History, Status and Strategies to Improve Oral Health Program Infrastructure and Capacity in the U.S. Virgin Islands: A Needs Assessment Project

Report produced by the Association of State and Territorial Dental Directors

Original information 2019-2022; updated and revised in 2024

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I.Overview of the Project

Background

The Association of State and Territorial Dental Directors (ASTDD) successfully submitted a proposal to the Centers for Disease Control and Prevention with the Division of Oral Health (DOH) in June 2018 in response to CDC NOFO DP18-1811 *Partner Actions to Improve Oral Health* for a five-year Cooperative Agreement. ASTDD is a national non-profit organization representing staff of state and territorial public health agency programs for oral health and open to others interested in state/territorial oral health and dental public health. Organized in 1948, it is one of 20 affiliates of the Association of State and Territorial Health Officials (ASTHO). ASTDD's vision is **"**A strong and effective governmental oral health presence in states and territories to assure optimal oral health." ASTDD provides leadership to support state and territorial oral health programs, address health equity, integrate oral health into overall health, and promote evidence-based and evidence-informed policies and practices. Much of ASTDD's work is accomplished through committees, workgroups and consultants in partnership with organizations and federal agencies.

ASTDD funding from CDC is for Component 1 of the NOFO; this report focuses on Strategy 3, conducting assessments and providing technical assistance to U.S. territorial oral health programs primarily in Year One (9/1/18-8/31/19); CDC gave ASTDD permission to use some additional funding for follow-up in subsequent years**.** The objective for Strategy 3 of the

cooperative agreement was "to assess and report on oral health program infrastructure and capacity, identifying strengths, gaps and needs for the U.S. Affiliated Pacific Islands and the Caribbean islands of Puerto Rico and the U.S. Virgin Islands." This report focuses solely on the U.S. Virgin Islands (USVI). ASTDD provided coordination and technical expertise for Strategy 3 to the USVI primarily through the following individuals:

- Magda A. de la Torre, RDH, MPH, ASTDD Caribbean Project Consultant, UTHSC-SA Dental School Faculty and former Region X11 Head Start Oral Health Consultant
- Reginald Louie, DDS, MPH, Territorial Coordinator, ASTDD Public Health Consultant and former USPHS officer who oversaw Region IX family health services programs
- Beverly Isman, RDH, MPH, ELS, ASTDD Consultant and a former ME state dental director, CO dental school faculty and Indian Health Service NW Regional Prevention Coordinator
- Harry Goodman, DMD, MPH, ASTDD Consultant and a former MD state dental director.

The initial collaborators in the USVI were:

- Noreen Michael, PhD, Project Director, Community Foundation of the Virgin Islands (CFVI), University of the Virgin Islands (UVI)
- Janis M Valmond, MS, DrPH, CHES, Co-Project Director, CFVI, UVI
- LaVerne El Ragster, PhD, Sr. Research Associate, CFVI, UVI
- Deborah E. Brown, PhD, Research Associate, CFVI, UVI
- Gloria B. Callwaood, RN, PhD, FAAN, Research Associate, CFVI, UVI
- Mr. Moleto Smith, Executive Director, St. Thomas East End Medical Center
- Dr. Lucien Moleenar, DDS, MPH, previous USVI Dental Director, Dental Director, St. Thomas East End Medical Center
- Dr. Sonia Griffith, Pediatric Dentist, Children's Dental Care, St. Thomas, USVI
- Dr. Dale Manuel, Chief Dental Officer, Frederiksted Health Care, Inc., St. Croix, USVI
- Derval N. Petersen, DHEd, MAOM, previous Director, Maternal and Child Health with Special Health Care Needs (MCH and CSHCN) Programs, USVI Department of Health (DoH)
- Charmaine Mayers, PhD, Director, MCH and CSHCN Programs, USVI (DoH)

Additional contacts who provided later information were:

- Elizabeth Karmasek, RDH, MSDH, Dental Hygienist Liaison for the USVI to the Head Start National Center on Health, Behavioral Health,and Safety
- Jane Grover, DDS, MPH, Senior Director, Council on Advocacy for Access and Prevention (CAAP), American Dental Association (ADA)
- Astrid Palmer, RDH, BS,ASTDD Project Officer, CDC Division of Oral Health.

Approaches and Methods

Major activities used to accomplish Strategy 3 included:

- Identify and engage key stakeholders and subject matter experts to plan and

conduct assessment activities.

- Identify existing assessment instruments and other resources to assess USVI oral health infrastructure and policies.
- Assess, identify, summarize and report on oral health program infrastructure and capacity needs and gaps in the USVI in the context of other environmental and health factors.
- Provide recommendations for capacity building resources for oral health programs and activities in the USVI.

Numerous existing reports from CDC, the Health Resources and Services Administration (HRSA), ASTHO, the National Association of Chronic Disease Directors (NACDD), the ADA and other groups were reviewed for information that would inform the needs assessment. In partnership with the USVI DoH, key oral health contacts (and others) were identified on each island to inform the needs assessment. ASTDD established distance communications via video conferencing links through Zoom. Several meetings via Zoom were conducted prior to and after the face-to-face Strategy 3 meeting (see below).

ASTDD consultants developed assessment tools and table templates to collect information from the USVI, i.e., *Priority Oral Health Topics* and *Components and Characteristics of the Oral Health Environment*. See more details in Section III.

ASTDD planned and convened face-to face meetings to begin the needs assessment in the Fall of 2019. Meeting participants included representatives from the USVI DoH, MCH and CSHCN Program; CEOs and dental directors from the Community Health Centers in St. Thomas and St. Croix, primary providers of dental services including the only pediatric dentist in the USVI; and faculty from the UVI Caribbean Exploratory Research Center. At the time there was no USVI dental director at the DoH, and ASTDD had not had a consistent primary dental contact in the USVI for several years. The objectives, activities and intended outcomes of the Strategy 3 meetings were that the participants would:

- have a clearer understanding of the roles, responsibilities, expectations, and components of the ASTDD needs assessment project;
- identify a key contact person in the USVI for communication purposes;
- develop a plan to implement the needs assessment through asking key questions and collecting and sharing data, including identification of relevant partners;
- present descriptions of current programs and existing data, e.g., oral health status workforce, community support and funding, capacities/capabilities, and partnerships (public health, MCH and CSHCN, Women, Infants and Children, Non-Communicable Diseases, Community Health Centers, and Education/Head Start).

During the meetings each participant answered questions to aid in completing a draft of the *Characteristics of the Oral Health Environment* table. ASTDD provided comments on the submissions, and follow-up iterations were completed. Ms. de la Torre, ASTDD Caribbean Consultant, compiled and summarized the collected information into a draft report that was sent to stakeholders for review, comments, additions, and corrections.

(L to R) Dr. Lucien Moleenar, Dental Director, St. Thomas East End Medical Center; Magda A. de la Torre, ASTDD Caribbean Consultant; Mr. Moleto Smith, Executive Director, St. Thomas East End Medical Center; Ms. Lisa Canero, Assistant to Executive Director, St. Thomas East End Medical Center

(L to R) Magda A. de la Torre and Dr. Noreen Michael, Project Director, Caribbean Exploratory Research Center, CFVI, UVI

Prior to, as well as subsequent to the meetings, the USVI experienced catastrophic hurricanes that damaged infrastructure, including the health department offices, and then the COVID 19 pandemic began. Communication for more than two years was non-existent, resulting in significant delays in acquiring updates and completing this report.

In May 2019 the ADA president, Jeffrey Cole, met with members of the USVI Dental Association and others including the Governor and USVI Health Official to discuss the USVI's dental care situation and to draft a five-year strategic plan. ASTDD was not invited to this

meeting but Ms. Torre did have ZOOM meetings with the ADA staff, Jane Grover, later to discuss the plan and its goals as well as our needs assessment project; two of the goals in the plan mentioned developing an oral health surveillance system and securing technical assistance from ASTDD as well as pursuing recruitment and funding of a territorial dental director.

Starting in June 2021, through separate funding from HRSA for the Centers for Oral Health Systems Integration Initiative (COHSII) through the National Maternal and Child Oral Health Resource Center (OHRC), ASTDD consultants re-established contact and provided technical assistance to the USVI around their MCH Block Grant needs assessment and selection of a National Performance Measure on Oral Health in consultation with Dr. Charmaine Mayers, the MCH director. Dr. Mayers subsequently agreed to be the primary USVI contact for ASTDD. In 2021 ASTDD established a USVI webpage on the ASTDD website as part of the Territorial & Freely Associated Oral Health Programs portion of the website. In addition, ASTDD has since 2021 coordinated a Dental Hygienist Liaison (DHL) project through the OHRC and the Head Start National Center on Health, Behavioral Health, and Safety (NCHBHS) as part of their contract with the Federal Office of Head Start. ASTDD was able to identify a dental hygienist working in St. Thomas, Elizabeth Karmasek, to serve as the USVI Dental Hygienist Liaison (DHL); she subsequently has initiated oral health projects in Head Starts and reports her involvement on a quarterly basis.

In July 2022, new reports on the Primary Care portion of the USVI DoH website related to oral health surveillance and to dentist and physician workforce enabled ASTDD to connect with the Primary Care Director and the Health Officer. We offered to provide technical assistance to help them plan and implement an oral health surveillance system and to conduct Basic Screening Surveys (BSS). They also agreed to review our draft needs assessment report and update some of the information. By the end of the CDC-funded project in 2024 we had not heard back from them despite several attempts to connect.

II.Overview of the U.S. Virgin Islands

Geography

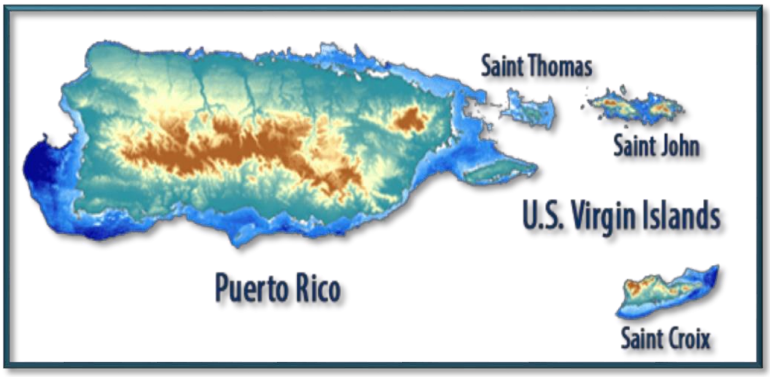


Figure 1-The major islands of the U.S. Caribbean-- Puerto Rico and the U.S. Virgin Islands

Geography and Weather

The USVI is comprised of four major Islands: St. Croix, St. Thomas, St. John, Water Island, and approximately 50 small, mostly uninhabited islands in the Caribbean Sea at the eastern end of the Greater Antilles and the northern end of the Lesser Antilles. The islands are 1,600 miles south southeast of New York, 1,100 miles east southeast of Miami, and 43 miles from Puerto Rico. Currently, the USVI uses the Atlantic Time Zone with no daylight savings time due to its close distance to the equator.

Only three of the islands are of economic or clinical significance to the needs assessment. The largest in size, St. Croix, is 84 square miles, mostly flat and, therefore, the most suitable for intensive industrial and agricultural development. St. Croix has two main towns, Christiansted, the larger of the two on the east, and Frederiksted, the smaller on the west.

St. Thomas, lying forty miles due north of St. Croix, is a major cruise and tourism destination and differs in both economic and geographic structure. St. Thomas is approximately 32 square miles with rugged mountains that rise sharply from the sea to heights of up to 1,500 square feet. The population density is more than twice that of St. Croix. Charlotte Amalie, the capital, is located on the southeast quadrant of St. Thomas.

St. John is 20 square miles and lies approximately four miles east of St. Thomas, with picturesque hills and pristine waters. More than half the island is designated as a National Park through the U.S. National Park Service, which has served to preserve much of this island's natural beauty. St. John is only accessible by boat; the main town of Cruz Bay is centrally located.

The fourth isle is Water Island, transferred from the Department of Interior in 1996. It is 2 ½ miles long and 2 miles wide with an area of 500 acres. Water Island is separated from St. Thomas by 2 miles. It is primarily residential with less than 200 residents and no significant commercial establishments.

The position of the islands with the Atlantic Ocean to the north and the Caribbean Sea to the south make these beautiful islands vulnerable to storms and hurricanes every year, especially between June and November.

The Caribbean region, including the USVI is susceptible to multiple natural hazards such as earthquakes, volcanic eruptions, tropical storms and hurricanes. In September 2018, marking the one-year anniversary post Hurricanes Irma and Maria, the Government released an extensive hurricane recovery report outlining the cumulative effects of the storms in damages to infrastructure and systems. The report spoke to underlying factors that compounded damages and provided a guide toward long-term recovery efforts intended to strengthen infrastructure and systems throughout the USVI. The following updates are cited from the USVI Hurricane Recovery and Resilience Task Force report as a baseline summary of the situation in the USVI at the beginning of the project.

The storms severely damaged the islands' critical infrastructure, knocking out electricity and telecommunications for months, blocking roads, shutting down ports and airports, damaging

water and wastewater facilities, generating hundreds of thousands of tons of debris, and damaging more than half the USVI's housing. Total damage was estimated at $10.7 billion: $6.9 billion to infrastructure, $2.3 billion to housing, and $1.5 billion to the economy.

Specific damage included:

Energy: More than 90 percent of aboveground power lines were damaged and more than half of all poles were completely knocked down. Customers on all three large islands experienced total service outages, most for at least several weeks. More than 90 percent of customers who could accept power were restored by January 1, 2018.
Transportation: Airports on St. Croix and St. Thomas closed for two weeks and reopened with only limited capacity. Seaports closed for three weeks due to the sinking of more than 400 vessels; roads blocked with debris and the loss of power to traffic lights—or the lights themselves—resulted in more than a sevenfold increase in crashes at intersections.
Housing: 52 percent of all housing was damaged (12 percent damaged severely); renters and low- and moderate-income (LMI) households were disproportionately affected. Senior centers were closed and homes for the elderly were damaged.
Health: Both main hospitals were severely damaged to the point of becoming nonoperational for most services; total daily inpatient capacity across the USVI was down 50 percent and hundreds of patients were evacuated to the mainland and have been unable to return because services such as dialysis and cancer treatments are no longer available.
Education: All public schools closed for more than a month, with 17 of 31 schools more than 50 percent damaged. Once open, most public schools operated on split sessions until the end of the academic year, and private schools saw steep enrollment drops.
Economic impacts: Hotel reservations saw a 78 percent drop in December 2017 compared to a year before; by June 2018, major airlines were still reporting a 43 percent drop in flight seats available compared to a year before. There were 4,300 additional jobless claims after the storms, with roughly 8 percent of all jobs lost, comparatively marking the third worst job loss from a U.S. hurricane in the last 30 years.

Since 2017 there have been 13 hurricanes or tropical storms that touched land on some part of the USVI. The most severe hurricane to make landfall on the Virgin Islands in the past 12 months was Ernesto. It reached a wind speed of up to 117 km/h on August 14, 2024 at 5:00 am local time near Charlotte Amalie and was 82 kilometers in diameter at the time.

Political Status

The United States purchased the islands from the Danish in 1917. Pursuant to the Revised Organic Act of 19354, the USVI is an unincorporated territory under the jurisdiction of the President of the United States. Residents are citizens of the United States. There are three separate branches of government: executive, judicial, and legislative. The USVI is governed by an elected Governor, with a non-voting Delegate to Congress (who can sit and vote in committee, however) and a fifteen-member Legislature with senators from the three major islands. Judicial power is vested in the District Court, the Supreme Court, and the Superior Court of the Virgin Islands. Policy relations with the U.S. government are under the jurisdiction of the Office of Insular Affairs.

Population, Race and Ethnicity

The USVI population according to the 2020 Census was 87,146 with 42,343 males (48.6%) and 44,803 females (51.4%). Most of its population is concentrated around Christiansted on St. Croix and Charlotte Amalie on St. Thomas. In 2020 there were 41,004 residents on St. Croix, 42,261 on St. Thomas, and 3,881 people living on St. John. This corresponds to an 18% decrease from the 2010 U.S. Census population of 106,405, mostly after major events such as the closure of the St. Croix Hovensa-owned refinery in early 2012 and hurricanes. It has continued to decline since then. The Black or African-American population was the largest race group with 62,183 people identifying as such. More than 5,500 others identified as Black or African American alone or in combination with another race group such as White. The White population identified 11,584 people with the designation alone. The district of St. Thomas/St. John holds the highest percentage of people of African descent, while St. Croix holds the highest percentage of Hispanics, whose place of origin is more often nearby Spanish-speaking islands such as Puerto Rico or the Dominican Republic. The Hispanic or Latino population was 16,075. Other groups identified as Asian, American Indian, Alaska Native, Native Hawaiian and Other Pacific Islander.

Children ages 0-17 accounted for 19.6% of the population, with 21.3% of the population ages 65 or older and 1.8% ages 85 or older. The median age of the population was 45.9 years. Among the population 5 years and older in households, 30.2% spoke a language other than English at home; of those, 70.3% spoke English “very well” and 56.9 spoke Spanish, 29.3% spoke French Creole, and 13.8% spoke a language other than Spanish or French Creole. The majority (50.6%) of the 21,759 family households were married couple families. Among family households, 8.6% were multigenerational. An estimated 8.8% of households were led by a female with no spouse or partner present and children who were under 18 years old. Nearly three-quarters (73.3%) of women ages 15 and older had ever given birth.

Infrastructure and Economy

The USVI’s location and infrastructure allows it to be a strategic market access for the U.S. mainland, Latin America, Asia, and Europe. Despite the hurricanes, it has one of the most modern, well-paved roads and highway systems in the Caribbean, two international airports on St. Croix and St. Thomas, and natural deep-water ports for shipping. There are modern telecommunications systems for domestic and international communication, but the hurricanes and COVID-19 pandemic have moderated overall progress towards improving the telecom industry. There is 100% sanitation facility access. There is limited municipal infrastructure for providing drinking water and treating wastewater. Fewer than 25% of USVI households are connected to a municipal water system and 95% of USVI residents collect rainwater and store it in cisterns for household use. This has implications for instituting water fluoridation. The USVI has several challenges in providing access to quality drinking water, including limited ground-water resources, a unique climate, and a lack of municipal infrastructure. The groundwater resources are limited and generally don't meet drinking water standards. Groundwater is contaminated by fecal coliform and fecal streptococci bacteria and has high concentrations of nitrogen.

In its role as the local watershed management agency, Coral Bay Community Council (CBCC) enables cooperation among a diversity of partners. Through quarterly conference calls as well as periodic workshops and training events with professional stakeholders and government agencies, CBCC brings different sectors together to address wastewater pollution and drinking water issues in the USVI. The July 2023 workshops were attended by more than 110 participants. Content covered 1) water quality and wastewater effluent testing and monitoring; 2) regulations related to wastewater and drinking water; drinking water treatment and disinfection methods and issues; and operation, maintenance, and best management practices for residential water and wastewater systems. CBCC also hosts a quarterly conference call focused on USVI watershed issues to encourage collaboration efforts and provide updates on various agencies' projects and activities. More than 130 organizations are on the invite list and call participation averages around 20-30 individuals.

Median household income decreased from $44,499 (in 2019 inflation-adjusted dollars) in 2009 to $40,408 in 2019. In 2017, the Virgin Islands Bureau of Economic Research (VIBER) reported that the major areas of employment were the Government of the Virgin Islands, services, leisure and hospitality and the retail and wholesale trade. Tourism is significant to the economic foundation of the USVI. Despite the lingering effects of the 2017 hurricanes, the territory welcomed 1.94 million visitors and received $1.0 billion in tourist-related revenue in 2018. The number of jobs in the leisure and hospitality sector, which benefits most directly from tourism, declined dramatically following the hurricanes but still accounted for 13 percent of total nonfarm payrolls in the territory during the 12 months ending July 2019. Tourism was then virtually brought to a standstill during the COVID pandemic. A majority (78.3%) of the population ages 25 and older in households were high school graduates and 22.3% held a bachelor's degree or higher. Business was the most common field of study for those with a bachelor's degree. Because of the disruption caused by the COVID pandemic, economic and housing data from the 2020 census could not be collected from the population living in group quarters so no data were available on those living in potential poverty in multi-family dwellings. There were 84,766 people in households; most (52.2%) rented while 47.8% owned their homes. Medium home value was $290,600 and medium monthly rent was $926. Nearly one-quarter (22.8%) of the population in households had income below the poverty level. Among households, 58.3% had a desktop or laptop computer, 88.6% had a smartphone, and 45.6% had a tablet or other portable wireless device. A majority (79.2%) had a broadband internet subscription but could not always count on it working.

Demand for sales housing, particularly by non-residents, declined dramatically following the hurricanes but has since resumed. Supply remains limited, however, with some severely damaged homes for sale yet to return to the market and many others being converted to rental units in response to tight rental market conditions. As a result, the inventory of homes for sale declined in the territory and prices increased during the past year. Relatively low incomes, high construction costs, limited developable land, and strong demand by non-residents of the territory seeking to buy a home have contributed to an ongoing affordability problem. Homeownership is also limited by significant financing barriers such as homeowner's insurance, which was about four times more expensive than in the states before the hurricanes and is estimated to have increased as much as 20 percent since the hurricanes. The high cost of living and relatively low wages make subsidized and other low-income rental housing extremely important in the USVI.

Subsidized housing accounted for 25% of the total rental inventory.

Education

The public education system sustained significant disruption from hurricanes Irma and Maria in 2017. Opening for some schools was delayed because they were used as shelters, schools were deemed condemned, and the facility that housed the school lunch program was destroyed. Virgin Islands Department of Education (VIDE) saw a reduction in enrollment in school year (SY) 2017-2018 for a total enrolment of 10,868. The reduction in enrollment continued during SY 2018-2019. VIDE reported 10,718 students enrolled in 25 public schools in the VI: 5,593 in 16 elementary schools, 1,716 students in 5 junior high schools and 3,409 students in 4 high schools. Enrollment in pre-kindergarten through ninth grade has declined slightly since then while high school enrollment has remained relatively stable. In 2020 38.8% of residents older than or equal to 25 years had at least a high school diploma.

The onset of the Covid-19 pandemic in March of 2020 caused the VIDE to restructure the 2019-2020 school year. VIDE suspended in-person teaching and implemented remote learning. Computers and internet devices were distributed to students in need of these items. Priority was given to 12th grade students earning less than a 70% GPA requirement as of March 17, 2020. Online educational platforms remained accessible through the end of the school year to allow students the opportunity to improve their grades. VIDE consolidated breakfast and lunch distributions in its "No VI Child Goes Hungry Initiative." In an effort to stop the spread of the virus, all school activities were cancelled including sports activities and prom, and a virtual graduation was held for graduating seniors. In 2022 there were 10,166 students and 888 teachers in 21 schools in the USVI.

There is now only one Head Start Program, administered by the Department of Human Services, serving 794 preschoolers on the islands of St. Croix, St. Thomas, and St. John. Lutheran Social Services of the Virgin Islands administers the Early Head Start Program that serves 120 infants, toddlers, and pregnant women on the island of St. Croix.

The Virgin Island Infants and Toddlers Program (ITP) is a USVI wide, family-centered, multidisciplinary system of early intervention services for infants and toddlers from birth through two years of age who have disabilities or developmental delays. The program is administered through the Department of Health and fully funded by Part C of the Individuals with Disabilities Education Act. The last available annual report (2021) indicated that the percent of infants and toddlers with IFSPs who primarily receive early intervention services in the home or community-based settings was 78.7% territory-wide, 97.29% in St. Croix, and 38.23% in St. Thomas.

The University of the Virgin Islands (UVI) is a public historically black land-grant university with campuses on St. Thomas and St. Croix. St. John, the northernmost island of the USVI currently has no college campus on the island. Residents of St. John wishing to attend the UVI are required to travel by ferry to the island of St. Thomas to attend classes. Funds were raised for the construction of a learning center in St. John. The St. John Academic Center (STJAC) contains four classrooms, a library, and a computer lab. Students can attend class via video conferencing technology to prevent travel off the island as frequently. Individual and group study spaces also are available. In addition, the STJAC provides the entire St. John community with

access to the Small Business Development Center, access to the general library and Wi-Fi networks, and conference rooms for meetings. The university has five academic divisions: Business, Education, Humanities and Social Sciences, Nursing, and Science and Mathematics. UVI offers various graduate degree and undergraduate degree programs including a Master of Public Administration. The legislature also chartered the UVI Research and Technology Park to help expand the technology segment of the islands' economy, encourage more businesses to operate on the islands, and foster technology research and activities at the university.

Health Insurance

Economic changes have led to changes in healthcare insurance coverage. As reported in 2020, the number of individuals without insurance was 20,825 (24.6%). Of the 63.805 insured persons, 46.6% had private health insurance and 37.2% had medical assistance. The proportion of USVI uninsured persons in 2020 was almost three times the U.S. national estimate. Medicaid, also called Medical Assistance Program (MAP) in the USVI, is based on income and an asset test designed to make adequate health care available to children and adults who are unable to meet the cost of their medical need. Clients receive assistance paying for doctor visits, custodial care costs, hospital stays, hotel accommodations and airline cost and more. The poverty threshold to qualify in the USVI is significantly below that of the national average, creating barriers to receiving health services. In the USVI, the Children's Health Insurance Program (CHIP) falls under the MAP. All CHIP services are free including doctor visits and check-ups, vaccinations, hospital care, dental and vision care, lab services, X-rays, prescriptions, and emergency services. The USVI has also implemented Presumptive Eligibility (PE) as another means to enroll in Medicaid/CHIP Programs. The PE process allows uninsured individuals who need medical care to be temporarily determined eligible by certain providers when they appear at the facilities. PE allows persons to complete a brief PE application and self-attest to all information on that application and be immediately determined eligible if they qualify, and receive services immediately paid for by the Medicaid and CHIP program. USVI enrollees do not have the freedom of choice to go to any provider as Medicaid enrollees do in the states. Due to the Medical cap imposed by Congress, USVI residents are not eligible for the Supplemental Security Income (SSI) Program, which provides assistive devices, therapeutic or rehabilitative services beyond acute care to children under the age of 16 with disabilities. The MCH Title V program provides these services on a limited case by case basis.

The Affordable Care Act does not extend to the USVI, resulting in the absence of companies offering individual health insurance leaving as much as 30% of the population uninsured. Just in 2024 the governor was able to enlist Optimum Global Insurance Company to provide services related to medical expenses, travel, life and personal accident risk. OGIC will offer three different plans, Essential, Standard and Superior. There are varying levels of coverage for outpatient care, and individuals would have the option to purchase maternity and dental coverage. There are several group insurance plans available.

Public Health and the Health Care Delivery System

The USVI health care system consists of two semi-autonomous hospitals, nursing homes, outpatient clinics, home health care services, hospices, healthcare providers, and health educators among others. The VIDOH serves the community as both a local and state health department

through two major divisions – Public Health Services and Health Promotion & Statistics. The Department is the sole state agency responsible for coordinating and providing a focal point for territory wide public health efforts on behalf of Virgin Islanders and visitors. VIDOH's mission is to provide quality health care, regulate, monitor, and enforce health standards to protect the public's health. Unlike state health departments on the U.S. mainland, VIDOH provides health services in three community health centers. In addition, the department has nine boards that license and regulate health care professionals. The central office is located on St. Thomas.

VIDOH has direct responsibility for conducting programs of preventive medicine, including special programs in MCH, Family Planning, Environmental Sanitation, Mental Health, and Drug and Substance Abuse Prevention. DOH also is responsible for health promotion and protection, regulation of health care providers and facilities, and policy development and planning, as well as maintaining the vital statistics for the population.

The three main facilities for primary care services are MCH & CSHCN Clinics, PHS 330-Community Health Centers, and hospital-based Community Health Clinics. On St. Thomas MCH's principal facility is located in the western district, the Community Health Clinics at the Roy L. Schneider Hospital serve the mid-island district, and the East End Health Center is in the east district. On St. Croix, the Frederiksted Health Center is in the western end of the island, and the MCH & CSHCN principal facility is located in the east at Charles Harwood Complex. On Cruz Bay, St. John, the Morris De Castro Clinic is the site for the MCH & CSHCN monthly Infant/Pediatric high-risk clinic.

The governance of the 330-funded community health centers is under the authority of governing boards. The health centers are incorporated as not-for-profit entities. Both 330 health centers are private corporations independent of the Department of Health. The Frederiksted Health Center (FHC) serves approximately 25,000 in four sites, two in Frederiksted and two in Christiansted; laboratory services and pharmaceutical services are provided onsite. In addition, FHC services include dental care for about 1367 patients per year in Christiansted. The facility is partially federally funded under a Section 330 Rural Health Initiative and Ryan White Title III - Early Intervention Services Grant Program and partially locally funded through the Virgin Islands Government.

The St. Thomas East End Medical Center Corporation (STEEMC), established in 2000, is the only private, non-profit FQHC that serves all persons in the St. Thomas/St. John community, and is a National Health Service Corps site. Demographic statistics show the center is marked by a substantial representation of young women and children; the characteristic patient mix includes immigrants from other Caribbean islands and elsewhere who are often estranged by linguistic and cultural barriers. STEEMC serves the medically underserved population of approximately 24,000, primarily providing primary and preventive health care. These services include medical primary care, walk in services, oral health care, psychiatric referrals, HIV testing and counseling, pediatrics and prenatal care, hypertension, cholesterol and diabetes screening and counseling, family planning services, breast and cervical cancer screening and prostate testing. Ob-Gyn care includes gynecological care, prenatal care, antepartum fetal assessment, referral for ultrasounds, genetic counseling and testing, and postpartum care. Oral health care services include preventive, restorative, and emergency care based on the availability of providers.

The Virgin Islands Central Cancer Registry was established in 1999 and currently collects information from several sources: hospitals in St. Thomas and St. Croix, pathology laboratories (in island and off island), hospice care centers, ambulatory surgery centers, free-standing chemotherapy clinics, and physicians. The Cancer Registry also has agreements with mainland states to obtain information on USVI residents who are diagnosed with or receive treatment for cancer in those states. In September 2017, with the VICCR working toward its first ever data submission, two Category 5 Hurricanes, Irma and Maria, devastated the USVI within two weeks of each other. The VICCR office at DOH headquarters on St. Croix was destroyed by Hurricane Maria. On January 31, 2018, four months after the hurricanes ravaged the USVI, the VICCR submitted, for the first time ever, a cancer incidence file to NPCR, beginning the process to identify the burden of cancer in the Virgin Islands. In 2017, cancer remained the second leading cause of death in the Virgin Islands with 115 deaths reported. The top three cancers among Virgin Islands men were prostate (100 cases or 49 percent), colorectal (18 cases or 8.8 percent), and hematopoietic (14 cases or 6.9 percent). Male incidence totaled 204 in 2017. Among Virgin Islands women, the top three cancers in 2017 were breast (57 cases or 39.9 percent), uterus (14 cases or 9.8 percent) and colorectal (11 cases or 7.7 percent). Female incidence of cancer totaled 143 in 2017. Cancer facts in later years, and especially for oral cancer, do not appear to be publicly available on the DoH website.

The Virgin Islands Diabetes Prevention and Control Program (VIDPCP) strives to implement public health prevention and control strategies that will improve the quality of diabetes care and education for all Virgin Islanders as well as increase the awareness of diabetes, its symptoms, its complications, and its risk factors through a broad range of public health activities. In the 2021–2022 BRFSS, 437 of 2,706 people (16%) responded that they had ever been told by a health care provider that they have diabetes. Small area estimates noted St. Croix diabetes prevalence was estimated as 16%, St. Thomas and Water Island at 17%, and St. John at 9%; the highest model-based prevalence estimates were for West End (28%) and Tutu (26%) subdistricts, both on St. Thomas. Diabetes has a strong effect on oral health conditions.

Since 2011, the Virgin Islands Smoke-Free Act prohibits smoking in virtually all workplaces, including restaurants and bars. The law reflects the commitment of many in ensuring that workers and the public are protected from secondhand smoke. The Virgin Islands tobacco and nicotine use rates could not be found from recent years searching on the internet. Tobacco smoking is a strong social determinant of oral health. In 2016, 5.6% of USVI adults reported current tobacco smoking, which was one of the lowest percentages in the nation and lower than the Healthy People 2020 target.

III. Oral Health Environment in the U.S. Virgin Islands

Purified bottled water with added fluoride found in large grocery and discount stores throughout the more populated areas of the USVI

Assessment Tools

The ASTDD consulting team reviewed numerous existing needs assessment formats and survey tools, including the *ASTDD State Synopses* for possible use. The U.S. territories do not complete the *State Synopses*. Because the USVI health department programs are more clinically focused and function similar to local health departments or community health centers rather than state government oral health programs, the team decided that existing tools were insufficient. We subsequently made a list of potential topics and data elements that might prove useful for the needs assessment.

ASTDD developed two assessment tools and templates, *Priority Oral Health Topics* and *Components* and *Characteristics of the Oral Health Environment* with input from stakeholders with the focus on the public sector including community health centers that are private corporations. With these templates, information was collected from the USVI on their oral health infrastructure strengths, weaknesses/gaps/challenges, and opportunities within six components: [1] oral health needs/demands; [2] dental care delivery sites; [3] funding for the

USVI oral health program and community-based prevention services; [4] workforce (current staffing and those in the "pipeline"); [5] policy mandates; and [6] partnerships and collaborations. The form itself, however, was not used and shared because of the multiple meetings and because there was no governmental oral health program or director. The information in this section is based on the *Components and Characteristics of the Oral Health Environment* tables aggregated into some common findings and opportunities. Additional information and recommendations have been added by ASTDD consultants and others based on additional information since the stakeholder meetings and recent updates from several sources.

Summary of Challenges and Potential Opportunities

1. Infrastructure, Geography, Economy, Demographics

The USVI's geographic location brings much climatic instability and natural disasters to the islands. Three-fifths of the USVI's gross domestic product is accounted for by tourism, trade, and service industries. With changes in air arrivals and tourism after the 2017 hurricanes, the pandemic, and recent hurricanes, a general downward trend in the economy has also impacted the service industry, which includes dental care and public health. Unemployment also varies considerably. The Covid-19 pandemic and the hurricanes have shown how vulnerable the USVI economy is to external threats and emphasized the volatility of its real economic growth and reliance on its infrastructure. Many government offices and all types of healthcare businesses were affected and closed for periods during the storms and pandemic**. Such economic volatility impacts the oral health workforce and the prevalence and sustainability of employment in both the private and public sector. This makes it more difficult to recruit, train, and sustain oral health professionals from the USVI, relying often on dentists and others from the mainland who only work sporadically, may see many tourists, and may not have a vested interest in the community.**

The Virgin Islands Department of Public Works team continues to try to secure funding from grants and redesign/rebuild roadways across the USVI to withstand damage from future storms and hurricanes. However, full recovery is ongoing and costly. Transportation among the islands is limited at times for ferries and airplanes. Ferries travel to/from St. Thomas to St. John and Water Island, and airlines to/from St. Thomas to St. Croix. **These transportation challenges pose additional barriers to people trying to access oral health services and dental care and, in tandem with bad weather, may interrupt appointments. Few home care or teledentistry options seem to exist to serve as an option to traveling from home or to other islands.**

The CCBC is attempting to coordinate watershed management in the USVI and brings together more than 130 organizations for workshops and conference calls. **This agency and its partners should be coordinating all issues affecting fluoridation and work with dental professionals to discuss effective alternatives to community or school fluoridation for various population groups.**

The percentage of residents who were age 65 or older increased while the percentage of children and young adults (under 20) decreased somewhat. Of grandparents living in households with their grandchildren under the age of 18, 34.9% were responsible for their basic needs, most for more than five years. In 2020 only 7.3% of children were enrolled in nursery or preschool. **This is important because the USVI's future oral health initiatives should increase focus, which is currently lacking, on maintaining the health of the older populations, especially grandparent caregivers, including identifying and addressing any oral health issues created by oral neglect or new chronic diseases, giving them more education, information about caregiving strategies and about oral health.**

Around 29.6% of USVI children in 2015 lived in poverty, of whom the majority lived in families of single-parent (mostly female-headed) families. In 2020 about 23% who still lived in the USVI fell below the poverty line. A large percentage of the children lived in families that receive benefits from public programs such as the Temporary Assistance for Needy Families (TANF), Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and Supplemental Nutrition Assistance Program (SNAP). **Pregnant women and young children should also be a primary audience for home oral care information and preventive oral care, especially through MCH and WIC staff and funding.**

2. Dental Care

2016 BRFSS data for the USVI show that 55% of respondents visited a dentist in the past year, while 69% visited within the last two years. However, only 35% indicated they had all their permanent teeth intact, while 4% report having lost all their teeth; 44% reported losing at least 1 tooth and up to 5 permanent teeth by decay or gum decay, while 17% reported having 6 or more, but not all, of their teeth removed. As of this report there has been no BRFSS survey since 2016 due to the hurricanes and COVID so self-reported oral information is not available.

Disruptions caused by the multiple natural disasters and the downturn in the economy significantly impacted people's ability to afford, access and receive care in a timely manner. Most private dental care in USVI is expensive for its residents, leading to medical tourism to neighboring islands for more affordable dental care. One USVI consultant found that 60% of dental services were for adults, of which 92% was paid for implants or crowns. **Most of the treatments were targeted towards the last line of treatment restorations instead of the first line of defense treatments that could be used towards saving or maintaining healthy teeth in children and adults.**

The markup in costs of dental materials and equipment sold to dentists on the USVI from dental supply companies resulted in dentists buying and shipping their equipment to someone they know such as a relative or friend on the mainland U.S. From there, the equipment is shipped to the USVI. **This makes it difficult and takes more time for offices to get the supplies they need to provide care. It is unknown how many people are trained to make equipment repairs and the process for doing so.**

3. Public Oral Health Care Delivery Sites

Dental services that were available at clinics administered by the DoH were suspended in 2011 and have not resumed to our knowledge. The FQHCs have been filling the gaps in dental services and provide examinations, fluoride applications, fillings and extractions to the children and families who have Medicaid and who are underinsured or uninsured. The School Based Preventive Program was discontinued due to the resignation of the dentist at the start of 2010 and the position has not been filled to date. **These closures need to be addressed by the legislature to provide adequate funding to the DoH.**

According to the initial site visits, there are two main dental community health centers in USVI, Frederiksted Health Center (FHC) in St. Croix and St. Thomas East End Medical Center (STEEMCC). FHC and STEEMC could not handle all the dental patients who live in their respective communities, creating long waitlists. FHC was set up as 3 sites with 9 operatories for its 5 dentists and 3 hygienists, handling up to 18,000 visits per year, with up to 4,000 people waiting for service before 2019. These centers have increased the number of dental patients they serve. FHC served 3,909 dental patients in 2019, 13% more than in 2017, while STEEMCC served 2,631 patients in both St. Thomas and St. John, 61% more than in 2017. Even though it expanded to 5 sites in the summer of 2019, it needs to handle up to 200,000 visits per year, showing its need for continued expansion. As of August 2019, the island of St. John did not have its own open dental public health clinic. Although a new woman's clinic was opened recently, St. John's dental operatory was shuttered with old equipment. A new private clinic providing full services opened in the summer of 2020. **Getting a handle on actual treatment of patients by each clinic and the demand for care from residents is difficult to locate. Those data need to be coordinated and publicly displayed.**

The Office of Preschool Services administers the Head Start program, which serves more than 78% of low income 3-4-year-olds in the USVI and is supposed to arrange for comprehensive dental care and follow-up. Screenings were done through STEEMCC, but record-keeping and follow-up were inadequate. **With the NCHBHS DHL providing technical assistance to Head Starts in the USVI, it is hoped that some of these issues are being addressed. Her acquiring oral health donations for the centers has provided more preventive materials for families and classrooms, sometimes in collaboration with other programs such as the Kiwanis.**

4. Funding for Public Health Oral Health Programs and Services

In the 2016 BRFSS data survey, 51% of the adult respondents reported they have health coverage through Medicare, which does not yet cover dental insurance. The Medicaid program is structured so that beneficiaries must first go through a centralized process where they must travel to the main public centers of FHC and STEEMCC to be assessed before being referred to private practice. In 2018 patients who needed treatment must call the central scheduler for an appointment. If patients skipped this process and scheduled directly with the dental office of choice, they would not be reimbursed for care. Program benefits were not means tested and there was no standardized dental fee schedule. There is a lack of dental coordination in timely referrals and reimbursements to dental offices. **Revamping the Medicaid program is a high priority for the USVI.**

5. Workforce

There is no Territorial Dental Director in the USVI DoH. Because the DoH in the USVI operates as 2 separate health districts, one in St. Croix and the other in St. Thomas/St. John/Water Island, instead of the traditional local public health system with separate local public health departments, assessments are done more territorially. **A qualified dental director needs to be hired to coordinate dental public health activities.**

There was only one pediatric dentist in the USVI at the beginning of this project. She split her time working between St. Thomas and St. Croix. She was also the director of the Virgin Islands Dental Association. It is unknown what the availability of credentialed pediatric dentists is in 2024. **To increase productivity, more pediatric dentists are needed on the USVI with a better system for triaging children in need of care by pediatric dentists instead of general dentists. More training for general dentists in treating pediatric patients also is needed as welll as appropriate screening and referral processes for other healthcare professionals.**

The USVI is designated as a geographic high-needs dental health professional shortage area. In 2019, there were a total of 78 dentists and 32 dental hygienists licensed in the USVI. However, according to the Area Health Resources File, there were only 10 active dentists on St. Croix, 19 active dentists on St. Thomas, and none on St. John; 42% of the USVI's territory-funded and 30% of the DOH's federally-funded public health positions were vacant. **Long-term vacancies of such positions affect the USVI's ability to provide core public health services.**

A 2020 Workforce report noted the following characteristics about dentists in the USVI:

- 81 dentists responded to the licensure and renewal survey; 63 were actively licensed but only 40 were "actively practicing" in the USVI; only 16 practiced 31-40 hours, 13 practiced between 11 and 30 hours, and 9 practiced 1-10 hours per week; in the next 3-5 years,75% of dentists planned to maintain their practices as is and another 17% planned to expand; none planned to retire.
- 26 were general dentists (includes pediatric dentists), while 14 are in other specialties (specialty wasn't included).
- 72% of dentists were male.
- 27 dentists were over age 50, with the other 13 between ages 25 and 50.
- 18 dentists were White Non-Hispanic, 13 were Black/African American, 1 was Asian, 5 were Hispanic and 3 classified themselves as Other.
- 18 dentists practiced on St. Croix and 20 on St. John and St. Thomas.
- Most dentists were accepting new patients but only 14 were accepting Medicaid patients; most dentists reported that only 0-5% of their patients were covered by Medicaid.
- No USVI dentists reported using American Sign Language or offered telephone or video language interpretation services.

(Source: Moore D, Choi Y, Armstrong D. *United States Virgin Islands Physician and Dentist Workforce Profile, 2020*. Rensselaer, NY: Health Workforce Technical Assistance Center, Center for Health Workforce Studies, School of Public Health, SUNY Albany; March 2022.)

The Medicaid credentialing process for providers is burdensome and long, discouraging private dentists from participating in the system. Some dentists who have applied to the program waited longer than a year to get a response because of problems with bureaucracy. Payments to dentists for services can take 4-5 months. **This process needs to change.**

In the year 2020, no dentists or dental hygienists were assigned to the USVI as a part of the National Health Service Corps program. There is no dental school in the USVI; the closest is in Puerto Rico. There are also no programs to train dental hygienists and dental assistants and no resident faculty to provide critical continuing education or mentoring to the USVI's oral health sector. **Local progress for obtaining dental health workers or dental assistance should be established with a dental hygienist program created either in the USVI or in Puerto Rico. The current availability of ZOOM courses and webinars from several sources should create opportunities for CE or online MPH and other degrees.**

The healthcare workers on the USVI perceive dental and medical systems as two separate parts. Therefore, it has been harder to gain support and cooperation from medical workers on the USVI for oral health advancement. However, the parents of children on the USVI are slowly changing this attitude because of their high satisfaction with topical fluoride varnish and ease of making appointments with dental hygienists in the pediatric departments. **Medical-dental integration/appreciation efforts need to be enhanced in all sectors.**

6. Policy Mandates

Bill 32-0326 to allow for dental therapists to work in the USVI was vetoed in 2019, preventing further expansion of oral health team members who can work in the territory. Although the USVI has a law for fluoridated public water, it currently has no fluoridated water. However, only 30% of the residents drink public tap water. **Because of this fact and limited funding, leaders must decide between fluoridation of public tap water, which would include replacing pipelines and improving the water infrastructure on St. Croix, buying or making bottled water with fluoride, and fluoride varnish programs that only address dental caries in children.**

Although the USVI DoH acknowledges that oral health is an important component of health for their residents, they only write about general goals to improve the overall health of USVI residents. They do not give specific sections dedicated to reporting oral health conditions in their *2020 Community Health Report* or specific oral health initiatives in their 2020 Strategic Plan. There was no mention of oral health on the health department website until 2022. Searching the website in 2024, dental diseases are not included in the list of top diseases and conditions. Oral health is listed on the Staying Healthy webpage but the link to the CDC website is broken. **Not having oral health information and data on the DoH website or in reports is a missed**

opportunity for oral health promotion and oral health surveillance. It is timely to form collaborations among advocates, dental professionals, and the DoH as the territory restructures and reorganizes from the devastation of the hurricanes and the pandemic. Each step in the revitalization process should include oral health as a critical component of public health and the health economy as well as individuals' general health.

7. Public Health Frameworks

The USVI DoH has a uniquely dual role in providing both public health and other health care services, allowing it to have a close relationship with health care providers and making it responsible for facilitating access to health care services for its residents. The USVI uses two frameworks for their own needs assessments and planning. The Mobilizing for Action through Planning and Partnerships (MAPP) Framework provides a structure for communities to assess their most pressing population health issues and align resources across sectors for strategic action. It is a community-driven strategic planning process to achieve health equity. This framework includes six-phases that emphasize close collaboration with community representatives, organizations, and agencies that are responsible for improving the health and wellness of communities. It can be used as part of the needs assessment for the Maternal and Child Health Title V Block Grant.

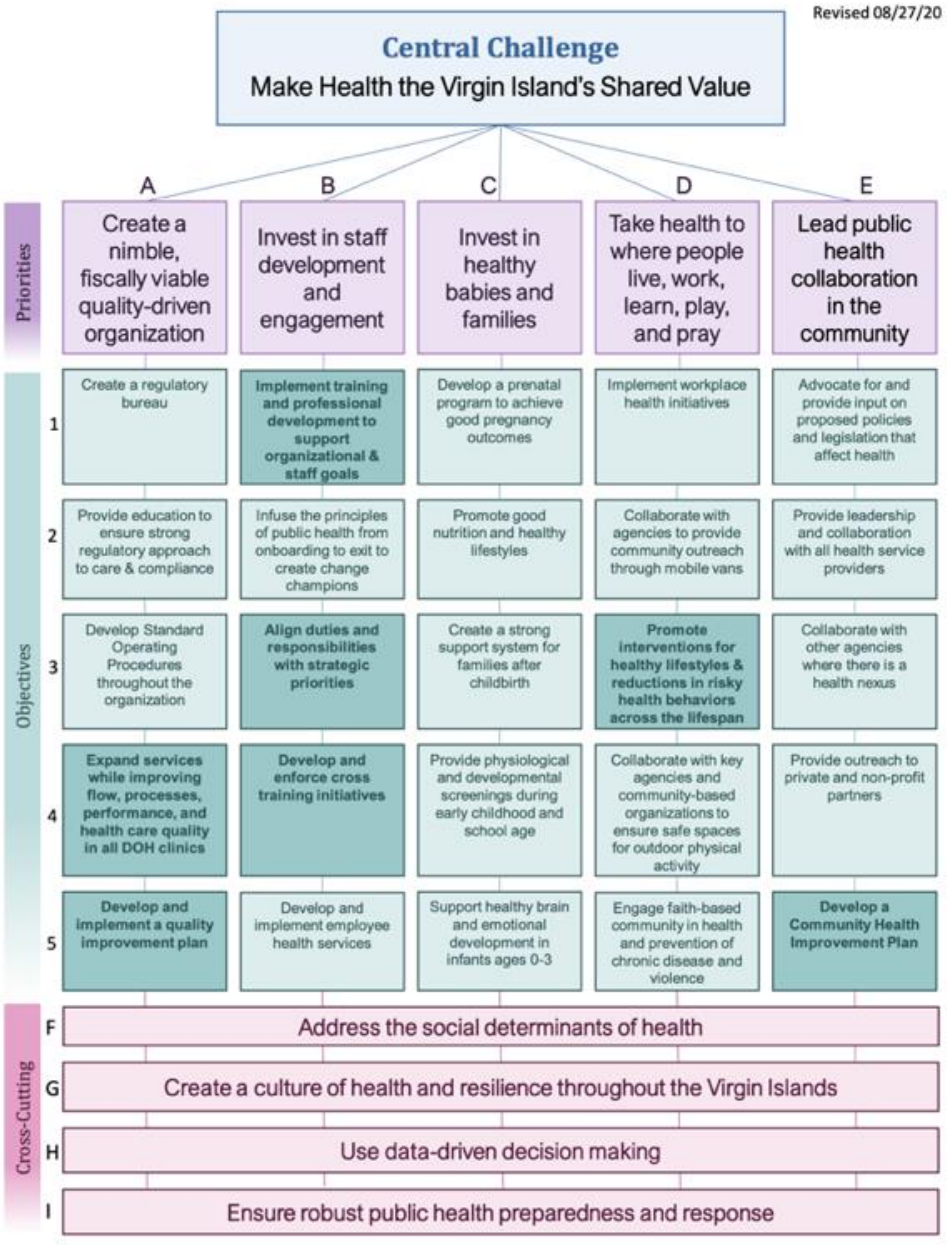
The MAPP Framework for the USVI Health Planning Process

SOURCE | USVI Department of Health, Adapted from National Association of County and City Health Officials

The MCH Services Title V Block Grant includes state performance measures, and state outcomes include increasing access to oral health care services for children and adolescents. The previous USVI State Performance Measure (SPM) 4's objective was to establish a systemic methodology to assess such oral health needs by developing an oral health steering committee, training clinical staff in applying varnish, and adding varnish applications as part of the children's check-up process. SPM 4 focuses on increasing the number of children ages 1 to 17 who receive a dental check-up annually by measuring the percentage of children with decayed teeth in the past year. Plans were to train providers to apply varnish to clients during their annual checkup and create social media and public service announcements to promote oral health education. **For the 2025 5-year cycle, the state performance measure stays the same while the strategies, activities and programming will continue to be enhanced. Planned strategies include DOH hiring a dental hygienist to lead the MCH mobile fluoride varnish program that includes delivering oral care products. Conducting oral health education sessions in classrooms, and assisting administrative staff with program recordkeeping and data collection efforts. MCH also plans to condult an oral health survey on 3rd grade children in all 15 schools rather than a sample. The FY2025 MCH Application also calls for more medical-dental integration efforts during well child visits and fluoride varnish training for pediatricians, nurses and other clinical staff. An Oral Health Steering Committee to lead the oral health needs assessment efforts had not yet been established at the time of the MCH application.**

The second framework featured on the next page is the creation of a strategic map that was accomplished by the DoH in August 2020. The USVI DoH created a 5-year Strategic Plan to make health in the USVI a shared value. Some of its strategic priorities include investing in staff development and engagement; taking health to where people live, work, learn, play, and pray; and leading public health collaboration in the community. **These are important priorities that can also improve the islands' oral health. Some of the USVI dental care programs collect some data on oral health, commonly on the number of decayed, missing and filled teeth (dmft/DMFT), and on services provided in their clinical programs. These data, however, primarily are for individual patients rather than for surveillance of communities or populations.** A Data Team was commissioned by the Territorial Health Commissioner and was charged to create the 2020 USVI Community Health Assessment, creating a health indicator inventory of available reported public health data over the last decade collected by the USVI DoH. **A new resource appeared on the website in 2022. *Paving a Path Towards Oral Health Equity: Planning Out an Oral Health Surveillance System for the U.S. Virgin Islands* by Benjamin Lee, an MPH candidate with Tufts University. This report outlines steps to better track the oral health status of the children in the USVI as well as adults and references the need for ASTDD TA.**

The USVI Strategic Map



SOURCE | USVI Department of Health

In June 2019, dental professionals, legislators, government staff of the USVI, and ADA representatives met together at the 2019 USVI Oral Health Summit and discussed the strengths, challenges, opportunities, and possible next steps for the island to prioritize oral health. From this summit, the USVI developed a 5-year plan to promote oral health in its communities. Goals were 1) to initiate community water fluoridation, 2) establish dental homes with regular dental visits so that every child starts kindergarten cavity-free and every pregnant woman has a healthy

mouth, 3) integrate oral health management into chronic disease management in the USVI medical community, and 4) make tooth replacement options accessible to every older adult. They hoped to do so by strengthening the organized dental community with sufficient staffing and strong oral health prevention programs, encouraging young adults to pursue oral health careers, developing an expanded function dental assisting/community dental health coordinator program at the University of Virgin Islands, and building partnerships with the dental industry and research entities to support such oral health activities.

Updates from 2024: **Subsequently, Beverly Isman, ASTDD consultant, spoke with Jane Grover and received a brief update on the status of the ADA's activities addressed in the strategic plan including the following: 1) An ADA legislative consultant has met with several leaders to finalize language for a dental director bill. 2) A CE program is planned for March 2025 to educate USVI workforce teams for continuous quality improvement. A previous CE program in August 2023 included a screening/varnish application program for the elementary schools on St. John led by AAPHD ED Francis Kim. 3) The health department has been a participant in National Children's Dental Health month with poster/postcard distribution and visits to Head Start Programs.**

Priorities Initially Identified During the Needs Assessment Process and Those Identified More Recently

- Update the USVI's Medicaid program. They had a match of 83/17, but they need to establish a better run program for the patients, with a streamlined credentialing process, self-appointment options, and reduced number of adult high-end restorative procedures. Marketing to potential providers also need to occurs.This can be done in partnership with a Medicaid specialist consultant and a Medicaid advisory committee, the ADA, CMS, and the USVI DoH.

- Hire a territorial dental director. The government needs to define and appoint a territorial dental director to work on grants and provide health on the island and be an active member of ASTDD. This can be achieved in partnership with the USVI DoH, ASTDD, VIDA, ADA.

- Establish interdisciplinary oral health promotion and care on the island. The goal is to change the mindset that medicine and dentistry are two separate entities that should not overlap. Several groups can work together to improve the relationship between several aspects of health and oral health. This should include MCH programs as well as those for tobacco/nicotine use, diabetes and cancer.

- Develop an oral health promotion strategy that focuses on healthy aging. This could focus on risk factors for periodontal disease, oral cancer, side effects of medications, dental caries, and other conditions as well as appropriate preventive home care measures and preventive oral services. This will require relevant training for the oral health and healthcare workforce.

- Establish a dental assisting program in the USVI and also other oral health programs

such as those for dental hygienists and community dental health coordinators. There is a need to improve the oral health workforce by setting up at least a dental assisting program with the local university in the USVI.

- Establish an interdiscipliary oral health education and promotion program for all age groups. Such a progrm should focus on common risk factors for several health issues, be promoted via several modalities and by several groups. Targeting the risk factors of diabetes and use of tobacco and nicotine should be on the DOH radar for medical-dental integration and health promotion. Hiring a DoH staff member to coordinate oral health education issues and be I contact with the VIOE would be helpful.

- Establish more public access points for oral care services that are community based via mobile vans, portable equipment to use in community sites or homes, and at health fairs or other public venues and make the information widely available.

- Determine valid oral health status and needs, and establish an oral health surveillance system. Conduct an oral health survey of at least 3rd grade children, preschool/Head Start children, adolescents and older adults using ASTDD Basic Screening Survey protocols and territorial assistance. ASTDD can provide a technical assistance consultant with BSS and oral health surveillance expertise and promote collaboration/training for the DoH epidemiology section.

- Develop an oral health presence on the USVI DoH website. Develop sections for oral health information for the public, oral health data/surveillance and reports with appropriate and current links to relevant resources. A dental public health communication expert would be useful for this effort.

- Identify and secure additional public and private funding for oral health. This requires more assistance with identifying potential funding sources and their focus and requirements, summary of oral health status and oral care data to document needs, coordination with several groups, and excellent writing and evaluation skills.

- Develop a coordination plan for which methods of fluoride are appropriate and affordable for various locations and groups. Using a professional with fluoridation science expertise is recommended.

- Create a communication mechanism so dental teams are more aware and involved in island affairs such as the economy, infrastrucrue, housing, and other attempts to sustain the USVI infrastructue and balance the needs of tourists and the residents.

- Continue to use resources from CDC and HRSA programs and ASTHO affiliates such as NACDD and ASTDD. Many websites and links have recently changed so DoH should link to relevant resources and make sure the most current links are used.