trends and disparities.*

The Arizona Department of Health Services (AZDHS), Office of Oral Health (OOH) conducted a statewide dental survey from 1999-2003. About 13,000 kindergarten, first grade and second grade children were screened. The purpose of the survey was to make policy recommendations based on the results documenting the oral health of Arizona's children. The results from the survey were compared to results from the 1987-1990 survey and it was determined that tooth decay continues to be a major problem for Arizona's children. The report discusses seven "key findings" derived from the study as well as recommendations for responding to those findings. A few of the key findings and recommendations are listed below. The complete list can be found in the report included in the Appendix.



Selected key findings:

- Almost 39% of Arizona's third graders have untreated tooth decay.
- Nearly 9% of Arizona's children between kindergarten and third grade have urgent dental care needs.
- Only 57% of the children between kindergarten and third grade visited the dentist in the last year.

Examples of recommendations:

- Expand the school-based dental sealant program to reach all eligible schools in all counties and stress the importance of sealants and preventive care for all children.
- Expand comprehensive evidence-based dental disease prevention strategies to include all pregnant women, infants and toddlers.
- Promote annual dental visits as a minimum standard of dental care, particularly for high- risk children by one year of age.
- Encourage an increase in the number of dentists participating in the Arizona Health Care Cost Containment System (AHCCCS).
- Increase number of dental providers practicing in underserved areas.

Association of State and Territorial Dental Directors, Fluorides Committee. (2007). *Fluoride varnish: an evidence-based approach* (Research Brief).

This research brief addresses the following questions: what is fluoride varnish? How do fluorides prevent dental decay? What are the advantages of fluoride varnish over other professionally applied fluorides? Does fluoride varnish prevent dental caries in both primary and permanent teeth? How often should fluoride varnish be applied? Are fluoride varnishes FDA approved? Is fluoride varnish safe? Does fluoride varnish contribute to fluorosis? What could improve the cost-effectiveness of community-based fluoride varnish programs?

In order to minimize risks and optimize benefits, the research brief recommends consistency with evidence-based practice guidelines. Some of these include: utilizing caries risk-assessments, varnish applications in 6-month intervals for at least 2 years in combination with counseling, beginning treatment at age one and use of dental sealants and water fluoridation.



Boston University, Goldman School of Dental Medicine, Center for Research to Evaluate and Eliminate Dental Disparities. (2010, July). *From the first tooth: eliminating early childhood caries in Maine.*

From the First Tooth (FTFT) is a dental health intervention in Maine that seeks to eliminate ECCs in Maine's children ages birth to three. The program consists of oral health assessments and fluoride varnish applications that are incorporated into pediatric well child visits. Additionally, the program educates parents and pregnant women about behavioral risk factors that lead to ECC and preventative measures to mitigate them.

Bruner, C. & Tirmizi, S.N. (2010). *The healthy development of Arizona's youngest children: A 21st century profile of opportunity and challenge.* Phoenix, AZ: First Things First.

This report, produced in partnership with First Things First and sponsored by St. Luke's Health Initiatives provides information about the health development of children in Arizona from birth to five years of age. Content covered includes oral health status, oral health care, dental insurance, household oral health indicators, demographics, and nutrition.

Dye, B., Arevalo, O., Vargas, C. (2010). Trends in paediatric dental caries by poverty status in the United States, 1988-1994 and 1999-2004. *International Journal of Paediatric Dentistry*, 20, 132-143. Doi: 10.1111/j.1365X.2009.01029.x

This is the first study to document pediatric caries by poverty status for children comparing nationally representative data collected from 1988-1994 and 1999-2004. The study utilized information on 13,168 children between the ages of 2 and 11 years old. For poor children, caries prevalence increased from 46% between 1988 and 1994 to 52% between 1999 and 2004. However, the overall prevalence remained about the same between the two periods at 35% and 38%, respectively. There are also significant differences between gender and age groups. Caries in the primary dentition have been more prevalent among boys than girls. For boys between 2 and 8 years of age, caries prevalence has increased from 33% to 41% while remaining the same for girls of the same age at 36%. Both poor and non-poor boys experienced greater caries incidence in the 1999-2004 time period. For poor boys, caries incidence increased from 45% between 1988 and 1994 to 53% between 1999 and 2004 and for non-poor boys the incidence rates were 23% and 31%, respectively.

The article also explores links between caries incidence, sugar consumption habits



among children, and access to dental insurance. An examination of eating habits of children reveals greater consumption of sweetened beverages among children in recent years. Low rates of dental insurance coverage among poor children may explain their higher incidence of caries. The increase in caries incidence in non-poor children could be attributed to a drop in private dental insurance (which is more common among affluent families.) Due to the findings of this study, the authors indicate a need to explore the reasons behind greater caries incidence among not only high-risk populations but also what was considered a low-risk population – non-poor boys.

Dye, B., Li, X., Beltran-Aguilar, E. (2012). *Selected oral health indicators in the United States, 2005-2008*. (NCHS Data Brief No. 96). Hyattsville, MD: National Center for Health Statistics.

This data brief presents collected data on untreated dental caries, dental restorations, dental sealants and tooth loss in the United States between 2005 and 2008, disaggregated by age, race/ethnicity and poverty level. The data indicate that untreated dental caries, dental restoration, and dental sealant prevalence varied by race/ethnicity and poverty level. For example, across all age groups, untreated dental caries were more prevalent among non-Hispanic black and Mexican American persons compared to non-Hispanic white persons. Similarly, across all age groups, untreated dental caries were most prevalent among those living below 100% of the poverty level, followed by those living between 100% to less than 200% of the poverty level, followed by those living at 200% of the poverty level or higher.

Florida Department of Health. *WIC dental partnership for prevention of early childhood caries best practice: customer and market focus*. Retrieved from http://www.doh.state.fl.us/HPI/BP-PDF/BP_WIC_Dental_Partnership_for_Prevention_of_Early_Childhood_.pdf.

The West Palm Beach Health Center began a pilot early intervention and prevention dental program in 2006 targeting WIC children ages 6 months to 18 months and their caregivers. The model includes parental counseling, oral health examinations, fluoride treatments, and referrals to dental care when necessary.

The program has been beneficial to the two main internal stakeholders: WIC and Dental staff. The program increases the number of clients seen in WIC and decreases dental staff clinic time. An important feature is that team members are cross-trained in each program area. The program is successful from the client perspective because they are able to receive an array of services in one place at one time.



The West Palm Beach program was very low cost because meetings were held during lunch hours and all activities and work were performed by WIC and Dental staff in addition to regular duties or on their own free time. The only cost associated with the program was for supplies and amounted to just \$2,000. In fact, the program brought revenue in for the Health Department because Medicaid was billed.

A low literacy level among service recipients has been a challenge for the project staff. Most service recipients speak English, Spanish or Creole and all written materials are provided in these languages but recipients cannot always read in their native language. Assistance is given when necessary but this is especially challenging with Creole-speaking service recipients since no program staff speak Creole.

Gillund, S. & Ferguson, R., *Effectiveness of oral health promotion, children less than five years old*. Unpublished manuscript.

The authors reviewed 32 articles to explore effective and ineffective methods of oral health promotion for children under the age of five. From the literature they reviewed, it was concluded that oral health programs targeting children under five should focus their attention on the child's caretaker, especially mothers, who are often the primary caretaker. They also found a number of factors that influenced program effectiveness including the age and education level of mothers, first-time mothers versus mothers with multiple children and cultural influences.

In implementing programs, the review found that individualized instruction (in the home or a dental clinic) was generally more effective and more measurable than population-based instruction (mass media or school-based programs). Repetition of information was also determined to be a key success factor. Better oral health outcomes were observed in those studies that engaged in several rounds of information dissemination with each participant.

Holt, K. (2011). *Dentists and head start: what you should know and how you can help* (2nd ed.). Washington, DC: National Maternal and Child Oral Health Resource Center.

This paper can be used as a reference for dental health providers on Head Start and Early Head Start programs in relation to oral health among children served by this program. Head Start program performance standards require their staff to track infant and child oral health care. The author recommends that dentists accept referrals of children enrolled in Head Start and to learn about reimbursements and billing for Medicaid and CHIP recipients, among other recommendations.

Institute of Medicine of the National Academies. (2011, July). *Improving access to oral health care for vulnerable and underserved populations*. Retrieved from <http://www.iom.edu/oralhealth> access.

The report asserts that the United States is experiencing “profound and enduring oral health disparities” as a result of economic, cultural and geographical barriers, among other reasons. The report outlines a vision for oral health care, including two guiding principles:

- Oral health is an integral part of overall health, and therefore, oral health care is an essential component of comprehensive health care.
- Oral health promotion and disease prevention are essential to any strategies aimed at improving access and care.

The report discusses and outlines various strategies for achieving the vision put forth, including integration of oral health care into overall health care, creating optimal laws and regulations, improving dental education and training, reducing financial and administrative barriers, promoting research, and expanding capacity.

Lopez, L., Berkowitz, R., Spiekerman, C., Weinstein, P. (2002). *Topical antimicrobial therapy in the prevention of early childhood caries: a follow-up report*. *Pediatric Dentistry*, 24(3), 204-206.

This study was developed to test the hypothesis that topical iodine agents applied to the teeth of children should reduce the risk of developing caries among high-risk children. The researchers undertook a study of 83 babies 12-19 months old who were clients of a WIC clinic in Puerto Rico. Half were randomized into a treatment group and the other half to a control group. The treatment group received application of an iodine solution on their teeth every 2 months for the duration of the experiment. The control group received a placebo solution. The study confirmed that topical iodine solutions significantly reduce the incidence of oral caries. In the control group, 14 of the 44 participants developed white spot lesions on their teeth. In the experimental group, just 3 of the 39 participants developed the spots.

Meyer, K., Geurtsen, W., Gunay, H. (2010). *An early oral health care program starting during pregnancy*. *Clinical Oral Investigation*, 14, 257-264. Doi:10.1007/s0078-009-0297-x.

The authors developed a long-term clinical study to assess the effects of an early oral health care program starting during pregnancy. The study utilized an “early oral health



care” strategy involving oral examination, education and treatment during the prenatal period and after delivery until age 3. Phase I of the study involved preventative care of pregnant women. Phase II involved preventative care of pregnant women and their children up to age 3. In phase III, mothers and children were treated until the child reached 6 years of age. Phase IV involved examining those participants as teenagers between 13 and 14 years old.

Researchers found that the program had notable positive effects on the oral health and caries incidence in toddlers, children, and teenagers. When children were tested at age 3 after completing phases 1&2 of the study, the researchers found that 100% of the treatment group were caries free while only 81.5% of the control group was caries free. When tested again at age 6 after completion of phase III, 75% of the treatment group children were caries free compared to 50% of the control group children. In phase IV, the treatment group still experienced better results than the control group as 65.5% had naturally caries free dentition, 24.2% were caries free with fillings and 10.3% had active caries. In the control group, 30.0% had naturally caries-free dentition, 26.7% were caries free with fillings and 43.3% had active caries. However, there was no significant difference in oral health knowledge between the treatment and control groups as evidenced by scores from a questionnaire administered to both groups of teens ages 13-14.

The researchers conclude that the study lends support to the body of literature that indicates that “early oral health care” strategies begun at pregnancy are effective in preventing oral diseases, especially caries.

Nishimura, M., Rodis, O., Kariya, N., Seishi, M. (2011). Caries-risk assessment in early childhood using a caries activity test. *Pediatric Dental Journal*, 2(2), 116-122.

This article tests and explains a specific caries-risk assessment tool to be used by health care professionals to estimate future caries activity for an individual child. The caries-risk assessment tool, called the Cariostat test, allows health care providers to predict future caries incidence. The tool can be used to classify children into different caries-risk groups based on Cariostat test results. Risk classification can be an important public health tool to plan for individualized preventative treatment. “The Cariostat is very simple, safe, requires short sampling time and shows excellent responsibility and predictive abilities,” according to the authors.

Rozier, R, King Sutton, B., Bawden, J., Haupt, K., Slade, G., King, R. (2003). Prevention of early childhood caries in North Carolina medical practices:



implications for research and practice. *Journal of Dental Education*, 67(8), 876-885.

This article describes the development, operation and preliminary outcomes of two North Carolina programs: *Smart Smiles* and *Into the Mouth of Babes*. The programs were designed to target babies from birth to 3 years of age from low-income families.

Smart Smiles was a community-based program involving oral health screenings, fluoride varnish applications and counseling of oral health providers. The program utilized a partnership approach that consisted of representatives from medicine, dentistry, community organization, health education, public health, child health and development, social services, and program evaluation. Another significant feature of the program is that it utilized existing networks that were already serving high-risk populations in other health care services. *Smart Smiles* was converted to a state-wide program in 2001 called *Into the Mouths of Babes*. Under this program, Medicaid provided reimbursements for up to six medical visits in which preventative dental services were provided. These visits had to include: risk assessment/oral screening, dental referral, fluoride varnish application, and oral health education for primary caregivers of the child.

The authors argue that the program significantly increased the number of children receiving preventative dental services in North Carolina. In 2002, infants and toddlers enrolled in Medicaid received preventative dental services at medical offices in 40,000 visits. They argue that the early success of the program in North Carolina can be attributed to a number of factors including: state legislative support and significant awareness-raising efforts, strong partnerships between the organizations involved, solid state and federal funding base, and proven success from the pilot program (*Smart Smiles*).

Ramos-Gomez, F., Crystal, Y., Wai, M., Crall, J., Featherstone, J. (2010). Pediatric dental care: prevention and management protocols based on caries risk assessment. *California Dental Association Journal*, 38(10), 746-761.

“An effective perinatal program should institute a long-range, pre- and postpartum maternal strategy to reduce maternal mutants streptococci (MS) and lactobacilli levels through therapeutic interventions and counseling on lifestyle modifications,” according to the article. The researchers note that since caries is a transmissible disease, treatment of caries in pregnant women and new mothers is an effective way to prevent transmission to their babies. The researchers also recommend early infant oral health visits – including caries risk assessment, fluoride treatment and preventative



guidance—and early establishment of a dental home.

Ramos-Gomez, F. (2005). Clinical considerations for an infant oral health care program. *Compendium of Continuing Education in Dentistry* 26(5), 21-23.

This article confirms the importance of widely published material indicating that a comprehensive infant oral care program including risk assessment, preventive treatments, and parental education are crucial. The article adds that incentives are effective tools to encourage participation in ongoing educational programming. Some examples of incentives that can be used to increase participation include achievement charts and games, toothpaste, toothbrushes and even toys. Such incentives should be “earned” by caregiver knowledge and favorable risk assessment results.

The article also adds recommendations for maximizing interest and trust among mothers in the program by tailoring it to the social and cultural norms of the community. One example is using the “knee-to-knee position” where the parent or caregiver holds the child on her/his lap and lower the child’s head onto the dentists lap for examination. This makes the parent an active participant in the procedure and establishes trust.

The PEW Center on the States. (2011). *The State of Children’s Dental Health: Making Coverage Matter, Arizona.*

The report gives Arizona a grade of “B” for meeting 5 of 8 policy benchmarks for improving children’s oral health, up from a grade of “C” in 2010. The state’s biggest gain in 2011 was reaching the benchmark of 25% for high-risk schools with sealant programs. However, the grade B status may be in jeopardy since Arizona is cutting Medicaid reimbursements to dentists. Access to dental insurance coverage is only one important factor in insuring children have access to oral health care. Another notable challenge for the state is that more than half of children on Medicaid received no dental service in 2009 and more than 40% of children on private insurance did not receive dental service either.

The PEW Center on the States. (2010, February). *The cost of delay: state dental policies fail one in five children.*

This extensive report covers numerous aspects of dental care for children in Arizona including early growth and development, school readiness and performance, overall health, economic consequences of poor health, an examination of the causes and an exploration of the solutions to poor health outcomes. The report includes regional and



national comparisons with respect to many of the topics mentioned above and focuses particularly on low-income children, minorities and the disabled.

United States Government Accountability Office. (2010, November). *Oral health: efforts under way to improve children's access to dental services, but sustained attention needed to address ongoing concerns.*

The GAO undertook a study as required by the Children's Health Insurance Reauthorization Act of 2009 (CHIPRA) regarding children's access to dental care. Many states have reported that most dentists treat few to no Medicaid or CHIP patients, making accessing dental care a significant challenge for many children and families. The Department of Health and Human Service (HHS) website Insure Kids Now webpage intended to help families find dental providers for their children. They found problems such as wrong or disconnected phone numbers, many dentists not accepting new Medicaid or CHIP patients, or clinics listed that were no longer in practice. The GAO made recommendations to HHS improve the Insure Kids Now webpage and to ensure that states are gathering reliable data on Medicaid and CHIP dental services. This extensive report details the findings of their study and contains extensive data on topics such as Medicaid utilization, funding, and types of dental providers.

Vann, W.F., Lee, J.Y., Baker, D., Divaris, K. (2010). *Oral health literacy among female caregivers: impact on oral health outcomes in early childhood. Journal of Dental Research* 89(12), 1395-1400.

The researchers hypothesize that a child's caregivers' oral health literacy is related to their oral health knowledge, behaviors and the oral health of their children. The study population consisted of 1,158 children between 1 and 59 months and their primary caregiver. Participants were given various tests to assess their oral health literacy, knowledge and behaviors.

The study revealed a strong positive correlation between oral health literacy and oral health knowledge. They also found a positive correlation between oral health literacy and good oral health behaviors as well as good oral health status. Results from this study underscore the importance of the oral health literacy of caregivers to improve oral health outcomes and lend support to interventions addressing low oral health literacy directly.

Weintraub, J., Ramos-Gomez, F., Jue, B., Shain, S., Hoover, C., Featherstone, J.D.B., Gansky, S.A. (2006). *Fluoride varnish efficacy in preventing early childhood caries. Journal of Dental Research* 85(2), 173-176.



Earlier studies had concluded that “the evidence for the effectiveness of fluoride varnish applied to primary teeth is incomplete and inconsistent,” (p. 173). The researchers undertook a two-year randomized controlled trial to determine whether fluoride varnish application coupled with parental/caregiver oral health counseling had a more significant impact of caries incidence among children compared to oral health counseling alone. Participants were randomized into three groups: parental counseling plus yearly fluoride varnish, parental counseling plus varnish twice a year and parental counseling only. A total of 376 children were enrolled and randomized.

The study findings indicated that the use of fluoride varnish to prevent ECCs is very effective. Moreover, those children who received the varnish twice a year experienced lower incidence of caries. Since the study took place in sites serving vulnerable and minority populations (WIC clinics, Well Child Clinics and Supplemental Nutrition Programs), these results are highly generalizable to these populations. The authors recommend that fluoride varnish and parental/caregiver counseling as integral parts of a caries prevention programs targeting infants and toddlers.



Appendix 2

Arizona Oral Health Programs Funded by First Things First

Arizona First Things First Oral Health Programs were identified and contacted to learn more about implementation and to identify opportunities for sharing of information and collaboration related to development of oral health programs for children 0-5. Interviews were conducted with Program Directors for five AZ First Things First Oral Health programs focusing on the following topics:

- Service delivery model
- Site selection
- Staffing
- Outreach strategies
- Parent engagement
- Patient - follow up
- Program Evaluation
- Lessons learned
- Patient satisfaction (from perspective of parent)
- Collaborating organizations and partners
- Opportunities for collaboration with other AZ First Things First Oral Health Programs



Arizona Oral Health Programs Funded by First Things First

| Program | Service Delivery Model | First Things First Funding FY 2012 | Staffing | Outreach Strategies | Community Partners | Referral for Dental Treatment for Children with ECC or Urgent Dental needs | Tracking and Follow Up for Children with ECC and Urgent Dental needs |
|---|---|--|--|---|--|--|--|
| Dignity Health Foundation-East Valley (formerly Catholic Healthcare West Foundation - East Valley) Megan Miks, Program Manager Megan.miks@dignityhealth.org | Hospital - Based Organization Schedules Dental Screening and Varnish Clinics in the Community Two person teams in clinics (1 nurse or hygienist and educator) | Southeast Maricopa Regional Partnership Council \$303,905 | 1 Coordinator 1 RN 2 Educators 1 Hygienist - contract 3 RN -contract | Developed FAQ for Parents and Teachers Posters 8.5 x 14 for sites with dates of preschool clinics, located by parent sign in | WIC Immunization Clinics Preschools in School Districts Family Resource Centers Home Visiting Programs Child Care Centers | AHCCCS (if eligible) Low Cost Dental Clinics | Follow-up phone calls are made to parents 30 days following a referral for urgent dental care for their child. |



Arizona Oral Health Programs Funded by First Things First

| Program | Service Delivery Model | First Things First Funding FY 2012 | Staffing | Outreach Strategies | Community Partners | Referral for Dental Treatment for Children with ECC or Urgent Dental needs | Tracking and Follow Up for Children with ECC and Urgent Dental needs |
|--|--|---|---------------------------------------|---|--|--|--|
| Cochise County First Smiles Program , Sierra Vista, AZ. Arizona Cooperative Extension , University of Arizona College of Agriculture and Life Sciences, Cochise County Joyce A. Flieger, Project Director jflieger@email.arizona.edu http://extension.arizona.edu/cochise/first-smiles | Oral Health outreach and education to children 0-5 along with teachers in Child Care settings using a <i>Head Start</i> model. | Cochise Regional Partnership Council \$190,000 | Program Director and Assistant | Toothbrushing Stations in Child Care Centers Tooth Fairy Island (http://www.toothfairyisland.com) age-appropriate stories, games and videos Letters to all licensed child care centers and providers on the Arizona Department of Economic Security list offering the First Smiles Program to visit their centers. Giving consent forms to child care center directors so that they can distribute them with child registration has improved the return rate. | Childcare centers/preschools El Rio Community Health Center Desert Senita Community Health Center (Ajo) University of Arizona Mobile Health Program WIC The Child Care Nurse consultant that was been instrumental in implementation of First Smiles with the child care providers. | Cochise County has a shortage of dentists. Only two Community Health Centers offer dental care on a sliding fee arrangement (El Frieda and Douglas). Some Cochise County residents access dental care in Mexico where the cost is low with the close proximity to the Mexican border. | No formal follow up with dentists. The Project Director receives updates on whether the children visited a dentist during the second visit to the child care centers. |



Arizona Oral Health Programs Funded by First Things First

| Program | Service Delivery Model | First Things First Funding FY 2012 | Staffing | Outreach Strategies | Community Partners | Referral for Dental Treatment for Children with ECC or Urgent Dental needs | Tracking and Follow Up for Children with ECC and Urgent Dental needs |
|---|---|--|--|---|---|---|--|
| Navajo County Health Department Mary Tyler, Oral Health Program Director Background Navajo County Mary Tyler, Assistant Health Director Mary.tyler@navajocountyaz.gov | Clinics are offered with a two-person team. | Funding: Navajo/ Apache Regional Partnership Council, \$61,000 White Mountain Apache Tribe Regional Partnership Council \$63,565 | 1 Coordinator 2 Educators 2 Hygienist - contract | A curriculum, <i>Oral Health in Early Childhood</i> is utilized to teach the importance of oral health to child care providers. | Child care providers, Head Start, WIC and community events. A medical clinic was recently added as a site (North Country Medical Clinic). | Navajo and Apache Counties are underserved areas for dental care. The vast geographic areas make access to health care and dental care difficult. The program refers children with ECC or decay to their dentist (if they have one) or if no dentist, to the nearest resource. In many instances the nearest dental resource can be 50 miles. | Follow-up phone calls are made to parents following a referral for urgent dental care for their child. |



Arizona Oral Health Programs Funded by First Things First

| Program | Service Delivery Model | First Things First Funding FY 2012 | Staffing | Outreach Strategies | Community Partners | Referral for Dental Treatment for Children with ECC or Urgent Dental needs | Tracking and Follow Up for Children with ECC and Urgent Dental needs |
|---|--|---|--------------------------------------|--|--|---|---|
| Sun Life Family Health Center Richard Saran, DDS, Oral Health Program Director Background Sun Life Family Health Center Richard Saran DDS Director of the FTF Oral Health Program in Pinal County. rls763@aol.com Jeanine Gooding 206.478.1252 jkgooding@msn.com | In order to provide the full range of oral health prevention, education and dental care in a rural county, Sun Life Health Center has invested in a 40 ft. Mobile Dental Care Unit with two operatories which will be in place by April 2012 | Pinal Regional Partnership Council \$600,000 | 1 Dentist 2 Dental Assistants | Clinics sites include preschools, daycare centers, Health Fairs, Sun Life Health Center (SLHC) and SLHC satellite locations. A successful collaboration with the Pinal County Mobile Library (Bookmobile) has helped to bring oral health prevention to parents and children | Dr. Saran has made presentations to statewide pediatrician groups on oral health and encouraging them to check children and refer to dentists. Staff contact preschools and Head Start programs. | Pinal County is a medically underserved area and has a limited number of Dentists. Sun Life Health There are two pediatric dentists in Pinal County. Children referred for dental treatment have difficulty accessing treatment due to affordability and geographic distance (as dentists can be 40 miles from their home). Sun Life Health Center has the capacity to | Sun Life Health Center provides referral and follow up dental care so children can be tracked if they obtain dental care through SLHC but not if they go to another dental provider |



Arizona Oral Health Programs Funded by First Things First

| Program | Service Delivery Model | First Things First Funding FY 2012 | Staffing | Outreach Strategies | Community Partners | Referral for Dental Treatment for Children with ECC or Urgent Dental needs | Tracking and Follow Up for Children with ECC and Urgent Dental needs |
|--|---|--|---|---|---|---|---|
| Casa Grande, AZ. | | | | | | provide follow up dental care to children using AHCCCS funds along with sliding fees and other funding sources. | |
| Pima County Health Department-First Smiles Matter Margaret Perry, Oral Health Program Director Margaret.Perry@pima.gov Tucson, AZ. | Clinic sites include preschools, child care centers and immunization clinics. Additionally, the University of Arizona Mobile Health Program reaches outlying areas in Ajo | South Pima Regional Partnership Council, \$224,987 | 1 Program Coordinator 1 Admin Assistant (who is a dental assistant) 6- dental hygienists Average of 1-2 dental or nursing student volunteers | Child care centers, immunization clinics in the back-to-school season as well as pediatric waiting rooms. In the past WIC centers were a primary focus for outreach for the First Smiles Matter program in Pima County | Childcare centers/preschools El Rio Community Health Center Desert Senita Community Health Center (Ajo) University of Arizona Mobile Health Program WIC | Children are referred to El Rio Community Health Center or Desert Senita Community Health Center in Ajo, | The Spanish-speaking administrative assistant follows up with a phone call to parents who indicated that they wanted further assistance from the program after screening. The others are not given any further follow-up. |



Arizona Oral Health Programs Funded by First Things First

| Program | Service Delivery Model | First Things First Funding FY 2012 | Staffing | Outreach Strategies | Community Partners | Referral for Dental Treatment for Children with ECC or Urgent Dental needs | Tracking and Follow Up for Children with ECC and Urgent Dental needs |
|---|---|---|--|---|---|--|--|
| <p>Maricopa County Department of Public Health Office of Oral Health</p> <p>First Teeth First</p> <p>Kimberly Richards, Program Coordinator</p> <p>www.Firstteethfirst.org</p> | <p>Clinic Sites include WIC, Immunization Clinics, Child Care Centers, Preschools, Health Fairs</p> <p>Delta Dental of Arizona Foundation Program through Subcontract</p> <p>Clinics at Preschools in School Districts in the Northwest Maricopa Region</p> | <p>Northwest Maricopa Regional Council \$413,349</p> <p>Southwest Maricopa Regional Council \$168,832</p> <p>North Maricopa Regional Council \$484,765</p> <p>Northeast Maricopa Regional Council \$193,906</p> | <p>1 Program Coordinator</p> <p>6 Dental Hygienists</p> <p>Contract</p> <p>6 Bilingual site assistants</p> <p>(Contract)</p> <p>2 Outreach Specialists</p> <p>1 Dentist Consultant</p> | <p>Flyers, letters to child care centers, Health Fairs, back to school events, community centers.</p> | <p>WIC, Immunization Clinics, Community Health Centers, Child Care Centers, Child Care Nursing Consultant</p> | <p>AHCCS (if eligible)</p> <p>Low Cost Dental Clinics, MIHS</p> | <p>Follow up with MIHS and John C. Lincoln Dental Clinic.</p> <p>Delta Dental – Telephone follow up.</p> |



Appendix 3

Arizona Oral Health Programs Funded by First Things First: Interview Summaries

1) Site: Pima County Health Department- First Smiles Matter

In-person Interview on 3/12/2012 with Margaret Perry, Oral Health Program Director

Background

Pima County Health Department

Oral Health Program

Funding: South Pima Regional Partnership Council FY 2012, \$224,987

Margaret Perry

Director of First Smiles Matter in Pima County.

520.243.7902

Margaret.Perry@pima.gov

Tucson, AZ.

First Things First Program Description: Provides oral health screenings and fluoride varnish in a variety of community-based settings: provide training to families on the importance of oral health care for their children; and provide outreach to dentists to encourage service to children for a first dental visit by age one. Decrease preventable oral health problems in young children.

Service Delivery model

First Smiles Matter is in their third year and is entering into another 3-year cycle. They work with several partners in Pima County (discussed below), including a mobile health component through the University of Arizona Mobile Health Program.

Staffing = 8 (+ intermittent volunteers)

- 1- Program Coordinator (Margaret Perry)
- 1- Administrative Assistant (who is a dental assistant)
- 6- dental hygienists



- Average of 1-2 dental or nursing student volunteers

Site selection

They serve about 45 sites that include preschools, child care centers and immunization clinics. Additionally, the University of Arizona Mobile Health Program reaches outlying areas in Ajo.

Dental Treatment Providers

When children are identified as needing further attention after screenings, they are referred to El Rio Community Health Center or Desert Senita Community Health Center in Ajo, depending on the location of the patient. These dental providers have sliding fees and accept the AHCCCS (Medicaid) insurance.

Outreach strategies

The program primarily relies on child care centers for outreach. They have established strong relationships with the centers and rely on their support in reaching children. They also look for children in immunization clinics in the back-to-school season as well as pediatric waiting rooms.

In the past WIC centers were a primary focus for outreach for the First Smiles Matter program in Pima County. They used to attend oral health classes provided by WIC and would use these opportunities to share information about First Smiles Matter and even deliver services. WIC stopped holding these classes, making outreach through WIC a challenge. It would be a resource drain to pay a hygienist to sit in the center waiting to enroll students when they may only get one or two children in a day.

Parent engagement

Parent engagement has been the hardest task for the program. Since parents are not present in childcare centers (their primary outreach strategy), they rely on feedback from participant consent forms where parents are able to select if they want follow-up support from the program in any way. They only follow up with those that indicate “yes” on the form or in situations where urgent care is needed.

Patient follow-up

Each child is sent home a form after dental health screenings indicating the results. Referrals to dental providers are given when necessary. The Spanish-speaking



administrative assistant follows up with a phone call to parents who indicated that they wanted further assistance from the program after the screening. The others are not given any further follow-up.

Program evaluation

Statistical data for the program is collected and reported to First Things First. No additional program evaluation activities are in place at this time.

Patient Satisfaction

Childcare providers indicate that the screenings and varnish applications are a positive procedure for the kids. A survey was implemented this year but it was a 1-round survey. As of now, there are no plans for another.

Collaborating organizations and partners

- Childcare centers/preschools
- El Rio Community Health Center
- Desert Senita Community Health Center (Ajo)
- University of Arizona Mobile Health Program
- WIC

Lessons learned

- Importance of calibration- 4 hour training is given to coordinate and standardize procedures and methods. It is important that everyone is delivering the same message and to mitigate those factors that make the Basic Screening Survey (BSS) subjective. They take steps to make sure they are identifying cavities etc. in the same way.
- Timing of distributing consent forms- they have found that giving consent forms to child care center directors so that they can distribute them with child registration has improved the return rate. At the beginning of the “school year” in the fall, registration rates are highest. Directors distribute the consent forms with the rest of the registration materials. Directors keep spare consent forms to distribute throughout the rest of the year when additional children are registered.

Issues to collaborate on with other AZ Oral Health Programs funded by FTF

Margaret Perry has collaborated with Joyce Flieger, Director of the Uof A Cooperative Extension Program in Cochise County as well as Dr. Richard Saran from



the Sun Life Family Health Center Pinal County program. Dr. Saran came to observe clinics in preparation for startup. Margaret gave the program some information and advice.

Interested in meeting with other FTF Oral Health Programs and representatives from FTF to collaborate on identifying underserved sites where there is a great need.

2) **Site: Cochise County First Smiles Program, Sierra Vista, AZ. Arizona Cooperative Extension, University of Arizona College of Agriculture and Life Sciences, Cochise County**

Phone Meeting on 2/20/2012 with Joyce A. Flieger, Project Director

Background

Arizona Cooperative Extension, University of Arizona College of Agriculture and Life Sciences, Cochise County

Funding: Cochise Regional Partnership Council FY 2012, \$190,000

First Smiles Program –Cochise County

Joyce A. Flieger

Project Director

jflieger@email.arizona.edu

520.458.8278

<http://extension.arizona.edu/cochise/first-smiles>

First Things First Program Description: Provides oral health screenings and fluoride varnish in a variety of community-based settings: provide training to families on the importance of oral health care for their children; and provide outreach to dentists to encourage service to children for a first dental visit by age one. Decrease preventable oral health problems in young children.

Service delivery model –First Smiles provides Oral Health outreach and education to children 0-5 along with teachers in Child Care settings using a *Head Start* model. The Program Director works with staff at child care centers to provide services at center sites consisting of oral health education, dental screening and fluoride varnish. Permission slips are sent home with children for dental screening and fluoride varnish. The oral health education begins with establishing **tooth brushing** stations,



similar to hand washing stations in the center and a daily tooth brushing with fluoride toothpaste. All children at the center participate in the oral health education program. Utilizing an evidence-based curriculum, **Tooth Fairy Island** (<http://www.toothfairyisland.com>) age-appropriate stories, games and videos the Project Director and staff teach children how to brush their teeth correctly with fluoride toothpaste. They receive toothbrushes and toothpaste along with educational materials to take home. Children whose parents have signed permission slips receive dental screening and fluoride varnish. The child care centers have been the primary sites of focus and have worked well. Oral health education programs have been offered to parents on occasion during evening meetings at the child care centers but attendance is low. Education programs have also been offered to parents and children in conjunction with activities at libraries.

Staffing = 2

Program Director and Assistant

Site selection

The First Smiles program was launched in March 2011 focusing on Child care centers in Cochise County. A partnership was established with the Child Care Nurse consultant that was been instrumental in implementation of First Smiles with the child care providers.

Dental Treatment Providers

Cochise County has a shortage of dentists and only two Community Health Centers offer dental care on a sliding fee arrangement (El Frieda and Douglas). Children with decay and urgent dental health needs are referred for a dental visit. It is well known that some Cochise County residents access dental care in Mexico where the cost is low and with the close proximity to the Mexican border.

Outreach strategies

Outreach efforts consisted of letters to all of the licensed child care centers and providers on the Arizona Department of Economic Security list offering the First Smiles Program to visit their centers. The response was excellent (more than can be accepted for the program). Cochise County is a small community and professionals serving children have a strong network.



Parent engagement

Parent engagement is limited in the child care settings since most of the services focus on children and preschool teachers. Oral health education is provided for parents at the Domestic Violence Shelter and Substance Abuse Program. First Smiles has also offered programs at Libraries sponsoring events for parents and children.

Patient follow-up

Although there is no formal follow up with dentists, the Project Director receives updates on whether the children visited a dentist during the second visit to the child care centers. Each child care center is scheduled for a second visit in three months to replace toothbrushes, and provide screening and fluoride varnish along with continuing oral health education. Parent permission forms will reflect a recent dental visits or parent will have an encounter with First Smiles staff and self-report either visits or barriers. Follow up with directly with Dental providers would require IRB approval for the project.

Program evaluation

Data on performance measures required by First Things First are reported. The amount of data collected has been reduced to eliminate burden to program staff.

Collaborating organizations and partners

Child care centers, child care home providers, Child Care Nursing Consultant, Libraries, Women's Crisis Shelter and Parent Group at a Substance Abuse Rehabilitation Program.

Lessons learned

- The Head Start model for delivering oral health education and services to children 0-5 is working well in the rural communities in Cochise County. This year the program will be expanded to Graham, Greenlee and Yuma Counties.
- A partnership was established with the Child Care Nurse consultant that was been instrumental in implementation of First Smiles with the child care providers.
- The oral health education curriculum, **Tooth Fairy Island** (<http://www.toothfairyisland.com>) has been very well received by children and preschool teachers. The content has age-appropriate stories, games and videos the Project Director and staff use to teach children how to brush their



teeth correctly with fluoride toothpaste.

Issues to collaborate on with other AZ Oral Health Programs funded by FTF

- Joyce Flieger, Project Director, has vast experience in oral health programs in several counties and at the state level. She has an existing network with other agencies providing oral health programs. She is amenable to informal communication and is willing to share information with assist other programs.

3) Site: Sun Life Family Health Center

Telephone Interview on 2/28/2012 with Richard Saran, DDS, Oral Health Program Director

Background

Sun Life Family Health Center

Oral Health Program

Funding: Pinal Regional Partnership Council FY 2012, \$600,000

Richard Saran DDS

Director of the FTF Oral Health Program in Pinal County.

520.381.0323

rls763@aol.com

Jeanine Gooding 206.478.1252 jkgooding@msn.com

Casa Grande, AZ.

First Things First Program Description: Provides oral health screenings and fluoride varnish in a variety of community-based settings: provide training to families on the importance of oral health care for their children; and provide outreach to dentists to encourage service to children for a first dental visit by age one. Decrease preventable oral health problems in young children.



Service Delivery model

Sun Life Health Center is a full service primary care provider in Pinal County with a dental clinic located in Casa Grande. First Things First provides funding for outreach, oral health education, screening and fluoride varnish with a grant beginning July 2011. Since July 2011 approximately 500 children have received screening. Sun Life Health Center has the capacity to provide follow up dental care to children using AHCCCS funds along with sliding fees and other funding sources. In order to provide the full range of oral health prevention, education and dental care in a rural county, Sun Life Health Center has invested in a 40 ft. Mobile Dental Care Unit with two operatories which will be in place by April 2012. Plans are underway to name the program and raise visibility in the community. A possibility for the name will be the Mobile Oral Health Team (MOAT). Staff will wear polo shirts with logos

Staffing = 3.0 FTE

- 1 Dentist
- 2 Dental Assistants

Site selection

Clinics sites include preschools, daycare centers, Health Fairs, Sun Life Health Center (SLHC) and SLHC satellite locations. A successful collaboration with the Pinal County Mobile Library (Bookmobile) has helped to bring oral health prevention to parents and children. Clinics for Dental Screenings and Varnish are scheduled to follow the Bookmobile Schedule.

Dental Treatment Providers

Pinal County is a medically underserved area and has a limited number of Dentists. Sun Life Health Center operates a full service dental clinic. There are two pediatric dentists in Pinal County. Children referred for dental treatment have difficulty accessing treatment due to affordability and geographic distance (as dentists can be 40 miles from their home).

Outreach strategies

Dr. Saran has made presentations to statewide pediatrician groups on oral health and encouraging them to check children and refer to dentists. Staff contact preschools



and Head Start programs.

Parent engagement

Parent education sessions have been offered at Head Start programs and Preschools, however participation has been limited, attributed to parents having to drive long distances for work and don't have time to stay at the child care centers for meetings and educational sessions.

Patient follow-up

Sun Life Health Center provides referral and follow up dental care so children can be tracked if they obtain dental care through SLHC but not if they go to another dental provider.

Program evaluation

Database will be operational in approximately two months which will be used to track patients and for performance improvement and evaluation.

Collaborating organizations and partners

- Preschools
- Head Start programs
- Pinal County Library and Bookmobile
- **Rotary Club-** Every year, Sun Life Health Center partners with the Casa Grande Rotary Club to raise funds for *Give Kids a Smile*. Last year the program helped to screen 260 children through the efforts of dentists donating their time, contributions and the efforts of Sun Life Health Center (screening 100 kids)

Lessons learned

- Parent education (whether group or individual) is the most important component of an oral health program.
- Pregnant women are receptive to oral health education. The Sun Life Clinic has conducted oral health education in the OB-GYN clinics.
- Head Start has more experience with screening services and health programs for children.
- Preschools have less experience coordinating health screening programs and can easily be overwhelmed when various programs are calling and requesting



to come and offer their programs at the centers.

- Sun Life Health Center has been successful coordinating screening efforts in preschools and Head Start Programs with other providers (such as sensory testing, vision screening, etc.)
- Visited USC Dental School to observe dental clinics in middle schools to build model for Sun Life Health Center in Pinal County.

Issues to collaborate on with other AZ Oral Health Programs funded by FTF

Interested in meeting with other FTF Oral Health Programs and representatives from FTF to collaborate on:

- Identify and increase resources for follow up dental treatment.
- Has collaborated with Margaret Perry (Pima County), Megan Miks (Dignity Healthcare, Chandler) and Joyce Flieger (University of Arizona Cooperative Extension – Cochise County)
- Dr. Saran is interested in hosting a bi-yearly meeting of Oral Health Providers administering programs for First Things First for children 0-5.
- When the Mobile Unit is available in April 2012, Dr. Saran would be willing to have representatives from other AZ Oral Health Programs come for a tour and site visit.
- Oral health is important for children 0-6 but also children of all ages and adults. Explore funding and resources for older children and adults.

4) Site: Navajo County Health Department

Telephone Interview on 2/29/2012 with Mary Tyler, Oral Health Program Director

Background

Navajo County

Funding: Navajo/ Apache Regional Partnership Council FY 2012, \$61,000

White Mountain Apache Tribe Regional Partnership Council FY 2012 \$63,565

Mary Tyler, Assistant Health Director

Navajo County Public Health Services District

928.524.4750

Mary.tyler@navajocountyaz.gov



First Things First Program Description: Provides oral health screenings and fluoride varnish in a variety of community-based settings: provide training to families on the importance of oral health care for their children; and provide outreach to dentists to encourage service to children for a first dental visit by age one. Decrease preventable oral health problems in young children.

Service delivery model

The Navajo County Health Department has received funding from First Things First (FTF) for oral health programs for children 0-5 from two Regional Councils, Navajo/ Apache Regional Partnership Council and White Mountain Apache Tribe Regional Partnership Council. The program serves Navajo and Apache Counties in non-reservation communities including Holbrook, Springerville, St. Johns, Pinetop, Snowflake and Taylor and the White Mountain Apache Indian reservation. A team comprised of an Oral Health Educator and Dental Hygienist focus on child care providers to provide education, screening and fluoride varnish to children 0-6. In the Navajo/ Apache Region, clinics are offered 10-15 days per month and 1200 applications are provided each year. The same model is used in the White Mountain Apache Reservation community with a two-person team.

Staffing =4 FTE Plus the Program Director

- 1 Coordinator
- 2 Educators
- 2 Hygienist -contract

Site selection

The program focuses on child care providers, Head Start, WIC and community events. A medical clinic was recently added as a site (North Country Medical Clinic). A curriculum, *Oral Health in Early Childhood* ¹⁶is utilized to teach the importance of oral health to child care providers. The curriculum contains pre and post test instruments. For each site, a team made up of an Oral Health Educator and Hygienists provide the educational program (geared to the child care providers or parents or adult caretakers, along with screening and fluoride varnish for the children whose parents have given permission. Toothbrushes and toothpaste are

¹⁶ Oral Health in Early Childhood. Curriculum obtained from the Arizona Department of Health Services.



also distributed to take home with the findings from the screening, educational materials and instructions for care of the fluoride varnish.

Dental Treatment Providers

Navajo and Apache Counties are underserved areas for dental care. The vast geographic areas make access to health care and dental care difficult. Barriers include geography and income. The program refers children with ECC or decay to their dentist (if they have one) or if no dentist, to the nearest resource. In many instances the nearest dental resource can be 50 miles.

Outreach strategies

The Oral Health Educator visits programs in advance explaining the program and setting up a timeline for distribution of the permission forms for parents to sign. Sending the permission forms home to parents approximately two weeks prior to the clinic date seems to work well.

Parent Engagement

One of the limitations of the preschool and child care sites is the lack of access to the parents. Head Start, community events and WIC provide opportunities for parent engagement and oral health education.

Patient follow-up

Follow-up phone calls are made to parents following a referral for urgent dental care for their child. Staff inquire as to whether the parent has been able to set up an appointment with a dentist for the child. If not, staff discusses barriers and tries to assist. In instances where contact information has changed the child care provider is contacted for assistance in locating the parents.

Program evaluation

Client level Data is collected manually to prepare the First Things First quarterly report. The program tracks children by number of fluoride varnish treatments.

Collaborating organizations and partners

- Head Start
- Child Care Centers and providers
- Preschools



- Health Fairs
- WIC
- Schools (Kindergarten)
- North Country Medical Clinic

Lessons learned

- The curriculum, *Oral Health in Early Childhood* ¹⁷ has been well received by child care providers and seems to be a useful tool to help teach the importance of oral health.
- Pre and Post Assessments instruments are included which provide valuable feedback for the program. The Navajo/ Apache County staff modified the curriculum for use with parents in a group setting.
- Community events are utilized primarily for oral health education. Indoor events work best.
- WIC locations provide opportunities for parent education.
- Head Start sites have worked well since the program is well established and can engage the parents and help secure permission forms.
- As staff in child care settings gain more experience hosting the oral health clinics, the clinics run more smoothly.
- Scheduling multiple clinics in a community is cost-effective due to the travel required. For example, when the Oral Health Team goes to Pinetop they will visit at least two preschools or programs.

Issues to collaborate on with other AZ Oral Health Programs funded by FTF

Interested in meeting with other FTF Oral Health Programs and representatives from FTF to collaborate on:

- Identify and increase resources for follow up dental treatment.
- Models for rural service delivery.
- Oral Health Education

5) Site: Dignity Health Foundation-East Valley (formerly Catholic Healthcare West Foundation -East Valley)

Meeting on 2/8/2012 with Megan Miks, Program Manager

¹⁷ Oral Health in Early Childhood. Curriculum obtained from the Arizona Department of Health Services.



Background

Funding-Southeast Maricopa Regional Partnership Council FY 2012 \$303,905

Contact Information

Megan Miks,
Program Manager
1727 W. Frye Road Suite 230
Chandler, AZ 85224
480.728.3813
Megan.miks@dignityhealth.org

First Things First Program Description: Provides oral health screenings and fluoride varnish in a variety of community-based settings: provide training to families on the importance of oral health care for their children; and provide outreach to dentists to encourage service to children for a first dental visit by age one. Decrease preventable oral health problems in young children.

Service Delivery Model

The Dignity Healthcare Foundation Program is based at Chandler Regional Hospital and serves the East Valley (Maricopa County). Throughout the two years of operation the focus has been to provide screenings and fluoride varnish and education to parents and children on oral health. The goal is to schedule 35 clinics per month serving 200-300 children. For example, clinics are offered at WIC Offices- 4-5 clinics in the east valley twice per month for 2 hours with an average of 8-12 children are seen per clinic. Currently clinics are scheduled at 6 Immunization Clinics either weekly or monthly clinics for 2 hours.

Staffing =5.6 FTE

- 1 Coordinator
- 1 RN
- 2 Educators
- 1 Hygienist -contract
- 3 RN -contract
- All staff are bilingual
- 2 person teams in clinics (1 nurse or hygienist and educator)



Site selection

WIC Offices, Immunization Clinics, Family Resource Centers (such as the East Valley Child Crisis Center) Home Visitation programs, preschools in School Districts and child care centers.

Dental Treatment Providers

Refer children with ECC or decay to their dentist (if they have one) or if no dentist, to low cost dental clinics. Approximately 30% of the children referred are eligible for AHCCCS and can go to a dentist for follow up treatment who accepts AHCCCS payments.

Outreach strategies

Developed FAQ for Parents and Teachers

Posters 8.5 x 14 for sites with dates of preschool clinics, located by parent sign in

Parent engagement

Clinics (WIC and Immunization) provide opportunities for individualized education for parents and children.

Head Start hosts parent meetings that are opportunities to provide education to parents and obtain consent for their children to have screenings and fluoride varnish.

Patient follow-up

Follow-up phone calls are made to parents 30 days following a referral for urgent dental care for their child. Staff inquire as to whether the parent has been able to set up an appointment with a dentist for the child. If not, staff discusses barriers and tries to assist. System barriers seem prevalent and include cost of treatment, waiting lists, and sedation requirements.

Program evaluation

- Program evaluation was not included in their grant proposal. Provide reports of programmatic data collected to First Things First.
- **A Patient satisfaction Survey has not yet been implemented.** An online survey was administered but the response rate did not reach a satisfactory number of participants.



- In the future the will use email addresses to send parents a survey.
- Interested in further development of patient satisfaction survey.
- Successfully conducted a **community partner satisfaction survey**.
- Use a performance improvement process to incorporate input from Program staff.

Collaborating organizations and partners

- School Districts
- Family Resource Centers
- Home visiting programs
- Head Start
- Child Care Centers
- First Things First funded programs

Lessons learned

The potential for numbers of children is high in child care centers but education can only be done with children as the parents are only dropping their kids off and picking them up. There are no good opportunities in these settings for the education with parents. Engaging the teachers from each classroom in securing consent forms from parents was determined to be very important. Through teacher outreach and engagement they were able to increase participation (consent forms) from 30%-50%.

Issues to collaborate on with other AZ Oral Health Programs funded by FTF

Interested in meeting with other FTF Oral Health Programs and representatives from FTF to collaborate on:

- Identify and increase resources for follow up dental treatment.
- Marketing campaign and outreach to dentists and community to build awareness and identify resources for follow up dental treatment. If specific referrals can be made to dentists who will accept children follow up information would be easier to obtain.
- Assistance with data collection on follow up dental services (to include AHCCCS data).

Appendix 4

Community Partner Survey

First Teeth First Community Partner Survey (Administer using email from Program Coordinator to partner organization contacts with link to Survey Monkey)

DRAFT Email with Survey LINK

Community partnerships have been extremely important to the implementation of the First Teeth First Oral Health Program, a First Things First Initiative, implemented by the Maricopa County Department of Public Health.

Maricopa County Department of Public Health has engaged LeCroy and Milligan Associates to conduct a survey about your experience with the First Teeth First Program. Please help us improve the program implementation by clicking on the survey link below to complete this survey.

<<Insert link>>

This survey should take about 5-7 minutes to complete. It is anonymous and only aggregate results will be shared with the Maricopa County Department of Public Health staff for the purposes of reviewing your feedback to improve further training. Please complete this survey at your earliest convenience and no later than Monday July 9th.

Thank you for your participation!

Sincerely,

Kimberly Richards

Program Coordinator





Survey Introduction

Community partnerships have been extremely important to the implementation of the First Teeth First Oral Health Program, a First Things First Initiative, implemented by the Maricopa County Department of Public Health.

Maricopa County Department of Public Health has engaged LeCroy and Milligan Associates to conduct a survey about your experience with the First Teeth First Program. Please help us improve the program implementation by clicking on the survey link below to complete this survey.

This survey should take about 5-7 minutes to complete. It is anonymous and only aggregate results will be shared with the Maricopa County Department of Public Health staff for the purposes of reviewing your feedback to improve further training. Please complete this survey at your earliest convenience and no later than Monday July 9th.

1. Type of Organization: Please select the most appropriate choice to describe your organization.

- ☐ Maricopa County Department of Public Health WIC Office
- ☐ Maricopa County Department of Public Health Immunization Clinic
- ☐ Child Care Center
- ☐ Community Health Center
- ☐ Public School
- ☐ Charter School
- ☐ Public Library
- ☐ Community Center
- ☐ Other (please Specify) _____

| 2. Indicate your level of agreement for each of the following statements based on your experience with the collaboration between your organization and the Maricopa County First Teeth First Program | Strongly Agree | Somewhat Agree | Somewhat Disagree | Strongly Disagree | Not Sure |
|--|----------------|----------------|-------------------|-------------------|----------|
| a. Access to dental care is a serious problem among children 0-5. | | | | | |
| b. First Teeth First and my organization have similar missions and goals. | | | | | |
| c. Parents are generally receptive to the dental screening and varnish services offered by First Teeth First. | | | | | |
| d. Sufficient information on First Teeth First was made available to my organization. | | | | | |

LeCroy & Milligan Associates, Inc. _____



| 2. Indicate your level of agreement for each of the following statements based on your experience with the collaboration between your organization and the Maricopa County First Teeth First Program | Strongly Agree | Somewhat Agree | Somewhat Disagree | Strongly Disagree | Not Sure |
|---|-----------------------|-----------------------|--------------------------|--------------------------|-----------------|
| e. First Teeth First program information is easily accessible on the website (firstteethfirst.org). | | | | | |
| f. First Teeth First Program schedules (days and hours) are adequate to meet the demand for service. | | | | | |
| g. First Teeth First Program days and hours are convenient for most families served at my site(s). | | | | | |
| h. The First Teeth First Program has adequate space at my site(s). | | | | | |
| i. The First Teeth First Program is disruptive to the primary services provided by my organization. | | | | | |
| j. Services provided by First Teeth First are beneficial to parents and children. | | | | | |
| k. Communication with the First Teeth First Program Staff occurs on a regular basis. | | | | | |
| l. First Teeth First Program operations are efficient. | | | | | |
| m. First Teeth First Program Staff act professionally at all times. | | | | | |
| n. The physical environment is a good setting for First Teeth First. | | | | | |
| o. First Teeth First Program staff use techniques that engage young children. | | | | | |
| p. First Teeth First Program staff communicate effectively with parents. | | | | | |
| q. Joint planning with First Teeth First Staff for events and distribution of materials works well. | | | | | |

3. How has the First Teeth First Program impacted the target population served by your organization?

4. How could the collaboration between your organization and the First Teeth First Program be improved?



Appendix 5

Site Assistant Survey

INTRODUCTION: As part of an independent evaluation of the First Teeth First Program we are asking you for your input as a program Site Assistant. We would like you to participate by answering some questions which will take approximately 5-10 minutes. There are no right or wrong answers. We are simply interested in your opinions and experiences. Your answers will be kept strictly confidential and will be combined with those experiences of other providers. We appreciate you taking time to share your ideas and experiences with us. Your open and honest answers are important to improving efforts to provide oral health prevention services to children. After completing the survey, please return in a sealed envelope to Dalila Guerrero, FTF Program Assistant (602.506.6842).

| 1. Please rate your level of satisfaction with the following aspects of the First Teeth First (FTF) Program. Choose the answer that most closely fits with your opinion and place a check (circle) in the corresponding box) | | | | | |
|---|---|-----------------------|-----------------------|-----------------------|----------------------------|
| Satisfaction | In general how satisfied have you been with the following aspects of your service? | | | | |
| | Highly Satisfied | Satisfied | Neither | Dissatisfied | Highly Dissatisfied |
| First Teeth First (FTF) training | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Clinic site (facility) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Clinic set-up/take-down process | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Communication with FTF hygienists | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Working with FTF hygienists | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Working with "host" site staff | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Supervision by Program Coordinator | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Number of hours of work per week | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Compensation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Scheduling of work hours | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Overall workload (while at the clinic) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Paperwork requirements | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



| | | | | | |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Interaction with children at clinics | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Interaction with parents at clinics | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Materials and handouts for parents | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Feedback on my performance | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Level of resources for program | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Completing daily reports | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 2. Please indicate whether you have participated in Training in the following topic areas through First Teeth First. If you have participated, please rate them. | Received Training | Extent Training Opportunities were helpful in your work with First Teeth First. | | |
|--|---|---|-----------------------|-----------------------|
| | | Very Helpful | Somewhat Helpful | Not Helpful |
| FTF Program Orientation and Procedures | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Parental Consent Form | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Maintaining Confidentiality | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Dental Screening Process | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fluoride Varnish Process | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Completion of Treatment Record | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

3. Are there any outstanding training needs, if yes, what are they?

☐Yes Please list _____
☐No

4. Tell us what you think in your own words. How can the First Teeth First program be improved?

5. Describe an aspect of the First Teeth First program that works well?



APPENDIX 6

Dental Hygienist Survey

INTRODUCTION: As part of an independent evaluation of the First Teeth First Program we are asking you for your input as a provider of oral health services. We would like you to participate by answering some questions which will take approximately 5-10 minutes. There are no right or wrong answers. We are simply interested in your opinions and experiences. Your answers will be kept strictly confidential and will be combined with those experiences of other providers. We appreciate you taking time to share your ideas and experiences with us. Your open and honest answers are important to improving efforts to provide oral health prevention services to children. After completing the survey, please return in a sealed envelope to Dalila Guerrero, FTF Program Assistant (602.506.6842).

| 1. Please rate your level of satisfaction with the following aspects of the First Teeth First (FTF) Program. Choose the answer that most closely fits with your opinion and place a check (circle) in the corresponding box) | | | | | |
|---|---|-----------------------|-----------------------|-----------------------|----------------------------|
| Satisfaction | In general how satisfied have you been with the following aspects of your service? | | | | |
| | Highly Satisfied | Satisfied | Neither | Dissatisfied | Highly Dissatisfied |
| First Teeth First (FTF) Training | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Clinic Site (Facility) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Availability of Equipment (head lights, screen, table, chairs, teeth models) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Availability of Supplies (toothbrush kits, forms, fluoride varnish, gloves, brochures) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Communication with FTF Project Administrative Staff | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Clinic Schedule Provides Coverage for Clients | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Supervision by Program Coordinator | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Overall Workload | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Receipt of Policy Information | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Compensation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Support from Site Assistant | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



| | | | | | |
|---|---|-----------------------|-----------------------|-----------------------|----------------------------|
| 1. Please rate your level of satisfaction with the following aspects of the First Teeth First (FTF) Program. Choose the answer that most closely fits with your opinion and place a check (circle) in the corresponding box) | | | | | |
| Satisfaction | In general how satisfied have you been with the following aspects of your service? | | | | |
| | Highly Satisfied | Satisfied | Neither | Dissatisfied | Highly Dissatisfied |
| First Teeth First (FTF) Training | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Interaction with children at clinics | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Interaction with parents at clinics | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Feedback on my performance | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Level of resources for program | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Patient Record requirements | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Materials and handouts for parents | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | |
|---|---|--|-------------------------|-----------------------|
| 2. Please indicate whether you have participated in Training in the following topic areas through First Teeth First. If you have participated, please rate them. | Received Training | Extent Training Opportunities were helpful in your work with First Teeth First. | | |
| | | Very Helpful | Somewhat Helpful | Not Helpful |
| FTF Program Orientation and Procedures | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Parental Consent Form | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Maintaining Confidentiality | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Providing Oral Health Education and Instruction | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Dental Screening Procedures | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fluoride Varnish Process | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Completion of Treatment Record | <input type="radio"/> Yes <input type="radio"/> No | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

3. Are there any outstanding training needs, if yes, what are they?

☐ Yes Please list _____
☐ No



4. Tell us what you think in your own words. How can the First Teeth First program be improved?

5. Describe an aspect of the First Teeth First program that works well?



Appendix 7

Parent Satisfaction Survey - English

We are interested in hearing your thoughts about the preventative dental services you just received. Please fill out the following survey. This survey is anonymous (we do not collect names). Your opinion counts! Thank you for your time.

Directions: Please mark the answer (or answers) that you feel best fits your opinion.

1. How did you hear about the preventative dental services your child(ren) received today?

☐ Flier ☐ Clinic Staff ☐ School ☐ Friend/Relative ☐ Website
☐ Other: _____

2. The paperwork was easy to understand. ☐ Yes ☐ No

3. The information given to me on my child's dental health was helpful. ☐
Yes ☐ No

What was the most important thing you learned today?

4. I would recommend this program to others with young children. ☐ Yes
☐ No

5. I plan to bring my child back in 6 months for a dental screening and/or fluoride varnish. ☐ Yes ☐ No

6. Please give us any other comments:

Thank you so much for completing our survey.



Parent Satisfaction Survey - Spanish

Estamos interesados en oír sus opiniones sobre los servicios dentales preventivos que usted acaba de recibir. Por favor llene el siguiente cuestionario. El cuestionario es anónimo (no colectamos nombres). ¡Su opinión cuenta! Gracias por su tiempo.

Instrucciones: Por favor marque la respuesta (o respuestas) que mejor describan su opinión.

1. **¿Cómo supiste de los servicios dentales preventivos que su(s) hijo(s) recibieron hoy?**

☐ Folleto ☐ Empleado de la Clínica ☐ Escuela ☐ Amigo/Familiar
☐ Sitio Web ☐ Otro: _____

2. **¿El papeleo fue fácil de entender?** ☐ Sí ☐ No

3. **¿La información que me dieron sobre la salud dental de mi hijo(a) fue útil?** ☐ Sí ☐ No

¿Cuál fue la cosa más importante que usted aprendió hoy?

4. **¿Recomendaría este programa a otra gente con niños?** ☐ Sí ☐ No

5. **¿Tengo planeado traer a mi hijo(a) en 6 meses para un inspección dental y/o un fluido de barniz?** ☐ Sí ☐ No

6. **¿Por favor denos cualquier otro comentario que tenga:**

¡Gracias por completar nuestro encuesta!



Appendix 8

Fidelity Assessment Plan

| <i>First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice</i> ¹⁸ | | |
|--|---|---|
| Standard of Practice | Measure | Data Collection Method |
| 1. All Programs Implementing Oral Health Strategies will: | | |
| 1a) Hire Staff who reflect the cultural and ethnic experiences and language of the families with whom they work. | Number/percent of staff who meet qualifications | Staff qualifications and demographics profile |
| 1b) Hire staff with the appropriate qualifications to deliver the specific services in the scope of work. | Number/percent of staff who meet qualifications | Staff qualifications Report |
| 1c) Assure that staff receive specific training to carry out oral health activities. | Number/percent of staff receiving training on oral health activities | Staff training report |
| 1d) Provide ongoing staff development on diversity issues. | Number/percent of staff trained on diversity issues | Staff training report |
| 1e) Maintain confidentiality of all information obtained as part of the oral health program. | Number/percent of staff trained in confidentiality | Staff training report |
| 1f) Establish an effective, consistent supervisory system that provides support for all staff members and ensures accountability to participants, funders and the community. | Frequency and duration of supervision | Supervision Report |
| 1g) Assure that evaluation and monitoring is a collaborative, ongoing process that includes feedback from staff, families and community members. | Satisfaction scores from Parent Survey at Clinics Satisfaction scores for Dental | Parent Satisfaction Survey Dental Staff/Provider Satisfaction Survey |

¹⁸**Sources:** “Policy on Early Childhood Caries (EDD): Classifications, Consequences, and Preventive Strategies.” American Academy of Pediatric Dentistry and the American Academy of Pediatrics, Revised 2008.

AAPHD Resolution on Fluoride Varnish for caries prevention, January 2008 American Academy of Public Health Dentistry (AAPHD)



*First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice*¹⁸

| Standard of Practice | Measure | Data Collection Method |
|---|---|---|
| | Staff/Provider Satisfaction scores for Partner Organizations | Partner Organization satisfaction survey. |
| 1h)To address cultural competency objectives, early childhood practitioners/early childhood service providers shall ensure that children and families receive from all staff members; effective, understandable, and respectful care that is provided in a culturally competent manner- a manner compatible with their cultural beliefs and practices and preferred language. Early childhood practitioners/early childhood service providers should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery. Early childhood practitioners/early childhood service providers should develop participatory, collaborative partnerships with communities and utilize a variety of formal and informal mechanisms to facilitate community and family-centered involvement to ensure that services are delivered in a manner that is consistent with the National Standards on Culturally and Linguistically Appropriate Services and/or the National Recommendations on Cultural and Linguistic Competence for the National Association for the Education of Young Children.” http://minorityhealth.hhs.gov and http://www.naeyc.org | Number/percent of staff trained in following content areas: Culturally and linguistically appropriate service delivery Formal and informal mechanisms to facilitate community and family-centered involvement Pre-Post Assessment Scores | Training Records Analyses of Training Content Pre-Post Assessment |
| 2. Parent Education –Staff Qualifications | | |
| 2a) Health Professionals with appropriate and relevant training and experience can provide parent education | Number/percent of Staff meet minimum qualifications | Staff qualifications report based on resumes |



*First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice*¹⁸

| Standard of Practice | Measure | Data Collection Method |
|---|---|--|
| regarding the oral health of children ages birth through five. | | |
| 2b) Have excellent communication skills. | Number/percent of Staff meet minimum qualifications | Staff qualifications report based on resumes |
| 2c) Have a comprehensive understanding of community, social and governmental resources available to support the oral health care of families. | Number/percent of Staff meet minimum qualifications | Staff qualifications report based on resumes |
| 3. Programs implementing a parent education component in an oral health strategy will provide information on the following topics: | | |
| 3a) The importance of dental treatment for pregnant and postpartum women | Number/percent (frequency) that Topic included in Parent Education for Pregnant women | Checklist Oral Health Education for Pregnant Women -Individual Treatment Data Base Checklist Oral Health Education for Pregnant Women-Group |
| 3b) Minimizing saliva-sharing activities (e.g. sharing utensils) between an infant or toddler and his family/cohorts | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents-Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |
| 3c) Implementing oral hygiene measures no late than the time of eruption of the first primary tooth | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents-Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |
| 3d) The importance of cleaning a young child's teeth if an infant falls asleep while feeding. | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents-Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |
| 3e) The importance of tooth brushing of children twice | Number/percent (frequency) that | Checklist Oral Health Education for Parents- |



*First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice*¹⁸

| Standard of Practice | Measure | Data Collection Method |
|--|---|--|
| daily with fluoridated toothpaste and a soft, age-appropriate sized toothbrush. Parents should use a “smear” of toothpaste to brush the teeth of a child less than two years of age. For the two through five-year-old, parents should dispense a “pea-size” amount of toothpaste and perform or assist with their child’s tooth brushing. | Topic included in Parent Education | Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |
| 3f) The importance of initiating flossing when adjacent tooth surfaces cannot be cleansed by a toothbrush. | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents- Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |
| 3g) The need to establish a dental home within 6 months of eruption of the first tooth and no later than 12 months of age. | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents- Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |
| 4. Topic: The importance of avoiding caries-promoting feeding behaviors. In particular, parents should be advised that: | | |
| 4a) Infants should not be put to sleep with a bottle containing fermentable carbohydrates (such as milk). | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents- Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |
| 4b) At pleasure breast feeding should be avoided after the first primary tooth begins to erupt and other dietary carbohydrates are introduced. | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents- Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |
| 4c) Parents should be encouraged to have infants drink from a cup as they approach their first birthday. Infants should be weaned from the bottle at 12 to 14 months of age. | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents- Individual Treatment Record Data base Checklist Oral Health Education for Parents - Group |



| <i>First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice</i> ¹⁸ | | |
|--|---|---|
| Standard of Practice | Measure | Data Collection Method |
| 4d) Repetitive consumption of any liquid containing fermentable carbohydrates from a bottle or no-spill training cup should be avoided. | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents-Individual Treatment Record Data base Checklist Oral Health Education for Parents -Group |
| 4e) Between-meal snacks and prolonged exposures to foods and juice or other beverages containing fermentable carbohydrates should be avoided. | Number/percent (frequency) that Topic included in Parent Education | Checklist Oral Health Education for Parents-Individual Treatment Record Data base Checklist Oral Health Education for Parents -Group |
| 5) Topic: Fluoride Varnish/Oral Health Exam -Qualifications for applying fluoride varnish: Health professional including: dentist, dental hygienist, physician and physician assistants | | |
| 5a) Have appropriate experience in working with youth children. | Number/percent of Staff meet minimum qualifications | Staff qualifications report based on resumes |
| 5b) Have completed training on the appropriate process to apply fluoride varnish. | Number/percent of Staff completed training on appropriate process to apply fluoride varnish | Training records/report |
| 6) Programs applying fluoride varnish or completing oral health screening will: | | |
| 6a) Obtain appropriate consent from the parent or guardian. | Number/percent of Consent Forms completed by parents compared to Treatment Forms for children | Program database |
| 6b) Maintain client confidentiality | Number/percent of staff trained on Confidentiality | Training Records/Reports |
| 6c) Make every attempt to apply varnish two to four times per year on each participating child. | Number/percent of children returning for follow up visits | Program database |
| 6d) Provide services within a variety of public health settings such as immunization clinics, physician offices, | Inventory of sites for First Teeth First dental clinics | Site Visits, Program Reports |



*First Things First Oral Health Care for Children Ages Birth Through Five Standards of Practice*¹⁸

| Standard of Practice | Measure | Data Collection Method |
|---|--|--|
| WIC Offices, Head Start, Early Head Start, schools, childcare facilities and in private homes for medically compromised patients. | | |
| 6e) Complete a brief screening of the child's mouth noting any potential problems within the context of the screening protocol used | Number/percent of children receiving screening | Program database Treatment Records Site visits |
| 6f) Complete a dental caries risk assessment | Number/percent of children receiving dental caries risk assessment | Program database Treatment records |
| 6g) Apply fluoride varnish as indicated. | Number/percent of children receiving fluoride varnish | Program database Treatment records |
| 6h) Provide instructions on follow up care | Number/percent of parents receiving instructions on follow up care | Program database Treatment Records |
| 6i) Provide any necessary referrals | Number/percent of parents receiving referrals for follow up dental care for their children | Program database Treatment Records |

