



Futures Smiles is a non-profit, 501(c)(3), organization specializing in school-based dental hygiene services targeting at-risk children as gauged through the logical and coordinated statistical evaluation of the impact oral health services have in our designated student population, the school community, and beyond.

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Mission:

The Mission of Future Smiles (FS) is to achieve optimum oral health in at-risk populations by increasing access to education and prevention of oral disease.

Vision:

Our Vision is to decrease a child's pain and suffering from dental decay through education and prevention of oral disease at a convenient community based site like a School-Based Health Center for Education and Prevention of Oral Disease (EPOD), allowing the child to thrive socially, physically, mentally and academically.

Agency History:

FS is proud to be a Nevada non-profit with a mission to increase access to oral health care in underserved populations. Established in 2009, FS provides the essential resources and infrastructure to create public health opportunities for dental hygienists. Through school-based care we focus on a systems approach that removes the common barriers of cost, transportation, lost income from time off work, and loss of educational time from school. Our ultimate goal is to change the way children and their families think and act, regarding their own health, by instilling positive oral health behavior for a lifetime.

Purpose:

To improve the oral health status of an at-risk population, which integrates a cost effective model delivered by Public Health Dental Hygienists who hold a Public Health Dental Hygiene Endorsement (PHDHE) approved by the Nevada State Board of Dental Examiners (NSBDE). Future Smiles collaborates with our restorative dental partners and medical professionals to increase access in oral health services, with a focus on prevention in a school-based setting. Services are provided at established School-Based Health Centers (SBHC) or at schools that do not have a SBHC but want to integrate an oral health model into their school setting.

It is well documented that there is a broad disparity in oral health care available to at-risk children. Because of this disparity, FS targets at-risk children through the school environment. FS pursues alternative sources of funding that increase access in oral health care for these underserved, at-risk populations. All services provided by the program target low-income, at-risk children from birth to 18 years of age, and Medicaid enrollees. The program bills for Medicaid/CHIP services when appropriate. Any child or family unable to pay for oral health care receives services at no cost.

Community Need:

The Clark County School District (CCSD) provides public education to all children in Clark County, is the 5th largest school district in the United States, and the largest school district in Nevada. CCSD has a K-12 enrollment of 311,429 students, and is home to over 70% of Nevada's students.¹

When we look at our local school communities in Clark County (Las Vegas, Nevada) our educational system is reflective of our disparities in health care, high unemployment, economic insecurity, low high school graduation rates, and poor performance in standardized testing. All these elements create the perfect storm leaving those who were already underserved less likely to receive the necessary access to dental care. CCSD has a staggeringly low high school graduation rate when compared to the Nation (bottom third). For the class of 2013, CCSD had a high school graduation rate of 71.5%.²

Furthermore, the District is home to a high percentage of children living in poverty: 56.6% of the CCSD student population receives free or reduced lunch (FRL), and 17.6% are limited English proficient (LEP).² CCSD is now a minority-majority District, with a Hispanic student population of 43.85% and Caucasian students accounting for 29.43%.² Demographics such as these are characteristic of high-need populations and are directly correlated with poor oral health and limited access to oral/dental health services.



Tooth decay is a manageable and preventable condition. However, if dental caries begins before the age of six, there is a severe risk to damaging the teeth and affecting the overall well-being of the child. Nevada consistently ranks high in children's tooth decay rate when statewide surveillance is conducted;

- 6 out of 10 children (64.8%) of Nevada's third grade students have experienced tooth decay.³
- In comparison, the National average caries experience in children 6-9 is 54.4% and the Healthy People (HP) 2020 Goal is 49%.⁴

It is well documented that children from low-income, racial/ethnic minority populations have a higher risk of developing tooth decay. The findings from the 2008 Nevada State Health Division's (NSHD) Basic Screening Survey (BSS) found;

- Oral disease rate in minority populations living in poverty is significantly higher at 78%, than non-minority children.³

Las Vegas continues to recover from the recent recession and still endures one of the nation's highest unemployment rates, uninsured children and homelessness in children. Existing resources have been reduced or eliminated resulting in more children at risk. As expected, vulnerable populations are suffering the most, according to the Nevada Annual Reports for Accountability:

- 53.45% of Clark County School District's (CCSD) students are eligible for the free and reduced lunch (FRL).²
- 124,532 children living in poverty.²
- Nevada ranks 45th in the nation in child homelessness.⁵

Coupled with a growing minority population of English language learners and a high transient rate, CCSD faces many challenges when trying to improve its low graduation rate (68% in 2009).² When we look at Nevada's Health Rankings, the two factors that stand out are: 1) education - high rate of high school dropout, low educational level of citizens and 2) income - childhood poverty, lack of health care and a staggeringly high rate of homelessness.

In the publication on Best Practices of the Association of State and Territorial Dental Directors (ASTDD) publication on Best Practice Project, it states that, "There is a relationship between a child's health and academic performance." The document also quotes Former Surgeon General, Dr. Antonia Novello, "Health and education go hand in hand: one cannot exist without the other."⁶ The U.S. Department of Education acknowledged that health problems and unhealthy behaviors have a major effect on students' success. The most cost effective and influential way to address positive health behaviors for the community is to bring health services into at-risk schools⁴. Future Smiles provides cost effective access to health care that works with school administrations to jointly impact the health of vulnerable children, which benefits their school work and potentially improving their chances to graduate and thrive in life.

Current Activities:

School-Based Health Center for Education and Prevention of Oral Disease (SBHC-EPOD)

Future Smiles has found that oral health care is a common community request in needs assessments. At-risk schools typically are interested in providing an oral health program to its students but funding for building a School-Based Health Center (SBHC) can be a barrier. FS has found a cost efficient system that operates with mobile/portable dental equipment in a dedicated classroom or in an unused modular to provide our oral health services. These services can be ongoing or episodic, depending upon the needs of the school. We refer to our set site facility as a School-Based Health Center for Education and Prevention of Oral Disease (SBHC-EPOD), the short title to be recognized as an EPOD.

Our policy and system change goals from these efforts are to:

- 1) Increase the number of schools that provide direct preventive oral health care;
- 2) Increase the understanding of oral health through ongoing education to parents, children and school staff; and



3) Show an increase in academic performance after program enrollment compared to baseline.

The purpose of the EPODs is to integrate cost effective preventive oral health services into schools with SBHCs. At schools that do not have a SBHC, the desire of Future Smiles is to start the early stages of a preventive oral health program. At the drafting of this report, Clark County has invested into the SBHCs medical/dental models to bring essential wrap-around services into the school community. Two of the program sites (Cunningham SBHC-EPOD and Basic's Bower's SBHC) collaborate with FS to integrate oral health into an existing medical model. All program outreach is tracked, evaluated and will be part of a 24 month longitudinal study conducted by Future Smiles (FS), Clark County School District (CCSD) and the Nevada State Health Division's Oral Health Program (NSHD OHP).

Service Population:

Our **no cost program** targets at-risk Southern Nevada children, birth to high school (HS) graduation, from schools with more than 50% Free and Reduced meal enrollment (F&R). At-risk is defined as children from low-income families, Medicaid or CHIP enrollees, and/or uninsured-w/out health care.

SY 2013-2014 Service Demographics

Data collected by FS reveals that our target population has a:

- Mean monthly household income well below Federal Poverty Level (FPL), at \$1,343
- Mean family members in the home are 4.4
- Mean parent education is 12th grade
- 46% are single parents

Our population profile for 2013-2014 was:

7% Asian/Haw/Ind | 14% African American | 26% Caucasian | 56% Hispanic.

NOTE: Our program demographic software reports multi-racial enrollees in each category representative of >100% ratio.

SY 2013-2014 Program Statistics

Under the Future Smiles Program, we served:

- Mean age 8 years old and in 3rd grade
- 76% of the children served are on Free and Reduced lunch
- 35% Medicaid, 65% uninsured
- 36% of the children have untreated tooth decay
- 9% have urgent dental needs

A Solution to Address Unmet Oral Health Needs:

FS promotes working within the dental community to establish a dental home for at-risk children and their families by providing oral health education and direct dental services at SBHC, within the school setting and at community health fairs.

Our oral health services include:

- 1) Oral health screening with data collection
- 2) Dental cleaning (prophylaxis)
- 3) Fluoride varnish/topical application
- 4) Dental sealants
- 5) Digital dental x-rays (limited locations)
- 6) Communication with parent/guardian regarding oral health status and referral to a community dental provider for restorative dental needs ensuring that the child gets the care that they need

All services are provided to individuals who have been identified as attending schools with 50% or higher FRL, uninsured/underserved, low-income and at-risk populations. No child in need is declined care through our program and all services are provided at no cost to the child or family. Our primary goal is to enhance our recipient's health and well-being, thereby improving their capacity to learn and succeed within the school



environment now and in the future.

Program Partners and Collaborations:

FS strives to create long-lasting changes in the way people think and act regarding the value of oral health by bringing together strong partners committed to the prevention of oral health disease.

Our greatest strength is the ability to network with organizations that target the supportive needs of those who are less fortunate. One area where we have had great success is working with the CCSD's staff to identify children in oral pain. As a school-based provider, school counselors and teachers have brought the children to our door for immediate care. Other professional collaborations include membership in the Community Coalition for Oral Health (CCOH), Southern Nevada Immunization and Health Coalition (SNIHC) and the Southern Nevada Dental Hygienists' Association (SNDHA), which have all resulted in each of these organizations supporting Future Smiles through program funding.

In addition, we have strong collaborative relationships that help us provide oral health services to children in need (oral pain) with the following organizations:

- 1) Children's Dental International
- 2) City of Las Vegas-EPOD sponsor at Clark HS
- 3) Clark County Dental Initiative-UNLV SDM and FS collaboration providing school-based dental services in Clark County, NV.
- 4) College of Southern Nevada
- 5) Communities In Schools
- 6) Eye Care 4 Kids
- 7) Helping Kids Clinic
- 8) Huntridge Teen Clinic
- 9) Positively Kids
- 10) Project Smile-This program is sponsored by the Clark County Public Education Foundation to support dental care to low income children.
- 11) Southern Nevada Dental Hygienists' Association
- 12) Southern Nevada Immunization and Health Coalition
- 13) Three Square
- 14) United Way of Southern Nevada
- 15) UNLV School of Dental Medicine (SDM)-No Cost Saturday Dental Clinics

Brief Description of Current Program (Total 17 CCSD Schools in total):

It is our intention to become an integral part of the school, a role model for the children and safety net provider making a difference in the lives and health of these children/ families that benefit from EPOD experiences. Routine care includes at least one preventive service such as oral health education, a dental cleaning, fluoride varnish/topical application, sealant application and retention check, which are provided not less than every 12 months and not more than every six months to the resident children of Clark County.

Future Smiles is staffed by nine dental hygienists with a Public Health Dental Hygiene Endorsement (PHDHE), this special license allows the dental hygienists the ability to treat underserved populations without direct supervision from a dentist.

All children served by FS, even those in good oral health, are referred for a comprehensive dental exam to an established dental provider. Future Smiles works hard to assist families by scheduling urgent dental needs with a dental provider. As oral health professionals, we can attest to the fact that oral disease is progressive and cumulative in nature. It is responsible for pain, discomfort, poor school performance, poor nutrition, diminished self-esteem and if left untreated, the disease becomes more complex and difficult to manage.



FS provides **two types** of operational delivery modes:

- A. Set Locations: School-Based Health Center for Education and Prevention of Oral Disease (EPOD)**
- B. Mobile School-Based Locations.**

Our focus is **dental hygiene (DH) services** (\$179 Medicaid value per child visit) which include: screenings, oral health education (OHE), dental cleaning, sealants, fluoride varnish, as well as case management through a referral system to a local dentist(s) or the UNLV School of Dental Medicine (SDM) for restorative dentistry.

- 1) **An EPOD operates in a School-Based Health Center (SBHC), classroom, or a modular.**
The Clark County School District (CCSD) provides space and other support at no cost to FS and we operate **3 EPODS** under two different schedules. **Two schools have a 12 month program** (1) *Clark (HS) EPOD* and (2) *Cunningham SBHC/EPOD*, and **one school has a 9 month program** at (3) *Hollingsworth (ES) EPOD*.
- 2) **FS Mobile serves 8 temporary (1 month average) school-based locations** utilizing portable dental units manufactured by DNTLworks. These units can go anywhere as they are light weight (50lbs or less), on wheels and fold into suitcase containers. All at-risk children enrolled in the school are eligible for our services. Further impact is achieved through OHE presentations, “brush at lunch” presentations, health fairs and program services provided at community health clinics, like Helping Kids Clinic.

Significant Accomplishments:

As we increase the number of children who benefit from dental sealants, we see a decrease in untreated tooth decay in subsequent years, as confirmed in this graph from our Cunningham SBHC-EPOD (Figure 1). Our third EPOD is located at Hollingsworth Elementary School (ES) (Figure 2) where the program is fully integrated into the school community.

Hollingsworth ES: From our initial oral health screenings in SY 2010-2011, FS found that 49% of the children screened had untreated dental decay and of those 40% were in urgent dental treatment need (pain). In the SY 2013-2014, we have seen an enrollment increase from 97 students in SY 2010-2011 (baseline) to 360 students in SY 2013-2014. We have also seen a 17% decrease in untreated dental decay (32 % SY 2013-2014) and a dramatic 33% decrease in children with urgent dental needs (pain) with a program low of 7% total urgent dental pain in the Hollingsworth ES student population from SY 2013-2014.

Since inception in 2009, FS has provided over \$1 million in Medicaid valued services: A) 11,185 children received oral health education, B) 7,181 oral health screenings, C) 16,668 teeth received dental sealants, D) 7,400 fluoride varnish, and E) 3,377 dental cleanings.

During the summer months of June-August 2014 FS provided part-time oral health care at the Cunningham SBHC-EPOD, Clark EPOD, Basic’s Dr. Joel and Carol Bower SBHC and Helping Kids Clinic.

2013-2014 Outcomes:

- 1,808 at-risk children shall receive an oral health screening with all data to be tracked and reported under the CDC software SEALS
- 3,961 children shall receive an oral health education experience
- 4,278 teeth received dental sealants
- 1,819 or more fluoride varnish/topical applications
- 871 dental cleanings (child prophylaxis)
- The Medicaid value for these services would equal \$256,884



Community Health Fairs:

These events are ongoing and are typically organized by the Southern Nevada Immunization and Health Coalition (SNIHC) and Shots 4 Tots. Community Health Fairs allow the program an opportunity to provide an oral health screening, oral health education and fluoride varnish application. All infection control CDC guidelines are adhered to at these events and Personal Protection Equipment (PPE) including: masks, gloves, safety glasses, individual optic light (hands free equipment), disposable mouth mirror, gauze and counter disinfectant are utilized during the administration of oral health services.

Current Funding:

With solid private/public partnerships, we leverage our FS dollars by uniting with CCSD and the City of Las Vegas (CLV) for our no-cost facility space. Additional workforce collaboration is formed with higher education's dental programs from UNLV SDM and the College of Southern Nevada (CSN). Recently, Gov. Sandoval announced support of the expansion of Medicaid, providing an additional 78,000 citizens health care coverage. Many of these Nevadans are school age children and FS believes that Medicaid reimbursement will provide future funding sustainability by 2015. FS is staffed by 8 DH Medicaid/CHIP providers.

We deeply appreciate all of our donors and sponsors for their strong belief and commitment to Future Smiles and our mission.

| SY 2013-2014 | Donor List |
|---------------------|---|
| 2013-2014 | Clark County Public Education Foundation |
| 2013-2015 | Clark County School District/In-Kind |
| 2013-2014 | CVS Charitable Caremark |
| 2013-2014 | Dial 4 A Smiles-Channel 8 NEWS |
| 2013-2014 | Junior League of Southern Nevada |
| 2013-2014 | MCH Coalition |
| 2013-2014 | McFadden Charitable Foundation |
| 2013-2015 | Medicaid |
| 2013-2014 | Network for Good |
| 2013-2014 | NSHD Oral Health Program |
| 2013-2014 | Oral Health America-Smiles Across America |
| 2013-2014 | United Way Southern Nevada |
| 2014 | ADHA/Wrigley Foundation |
| 2014 | Donald Reynolds Foundation |
| 2014 | Elaine P. Wynn Family Foundation |
| 2014 | McFadden Charitable Foundation |
| 2014 | Private Donation Razoo |
| 2014-2015 | City of Las Vegas-Community Development Block Grant |
| 2014-2015 | DentaQuest Foundation |
| 2014-2015 | MGM Resorts Foundation |
| 2014-2015 | United Way of Southern Nevada |



Program Evaluation:

Sealant Efficiency Assessment for Locals and States (SEALS), developed by the Centers for Disease Control and Prevention (CDC), tracks and evaluates our program deliverables, providing a snapshot view of oral disease rates and program success performed by FS in Southern Nevada.

The following SY 2013-2014 Healthcare Coverage table (Figure 4) shows that less than 4 out of 10 children served were covered by Medicaid (35% Medicaid) and that 65% were uninsured. However, the program continues to make strides in oral health outcomes with a 36% untreated tooth decay rate in students served in SY 2013-2014. This is a measurable decrease of 12.2% in untreated tooth decay rates when compared to SY 2012-2013 (48.2% untreated decay). We can also document that urgent dental needs have decreased by 4% when compared to the previous school year (9% total urgent dental need in SY 2013-2014).

It is well documented that children from low-income, racial/ethnic minority populations have higher risk factors of living in poverty with less economic resources for seeking oral care and this unfortunately translates into accepting that living with oral pain is a normal way of life for children.

Beginning in the summer of 2014, Future Smiles will commence a multi-year intensive review of three Clark County School District school-based dental-health locations, where Future Smiles has provided preventative dental services. We will evaluate the status of dental health among the treated children and perform an assessment of the impact of the dental care on other factors in the lives of the children. Our evaluation focuses on three schools in CCSD with high rates of free and reduced lunch: Cunningham Elementary, Hollingsworth Elementary, and Martinez Elementary School. These schools are all part of the on-going Future Smiles dental program.



Figure 1: Cunningahm SBHC/EPOD

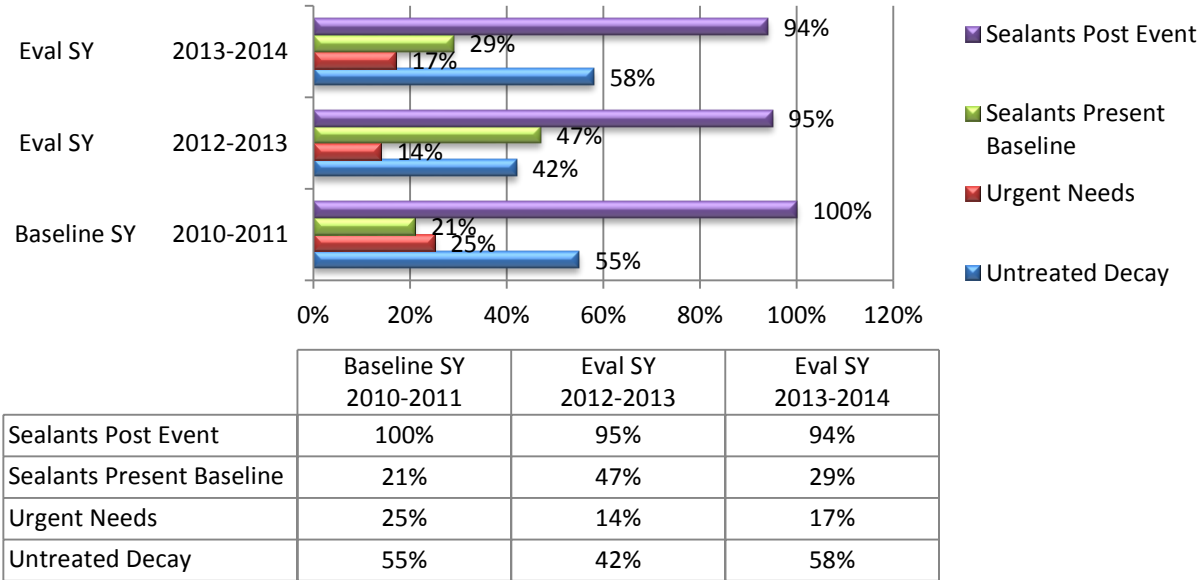


Figure 2: Hollingsworth EPOD

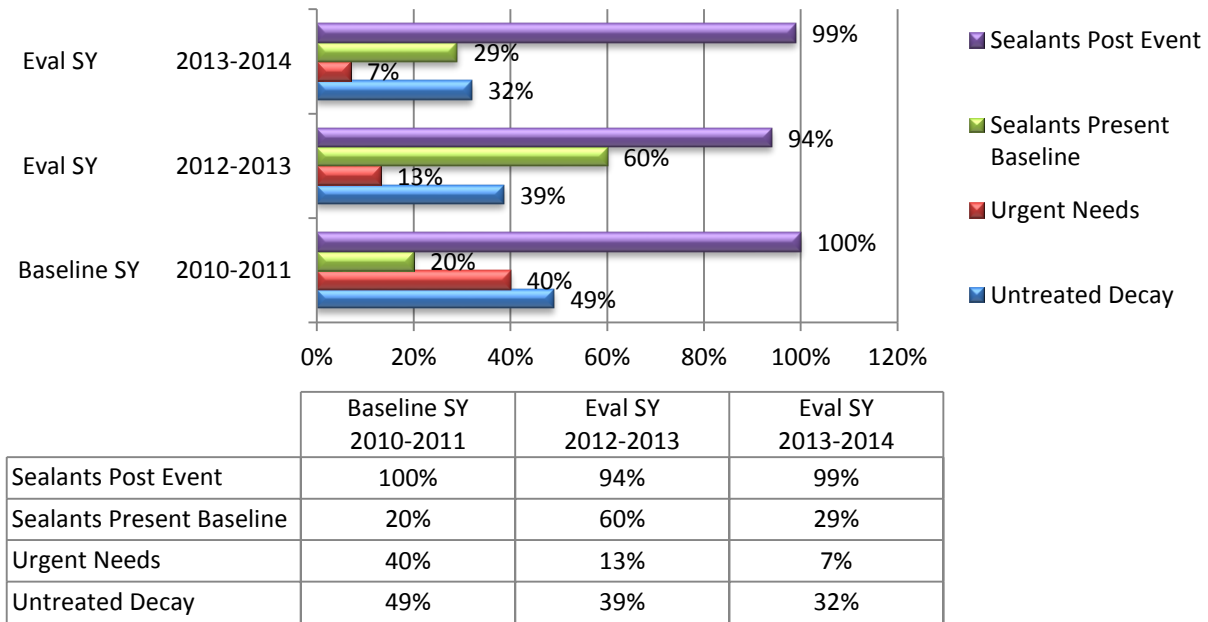
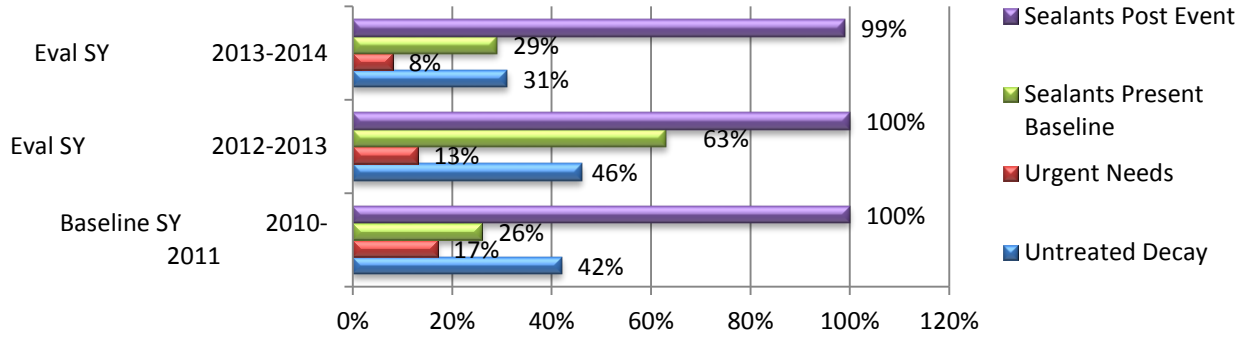


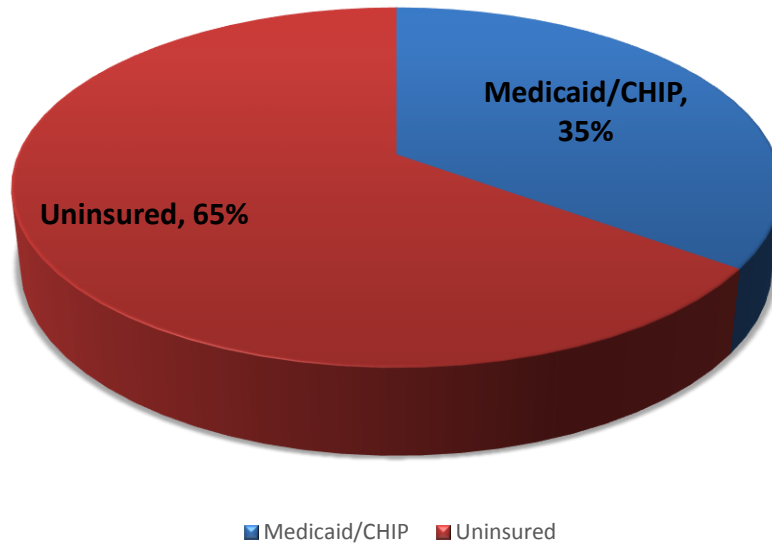


Figure 3: Martinez EPOD



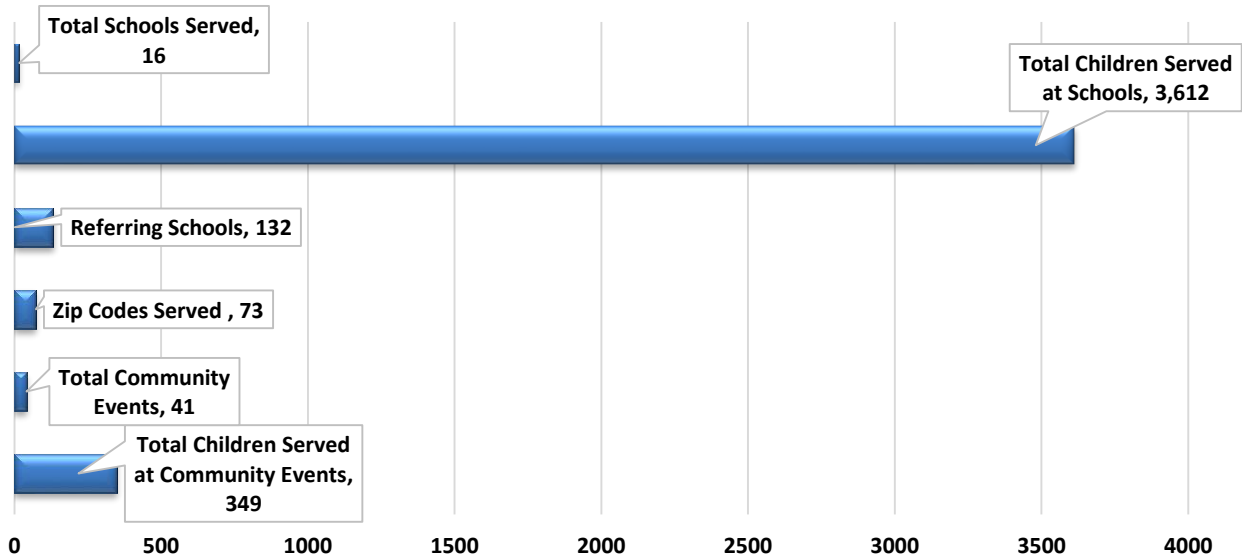
| | Baseline SY 2010-2011 | Eval SY 2012-2013 | Eval SY 2013-2014 |
|---------------------------|-----------------------|-------------------|-------------------|
| Sealants Post Event | 100% | 100% | 99% |
| Sealants Present Baseline | 26% | 63% | 29% |
| Urgent Needs | 17% | 13% | 8% |
| Untreated Decay | 42% | 46% | 31% |

Figure 4: Healthcare Coverage





**Figure 5: SY 2013-2014
Combined Program School/Event Outcomes
and Referral Sources**



**Figure 6: SY 2013-2014
Future Smiles Outreach Population**

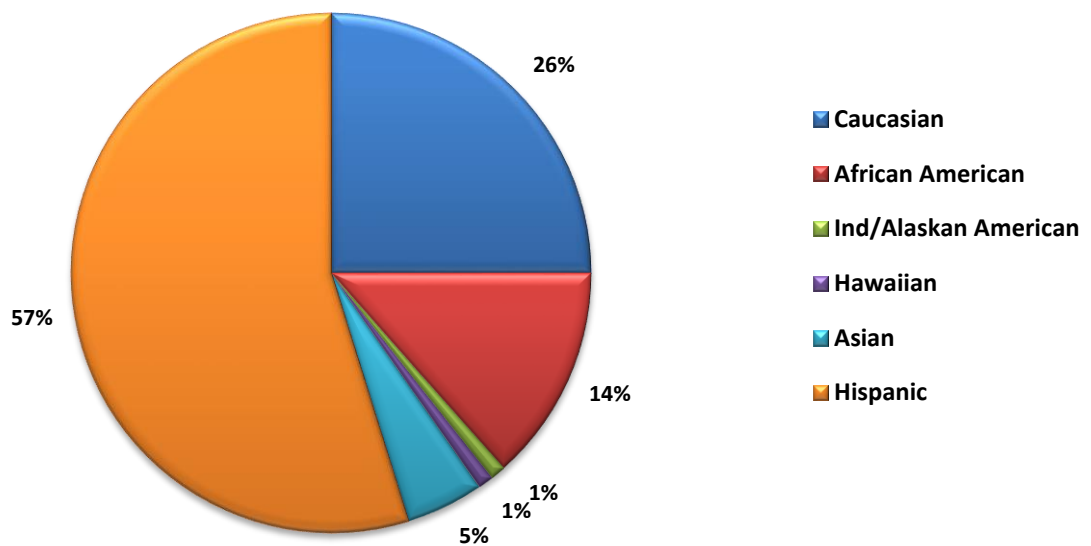




Figure 7: Annual Program Demographics by Schools

| SY 2013-2014 | ANNUAL PROGRAM DATA (BY SCHOOLS) | | | | | | Future Smiles |
|--|----------------------------------|------------------------|------------------------|-----------------------|-----------------------------|--------------------------------|-----------------------------|
| School | Student Population (#) | % Free & Reduced Lunch | # Free & Reduced Lunch | # of Sealant Students | # of OHI Education Students | % of Sealant Students from OHI | Total # of Teeth w/Sealants |
| Clark County School District (CCSD) | | | | | | | |
| Basic HS | 2,251 | 50% | 1,133 | 40 | 52 | 77% | 402 |
| Bennett ES | 324 | 75% | 244 | 41 | 71 | 58% | 152 |
| Brinley MS | 901 | 84% | 755 | 20 | 21 | 95% | 209 |
| Clark HS | 2,975 | 60% | 1,778 | 174 | 241 | 72% | 1,477 |
| Cunningham ES | 764 | 79% | 601 | 118 | 213 | 55% | 553 |
| Fay Herron ES | 885 | 97% | 859 | 62 | 253 | 25% | 240 |
| Herr ES | 682 | 80% | 809 | 0 | 15 | 0 | 0 |
| Hollingsworth ES | 682 | 96% | 652 | 116 | 360 | 32% | 505 |
| Lake ES | 956 | 89% | 854 | 0 | 16 | 0 | 0 |
| Laughlin JR-SR | 367 | 60% | 220 | 5 | 14 | 36% | 41 |
| Martinez ES | 610 | 100% | 610 | 75 | 441 | 17% | 307 |
| Roundy ES | 870 | 89% | 777 | 0 | 137 | 0 | 0 |
| Sewell ES | 771 | 70% | 542 | 0 | 19 | 0 | 0 |
| West Prep ES | 449 | 89% | 40 | 0 | 67 | 0 | 0 |
| Whitney ES | 580 | 83% | 484 | 56 | 325 | 17% | 211 |
| Wynn ES | 866 | 93% | 809 | 34 | 626 | 5% | 181 |
| Totals: 16 | 14,933 | 81% *AVE | 11,167 | 741 | 2871 | 30% *AVE | 4,278 |

** Free and Reduced Lunch Enrollment (FRL) and student enrollment totals are from CCSD report *Nevada Schools Count Day Enrollment for Free and Reduced Lunch* print date 1/21/2014.



References

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