PROGRAM NARRATIVE

Virginia Targeted State Maternal and Child Health Oral Health Service Systems Grant Program CFDA # 93.110

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I. SECTION ONE: ACCOMPLISHMENTS OF FY11 FINAL GRANT YEAR

OBJECTIVE 1 **By 2011, integrate dental visits for one-year old children into existing systems that currently serve high-risk children.**		**Accomplishments in FY 2011 (Grant Year 4)**
Activity 1	By 2011, extensively promote the concept of a dental home by working with the Virginal Chapter of the American Academy of Pediatrics (AAP) to increase awareness by medical providers who care for infants and toddlers.	Collaborated with the Virginia Chapter of the AAP to publish an article in the Spring 2011 Virginia Pediatrics newsletter regarding early childhood caries, the importance of incorporating oral preventive services in the medical setting, and referring children to a local dental home. Distribution extended to approximately 1,200 pediatricians.
Activity 2	By 2011, get legislative approval for all six Medicaid Health Maintenance Organizations (HMOs) to reimburse medical providers for oral screenings and fluoride varnish application by working with the Department of Medical Assistance Services (DMAS) and the Virginia Chapter of the AAP.	Effective September 2008, all Medicaid HMOs reimburse medical providers for fluoride varnish applications for children between the age of six months and three years. There is currently no reimbursement for medical providers who provide oral screenings or oral health anticipatory guidance.
Activity 3	By 2011, work with the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) in 11 target health districts (Chesterfield, Crater, Hampton, Hanover, Henrico, Piedmont, Peninsula, Rappahannock, Richmond City, Thomas Jefferson, Three Rivers) to establish a system for providing dental visits for 12,179 infants and 19,314 young children in WIC, targeting one-fourth of localities per year starting in 2008.	In FY 11, DHP maintained preventive services in 10 of 11 targeted health districts (Chesterfield, Crater, Hanover, Henrico, Piedmont, Peninsula, Rappahannock, Richmond City, Thomas Jefferson, and Three Rivers). The program ended in Hampton due to unsuccessful initial implementation. With supplemental grant funding, DHP continued to support the Lord Fairfax district and piloted three additional districts (Eastern Shore, Norfolk, and Chesapeake). Final grant activity reports have been written for each district to summarize services provided and make recommendations regarding options for sustaining services. Meetings with key district staff are being scheduled; one district meeting has been held to date (Three Rivers).

Activity 3	See above.	Oral health education was provided to 8,198 WIC clients in FY11, including pregnant women and mothers of infants and children. Individual risk-based information was provided regarding daily oral hygiene measures, nutrition, feeding practices, fluoride, and the importance of primary teeth and dental visits. Education was provided one-on-one during re-certification clinics, as well as in group settings such as nutrition education classes. A total of 7,450 children received varnish application in FY11.
Activity 3	See above.	Age one dental visits were provided for 729 WIC infants (newborn until the 1st birthday). The age one dental visit includes an oral screening and risk assessment, fluoride varnish application, parental education, and dental referrals to local Medicaid dentists. This is provided under a signed standing order from the local health director and/or DHP Manager, Dr. Karen Day.
Activity 3	See above	A referral list for young children was developed and updated in each of the districts. Dentists who are Medicaid providers are contacted to confirm information about minimum age requirements for their patients. In FY11, 3,806 dental referrals were made for WIC clients.
Activity 4	By 2011, develop and pilot at least three different models for providing dental visits in WIC programs based on the number of families enrolled, location (rural or urban), and other community-specific or cultural needs. Models will address sustaining of projects using revenues generated from Medicaid billing for oral screenings and varnish application.	Of the three models initially piloted for the WIC implementation, two were utilized during this grant period: • DHP hygienist provides services in the WIC clinic setting • DHP nurse provides services in the WIC clinic setting (Lord Fairfax Health District only) For sustainability, some districts will be considering the use of public health nurses, especially in rural locations where client volume is low and, therefore, the amount of nurses' time needed for the program would be minimal. Local health districts would benefit from using their own staff because of revenues generated from Medicaid billing. The model of using a mobile dental van was discontinued during Grant Year 2 due to low participation rates and cost of providing services in the mobile van.

Activity 4	See above.	DHP bills Medicaid for varnish application provided by DHP staff through the Medicaid provider number of Dr. Karen Day. The generated revenue only partially sustains the program financially. Reimbursement covers fluoride varnish application only; there is no reimbursement for oral screenings and parent counseling. Also, when hygienists and nurses are applying varnish under a standing order, as for this program, Medicaid reimbursement is restricted to children up to their third birthday. Under current guidelines, fluoride varnish applied to children aged 3 and 4 cannot be billed.
Activity 4	See above.	Sustainability is being addressed through Medicaid billing, supplemental sources of funding, and local staff resource options. Of the 11 health districts targeted in the TOHSS grant, plans and processes for sustainability are in place for 10 (Chesterfield, Crater, Hanover, Henrico, Peninsula, Piedmont, Rappahannock, Richmond City, Three Rivers, and Thomas Jefferson). Four of these districts have part-time DHP hygienists funded by the Preventive Health and Health Services block grant. If this funding is not continued, services will be affected in these districts.
Activity 4	See above	Several additional districts (Central Virginia, Cumberland Plateau, Lenowisco, Lord Fairfax, Pittsylvania-Danville, Rappahannock-Rapidan, and Southside), which are supported by the Health Resources and Services Administration (HRSA) Oral Health Workforce grant, have implemented the varnish program in WIC with full-time hygienists who also provide sealants to elementary school children.
Activity 4	See above.	Thomas Jefferson and Lenowisco Health Districts currently use locally funded public health nurses to apply fluoride varnish. Other districts will be strongly encouraged to use this model without future grant funding, as it is the most economically feasible.

Activity 5	By 2011, modify the Bright Smiles for Babies Program (BSB) manual for the WIC population, utilizing Bright Futures guidelines, to include age-specific, developmental, and culturally appropriate training and translated educational materials as needed.	The BSB manual for medical providers was revised in FY11. The changes included updated protocols and forms, a resource section for Children with Special Health Care Needs (CSHCN), and a laminated provider guide explaining risk factors and corresponding key oral health messages. An educational bookmark, "Baby's First Visit," was developed in English and Spanish. VDH's "Smile for Good Health" pamphlet was reviewed and updated. These are included with other culturally and age-appropriate handouts and oral health preventive supplies that are provided provide to pregnant women, infants, and children aged 1 to 5 in the WIC clinics.
Activity 6	By 2011, continue to work with all 13 Early Head Start programs statewide to ensure that 80% of enrollees receive a dental visit by aged 1, by developing community partnerships to ensure that BSB continues without direct involvement at the state level.	There are now 17 Early Head Start programs in Virginia due to a recent program expansion. Semi-annual oral screenings and varnish applications were provided in 11 Early Head Start programs primarily by DHP hygienists and local health department dentists and hygienists. The expansion programs are in the planning stages of implementing the varnish program. A total of 585 varnish applications were provided to children in FY11, including those in a seasonal migrant program on the Eastern Shore. DHP continued to utilize DentaQuest, the Medicaid dental provider, as a partner for dental referrals. Eight Head Start staff trainings were held (225 participants), including a presentation at the annual Head Start State Training Conference. Two parent trainings were held by DHP staff with 26 participants. Local programs were also provided with audio-visual aids and other materials for use in providing their own parent trainings. Trainings include Early Head Start and Head Start staff and parents.
Activity 7	By 2011, continue training of local health department nurses and dentists to provide oral screenings, fluoride varnish, and anticipatory guidance to patients in immunization and well-baby clinics.	BSB trainings were held for Cumberland Plateau and Central Virginia Health Districts for new nursing staff. Since 2005, 30 of Virginia's 35 health districts have had implementation of the BSB program through one or more of several models. Three other districts are in the planning stages, and two districts are currently unable to consider conducting the program.

Activity 8	By 2011, provide technical assistance and training to 27 community health centers statewide to help them establish fluoride varnish programs for their clients, reflecting the community-specific and cultural needs of clients.	To date, seven community health centers have received BSB fluoride varnish training. Technical assistance is ongoing to those centers that have been trained.
Activity 9	By 2011, expand BSB trainings to private medical providers (physicians and nurses) with the collaboration and support of the Virginia Chapter of the AAP, by conducting at least six private sector trainings annually.	Trainings were conducted in three private medical offices and one children's hospital, with a total participation of 43 medical providers. The trainings included information about oral screening, varnish application, parent education, and the importance of establishing a dental home by aged 1. Training in the VDH BSB model is recommended (but not required) for Medicaid reimbursement of medical providers in Virginia.
Activity 10	By 2008, collaborate with the Virginia Commonwealth University (VCU) School of Dentistry and the Virginia Dental Association (VDA) to conduct in-depth training to at least six dentists annually regarding care of young children.	In FY11, DHP contracted with a pediatric dentist, Dr. Mathew Cooke, Assistant Professor, University of Pittsburg Department of Dental Anesthesiology (and previously with VCU School of Dentistry), to conduct dentist trainings in five locations across the state. Sixty-nine dentists attended these lecture and hands-on trainings, bringing the total number of dentists trained to almost 140. The training increases skills in providing services for young children and CSHCN.
Activity 11	By 2011, continue working with the other partners initiated during the State Oral Health Collaborative Systems (SOHCS) grant (e.g., Resource Mothers and Regional Perinatal Council Programs) to educate women about the importance of oral health throughout pregnancy and early oral health care for their children and expand these services into selected hospitals that serve low-income families.	Partnering continues with Healthy Start and Resource Mothers Programs, providing trainings and technical assistance upon request. Through partnership with the Virginia Department of Social Services, regional oral health training was held for 41 child day care workers as part of their provider training and development. The three-hour training focused on infant and early child oral health and incorporated state competencies in the classroom related to oral health. The Comprehensive Health Investment Project (CHIP) of Virginia remains a strong partner for the provision of preventive services during home visitation by CHIP nurses. A conference call was held to update nurses on new forms and recommendations.

Activity 12	By 2011, conduct a statewide educational campaign regarding the importance of early oral health, targeting pregnant women and parents by developing educational materials, media releases, and a video for health department patient waiting rooms. Pilot materials with appropriate focus groups to ensure that they are culturally and language appropriate.	In FY11, plans were developed and a script was written for an educational DVD for WIC clinic waiting rooms. Topics include the importance of baby teeth, causes of tooth decay, preventing tooth decay, and the importance of timely professional dental care. Script approval is currently pending. Through collaboration with WIC, oral health messages have been developed for use in Virginia's "Health Bites," an electronic educational system for WIC clients that can be accessed online. Information will target pregnant women, infants, toddlers, and preschoolers and is offered in a question and answer format.
Activity 13	By 2011, expand the "Adopt a Head Start" program throughout the state to 14 adoptions, a collaborative project between VDH and the 10 components of the Virginia Dental Hygienists' Association (VDHA). The goal is for each component to adopt at least one Head Start. Volunteer dental hygienists from the private sector are being trained in the BSB curriculum to provide oral screenings, fluoride varnish applications, and anticipatory guidance.	One additional VDHA local component was trained for the "Adopt a Head Start" initiative, bringing the total to nine of the ten active components having received the training. Currently, seven components, including three dental hygiene schools, have "adopted" a Head Start program. Volunteers provided seven staff trainings, nine parent trainings, and attended five advisory committee meetings. Support and technical assistance is ongoing for the "Adopt a Head Start" program. In April 2011, DHP exhibited at the VDHA Annual Session to highlight new resources and updated toolkits. A strategic plan status update was reported to the VDHA Executive Board. The Board expressed strong interest in continuing to support the initiative. A new round of trainings has been developed to be presented in November 2011 to components for the upcoming year focusing on the age one dental visit and specific technical assistance for adopting a local Head Start program. The trainings will be offered to dentists through promotion from the VDA and through hygienists inviting their employers. VDHA has representation on the Virginia Head Start Health Services Advisory Committee.

Activity 14	By 2011, work with eight dental hygiene programs statewide to incorporate early child preventive measures in their curriculums and to provide training in community settings for their students.	No significant progress to report. Curriculum content is mostly driven by accreditation standards set by the American Dental Association's Commission on Dental Accreditation. Old Dominion University, Virginia Commonwealth University, and Germanna Community College have provided Head Start classroom programs and some fluoride varnish activities this year. Lord Fairfax Community College has "adopted" a local Head Start program where students will be active in education efforts.
Activity 15	In 2011, administer and analyze the Association of State and Territorial Dental Directors Basic Screening Survey (BSS) to obtain baseline information about the oral health of children (aged birth - 5 years) in WIC programs in 11 health districts. In 2011, conduct a follow-up cross-sectional study of the same programs.	Baseline BSS survey data have been collected in all targeted districts over the four-year grant period, including FY11. The survey form used to collect the screening data is included as Attachment A. Baseline data for nearly 10,000 WIC enrolled children are included as Attachment B. Follow-up data collection will be completed in fall of 2011.
Activity 16	By 2011, begin measuring the impact of increased referrals and training of public health dentists in local departments by modifying and utilizing the existing required monthly activity reporting form (DH 1214) to track visits in 0 - 3 year olds.	From July 1, 2010, to June 30, 2011, 3,910 (11%) of visits were for children aged birth to 4 years in local health departments.
Activity 17	In 2011, utilize WIC programs in the 11 chosen health districts to obtain baseline data regarding parental knowledge and access to dental care for children aged 1 - 3. Conduct a follow-up study in the same programs in 2011.	From August 2008 through August 2011, the WIC caregiver questionnaires were administered to parents in all districts that have implemented the varnish program. The survey form used for caregivers is included as Attachment A. Baseline data for more than 11,000 caregivers are included as Attachment B. Follow-up surveys will be completed in fall 2011.

OBJECTIVE 2 **By 2011, extend the oral health screening, education, and fluoride varnish program (Bright Smiles for Babies) that was initiated under the SOCHS grant to CSHCN.**		**Accomplishments in FY 2011 (Grant Year 4)**
Activity 1	By 2011, develop training and educational materials specific for CSHCN for the BSB manual. All materials will be age-specific, developmentally and culturally appropriate, and translated as needed.	Training materials, including power point presentations and educational information packets, are regularly updated to reflect current knowledge and audience needs. The DHP website regarding CSHCN was updated throughout the year as new providers joined or existing providers sent changes to their information. A separate section of the BSB manual was added specifically for CSHCN.
Activity 2	By 2011, continue to provide training and education regarding early oral health to professionals employed by statewide programs that provide evaluations and care-coordination for CSHCN (e.g., Care Connection for Children programs, Child Development Clinics, hospitals, and Part C) and to healthcare professionals in the private sector.	From September 2010 through August 2011, "Oral Health Care for CSHCN" presentations, informational sessions, and exhibit booth one-on-one educational opportunities were provided to 256 health care providers, case managers, care coordinators, home visitors, school nurses, parent resource managers, lay health workers, and parents/caregivers. This figure includes 11 nurses at Carilion Community Hospital who were trained to provide oral health screenings and fluoride varnish applications in addition to the CSHCN training.
Activity 3	By 2011, continue to work with statewide parent groups such as The Arc of Virginia Family Involvement Project to provide education about early oral health care to parents of children who qualify for the state-administered Part C.	During FY11, contacts included Children's Hospital, The Arc of Virginia, Down Syndrome Association, Virginia Department of Education Office of Special Education, Partnership for People with Disabilities, and Health Promotion for People with Disabilities Task Force that have led to invitations to present information regarding oral health for CSHCN for families and caregivers. Several organizations have included website links to VDH's dental webpage so that parents can access information more readily. VDH staff assisted with planning the Central Virginia CCC Connections Resource Fair held in 2011 for CSHCN and their families. This fair was attended by close to 500 people. In collaboration with the VCU Pediatric Dental Program, parents/caregivers and health professionals were educated and 71 oral screenings and fluoride varnish applications were provided for CSHCN.

Activity 4	By 2011, design, administer, and analyze survey of parents of children enrolled in at least four of the six Care Connection for Children (CCC) centers to assess level of parental knowledge and ability to access care for their child. Conduct a follow-up study in the same programs in 2011.	In January 2009, a dental health survey was developed to assess the oral health care needs of CSHCN, the oral health knowledge of the families, and their ability to access care for their child. Between June and December 2009, a total of 198 surveys were completed by parents attending CCC centers, the Children's Hospital of Richmond Early Intervention/Infant Services, Arc of Virginia in Richmond, and other appropriate venues. The results showed that the majority (67% - 92% depending on topic) of parents were knowledgeable regarding the age one dental visit and other basic oral health topics. However, less than half (43%) were aware of the transmission of caries-causing bacteria. Surprisingly, only 16% reported a difficulty finding a dentist for their child. It was concluded that additional parent surveys would not lend more useful information, and therefore, the follow-up survey was not conducted in 2011 (Attachment C).
OBJECTIVE 3 **By 2011, improve access to care for CSHCN through collaborative projects.**		**Accomplishments in FY 2011 (Grant Year 4)**
Activity 1	By 2011, explore innovative ways of developing dental referral systems for CSHCN such as through the standardized screening being promoted for referring children to state programs like Part C, working with DMAS, VDH Title V CSHCN program, and the Virginia Chapter of AAP.	Using funding from the Oral Health Workforce grant, in FY 2011, the dental home visiting program was extended to include a total of eight health districts in the state. Fifty family support workers (home visitors) were trained to provide targeted oral health education to families of CSHCN and to assist with making dental appointments upon referral by the public health dental hygienists employed in these districts. Since the inception of the program, 111 home visitors have been trained in all eight districts. In addition, DHP dental hygienists working under remote supervision in Southwest Virginia began providing oral screenings, anticipatory guidance, fluoride varnish, and dental referrals to children of all ages presenting to CCC pediatric specialty clinics in three cities in Southwest Virginia. In FY11, 236 CSHCN received fluoride varnish and/or oral screenings in the CCC clinics.

Activity 2	By 2011, develop a statewide directory of dental providers who treat CSHCN so that children may be referred to a dental home.	Effective June 2009, this objective was completed: http://www.vahealth.org/dental/dentaldirectory/. In January 2010, a follow-up survey was sent to dentists to update information and increase participation. To date, about 2,400 dentists have been included on the website, which is about half of the licensed dentists in Virginia.
Activity 3	By 2011, collaborate with the VCU School of Dentistry and the Virginia Dental Association to conduct in-depth training to at least six dentists annually regarding care of CSHCN.	In FY11, through a contract with the Virginia Dental Association, DHP worked with Dr. Matthew Cooke, Associate Professor at the University of Pittsburgh and adjunct faculty at VCU, to expand training to dentists across the state. The course was offered in five different areas of the state to broaden the scope of the training. A total of 69 dentists and 31 auxiliaries were trained in the care of CSHCN and very young children, for a total of 137 dentists and 31 auxiliaries since grant inception. The expansion included an active hands-on component with 109 patients provided with dental care in various host clinics.

II. SECTION TWO: GRANT SUMMARY

The Virginia Targeted Oral Health Service Systems (TOHSS) grant project had two primary goals. The first was to increase age one dental visits for high-risk children. This was accomplished primarily by working with local health department Special Supplemental Nutrition Program for Women, Infants and Children (WIC). The second goal was to improve access to oral health services for children with special health care needs (CSHCN). This summary presents the outcomes and accomplishments, the impact on the system of care, and the lessons learned for each objective of the original TOHSS grant application.

OBJECTIVE 1
By 2011, integrate dental visits for one-year-old children into existing systems that currently serve high-risk children.

a) Accomplishments and Outcomes

The major accomplishments of this grant project were the statewide expansion of Bright Smiles for Babies, developed under the State Oral Health Collaborative Systems Grant, and the resultant increase in the number of very young children receiving oral health preventive services in Virginia. Under the TOHSS grant, the Virginia Department of Health (VDH) Dental Health Program (DHP) collaborated with the WIC program at the state and local levels to provide direct services to local health department patients, thus helping to fill a void for dental services within the agency. As a result, an increasing number of low-income children in WIC programs are receiving oral health preventive services and referrals for dental treatment as needed.

During the first year of the TOHSS grant, DHP began targeting children in WIC programs as a means of expanding and sustaining the Virginia Bright Smiles for Babies (BSB) initiative. This program includes oral screening and risk assessment, fluoride varnish application, parental education, and referrals for local dentists. During the past four years, the number of oral health preventive services to infants and young children enrolled in the WIC program has steadily increased. Data have been collected over the grant period regarding health status and caregiver knowledge. Survey forms and baseline data are included as Attachments A and B, respectively.

In addition to TOHSS grant, funds from the Title V Maternal and Child Health (MCH) block grant and the Preventive Health and Health Services (PHHS) block grant have supported staff positions. Staff members in the BSB program currently include full- and part-time dental hygienists working in nine health districts. The program is supervised by a full-time program supervisor who has been with the program since its inception. A part-time dental hygienist now also currently oversees the CSHCN program efforts. During the past one to two years, eight additional health districts hired full-time dental hygienists through the Health Resources and Services Administration (HRSA) Oral Health Workforce Activities grant and seven have begun providing the BSB program in their district as part of their job duties. Hygienists in three of these districts practice under a pilot protocol of remote supervision, which has the potential for

greatly broadening the statewide impact of the projects initiated in the TOHSS grant. (Note: Data from the Oral Workforce Activity programs are not included in this report.)

In 2010, VDH approved a new policy providing automatic eligibility for WIC clients to receive BSB services regardless of insurance status. This has enabled DHP to bill Medicaid for application of dental varnish for WIC participants aged 6 months to 3 years. Prior to this policy change, billing was impeded because financial eligibility screening would have been required for each child before they received oral health preventive services. As a result of this policy change, DHP has been billing Medicaid since July 2010 and uses this funding source to help sustain staff and other program costs, including travel and supplies. All oral health services, including varnish, continue to be offered free of charge to WIC clients who do not have Medicaid. Medicaid revenues will help to sustain the program long term.

Another significant result is that dental and medical providers are starting to receive the message about the importance of early oral health preventive services. The efforts of VDH, in collaboration with organizations—such as the Virginia Chapter of the American Academy of Pediatrics (AAP), Virginia Dental Association (VDA), Virginia Dental Hygienists' Association (VDHA), and Virginia Commonwealth University (VCU)—have played a role in the steadily increasing number of private and public dental and medical providers providing oral health preventive services to high-risk children. According to state Medicaid data, the number of medical providers billing for fluoride varnish application for children under aged 3 has increased from 24 to 118 since 2006. Since 2007, the number of children in this age group who have received an oral assessment by a dentist has increased ten-fold , from 453 to over 4,300 children in FY11. While there is still a long way to go before a significant number of high-risk children receive these services, if this trend continues, real impact on the oral health of children should be seen through venues other than dental providers.

Throughout the four years, collaborative efforts have personified the success of the TOHSS grant projects. A crucial collaboration was partnering with the WIC program, both at the state and local health department levels. This project also has received approval from the Statewide WIC Advisory Council. DHP continues to work closely with the VDHA, particularly with the "Adopt a Head Start" Program. The VDA also has been instrumental in supporting all of the legislative changes that have enabled DHP to expand the BSB program, including a legislative change in 2007 that allowed dental hygienists to provide fluoride varnish to young children without requiring that a dentist first examine the patient. In 2009, legislation was introduced by the VDA to allow for the remote supervision of VDH dental hygienists in three rural health districts as part of a pilot project. Early Head Start (EHS) also continues to be a strong partner with DHP. Of the original 14 EHS programs, 11 programs are providing semi-annual preventive services either through support of local public health dentists or DHP dental hygienists. With a recent EHS program expansion of four additional programs, three are interested in partnering in the varnish program for their children. Ongoing partnering continues with non-dental professionals such as through the Virginia Chapter of the AAP. The AAP has a national initiative to train medical providers regarding oral health assessments and fluoride varnish application. The first dental visit is a challenge for medical and dental providers and cannot be accomplished without mutual support.

b) Impact on System of Care

By all indications, more very young children are receiving oral health preventive services in Virginia. Since the TOHSS grant inception, over 22,000 preventive visits have been provided to children enrolled in WIC in the health districts targeted by the TOHSS grant, including 2,212 infant visits. In addition, data from the Virginia Medicaid program show that the number of public and private dentists performing oral assessments for children aged birth to 3 years is almost doubling yearly, with the number of children receiving these services from dentists also increasing as illustrated in the following table.

State Fiscal Year	Number of children under aged 3 receiving oral health assessment and counseling with primary caregiver (Medicaid code D0145).*
2007	453
2008	1,116
2009	3,138
2010	4,172
2011	4,342

Source: DMAS Claims Data. *Most children also received a varnish application.

Medicaid data also showed a steady increase in billing for fluoride varnish application by medical providers: Since 2005, 30 of Virginia's 35 health districts have had implementation of the BSB program using one or more models to provide services to WIC and other local health department clients. Three additional districts are in the planning stages, while two remain unable to consider the program.

State Fiscal Year	Providers	Claims	Claims Dollars
2006	24	516	$10,727.64
2007	47	873	$18,149.67
2008	47	1,146	$22,468.64
2009	55	1,714	$31,174.30
2010	58	2,567	$51,148.00
2011	118	6,262	$127,805.44
Total	**349**	**13,078**	**$261,473.69**

Source: DMAS Claims Data.

c) Lessons Learned and Challenges

During the four-year TOHSS grant period, key lessons learned that will help establish and sustain current and future programs are highlighted below.

- After trying multiple models of providing care, the model that worked best was the use of a dental hygienist in the WIC clinic setting. This model allows access to all WIC families who present to re-certification clinics, all of whom are considered to be at high risk for disease.
- DHP anticipated that the urban WIC sites would have the highest participation rates. This was not the case, however, as staff determined that the best participation rates for the BSB program were in the suburban locations. Rural areas typically had lower overall participation numbers.
- The importance of local WIC staff support to the success of the program cannot be overstated. Without total buy-in from the staff of the importance of the program, participation numbers were less than expected, regardless of the client load.
- Full financial sustainability of the dental hygienist model is not possible under current practice laws, which limit billing for hygiene services done outside of a traditional dental office. A best estimate is that it is possible to generate approximately 50% of costs in the highest-volume districts.
- The use of public health nurses in lower volume districts continues to be a very cost-effective way to provide the services; dental hygienists work the best in high volume clinics.
- Automatic eligibility for all WIC clients removes the burden of the staff to determine eligibility for the clinical services.

Many of the key challenges in the past year were related to the inability to generate sufficient revenue to maintain the program without TOHSS grant or other funding. Existing policies and practice laws for dental hygienists practicing outside of a traditional dental office limit long-term income generation and financial sustainability. Although DHP has been billing for fluoride varnish services since August 2010, the revenue is not able to cover staff costs, supplies, and other expenses. Billing is limited to varnish applications on children under the age of 3, except in the three districts in the pilot remote supervision project. In effect, this reduces potential revenue by about 50%, since WIC children are enrolled up until their fifth birthday. Additionally, only dentists can bill for the Medicaid dental procedure D0145 (oral health assessment of children under aged 3 and counseling with primary caregiver); this eliminates a potential source of revenue when dental hygienists perform the service.

A long-term effort put a policy in place so that DHP could bill without conducting eligibility testing and balance billing for those WIC children without Medicaid coverage. Working with the State Attorney General's Office and the Deputy Commissioner of Community Health Services, it was determined that a guidance document could be developed rather than a complete regulatory review. Also, DHP has not been able to determine as yet the administrative cost of conducting billing.

An ongoing issue is that there is still no reimbursement for the oral health assessment by medical providers, which continues to be a potential barrier when working with them. Other challenges are changes in WIC clinic participation levels, which can result in lower participation rates in the varnish program. Additionally, large Medicaid dental clinics (e.g., Kool Smiles) are expanding throughout Virginia, which often reduces participation in the BSB program, if only temporarily. Local health department staff reductions and other priorities have resulted in issues

with districts using existing or new staff to "take over" the BSB program in their WIC clinics after federal funding. Of the 11 districts originally targeted by TOHSS, only two have been fully transitioned to managing the program with local health department staff. Currently, DHP has found other sources of funding for these areas to supplement revenue generation. And finally, there are ongoing issues with public and private dentists' willingness to provide care for very young children and CSHCN. Programs such as the continuing education trainings that VDH has sponsored through this grant have helped, but more work needs to be done to overcome this challenge.

OBJECTIVE 2
By 2011, extend the oral health screening, education, and fluoride varnish program (Bright Smiles for Babies) that was initiated under the SOCHS grant to CSHCN.

a) Accomplishments and Outcomes

The first significant accomplishment of this grant objective was the hiring of a part-time CSHCN Oral Health Coordinator in December 2008. This represented the first time VDH had staff dedicated to improving the oral health of CSHCN. Initial efforts included reaching out to the professional and parent organizations that work with CSHCN across the state. Numerous new collaborations were initiated as part of this portion of the grant. DHP worked with the Title V Maternal and Child Health CSHCN Program, which resides in the VDH Division of Child and Family Health in order to work with the Care Connection for Children (CCC) programs. A partnership was developed with the Southwest CCC in Bristol (the only CCC that provides clinical services) for DHP dental hygienists to provide preventive oral health services for their clients. In 2010, DHP dental hygienists working under remote supervision in Southwest Virginia began providing oral health assessments, anticipatory guidance, fluoride varnish, and dental referrals to children of all ages presenting to neurology and orthopedic clinics operated by that CCC.

DHP collaborated with the Virginia Department of Education Office of Special Education and the Virginia Department of Behavioral Health and Developmental Services, which administers the statewide Part C program for children with disabilities. Other important partners included The Arc of Virginia, the Down Syndrome Association of Greater Richmond, Children's Hospital of The King's Daughters in Norfolk, Children's Hospital of Richmond, Carilion Hospital in Roanoke, the Central Virginia CCC Connections Resource Fair planning committee, Partnership for People with Disabilities, Parent to Parent of Virginia, and the Health Promotion for People with Disabilities Task Force. The CSHCN Oral Health Coordinator was invited to become a member of the Virginia Health Promotions for People with Disabilities Taskforce, which is administered by VCU.

A pilot project was initiated using a DHP dental hygienist to provide oral health preventive services at Carilion Hospital of Roanoke in their specialty clinics that serve CSHCN. Exploratory talks were initiated several times with Children's Hospital of Richmond in anticipation of working with them to provide oral health preventive services for CSHCN; however, the provision of services did not come to fruition.

Educational materials were developed with input from parent and other organizations. Virginia's progress in working to improve the oral health of CSHCN was noted early on, and in 2009, the Association of State and Territorial Directors offered DHP a small grant, part of which was used to develop display materials. Education regarding oral health care for CSHCN has been provided to health care practitioners, case managers, care coordinators, home visitors, school nurses, parent resource managers, lay health workers, and parents/caregivers. The trainings have been very well received, and requests to conduct these trainings are ongoing.

In keeping with the TOHSS grant objectives, DHP designed and administered the survey of parents (caregivers) of CSHCN. The intent of the survey was to assess the level of parental oral health knowledge and access dental care for their child. DHP also included questions regarding demographics, oral hygiene, and referrals to dentists. From June 2009 to December 2009, parents were asked to complete the survey while attending Care Connection for Children offices, special needs conferences, and CSHCN family events. DHP distributed the survey to the following areas in Virginia: the counties of Prince William, Culpepper, and Fairfax and the cities of Bristol, Charlottesville, Richmond, and Virginia Beach.

A total of 224 surveys were completed, primarily by parents of CSHCN (83%). Over half (57%) of the children for whom information was obtained were over 5 years of age, one fourth (26%) were 3 to 5 years of age, and the remainder were under aged 3. Racial distribution included 70% white; 17% black or African American; 8% Hispanic; and 6% as Asian, multi-race, or other. Approximately half of the children (55%) were male. When asked if the family was covered by dental insurance, 83% answered positively (specifically, 66% checked Medicaid coverage).

Multiple special needs conditions were selected for each child. Developmental conditions were marked on 58% of the surveys, and other marked conductions included physical 38%, behavioral 28%, and emotional 16%. On 19% of the surveys, the question regarding special needs conditions was left blank. When asked who referred their child to a dentist, over one fourth (28%) checked doctor or nurse. Pre-school or Head Start was selected by 12%. However, 54% checked other or left the question blank. The most common age for a first dental visit on the survey was 2 to 3 years of age (42%), but one fourth (25%) were seen by a dentist by 1 year of age or under. At the time of the survey, 14 % had not yet been seen at the dentist.

After tabulating responses, the attached chart of results suggests that only 43 % of the parents/caregivers knew about the transmission of caries-causing bacteria. The other oral health knowledge questions were answered correctly by 73% - 92% of parents. Surprisingly, only 16 % of parents reported a difficulty finding a dentist for their child. Specific comments regarding dental care are noted at the bottom of the table of results but include concerns about being able to afford dental care and finding dentists with expertise in caring for CSHCN. The survey and full results are included in Attachment C. Results will be used to help plan projects that best serve CSHCN.

b) Overall Impact on System of Care

The activities conducted as part of this grant objective helped increase awareness regarding the oral health needs of CSHCN and explored different venues for providing oral health preventive services. Since December 2009, 529 people were provided with oral health education regarding CSHCN through live presentations or one-on-one discussions at oral health exhibit booths. These programs were held in all areas of the state. In addition, over 400 CSHCN were provided with fluoride varnish applications and/or oral screenings by the dental hygienists working with the Care Connection for Children clinics or resource fair (included in BSB varnish totals in Objective 1).

In Southwest Virginia, in particular, there has been direct impact on the provision of oral health preventive service to CSHCN and their families. In all surveys conducted by VDH since the inception of the dental program over 60 years ago, this area of the state consistently has the highest decay rates and the biggest issues with access to care. Providing care through the CCCs in Southwest Virginia has positively impacted the expansion of services to high-risk children in a way that has never been done before.

Ultimately, the BSB program targets all high-risk children, and as it continues, more CSCHN will be reached and families educated. Reaching these children at a very young age should, in the long term, prove to be a significant means of reducing decay and managing other oral health problems that may be more severe in CSCHN. As a result of DHP work with the TOHSS grant, DHP has concluded that providing preventive oral health services to children at the earliest age possible is one of the most important messages that DHP needs to continue to promote and teach to parents, medical providers, and members of the dental profession.

c) Challenges and Lessons Learned

The CSHCN objective was challenging and had several important lessons learned:

- Finding a venue to provide BSB oral health activities to CSHCN is difficult. DHP has found very few venues with sufficient daily patient volume to warrant staffing with a dental hygienist. In fact, the only site that has been truly successful is the Bristol CCC and its specialty clinics in Southwest Virginia.
- CCC and VDH Child Development Clinics programs have very limited patient contact in general; therefore, although overall their staff members were enthusiastic, there was not much opportunity for them to provide anticipatory guidance, conduct oral health assessments, or apply varnish. Further, the amount of nursing staff at these programs is much more limited than originally anticipated.
- Hospital-based programs were difficult to establish. In the one site DHP piloted with dental hygienist staffing, nurses were unable to sustain the program once the hygienist left. However, since these programs provide care for significant numbers of CSHCN, exploring the potential for this venue should be continued.
- Continued sustained and long-term efforts are needed to adequately and fully address the oral health care needs of CSHCN in Virginia.

OBJECTIVE 3
By 2011, improve access to care for CSHCN through collaborative projects.

a) Outcomes and Accomplishments

This objective had two primary accomplishments. The first was the development and implementation of training for general dentists to improve their confidence and skills in caring for CSHCN and very young children. Since the grant inception, 11 continuing education classes have been held and 139 dentists have participated.

From August 2008 through September 2009, six trainings were conducted at VCU School of Dentistry. Seventy dentists completed the training, which consisted of a day-long seminar and an individualized session on a separate day and tailored to the interests of the participant. Activities included observing in the operating room, preparing a stainless steel crown on a model, applying fluoride varnish to an infant, and observing in the VCU clinic. The instructor was Dr. Tegwyn Brickhouse, who is the current Chair of the Department of Pediatric Dentistry at VCU.

In April 2010, a follow-up survey was mailed to all course participants to assess the usefulness of the hands-on session, to inquire about any changes made to their practice as a result of the training, and to determine their interest in additional courses and/or mentoring. The survey was sent out twice, and although only 28 (40%) of dentists responded, their feedback was valuable in helping design the second round of trainings. The survey included the following feedback.

- Almost half (46%) of the 28 respondents said they were seeing more very young children since taking the class (didactic and/or clinical session), while only 29% said they were seeing more children with special needs.
- Dentists repeatedly made comments that they had learned and benefited from taking this training. One dentist wrote that as a result of the training, she had focused her practice intensively on very young children and those with special needs and that this was a great practice builder and source of referrals.
- The most commonly given reason for not making practice changes was inability to do sedation in their office.
- Dentists wrote about the need for more training, starting with more education in dental school. The need for more hands-on training for practicing dentists, including working on patients, was stated by 9/28 (32%) of respondents.

Two main goals drove the design of the second set of trainings: to convene the trainings outside Richmond in various areas of the state to increase accessibility and to make the trainings more hands-on. DHP also wanted to involve other members of the dental team, including dental hygienists and assistants. Working in collaboration with the VDA, five new courses in a two-day format were presented from February 2010 through September 2011 by Dr. Matthew Cooke, a pediatric dentist and the Director of Healthy Athletes for the Special Olympics of Virginia. In addition to his pediatric dental background, Dr. Cooke is a physician and dental anesthesiologist,

giving him a unique perspective on children's oral health needs. The 10.5 credit hour, two-day course was structured as follows:

- An all day lecture, including an overview of special health care conditions, patient behavioral management techniques, infant oral health assessment and prevention, and sedation.
- A half-day clinical session on the day following the lecture where participants had the opportunity to provide dental care to CSHCN and very young children.

The new courses were strategically placed in various areas around the state of Virginia: Charlottesville, Martinsville, Saltville, Newport News, and Alexandria. This placement allowed access to a greater number of dentists and the potential to impact more children around the state. The table below shows the number of attendees by locality:

	Dentists	Hygienists	Assistants/ Other	Total	Patients
Charlottesville	**14**	**1**	**3**	**18**	**6**
Saltville	**10**	**6**	**2**	**18**	**9**
Martinsville	**13**	**1**	**5**	**19**	**28**
Newport News	**15**	**0**	**4**	**19**	**40**
Alexandria	**17**	**1**	**8**	**26**	**26**
Total	**69**	**9**	**22**	**100**	**109**

In September 2011, a follow-up survey was emailed to all dentists participating in the first four courses in this series (Charlottesville, Saltville, Martinsville, and Newport News). Again, the response rate was poor with only 18 (35%) of 52 dentists returning the survey. One of these dentists had not attended the hands-on session. Of the 17 that did attend the hands-on session, six (35%) said it was extremely useful and the remainder said it was useful. The survey included the following feedback.

- Eleven (61%) of the 18 respondents said they were seeing more very young children since taking the class, and 33% said they were seeing more children with special needs. Of the seven dentists who stated they were not seeing more young children, five were providing more services for these children. Likewise, of the 12 dentists not seeing more patients with special needs, three stated that they were providing more services.
- Dentists repeatedly commented that they learned and benefited from taking this training: 94% stated being more comfortable treating very young children and 78% more comfortable treating CSHCN after the course. The most common stated reason for not making practice changes was the low number of CSHCN in their practice. Other comments included lacking proper equipment for behavior guidance (e.g., restraint, nitrous oxide).
- 67% of the dentists reported referring fewer very young patients for treatment elsewhere. On the other hand, only 33% of the dentists reported referring fewer CSHCN. Behavior management was listed as the primary concern for two of the dentists dealing with CSHCN.

The second important accomplishment for this grant objective was the development of a searchable website to help locate providers that treat CSHCN. In June 2008, a survey was mailed to all licensed dentists in Virginia to identify practitioners who provide care for children with special health needs and very young children. Of the 4,625 dentists receiving surveys, 1,707 (37%) were returned. Dentists who treated patients with special needs were included on a new VDH website that went live in June 2009 (http://www.vahealth.org/dental/dentaldirectory/). The website has since been updated twice through mass mailings to dentists. Dentists can also enroll or make changes on an ongoing basis by going through the website. Approximately 2,400 dentists are now included on the website, which is about half of the licensed dentists in Virginia.

b) Overall Impact on System of Care

Based on provider feedback and the high interest, it appears the dentist training will have a long-term impact on the provision of care to CSHCN and to very young children, and this is an effective means of improving direct services to these populations. However, education is a long-term process and as funding for the trainings no longer exists, other means will need to be determined to continue some type of dentist education and to reach more providers.

This project far exceeded the initial objective of training six dentists annually. During the TOHSS grant period, 139 dentists and 31 auxiliaries participated in this training. Additionally, in phase two of the trainings, which had a strong clinical component, 109 children under 4 years of age and CSHCN received needed dental services ranging from preventive to restorative and extractions. All children were offered dental homes either with participating dentists, participating clinic sites, or through appropriate referrals when needed. Although not officially surveyed, parents expressed great appreciation of the care that their children received, many of whom had not been able to find a dentist to treat their child.

Although difficult to evaluate, the provider website that went into effect in June 2009 appears to have been well received by dentists with almost half of the licensed providers participating.

c) Challenges and Lessons Learned

Challenges and lessons learned in this objective are summarized below.

- Organizing and implementing training with a hands-on component was a challenge, especially as classes were conducted outside of the Richmond area. Potential sites had to have adequate clinical spaces and dental chairs. When approached, most sites were eager to host the trainings; although, there was difficulty locating a site in Northern Virginia. Two sites declined before partnering with the Alexandria Health Department. Except for one site in Southwest Virginia, there were no problems filling the classes.
- Although the bulk of the training addressed CSHCN, the biggest impact appears to be an increased number of dentists providing oral health preventive services to very young children.
- Despite high interest in the topic and desire to provide care, general dentists' ability to treat CSHCN may be limited, depending on the severity of the condition or disability and,

especially, their ability to manage behavior without sedation. This was listed as a concern by several respondents who do not utilize sedation, including nitrous oxide in their practice. It is anticipated that courses such as this will help dentists to better understand that there are many CSHCN who can be treated without sedation or specialty training.

- As stated by more than one participant, learning to work with very young children and CSHCN needs to start in dental school so that dentists will be more prepared upon graduation.
- While this appears to be a very effective method of improving access to care, providing clinical dentist trainings is very costly and takes a large amount of time and effort to develop, organize, and conduct. Without VDH staff dedicated to the program this project would not have been possible. It required hands-on management for months in order to put together all the pieces, including working with the clinics to schedule patients and conduct the scheduling, ensuring adequate staff at the sites, notifying and registering dentists and their staff, responding to questions from dentists and clinical sites, and addressing the unique situations that arose at the various sites.
- Having an excellent relationship with VCU School of Dentistry and the VDA was invaluable to the success of the 11 dentist trainings. Their collaboration was essential to completing this objective.
- Designing the website was challenging, even with a prototype from South Carolina. However, the long-term challenge will be maintenance and keeping the information current. In the past, DHP has relied on statewide mailings, which have had good response. Challenges remain for being able to have the survey included with annual licensure mailings.

16447

Child Survey: Questions About Your Child's Teeth

INSTRUCTIONS: This questionnaire must be answered by the child's parent or legal guardian.

Child's First Name

Child's Last Name

Shade Circles Like This--> ●

Not Like This--> ⊗ ✓

What is your child's birthday? Month - Day - Year

Child's age (months)

Is your child a: Boy ○ Girl ○

In your opinion, which **one** group best describes **your child**? ***Please check only one.***

○ White ○ Hispanic ○ Multi-racial

○ Black/African American ○ American Indian or Alaska Native

○ Asian ○ Native Hawaiian/Pacific Islander ○ Other_____

Please specify

Care of Your Child's Teeth

#1. Are your child's teeth ever wiped with a cloth or brushed?

○ Yes ○ No **<- If you checked NO, please go to Question #4 below.**

#2. How often are your child's teeth wiped or brushed?

○ 2-3 times a week ○ Once a day ○ 2 or more times a day

#3. Is toothpaste used? ○ Yes ○ No

If 'Yes,' does the toothpaste have fluoride?

○ Yes ○ No ○ Don't know

#4. Has a doctor or nurse ever told you when your child should have their first dental visit?

○ Yes ○ No

#5. Has your child ever had a dental visit? ○ Yes ○ No **<- If you checked NO, you have finished the survey.**

#6. If yes, what was the reason for the visit? ***Please check all that apply.***

○ Check-up ○ Fluoride ○ Fillings ○ Other _____ Please specify

#7. If yes, did your child go to the dentist before or at age one?

○ Yes ○ No

For Office Use ONLY

Oral Screening Assessment: To be completed by dental examiner **Dental Referral:** ☐ Yes ☐ No

Untreated cavities

☐ No untreated cavities

☐ Untreated cavities

Caries Experience

☐ No caries experience

☐ Caries experience

Treatment Urgency

☐ No obvious problems

☐ Need for dental care

☐ Urgent/emergency need for care

Examiner ID

Child ID

County/City _____

Date of exam

Month - Day - Year

Appendix B
Bright Smiles for Babies Data
Targeted Oral Health Service System Grant

Background:

The Dental Health Program (DHP) in the Division of Child and Family Health, Office of Family Health Services, Virginia Department of Health (VDH), has collected data on participants in the Bright Smiles for Babies (BSB) Program throughout the four-year grant period funded by the Targeted Oral Health Service System (TOHSS) Grant. Data were collected on children from birth to 5 years of age and parents or caregivers enrolled in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) and receiving services in BSB Program. Under the supervision of DHP staff, dental hygienists were responsible for providing oral health screenings, fluoride varnish applications, parental education, and dental referrals during visits to WIC clinics. Participation in the program was contingent on the child's caregiver providing written informed consent. Two assessment tools were used during the data collection: (1) an oral health screening using the Basic Screening Survey (BSS) protocol developed by the Association of State and Territorial Dental Directors and (2) caregiver questionnaires to evaluate parental knowledge and practices regarding early oral health care. The VDH Institutional Review Board reviewed the forms and protocols prior to approving the data collection. The baseline cross-sectional data has been analyzed and is reported below, with follow-up surveys to be completed in fall of 2011.

Basic Screening Survey:
Demographics:

"Age in months" was solicited on the child questionnaire as was the child's date of birth. A computed variable for age in months was established based on questionnaire date and date of birth for greater accuracy. Overall, the mean age of participants was 27.4 months and gender was equally distributed with 50.9% male participants. The distribution of patients shows that the majority of children participating in the program were white at 33.4% followed by black or African American at 32.2% percent, and Hispanic children at 27.3%. To facilitate analysis, racial categories "Asian," "American Indian or Alaska Native," "Native Hawaiian/Pacific Islander," "Multiracial," "Other," and all blank responses were reclassified into an "All Others" category representing 13.8% of participants. Results are summarized in Table 1.

Table 1: Racial Classification of Participating Children, Bright Smiles for Babies, 2008-2011.

Racial Classification	n (baseline)	Percent
White	3,286	33.4
Black/African American	3,128	32.2
Hispanic	2,075	27.3
All Others	1,354	13.8
Total	**9,843**	

Caries Experience/Health Status Findings:

Overall, 9.4% of participants (with an average age of 2.3 years) had untreated caries and 11.9% had dental caries experience (Table 2). Because of missing information on these two indicators, the total number of children varies from demographic data. A total of 211 children were missing information on untreated caries. A total of 213 children were missing information on dental caries experience.

Table 2: Untreated Caries and Dental Caries Experience, Bright Smiles for Babies, 2008-2011.

Untreated Caries		Total
Yes	No	
834 (9.4%)	8,798 (90.6%)	9,632
Dental Caries Experience		**Total**
Yes	No	
1,145 (11.9%)	8,485 (88.1%)	9,630

The BSS survey data on baseline children shows that a higher percentage of children classified as "Hispanic" had untreated caries (13.4%) and dental caries experience (17.8%) than their peers in other racial categories. A higher percentage of Hispanic children also needed dental care (13.9%) and were in need of a dental "home" (74.6%) than those in other racial categories as well. A lower percentage of children classified as "Black" needed a dental home than their peers in other racial categories (Table 3).

Table 3: Health Status Measures by Racial Categories, Bright Smiles for Babies, 2008-2011

Health Status Measure	Percent Participants With Health Status Measure by Race			
	White	Black	Hispanic	All Others
Untreated caries	7.4 (6.3, 8.7)	8.7 (7.4, 10.2)	13.4 (11.7, 15.4)	7.2 (5.5, 9.3)
Caries Experience	10.7 (9.3, 12.2)	11.6 (10.1, 13.3)	17.8 (15.8, 20.0)	10.3 (8.3, 12.7)
No obvious problem	92.0 (90.6, 93.2)	91.0 (89.4, 92.3)	85.7 (83.7, 87.5)	92.3 (90.2, 94.1)
Needs dental care	8.0 (6.8, 9.3)	8.9 (7.5, 10.4)	13.9 (12.1, 15.9)	7.7 (5.9, 9.8)
Urgent/ Emergency care needed	0.1 (0.0, 0.3)	0.1 (0.0, 0.5)	0.4 (0.1, 0.9)	0.0 (0.0, 0.6)
Dental Referral	66.4 (64.2, 68.6)	53.9 (51.4, 56.4)	74.6 (72.1, 77.0)	62.8 (59.2, 66.2)

Caretaker Survey:
Demographics:

Type of Caregiver:

A total of 11,744 caretakers participated in the survey, and the vast majority (90.3%) of caretakers were the infant or child's mother (Table 4). The number of caretakers differs from the number of children surveyed due the child's age and absence of teeth before 6 months of age.

Table 4: Distribution of Caregiver Type, Bright Smiles for Babies, 2008-2011

Caregiver Type	Number of participants	Percent of participants
Mother	10,600	90.3
Father	539	4.6
Legal Guardian	266	2.3
Other	162	1.4
Unknown	177	1.5
Total	**11,744**	**100.0**

Race:

Racial categorizations of participating caretakers are listed in Table 5. To facilitate analysis, racial categories "Asian," "American Indian or Alaska Native," "Native Hawaiian/Pacific Islander," "Multiracial," "Other," and all blank responses were reclassified into an "All Others" category. Racial demographics of the caregivers followed trends established with child surveys.

Table 5: Racial Classification of Participating Caregivers, Bright Smiles for Babies, 2008-2011

Racial Classification	Number of Participants	Percent
White	4,486	38.2
Black/African American	4,159	35.4
Hispanic	2,168	18.5
All Others	931	7.9
Total	**11,744**	**100.0**

Caregiver Survey Findings:

Although the majority of caregivers (89.1%) reported that they wiped or brushed their child's teeth, a much smaller percentage knew the needed frequency for optimal oral health. Only 37.1% of caregivers cleaned their child's teeth once a day. A majority of caregivers (84.2%) also reported using toothpaste when they cleaned the teeth, but half of these caregivers did not use toothpaste with fluoride.

Responses concerning the need for visiting the dentist were less frequent, with only 38.5% of caregivers having instructions on the timing of the first dental visit. Approximately one quarter of all caregivers (26.9%) stated their child had visited a dentist, and only 7.8% of these children visited the dentist by aged 1 (Table 6).

Table 6: Percent of Participating Parents Who Report Various Health Behaviors and Knowledge, Bright Smiles for Babies, 2008-2011.

Question	Percent Responding "Yes"
Child's teeth wiped or brushed?	89.1
Brushing frequency: 2-3 times per week	13.6
Once per day	37.1
More than once per day	40.4
If yes, was toothpaste used?	84.2
If toothpaste used, does it have fluoride?	42.9
Has a doctor or nurse told you when your child should have a first dental visit?	38.5
Has your child ever had a dental visit (reason)?	26.9
Checkup	23.2
Fluoride	3.3
Fillings	3.7
Other	2.3
If yes, did child go the dentist before the age of one? (Yes)	7.8

Discussion of Results to Date:

Baseline data reveal some significant information for the continued implementation of the program. For example, Hispanic children appear to have the highest disease rates and less access to a dental home than their counter parts. Overall disease rates were higher than anticipated on a population of children with a mean age of 2.3 years compared to other data collected by the DHP. This information reinforces the need for these preventive services in a high-risk population such as children enrolled in WIC. Caregiver data show a continued need to emphasize preventive care for this population, including frequency of cleaning the teeth, access to fluoride, and need for a dental visit by 1 year of age.

Attachment C
Children with Special Health Care Needs
Parent/Caregiver Survey

Dental Health Survey
Children with Special Health Care Needs

1. Which of these items are used in caring for your child's mouth? (check all that apply)

□ regular toothbrush □ battery toothbrush □ specially adapted toothbrush
□ floss/floss holders □ picks that clean between teeth □ fluoride pills
□ fluoride rinse or brush on gel □ mouthwash other than fluoride
□ mouth prop or bite block □ other:_____

2. How would you rate your child's overall mouth health? (check only one)
□ excellent □ very good □ good □ fair □ poor

3. How often are your child's teeth wiped or brushed? (check only one)
□ never □ rarely □ once or twice a week □ once a day □ twice a day or more

4. Have you ever been shown how to brush and floss your child's teeth? □ yes □ no

5. How confident do you feel about caring for your child's teeth at home?
□ very confident □ somewhat confident □ less than confident

6. Child's Age: □ Less than one year □1 – 2 years □3 – 5 years □ over 5 years

7. Child's Sex: □ Male □ Female

8. Race: (check only one)
□ White □ Black □ Asian □ Hispanic □ Multi-racial □ Other:_____

9. Do you have dental insurance? □ Yes □ No
If yes, is it □ private □ public (Medicaid) □ both (with a waiver) (check only one)

10. What are your child's special needs conditions? (check all that apply)
□ physical □ developmental □ behavioral □ emotional □ other:_____

11. What is your relationship to the child? (check only one)
□ parent □ grandparent □ other relative □ legal guardian □ other:_____

12. Circle the best answer for the next statements:

a. Putting a child to bed with a bottle is OK as long as it is just milk.
True False Don't Know

b. The bacteria/germs that cause cavities can be passed from one person to another.
True False Don't Know

c. Children should have their first dental visit by age one.
True False Don't Know

d. Only a pea sized drop of toothpaste with fluoride should be used.
True False Don't Know

e. Sugary foods help to cause tooth decay.
True False Don't Know

f. Fluoride helps to prevent tooth decay. True False Don't Know

g. Certain medications can increase the chance of tooth decay.
True False Don't Know

13. Was your child referred to the dentist by: (check all that apply)
□ doctor/nurse □ case coordinator □ WIC □ Pre-school/Head Start □ Other

14. At what age was your child's first dental visit?
□ age 1 or under □ 2-3 years □ 4 years or older □ my child has not seen dentist yet

15. Have you had trouble finding a dentist to see your child? □ yes
□ no □ do not know yet

16. Do you have any other concerns about your child's oral health care needs not already covered in this questionnaire? _____
_____
_____

CSHCN Parent/Caregiver Survey Results June 2009 - December 2009

Surveys were administered at Care Connection for Children offices, special needs conferences and CSHCN family events. The areas included are: Prince William County; Culpepper County; Fairfax County; the cities of Bristol, Charlottesville, Richmond, and Virginia Beach.

Knowledge	Correct	Incorrect	Don't know	Total	% correct
12a. Bed w/ bottle	206	7	11	224	92%
12b. Bacteria transmitted	96	77	51	224	43%
12c. Age one dental visit	151	40	33	224	67%
12d. Pea size Fl toothpaste	163	32	29	224	73%
12e. Sugary foods = decay	210	10	4	224	94%
12f. Fluoride prevents decay	204	4	16	224	91%
12g. Meds increase decay risk	170	6	48	224	76%

Access	YES	NO	Don't know yet	Total #	% w/ access difficulty
15. Had difficulty finding a dentist for CSHCN	35	160	29	224	16%

Demographics & Misc. Information

OH Items	Regular brush	Battery brush	Adapted brush	Floss	Picks to clean between	Fluoride Rx (pill or drop)	Fluoride rinse/gel	Mouthwash - no fluoride	Mouth prop / bite block
1. OH Items Used*	191 (85%)	41 (18%)	7 (3%)	69 (31%)	20 (9%)	8 (4%)	42 (19%)	48 (21%)	4 (2%)

*Multiple answers possible

Oral Health	Excellent	Very good	good	fair	poor		Total
2. Mouth health	36	73	73	33	9		224

Brushing	Never	Rarely	1-2/week	1/day	2/day +		Total
3. Teeth brushed	1	3	25	76	119		224

OHE	Yes	No					Total
4. Shown how to brush/floss	174	50					224

Caregiver	very confident	somewhat confident	less than confident				Total
5. Caring for child's teeth	156	59	9				224

Age	< 1 year	1-2 yrs	3-5 yrs	over 5 yrs			Total		
6. Child Age	5	32	59	128			224		
Sex	Male	Female					Total		
7, Child Sex	124	100					224		
Race	White	Black	Asian	Hispanic	Multi-race	Other	Total		
8. Race	156	37	3	18	7	3	224		
Insurance	Yes	No	Private	Medicaid	both w/ waiver				
9. Dental Insurance*	187	20	30	129	19				
						*Multiple answers possible			
Condition	Physical	Developmental	Behavioral	Emotional	Left blank				
10. Special Need / Condition*	84	129	62	35	42				
						*Multiple answers possible			
Person Surveyed	Parent	Grand-parent	Other relative	Guardian	Other		Total		
11. Person completing survey	187	16	3	9	9		224		
Referral Source	Doctor / nurse	Case Coord.	WIC	Pre-school / Headstart	Other	Left blank	Total		
13. Who referred child to dentist	62	9	4	27	74	48	224		
1st Visit	1 year or under	2-3 years	4 yrs +	not seen yet	unsure		Total		
14. Age of 1st dental visit	55	95	38	32	4		224		
Comments						Total			
too few dentists accepting Medicaid						4			
financially hard to pay for dental work						2			
difficult finding a dentist to see a one year old						1			
need more dentists with hospital privileges/offer anesthesia						3			
need more dentists with experience with CSHCN						2			
	(specifically: autism & ortho on cleft lip/palate)								
need more orthodontic work available						4			
no coverage for over 21 year old with SHCN						1			
bad first visit with the dentist						2			
prepared 10-21-2010 kap									