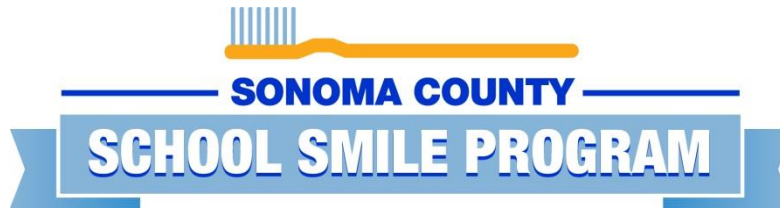


**Annual Report**

**2014 – 2015 School Year**



## Program Report 2015

### PROGRAM DESCRIPTION

For a second year, the Community Action Partnership (CAP) Dental health Program managed the Sonoma county School Smile Program. The program continued in its expansion phase into 4 more schools to reach a total of 11 schools this year. Participation in the program was offered to all grades this year as opposed to just 2<sup>nd</sup>, 3<sup>rd</sup>, 6<sup>th</sup> grades in the previous year. Active consent from parents or guardians was required for program participation. Consent return rate for the program was 36%. Children returning consents were first screened and received a fluoride varnish treatment. Assessments took place at the back of the classroom while a Community Health Worker provided an education lesson on healthy eating, drinking and oral health at the front of the classroom. Assessment results were sent home to parents. Program staff returned over the course of the school year to place sealants on the children that needed them. Of the 874 children screened, 499 children received dental sealants in the program.

The Fee for Service Model (FFS) model returned with the same treatment protocols as the previous year. The FFS model returned to the 5 Bellevue Union School District schools and also expanded to Jefferson Elementary in Cloverdale. The FFS model encompassed 13 screening days and 47 treatment days during the school year. Time spent at an individual school ranged from 2 days to up to 13 days depending on the number of students needing sealant treatments.

In the model utilizing dental staff and coordination through local Federally Qualified Health Centers (FQHC), Petaluma Health Center Dental Clinic (PHC) returned to McDowell Elementary School and McKinley Elementary School. Santa Rosa Community Dental Clinic (SRCDC) was recruited into the Smile Program to further expand the reach of the program and provide services to more students. Similar to Petaluma Health Center's role in the initial year of the program, SRCDC provided services to 3 schools that were within their catchment area. The schools added were Luther Burbank Elementary, Steele Lane Elementary and Brook Hill Elementary. The FQHC model averaged 2 days per school.

St. Joseph's Mighty Mouth mobile dental program staff was utilized this year as the primary screener for the FFS model in the Bellevue Unified School District. As part of their participation in the program, screening was done for all grades K-6 and not limited to only 2<sup>nd</sup>, 3<sup>rd</sup> and 6<sup>th</sup> grades as in the previous year. In addition they also provided limited restorative and preventative treatment at some of the school sites. Mighty Mouth is a charitable program, offering no-cost services to underserved children.

For year two of the Sonoma County School Smile Program, several changes were made to the program in order to expand access of services to more schools, to provide better communication between program directors, participating providers and schools and to have a more efficient data collection system. Efforts were also made to streamline the consent process and provide better case management for referral and treatment needs. There were schedule conflicts within the Bellevue district that limited access to children during specified times. This resulted in the need for additional screening days, extra staff on screening days and ultimately more treatment days.

## **Funding**

Continued funding for the pilot program was provided through a contract from the Sonoma County Department of Health Services (DHS). The scope of work for the \$ 154,624 contract included expansion of the program into more schools. The contract for the pilot program's second year was for a period from 7/1/14 to 6/31/15.

In addition to funding provided, in-kind assistance came from the SRJC Community Health Worker program, DHS staff, community volunteers, school personnel and from CAP staff leveraged through other grants. The Registered Dental Hygienists in Alternative Practice (RDHAP's) provided their own dental units and dental supplies.

## **Interagency Communication**

Interagency communication was similar to the previous year, utilizing email, face-to-face visit and phone conversations. We also implemented Egnyte, a cloud based file system. This allowed us to share and update school calendars, maps, training manuals and important documents between providers and CAP staff.

## **Implementation Timeline**

Planning for the second year began in May 2014. Consents were revised in order to facilitate and improve consent return rates. Memorandums of Understanding were revised and updated as needed. In-person communication between CAP program managers and the District Superintendent of Bellevue USD were held in order to facilitate placement of consents into student packets at the beginning of the school year. Planning meetings for implementation into Jefferson Elementary, Cloverdale began in late August 2014. One in-person meeting took place between CAP staff, the school principal and office administrator. They made suggestions to have a banner for the school entryway and to write an article for the school newsletter. Jefferson Elementary Principal and staff were very helpful in the implementation of the program, even taking over the printing of all consents.

Planning meetings began with Santa Rosa Community Dental Clinic (SRCDC) in October 2014. SRCDC began the scope changes to include the Santa Rosa City School District as an intermittent clinic. This involved an approval wait time of approximately 3 months. Planning meetings with Santa Rosa City Schools started in January 2014. Meetings focused on roles of the school personnel, roles of CAP program staff, marketing the program to parents, logistics for treatment and a timeline for implementation.

## **PROGRAM**

### **Education**

Education was shared between the Community Action Partnership's (CAP) Community Health Workers (CHW) and an AmeriCorps volunteer from the St. Joseph Dental Clinic. Efforts were made to follow the same education module as the previous year. As St. Josephs had their own education module from their program, CAP staff met with the AmeriCorps volunteer to provide calibration and integration of education modules. There were some conflicts with messaging between the two groups and ultimately the CAP staff provided education to the remaining schools.



CHW Cory Spencer providing dental education

**Dental Assessment:** A visual survey of the mouth which assesses the presence of untreated decay, treated decay, urgent dental problems and presence or need for dental sealants. A dental screening does not take the place of a regular dental exam in a dental office.

**Fluoride Varnish Application:** A fluoride treatment contained in a resinous base that is painted onto tooth surfaces to prevent decay.

**Sealant Placement:** The sealant is a thin plastic coating applied to the biting surfaces of molars. They may remain on the tooth for several years, providing lasting decay prevention.

**Sealant placement diagnostic criteria:** A tooth (permanent molar) is selected for sealant placement if it is erupted and there is no existing decay, filling or previous sealant. The procedure also requires a cooperative child.

**Referral protocol:** Identified dental treatment needs were categorized as either “early” or “urgent” needs. The clinical definition for “urgent” includes one of the following conditions: Pain, swelling, abscess, multiple lesions (cavities) in 3-4 quadrants of the mouth.

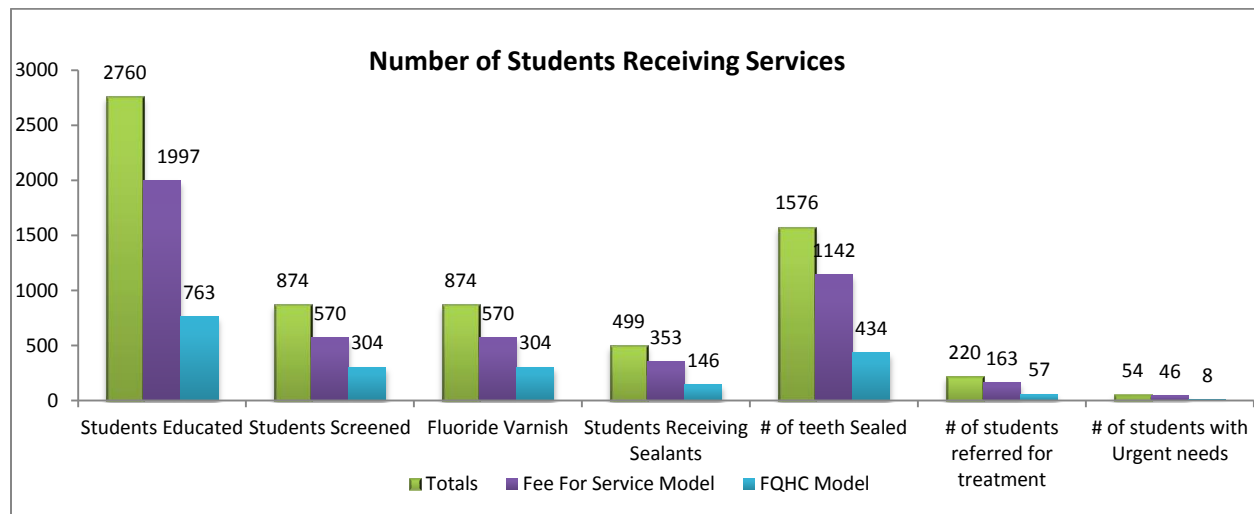
**Case management:** In both models a referral list was sent home with the students after the screening. A list of students with early or urgent dental needs was given to the school nurse. Urgent needs were followed up as soon after the screening date by the school nurse. In the Bellevue School District, this list was also provided to the St. Joseph Mighty Mouth program for follow-up on children who were existing patients or who had no identified dental home. In the FQHC model, referrals were made to the Health Center’s dental clinic. Health insurance enrollment assistance was also offered.

### Services

The services offered for each model were the same: classroom education, dental screening, fluoride varnish, dental sealant and referral for treatment if indicated. The Fee for Service model (FFS) included 5 elementary schools and one middle school in the Bellevue Union School District and Jefferson Elementary in the Cloverdale Unified School District. The FFS model educated 1,997 students, screened and provided fluoride varnish to 570, applied dental sealants to 353 students and 1,142 teeth. One

hundred sixty-three (163) students were referred for treatment, with 46 (8%) of them having urgent needs.

In the FQHC model, Petaluma Health Center provided services to McKinley Elementary School and McDowell Elementary School. Santa Rosa Community Dental Center provided services to Burbank Elementary, Steele Lane Elementary and Brook Hill Elementary. The FQHC model educated 763 students, screened and provided fluoride varnish treatment to 304 students, 146 students received sealants, and 434 teeth were sealed. Fifty-seven (57) students required referral for treatment and 8 (2.6%) of those had urgent needs.



### **Program Results and Discussion**



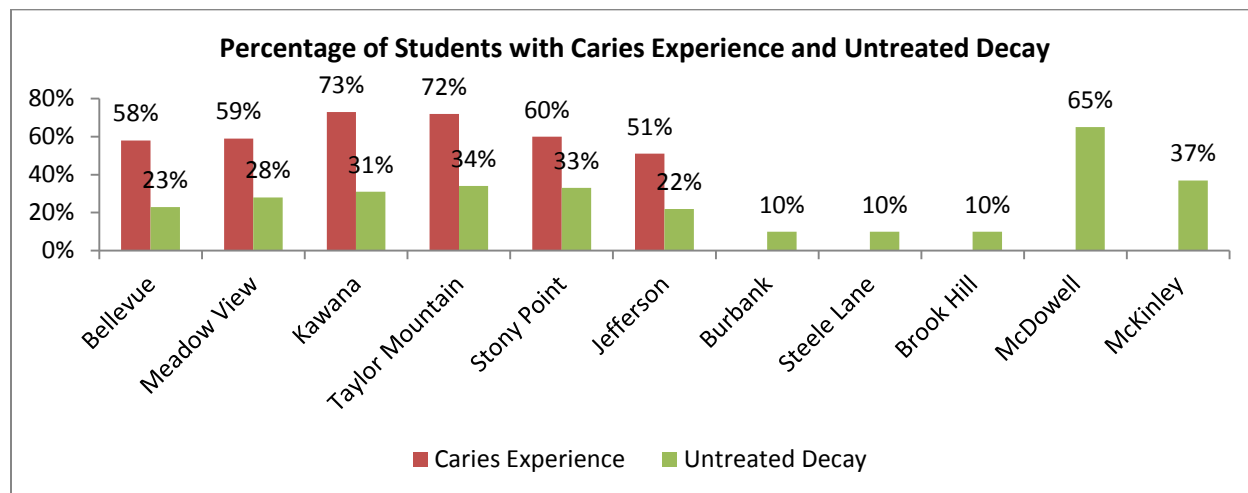
Dr. Christine Tomaszewski screening students.

Data involving caries experience of students shows that Jefferson Elementary had the lowest caries experience with 51%, while Kawana remains as the highest caries experience at 73%. The caries experience tells us the percentage of students with the presence of either untreated or treated (restored or filled) tooth decay.

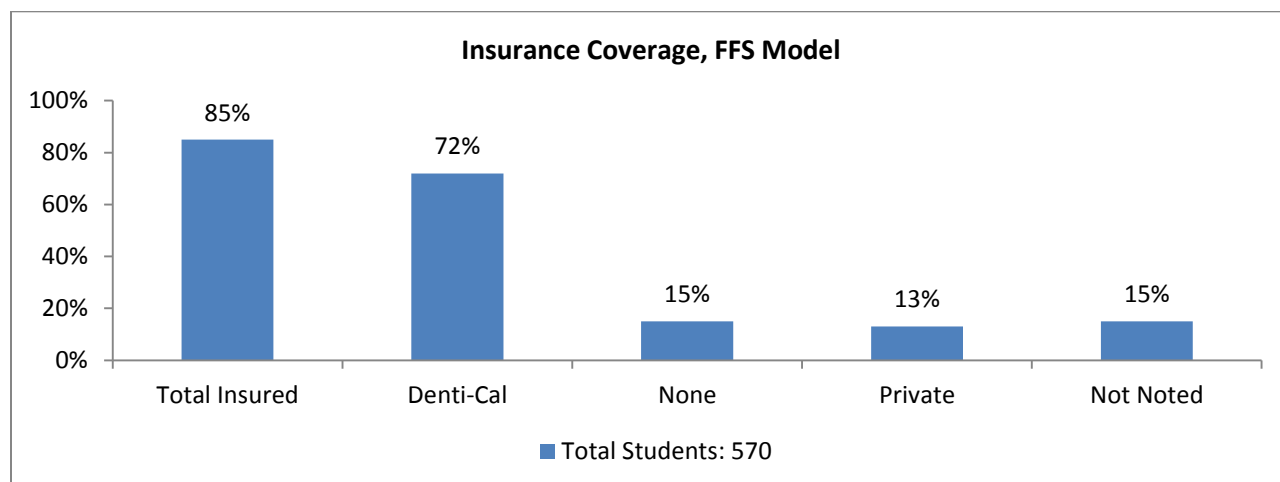
In evaluating the results of untreated decay in our participating schools, Taylor Mountain Elementary had the highest level of untreated decay at 34%. Taylor Mountain also had one of the highest rates for children who had urgent treatment needs. Again Jefferson Elementary had the lowest levels of untreated decay at 22% with only one child having urgent treatment needs. Students with urgent treatment needs were serviced at the school site by the St. Joseph Mighty Mouth mobile dental van in Bellevue and Meadow View schools. Any students not seen at the school were referred to the St. Joseph dental clinic or to their personal dental home. Referral forms were sent home with the students who had additional treatment needs. CAP staff and the school nurse provided follow-up assessments and phone calls to parents to make sure those with urgent needs had been seen. Additional case management is discussed later in this report.

In the FQHC model, the Santa Rosa City schools had the lowest decay rate with a combined 22 children needing additional treatment and 8 having urgent needs. All Santa Rosa schools were at 10% untreated decay but keeping in mind that in this district only 2<sup>nd</sup>, 3<sup>rd</sup>, and 6<sup>th</sup> grades were seen as opposed to all grades in the other schools. Mc Dowell had an active decay rate of 65%. McDowell Elementary and

McKinley Elementary combined had 45 students requiring additional treatment but no child had urgent needs and overall 52% of children screened had untreated decay. The FQHC model did not gather data on caries experience. Students who were members of the FQHC participating clinics were referred to the dental clinics for treatment. Others were referred to their dental homes or provided a referral list.



Insurance status was also captured as part of the data in the FFS model. 85% of the children who were screened were insured either through Denti-Cal (72%) or private insurance (15%). Both models provided screening and preventative services to the students regardless of the insurance status of the children. While a majority of the students were insured through Denti-Cal (72%) versus uninsured (15%) it was apparent that a large portion of students are not able to access regular care. The RDHAP providers were noticing that there were students who presented with clinical gingivitis and supra-gingival calculus and felt that students would benefit from expanding preventative services to include prophylaxis.



## Quality Assurance

Retention checks to ensure sealant remained on the teeth were performed by Kathy Kane, RDHAP. A random sample of 10-15% of students receiving sealants at each school was chosen for review. Time interval between sealant placement and the quality assurance assessments varied from 3 months from completion dates to within 1 week of completion date due to the close proximity to the end of the school year. Time and limited workforce days did not allow for program follow-up on un-retained sealant teeth. These students will have replacement sealants next school year when the program resumes. Ideally there should be between 80- 90% retention rate.<sup>iii</sup> Average retention rate for this program year was at 87%. An annual provider training program and on-site evaluation of provider's placement techniques takes place at the onset of the program year and throughout the school year.

| School                        | Retention Rate |
|-------------------------------|----------------|
| Bellevue                      | 86%            |
|                               |                |
| Meadow view                   | 100%           |
| Stony Point Academy           | 100%           |
| Kawana AAS                    | 76%            |
| Jefferson                     | 88%            |
| Taylor Mountain               | 81%            |
| Luther Burbank                | 92%            |
| Steele Lane                   | 90%            |
| Brook Hill                    | 94%            |
| <b>Average Retention Rate</b> | <b>87%</b>     |

## Workforce

No new providers were added in the FFS model. In fact, RDHAP availability was slightly less than last year. In the previous year we also utilized 3-4 CHW interns and volunteers for both education and on-site assistance to the RDHAPs during treatment days. Coordination of CHW volunteers was handled by DHS. In the previous year DHS recruited several CHW interns and trained them to present the education module. This year there was only 1 interested intern to assist us with the program. She assisted with consent collection and occasionally on treatment days. There was a need to use more of CAP's CHW staff time in order to provide classroom education and assist on-site during treatment days.

In the FQHC model, Santa Rosa Community Dental Clinic sent a dentist and support staff to the school for screening days. In order to be more efficient and lessen treatment days, they also brought a team of a dentist and assistant to provide dental sealants the same day. As screening progressed, identified children were then sent to another classroom where the dental team was set up and prepared to provide dental sealants. The dental team returned on a subsequent day to provide treatment to any who were not able to be seen the initial day. This may be a good adaptation to use in both models in the coming year.

## Parent Liaisons

This year the parent liaisons at each school took a more active role in disseminating and collecting consent forms and helping to gather missing information. They provided a valuable link between the principal, teachers, parents and CAP staff. There was a 10% increase in billable services in the FFS model from the 2013-2014 pilot year. It is difficult to determine whether the parent liaisons had a role in

increasing completed consent return in comparison with last year as there were other factors that changed within the program that could have also contributed to more billable services. These factors included: 1) All grades were seen this year 2) Not every school had a parent liaison at the start of the school year 3) The role of the parent liaison was not clearly defined so assistance varied between schools and 4) Consents were sent out at the beginning of the year for all but one school in the FFS model, however the FQHC model's consents were sent out approximately approx. 3 weeks before the start date of the program during the winter and spring semesters.



Dr. Alicia Montell, and Marci LaGrande from Santa Rosa Community Dental Center and CHW Cory Spencer ready for screening day.

### **Data Collection**

Due to its limitations and lack of technical support, the data collection program for the FFS model was changed from the CDC SEALS tool to an iPad format developed by Oral Health Solutions. Similar forms and data recording have been used successfully by other CAP dental programs. The form was adapted to the program's needs. Paper consents were scanned into CAP database. An iForm file was created for each child from consent information. The iForm divides the treatment visits into a) screening, b) treatment, and c) follow-up visit. Providers were responsible for entering and submitting treatment provided. Daily treatment reports were sent by the database manager at Oral Health Solutions to the CAP program manager. The CAP program manager reviewed treatment reports for accuracy and then sent them to the necessary providers for their records and insurance billing. Dental providers found the iPad format much easier to use and the Excel file report easier to read and use for insurance billing. The FQHC model used paper forms and entered data into their clinic software program.

### **RDHAP program Training**

A program review meeting was held at the end of the previous school year for review and critique of the program and to assess who would be returning to the program. All providers were willing to continue with the program. QA assessments were reviewed and techniques discussed to improve QA rates. An additional training day was done in early August to review the protocols and program changes and provide training on the new data collection system. Other support was ongoing and provided on an as needed basis.



## **Case Management and Referrals**

In the FFS model, it was originally planned that St. Joseph's Mighty Mouth mobile unit would be used to provide treatment directly at the schools so that children would not have to leave the school and would save parents from having to take time off of work. Unfortunately this did not work out as anticipated. St. Joseph protocols required that parents be present when there is any treatment other than preventative services being done. This led to no-shows, scheduling difficulties and ultimately many fewer children being treated than originally anticipated. The mobile van also had previously scheduled dates at other schools in their own program and were only able to provide limited treatment at the first two schools. Any children who were not seen at school were referred to the clinic for on-site treatment. Of the 73 students referred to St. Joseph, only 19 were seen for a follow-up visit. Just 8 of students completed treatment as of June 15, 2015.

In the FQHC model, students identified as needing treatment were referred to their dental clinics for follow-up treatment. Students with private insurance or who already had a dental home were referred to their provider. CAP staff was available to assist with insurance application if needed.

Case management was done by CAP staff, dental providers and the school nurses to make sure that all urgent needs were met as soon as possible. CAP CHW's were assigned schools and were responsible for following up with as many families as could be reached by phone. Fifty-nine percent (59 %) of families were reached during follow-up phone calls. Parents were asked if children had received treatment and where treatment was received. If the children had not received treatment, additional referrals and assistance was given. Ideally case management should be started as soon after screenings as possible to ensure timely access to dental care, however workforce limitations resulted in delayed follow up. . Many of the referrals made in the beginning of the school year still not had accessed care at the time of follow-up phone calls were made and were also being re-diagnosed by the hygienists during the treatment phase as a more severe classification than was originally stated. Of the 163 children needing treatment in the FFS model, 78 were in the process of or had completed treatment by the end of the school year.

## **Insurance Reimbursement Fee for Service Model**

Parent liaisons were used at the schools to access missing consent information. This was helpful in obtaining more billable information than in the previous year. Attempts were made to gather missing information through accessing information through school records or by phone calls to the families. Calls were also made at times from the school as it was thought that parents were more likely to answer the phone when it was coming from the school than an unknown number. In total, 85% of students seen were insured, 55% of students screened were able to be billed and to date 95% of claims have been paid. Average daily reimbursement at this time is \$229/day. At the time of this report, 82% of sealants that had been billed were reimbursed with total program reimbursement in the FFS model at \$9,400. This is an approximate \$3,000 increase from last year's reimbursement.

## **Financial Sustainability**

Sustainability of the program relies on several different factors. The ability for the providers to bill for services being the main one in the FFS model. Efforts continued to be made to address incomplete information but was limited by the amount of workforce hours available. The Fee for Service model averaged 3.2 sealants placed per child, while the FQHC model averaged 2.9 sealants per child.

As part of the expansion, the cost of printing the consents and information sheets was assigned to the most recently added school, Jefferson Elementary. CAP staff assisted in bundling the consent packages. In the schools added within Santa Rosa City Schools District, SRCDC was responsible for printing and

bundling the consents. CAP Staff delivered and picked up consents in order to collect consent rate return. Having all participating schools absorb this cost can help the program work towards sustainability.

## **PROGRAM SUCCESSES FROM YEAR TWO**

### **Action Items for Quality Improvement**

#### Consents

- Placing consents into the parent packets at the start of school year.
- Include in MOU with schools: Printing is school responsibility.

#### Program Scheduling

- Plan screening process for August-October.
- Prioritize schools with history of highest treatment needs when scheduling treatment dates.
- It was beneficial for the screening process at the schools to be done as close to the beginning of the school year as possible. In addition, starting treatment at schools with the highest treatment needs allowed us to better gauge our workforce needs and timeline.
- Complete program by April 15 to allow for retention checks and final data collection by the end of May.

#### Case Management

- Begin case management within 30 days of referral.

#### Program Evaluation

- Conduct a Principal / Teacher survey.

Exploring additional funding sources for the expansion of the program continues to be of importance. Encourage the RDHAP's to pursue other supplemental grants to help cover supply costs. The RDHAP's felt that it would be beneficial to the students to explore the option of expanding services offered to include prophylaxis. Explore the option of assigning one or two schools to each of the providers within the school year. The main drawback to this may be the limited volunteers and CHW's to assist on-site.

### **For Consideration**

Due to decreased funds for the upcoming 2015-2016 school year, re-assessing the program's capabilities to reach all schools previously served will need to be addressed. There can be no expansion of the RDHAP model unless the providers take a more active managerial and financial responsibility. This is unlikely as the reimbursement rate is still too low for adequate compensation and most RDHAP providers are not recouping their time and expenses. They continue with the program in the spirit of community giving and responsibility. The FQHC model may be able to expand into more schools within their catchment area by also taking over management of the program and simply providing the data for CAP to collect and report on.

- Consent return rates continue to be low. There has been some discussion to do a passive consent next year for the screening portion and then send out active consents for fluoride varnish and dental sealants. This may address the concern from the school nurse that not all children who need screenings are receiving them. Children who have come into the nurse's office due to pain have often been children who did not receive a screening because

forms were not returned. This would allow us to better assess treatment needs of ALL students but may incur slightly higher costs in printing for additional forms that would be needed.

- A portable dental unit has been bought and donated to the program and will allow RDHAP providers who do not have dental units or the finances to purchase one, the opportunity to participate in the program. This will allow more timely completion of the program.
- Better communication is needed next year between DHS and the CHW intern program at Santa Rosa Junior College to better promote the program and gather more intern assistance.

## FINAL COMMENTS

A general observation during the program was that there were several children who were identified as needing sealants during the screening who then went on to see their own dentists and had sealants placed before the Program returned to the school. We hope that an outcome of this program is increasing parents' awareness of both the benefit from dental sealants and the need to access preventative care from their own dentists.

CAP staff also observed that the overall comfort level of the providers was more evident this year. RDHAP providers were faster and more organized during treatment; they were more comfortable using the digital records and overall were more comfortable with the children. They noted that there was one particular hygienist who worked the best with the very anxious patients. Even though it may have meant a less productive workday, ensuring that the child had a positive experience was more important.

During case management follow-up calls, parents were asked to comment on the program and whether they felt it was beneficial to their children. Below are some of the parent statements gathered by CAP staff :

*Mom was very glad and thankful we provided dental sealants at school.*

*Mom thought the program was great and said that it also helped her child.*

*Mom was very pleased with the program and grateful for the services.*

*Mom was very thankful for the program and was also glad that we followed up to make sure that her child had received care.*

*Dad liked that we were able to see child at school and that he didn't have to take time off from work.*

*Mom said our program was great and that it helps parents know if their child had needs.*

*Program was "excellent".*



RDHAP Deborah De Vries and CHW Monica Luna providing dental sealants.

<sup>i</sup> Ahovuo-Saltoranta A, Hiiri A, Norblad A, Worthington H, Makela M. 2004. Pit and fissure sealants for preventing dental decay in the permanent teeth of children and adolescents. **Cochrane Database of Systematic Reviews** (3):CD001830. <http://www.ncbi.nlm.nih.gov/pubmed/18843625>.

<sup>ii</sup> Dorantes C, Childers NK, Makhija SK, Elliott R, Chafin T, Dasanyake AP. 2005. Assessment of retention rates and clinical benefits of a community sealant program. **Pediatric Dentistry** 27(3):212-216. <http://www.ncbi.nlm.nih.gov/pubmed/16173225>.

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