2015 Report to the General Assembly

Services Provided by Virginia Department of Health Dental Hygienists Pursuant to a "Remote Supervision" Protocol

VDH VIRGINIA DEPARTMENT OF HEALTH
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Executive Summary

The program for Virginia Department of Health (VDH) dental hygienist services provided under a "remote supervision" protocol was first established in 2009. The evolution of the "remote supervision" protocol from pilot to established program is detailed in VDH annual reports on the General Assembly's Legislative Information System website.

This legislative action has enabled VDH dental hygienists to provide preventive dental services without the general or direct supervision of a dentist. This effort has improved access to preventive dental services for those at highest risk of dental disease, as well as reduced barriers and costs for dental care for low-income individuals. This report summarizes the burden of relevant oral disease statewide and documents the services provided in FY15 by the dental hygienists and dental assistants employed by VDH under the "remote supervision" protocol.

In FY15, nearly 5,000 children returned a permission form and were screened by a dental hygienist in a school-based setting; 1,993 received sealants and 5,445 fluoride varnish applications were provided in initial and recheck visits. A total of 1,181 children were identified as having other oral health needs and referred to community providers. In clinic settings, through the VDH "Bright Smiles for Babies" program, 5,408 infants and children were screened. School and clinic programs combined to provide 10,440 fluoride varnish applications. In FY15, the combined "remote supervision" hygienist workforce provided clinical services with a market value exceeding $2 million in 14 VDH Health Districts. The remote supervision model expansion continued in FY 15 with new staff hired to begin school-based services based in four additional Health District for the 2015-2016 school year, for a total of 11 teams serving 12 VDH health districts.

As this and previous reports indicate, the remote supervision model offers an effective alternative method of delivery for safety net dental program services that increases access for underserved populations.

History and Overview of Remote Supervision Program

Although tremendous strides have been made in the reduction of tooth decay among many Virginians over the past fifty years, primarily due to community water fluoridation, the decline in disease prevalence and severity has not been distributed uniformly across all segments of the population. Race and socioeconomic disparities continue to be predictors of tooth decay, and geographic considerations affect access to care in many parts of the state. Racial and ethnic minorities, persons with low-income, and individuals with special health care needs are all less likely to have access to regular dental care and resources, further compounding the impact of oral disease. The need for creative solutions to dental care access challenges have led to the development of alternative practice models for dental hygienists in the Commonwealth, such as the "remote supervision" protocol in the Virginia Department of Health (VDH).

In 2009, the Virginia General Assembly passed legislation to revise § 54.1-2722 "License; application; qualifications; practice of dental hygiene" to allow dental hygienists employed by VDH, and working in the Cumberland Plateau, Lenowisco, and Southside Health Districts, to provide preventive dental services in selected settings without the general or direct supervision of a dentist. This legislation aimed to improve access to preventive dental services for those at highest risk of dental disease, as well as reduce barriers and costs for dental care for low-income individuals. The legislation also had potential for significant changes to the practice of public health dentistry in the Commonwealth, a model that had not changed since the state dental program was established in 1921.

When the legislation passed, there were only two VDH dental hygienists (one full-time and one part-time) located in priority health districts. Therefore, efforts were made to secure funds through grants and other opportunities to increase staff that could work under this new protocol. As a result, by early 2010 there were six full or part-time VDH dental hygienists practicing under remote supervision in Lenowisco, Cumberland Plateau and Southside Health Districts and one part-time hygienist working exclusively with the fluoride varnish program.

The primary prevention services provided by VDH using the remote supervision protocol were school-based dental sealant and fluoride varnish programs in the targeted health districts. Dental sealant and fluoride varnish programs are evidence-based and cost-effective means to reduce the dental disease burden of a population. The hygienists were also able to provide many other additional preventive services for the individuals in these communities under existing practice protocols, including screenings, education, and referrals.

In addition to the sealant programs provided under the pilot remote supervision protocol, preventive services were provided under existing practice protocols in the target health districts. These included 1) a fluoride varnish program in Special Supplemental Nutrition Program for Women, Infants and Children (WIC) clinics and Care Connection for Children (CCC) clinics; 2) dental education programs; 3) oral health screenings and referrals; and 4) a program that involved home visits (this program ended after the first year).

The pilot program was originally slated to last until July 1, 2011. However, due to the program's success, it was extended during the 2011 Legislative Session for another year – until July 1, 2012. On July 1, 2012, the Virginia Code was amended to permit any VDH dental hygienist throughout the Commonwealth to practice under the "remote supervision" protocol, not just those practicing in one of the three designated districts.

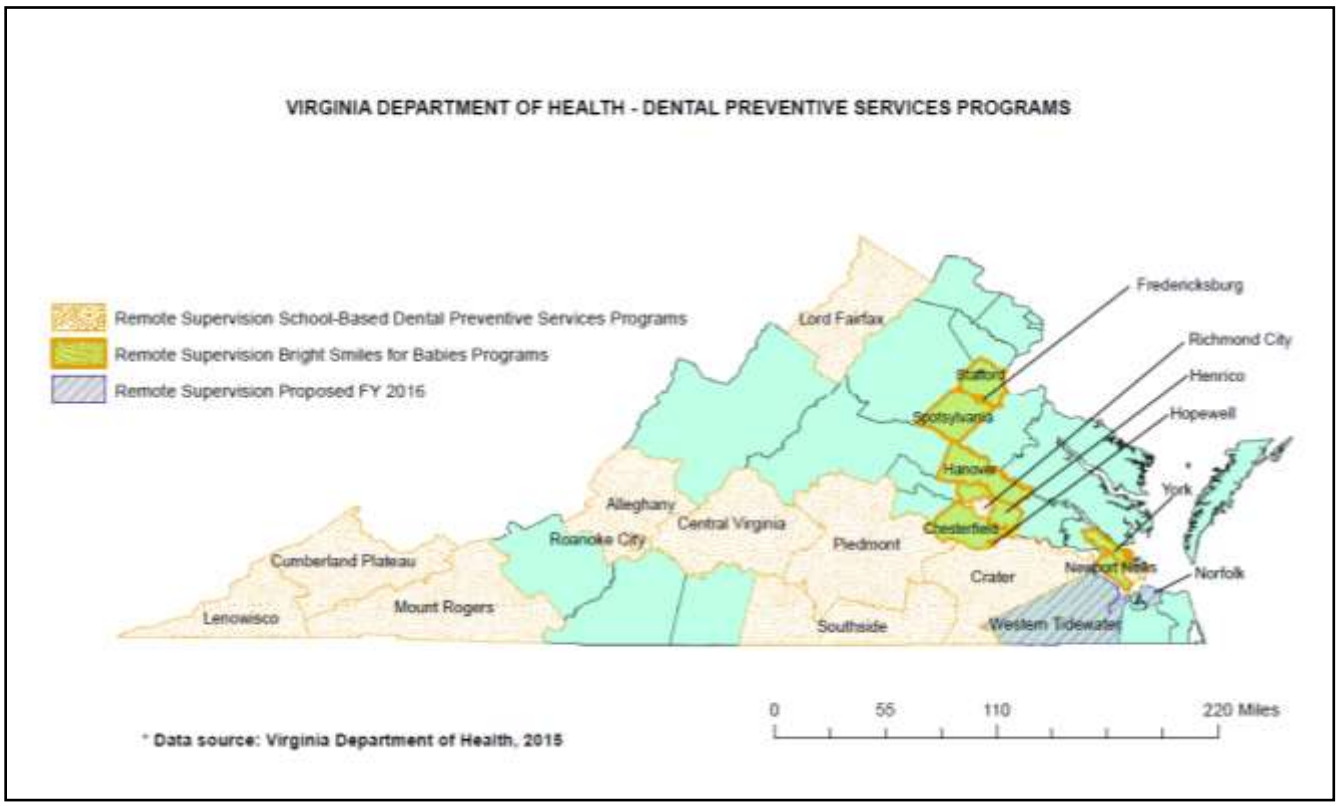
In recognition of the new legislation, VDH enrolled all existing VDH hygienists providing patient care services into the remote supervision protocol in FY13. This expanded the service capabilities of hygienists that had previously been working under more restrictive supervision and improved efficiency in professional oversight. To fund dental hygienist positions working under the new practice protocol, VDH applied for and received a federal Oral Health Workforce Grant from the U.S. Health Resources and Services Administration (HRSA). Additionally, some local VDH Districts contributed funding to support hygienists practicing in their areas.

In FY14, VDH initiated implementation of the VDH Dental Transition Plan to emphasize more community-based prevention services. Resources previously committed to VDH Districts were identified for redirection to add new remote supervision hygienist programs in targeted areas of the State. The transition plan identified localities based on applied metrics of greatest need, for placement of additional hygienists to expand the "Dental Preventive Services Program."

Also in FY14, VDH expanded the eligibility rules for the dental sealant program. Schools are selected for participation in the sealant program based on having a National School Lunch Program (NSLP) participation rate of 50% or greater. Prior to the 2013/2014 school year, individual students at identified schools had to be in the free lunch program to be eligible for sealant services through VDH. VDH identified concerns that the requirement for parents to disclose a child's NSLP status is potentially stigmatizing and poses administrative burden and is thus a barrier to participation in the program. Therefore, in FY14, eligibility was expanded to all students in the qualifying schools. It is anticipated that this will increase the service population, reach and impact of the program in high need areas.

As of August 2015, the recruitment and selection process for expansion of the VDH remote supervision programs, as proposed for FY15 in the VDH Dental Transition Plan, has been completed. In the 2015-2016 school year, four additional full-time community-based dental hygienists and part-time dental assistants will be providing services in Roanoke, Alleghany, Richmond, Crater, Piedmont and Hampton Health Districts, for a total of 13 teams in 16 VDH Health Districts (Figure 1). VDH Office of Family Health Services' Dental Health Program (DHP) dentists will expand coverage to all new remote supervision programs to include ongoing technical assistance, clinical oversight and quality assurance functions.

Figure 1: Map of VDH Preventive Dental Services in Virginia



Burden of Dental Disease among Children

Tooth decay is estimated to be five times more common than asthma and seven times more common than hay fever in children. Dental issues among children have been demonstrated to contribute significantly to lost school and activity time[1], and lack of dental insurance and access to care complicate dental treatment for those most at risk. Nationally, 28% of children aged 3-5 years were estimated to have some dental caries experience in the 2011-2012 period, according to data from the National Health and Nutrition Examination Survey (NHANES)[2]. For children aged 6-9 years, the prevalence of dental caries was 57.7%, and for adolescents, 13-15 years, the prevalence of caries experience was 53.4%.

Healthy People 2020 (an initiative of the U.S. Department of Health and Human Services) includes two objectives related to dental caries experience and untreated decay in children that VDH is currently able to monitor at the population level with available data systems:

[1] Gift H, Reisine S, Larach D. The social impact of dental problems and visits. *Am J Public Health*. 1992;82(12):1663–1668.
[2] US Department of Health and Human Services. Oral health. *Healthy people 2020*. Available at: http://www.healthypeople.gov/2020/. Accessed August 30, 2013.

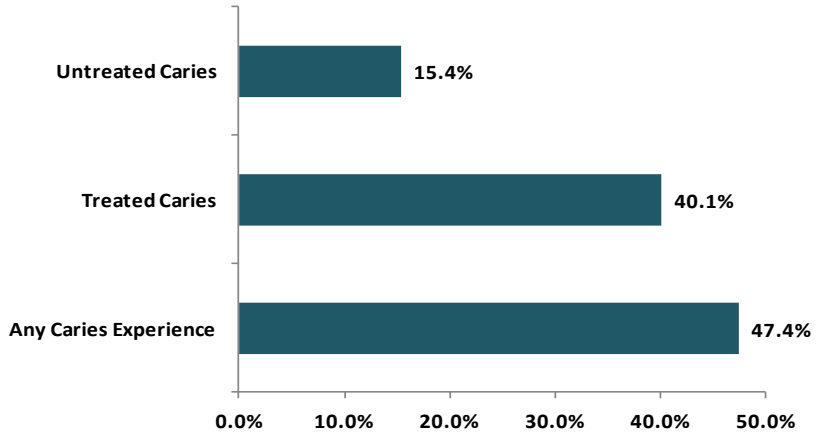
- OH-1.2: Reduce the proportion of children aged 6 to 9 years with dental caries experience in their primary and permanent teeth.

- OH-2.2: Reduce the proportion of children aged 6 to 9 years with untreated decay in their primary and permanent teeth.

Virginia monitors these indicators through the Virginia Basic Screening Survey (BSS). Conducted every five years and based on guidelines developed by the Association of State and Territorial Dental Directors (ASTDD), the Virginia BSS includes an open-mouth survey of a representative sample of 3rd grade school children in Virginia to assess statewide progress in pediatric oral health indicators. Data are weighted to the population level and are thus representative of all 3rd graders in Virginia. In the 2014-2015 school year the BSS was repeated for statistically selected 3rd graders across Virginia. Several remote supervision hygienists were tasked with serving as screeners. This is a significant commitment of time in schools, but does facilitate an opportunity, not only to collect data, but also to interact with children, reinforce preventive dentistry and inform parents of children's basic oral health status.

Findings on the prevalence of caries experience, treated decay, and untreated decay are presented in Figure 2. The available data from BSS was extracted from the survey conducted in 2009. Updated data from the 2014-2015 BSS, relevant to this report, should be available from VDH in 2016 and will be reflected in future documents.

Figure 2: Prevalence of Treated Caries, Untreated Caries and Any Caries Experience among 3rd Graders, Basic Screening Survey, Virginia 2009



The prevalence of caries (both treated and untreated) varies by region, ethnicity and race, with Southwest Virginia and Hispanics having the highest rate of untreated caries. Virginia BSS data on the prevalence of caries experience, treated decay, and untreated decay by race/ethnicity and health planning region are presented in Table 1.

Table 1: Prevalence of Treated Caries, Untreated Caries, and Any Caries Experience among 3rd Graders, by Region and Race/Ethnicity, Basic Screening Survey, Virginia 2009

	Treated Caries (%)	Untreated Caries (%)	Any Caries Experience (%)
Region			
Northwest	38.2	14.3	45.4
Northern	36.2	11.5	40.5
Southwest	47.7	25.3	59.6
Central	41.4	13.6	48.3
Eastern	40.0	15.4	47.7
Race			
White, non-Hispanic	39.0	13.4	45.2
Black, non-Hispanic	41.3	18.2	50.3
Hispanic	45.2	22.4	54.0
Asian/Pacific Islander	44.6	15.5	51.8
Other/Multiracial	36.4	15.0	44.5

According to the BSS, most 3rd graders in Virginia in 2009 had no obvious dental problems requiring care, while 12.4% were in need of care within weeks, and a small percentage (1.1%) needed urgent dental care (within 24 hours). Progress on these indicators will be tracked periodically through the BSS, and findings from subsequent BSS administrations will be evaluated to determine if caries experience in this population declines over time.

Oral Health Services Provided by VDH through Remote Supervision

Dental Sealants

A dental sealant is a plastic coating applied to the chewing surfaces of the back teeth (molars) to prevent cavities, by forming a barrier to plaque and bacteria. It is generally accepted that sealants are most effective when applied to newly erupted first and second permanent (adult) molars. The Centers for Disease Control and Prevention Task Force on Community Preventive Services found strong evidence that school-based and school-linked sealant programs are effective in reducing tooth decay, with a median decrease of 60%.[3] Nationally, school-based sealant programs targeting low-income children have been in place now for many years. A dental hygienist is widely accepted as equally skilled in applying dental sealants as a dentist. A 10-year retrospective study comparing the longevity of sealants placed by dentists, dental hygienists, and dental assistants found that all operators are effective in applying sealants.[4]

[3] Centers for Disease Control and Prevention. Promoting Oral health: Interventions for Preventing Dental Caries, Oral and Pharyngeal Cancers, and Sports-Related Craniofacial Injuries—A Report on Recommendations of the Task Force on Community Preventive Services. MMWR Recommendations and Reports 2001; 50(RR-21):1-13.

[4] Folke BD, Walton JL, Feigal RJ. Occlusal Sealants Success over Ten Years in a Private Practice: Comparing longevity of sealants placed by dentists, hygienists and assistants. Pediatric Dentistry. 2004: 26: 426-432.

According to NHANES, 27.2% of children aged 5-19 had at least one dental sealant on a permanent tooth[5] in the 2005-2008 survey period. Dental sealant prevalence is known to vary by socio-demographic factors. According to an analysis of NHANES data from 2009 and 2010, children aged 6-9 years living below the federal poverty level were less likely to have sealants on permanent molars than children of that age living above the federal poverty level (26% vs. 34%)[6]. This analysis additionally found that sealant prevalence was lower among black adolescents (32%) than white adolescents (56%).

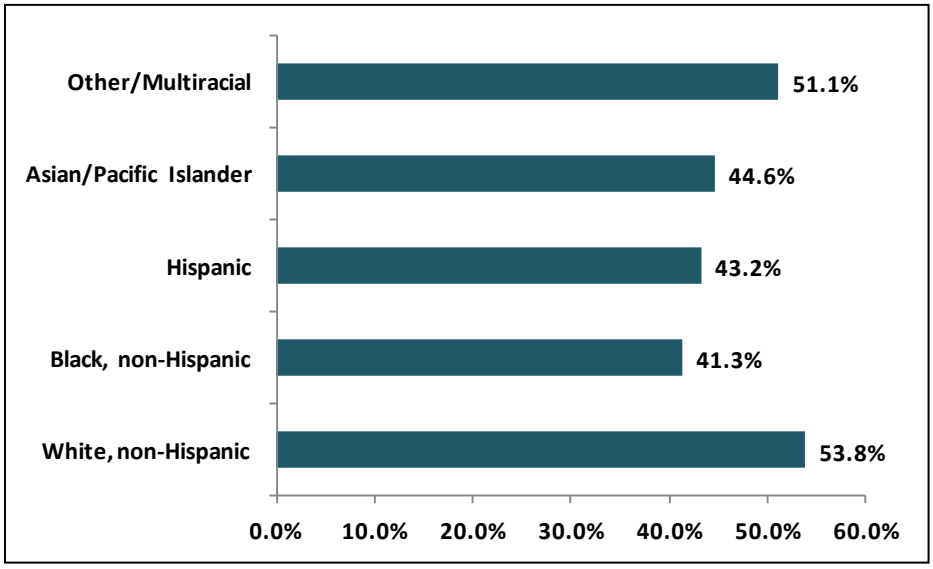
VDH currently monitors the following *Healthy People 2020* objective on dental sealants in children:

- OH-12.2 Increase the proportion of children aged 6 to 9 years who have received dental sealants on one or more of their permanent first molar teeth.

By region, the prevalence of dental sealants on permanent molars was lowest in the Southwest (40.3%) and highest in the Central region (53.7%), with 49.4% of all 3rd graders in Virginia having at least one sealant on a permanent molar.

Sealant prevalence is monitored by VDH through the BSS. Virginia 2009 BSS data on dental sealant prevalence by race/ethnicity are presented in Figure 3.

Figure 3: Prevalence of Dental Sealants on Permanent Molars, 3rd Graders, Basic Screening Survey, Virginia 2009



[5] Dye B, Xianfen L, Beltran-Aguilar E. Selected oral health indicators in the United States, 2005-2008. 2012. Available at: http://www.cdc.gov/nchs/data/databriefs/db96.pdf. Accessed October 10, 2013.
[6] Dye B, Xianfen L, Thornton-Evans G. Oral health disparities as determined by selected Healthy People 2020 oral health objectives for the United States, 2009-2010. 2012. Available at: http://www.cdc.gov/nchs/data/databriefs/db104.htm. Accessed October 4, 2013.

Topical Fluorides, Fluoride Supplements, and Varnishes

Topical fluorides (gels, varnishes, pastes, and mouth rinse) and fluoride supplements are all interventions proven effective in reducing the risk of dental decay. In a 2013 systematic review of dental literature, the authors attributed a 43% reduction in decayed, missing, and filled tooth surfaces to the use of fluoride varnish alone.[7] Fluoride varnishes are a topical fluoride delivery vehicle that instantly "stick" to tooth surfaces where applied and eliminates the risk of significant patient ingestion. This facilitates the use of topical fluorides for infants and children of all ages in a variety of settings.

Preventive Care Visits

Routine preventive dental visits are an important component of good oral health. Preventive dental visits provide opportunities for oral health education, professional cleaning, fluoride applications, and oral cancer screenings. Delivery models for school based preventive services significantly reduce many of the typical barriers to accessing preventive care visits facing some families[8]. *Healthy People 2020* includes the following related objective that VDH tracks through BSS and the Behavioral Risk Factor Surveillance System (BRFSS):

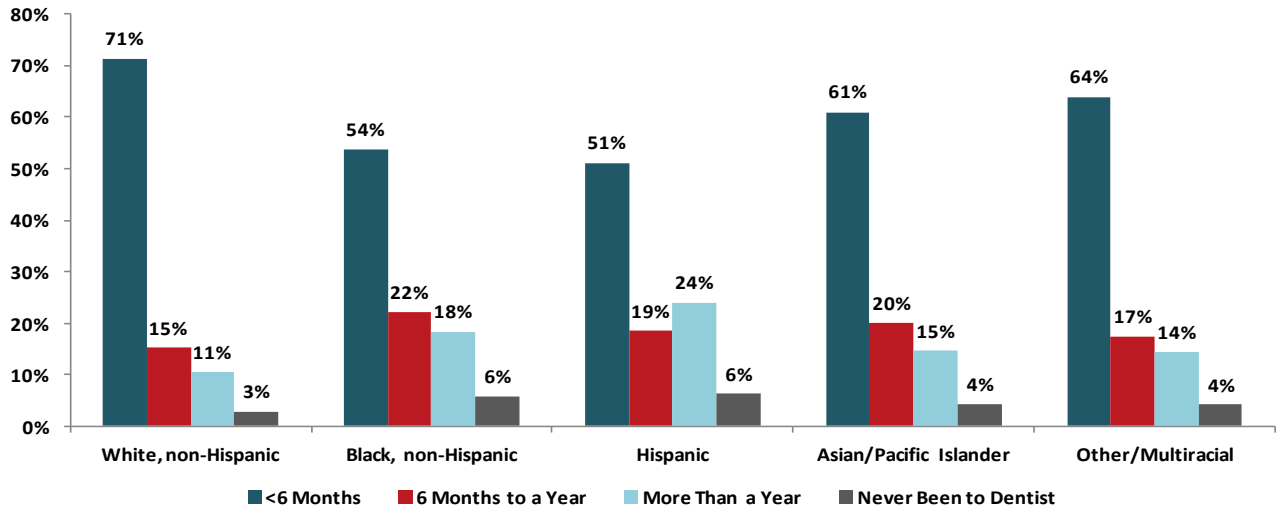
- OH-7: Increase the proportion of children, adolescents and adults who used the oral health care system in the past year.

Overall, 63.7% of Virginia 3rd graders had seen a dentist in the six months prior to the 2009 BSS; an additional 17.2% had last seen a dentist more than six months but less than a year before the survey. Virginia BSS data on the "time since the last dental visit" by race/ethnicity for 3rd grade children from the 2009 survey are presented in Figure 4.

[7] Marinho VCC, Worthington HV, Walsh T, Clarkson JE. 2013 Fluoride varnishes for preventing dental caries in children and adolescents. Cochrane Summaries. July 2013.Available at http://summaries.cochrane.org/CD002279/fluoride-varnishes-for-preventing-dental-caries-in-children-and-adolescents

[8] Gooch, B et al. 2009. Preventing Dental Caries through school based dental sealant programgs. JADA. 140;11:1356-65. November 2009. Available at http://jada.ada.org/article/S0002-8177(14)64584-0/fulltext

Figure 4: Time Since Last Dental Visit by Race/Ethnicity, Basic Screening Survey, Virginia 2009



Program Production and Impact on Oral Health

School-based Preventive Services *VDH* remote supervision hygienists provide preventive care visits in a school-based setting to deliver dental assessment, dental sealants, fluoride applications and oral health education. Low income children in qualified schools who do not have a dental home are also referred to dental providers. In addition to providing clinical preventive services, VDH hygienists are responsible for program development in their geographic area. Hygienists spend substantial effort working with school administration, staff in schools, and with parent groups, to provide information about the dental sealant program and to encourage participation. The hygienists also meet with local private dentists and safety net providers to introduce the program, gain acceptance, and facilitate referral of children with treatment needs.

In FY15, nearly 5,000 children returned a permission form and were assessed by a dental hygienist in a school-based setting; 1,993 received sealants and 5,445 fluoride varnish applications were provided. A child could be assessed and not be a candidate for a dental sealant due to the identified status of the permanent molar teeth, including "filled", "decayed", "previously sealed" or those molars "missing" or not fully erupted into the mouth. Additionally, in some areas, children receive multiple varnish applications. A total of 1,181 children were identified as having other oral health needs and referred to community providers. Over the past six years, this program has increased the number of children receiving sealants from 346 to 1,993, an increase of over 500%.

School programs vary in their elected participation, with some of the newer programs not yet having the school engagement that is enjoyed by Districts with long term Health Department /school relationships. As VDH expands preventive services programs across the Commonwealth, few challenges are encountered and community support is generally outstanding. DHP management is engaged on an ongoing basis with the hygiene staff to share

"lessons learned" and "best practices" to facilitate program acceptance and participation. Past experience has shown that a continuous presence in the schools and community, over time, results in increased school and parent support for these programs. Additionally, programs are monitored and adapted to best serve the targeted population while remaining consistent with public health science recommendations. For example, in FY13, routine application of fluoride varnish was initiated in conjunction with screening appointments, increasing program impact.

VDH School-based services production is summarized in Table 2.

Table 2: School-based Program Summary Data Provided Under Remote Supervision, All Grades – FY10 – FY14

Year	Number of Participating Health Districts	Number of Participating School Districts	Number of Children Screened for Sealants or Varnish	Number of Children Referred for Treatment	Number of Children Sealed	Number of Teeth Sealed	Number of Teeth Sealed per Child (average)	Fluoride Varnish Applied
FY10	3	8	485	248	346	1277	3.7	N.A
FY11	3	9	1029	474	543	1909	3.5	N.A.
FY12	3	10	1274	819	746	2281	3.0	N.A.
FY13	5	16	3011	1094	831	3186	3.8	1794
FY14	7	23	3982	1220	1746	6109	3.5	3754
FY 15	6	21	4955	1181	1993	6918	3.5	5445

Sealant programs are only effective if the sealants that are placed are retained. Sealant retention is evaluated in two ways: follow-up assessments and quality assurance evaluations. The program protocol requires annual follow up assessments by hygienists to evaluate retention of sealants placed during the prior year. This yields retention rate data and provides the opportunity to place new sealants on teeth previously unable to be sealed at the first appointment and to replace lost sealants. Follow up is dependent on children returning to the same school in consecutive years, parents continuing to sign children up for services, and schools participating in the program consistently. Therefore, the sealant retention data is limited to the available sample.

In FY15, based on the one-year evaluation of 1,367 sealant recipients in six Districts, the aggregate retention rate reported was 91%. The VDH dental Quality Assurance Manager performs an annual onsite quality assurance evaluation, and directly observes a sample of patients to evaluate and corroborate calculated retention rates. The observed one-year retention rate ranged from 84% to 99% for individual programs reviewed in FY15. These rates are consistent with other state programs with a long history of success, including the long-running Ohio School Based Dental Sealant Program and others, which use the performance standard rate of >90% for long term (one year minimum) retention.

Under the remote supervision model, assessments are conducted and sealants are applied at the same visit utilizing a hygienist and assistant only. As expected, this is a more efficient and cost effective modality for providing preventive services than alternative protocols available in the

past requiring an initial examination by a dentist, followed by a separate visit for a child to receive preventive services. In FY15, the cost per sealant application for VDH remote supervision programs was calculated through modeling to be $22.69 per sealant, unchanged from FY14. According to the 2011 American Dental Association Fee Schedule for the South Atlantic Region, the average charge in private dental offices for placing a dental sealant on one tooth is $46.00.[9] *Smiles for Children* Virginia Medicaid reimbursement per sealant is $32.28. The VDH remote supervision sealant delivery model is consistently cost effective relative to most alternative provider resources.

Bright Smiles for Babies Preventive Services In addition to preventive services that are offered through schools, VDH dental hygienists operating under remote supervision working in the Bright Smiles for Babies (BSB) program provide services through WIC clinics, Head Start, and the Care Connections for Children network. This affords opportunities to provide preventive and educational services and fluoride varnish, when appropriate, to low-income children and their parents, and children with special health care needs. The BSB program utilizes non-dental settings as a means of accessing children aged five and under who otherwise may not receive early preventive dental services.

WIC enrolled pregnant mothers also continue to be offered screenings by the BSB hygienists. Protocols and guidance for this are provided by DHP. Those identified as insured under the new Medicaid/FAMIS expansion for pregnant women are informed and educated regarding the value of utilizing this opportunity. However, the dental services benefit for pregnant women has very strict time constraints limiting services to the first trimester through the month following the 60th day after delivery. To assure effectiveness of the BSB hygienist efforts when screening and referring for care, a protocol and tracking log have been provided to staff to encourage patient compliance and provide follow up reminders for timely care.

Physicians and nurses across the state are trained to provide the BSB program services during well-child visits, and can receive Medicaid reimbursement for the application of the fluoride varnish. Additionally, as an extension of the BSB program, VDH dental hygienists provide the same oral health preventive services to children with special health care needs in medical specialty clinics and in some Head Start settings.

In FY15, hygienists working in the BSB program screened 5,408 infants and children, provided fluoride varnish to 4,995, and referred 2,865 to a dental home (see Table 3 below). There was a slight drop in total services delivered through the BSB program in FY15. This resulted primarily from an organizational change redeploying some BSB hygienists and expanding their non-dental WIC support functions. Additionally, two positions were vacated and one provider was on leave. New positions were filled, but as expected, production in new locations lags expectations until programs have time to mature. FY16 should show a return to the normal trend of growth. Medicaid reimbursement for varnish placement helps to partially sustain the VDH program.

[9] American Dental Association (ADA). 2011 Survey of Dental Fees. ADA Survey Center, December 2011.

Table 3: Services Provided Through "Bright Smiles for Babies" Fluoride Varnish Program, by VDH Dental Hygienists, FY10 - FY14

Year	Number of Health Districts	Number of Children Screened	Number of Children Treated with Fluoride Varnish	Number of Children Referred to a Dental Home
FY10 - FY11	3	1822	1607	1351
FY12	3	508	483	296
FY13	14	5828	5682	4358
FY14	13	6527	6088	3552
FY 15	13	5408	4995	2865

Combined Preventive Services Impact In FY15, the combined preventive services "remote supervision" hygienist workforce provided clinical services with a market value exceeding $2 million in 14 VDH Health Districts. Value calculations, as determined by Current Dental Terminology Codes from the American Dental Association, include oral screenings (D0190) and assessments (D0191), dental sealants (D1351), education (D1330), topical fluoride varnish applications (D1206), and a limited number of child prophys (D1120).

Dental Health Education - Dental hygienists provided dental health education to a variety of customers in programs across the Commonwealth. Teacher, parent, and student education sessions were conducted in many schools to increase knowledge of the dental preventive services program, to motivate participation in the school-based programs, and to stress the importance of accessing preventive services in the community when available. Other venues included WIC clinics, preschool programs such as Head Start, and professional trainings for nurses and other health providers. Oral health education was provided to over 19,000 individuals in FY15.

Recommendations and Plans for FY16

The VDH remote supervision program fully supports the transition from dental clinical services to dental preventive services. As this report indicates, the remote supervision model has been a successful alternative method of delivery for safety net dental program services that has increased access for underserved populations. Increasing the availability of preventive services such as sealants and fluoride varnish has been proven to significantly reduce the dental disease burden, which is a priority need for those populations at highest risk. Preventive services can be provided to more individuals at a lower cost, with referrals to private community dentists for comprehensive diagnosis and treatment services. The potential for program sustainability improves as costs for delivering services are reduced with this model compared to those requiring a licensed dentist to examine a patient.

The interest and willingness of local schools to participate in prevention programs and the ratio of hygienist capacity to the population need will inform decisions about the number of full-time hygienists needed. Currently, participation in VDH school-based preventive services is voluntary for schools. Therefore, it will continue to be the mission of the DHP staff to educate schools and communities about the prevention resources VDH offers and the opportunities it can provide in the school setting.

Working with oral health stakeholders and professional providers in the community, continued expansion of the remote supervision program will facilitate broader prevention across underserved populations, while linking children to a dental home for treatment when needed. In addition, the VDH Dental Transition Plan notes that stakeholders have promoted the value of extending remote supervision to other providers serving underserved and challenged populations; such as hospitals and nursing homes, charitable safety net facilities, and Community Health Centers. Statutory authority would be required for broader implementation of these remote supervision practice models. On May 8, 2015, the Virginia Board of Dentistry (BOD) held an *Open Forum on Policy Strategies to Increase Access to Dental Treatment.* At that time, VDH summarized the remote supervision program's accomplishments to date and supported, as reasonable, the BOD's consideration for expansion of the remote supervision protocol to other safety net providers. VDH will closely monitor and, as appropriate, inform this process if it progresses from the concept stage. VDH shares with all Virginia oral health stakeholders the desire to employ prevention as one strategy for addressing dental care access issues. Quality, evidence-based school programs serving all low income children regardless of insurance status, as currently implemented by VDH and potentially others, will be needed for the foreseeable future to address significant health status disparities across the population.

VDH's goal continues to be the utilization of remote supervision hygienists to bring preventive services to targeted schools with significant numbers of under resourced families, developing and expanding child and infant interventions with a focus on fluoride varnish, and increasing establishment of dental homes in local communities for infants, children and adults.

Appendix A: Code of Virginia effective July 1, 2012

§ 54.1-2722. License; application; qualifications; practice of dental hygiene.

A. No person shall practice dental hygiene unless he possesses a current, active, and valid license from the Board of Dentistry. The licensee shall have the right to practice dental hygiene in the Commonwealth for the period of his license as set by the Board, under the direction of any licensed dentist.

B. An application for such license shall be made to the Board in writing and shall be accompanied by satisfactory proof that the applicant (i) is of good moral character, (ii) is a graduate of a dental hygiene program accredited by the Commission on Dental Accreditation and offered by an accredited institution of higher education, (iii) has passed the dental hygiene examination given by the Joint Commission on Dental Examinations, and (iv) has successfully completed a clinical examination acceptable to the Board.

C. The Board may grant a license to practice dental hygiene to an applicant licensed to practice in another jurisdiction if he (i) meets the requirements of subsection B; (ii) holds a current, unrestricted license to practice dental hygiene in another jurisdiction in the United States; (iii) has not committed any act that would constitute grounds for denial as set forth in § 54.1-2706; and (iv) meets other qualifications as determined in regulations promulgated by the Board.

D. A licensed dental hygienist may, under the direction or general supervision of a licensed dentist and subject to the regulations of the Board, perform services that are educational, diagnostic, therapeutic, or preventive. These services shall not include the establishment of a final diagnosis or treatment plan for a dental patient. Pursuant to subsection V of § 54.1-3408, a licensed dental hygienist may administer topical oral fluorides under an oral or written order or a standing protocol issued by a dentist or a doctor of medicine or osteopathic medicine.

A dentist may also authorize a dental hygienist under his direction to administer Schedule VI nitrous oxide and oxygen inhalation analgesia and, to persons 18 years of age or older, Schedule VI local anesthesia. In its regulations, the Board of Dentistry shall establish the education and training requirements for dental hygienists to administer such controlled substances under a dentist's direction.

For the purposes of this section, "general supervision" means that a dentist has evaluated the patient and prescribed authorized services to be provided by a dental hygienist; however, the dentist need not be present in the facility while the authorized services are being provided.

For the purposes of this section, "remote supervision" means that a public health dentist has regular, periodic communications with a public health dental hygienist regarding patient treatment, but such dentist may not have done an initial examination of the patients who are to be seen and treated by the dental hygienist and may not be present with the dental hygienist when dental hygiene services are being provided.

The Board shall provide for an inactive license for those dental hygienists who hold a current, unrestricted license to practice in the Commonwealth at the time of application for an inactive license and who do not wish to practice in Virginia. The Board shall promulgate such regulations as may be necessary to carry out the provisions of this section, including requirements for remedial education to activate a license.

E. Notwithstanding any provision of law, a dental hygienist employed by the Virginia Department of Health who holds a license issued by the Board of Dentistry may provide educational and preventative dental care in the Commonwealth under the remote supervision of a dentist employed by the Department of Health. A dental hygienist providing such services shall practice pursuant to a protocol adopted by the Commissioner of Health on September 23, 2010, having been developed jointly by (i) the medical directors of the Cumberland Plateau, Southside, and Lenowisco Health Districts; (ii) dental hygienists employed by the Department of Health; (iii) the Director of the Dental Health Division of the Department of Health; (iv) one representative of the Virginia Dental Association; and (v) one representative of the Virginia Dental Hygienists' Association. Such protocol shall be adopted by the Board as regulations.

F. A report of services provided by dental hygienists pursuant to such protocol, including their impact upon the oral health of the citizens of the Commonwealth, shall be prepared and submitted by the Department of Health to the Virginia Secretary of Health and Human Resources annually. Nothing in this section shall be construed to authorize or establish the independent practice of dental hygiene.

(1950, pp. 983-985, §§ 54-200.2, 54-200.4, 54-200.7 through 54-200.9, 54-200.11; 1968, c. 604; 1970, c. 639; 1972, cc. 805, 824; 1973, c. 391; 1975, c. 479; 1976, c. 327; 1986, c. 178; 1988, c. 765; 1990, c. 441; 1997, c. 855; 2002, c. 170; 2005, cc. 505, 587; 2006, c. 858; 2007, c. 702; 2009, cc. 99, 506, 561; 2011, c. 289; 2012, c. 102; 2013, c. 240.)

Appendix B: Protocol for Virginia Department of Health Dental Hygienists to Practice in an Expanded Capacity under Remote Supervision by Public Health Dentists

As authorized by law, the Virginia Department of Health is conducting a pilot program in three health districts, Cumberland Plateau, Lenowisco and Southside, to assess the use of dental hygienists employed by VDH in an expanded capacity as a viable means to increase access to dental health care for underserved populations. This protocol shall guide the pilot program.

Definitions:

- *"Expanded capacity" means that a VDH dental hygienist provides education, assessment, prevention and clinical services as authorized in this protocol under the remote supervision of a VDH dentist.*
- *"Remote supervision" means that a public health dentist has regular, periodic communications with a public health dental hygienist regarding patient treatment, but who has not done an initial examination of the patients who are to be seen and treated by the dental hygienist, and who is not necessarily onsite with the dental hygienist when dental hygiene services are delivered.*

Management:

- *Program guidance and quality assurance shall be provided by the Dental Health Program in the Division of Child and Family Health at VDH for the public health dentists providing supervision under this protocol. Guidance for all VDH dental hygienists providing services through remote supervision is outlined below:*
    - *VDH compliance includes a review of the remote supervision protocol with the dental hygienist. The hygienist will sign an agreement consenting to remote supervision according to the protocol. The hygienist will update the remote agreement annually attaching a copy of their current dental hygiene license, and maintain a copy of the agreement on-site while providing services under this protocol.*
    - *VDH training by the public health dentist will include didactic and on-site components utilizing evidence based protocols, procedures and standards from the American Dental Association, the American Dental Hygienists' Association, the Centers for Disease Control and Prevention, the Association of State and Territorial Dental Directors, as well as VDH Occupational Safety and Health Administration (OSHA), Hazard Communication and Blood Borne Pathogen Control Plans.*
    - *VDH monitoring by the public health dentist during remote supervision activities shall include tracking the locations of planned service delivery and review of daily reports of the services provided. Phone or personal communication between the public health dentist and the dental hygienist working under remote supervision will occur at a minimum of every 14 days.*

  - *VDH on-site review to include a sampling of the patients seen by the dental hygienist under remote supervision will be completed annually by the supervising public health dentist. During the on-site review, areas of program and clinical oversight will include appropriate patient documentation for preventive services (consent completed, assessment of conditions, forms completed accurately), clinical quality of preventive services (technique and sealant retention), patient management and referral, compliance with evidence-based program guidance, adherence to general emergency guidelines, and OSHA and Infection Control compliance.*
- *The protocol may be revised as necessary during the trial period through agreement of the committee composed of medical directors of the three health districts, staff from the Division of Dental Health and Community Health Services, and representatives from the Virginia Dental Hygienists' Association, Virginia Dental Association and Virginia Board of Dentistry. This committee shall meet and discuss program progress and any necessary revisions to the protocol at periodic intervals beginning July 1, 2009. The protocol and any revisions will be approved by the State Health Commissioner of VDH.*
- *No limit shall be placed on the number of full or part time VDH dental hygienists that may practice under the remote supervision of a public health dentist(s) in the three targeted health districts.*
- *The dental hygienist may use and supervise assistants under this protocol but shall not permit assistants to provide direct clinical services to patients.*
- *The patient or responsible adult should be advised that services provided under the remote supervision protocol do not replace a complete dental examination and that they should take their child to a dentist for regular dental appointments.*

Remote Supervision Practice Requirements:

- *The dental hygienist shall have graduated from an accredited dental hygiene school, be licensed in Virginia, and employed by the Virginia Department of Health in a full or part time position and have a minimum of two years of dental hygiene practice experience.*
- *The dental hygienist shall annually consent in writing to providing services under remote supervision.*
- *The patient or a responsible adult shall be informed prior to the appointment that no dentist will be present, that no anesthesia can be administered, and that only limited described services will be provided.*
- *Written basic emergency procedures shall be established and in place, and the hygienist shall be capable of implementing those procedures.*

Expanded Capacity Scope of Services:

Public health dental hygienists may perform the following duties under remote supervision:

- *Performing an initial examination or assessment of teeth and surrounding tissues, including charting existing conditions including carious lesions, periodontal pockets or other abnormal conditions for further evaluation by a dentist, as required.*

- *Prophylaxis of natural and restored teeth.*
- *Scaling of natural and restored teeth using hand instruments, and ultrasonic devices.*
- *Assessing patients to determine the appropriateness of sealant placement according to VDH Dental Program guidelines and applying sealants as indicated. Providing dental sealant, assessment, maintenance and repair.*
- *Application of topical fluorides.*
- *Providing educational services, assessment, screening or data collection for the preparation of preliminary written records for evaluation by a licensed dentist.*

Required Referrals:

- *Public health dental hygienists will refer patients without a dental provider to a public or private dentist with the goal to establish a dental home.*
- *When the dental hygienist determines at a subsequent appointment that there are conditions present which require evaluation for treatment, and the patient has not seen a dentist as referred, the dental hygienist will make every practical or reasonable effort to schedule the patient with a VDH dentist or local private dentist volunteer for an examination, treatment plan and follow up care.*

Approved July, 2009; Revised September, 2010, Signed by the State Health Commissioner September 2010