Alameda County’s Local Dental Pilot Program

HEALTHY TEETH HEALTHY COMMUNITIES

2017–2020

A New County-wide Dental Care Coordination System to Increase Access to and Utilization of Preventive Dental Care for Medi-Cal Beneficiaries Ages 0–20

OFFICE OF DENTAL HEALTH

MARCH 2021
“Dental health begins with your child’s first tooth.”

Source: Department of Health Care Services (DHCS)
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Disclaimer: All photos were taken prior to the COVID-19 global pandemic.
Acknowledgements

This report was written for the Healthy Teeth Healthy Communities (HTHC) project of the Office of Dental Health (ODH) of Alameda County Public Health Department (ACPHD). HTHC is a project (Domain 4) of the Local Dental Pilot Program (LDPP) under the Dental Transformation Initiative (DTI), funded by the California Department of Health Care Services (DHCS).

Many thanks to HTHC staff for their wonderful team spirit, passion, hard work, and willingness to be flexible to try new ideas that made this pilot project such a huge success in such a short time. It has become a role model in dental public health.

Thanks to Alameda County Public Health Department (ACPHD) Information Services (IS) team members for their support and work to implement the database activities, transition the CCMS database to ACPHD server, and upload HTHC information on the ODH website.

Special thanks to Alameda County Human Resources (Central and HCSA) for expediting the hiring of personnel by creating and approving the new positions quickly.

Special thanks to the 41 HTHC partners and collaborators (17 agencies and 24 private dental offices) for their collaborative spirit and relentless efforts in finding solutions to the many new lessons learned and making this project a success. The 17 partner organizations were: Alameda Health Consortium, Alameda Health System, Asian Health Services, Axis Community Health, Bay Area Community Health, Center for Healthy Schools and Communities, Center for Oral Health, East Bay Agency for Children, First 5 Alameda County, La Clínica de La Raza, Lifelong Medical Care, Native American Health Center, Oral Health Solutions, Roots Community Health, Tiburcio Vasquez Health Center, West Oakland Health, and University of California San Francisco.

Thanks to Lisa Haefele, Emily Kaplan, Baharak Amanzadeh, Jared Fine, and Liz Maker for writing the grant.

Thanks to Alameda County programs WIC (Women, Infants & Children) and DCDCP (Division of Communicable Disease Control and Prevention) for collaborating with the Community Dental Care Coordinators (CDCCs).

Thanks to the leadership of ACPHD, Alameda County Health Care Service Agency (ACHCSA), and Board of Supervisors for their constant support for this project.
**Goal, Objective, and Actions**

Alameda County Office of Dental Health (ODH) was one of the funding recipients of the Local Dental Pilot Program (LDPP) by the California Department of Health Care Services (DHCS). The LDPP was created under the Dental Transformation Initiative (DTI), which was a component of the Medi-Cal 2020 waiver that aimed to improve dental health for children covered by the Medi-Cal Dental Program.

Alameda County’s LDPP was called the Healthy Teeth Healthy Communities (HTHC) Program. HTHC was funded $19.7 million from April 2017 to December 2020. ODH administered the HTHC program and increased access to and utilization of dental care emphasizing prevention for Alameda County Medi-Cal beneficiaries ages 0-20 years. The objective of HTHC was to assure utilization of dental care for 15,000 children. The goal and objective were achieved by building a new county-wide dental care coordination system through 3 actions and 3 sub-actions.

The 3 actions were:

- Create a Community Dental Care Coordinator (CDCC) workforce.
- Create a network of dentists called the Community of Practice (COP).
- Create an online database: Care Coordination Management System (CCMS).

The 3 sub-actions were:

- Continuous quality assurance.
- Effective leadership, administration, and multi-level communications.
- Build and utilize collaborations across public-private organizations.

It was a county-wide initiative with 41 partners [17 agencies (including 8 FQHC dental clinics) and 24 private dental offices]. All partners worked together to increase access to and utilization of care through dental care coordination.

**Create Community Dental Care Coordinator (CDCC) Workforce**

The CDCCs were the bridge that connected the families, providers, and systems for increasing access to dental care. The 26 culturally and linguistically sensitive CDCCs from 14 agencies were hired and trained to conduct dental care coordination for Medi-Cal beneficiaries ages 0-20 years. These were para-professionals similar to community health workers. The CDCCs provided county-wide services, spoke 10 languages, and were racially/ethnically diverse. The 14 agencies who hired CDCCs were: 2 County programs, 8 Federally Qualified Health Centers (FQHCs), 2 community health centers, and 2 community-based organizations. The CDCCs received 8-week training on dental care coordination, tools and benchmarks to help with their tasks. A learning network was formed to support them.

**Create a Dentist Network Community of Practice (COP)**

The COP was created to address the provider factor related to barriers to access for Medi-Cal beneficiaries. The members of this dentist network were supported, trained and mentored to recognize and overcome the importance of equitable access to care and the barriers to adequate services often experienced by Medi-Cal beneficiaries. This network recruited 169 dentists (136 from 8 Federally Qualified Health Centers, 2 from 1 community health center, 30 from 24 private dental offices, and 1 from an out-of-HTHC network dental office). 14 Continuing Education (CE) Courses were provided (49 units, no cost to providers) mostly by the faculty from University of California San Francisco (UCSF) School of Dentistry. The CE topics focused on increasing the confidence and competence of dentists to serve young children. About 17 pediatric dentistry mentors were recruited to serve the network. Most COP members were general dentists, but they provided care for young children. They also provided Family Oral Health Education (FOHE) to families with children ages 0-5 years.
Create an Online Database

The HTHC project created and maintained a cloud-based online database called the Care Coordination Management System (CCMS). It was a live, HIPAA compliant, cross-agency database that supported county-wide dental care coordination services for data collection, data entry, data tracking, and sharing, especially the dental appointments. The database provided program data for operation and evaluation and quality improvement efforts while implementing HTHC. The CCMS provided real-time information about the utilization of services, types of dental care provided, and client demographics. The CCMS enabled 26 CDCCs to enter and use data simultaneously. HTHC project performance was monitored with the data from the CCMS and relevant feedback was given to the partners monthly and quarterly. This is the first time Office of Dental Health (ODH) developed such a complex database.

Continuous Quality Assurance

Continuous and consistent quality assurance activities were integral parts of the HTHC project. This was essential to achieve the goal of the HTHC project; it allowed the project to make timely quality improvements of the various aspects of the project and meet project deliverables. The Accountability and Quality Improvement (AQI) workgroup was formed to implement the quality assurance—the members consisted of HTHC Leadership, researchers and faculty from UCSF School of Dentistry, and leadership from Alameda Health Consortium. The AQI members met monthly to review and give feedback on data collection, data analysis, data reporting, and using the data from the online database. Numerous surveys and multiple focus groups for CDCCs, COP members, and Medi-Cal beneficiaries were conducted under the guidance of the AQI workgroup.

Effective Leadership, Administration, and Multi-level Communications

Leadership was critical to the success of HTHC. The ODH had vision, infrastructure and experience of implementing a dental public health program that included dental care coordination services. All levels of county leadership and partner leadership were deeply engaged in the project.

The HTHC project received high quality administrative support which also contributed to the success. Multiple workgroups were formed to help administer various components of the project. Along with the strong ODH administration, an active Steering Committee, Implementation group, and AQI group supported the project from the beginning to end. The weekly Implementation workgroup meeting was critical for accomplishing the project deliverables on time. The 3.5-year HTHC project activities were as follows:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (2017)</td>
<td>Planning and developing the curriculums and tools, and CDCC and COP trainings</td>
</tr>
<tr>
<td>2 &amp; 3 (2018, 2019)</td>
<td>Full implementation of the program</td>
</tr>
<tr>
<td>4 (2020)</td>
<td>Program implementation interrupted due to COVID-19 pandemic</td>
</tr>
</tbody>
</table>

Multi-level, effective communication with staff and partners contributed to the success of HTHC. For example, HTHC staff regularly communicated with CDCCs and their supervisors, project directors, finance and contracts staff, and private dental office staff. Various workgroups and meetings were used to communicate with both HTHC staff and partners, and solve problems when challenges were faced. HTHC leadership anticipated challenges for this pilot project and were proactive about finding solutions quickly. Every workgroup meeting ended with some kind of consensus about moving forward with solution.

Build and Utilize Collaborations

HTHC built and leveraged partnerships and collaborations between public-private entities, dental-medical-behavioral providers, and academia. The 41 contracted partners included 17 large agencies and 24 private dental offices. Alameda County Public Health Department had longtime relationships with most of the agency partners.
Results
Although the project period was 3.5 years, most of the work was done in less than 3 years because year 1 was spent for planning and training CDCCs and year 4 was challenging due to the COVID-19 pandemic.

Key results:
- 52,402 families were contacted via outreach and inreach (99.8% of target)
- 11,922 children enrolled in program (79.4% of target)
- 34,934 all dental appointments made (1st and subsequent) for the 10,395 children (144.6% of target)
- 25,811 all dental appointments kept (164.8% of target)
- 26.2% no-show rate of all dental appointments made (grant target was 35%)
- 10,395 1st dental appointments made
- 8,604 1st dental appointments kept
- 17.3% no-show rate of 1st dental appointments made (grant target was 35%)
- 49% (4,195) of these were children ages 0-5 years
- 89.98% (3,775) of the children ages 0-5 years received FOHE from dental office (no target set in grant proposal)

Most children needed multiple appointments because by the time they enrolled in the HTHC program they already had many dental problems, e.g., abscess, caries, etc. Thus, many continuity of care appointments did not take place immediately after the 1st appointment; several restorative services had to be done before the preventive service associated with continuity of care appointment could be provided.

The number of children in HTHC who reported not accessing any dental care in more than a year is higher compared to the State’s data. About 82.2% HTHC children reported that they had not visited any dentist for more than a year. State Portal data for Alameda County shows this rate was 52.7%-55% (for 2018 & 2019).

In 2018, at least 4.5% (3,158/69,011) and in 2019, at least 3.6% (2,955/81,896) of Alameda County’s children received dental services due to HTHC efforts. In absence of HTHC, these children probably would not have received dental care.

Implications
The results of HTHC have profound program and policy implications for dental public health.

- Having a diverse racial/ethnic and linguistically sensitive workforce (CDCCs and COP) benefitted Alameda County’s diverse residents.
- Dental Care Coordination led to thousands of children-youth getting dental services (most of whom had not seen a dentist for >12 months).
- Dental care coordination can improve access to care for very young children ages 0-5 years.
- General dentists’ capacity can be built to provide care to children-youth ages 0-20 years if they are supported by care coordinators and appropriate CEs that increase their confidence and skills.
- Dental Care Coordination contributed to extremely low no-show rates at almost all the FQHCs.
- Dental Care Coordination should be considered a best practice for increasing access to care, especially for Medi-Cal beneficiaries.

Challenges
The COVID-19 pandemic in 2020 placed an unprecedented challenge on HTHC. All aspects of HTHC were affected across the 41 partner agencies. If the pandemic had not happened, HTHC would have exceeded its targets mentioned in the grant proposal. The other major challenges were: delayed development of the online database, lengthy process of staff recruitment, high staff turnover, and time needed to create dental care coordination tools and curriculum.

Conclusion
The county-wide dental care coordination model of Alameda County was successful in increasing access to and utilization of dental care for thousands of Medi-Cal beneficiaries ages 0-20 years. This model can also be used for any target population and could be replicated across California. Partnerships with FQHCs are essential to any projects that will provide services to Medi-Cal beneficiaries.
California’s Medicaid program is called Medi-Cal. One of the neglected areas in Medi-Cal is dental health and early childhood caries risk. “The burden of oral diseases constitutes a major challenge because of the economic and social costs it imposes on society. In children, untreated disease can lead to impaired growth, altered speech, missed school days, difficulty in learning and lowered self-esteem” (Little Hoover Commission, 2016). Dental caries is the most prevalent childhood illness in the United States (45.8% for all ages, 2015-2016, CDC). Studies show that low access to dental care is related to more childhood caries (Edelstein 2006). Thus, increasing access to dental care will lead to reduction of childhood caries.

Two reports highlighted the need to increase access to dental care and improve California’s Medi-Cal Dental Program. The 2014 State Audit Report found that fewer than 50% of the under 21-year old beneficiaries had accessed the Medi-Cal Dental Program. After the audit report, the State Legislature convened the Little Hoover Commission. The Commission took written and oral testimony to better understand the reasons for the failing Medi-Cal Dental Program. Based on their findings they issued a report in 2016 and listed the barriers to access to care.

The key barriers to access reported in the Little Hoover Commission Report can be grouped as follows:

- **Dental Provider Factors** (low reimbursement, lack of dentists who take Medi-Cal patients/concern that practice would be overwhelmed, fear of high no show rate, administrative-financial burden).
- **Patient/Client Factors** (little outreach or care coordination, difficulty finding providers for kids under 5, high no show rate, low oral health literacy, language/culture, long wait for appointments, long distances, psycho-social barriers, administrative-financial burden).
- **System Factors** (administrative issues, financial issues, data collection/utilization, limited public-private collaboration, lack of dental-medical-behavioral collaboration).

A Venn diagram (Figure 1) below shows how 3 barriers to care factors intersect. The Little Hoover Commission Report indicated that if the barriers related to these 3 factors are removed, then, access to care will improve. It is apparent that, if a system of care could facilitate removal of the barriers and strengthen the interactions of these 3 entities, then, it might increase access to care and thus lead to reduced childhood caries.

The two reports led to an investment from the California Department of Health Care Services (DHCS) via California’s Section 1115(a) Medicaid Waiver, entitled Medi-Cal 2020. This investment in oral health was called the Dental Transformation Initiative (DTI).

The DTI introduced pilot projects called Local Dental Pilot Program (LDPP) to improve the dental health for Medi-Cal children by focusing on “high-value care, improved access, and utilization of performance measures to drive service delivery system reform in the hope to increase the use of preventive dental services for children, prevent and treat more early childhood caries, and increase continuity of care for children” (DHCS 2020).
Alameda County Office of Dental Health (ODH) was one of the LDPP funding recipients to implement Domain 4. Alameda County’s LDPP was called the Healthy Teeth Healthy Communities (HTHC). ODH was funded with $19.7 million from April 2017 to December 2020. The funding enabled the ODH to implement and build an effective county-wide Dental Care Coordination model that led to increased access to (and utilization of) dental care emphasizing prevention and increased continuity of care for Medi-Cal children-youth ages 0-20 years. The HTHC model embraced the hypothesis explained above in the Venn diagram (Figure 1) section.

The HTHC model was developed from lessons learned from ODH’s existing dental public health programs (e.g. Healthy Kid Healthy Teeth, WIC Dental Days, Healthy Smiles,) that had offered small scale care coordination for many years. ODH’s first 5-year oral health strategic plan for 2012-2017 included the HTHC concept for dental care coordination to increase access to care for underserved populations. All ODH partners (especially the 8 FQHCs) were interested in ramping up dental care coordination activities to improve access to care for Medi-Cal beneficiaries and were united in their efforts under ODH’s leadership.
Alameda County’s LDPP: Healthy Teeth Healthy Communities (HTHC) Program

Alameda County is the 7th largest county in California in terms of population and land (1,671,329 and 739 square miles). It is located by the San Francisco Bay Area in Northern California. Its population is very diverse by race/ethnicity and socio-economic status. The race/ethnicity distribution is Asian American 31.5%, White 30.9%, Latinx 22.2%, African American 9.8%, Multi-race 4.3%, Pacific Islander 0.8%, Native American 0.2%, and Other 0.3% (Data Source: CAPE 2020).

About 401,911 people (all age groups) are eligible for Medi-Cal and 303,816 (all age groups) are enrolled in Medi-Cal. About 140,081 children ages 0-20 years are enrolled in Medi-Cal (calculated for 12 months using December 2019 as the average; State Portal Data 2019).

HTHC was a County-wide initiative with 41 partners (17 agencies and 24 private dental offices) to achieve one common goal. The HTHC’s collaborative structure was an ideal example of the Collective Impact model. This collaborative effort fulfilled all 5 conditions of the Collective Impact model (Figure 3).

Figure 2: Alameda County

Figure 3: HTHC is an example of Collective Impact model

<table>
<thead>
<tr>
<th>5 CONDITIONS OF COLLECTIVE IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Back Bone Organization</strong></td>
</tr>
<tr>
<td>✓ ODH administered the grant, convened and coordinated with all partners</td>
</tr>
<tr>
<td><strong>Common Agenda</strong></td>
</tr>
<tr>
<td>✓ All HTHC partners worked to increase access to dental care for 0–20 yrs through Care Coordination</td>
</tr>
<tr>
<td><strong>Shared Measurement</strong></td>
</tr>
<tr>
<td>✓ All HTHC partners collected care coordination data, shared accountability</td>
</tr>
<tr>
<td><strong>Mutually Reinforcing Activities</strong></td>
</tr>
<tr>
<td>✓ Community Dental Care Coordinators and Dental providers worked together to increase access to care</td>
</tr>
<tr>
<td><strong>Continuous Communication</strong></td>
</tr>
<tr>
<td>✓ ODH assured that all partners built a strong relationship through ongoing meetings and trainings</td>
</tr>
</tbody>
</table>
Figure 4 shows a graphical representation of the HTHC Dental Care Coordination system. The Community Dental Care Coordinators (CDCCs) played a key role in this model; they were the liaisons between the dental providers, clients and systems. Dental care coordination was supported by continuous quality assurance, effective leadership-administration-communication-partnerships and data. This model was designed to remove the barriers to access (mentioned in the Little Hoover Commission Report) and to increase access to and utilization of dental care by Medi-Cal beneficiaries.

Although this model was developed for families with children and youth age 0-20 years, it can be used for any target population (e.g. adults, seniors, children with special needs, pregnant women, or homeless).

The goal, objective, actions, and sub-actions of HTHC were:

- **Goal:** To increase access to dental care services emphasizing prevention, for Medi-Cal beneficiaries children-youth ages 0-20 years in Alameda County.

- **Objective:** By the end of the project period, 15,000 children will utilize dental care. This will be achieved by creating and implementing a new model of county-wide dental care coordination system in Alameda County.

- **Actions:**
  1. Create a Community Dental Care Coordinator (CDCC) workforce (bridge connecting the 3 access to care factors of clients, providers and systems).
  2. Create a network of dentists called Community of Practice (COP) (addressed provider factors).
  3. Create online database: Care Coordination Management System (for data collection, data entry, and data use by 26 CDCCs for HTHC operations and monitoring).

- **Sub-actions:**
  1. Continuous quality assurance of all areas of the project.
  2. Effective leadership, administration, and multi-level communications.
  3. Build and utilize collaborations
     - Public-private
     - Medical-dental-behavioral.
Development

The Dental Care Coordination was key to the HTHC model, thus creating a dental care coordinator workforce was vital. Alameda County’s Office of Dental Health believed that dental care coordination can increase access to care. And the HTHC model was able to demonstrate that linguistically and culturally sensitive Community Dental Care Coordinators (CDCCs) were effective in increasing access to and utilization of preventive dental care services for Medi-Cal eligible and enrolled population ages 0-20 years in Alameda County. The CDCCs were also the bridge connecting the 3 access to care factors related to clients, providers, and systems.

Definition of Dental Care Coordination

Dental Care Coordination is a family-centered, assessment-driven, and team-based activity designed to meet the needs of families (with children-youth) while enhancing the family’s ability to navigate the health and social service system, and access dental health and other services and resources.

8 Steps of Dental Care Coordination

1. Initial contact—connection with clients via outreach, inreach or referral
2. Enrollment of client in program (i.e. sign consent form)
3. Set up appointment with dental offices
4. Remind client about appointment
5. Accompany client to 1st dental appointment
6. Follow-up after dental appointment—with dental office and client
7. Continuity of care—make preventive care appointment 6 months to 1 year later
8. Visit dental offices at least twice a month to build and nurture relationship with dental office staff and collect data

Definition of Community Dental Care Coordinator (CDCC)

A community health worker or similar paraprofessional who conducts dental care coordination.

A CDCC connects with the patients, providers, and systems; works closely with families, identifies dental care needs of the families and organizes dental care for the families with the dental providers.

An ideal CDCC requires skills and knowledges related to interpersonal, communications, and public health programmatic attributes. Any community health worker with these attributes can be trained for Dental Care Coordination—dental knowledge is not a prerequisite.
After the grant was awarded in April 2017, HTHC partners recruited their CDCCs. There were 26 culturally and linguistically sensitive CDCCs from 14 agencies and they were ready to be trained to conduct care coordination. The majority of the CDCCs were females (70%). The CDCCs were diverse in race/ethnicity which consisted of: Asian Pacific Islander (e.g. Afghan, Bangladeshi, Chinese, Filipino, Korean, Vietnamese), African American, Hispanic/Latino (e.g. Guatemalan, Mexican, Peruvian, Salvadoran), and White. Including English, the CDCCs spoke 10 different languages fluently: Spanish, Portuguese, Vietnamese, Tagalog, Korean, Farsi, Chinese-Mandarin, Chinese-Cantonese, and Bengali. Seven (7) CDCCs had worked as a dental assistant before joining the HTHC project. For each Dental office there was a lead CDCC.

The 14 agencies where the CDCCs were based out of were:
- 2 County programs (Office of Dental Health & Center for Healthy Schools and Communities)
- 8 Federally Qualified Health Centers
- 2 community health centers
- 2 community-based organizations

The grant proposed for 25 CDCCs but the project actually had 26 as West Oakland Health (WOH) supported a full time CDCC, even though WOH was not contracted with ODH until middle of 2019.

Table 1 shows the distribution of the CDCC workforce among the 14 partner agencies. In HTHC, there were mainly two types of agencies:
- Health Centers and
- non-Health Centers.
<table>
<thead>
<tr>
<th>Agency</th>
<th># of CDCCs</th>
<th>Primary Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NON-HEALTH CENTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office of Dental Health</td>
<td>2</td>
<td>Albany, Berkeley, Fremont, Hayward</td>
</tr>
<tr>
<td>Center for Healthy Schools and</td>
<td>2</td>
<td>Castro Valley, Dublin, Livermore, Union City</td>
</tr>
<tr>
<td>Communities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Bay Agency for Children</td>
<td>3</td>
<td>Fremont, Hayward, Oakland, Piedmont, San Leandro, San Lorenzo, Union City</td>
</tr>
<tr>
<td>First 5 Alameda County</td>
<td>3</td>
<td>Alameda, Berkeley, Fremont, Newark, Oakland, Pleasanton, San Lorenzo, Union City</td>
</tr>
<tr>
<td><strong>HEALTH CENTER—WITHOUT DENTAL CLINIC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roots Community Health Center</td>
<td>2</td>
<td>Berkeley, Oakland</td>
</tr>
<tr>
<td><strong>HEALTH CENTER—WITH DENTAL CLINIC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alameda Health System</td>
<td>1</td>
<td>Oakland</td>
</tr>
<tr>
<td>Axis Community Health</td>
<td>1</td>
<td>Castro Valley, Dublin, Livermore, Pleasanton (clinic started in 2019)</td>
</tr>
<tr>
<td>Asian Health Services</td>
<td>2</td>
<td>Alameda, Castro Valley, Oakland, San Lorenzo</td>
</tr>
<tr>
<td>La Clinica de La Raza</td>
<td>2</td>
<td>Oakland, San Leandro, San Lorenzo</td>
</tr>
<tr>
<td>LifeLong Medical Care</td>
<td>1</td>
<td>Berkeley, Emeryville, Oakland, Piedmont</td>
</tr>
<tr>
<td>Native American Health Center</td>
<td>2</td>
<td>Alameda, Oakland, San Leandro</td>
</tr>
<tr>
<td>Tiburcio Vasquez Health Center</td>
<td>2</td>
<td>Castro Valley, Hayward, San Leandro, San Lorenzo, Union City</td>
</tr>
<tr>
<td>Bay Area Community Health (previously</td>
<td>2</td>
<td>Fremont, Newark, Union City</td>
</tr>
<tr>
<td>called Tri-City Health Center)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Oakland Health</td>
<td>1</td>
<td>Oakland</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td></td>
</tr>
</tbody>
</table>
In order to build a competent CDCC Workforce, HTHC took the following actions:

- Developed an 8-week training curriculum that reflected the importance and benefit of dental care coordination as part of overall health and well-being.
- Offered the 8-week training to help increase knowledge and skills related to dental care coordination to serve the target population.
- Developed tools and benchmarks to help the CDCCs with their tasks.
- Developed a shared sense of responsibility for the dental health of our communities.
- Supported the CDCCs in connecting with peers in the community who were serving the target population by creating formal avenues for sharing experiences and learning together.
- Developed and facilitated the partnerships between CDCCs and dental offices (both FQHC and private).
Dental Care Coordination Curriculum and 8-week Training

In May 2017, a Curriculum Advisory Committee was created from the leadership of the partner agencies. The Health Outreach Partners (HOP), a consultant facilitated the team. The 8-week curriculum was developed and the Office of Dental Health took leadership to offer the training at the Alameda County Public Health Department from October–December 2017. All sessions of this training were offered in-person, usually 3 times/week.

There were 10 modules in the training course. The CDCCs came from a wide range of skills and experiences, from beginners to skilled individuals. This curriculum covered the following topics:

- orientation about HTHC
- dental care coordination
- oral health disparities
- basic dental terminology
- oral health care for children and youth ages 0-20 years
- oral health education
- effective communication
- HIPAA, privacy, and confidentiality
- data collection, data entry, and reporting.

Along with the training CDCCs were also given various tools such as an outreach calendar, talking points with clients, brochures about HTHC, etc. CDCCs started care coordination in January 2018.

Tools Given to the CDCC Workforce

The CDCCs were given various tools to conduct their activities with high quality. These tools were:

- **iPads**: to help enter data.
- **Patient consent form**: is a 2-page document explaining the program and collecting some data. This was later translated in 7 languages (Arabic, Farsi, Chinese traditional, Chinese simplified, Spanish, Tagalog, Vietnamese).
- **Dental Encounter Form**: is a 1-page document that collects some information about services provided at dental offices. The top portion was filled out by the assisting CDCC and the bottom portion was filled out by the dental provider office staff. This was later translated in 7 languages (Arabic, Farsi, Chinese traditional, Chinese simplified, Spanish, Tagalog, Vietnamese).
- **Goal setting tool**: is a 1-page document with mostly visuals that show dental hygiene practices, e.g. brushing, flossing, dietary and feeding practices.
- **Urgency tool**: is a 1-page document that helps CDCCs quickly identify and refer clients if their dental condition falls under Class 3 and 4.
- **Monthly reporting spreadsheet**: is a 2-page excel spreadsheet with monthly targets for each partner working through CDCCs. This was a performance monitoring tool.
- **Dental Provider Office Protocol**: is a 56-page document that included detailed information about each dental service provider participating in HTHC (FQHC and private), e.g. staff contact information, appointment time availability, cancellation/late policy.
- **Frequently Asked Questions document**: is a 30+ page document that included information about dental care coordination, who is a lead CDCC, how to drop-off/pickup Dental Encounter Forms from dental offices, etc.
Activities

HTHC was a 3.5-year project from April 2017 to December 2020. However, CDCCs started working in the field in January 2018 and worked with full potential until February 2020. From March 2020 to December 2020 care coordination activities were reduced almost by 80% due to the COVID-19 pandemic.

In the HTHC model, CDCCs were considered as the change agent. They worked with the clients, dental offices and systems. Initially, it was difficult to establish relationships with the dental offices. But within a short time, the CDCCs were able to build good relationships with the dental offices. Their hard work and constant support from the leadership helped CDCCs to become a reliable partner of the dental offices.

How Health Center CDCCs Worked with Their Dental Offices, Clients and Other CDCCs

About two thirds of the 26 CDCCs worked in the Health Centers. These Health Centers offered medical and/or dental services (e.g., FQHCs, community health centers). These CDCCs conducted mostly inreach to their own health center medical clients and sometimes participated in some community outreach events. If the health center had a dental department, the CDCCs referred the clients to an in-house dentist. Otherwise, they referred to a private dentist who had joined the HTHC network of Community of Practice (COP).

The CDCCs established relationships with the staff of their in-house Dental offices such as receptionist, Registered Dental Assistants, Registered Dental Hygienists, and Dentists. Each Dental office was assigned a lead CDCC. All other CDCCs scheduled dental appointments through the lead CDCC.

The CDCCs worked together with each other to find a dental home as per client’s need. For example, if a non-Health Center CDCC’s client wanted their medical and dental home in the same institution, then, the non-Health Center CDCC contacted the health center CDCC to enroll the client in the health center.

Picture 4: Tiburcio Vasquez Health Center CDCCs with their dental office staff
How Non-Health Center CDCCs Worked with Private Dental Offices, Clients and Other CDCCs

Agencies which are considered non-health centers did not offer in-house medical or dental services (e.g., County programs, community-based organizations). The non-health center CDCCs always did outreach at community venues, health fairs, schools, affordable housing complexes and referred most of their clients to private dentists who participated in HTHC network of Community of Practice.

The CDCCs established relationships with the staff of private Dental Offices as well as FQHC Dental Offices such as receptionists, Registered Dental Assistants, Registered Dental Hygienists, and Dentists. Each private dental office was assigned a lead CDCC. All other CDCCs scheduled dental appointment through the lead CDCC. This system worked very well for the private dental offices.

CDCC Job Responsibilities

1. Conduct outreach and inreach to find families with children who are on Medi-Cal or Medi-Cal eligible.
2. Educate families about oral health.
3. Educate families about using Medi-Cal dental services.
4. Assist families with dental appointments, e.g.
   a. scheduling and showing up
   b. accompany clients to 1st appointments
   c. conduct follow-up calls
5. Establish and maintain a good working relationship with dental providers and dental provider office staff.
6. Collect and enter data in the HTHC online database.
7. Attend project trainings-meetings as scheduled.
Tables 2 and 3 show the targets/benchmarks and care coordination performance matrix as proposed in the grant.

**Table 2: Targets/benchmarks per 1 FTE CDCCs to serve Medi-Cal beneficiaries**

<table>
<thead>
<tr>
<th>Service</th>
<th>Per 1 FTE CDCC/ month</th>
<th>Per 1 FTE CDCC/ year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact families with children</td>
<td>50</td>
<td>600</td>
</tr>
<tr>
<td>Care coordination/schedule dental appointment</td>
<td>23</td>
<td>276</td>
</tr>
<tr>
<td>Show for dental appointment</td>
<td>15</td>
<td>179</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>10</td>
<td>116</td>
</tr>
</tbody>
</table>

*FTE: Full Time Employee*

**Table 3: Care Coordination Performance Matrix for the project period**

<table>
<thead>
<tr>
<th>Service</th>
<th>Yearly</th>
<th>Project Period 3.5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDCCs outreach/contact families with children</td>
<td>15,000</td>
<td>52,500</td>
</tr>
<tr>
<td>CDCCs schedule appointment</td>
<td>6,900</td>
<td>24,150</td>
</tr>
<tr>
<td>Show of dental appointments (rate 65%)</td>
<td>4,485</td>
<td>15,697</td>
</tr>
</tbody>
</table>

*Calculations were done for 25 FTEs as per the grant.

**Formed A Learning Community for CDCC Workforce**

After the 8-week CDCC training, a learning community was formed; ODH organized and facilitated monthly all-day meetings for CDCCs and their supervisors from January 2018–September 2019. Then, it was organized quarterly from October 2019–December 2020. Part of the meeting had targeted contents only for the supervisors.

This all-day in-person meeting included review and discussion of care coordination best practices, lessons learned, challenges, and solutions to the challenges. Moreover, the meetings provided CDCCs the opportunity to ask questions that they had about the program or any protocols or any situations arising from the field work. The meeting time was also used to provide refresher trainings and reviewing content/topics from the eight-week training in 2017 (e.g. Medi-Cal Dental Program issues, retraining on how to enter data on the Care Coordination Management System database). When a new CDCC joined (usually because of turnover) an existing CDCC from that agency would do the main ‘on-boarding’ of the new CDCC. An ODH CDCC would show the new CDCC about data entry on the database, or the HTHC Care Coordinator Manager or Epidemiologist would provide technical assistance.
# Outcomes of CDCC Work

<table>
<thead>
<tr>
<th>What we did</th>
<th>How much we did</th>
<th>Target</th>
<th>How well we did (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Families contacted via outreach and inreach</td>
<td>52,402</td>
<td>52,500</td>
<td>99.8%</td>
</tr>
<tr>
<td>2 Children enrolled in program</td>
<td>11,922</td>
<td>15,000</td>
<td>79.4%</td>
</tr>
<tr>
<td>3 All dental appointments made (1st and subsequent)</td>
<td>34,934</td>
<td>24,150</td>
<td>144.6%</td>
</tr>
<tr>
<td>4 All dental appointments kept (1st and subsequent)</td>
<td>25,811</td>
<td>15,697</td>
<td>164.8%</td>
</tr>
<tr>
<td>5 1st dental appointments made</td>
<td>10,395</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>6 1st dental appointments kept</td>
<td>8,604</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>7 Show rate of 1st dental appointments made</td>
<td>82.7%</td>
<td>65%</td>
<td>127%</td>
</tr>
<tr>
<td>8 Show rate of all dental appointments made</td>
<td>73.8%</td>
<td>65%</td>
<td>113.5%</td>
</tr>
<tr>
<td>9 No-show rate of 1st dental appointments made</td>
<td>17.3%</td>
<td>35%</td>
<td>202%</td>
</tr>
<tr>
<td>10 No-show rate of all dental appointments made</td>
<td>26.2%</td>
<td>35%</td>
<td>133.5%</td>
</tr>
<tr>
<td>11 Children 0-5 years received FOHE from dental office</td>
<td>3,775</td>
<td>NA</td>
<td>89.9%</td>
</tr>
</tbody>
</table>

The most impressive outcome of CDCCs’ dental care coordination work was the number of appointments made in less than 3 years. In the grant proposal the deliverable was only mentioned as “appointment” not “1st appointment” or “all appointment.” That created a challenge to explain the achievements as described in the grant proposal.

The care coordination benchmark was determined in the grant for the entire project period (3.5 years). Due to the CDCCs’ specific training need, the CDCCs were not able to start standard field work until January 2018. The CDCCs were very productive during 2 pre-COVID years (2018 & 2019) and first 2 months of 2020. After February 2020, the CDCCs’ productivity decreased due to the Stay at Home Order for COVID-19.

Even after all these challenges, all appointments (1st and subsequent) made by CDCCs in less than full 3-years work exceeded the number of appointments’ target written in the grant (24,150). A total of 34,934 appointments were made for 10,395 children and youth; out of that 25,811 all appointments (1st and subsequent) were kept. Most children needed multiple appointments because, by the time they enrolled in HTHC program they already had dental problems such as abscess, caries, etc. When the grant was written, it was not anticipated that the majority of children would need immediate multiple appointments for restorative services.

The actual show-rate was 73.8% (for all appointments), and 82.7% (for 1st appointments). Both show rates are much higher than the target in the grant which was 65%. All dental providers and partners strongly believe that the higher show rate was only possible due to the dental care coordination by the CDCCs.

Most of the FQHC CDCCs reached >100% of their targets in 2018 and 2019. These CDCCs reached out to
their own clinic members/clients ("inreach") who only used their medical services but not dental services. By bringing these clients into dental care, they were able to reach more than 100% of their targets. Internal FQHC data from 2018 (not shown in this report) showed that two-thirds of medical clients in FQHCs were not utilizing dental services; as such, the focus of the FQHCs became inreach rather than outreach.

The Health Center (i.e. FQHCs, community health centers) clients also had much lower rate of no-show rate of 1st appointments: average 17%, (range 11%-35%) compared to non-Health Center (i.e. private dental offices) clients. Some FQHCs had extremely low no show rates of 2%-5% (e.g. Asian Health Services, West Oakland Health, Tiburcio Vasquez Health Center).

About 49% of the total children served by HTHC were 0-5 years old; 89.9% of them received Family Oral Health Education (FOHE). This is a huge achievement as this age group is usually missed by Medi-Cal Dental program. Reaching children and their families as early as possible contributes to a greater likelihood of good oral health.

Challenges and Solutions

It was anticipated that HTHC will face many challenges especially during the county wide CDCC workforce development process. But the county and the partner leaderships were ready to face any challenges and find solutions for those. Here are some examples of challenges and solutions:

Lengthy Hiring Process and High Staff Turnover

These affected the functions of ODH as well as partner agencies of the HTHC project. The staff hiring process was lengthy, therefore, sometimes positions remained vacant for a while. The staff turnover was high especially towards the end of the project period. Most CDCCs were looking for higher paying jobs or permanent positions. This impacted reaching the project target.

During these kinds of situations, agencies reassigned existing staff to take on some responsibilities of CDCCs. There was ongoing communication and coordination between ODH and partner agencies to minimize the challenge.

Public Charge

The fear of public charge reduced new client enrollment in 2019, and increased drop out of some existing clients. Existing clients were very hesitant to continue.

The CDCCs took extra initiative to educate and inform the existing and prospective clients about the updates on public charge so that the clients could make informed decision about participating in the program.

COVID-19 Pandemic

The pandemic greatly impacted the work of the CDCCs in 2020. New client enrollment was significantly reduced and no-show rates were extremely high (81% in Q2). The dental offices, especially the private ones, were closed for a few months in the beginning of pandemic (March-June). Dental offices started to open around mid-June 2020, but clients were hesitant to attend their appointments.

Although there were no solutions for this challenge, CDCCs continued to stay in touch with their clients to provide moral support to them. The clients were very happy to receive the calls. When CDCCs called the clients, they also provided COVID related information to the clients.

Scheduling 1st Appointment Required More Effort and Time than Anticipated

First appointment scheduling required multiple phone calls by the CDCCs with the clients and the dental offices.

The CDCCs accompanied families usually to the 1st dental appointments. This became challenging as the CDCCs were serving clients all over the County (simultaneously they would have client in Oakland and Hayward and had to select to accompany one client). Some clients needed to be accompanied multiple times to dental offices due to greater needs of children (e.g. more complex treatment plans), greater need of information by the parents (e.g. lack of knowledge about utilizing dental services, culture of fear and seeing a dentist regularly, not just when you are in pain).

The CDCCs planned and organized the appointments better after learning about these challenges, e.g.
CDCCs scheduled multiple clients in the same dental office on the same day.

**Higher No-show Rate for Non-Health Center Based CDCCs**

The CDCCs who were employed by non-Health centers, had a higher no-show rate of their clients compared to the CDCCs who worked at Health Centers (e.g. FQHCs, community health centers). Non-FQHC/Health center CDCCs also had to spend more time doing outreach to recruit families, and hence faced more challenges with enrolling new clients, getting them to appointments, and getting them into continuity of care.

The AQI team provided continuous support to address this issue.

**CDCCs and Dental Provider Office Staff Not Familiar with Each Other**

In the beginning of the field work (January 2018) most of the dental provider offices (dentists and front office staff at both FQHC and private offices) were still unfamiliar with HTHC program and CDCCs’ role. When the CDCCs called them for an appointment for a client, dental office staff was hesitant to interact with them.

This challenge was addressed by setting up introductory meetings between the CDCCs and the dental provider office staff.

**Communication between Dental Offices and 26 CDCCs**

Dental provider office staff especially private provider office staff were uncomfortable working with all 26 CDCCs simultaneously, e.g. getting calls from CDCCs to setup dental appointments.

This challenge was addressed by appointing one “Lead CDCC” per dental office. All the other 25 CDCCs had to contact the lead CDCC if they wanted to make an appointment with the Lead CDCC’s office. This protocol was strictly followed in 2018. By 2019 (2nd year of field work) the dental office staff knew all the CDCCs well and most dental offices allowed all 26 CDCCs to contact them directly to set up appointments.

**Linguistic Needs of Clients**

In early 2018, the program did not have educational materials in multiple languages to serve the diverse Alameda County population.

Educational/program materials were developed and available by 2019 in English, Arabic, Farsi, Chinese simple, Chinese traditional, Tagalog, Spanish, and Vietnamese.

**Database Was Not Ready in the Early Part of the Program**

By the time CDCCs started the field work (January 2018), the cloud-based database was not ready. By July 2018, the database was ready to enter data.

From January-June 2018 data were collected by the CDCCs manually by a paper form developed by ODH; these data were entered into an Access database for further analysis by an ODH staff. Many features of the database were developed very late and were available by mid/late 2019 (e.g. notification feature to help CDCCs remember which appointments they needed to remind the clients about). The reporting feature was not developed even by the end of the project period. ODH downloaded raw data and created a data report for every CDCC and their respective agency. Then, the reports were shared quarterly with all partner agencies and CDCCs.
ACTION #2
Create a Dentist Network Called Community of Practice (COP)

Development

The 2nd Action of the HTHC model was to create and maintain a network of dentists, called the Community of Practice (COP), who served Medi-Cal enrolled children and youth ages 0-20 years in Alameda County.

This action addressed the provider factors and barriers to access to care for Medi-Cal beneficiaries. This network was also created because California lacks pediatric dentists.

The members of this dentist network were supported, trained and mentored to recognize the importance of equitable access to care; and increased their confidence and competence to provide care to 0-20 year old Medi-Cal population. Prior to the creation of the COP network, it was clear that low participation was synonymous with dental providers not willing to accept any Medi-Cal beneficiaries or they were participating in Medi-Cal but not accepting any new beneficiaries. Furthermore, the COP network targeted recruiting general dentists and focused on building their skills to offer services to young children (ages 0-5 years).

HTHC recruited dentists throughout Alameda County by conducting outreach to FQHCs, dental societies and private practices by the Community Dental Ambassador. The Continuing Education (CE) training and mentorship for the COP members were offered by faculty of UCSF School of Dentistry. Some mentors were practicing pediatric dentistry throughout Alameda County. The Community Dental Ambassador was a retired dentist who has existing and strong relationships with County dental societies and dentists.

Vision of COP

To build a sufficient network of dentists who are sensitive to equitable access to care, knowledgeable of barriers to care experienced by Medi-Cal enrollees, proficient in the application of preventive dentistry, motivational interviewing and in interfacing with local and state payment and monitoring systems.

The vision was achieved by:

1. Identifying barriers, finding solutions and support for dentists who wish to expand their capacity to serve the target population.
2. Supporting dentists in connecting with peers in the community who are serving the target population by creating formal avenues for sharing experiences and learning together.
3. Engaging and motivating more dentists to better serve children from low-income families in our community.
4. Offering training and education to help increase dentists’ clinical and cultural competency to serve the target population.
5. Identifying the usefulness of the dental care coordination model to increase access to and utilization of care by underserved population.

6. Developing a shared sense of responsibility for the dental health of our communities.

Incentives for joining the COP network were:

1. Free Continuing Education Courses
2. Support of pediatric dentistry mentors
3. Support of CDCCs to reduce no-show rates (and increase utilization)
4. Annual data reporting incentive of $10/child (for both FQHC and private providers)
5. FOHE (Family Oral Health Education) incentive for private dental offices, maximum $20 two (2) times per year. FQHCs were not reimbursed since they bill this service to Medi-Cal Dental Program.

Activities

The COP dentists were responsible for the following:

- Accepting Medi-Cal Patients (especially for private dental offices)
- Coordinating with CDCCs for patient’s dental appointments
- Completing documents (Dental Encounter Form)
- Participating in CE trainings & mentorship program
- Providing Family Oral Health Education (FOHE) to families with children ages 0-5 years.
- Completing the Treating Young Kids Early (TYKE) training on the California Dental Association website.

In order to build the capacity of this dentist network, the following actions were taken:

1. Developed a training curriculum for Continuing Education (CE) and a Mentorship program.
2. Developed Continuing Education (CE) courses that reflect Dental Public Health and Pediatric Dentistry topics.

3. Developed mentorship program for general dentists to get support from pediatric dentists and other dental specialists. The mentors provided guidance to the general dentists and/or served as referrals for children requiring specialty care.

4. Built public-private partnerships between FQHCs and private dental offices.

5. Promoted the importance and benefit of dental care coordination (in order to increase utilization of services).

6. Developed and facilitated the partnership between dental offices and Community Dental Care Coordinators (CDCCs); this connected Action #1 and Action #2 of the HTHC model.

7. Emphasized providing oral health education to families with children, and Family Oral Health Education (FOHE) for families with children ages 0-5 years.

Office of Dental Health and UCSF team met every 2 weeks for CE planning and mentorship program.
Outcomes

COP target in grant proposal: “An increase of participating dentists who provide preventive dental services to Medi-Cal children (ages 0 through 20) to 35 dentists.”

HTHC exceeded the grant target for this deliverable. The COP network included 169 dentists (136 dentists from 8 Federally Qualified Health Centers, 2 dentists from 1 community health center, 30 dentists from 24 private dental offices, and 1 dentist from 1 out-of-HTHC network dental office).

Creating a dental provider network from scratch was quite a lot of work. The ODH leadership met with the FQHC dental directors before the project started. The FQHC directors motivated their colleagues to join COP network.

Community Dental Ambassador and HTHC leadership met with the private dentists multiple times on a one-on-one basis to explain the goals and objectives of HTHC. Most private dentists were very supportive of the project and wanted to participate; at the same time many were concerned that the program might bring hundreds of Medi-Cal clients which would overwhelm their practice. ODH staff assured the dentists that private practices could select how many children they would take on, the age of the children, and how many appointment slots they would give. Over time, the dentists felt comfortable with the program, accepted even the youngest children, and by the end of the project most of them expressed interest to continue to serve Medi-Cal beneficiaries and maintain partnership with the ODH even after the HTHC project ends in December 2020.

Most dentists (both FQHC and private) were general dentists and they were reluctant to serve children, especially very young children ages 0-5 years. But over the course of the project the confidence and skills of the dentists increased about providing care to children-youth age 0-20 years including very young children. This was achieved by gaining knowledge from participating in appropriate CEs and the support provided by the Community Dental Care Coordinators and the Community Dental Ambassador.

CE Curriculum

The original curriculum was conceptualized and developed in 2017 by ODH in collaboration with the Pediatric Dentistry Division of the University of California San Francisco (UCSF) School of Dentistry. The primary target audience for this curriculum was dentists, but due to high demand and recognition that care provision is a team effort, Registered Dental
Hygienists (RDH), Registered Dental Assistants (RDA), and Dental Assistants (DA) also participated in the trainings.

In 2020, the curriculum was revised and a Guide For Trainers was developed; this was shared with partners and stakeholders. This curriculum/training guide can be used by any organization or institution who wants to provide CEUs to dental providers especially dentists, or build the capacity of dental providers to serve dental patients ages 0-20 years. It is available on the ODH website.

This interactive curriculum covers the topics that boosted the knowledge, confidence, clinical, and interpersonal skills of participants to identify the susceptible population, recognize the disease indicators, provide a suitable preventive and management plan, early disease recognition and management, proficiency in the application of preventive dentistry, motivational interviewing, as well as to be able to interface with local and state payment and monitoring systems.

Some CE training sessions were videotaped for use in future trainings. A few topics are repeated in multiple modules due to the extra importance of the topic (e.g. local anesthesia, when to refer, taking care of younger patients).

Purpose of the curriculum:
1. To increase the knowledge and understanding of dental care providers, especially dentists, about Dental Public Health and underserved population.
2. To increase the capacity, confidence, and competency of the dental care providers, especially dentists, to care for children ages 0-20 years old.
3. To provide CE units to the COP dentist.
4. To connect dental providers/dental offices with CDCCs.
5. To increase willingness of the general dentists to see very young children (ages 0–5 years) because preventive dental care is crucial in achieving long term positive outcomes in oral health.
CE Training

During the project period, 14 CE courses (for 49 CE credits) were convened for COP dentists. The CE courses were held in Oakland, San Leonardo, San Francisco, and virtually (in 2020 due to the COVID-19 pandemic). The CE courses were organized jointly by Office of Dental Health and the Pediatric Division of UCSF’s School of Dentistry. Most of the courses were taught by faculty of Pediatric Division (UCSF School of Dentistry). Some CE courses also had featured guest speakers. A total of 810 participants attended the CE courses.

The training sessions include mostly in-person sessions, 1 hands-on practice at a simulation laboratory at UCSF, and 3 online virtual sessions (due to COVID-19).

Some of the topics that were discussed in the CE courses include:

- Successful strategies for dentists treating 0-20 year olds in the era of the new Medi-Cal Dental Program
- Motivational interviewing: gaining patient and family participation in preventive practices and dental care
- Early childhood oral health care using the CAMBRA principles
- Prevention treatment strategies: Atraumatic Restorative Treatment, Interim Therapeutic Restorations, and Silver Diamine Fluoride
- Diagnosis and treatment planning: when to refer
- Hands-on training: How to practice more efficiently and with more profitability
- Tobacco and vaping
- Children with special needs

<table>
<thead>
<tr>
<th>Table 5: Participants at CEs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>2017</td>
</tr>
<tr>
<td>2018</td>
</tr>
<tr>
<td>2019</td>
</tr>
<tr>
<td>2020</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
</tr>
</tbody>
</table>

*Data source: CE sign-in sheets

**Data Source: CE Satisfaction Surveys (usually via Survey Monkey). To get CE credit participants were required to submit the CE Satisfaction Survey. All are in one data set in Survey Monkey. Everybody didn’t get CE credit if they were not part of the COP network (e.g. dentist from Contra Costa County). The individual years of CY 2018, CY 2019, CY 2020 do not add up CY 2018-2020 because we are counting unduplicated number of participants per CE.
Challenges and Solutions

Private Dental Provider Concerns

Private dentists expressed their concerns about taking on Medi-Cal beneficiaries and very young children. One dentist revealed that she had a nightmare just before she joined the COP network that a school bus load of Medi-Cal children were waiting outside her practice door.

In anticipation of this fear and to address this challenge, the Community Dental Ambassador and ODH staff met with private dentists multiple times on a one-on-one basis. ODH suggested that practices could select how many children they would take on, the age of the children, and how many appointment slots they would give. Over time, private providers felt comfortable in taking Medi-Cal clients because the Community Dental Ambassador and Community Dental Care Coordinators provided support and the dentists also liked the program.

Shortage of Specialty Dental Services (Pediatric and Endodontic Specialists) Accepting Medi-Cal

This was an unmet need of the HTHC project. HTHC had only one private pediatric specialist office participating in the COP network. This led to long wait times when specialty level care was needed.

So, to increase access for 0-5 year old children, HTHC offered special CE courses intended to increase confidence and skills of general dentists to provide care to 0-5 year old children. The COP member dentists were also supported by the Pediatric Dentist mentors to which each mentor was assigned.

Communication Gap with Dentists and Dental Front Office Staff

Some COP dentists did not regularly attend the CE courses, resulting in interruption in regular communications with HTHC program staff. Furthermore, the front office staff never attended the CEs and did not know much about the HTHC program. Initially, many of these front office staff heard about HTHC when the CDCCs called to schedule appointments for the families.

The solution was to arrange meeting with CDCCs and the front office staff before they call for appointment. Also, the CDCCs were requested to visit the private dental offices twice a month to collect data and build relationship with front office staff.

Dental Encounter Form (DEF), Family Oral Health Education (FOHE) Data, and Incentive Payments

HTHC introduced some new concepts for the dental offices for example, providing Family Oral Health Education (FOHE), completing FOHE information in a Dental Encounter Form (DEF), and submitting the DEF to the CDCCs to receive incentive payments. It took almost a year for the dental offices to become comfortable with these new responsibilities. But COP members and their staff took it in a positive manner and complied.
ACTION #3
Create an Online Database: Care Coordination Management System (CCMS)

Development

The Care Coordination Management System (CCMS) was developed to collect and analyze data from 26 Community Dental Care Coordinators (CDCCs) of 14 partner agencies. The database was cloud-based and HIPAA compliant. Alameda County Public Health Department did not develop such a complex database before. The CCMS provided real-time information about the utilization of services, types of dental care provided, and client demographics. It also provided program data for operation and real time evaluation and quality improvement efforts for the implementation of HTHC.

The CDCCs were able to enter data anytime from anyplace with an iPad or computer; it also helped CCMS development. The database with limited features was available to CDCCs in July 2018. CCMS was improved over the course of the program with additional functionalities related to making appointments, e.g. notifications about future appointments.

Oral Health Solutions (OHS), a private developer, created and hosted the CCMS. After the grant was awarded in 2017, OHS started the CCMS development process. After few months of work, the developer had to change the platform, so CCMS development took longer than expected. The database with limited features was available to CCMS in July 2018.

Not all the CCMS features were developed as expected, such as ODH and partners were not able to generate reports. Partners entered data and reports were generated by ODH. All feature-related development was stopped in July 2020. CCMS was used by ODH and partners until December 2020.

Activities

In June 2018, OHS and the HTHC Epidemiologist trained the CDCCs through in-person hands-on training sessions and webinars about the “live CCMS,” covering the logic and structure of the database, and data entry. OHS also provided some technical support everyday throughout the project period to all users, e.g. new passwords for newly hired CDCCs.

HTHC project performance was monitored with the data from the CCMS database, and relevant feedback was given to the partners monthly and quarterly. To ensure effective use of CCMS, initial trainings as well as updates and technical assistance throughout the project period were provided to the CDCCs and partner agencies.

In 2018 and 2019, ODH conducted periodic trainings on CCMS for CDCCs and partner organizations who employed the CDCCs. After CCMS trainings, participants were surveyed about their understanding, confidence and satisfaction with using CCMS. The CDCCs who participated in the surveys said that they were satisfied (83%) and confident (87%) about the CCMS. The grant target for performance standard was 80% for these indicators; HTHC achieved more than the grant target.

At the end of the project period, CCMS was successfully migrated from the OHS/private developer’s server to

<table>
<thead>
<tr>
<th>Table 6: CCMS Training Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Understanding</td>
</tr>
<tr>
<td>Confidence</td>
</tr>
<tr>
<td>Satisfaction</td>
</tr>
</tbody>
</table>
Alameda County Public Health Department’s server in December 2020. This is the first time where a database developed by a private developer was successfully migrated to the County’s server. Currently at the time of writing this report CCMS is not being used for data entry or care coordination since HTHC project concluded at the end of Dec 2020.

Outcomes

Features and Functionalities

CCMS played a major role in program monitoring. HTHC’s on-time quarterly data analysis was only possible for CCMS. Without CCMS, collecting and analyzing data from 26 CDCCs would have been a daunting job. HTHC program quality assurance was conducted regularly from a random sample of the CCMS data entered from Client Data Collection Form and Dental Encounter Form into the CCMS to ensure 95% of the data were free of error.

In 2018, CCMS client data records were 76% complete; 24% had minor errors or missing information (e.g. race/ethnicity, primary language, appointment status, etc.). In 2018 and early 2019 a list of identified errors was sent to the corresponding CDCCs. The HTHC Epidemiologist made sure all errors were corrected before data analysis. At the end of 2019, CDCCs automatically received notification from CCMS about incomplete client information so, they were able to complete (free of error) 100%. By early 2020, about 98% data was free of error meeting the performance standard of 95% complete in the final year of the program.

Types of Data Collected

A wide range of data were collected including demographic characteristics of clients (e.g. age, race/ethnicity, residential zip code, residential city), dental appointments made and kept with dental offices (e.g. all appointment dates, 1st appointment dates, continuity of care), events organized by CDCCs (e.g. outreach, inreach), health education given to families with children (by CDCCs, by dental offices), dental provider information (e.g. service location name, zip code and city; services provided—preventive, restorative, some service codes for exams), etc.

Media Files Uploaded

The CCMS was interactive and allowed uploading of supplemental media file documents for each HTHC client and corresponding appointments such as signed consent forms and completed Dental Encounter Forms (DEFs).

Automatic Reminders

The CCMS generated automatic reminders for the CDCCs for upcoming appointment, incomplete records, and six months recall/continuity of care appointment.

Export Report in CSV (Comma/Character Separated Values) Format

The CCMS provided a new downloadable export report in CSV format every day. CSV is a special text file that contains data. This format is used by data analysts and Information System. This text file can be imported into excel spreadsheet. This was the raw data the HTHC Epidemiologist analyzed for operations, performance and monitoring throughout the 3.5 years of the HTHC program period.

This report included all the types of data mentioned earlier.
**Other Features**

Other important features were developed such as the cyber security features (e.g. use of strong password, periodic password expiration), black feature (e.g. flagging incomplete records), case status feature (e.g. documenting appointment status, continuity of care of clients).

**Challenges and Solutions**

The CCMS database was the biggest challenge for the HTHC project. ODH leadership and the developer worked very closely for finding solutions about CCMS related challenges. Initially there were designer limitations which led to a delay in launching that made HTHC management always stressed about the quality and functionality of CCMS. It was a work in progress until middle of 2020.

**Delayed Development of Database**

The first effort of CCMS development did not work and the launching was delayed and not available to the CDCCs to enter data when they started their fieldwork in January 2018. Then CCMS was launched with limited features and functionalities in July 2018. CCMS was improved over the course of the program with additional functionalities. The project collected care coordination data during January–June 2018 from 26 CDCCs by the following measures:

1. A 1-page paper collection form was created by the HTHC Epidemiologist. The 26 CDCCs started collecting data with this paper form.
2. An Access database was created by the HTHC Epidemiologist as per suggestion of the HTHC Project Director. The 26 CDCCs and one HTHC staff started entering their paper data into this database.
3. HTHC staff manually counted the DEFs.

**Delayed Development of Some Features and Functionalities**

A few features on the database were critical to the success of the dental care coordination process, e.g. dental appointments made, dental appointments kept, outreach/inreach events attended by the CDCCs to contact families with children. But there was delay in developing these features. To address this challenge, the following actions were taken:

1. An online google doc Appointment Calendar (outside of the CCMS) was created by HTHC staff—so the 26 CDCCs entered data in this calendar. This enabled them to see what appointment slots were available for their clients for each respective dental office. This “Calendar” was discontinued after July 2018 as some information became available on the CCMS.
2. Demographic variables were not available until the end of 2018. CCMS was also unable to develop granular race/ethnicity variables in the database.
3. Alerts/reminders for future appointments were not available until 2019.
4. Some database features had to be updated and revised based on the feedback from the CDCCs to improve the usability of the feature. This impacted the usability and the monitoring of the program.

**Some Features Were Not Developed**

Some important features such as an outreach calendar were never developed. To address this challenge, the following actions were taken:

1. An online google spreadsheet Outreach Calendar was created by HTHC staff—the 26 CDCCs entered their outreach/inreach activities in this calendar. This enabled all 26 CDCCs from 14 agencies to see which CDCC was doing outreach/inreach in which community/events. This calendar helped CDCCs avoid duplication of services in the same community. This was used until the end of the project period. The calendar included outreach and inreach activities feature as well as number of potential people to be contacted, location, time of event, etc.
2. **Reports/dashboard for the Epidemiologist and CDCCs/Supervisors:** Many of these quality improvement features were not available on the CCMS. CDCC or Agency Specific Report generation and Dashboard accessible only to the corresponding partner was not possible. To address this gap the following actions were taken:

- The HTHC Epidemiologist downloaded the raw data, analyzed it by agency and by CDCC, and prepared a master report. Then ODH staff prepared individual agency reports. ODH then shared the reports with the individual partner agencies.

- A 2-page CDCC Monthly Report spreadsheet was created by the HTHC Project Director and the Epidemiologist. It was used by HTHC leadership as well as partner leadership to monitor the quality of work of the CDCCs. This was used until the end of the project period. The CDCCs submitted this spreadsheet monthly to ODH staff.

3. **A provider portal** proposed in the grant was not developed. Entering dental encounter data at provider’s office requires data entry persons at each dental office. This idea appeared not to be feasible especially in the small private dental provider offices. The cost of developing a provider portal on CCMS appeared to outweigh the benefit. The provider office data were collected with a Dental Encounter Form (DEF), a paper document, and the CDCCs entered the data into the CCMS.

**Frequent Glitches in the System When New Features Released**

Whenever new features were released, there were usually glitches in the entire database, i.e. other features were also affected; and it usually took several weeks to fix those glitches which in turn hampered the use of CCMS by the CDCCs.
Continuous and consistent quality assurance activities were integral part of the HTHC project. This was written in the grant to achieve the objective of the HTHC project and to make timely quality improvements (QI) of the various aspects of the project as needed. Quality assurance (QA) measures were led by the Accountability and Quality Improvement (AQI) workgroup; this was envisioned in the governance structure mentioned in the grant. The AQI workgroup met monthly for 2 hours to brainstorm, problem solve, develop monitoring tools, discuss the results of collected data, etc. The AQI group consisted of HTHC Leadership and the Epidemiologist, researchers and faculty from University of California San Francisco (UCSF) School of Dentistry, leadership from Alameda Health Consortium, and Community Dental Ambassador. In 2018 it had included the leadership of the database developer Oral Health Solutions.

How Quality Assurance (QA)/Quality Improvement (QI) Was Ensured

- By reviewing program data from the online database.
- By reviewing CDCC monthly report and progress reports from partner agencies.
- By conducting data audit: monthly, quarterly, and through in-person site visit.
- From feedback received at every workgroup meetings (e.g. CDCC, COP, CE Training, Project Director, etc.).
- By conducting multiple and multi-year surveys and focus groups of CDCCs, COP Network, and HTHC clients.
  - The AQI workgroup members designed the surveys and focus groups, developed the relevant data collection tools, and conducted the surveys.
- The workgroup members also collected and analyzed the data, and prepared the data reports.

Activities

Monitoring CCMS

The workgroup reviewed, discussed, and approved/dis-approved development and maintenance of CCMS features and functionalities for operation and monitoring.

Maintain High Quality of Data in the Online Database

This was ensured via the following:

- Monthly (2018-2020) error report generated from the raw data from the database—given to 26 CDCCs for correction.
- Data Audit: Done in 2019 (Sept–Dec) in-person by HTHC staff. The 26 CDCC’s client data were checked and corrected, e.g. consent form is signed, name on consent form matches name in the database, etc.
- A random sample of 250 records on the CCMS including data from DEFs were checked by HTHC Epidemiologist annually to ensure 95% of the data were free of error. The Epidemiologist ensured that most errors were corrected before data analysis was completed. By end of 2019 there were fewer and fewer errors in the database.

CCMS Data Analysis

Data were regularly analyzed and data reports were prepared for:

- Program monitoring (not de-identified) purposes—done by HTHC Epidemiologist for key performance indicators (e.g. appointments made, appointments kept, demographic distribution—age, language, residence, type of provider). This was done quarterly from August 2018 to December 2020.
- De-identified—done once a year in 2019 and 2020 by UCSF Researcher.
**Additional Program Data Collection and Data Analysis**

- CDCC progress reports (monthly): There were some data that were not collected in the CCMS database; those data were collected from the partners through a monthly progress report, e.g., number of families contacted, events organized, families given health education, and interesting stories of interaction between CDCCs and clients. The reports were reviewed monthly to make sure CDCCs were meeting their benchmarks. Thus, data from these reports were also analyzed throughout the project period.

- Partner progress reports (quarterly): Initially in 2018 when CCMS was under development these progress reports from the partners were very important for quality assurance; data were analyzed from these reports and feedback were given to the partners.

- State Portal data (2013–2019): were analyzed annually by UCSF researcher to assess how HTHC program was performing compared to Alameda County and State benchmarks.

- State Claims data: were analyzed in 2020 by UCSF researcher to assess the impact of HTHC.

**Surveys**

The AQI workgroup members designed the surveys and focus groups, developed the relevant data collection tools, conducted the surveys, and collected, analyzed, and prepared the data reports. The surveys were part of the overall HTHC evaluation plan that tracks progress on outcome measures and program quality for the 3 main actions/stakeholder groups: Community Dental Care Coordinators (CDCCs), members of the Community of Practice (COP), and parents/caregivers of children participating in the program. These were:

- **CDCC Surveys**
  - CDCC satisfaction survey of 8-week training (2017, after every day/3 day per week)
  - CDCC satisfaction survey of CCMS (2018)
  - CDCC knowledge-skills-confidence survey (2018, 2019)

- **COP Surveys**
  - COP satisfaction surveys (after every CE courses, 4 times a year, 2017-2020)
  - COP follow-up baseline surveys (2018, 2019, 2020)

- **Client Surveys**
  - Client satisfaction survey (2019, 2020)—in English, Spanish, and Cantonese

**Focus Group Discussions**

The Focus Group Discussions (FGDs) were part of the overall HTHC evaluation to monitor the progress of outcome measures and program quality for the 3 main stakeholder groups: parents/caregivers of children participating in the program, Community Dental Care Coordinators (CDCCs), and members of the Community of Practice (COP). Common aims for all 3 stakeholder groups were to identify:

1. What was working well with the HTHC program?
2. Were there any concerns with HTHC program?
3. Potential solutions to improve the program addressing the concerns identified in #2.
4. Protective factors and barriers to optimal regular dental care for children on public insurance in Alameda County?

<table>
<thead>
<tr>
<th>Table 7: Focus Groups Conducted in 2018 and 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Client FGDs in 2018 (in-person)</td>
</tr>
<tr>
<td>2 CDCC FGDs in 2018 (in-person)</td>
</tr>
<tr>
<td>4 COP FGDs in 2018 (in-person)</td>
</tr>
<tr>
<td>4 COP FGDs in 2020 (via Zoom)</td>
</tr>
</tbody>
</table>

In 2018 the COP focus groups were conducted to gain feedback from COP members about their experience after a year of participation in HTHC. In 2020 the COP focus groups were conducted to gain feedback from COP members after 3 years of participation in HTHC.
**Challenges and Solutions**

**Underestimated the Workload and Staffing Needs**

The HTHC grant proposal underestimated the number of staff that would be needed to complete the data collection and analysis, checking data quality, and writing the data reports that could be shared externally. Future projects should include staffing at “Research Assistant or Program Assistant” level to address this gap.

For example, the second round of Focus Groups for Clients and CDCCs for 2019 were not conducted because the data from first round was analyzed and the report was prepared by the end of 2020 (although data were collected in 2018). Also, it took a long time to organize the client surveys, so only the long version—Client Satisfaction survey was done.

Checking data accuracy, missing data, quality (e.g. data entered did not match the information on Dental Encounter Forms) was also very time consuming and complex due to the diversity of partner organizations, the large volume of dental appointments made, slow development of features on CCMS, and staff turnover (ODH and partners). The grant also did not include a QA staff and that created burden on existing staff, especially the HTHC Epidemiologist.

**COVID-19 Pandemic Impacted Work in 2020**

Community Health Center Network (CHCN)/AHC (Alameda Health Consortium) collects Alameda County wide medical/dental service data—which was not reflected in the available State Portal Data. HTHC had intended to compare program data with CHCN data to assess impact of HTHC. Community Health Center Network (CHCN) data could not be analyzed as CHCN and AHC staff were busy with COVID-19 pandemic related tasks in 2020.

As such the impact of HTHC could not be measured by the time of end of the HTHC project.

**Continuity of Care Data**

Initially, provider offices were making next appointments with the clients without the knowledge of CDCCs. So, CDCCs could not always report continuity of care appointments.

**Dental Office Staff Contacted Families Directly Without Informing the CDCCs**

Sometimes the patients’ families were contacted by the Dental Office staff directly, so the CDCCs did not know when dental appointments were changed, if dental appointments were kept or not, and the data on CCMS would not match to what actually happened. This took much longer to correct.

**Lack of a Formal Evaluation Report by Internal or External Evaluator**

HTHC Evaluation Plan was written in early 2018. According to the plan most data were collected and analyzed. However, a formal evaluation report was not completed due to the COVID-19 pandemic in 2020.
SUB-ACTION #2 Effective Leadership, Administration, and Multi-level Communications

Leadership: Vision, Infrastructure, Planning, and Implementation

Leadership was critical to the success of HTHC. Alameda County already had a dental public health program for many years that offered Dental Care Coordination. The programs were envisioned and developed by Dr. Jared Fine many years ago while he was the Dental Health Administrator (DHA) of ODH. Then Dr. Fine and Dr. Baharak Amanzadeh (past DHA of ODH) envisioned and wrote the brilliant HTHC grant conceptualizing a model of a county-wide HTHC dental care coordination system. HTHC Project Director Dr. Suhaila Khan led the successful implementation of the project.

ODH’s Dental Health Administrator’s position became vacant in 2019; due to the pandemic, this recruitment was delayed. During this period, Dr. Quamrun Eldridge, Division Director of Community Health Services, supported the HTHC project and performed the role of the Dental Health Administrator. The Public Health Director Kimi Watkins-Tartt, Health Care Services Agency Director Colleen Chawla, and Board of Supervisors especially Wilma Chan supported the project throughout the project period.

The HTHC model was developed from lessons learned from ODH’s existing dental public health programs (e.g. Healthy Kid Healthy Teeth, WIC Dental Days, Healthy Smiles,) that had offered care coordination for many years. ODH’s first 5-year oral health strategic plan for 2012-1017 included the dental care coordination to increase access to care for underserved populations. All ODH partners (especially the 8 FQHCs) were interested in ramping up dental care coordination activities to improve access to care for Medi-Cal beneficiaries and united their efforts under ODH’s leadership.

The graphic in Figure 6 illustrates the Healthy Teeth Healthy Communities Project and the Office of Dental Health within the larger framework of Alameda County. Every HTHC partner agency also provided strong leadership for high quality services. ODH always had a vision for county-wide Dental Care Coordination and LDPP made that possible.

Along with County leadership, all partner leaders also provided strong support to their staff and ODH.

Figure 6: Alameda County’s Layered Administrative System

Alameda County

HCSA

PHD

ODH

CHS

Public Health Department

Community Health Services

Office of Dental Health

Healthy Smiles

WIC Dental Days

School Based Programs

Local Oral Health Program
Effective Administration

The HTHC project was developed with a high dream. It became a high functioning, high quality, fast-moving, structured, and well-disciplined project for achieving the goal and objective. A governance infrastructure (Figure 7) was envisioned and included in the grant that matched the actions needed to meet the goal of the project. Each workgroup in this infrastructure had a unique membership and served a very distinct purpose. The graphic below highlights the types of members and frequency of meetings for these HTHC workgroups as per the grant.

The Steering Committee met quarterly in the first half of the project, then it met 2-3 times a year. The committee provided high level oversight of the program. In 2019, the Sustainability Workgroup was merged with the Steering Committee as there was overlap of the activities of the two committee members.

In 2018, the Implementation Workgroup started meeting weekly instead of monthly. For this pilot project, there was a constant need for problem solving. Yearly Implementation Plan was developed to complete the deliverables on time. In August 2020, the Implementation Workgroup became the Wrap Up Workgroup as the project end (December 2020) activities needed to be completed on time.

HTHC was a complex county-wide initiative. Although ODH had existing infrastructure to implement this project, challenges and barriers of a large complex pilot project were also anticipated. ODH leadership

![Figure 7: HTHC Governance Structure](image-url)
was proactive about putting systems in place in order to avoid challenges, and when challenges surfaced solutions were found. A few plans were developed to complete the deliverables on time such as, Evaluation Plan (2018), Implementation Plan (2018, 2019, 2020), and Wrap Up Plan (2020).

As mentioned before, the Accountability and Quality Improvement (AQI) workgroup met monthly from the beginning to the end of HTHC project. This group was responsible for implementing all quality assurance activities.

Alameda County Office of Dental Health (ODH) provided the leadership to write the grant and be the lead agency. ODH facilitated the conversations with the 17 partner agencies and developed the grant together with the partners.

The 3.5-year HTHC project followed the timeline below:

**Year 1 (From April 2017): Planning and developing Implementation tools and curriculum**
- CDCC Workforce curriculum advisory group formed—met weekly
- Care coordination advisory group formed—met monthly
- COP Leadership group formed with UCSF—met 2x monthly
- COP & CDCC curriculum development started
- Quality Assurance AQI Group formed with UCSF,

**Year 2 & 3 (2018, 2019): Full project implementation**
- Database design started with the vendor
- 2018 Implementation Plan was developed
- Draft Evaluation Plan was developed
- Care Coordination training was completed
- Data collection paper tools were developed

**Year 4 (2020): Project implementation interrupted due to COVID-19 pandemic**

**Finances and Contracts**

HTHC was implemented through a county-wide collaboration with 41 contracted partners. Out of the $19.7 million budget, 25% was allocated for Alameda County Public Health Department (ACPHD) and 75% was contracted to the partners. Contract management was a huge task for HTHC; ODH staff worked above and beyond to make sure contracts were executed and invoices were paid to partners on time. Most partners submitted invoices and progress reports on time. Budgets were revised every year, and roll over dollars were planned and estimated every year for the partners and ODH and submitted to the State for approval in a timely manner.

**Processing FOHE incentive payments**

The private providers received incentives up to twice a year for offering Family Oral Health Education (FOHE) to families with children ages 0-5 years. The FOHE payment process was a multi-step process. For example, every month the HTHC Epidemiologist exported data from the database, analyzed it and sent a list of private providers who needed to be paid FOHEs. Then a HTHC Data Entry Clerk confirmed that DEFs (considered a receipt/proof that FOHE was done) to support the FOHE payment based on confirming that the DEF was uploaded on the database. The HTHC Program Financial Specialist then sent the list by secure email to the private providers. The private providers sent back a signed invoice and then the payment check was processed. If any DEF was missing, that needed involvement of CDCCs to collect the DEF before payment was processed. FOHE data was processed every month, but paid every quarter.
Multi-Level Communications

It was mentioned in the beginning of this report that HTHC had all 5 conditions of the Collective Impact model. One of the conditions of collective impact is continuous communication. HTHC made communication a priority. Communication with partners was maintained mostly through various workgroup meetings (see Tables 9 a, b & c).

Other communication methods were:

- Organizing an Annual Summit
- Presentations to different non-HTHC meetings, dental societies, Local Oral Health Program, APHA annual conference, etc.
- Developing and distributing oral health education materials
- Developing and distributing brochures and flyers about the program
- Writing and disseminating Quarterly Activity reports and fact sheets
- Uploading information and materials developed on the ODH website

Table 8 shows a snapshot of the calendar of HTHC workgroup meetings. All of these meetings were planned 12 months in advance. Sometimes the meetings dates were set based on Doodle Polls sent to respective members of the different workgroups. For example, the Care Coordination Forum (or the monthly meeting of the CDCCs and Supervisors) was every last Thursday from 8:30 am to 4:30 pm, as chosen by most of the 45 members of this workgroup. Table 9 shows more detailed information about some of the meetings (e.g. duration, number of participants, agenda, outcomes). As the meetings were very important methods of communications, hardly any meetings were canceled, and participation was very high.

These workgroup meetings were used to form learning networks, communicate with both HTHC staff and partners, and find solutions when challenges were faced. Since this was a pilot project, HTHC leadership anticipated challenges but also understood that solutions would have to be found quickly to make this project successful. Every meeting ended with solutions and some kind of consensus about moving forward.
Additional Meetings Not Included in the Grant

Some meetings were added during the project implementation. Those were not mentioned in the grant. For example, the Leadership/Project Director’s monthly meeting of about 25 people (mainly the project directors, contracts and finance people about submitting reports, invoices, etc. on time). More than half the HTHC partners were from FQHCs and led by their dental directors.

The purpose of this meeting was to keep strengthening the partnerships, provide transparency, provide consistent and timely information to all the partners. It was a very important communication channel, partners were very engaged, and always participated for the best outcome of the project. Almost half of the partners usually attended via phone or computer. There was consensus among the partners that we were “learning together”. A lot of information was shared among the partners such as lessons learnt, best practices, problem solving, quality improvement.

There was another monthly meeting related to the CCMS-database that consisted of staff from HTHC staff, database vendor (Oral Health Solutions) staff, and County’s Information Services staff; to brainstorm on challenges and find solutions.

Based on the need of the project other meetings were added such as the daily Morning Huddle of HTHC staff (about 12 people) started in May 2018, every day from 9:00 am to 10:00 am with whomever was present in the office; this was done to build team spirit and problem solve as a team. HTHC staff were dealing with approximately 40+ people (staff of partner agencies) on a daily basis. Another example is the monthly Dental Director’s meeting organized by Alameda Health Consortium; HTHC was allocated half an hour at these meetings and the HTHC Project Director used this forum to further communicate with the FQHC partners.
<table>
<thead>
<tr>
<th>Meeting Type</th>
<th>Agenda</th>
<th>Desired Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steering Committee</strong></td>
<td>Give updates on HTHC progress.</td>
<td>Highest level of governance.</td>
</tr>
<tr>
<td><em>Quarterly; 2-hour</em></td>
<td>Discuss sustainability needs.</td>
<td></td>
</tr>
<tr>
<td>15 people (leadership from ACPHD, CHS, ODH, partners, Children Now, CHDP, UCSF)</td>
<td>Discuss communication needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss policy needs.</td>
<td></td>
</tr>
<tr>
<td><strong>AQI Workgroup</strong></td>
<td>Provide feedback about quality assurance (data and evaluation) needs of HTHC</td>
<td>To assure QI for all aspects/components of HTHC.</td>
</tr>
<tr>
<td><em>Monthly: 2-hour</em></td>
<td>Provide feedback about database/CCMS</td>
<td></td>
</tr>
<tr>
<td><em>(1st Tuesday of month, 1:00-3:00pm)</em></td>
<td>Plan and conduct all surveys related to CDCC, COP, client, and CCMS.</td>
<td></td>
</tr>
<tr>
<td>10 people (staff from ODH, UCSF, AHC)</td>
<td>Review &amp; analyze data from: CCMS, CA Open Portal, CA Claims data.</td>
<td></td>
</tr>
<tr>
<td><strong>Leadership/Project Director’s Workgroup</strong></td>
<td>Invoicing, budgeting, reporting: submission on time</td>
<td>To share two-way information and feedback between ODH and partner-contractors of all aspects of HTHC.</td>
</tr>
<tr>
<td><em>Monthly: 2-hour</em></td>
<td>Share updates from DHCS (Department of Health Care Services)</td>
<td></td>
</tr>
<tr>
<td><em>(3rd Thursdays, 1:30-3:30pm)</em></td>
<td>Share HTHC progress and program updates</td>
<td></td>
</tr>
<tr>
<td>20+ people (project directors, dental directors/managers, contracts/finance staff of partner agencies)</td>
<td>Performance review</td>
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<tr>
<td></td>
<td>Follow-up on deliverables that were not met</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finding solutions for challenges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clarifying the financial and reporting expectations.</td>
<td></td>
</tr>
<tr>
<td><strong>Alameda Health Consortium FQHC Dental Directors Meeting</strong></td>
<td>Share HTHC program updates &amp; progress</td>
<td>Get buy-in of FQHC partners.</td>
</tr>
<tr>
<td><em>Alternate months</em></td>
<td>Discuss with FQHC dental offices to see children under age 5 years, external clients (clients who do not have a medical home in a FQHC)</td>
<td></td>
</tr>
<tr>
<td>12 people (staff from FQHCs, AHC, ODH)</td>
<td>Discuss workforce/pipeline challenges (staff turnover)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss challenges and sustainability</td>
<td></td>
</tr>
</tbody>
</table>
### Table 9b: List of meetings (selected)

<table>
<thead>
<tr>
<th>Meeting Type</th>
<th>Agenda</th>
<th>Desired Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CDCC RELATED</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| CDCC & Supervisor Meetings (Care Coordination Forum) | - Share lessons learnt from field work (e.g. Medi-Cal eligibility check for clients)  
- Discuss challenges & their solutions  
- Review data collection, data entry (e.g. data errors, new features)  
- Use outreach-inreach online calendar  
- Learn to collaborate with 26 peers, 14 agencies, 8 FQHC dental clinics, and 24 private dental offices  
- Share dental provider office updates (e.g. new appointment slots available)  
- Provide refresher trainings (e.g. protocols for taking clients to dental offices, HIPAA, Medi-Cal Dental Program). | Created and maintained a learning community.  
Improved knowledge, skills and confidence of CDCCs/dental care coordination  
Improved data quality in CCMS  
Improved communication within the CDCC network, providers and clients. |
| Monthly: 8-hour (last Thursdays, 8:30-4:30)       |                                                                                                                                                                                                      |                                                                                                            |
| 45+ people from 14 agencies                      |                                                                                                                                                                                                      |                                                                                                            |
| Attendance: mandatory for CDCCs; supervisors can call in. |                                                                                                                                                                                                      |                                                                                                            |
| **COP RELATED**                                  |                                                                                                                                                                                                      |                                                                                                            |
| COP Leadership Workgroup                         | Discuss and develop CE topics for COP members.  
Prepare for quarterly CE trainings.  
Discuss findings from Focus Group, CE satisfaction surveys, COP baseline-follow-up survey, or other surveys.  
Discuss actions to improve quality of CEs and COP network.  
Develop pediatric mentor program.  
Debrief about the last CE  
Discuss sustainability of HTHC  
Discuss policy issues.  
Discuss how to disseminate the COP efforts outside of HTHC.  
Discuss technical assistance requested by other counties.  
Review CE videos. |                                                                                                                                 |
| Bi-monthly: 1.5-hour (Wednesdays, 9:30-11:00 am)  |                                                                                                                                                                                                      |                                                                                                            |
| 7 people (staff from ODH, UCSF, Community Dental Ambassador) |                                                                                                                                                                                                      |                                                                                                            |
| **CCMS Related Database/CCMS Workgroup**         | Review status of feature development  
Give feedback and find solutions to challenges, e.g. CCMS down, data errors, new features, delayed features (dashboard, notifications). | Build a comprehensive database that meets the requirements of the program, e.g. monitoring, reporting for ODH and partners. |
| Monthly: 1-hour (was weekly in 2018)              |                                                                                                                                                                                                      |                                                                                                            |
| 10 people (staff from ODH, IS, OHS/developer)    |                                                                                                                                                                                                      |                                                                                                            |
### Table 9c: List of meetings (selected)

<table>
<thead>
<tr>
<th>Meeting Type</th>
<th>Agenda</th>
<th>Desired Outcomes</th>
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</thead>
<tbody>
<tr>
<td><strong>EXTERNAL</strong></td>
<td></td>
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</tr>
<tr>
<td>Presentations at local Dental Societies in Alameda County</td>
<td>Share information about HTHC and COP membership benefits</td>
<td>Join HTHC COP network</td>
</tr>
<tr>
<td>As invited: 1-2 hours</td>
<td>Develop relationship with Community Dental Ambassador</td>
<td></td>
</tr>
<tr>
<td>15–30 people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present in Alameda County Public Health Commission (Oral Health Committee)</td>
<td>Usually done by Community Dental Ambassador</td>
<td>Get buy-in and support of Commissioners</td>
</tr>
<tr>
<td>Every other month</td>
<td>Give an overview of HTHC updates/progress to Commissioners.</td>
<td></td>
</tr>
<tr>
<td>Presentation at UCSF Dental Public Health (DPH) seminar/webinar series</td>
<td>Give an overview of HTHC and disseminate the results of the project.</td>
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</tr>
<tr>
<td>As invited (2018 &amp; 2019)</td>
<td>Inform a national audience of practitioners and policymakers in dental health (60+ dentists, faculty, and dental residents)</td>
<td></td>
</tr>
<tr>
<td>APHA Annual Conference 2020 presentations</td>
<td></td>
<td></td>
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<tr>
<td>Thousands of participants from 37 countries</td>
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<td></td>
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</tbody>
</table>

### HTHC Annual Summit

The 1st HTHC Annual Summit was held on September 27, 2018. The purpose of the Summit was to communicate with the partners, stakeholders, funder, elected officials, Alameda County and State leadership, and communities about the progress of HTHC. The Summit highlighted the partnership between the CDCCs and dentists, the collaboration within the dentists (FQHCs and private dental offices), and the role of academia like UCSF in dental care coordination. Over 100 participants attended the event. There was a plan to hold a 2nd and last Summit in 2020. But due to the pandemic that was canceled.
Picture 16-20: 2018 Annual Summit Speakers; Top Left: Colleen Chawla, Director ACHCSA
Top Right: Kimi Watkins-Tartt, Director ACPHD; Bottom Left: Wilma Chan, Alameda County Board of Supervisor, District 3; Bottom Right: Eileen Espejo, Steering Committee Member; Middle: Dr. Jayanth Kumar, State Dental Director, CDPH

Picture 21-24: Top left: Summit participants; Top right: Dental Directors & CDCCs with DHCS representatives; Bottom left: Summit panels; Bottom right: ODH staff during Summit
COHTAC Presentation

COHTAC (California Oral Health Technical Assistance Center), is a UCSF based organization that provides technical support to Local Oral Health Programs (LOHP) in all the 58 California counties. COHTAC invited HTHC to share the care coordination experience in their monthly meeting on November 19, 2020. There were over 50 participants from all over the state including the State Dental Director. There was lively discussion with the participants and many follow-up emails. There were many requests for sharing the two HTHC curriculums for CDCCs and COP.

Other Presentations

- California Department of Public Health (CDPH): HTHC was invited to make a webinar presentation on the CCMS database to CDPH staff and Dental Director in September 2019. CDPH was exploring the use of databases towards building a state-wide surveillance system on oral health.

- UCSF: HTHC was invited to make a webinar presentation to UCSF researchers in 2019 who focus on underserved Asian American, Native Hawaiian, and Pacific Islander (AANHPI) populations. The participants were from California.

- Board of Supervisor Health Committee: in-person presentation was done in January 2018 and April 2021.

APHA (American Public Health Association) Annual Conference 2020

Why we presented: Care coordination is a new concept in dental public health and HTHC’s data showed care coordination can improve access to and utilization of dental care. So, HTHC wanted to share the experience with a larger audience. HTHC staff and UCSF Researcher submitted 5 abstracts for the 2020 APHA meeting and 4 abstracts were selected. The topics presented were:

1. Healthy Teeth Healthy Communities: Alameda County’s Systems Approach leads to Increased Access to Dental Care for Medicaid Children (oral)

2. Building a Culturally Competent Care Coordination Workforce to Connect Clients to Dental Health Care in Alameda County: A Community Collaboration (oral)

3. General Dentists Can Treat Infants and Promote Good Oral Health Practices in Families: Alameda County’s Results (poster)

4. Dental Provider Community of Practice: Needs and Progress in California’s Alameda County (oral)

What was the result: The presentations received lots of attention and later on HTHC presenters/staff received calls from many programs from other California counties and other states who wanted to learn more about the details of the program. There were many requests for the curriculums and materials developed for HTHC.
Communications Materials

Multiple materials were developed for the project and they were distributed via email and through ODH website. These communications materials were: factsheet on program overview, factsheet on outreach, flyer, brochure, booklet for families, booklet for dental providers, and curriculum for COP training.

HTHC has produced various documents and even CE course videos that will be used to train and empower general dentists with the skills that will enable them to confidently treat young children. HTHC staff members developed a training guide based on the COP curriculum and Continuing Education courses so that other trainers can use this guide to empower more general dentists to treat young children. HTHC also produced a CDCC training curriculum.

Another important document produced was the 13-page client booklet “Healthy Teeth at Every Age.” The client booklet contains oral health information that is beneficial to everyone. This type of booklet was not developed before and it is already getting a lot of attention statewide. This booklet provides guidance on keeping a healthy mouth and teeth at every age. This booklet covered topics such as caring for your child’s teeth, how to take care of your teeth and gums every day, what to eat for good teeth and what happens during dental visits at different ages. This booklet was also published in two other languages, Spanish and Chinese.

Another booklet was developed for providers; the provider booklet provides information on the Office of Dental Health and the services that ODH offers. The purpose of this booklet was to explain to providers how our partnership can improve access to dental care and providers can also benefit from it. This will be of tremendous value in sustaining a robust network of providers who accept children covered by the Medi-Cal Dental Program.

Challenges and Solutions

Staff Shortage
When the grant was written, the number of staff needed to implement such a large project was underestimated. Some new positions were created in order to maintain quality and result/deliverables of the project.

Staff Hiring and High Staff Turnover
The Alameda County hiring process and system is complex and lengthy. It was difficult to find qualified candidates due to short length of the project period, and the positions designated as “Project” had limited job benefits.

COVID-19 Pandemic
In 2020, some HTHC project staff were deployed to COVID-19 pandemic-related efforts; this impacted the project, too. All HTHC meetings became virtual.
FOHE Data Submission Was Slow
FOHE was paid based on ODH receiving DEFs. Filling out the DEFs by the private dental office staff was a new concept and took some time for them to get used to completing this task. CDCCs and HTHC staff continuously provided support to private dental office staff about DEFs.

Delayed Budget Approval from State
Delayed budget approval, especially with the rollover dollars, resulted in unspent fund for all HTHC partners which affected service delivery.

Communications Plan Was Not Included in Grant
The grant proposal did not include a communications plan. This greatly hampered getting the word out to the residents of Alameda County. A part-time staff person was hired by end of 2018 to help write the various project reports and factsheets. A communications plan was developed for the 2019 Implementation Plan. Because of the lack of a plan in the grant there was also delay in getting client-related documents translated early in the program, e.g. client consent form, flyers, brochures.

Many Requirements for Contracts
Alameda County has many requirements for contracts. These made it difficult especially for the private dental practices. This was a barrier to enrolling private dental providers quickly in the COP network, e.g. insurance and documents required by Alameda County. A few private dental providers dropped out of the program for this reason.
Sub-action #3: Build and Utilize Collaborations

Development

HTHC built, leveraged, and utilized partnerships and collaborations very successfully. County-wide partnerships-collaborations were built between public-private entities, dental-medical-behavioral providers, academia like UCSF, and Alameda Health Consortium. This effort was more collaborative. There were 41 contracted partners—17 large agencies and 24 private dental offices. The agencies were:

- **1 Alameda County program:**
  Center for Healthy Schools and Communities (CHSC)

- **4 Community Based Organizations:**
  Alameda Health Consortium, Center for Oral Health, East Bay Agency for Children (EBAC) and First 5 Alameda County

- **2 Community Health Centers:**
  Alameda Health System and Roots Community Health Center

- **8 FQHCs:**
  Asian Health Services (AHS), Axis Community Health, La Clinica de La Raza, Lifelong Medical Care, Native American Health Center, Tiburcio Vasquez Health Center (TVHC), Try-City Health Center (now called Bay Area Community Health) and West Oakland Health

- **1 Private Information Technology entrepreneur:**
  Oral Health Solutions

- **1 Academia:**
  University of California San Francisco (UCSF)

The Alameda County Public Health Department already had longtime relationships with most of these agency partners, just not all of them in one program at the same time. The partner agencies are listed below. The partnership with all 8 FQHCs of Alameda County was remarkable. Private dental office information is not included here as they requested HTHC staff not to share their information publicly and that request was maintained throughout the project period.

There were many collaborations that were outside of “formal contracts” of the 41 HTHC partners. ODH collaborated with County programs such as Women Infant Children (WIC), Division of Communicable Disease Control and Prevention (DCDCP), Nutrition Services, and Tobacco Control Program. HTHC partners (i.e. 14 agencies with CDCCs) collaborated with the school districts and schools in their areas. Some partners worked with the Social Services Agency.

Challenges and Solutions

The COVID-19 pandemic created new challenges for all the ODH partners. Collaboration with the partners continued virtually. For example, the CDCCCs were able to connect with clients to provide necessary support, including care coordination and linking clients with resources for social needs (e.g. food bank, housing resources). All partners, especially the FQHCs, supported and started conducting tele-dentistry efforts to continue providing services to clients, including children with special needs.
Figure 10: Our Partners
HTHC Results

HTHC was a county-wide dental care coordination effort. The data was collected county-wide from all partners. The HTHC program data show that the HTHC project increased access to care and utilization of dental services for Medi-Cal beneficiaries ages 0-20 years in Alameda County. This was possible because all partners shared accountability and worked together to increase access to care. FQHCs provided services to 2/3rd of the HTHC clients.

**HTHC Data**

Some of the results were presented earlier in the report. Those and additional data (e.g. client’s age, race/ethnicity, languages spoken, residence) are presented here with more detailed information. The socio-demographic data were instrumental in choosing the translation needs of project documents/communications materials. In the grant proposal the deliverable was only mentioned as “appointment.” That created a challenge to explain the achievements as described in the grant proposal. When the grant was written it was not anticipated that there would be first and many subsequent appointments before continuity of care. For analysis and for providing service, HTHC had to distinguish “1st appointment” and “all appointments” instead of only “appointment.”

- 52,402 families were contacted via outreach and inreach (99.8% of grant target achieved)
- 11,922 children enrolled in program (79.4% of grant target achieved)
- 34,934 all dental appointments made (1st and subsequent) for the 10,395 children (144.6% of grant target)
- 25,811 all dental appointments kept (1st and subsequent) by 8,604 children (164.8% of grant target)
- 26.2% no-show rate of all dental appointments
  - 22% Health Center (range 12%-32%, at FQHCs and community clinics)
  - 35% Non-health center (range 14%-81%, at private dental offices, highest rates seen during 2020 pandemic)
- 10,395 1st dental appointments made
- 8,604 1st dental appointments kept
- 17.3% no-show rate of first dental appointments (grant target was 35%)
  - 12% in Health Centers (at FQHCs, range 6%-36%; TVHC 2%, AHS & WOH 5%)
  - 27% in Non-health centers (at private dental offices; range 19%-81%, highest rates seen during 2020 pandemic)
- 8,604 children received preventive services from a dentist
  - 49% (4,195) of these were children ages 0-5 years (no target was set in grant proposal)
  - 89.9% (3,775) of these children ages 0-5 years received FOHE from dental office (no target set in grant proposal)
Key Performance Indicators

The high numbers of all dental appointments (1st and subsequent) indicate that even though HTHC and DTI-LDPP was emphasizing preventive care, a large proportion of children (1 in 3) needed multiple visits to the dental offices for restorative services. Most children needed multiple appointments because by the time they enrolled in the HTHC program they already had many dental problems e.g. abscess, caries. Thus, the continuity of care appointments did not take place immediately after the first appointment; several restorative services had to be done before the preventive service associated with continuity of care appointment could be done.

These multiple appointments led to additional costs for families that are not covered by the Medi-Cal Dental Program such as transport, some dental service costs (e.g. root canal, tooth extraction, Silver Diamine Fluoride application) that are not fully re-imbursed by Medi-Cal. Some of those costs were covered by Alameda County’s Healthy Smiles program (for un-insured and underinsured children), and some costs were out-of-pocket paid by the families. These costs and considerations should be incorporated in future programs.

Age

Half of the children in the HTHC program were aged 0-5 years. This was a significant achievement for HTHC as this age group usually has very low utilization of Medi-Cal Dental Program. This problem was highlighted in the 2014 State Auditor’s Report and 2016 Little Hoover Commission’s Report.
**Race/Ethnicity**

The HTHC clients represent the racial/ethnic diversity of Alameda County. This was 54% Latino/Hispanic, 20% Asian Pacific Islander, 11% African American, 6% Other. Latino/Hispanics are overrepresented in this program indicating they may be more underserved than any other racial/ethnic groups. The Other category included declined/not specified, Middle Eastern, Native Hawaiian, Yemeni, and Mongolian.

**Primary Language Spoken by Clients/Families**

Spanish 48%, English 37%, Cantonese 8%, and Other 6%. Other languages included Arabic, Mandarin, Vietnamese, and Farsi. Nearly all the CDCCs spoke a language other than English, which greatly increased the capacity of HTHC to serve underrepresented groups who have linguistic needs.
Where HTHC Clients Live

The data show that HTHC was able to reach children all across Alameda County – Oakland, Hayward, Fremont, San Leandro, Union City, Livermore, Newark, Alameda, Berkeley, Castro Valley, Pleasanton, Dublin, Emeryville, Albany, and Piedmont.

1st Appointments Kept

This graph shows the distribution of the number of 1st appointments kept. The data was always higher in appointments in Health Centers, usually FQHCs. The 2020 data show dramatic decline due to the COVID-19 pandemic.
No Show Rate for 1st Appointments

This graph shows the no-show rate for First Appointments. The data consistently show that Health Centers had much lower no-show rates (average 12%, range 8%-31%) than non-Health Center CDCCs (average 27%, range 19%-81%). The year 2020 had the highest no-show rates due to the COVID-19 pandemic. Some FQHCs had extremely low no-show rates (e.g. TVHC 2%, AHS 5%, WOH 5%—granular data by each CDCC serving agency is not shown in this report).

Families Contacted

This graph shows that more families were contacted by the Health Center based CDCCs, compared to the CDCCs who were non-Health Center based. This probably occurred because the Health Centers already these patients in their various medical services (i.e. pediatrics, family medicine).
**Dental Appointments by Provider Type**

Graph 9 shows that two thirds (66%) of all dental appointments were made with FQHC dentists, while one third (33%) were made with private dentists. Provider data for 196 children were missing from the paper form as CCMS was not developed yet.

Figure 11 is a map of Alameda County that shows that the HTHC dental service locations are county-wide with both FQHCs (with multiple locations) and private dental practices. The map shows that most providers are located near the Oakland area—FQHCs and private. The Tri-valley area does not have as many dentists as other parts of Alameda County.

**GRAPH 9**

All Dental Appointments by Provider Types (N=34,934)

Source: CCMS Jan 2018–Dec 2020

- Missing, 196, 0%
- Private, 11,424, 33%
- FQHC, 23,079, 66%
- Out-of-HTHC network, 235, 1%
Impact of HTHC in Alameda County

Majority (82.2%) of the children in the HTHC program reported that they had not visited any dentist for more than a year. If HTHC data with State Portal data for Alameda County are compared, the difference is striking for children who did not see any dentist for more than a year: HTHC 85.7% vs Alameda 55% (for year 2018); HTHC 81.3% vs Alameda 52.7% (for year 2019) (see Table 9. More children in HTHC reported that they did not access any dental services compared to the State’s data (see Table 9).

In 2018, at least 4.5% (3,158/69,011) of Alameda County’s children received dental services due to HTHC efforts. In 2019, at least 3.6% (2,955/81,896) of Alameda County’s children received dental services due to HTHC efforts. If HTHC program was not there, these children probably would not have accessed a dentist for any care. The HTHC program’s dental care coordination efforts enabled these children to access a dentist and receive preventive and/or restorative services to improve their oral health.

<table>
<thead>
<tr>
<th>Table 10: Impact of HTHC</th>
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<tbody>
<tr>
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<tr>
<td><strong>Child 0–20 did not see dentist for &gt;12 months</strong></td>
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<tr>
<td></td>
</tr>
<tr>
<td>HTHC (child kept appt= received service)</td>
</tr>
<tr>
<td>State Portal—Alameda (did not see dentist for any reason)</td>
</tr>
<tr>
<td><strong>Child 0–20 received preventive services (from dentist)</strong></td>
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<td></td>
</tr>
<tr>
<td>HTHC project</td>
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<tr>
<td>State Portal—Alameda</td>
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<tr>
<td><strong>In continuity of care</strong></td>
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<td></td>
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<tr>
<td>HTHC project</td>
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<tr>
<td>State Portal—Alameda</td>
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</table>

Analyzing and collecting the continuity of care data was very challenging for several reasons:

- These appointments were under-reported. The dental offices frequently contacted the clients directly to setup these appointments and the CDCCs would not be aware.
- Those who enrolled after June 2020 would have their continuity of care appointments in 2021.
- Usual definition of continuity of care is “6-month preventive appointment after the first preventive visit appointment”. However, many children in HTHC needed multiple restorative dental appointments before they could be on continuity of care. HTHC decided (based on program data) to use “up to 18 months after 1st appointment” as continuity of care.
- Year 2020 was particularly affected by the pandemic.
“Working through our internal referrals, I met a family who needed extra support and dental care coordination. Mom informed me that her daughter had been complaining of a toothache and was overdue for a dental visit. She has been wanting to see a dentist but didn’t know where to go. The family was also preparing to move out of state and would be leaving for Nevada by the beginning of next week. Once the mom informed me of her daughter’s needs and the limited time they had left, I was able to book an appointment for her the next day with our pediatric specialist.

The following day I greeted mom and her daughter; we then went over the HTHC program, family oral health education, and mom updated me on the families’ transition to a new state. To help the child, we played with the typodont and established oral health goals. When the child was called back, she was much less anxious and was able to warm up to our dentist more easily.

After her exam, the dentist informed mom that her child had an active infection and would need an extraction. I was able to find that there was a last-minute cancellation with the same pediatric specialist at the end of the week. After discussing the family situation with the reception staff and dentist, I was able to offer the family the appointment. I explained to mom the importance of that appointment and how to not miss it. Mom was grateful and said she would be there.

On the day of the appointment, mom called me an hour before her scheduled time and informed me that she was running late, completing other tasks she had to do since she was moving the following day. I told mom I appreciated her update and that we would work with the dentist and see what can be done once she arrived. When mom arrived, she apologized and understood if she could not be seen, but we asked her to wait. Looking over the schedule, I noticed that the following patient was probably not going to attend, and I was able to reschedule the child.

The dentist was able to complete the dental treatment for the child, and the mother was extremely grateful. Following up with the mom, I assisted her with her Medicaid transition by offering a warm handoff to our eligibility department. They were able to better inform her about what to expect regarding coverage when moving. They also told her how and where to reapply for Medicaid in her new residence. She felt much more prepared and grateful for all the staff’s help.”

(From Chris Aguirre, Tiburcio Vasquez Health Center CDCC, 11/12/2019)

““In early March 2020, I performed my outreach activities at 3 WIC sites — Fremont, Hayward and Eastmont WIC. From March 16, all dental providers had to close down their offices for the Shelter-in-Place order due to COVID-19. I could not continue my outreach at the WIC locations for the situation. And I could not schedule appointments for most of my new clients that I enrolled this month. I also was not able to follow up on the families and the staff of dental offices on the status of clients attending recall appointments that they had till middle of the month. I could not collect the DEFs from the dental offices about my clients and other CDCCs.

By early April, I started contacting my clients; I was happy to be able to reconnect with my old clients who had not been contacted for missing their recall appointments last year. Some of them requested me to schedule appointments after the dental offices re-open. They shared with me the reasons why they could not make the follow up appointments. They appreciated my follow up calls during this critical time. I was able to assure them that they have not been forgotten, and they will be served again when our lives get back to normalcy. I believe that calling my clients after few weeks has made our relationships even stronger than before.” (From Nandita Yasmin, ODH CDCC)

One of the private dentists was hesitant to join the program initially. On one hand she wanted to support the families, but on the other hand she thought she might get overwhelmed by the number of Medi-Cal patients who would come to her office. She said that she had a nightmare: she opened her clinic door and a school bus load of Medi-Cal children were waiting for her.

Despite her nervousness, she joined the COP dentist network. She raised her concerns with the HTHC Project Director and the Community Dental Ambassador who assured her that HTHC will not overwhelm her with referrals. She had the flexibility of selecting the number and age of HTHC clients she wanted to see. She also had the flexibility of pick the timeslots for the HTHC clients. HTHC respected her decision and built a very strong partnership with her. This partnership will continue even after the project ended in December 2020.
Dr. Pamela Alston, Dental Director, Eastmont Wellness Center/Alameda Health System: Dr. Alston was one of our partners and led a community dental clinic. She was a dedicated advocate for increasing access to care. Dr. Alston, "I walk along the hallway of our clinic. And if I see any families with children, I ask them if they have a dentist. If they say no, I immediately connect them with the CDCC and enroll them in the program." She sometimes did the inreach herself and distributed HTHC goody bags (toothpaste, toothbrush, floss, etc.) to patients.

Picture 25: Dr. Pamela Alston with her HTHC clients
The results of HTHC have profound program and policy implications for dental public health. Alameda County’s Office of Dental Health (ODH) is committed to continue to improving access to dental care for Medi-Cal beneficiaries who reside in Alameda County. HTHC project officially ended on December 31, 2020. However, many aspects of the program (based on lessons learned and evidence) will be continued by ODH as well as the HTHC partners. For example:

- Having a diverse racial/ethnic and linguistically sensitive workforce (CDCCs and COP) benefitted Alameda County’s diverse residents.
- Dental Care Coordination led to thousands of children-youth getting dental services (most of whom had not seen a dentist for >12 months).
- Dental care coordination can improve access to care for very young children ages 0-5 years.
- General dentists capacity can be increased/built to provide care to children-youth age 0-20 years if they are supported by care coordinators and appropriate CEs that increase their confidence and skills.
- Dental Care Coordination contributed to extremely low no-show rates at almost all the FQHCs.
- Dental Care Coordination should be considered a best practice for increasing access to care, especially for Medi-Cal beneficiaries.

Continue the Community Dental Care Coordination (CDCC) Workforce

Federal Matching Funds Via Child Health & Disability Prevention Program (CHDP) Can Support Care Coordination Statewide for CHDP Children

ODH successfully created a new workforce of Community Dental Care Coordinators (CDCCs) who formed the bridge that connected the clients, providers, and systems. 8,604 children received services from dentists (49% of these children were ages 0-5 years); in total 34,934 dental appointments were made.

7 HTHC organizations are considering to continue dental care coordination through CDCCs:

1. ODH has created 3 positions (2 will be funded by CHDP).
2. Center for Healthy Schools and Communities: will keep 1 position.
3. 5 FQHCs: Asian Health Services 1 position, West Oakland Health 1 position, La Clinica de La Raza 1 position, LifeLong Medical Care 1 position, and Axis Community Health 1 position. The FQHCs decided to keep the CDCC because:
   - CDCCs were responsible for much lowered no-show rates for their clinics (<10%),
   - CDCCs used in-reach to connect with existing medical clients who were not using dental services (internal FQHC data showed that two-thirds of their medical patients were not accessing dental care).
An updated CDCC Curriculum Guide for Trainers Is Available
This can be used by any organization, other LOHPs, LDPPs, etc. to train the needed workforce.

Continue the Collaborations
A very strong collaborative of partners was built and ODH is committed to continue these collaborations in different forms. For example:

- ODH & UCSF—will keep providing the CEs to the COP network in 2021.
- ODH & Alameda Health Consortium—to keep supporting the FQHCs.
- ODH & FQHCs
- ODH & Private Dentists—to keep seeing the HTHC clients whose dental homes are with these private offices.
- ODH & Dental Societies—to motivate and recruit private dentists to keep taking on Medi-Cal beneficiaries and see younger children.
- FQHCs—internal collaboration among medical-dental-behavioral departments.

Continue the Community of Practice (COP) Dentist Network

DHCS or CDPH Could Introduce This COP Concept Throughout the State

- ODH successfully created a dental Community of Practice (COP) network of dentists: 169 dentists (136 from FQHCs, 30 from 23 private dental offices, 2 from 1 community health center, 1 from 1 out of network dental office). It took more than three years to build this network and it should continue.
- ODH will continue the CEs (with UCSF) in 2021. This will help maintain the COP network.
- This can be expanded for all LOHPs and provided virtually statewide. State could fund ODH to take on this role. It would be easier because the curriculum and CE content are already developed.

Medi-Cal Could Adopt the Family Oral Health Education (FOHE) and Other Incentive Payments

- ODH will continue the FOHE incentive payments.
- This payment can become part of the Medi-Cal payment system statewide as an incentive for private dental providers to serve very young children ages 0-5 years.
- Most private dental provider offices have said that the HTHC patients will continue with their dental homes found through HTHC.
- ODH will induct the private dentists into its Healthy Smiles program so that under-insured and uninsured Alameda County residents can have access to some dental services.

A Guide for Trainers for the COP CE Curriculum is Available
This can be used by any organization, by other LOHPs, LDPPs, etc. to build a network of general dentists who can confidently serve children ages 0-20 years.

Other Considerations

- A dental care coordination program should always include community dental care coordinators and dentists.
- An online Database is available. This can be modified for State LOHP or surveillance needs.
- A database should be an essential component of any public health program.
- Dental public health programs must collect-analyze-use disaggregated data by age, race/ethnicity, language, zip code to understand and identify the disparities in the community.
- A dental champion function (i.e. Community Dental Ambassador) in every county would be very useful to interact with the local provider community.
- Dental public health programs can incorporate oral health education campaign about early dental care for good oral health of all County residents.
- Pediatricians and obstetricians have a big role for assuring dental care for children 0-20 years.
Conclusion

Alameda County Office of Dental Health increased access to and utilization of dental care for thousands of Medi-Cal beneficiaries ages 0-20 years in just 3 years. This was possible through county-wide dental care coordination and collaborations between dental care coordinators and dental providers.

The dental public health has a momentum now to increase preventive care for children and youth. But the target on preventive care will not be met unless the key barriers to access to care are mitigated.

Medi-Cal beneficiaries are still underserved in California. To sustain the progress of oral health care, care coordination, partnerships-collaborations at many levels, and dental providers’ capacity building need to continue. Partnership with FQHCs are essential for any projects that will provide services to Medi-Cal beneficiaries. The HTHC model can be used to target any population age groups and could be replicated across California.
References


## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHCSA</td>
<td>Alameda County Health Care Services Agency</td>
</tr>
<tr>
<td>ACPHD</td>
<td>Alameda County Public Health Department</td>
</tr>
<tr>
<td>ART</td>
<td>Atraumatic Restorative Treatment</td>
</tr>
<tr>
<td>CAMBRA</td>
<td>Caries Management by Risk Assessment</td>
</tr>
<tr>
<td>CAPE</td>
<td>Community Assessment Planning and Evaluation</td>
</tr>
<tr>
<td>CDCC</td>
<td>Community Dental Care Coordinator</td>
</tr>
<tr>
<td>CHCN</td>
<td>Community Health Center Network</td>
</tr>
<tr>
<td>CHS</td>
<td>Community Health Services</td>
</tr>
<tr>
<td>COP</td>
<td>Community of Practice</td>
</tr>
<tr>
<td>DHCS</td>
<td>Department of Health Care Services</td>
</tr>
<tr>
<td>DPH</td>
<td>Dental Public Health</td>
</tr>
<tr>
<td>DTI</td>
<td>Dental Transformation Initiative</td>
</tr>
<tr>
<td>HTHC</td>
<td>Healthy Teeth Healthy Communities</td>
</tr>
<tr>
<td>FOHE</td>
<td>Family Oral Health Education</td>
</tr>
<tr>
<td>ITR</td>
<td>Interim Therapeutic Restorations</td>
</tr>
<tr>
<td>LDPP</td>
<td>Local Dental Pilot Program</td>
</tr>
<tr>
<td>ODH</td>
<td>Office of Dental Health</td>
</tr>
<tr>
<td>MI</td>
<td>Motivational Interviewing</td>
</tr>
<tr>
<td>SDF</td>
<td>Silver Diamine Fluoride</td>
</tr>
<tr>
<td>Sim lab</td>
<td>Simulation Laboratory</td>
</tr>
<tr>
<td>SMART</td>
<td>Silver Modified Atraumatic Restorative Treatment</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>Medi-Cal beneficiaries continuously enrolled in Medi-Cal who receive services from a dentist in 2-, 3-, 4-consecutive year periods</td>
</tr>
</tbody>
</table>
Appendices
Appendix 1: Client Booklets and Provider Booklet


Appendix 2: Protocols and Curriculums

a. Provider Office Protocol

b. Frequently Asked Questions

c. Community of Practice

d. Dental Care Coordination
Dental decay is the most common chronic childhood disease in the U.S. Children who establish good dental hygiene habits at a young age are more likely to continue excellent brushing and flossing as adults, experience fewer dental problems throughout life, maintain a positive self-image, and perform better in school. Developing good dental hygiene is the first line of defense against many common dental issues.
Healthy Teeth Healthy Communities
A program that helps children and youth in Alameda County maintain healthy teeth

WHY should you join Healthy Teeth Healthy Communities (HTHC)?
✓ Children’s teeth are important to their health!
✓ We can help your child get to a dentist regularly

WHAT can we do for your family?
✓ Help schedule appointments with a dentist
✓ Help sign up for Medi-Cal
✓ Provide information about good dental health practices

WHO is eligible for our services?
✓ Residents of Alameda County
✓ 0-20 years old
✓ Families who are signed up or qualified for Medi-Cal

For more information:
Office of Dental Health
1000 Broadway, Suite 500
Oakland, CA 94607
(510) 208-5910
HTHC.INFO@acgov.org

This is a Local Dental Pilot Program (LDPP) of the Dental Transformation Initiative (DTI) funded by the California Department of Health Care Services.
Appendix 5: Quarterly Activity Report

Healthy Teeth
Healthy Communities
Quarterly Activity Report
January-June 2018

Office of Dental Health, Alameda County Public Health Department
1000 Broadway, Suite 500
Oakland, CA 94607
Tel: 510-208-5910
Fax: 510-273-3748
Email: HTHC.info@acgov.org

Quarterly Activity Report
Healthy Teeth, Healthy Communities
January-March 2018

Office of Dental Health, Alameda County Public Health Department
1000 Broadway, Suite 500,
Oakland, CA 94607
Tel: 510-208-5910
Email: HTHC.info@acgov.org
Appendix 6: APHA Presentations (4)

Healthy Teeth Healthy Communities: Alameda County’s Systems Approach Leads to Increased Access to Dental Care for Medicaid Children

Suhaila Khan, Jared Fine, Yilak Fantaye, Quamrun Eldridge, Kerri Chen, Ngan Dang
Alameda County Office of Dental Health
APHA Annual Conference
October 26, 2020

General Dentists Can Treat Infants and Promote Good Oral Health Practices in Families: Alameda County’s Results

Jamal Yousuf, BA
Alameda County Office of Dental Health
APHA Annual Conference
October 26, 2020

Building a Culturally Competent Care Coordination Workforce to Connect Clients to Dental Health Care in Alameda County: A Community Collaboration

Luwissa Wong, Kerri Chen, Suhaila Khan, Arash Aslami, Yilak Fantaye, Bhavana Ravi, Jamal Yousuf
Alameda County Office of Dental Health
APHA Annual Conference
October 28, 2020

Dental provider Community of Practice: Needs and progress in California’s Alameda County

Kristin S. Hoeft, PhD, MPH
October 29, 2020
American Public Health Association
Appendix 7: Plans

a: Implementation 2018

b: Implementation Plan 2019

c: Evaluation Plan

d: Wrap-up Plan
Appendix 8: Dental Encounter Form—for dental offices
# Appendix 9: Data Collection Paper Form

## Healthy Teeth Healthy Communities (HTHC) Client Tracking Form

<table>
<thead>
<tr>
<th>CDCCs Name</th>
<th>Date data entry began</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDCCs Agency/Employer</td>
<td></td>
</tr>
</tbody>
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### Family Contact Information

<table>
<thead>
<tr>
<th>First name (primary guardian)</th>
<th>Last name (primary guardian)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guardian’s relationship to child</td>
<td></td>
</tr>
<tr>
<td>First name (child/client)</td>
<td>Last name (child/client)</td>
</tr>
<tr>
<td>Date of birth of the (child/client)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phone: mobile</th>
<th>Phone: home</th>
<th>Phone: other</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Street address</td>
<td>Zip code</td>
</tr>
</tbody>
</table>

### Email address

<table>
<thead>
<tr>
<th>Email address</th>
<th>Primary language</th>
<th>English</th>
<th>Spanish</th>
<th>Cantonese</th>
<th>Other (write-in)</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>African-American/Black</th>
<th>American Indian/Alaska Native</th>
<th>Asian/Pacific Islander</th>
<th>Latino/Hispanic</th>
<th>(White)</th>
<th>Other (write-in)</th>
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</table>

### Dental Needs

<table>
<thead>
<tr>
<th>When was the child’s last dental visit?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any pain, trauma to teeth or visible infection?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Urgency of dental needs</td>
<td>Non-Urgent</td>
<td>Urgent (Class 3)</td>
</tr>
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</table>

### Insurance Status/HIT Referral

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>Medi-Cal</th>
<th>Health Pac</th>
<th>Other</th>
<th>None</th>
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</thead>
<tbody>
<tr>
<td>Insurance ID Number</td>
<td></td>
<td>Verified in Meds Check?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Has the child been referred to a Health Insurance Technician for enrollment?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did the client acquire new health insurance/Medi-Cal?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Enrollment

<table>
<thead>
<tr>
<th>Did the family sign consent?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment Status</td>
<td>Enrolled</td>
<td>Enrollment Pending</td>
</tr>
</tbody>
</table>

### Dental Appointment Made for Child

<table>
<thead>
<tr>
<th>Name of dental provider</th>
<th>Location</th>
</tr>
</thead>
</table>

### Appointment Status & Troubleshooting

<table>
<thead>
<tr>
<th>Did the client show up for the appointment?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>If didn’t show for the dental appointment what was the reason?</td>
<td>Scheduling conflict</td>
<td>Other (Write In)</td>
</tr>
<tr>
<td>Encounter form given to dental provider?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Encounter form received back from dental provider?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### Make-Up Dental Appointment

<table>
<thead>
<tr>
<th>Date of dental appointment</th>
<th>Name of dental provider</th>
<th>Location</th>
</tr>
</thead>
</table>

### Notes
Appendix 10: Calendars

a: HTHC Dental Appointment Calendar

b: HTHC Outreach/Inreach Calendar
Appendix 11: Drill Metrics: DTI Alameda—Healthy Teeth Healthy Communities (submitted annually to State DHCS for CMS review)

Note: This metrics was analyzed and compiled using the data exported from the live Care Coordination Management System (CCMS) database on January 4, 2021. Some numbers on this report may be different from previously submitted reports for CY 2018 or CY 2019 as data are continuously entered and updated on the CCMS database.

FQHC: Federally Qualified Health Center; CHC: Community Health Center

Access to Care

1. Metric: Hire and cross-train 25 Community Dental Care Coordinators (CDCCs)
   a. 2017: 26
   b. 2018: 26 (maintained)
   c. 2019: 26 (maintained)
   d. 2020: 26 (maintained)
   e. 2017-2020: 26

2. Metric: CDCCs Outreach/contact 15,000 families with children annually
   a. 2017: 0
   b. 2018: 18,393/15,000 (122.6%)
   c. 2019: 21,596/15,000 (143.9%)
   d. 2020: 12,413/15,000 (82.8%)
   e. 2017-2020: 52,402/52,500 (99.8%)

3. Metric: CDCCs case management/scheduling appts 6,900 children annually (1st appts)
   a. 2017: 0
   b. 2018: 4,396/6,900 (63.7%)
   c. 2019: 4,319/6,900 (62.6%)
   d. 2020: 1,680/6,900 (24.3%)
   e. 2017-2020: 10,395/24,150 (43.0%)

4. Metric: Preventive first appt attended 4,485 (65% of 6,900) children annually
   a. 2017: 0
   b. 2018: 3,678 /4,396 (83.7%)
   c. 2019: 3,613/4,319 (83.7%)
   d. 2020: 1,313/1,680 (78.2%)
   e. 2017-2020: 8,604/10,395 (82.7% actual) or (8,604/15,697=54.9% target)

5. Metric: Increase of 35 enrolled dentists who provide preventive services to children 0-20 years
   a. 2017: 58 dentists (50 from 7 FQHCs, 1 from 1 community health center, 7 from 7 private practices)—(non-CCMS data; no services provided).
   b. 2018: 135 dentists (109 from 7 FQHCs, 1 from 1CHC, 24 from 17 private practices, 1 from 1 out-of-network private practice).
   Grant mentions enrolling 15 dentists for this year.
   c. 2019: 146 dentists (116 from 8 FQHCs, 1 from 1 CHC, 28 from 22 private practices, 1 from 1 out-of-network private practice).
   Grant mentions enrolling 20 dentists for this year.
   d. 2020: 121 dentists (95 from 8 FQHCs, 2 from 1 CHC, 23 from 21 private practices, 1 from 1 out-of-network private practice).
   e. 2017-2020: Cumulatively 169 dentists (136 from 8 FQHCs, 2 from 1 CHC, 30 from 24 private practices, 1 from 1 out-of-network private practice).

6. Metric: (of the 35) Increase of 20 enrolled dentists who provide preventive services to children 0-5 years (<6 years)
   Same answer as Metric #5. Most dentists serviced either children 0-5 year, or 1-5 years, or 2-5 years, or 3-5 years, or 4-5 years.

7. Metric: Increase of 21 newly enrolled dental service locations (15% of 137 mentioned in grant)
   a. 2017: 14 (7 FQHCs, 7 private practices) – (non-CCMS data, no services provided).
   b. 2018: 46 (27 from 7 FQHCs, 1 from 1 CHC, 17 from 17 private practices, 1 from 1 out-of-network private practice).
   Grant mentions enrolling 10-11 locations for this year.
   c. 2019: 52 (28 from 8 FQHCs, 1 from 1 CHC, 22 from 22 private practices, 1 from 1 out-of-network private practice).
   Grant mentions enrolling 10-11 locations for
d. 2020: 50 (27 from 8 FQHCs, 1 from 1 CHC, 21 from 21 private practices, 1 from 1 out-of-network private practice).
e. 2017-2020: Cumulatively 57 service locations participated (31 from 8 FQHCs, 1 from 1 CHC, 24 from 24 private practices, 1 from 1 out-of-network private practice).

Most locations were already participating in Medi-Cal but were not taking new Medi-Cal clients (all the private practices, even most FQHCs); they started accepting new Medi-Cal clients through HTHC. Only 1 new service location was added to HTHC as per definition in grant.

8. Metric: Increase of 21 actively participating (10+ claims/month) providers (15% of 137)
   a. 2017: 0
   b. 2018: 4
   c. 2019: 4
   d. 2020: 5
   e. 2017-2020: 11 (cumulatively)

Multiple providers submitted <10 claims/month and are not counted here.

9. Metric: 10% increase in the proportion of children 0-20 accessing preventive services, or 2-3% increase each program year (~15,478 additional children: Year 1 - 2,971; Year 2 - 4,690; Year 3 - 4,690; Year 4 - 3,127)
   a. 2014: 28% or 43,775 children (baseline mentioned in grant but project started in 2017)
   b. 2017: 0/2,971
   c. 2018: 3,678/4,690 (78.4%)
   d. 2019: 3,613/4,690 (77.0%)
   e. 2020: 1,313/3,127 (40.8%)
   f. 2017-2020: 8,604/15,478 (55.5%)

It is challenging to compare the HTHC data with the State data and show “% increase.” Because the State data changed dramatically for 2014-2016 from the time the grant was written. State data already showed an increase even before the project started. HTHC data shows that there are additional children accessing preventive services but the “% increase” is hard to calculate.

Continuity of Care

10. Metric: 10% increase in the proportion of children 0-20 having a second visit with the same provider, or 2-3% increase each program year.
   a. 2014: 49% or X children (baseline mentioned in grant but project started in 2017)
   b. 2017: 0
   c. 2018: 2,440/3,678 (66.3%) in continuity of care.
   d. 2019: 1,994/3,613 (55.1%) in continuity of care.
   e. 2020: 286/1,313 (21.7%) in continuity of care. Those who enrolled after June 2020 would have their continuity of care appointments in 2021.
   f. 2017-2020: 4,720/8,604 (54.8%) in continuity of care.

Collecting the continuity of care data was very challenging for several reasons. First, these appointments were under-reported. The dental offices frequently contacted the clients directly to setup these appointments and the CDCCs would be unaware. Second, “% increase” is hard to calculate because State data changed dramatically between the time the project grant was submitted and the actual project work started.
Thank you.