ORANGE COUNTY LOCAL ORAL HEALTH PROGRAM

Evaluation Plan 2019-2022

Local Oral Health Program
Orange County Health Care Agency
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INTRODUCTION AND EVALUATION OVERVIEW

The evaluation plan has been developed through engagement of several community partners and stakeholders through the Orange County Oral Health Collaborative. Stakeholders have been involved since before the establishment of the Local Oral Health Program (LOHP), have advised the development of this evaluation plan and will be involved throughout the implementation of the plan.

Currently, the Orange County Oral Health Collaborative ('Collaborative') serves as the Evaluation Stakeholder Workgroup (ESW). As needed, ad-hoc sub-committees will be utilized to plan, implement and interpret specific evaluation activities and findings.

Evaluation Purpose

The evaluation will be a combination of formative and summative evaluations of all LOHP objectives. The overarching purpose of this evaluation is to evaluate program infrastructure, all processes and select outcomes. Since the LOHP was established in Orange County in early 2018, a significant focus of the evaluation will be on processes rather than outcomes or impact. Wherever feasible, outcomes will be evaluated, and program improvements will be recommended. The evaluation will assess how the LOHP's activities and leadership are supporting the implementation of the Orange County Oral Health Strategic Plan 2018-2022. The evaluation will also account for other key activities of the Orange County Health Care Agency (OCHCA) and how LOHP's activities are aligned with them. A mixed-methods approach will be used for the evaluation. Data will be collected from primary and secondary sources and methods will include network mapping, document reviews, structured observations, key-informant interviews, focus groups and surveys.

Five overarching evaluation questions have been identified and focused into this evaluation plan. Several sub-questions as they relate to specific activities will be developed, all of which will ultimately support the overarching evaluation questions.

All evaluation findings will be interpreted in collaboration with the LOHP, the Collaborative and other involved partners.

Evaluation Team and Roles

The Center for Oral Health (consultant) of the LOHP will be the evaluation lead. The LOHP will also be supported indirectly and as needed by the Health Care Agency's epidemiology team. A surveillance and evaluation workgroup of the Collaborative will be established and will meet every alternate month of the year starting in October 2019. This workgroup will advise all LOHP data, surveillance and evaluation activities. Further review and recommendations will be requested from the other workgroups and the collaborative on an ongoing basis. Evaluation will be addressed as a standing item during all workgroup and AC meetings to build and maintain a culture of evaluation.

Stakeholder Engagement

The LOHP is the primary stakeholder in this evaluation. Additionally, several stakeholders have been and will continue to be engaged in the development, periodic review, implementation, communication and utilization of findings of the evaluation. Stakeholders will be engaged through several methods – the collaborative and workgroups. Finally, and most importantly, community members/ beneficiaries of LOHP's services will be engaged in this evaluation. Community members have been engaged through interviews and focus groups to conduct the comprehensive oral health needs assessment that informed the development of the strategic plan and continue to inform evaluation of LOHP's activities.

The key aspects/ perspectives of the evaluation that the Collaborative is interested in (which also helped focus the evaluation design) are:

1. Effectiveness of the LOHP in implementing its work plan
2. Strength of the network and extent of engagement of stakeholders and partners involved in LOHP activities.
3. Minimum duplication, suitable replication of best practices and maximum leveraging of existing programs, resources and partnerships.
4. Components of the strategic plan implemented and addressed by the LOHP
5. Effectiveness of collaboration with and integration into other public health programs of the Health Care Agency

Table 1. Stakeholder Assessment and Engagement Plan

List of stakeholders is as follows:
Note that this list is updated monthly, and several partners choose to support specific activities of the LOHP as feasible.

Stakeholders will play one or more of the following specific roles in the evaluation (Table 1).

1. Planning team
2. External reviewer
3. Data collection, analysis and interpretation support/ guidance

Stakeholder Name	Role in Program	Role in the Evaluation
CDPH Office of Oral Health	Funder	2
Center for Oral Health	Evaluator/ Consultant	1, 2, 3
Local Oral Health Program	Program Lead	1, 3
First 5 Orange County	Partner	1, 2, 3
CalOptima	Partner	1, 2, 3
Orange County Department of Education	Partner	1, 2, 3
School Districts, Schools and related staff	Partner	1, 2, 3
Orange County Head Start	Partner	1, 2, 3

Stakeholder Name	Role in Program	Role in the Evaluation
Coalition of Community Health Centers of Orange County	Partner	1, 2, 3
Dental Directors of Health Centers	Partner	1, 2, 3
Leadership and Staff of Health Centers	Partner	1, 2, 3
Medi-Cal Dental Providers	Partner	2, 3
Select programs of the Health Care Agency	Partner	1, 2, 3
Other County partnerships (Health Improvement Partnership, Aging Collaborative etc.)	Partner	1,2
Community-based organizations	Partner	1, 2, 3
Local Colleges and Universities	Partner	1, 2, 3
Smile California and Medi-Cal Dental Program; Department of Health Care Services	Partner	1, 2, 3

Intended Use and Users

Evaluation findings will be used by the LOHP on an ongoing basis to make data and results driven decisions regarding program improvement. Findings will also be used by the LOHP and OCHCA to expand oral health infrastructure, programs and integration into other systems/ services in the county.

The evaluation will be stakeholder-driven and iterative and will be conducted on an ongoing basis until the end of the current grant cycle (ending June 31, 2022). One annual evaluation report and four quarterly status updates will be published to disseminate findings of the evaluation. All evaluation findings will be interpreted in collaboration with the LOHP, OCHCA leadership, the Collaborative and other involved partners.

Findings will thus be used by partners, stakeholders and community members to learn from the LOHP, compare and contrast their own oral health efforts with LOHP to maximize learnings and advance favorable oral health policies and systems of care.

Evaluation Resources

New and existing evaluation resources that will be used to implement this evaluation plan are as follows:

1. **Community oral health needs assessment (NA):** A comprehensive countywide oral health needs assessment was completed in 2018. This NA informed the development of the oral health strategic plan and its methods and findings will serve as a baseline resource for this evaluation.

2. **OCHCA data infrastructure:** There are several resources (tools, skilled professionals and best practice examples) that exist or will be developed to support this evaluation and the LOHP's data needs.

3. **Surveillance and epidemiology efforts:** OCHCA is currently conducting a countywide basic screening survey of kindergarten and 3rd grade students to establish a baseline of dental disease prevalence among the county's children. Several tools and methods were developed for the NA that will be implemented on an ongoing basis over the upcoming years. The LOHP will also be developing an oral health surveillance plan and system to support oral health efforts in the County.

4. **Community partners and experts:** The county is home to many community-based organizations, think tanks, universities, providers and primary care clinics and a regional oral health coalition who all possess expertise in dental and public health research, evaluation and epidemiology.

Evaluation Budget

The LOHP has currently allocated $100,000 annually to subcontract with the Center for Oral Health to support all their evaluation and surveillance needs. Nearly 40% of this budget ($40,000) is anticipated to be used for specific evaluation activities. Evaluation activities that include development of the evaluation plan, conducting the basic screening survey and establishing key data processes (based on the NA) for ongoing implementation. The LOHP has also allocated an annual budget to staff a statistical analyst who will serve as the evaluation lead. The budget for FY 2021 and 2022 will be reviewed annually and evaluation resources will be allocated accordingly.

BACKGROUND AND DESCRIPTION OF THE LOHP

Mission: To implement a countywide oral public health program focused on dental disease prevention, dental surveillance and epidemiology and optimizing oral health services through integration and collaboration.

Vision: All Orange County residents have opportunities and resources for optimal oral health.

Values/ Foundational Principles:

The LOHP activities and strategic plan efforts will be guided by the following foundational principles.

1. Prevention of disease and timely linkage to appropriate care.
2. Utilization of upstream and sustainable approaches to dental disease prevention.
3. Supporting health education, public awareness and change in perceptions around oral health.
4. Development and implementation of a plan that is community-inclusive and stakeholder driven.
5. Ensuring all programs and efforts are culturally and linguistically appropriate.
6. Strengthening and, effectively and efficiently utilizing existing systems of oral health care.
7. Addressing needs of underserved populations/communities. Age groups (children/ adults/older adults) and specific populations will be determined based on the needs assessment findings related to disease burden and resource gaps.

Program Goals and Objectives

The Oral Health Strategic Plan 2018-2022 outlines several goals and strategies for improving oral health of Orange County. This strategic plan is a countywide collaborative plan, i.e. LOHP will not take the lead on implementing all strategies. Strategies fall into one of the following three categories of implementation (*terms only for internal use*):

LOHP total: Strategies to be implemented in totality by the LOHP.

LOHP partial: Strategies to be implemented by multiple partners including the LOHP

Non-LOHP: Strategies to be implemented by partners other than LOHP.

Strategies are listed in the Appendix.

It is important to note that the LOHP will continue to foster partnerships and promote/ support implementation of all strategies. Similarly, the Collaborative and other community partners will continue to advise all activities of the LOHP.

This evaluation plan covers only those strategies that will be implemented either fully or partially by the LOHP. The LOHP's leadership and convening role in supporting implementation

of other strategies will also be evaluated, but specific objectives will not be evaluated under this evaluation plan.

Since January 2019, workgroups have been developing a collaborative implementation plan with measurable objectives and activities for each of the strategies in the Plan. During this process and in workgroups, evaluation of 'Non-LOHP' strategies will be planned.

In alignment with the strategic plan and the grantee work plan provided by the CDPH office of Oral Health, the LOHP has the following objectives.

1. By June 30, 2020, implement evidence-based programs (dental screenings, fluoride varnish application, oral health education and care coordination) at select school districts (focus on high-risk and underserved schools/ students), to increase dental service utilization and promote disease prevention by 2% among Medi-Cal eligible children in Orange County.
    i. Identify, outreach and, recruit schools and partners for implementation of school-linked programs. (includes planning logistics for program implementation e.g. schedule screenings etc.)
    ii. Provide screening and risk assessment (Kindergarten (KG) Oral Health Assessment included); Fluoride Varnish and Sealant information to eligible students at a minimum of three new elementary schools every program year. (Details of the KG oral health assessment activity are elaborated in later objectives)
    iii. Coordinate care (provide referrals and ongoing support) for identified students to receive dental sealants and needed dental treatment at community provider sites with the goal of 60% of all students with unmet need establishing a dental home and receiving dental treatment within one year from date of screening.
    iv. Provide oral health education to students, parents and school staff/ administration at all 3 schools served by LOHP annually. Partner with community providers and partners to provide oral health education at their program sites and schools.

2. By June 30, 2020, work with partners to promote oral health by developing and implementing prevention and healthcare policies and guidelines for programs, health care providers, and institutional settings (e.g., schools) including integration of oral health care and overall health care, resulting in 60% of all elementary public schools in Orange County collecting and reporting Kindergarten Oral Health Assessment data.
    i. Develop a mechanism for increasing the percentage of Kindergarten Oral Health Assessments completed and submitted by students in Orange County Public Schools by both conducting assessments at un-served schools and promoting completion of assessments by partners who are already serving schools in their own capacity.

3. By June 30, 2022, address common risk factors for oral diseases and chronic diseases including tobacco and sugar consumption and promote protective factors that will reduce disease burden by

- Increasing primary care clinics and community dental clinics that field RYD message from 0 to 8 and 0 to 25 respectively.
- Increasing number primary care dental clinics and community dental clinics that provide tobacco cessation support from 4 (baseline to be further confirmed) to 25.
    i. Collaborate with partners within and outside the HCA to promote Rethink Your Drink campaigns in dental settings.
    ii. Collaborate with partners within and outside the HCA to promote tobacco cessation messaging in dental settings.

4. By June 30, 2022, coordinate outreach programs; implement education, health literacy campaigns and promote integration of oral health and primary care, by reaching at least 1,250 individuals from priority underserved populations (to be further defined by workgroup) and increasing oral health knowledge of at least 200 individuals annually.
    i. Develop, implement and maintain a data-driven print and digital public awareness campaign addressing different oral health messages.
    ii. Promote the implementation of evidence-based campaigns like Brush-Book-Bed in dental other settings.
    iii. Promote oral health literacy at dental offices with guidance from the CDPH Office of Oral Health.

5. By June 30, 2022, assess, support, and assure establishment of effective oral healthcare delivery and care coordination systems and resources, including workforce development and collaborations to serve underserved areas and vulnerable populations by

- Increasing the number of primary care providers who incorporate oral health risk assessment, fluoride varnish application, education and referral into well-child visits by 20%.
- Increase the number of 0-5 year old Medi-Cal eligible children receiving fluoride varnish applications from a primary care provider by 6%.
- Increasing the number of primary care providers and Ob/Gyns who incorporate oral health education and referral into visits prenatal and postpartum care visits by 10%
    i. Integrate medical and dental care by promoting referrals through coordinated system.
    ii. Promote inter-professional knowledge and strengthen the medical and dental workforce to promote collaboration and integration of care.

Need

There is a strong need for the LOHP in Orange County. Through a comprehensive needs assessment, several key oral health care needs were identified.

Prevalence of dental disease in children: While prevalence of untreated tooth decay has declined among children in Orange County, many children still suffer from dental disease and disparities persist, affirming the need to focus on early prevention.

Rate of utilization and reasons for non-utilization of dental services by children: Utilization of dental services by the Medi-Cal child population is low and varies significantly by age, with Orange County's youngest and oldest children utilizing services at a rate lower than their counterparts. Utilization of services by Medi-Cal eligible children is higher than the California average but falls short of statewide targets.

Utilization of services by and oral health care needs of pregnant women: Low-income pregnant women constitute an underserved population that faces barriers in utilizing dental services during pregnancy and has limited access to information about oral health practices and resources.

Low-income adults in Orange County and their dental service utilization: Utilization of dental services by adults insured through Medi-Cal shows an upward trend. The primary reasons for non-utilization of services is cost and the lack of awareness that Medi-Cal benefits cover dental care.

Children and adults with special health care needs: Individuals with intellectual and developmental disabilities, and special health care needs face significantly more challenges in achieving optimal oral health than their healthier counterparts. Ongoing data collection to determine true disease burden and appropriate solutions to address their needs are imperative.

Institutionalized and community-dwelling older adults: Older adults have unique oral health care needs and face several barriers toward achieving optimal oral health. Monitoring state and federal policies that impact older adults' ability to pay for dental services is critical. From a public health standpoint, increasing access to accurate information and resources to bridge gaps in accessing available services is important.

Dental workforce capacity and the oral health care system: While Orange County has a strong oral health workforce and oral health care system, further capacity building and coordination of efforts are needed to meet the needs of the County's underserved and low-income populations.

In addition to addressing oral health care needs of the community through programs and initiatives, there is a high need for an entity like LOHP that can convene stakeholders around a common agenda, support them with actionable data and information and serve a conduit to other health and social services/ programs in the County.

Orange County is also a recipient of the Local Dental Pilot Project grant from the Department of Health Care Services. The formation of the Collaborative under the LOHP's leadership and in partnership with First 5 Orange County, who is the LDPP lead, has been timely and much needed.

Context

Improving access to dental care and preventing dental diseases is a Healthy People 2020 goal. Based on its community health assessment process, the Orange County Health Improvement Partnership identified oral health as a 'new area of interest' in the Orange County Health Improvement Plan for 2017- 19. This resulted in the establishment of the Orange County Oral Health Collaborative. In January 2018, with funding from the California Department of Public Health, a Local Oral Health Program was established within the Orange County Health Care Agency. The Orange County LOHP was tasked to conduct a comprehensive oral health needs assessment and engage stakeholders to develop an oral health strategic plan. Orange County is home to clinics, providers, organizations, coalitions and stakeholders dedicated to improving oral health.

The county's provider network and community health center capacity to provide dental services has been expanding over the past five years and several stakeholders have identified oral health as an unmet need. Increased attention to oral health care needs statewide has also resulted in policies (e.g. full restoration of dental benefits for adults in the Medi-Cal program) and programs (e.g. Dental Transformation Initiative by the Department of Health Care Services) that have the potential to positively impact the oral health of Orange County residents.

The Oral Health Strategic Plan builds on the expertise of stakeholders across the County and takes into consideration existing programs, policies, best practices and environmental factors. Through coordination and expansion of strategies that increase accessibility and utilization of oral health services, heightened awareness of the importance of oral health as part of overall health, and a stronger oral health workforce, this strategic plan provides a comprehensive roadmap for improving the oral health of all Orange County residents.

The LOHP plays a key role in the implementation of the strategic plan. The program is housed within the Family Health Division and is led by the Division Manager. The program team also consists of a Program Supervisor and a Dentist. The LOHP has contracted with two consultants to support their work. The Center for Oral Health provides evaluation and surveillance support and WestBound Communications supports the development of a public awareness campaign. The LOHP is strongly supported by the Health Care Agency (HCA) and HCA leadership have been engaged in its work since the start of the program. The strategic plan builds on the expertise of stakeholders across the county and takes into consideration existing programs, policies, best practices and environmental factors. Through coordination and expansion of strategies that increase accessibility and utilization of oral health services, increased awareness of the importance of oral health as part of overall health, a stronger oral health workforce and quality data and surveillance, this plan provides a comprehensive roadmap for improving the oral health of all Orange County communities.

Target Population

The LOHP serves all population and age groups including special populations like pregnant women, individuals with intellectual and developmental disabilities, homeless individuals and families, individuals living with HIV/AIDS, individuals with chronic diseases, current smokers and

tobacco users, rural communities, immigrants and refugees, and many more through public health programming. Populations served by specific initiatives will be determined based on need, available resources and existing community efforts. Several initiatives like the public awareness campaign will be implemented to serve all County populations.

Stage of Development

The LOHP is a new program which was established in January 2018. The program has been in a planning phase until June 2019. The LOHP is currently in the implementation phase and hence, the evaluation will be formative with some summative/ outcome evaluation components.

Theory of Change

Oral health is an integral component of overall health and well-being and dental disease is 99% preventable. Dental disease can impact individuals across the life span. Orange County performs better than several other Counties and the State average on several key oral health indicators. Yet, oral health disparities by income, race/ ethnicity, disability status and other similar factors are prevalent in Orange County. There are several service providers, partners, resources and community champions who identify oral health needs of their communities, have expertise in dental public health and are deeply invested in this issue area. Upstream approaches with a prevention focus, collaborative mindset and a culture of evaluation must be central to all oral health efforts. Through a data-driven, evidence-based or evidence-informed, multi-pronged, stakeholder and community-informed approach, oral health of Orange County can be improved.

Logic Model

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES
Staff and Funding • Prop 56 Funding from CDPH Office of Oral Health • OCHCA Local Oral Health Program (specific staff may vary) • Consultants/ Evaluators: Center for Oral Health • Marketing Consultants: WestBound Communications **Other Infrastructure** • Other divisions in OCHCA – e.g. Nutrition, Tobacco Control, Maternal, Child and Adolescent Health, Epidemiology and Surveillance • IT resources (as needed) **Partners and Oral Health Collaborative** • OC Oral Health Collaborative • Children and Families Commission of OC • OC Health Improvement Partnership • CDPH Office of Oral Health • CA Department of Health Care Services • Professional Associations • Orange County Public Schools • Universities and academic partners • Dental and non-dental providers, Dental clinics • National, state and local partners • Other stakeholder and community programs • Other Funders • Community champions and members	**Collaborate** • Establish and maintain an Oral Health Collaborative • Establish and maintain workgroups for each focus are of the OC Oral Health Strategic Plan • Engage in other collaboratives and with other initiatives like the Dental Transformation Initiative **Assess** • Conduct an oral health needs assessment and update relevant oral health data annually • Collect, aggregate, analyze and interpret other oral health data on an ongoing basis to inform programs and policies • Develop and maintain an oral health surveillance plan and system **Implement** • Design, implement and maintain efforts/ initiatives/ projects related to oral health education, integration of medical and dental care and strengthening the oral health workforce • Increase access to care and minimize barriers through innovative approaches **Evaluate** • Develop and implement an evaluation plan • Evaluate the program annually and make necessary updates/ improvements • Consistently engage stakeholders in the evaluation process	• Orange County Oral Health Collaborative that meets on an ongoing basis (frequency TBD) • OC Strategic Plan Work Groups that meet on an ongoing basis (specific names and meeting frequency TBD) • Oral Health Strategic Plan 2018-2022 • Oral Health Needs Assessment • Local Oral Health Program Evaluation Plan • OC Oral Health Surveillance Plan • Annual data updates (data points to be determined by collaborative) • Publicly available data with interpretations, trend analysis and limitations. • Data tables and ad-hoc reports as needed • Annual LOHP evaluation report and individuals project evaluation reports • Project protocols toolkits and descriptions • Orange County LOHP interactive website with educational materials • County-wide public awareness campaign (print and digital)	**Short Term:** • Increased capacity • Enhanced collaboration • Targeted surveillance • Collaborative communications • Coordinated system to address specific needs **Intermediate:** • Increased utilization of data and resources for program decision making • Increased number of engaged partners • Increased number of policies and programs that support oral health • Increased engagement of dental, medical and social services workforce • Increased number of people engaged in healthier habits • Increased number of people receiving evidence-based interventions **Long Term:** Reduction in • Dental caries prevalence & untreated caries as measured in kindergarten and 3rd grade children • Unmet dental needs among low-income (Medi-Cal eligible) individuals • Oral & pharyngeal cancers • Emergency room visits • Health disparities

FOCUS OF THE EVALUATION

Evaluation Questions

In consultation with the Collaborative, it was determined the evaluation would focus primarily on assessing processes. The LOHP being relatively new, is currently building the program from scratch and establishing several new initiatives and partnerships. But, since several strong partners and organizations have been addressing oral health care needs of the community before the LOHP was established, much of the LOHP's work is focused on leveraging, supporting and standardizing all the work that is ongoing. To that end, such initiatives/ objectives will be assessed for outcomes.

In summary, a combination of formative and summative evaluation (process and outcomes) will be used.

1. How and to what extent has the LOHP integrated oral health into other public health and social service programs of Orange County?
   - Are non-dental providers and program integrating oral heath in their workflow?

2. Has oral health knowledge increased and translated into an increase in utilization of preventive dental services?

3. To what extent are policy and program decisions (by LOHP and its partners) being made based on 'current' (no more than 2 years old), actionable and representative data?
   - Is there a sound oral health surveillance system in place to support oral health in Orange County?

4. What is strength, diversity and extent of the 'network' of partners who collaborate with each other and the LOHP to achieve objectives of the oral health strategic plan?

5. Has there been a change in oral health service utilization and outcomes in Orange County? If yes, to what extent?

More detailed sub-questions for each of the goals and objectives of the LOHP work plan will be sued (and periodically updated as activities are initiated) to ultimately answer these overarching evaluation questions.

Indicators

To answer the evaluation questions, a set of indicators have been developed. Each of the indicators will be measured through specific modes of data collection as outlined in the evaluation plan grid. Indicators will be refined and updated as data collection methods are streamlined, and relevant tools are designed. Indicators will be also be updated when work plan and evaluation plan updates are made over the next four program years. Indicators will measure effectiveness of efforts to increase access to and utilization of preventive services,

change in oral health knowledge of populations served, strength and relevance of oral health data and surveillance capacity, strength and extent of networks to maximize collaborative impact and the integration of oral health into medical and other services.

Evaluation Methods

The evaluation will be both formative and summative. The formative component of the evaluation will assess the LOHP with the goal of informing its implementation and potential changes/ improvements through an interactive process. The summative component of the evaluation with measure outcomes of the work implemented by the LOHP. Since the evaluation spans less than four years and the program is new, an impact evaluation will not be conducted. A hybrid (mixed-methods) approach will be taken to evaluate the program. Data – both qualitative and quantitative will be collected, analyzed and interpreted by the evaluation team in collaboration with the surveillance and evaluation workgroup of the AC. Data collection methods will yield primary and secondary data from surveys, census, document reviews, interviews, focus groups and observations.

For the summative component of this evaluation, processes and outcomes will be evaluated. A generic set of steps involved are as follows:

Process Evaluation (generic plan):

1. Individual evaluation of specific processes will be designed before implementation. All data collection tools and methods will be finalized in consultation with individuals and partners involved and documented.

2. All data will be reviewed and cleaned after collecting from various sources. No analysis will be done before data is cleaned.

3. Data will be analyzed monthly, quarterly and yearly to answer all evaluation questions of all objectives. The process evaluation will be explained with Results Based Accountability questions (How much did we do? How well did we do?)

4. Structured observations, interviews, focus group discussions and surveys will be used to evaluate the quality of the project implementation, successes and challenges of the project, as well as lessons learned.

5. A quarterly narrative report will be prepared with all quarterly analyzed data; the quarterly report will include a section for ongoing quality improvement.

6. All findings will be summarized annually to identify potential quality improvement areas.

Outcome evaluation:

At the end of the grant term, the outcome evaluation (utilizing data sources listed in Table 2) will assess if the program was able to meet the targets set for the following areas:

As the work plan (plan of implementation) is still being determined, the following will be made measurable as each of the outcomes are finalized.

1. School-based or school-linked services

2. Care coordination across all program initiatives and the establishment of dental home to meet unmet dental needs

3. Integration of medical and dental services, adoption of relevant workflows and policies and sustained implementation of efforts

4. Collaborative/ partnership efforts; strength of the network and its accomplishments

5. Availability and use of data for action

Evaluation Standards

The Joint Commission on Standards for Educational Evaluation prescribes specific standards for program evaluation. The LOHP evaluation team and stakeholders will incorporate the following standards.

Utility Standards: Stakeholders and partners identified in earlier sections of the evaluation will be engaged throughout the lifespan of this evaluation. The evaluation team will ensure that the needs of stakeholders and intended users is integral to the process and findings are communicated in a clear and timely manner.

Feasibility Standards: All components of the evaluation including specific data sources like the surveillance system will be analyzed for feasibility before implementation. Evaluation processes and protocols will be negotiated and established proactively to ensure smooth implementation.

Propriety Standards: The evaluation team will ensure measures are taken to maintain data security, inclusivity and transparency throughout the process.

Accuracy Standards: The evaluation team and stakeholder groups will ensure accountability in the way the LOHP evaluation is planned, implemented, interpreted and disseminated.

Accountability Standards: In collaboration with its stakeholders, the LOHP will ensure findings and recommendations of the evaluation are utilized to make programmatic improvements.

GATHERING CREDIBLE EVIDENCE: DATA COLLECTION

Data Collection

Data for the evaluation will be collected from a multitude of sources as listed in the evaluation activities grid. Data will be generated from LOHP programs, the surveillance system, external/ partner data systems, electronic health records, survey and census data (primary and secondary) and qualitative data in the form of interviews, focus groups, observations and document reviews. The LOHP evaluation team will lead collection, analysis, interpretation and dissemination of evaluation data/ findings.

The Appendix outlines performance measures and potential indicators of the surveillance plan.

A summary of data sources is as follows:

Proposed primary data sources	Proposed secondary data sources
Basic Screening Survey (2019)	American Dental Association
Basic Screening Survey of Older Adults	Behavioral Risk Factor Surveillance System
Survey of Parents and Caregivers of Individuals with I/DDs Department of Health Care Services - Data Request - *For Medi-Cal Eligibles*	California Cancer Registry
Oral Health Census of Primary Care Clinics	California Dental Board
Census of Dental Offices	California Department of Health Care Services
Oral Health Census of Public Schools	California Health Interview Survey
Denti-Cal Provider Survey	Health Resource and Services Administration
Network survey and mapping	Kindergarten Oral Health Assessment Data System (exact name TBD)
	Maternal Infant Health Assessment
	Public Information Report
	Office of Statewide Planning and Development
	Youth Behavioral Surveillance System

Evaluation Plan Grid

Evaluation Question	Indicator/ Performance Measure ** Data will be stratified by age group, geographic location, race/ ethnicity and target populations wherever applicable*	Data Source	Evaluation Method	Analysis Method with Standard of Comparison ** Several baseline statistics/ prevalence estimates are yet to be established. Comparison to baseline will be done for most, if not all indicators*	Staff Responsible for Collection and Analysis
How and to what extent has the LOHP integrated oral health into other public health and social service programs of Orange County? Are non-dental providers and program integrating oral heath in their workflow?	# of preschools and elementary schools with an oral health program that serves them annually and provides oral health assessments, education and referrals at a minimum #, % and geographic distribution of elementary schools with a school-based or school-linked dental sealant program # of children served through school-based or linked program, types of services received (FV, Sealants, Treatment) and # of those who have established a dental	Data requests from external stakeholders, program logs and data systems, sign-in sheets and internal report extracts collected quarterly Training logs, evaluation surveys, follow-up surveys, qualitative interviews, structured observations collected on an ongoing basis Clinic and program protocols, claims data as available, special claims data requests and	Quantitative secondary data collected through data requests Quantitative primary data collected through surveys Qualitative data collected through structured interviews, observations and document review	Descriptive analysis quantifying number and types of services and programs Mixed methods analysis of adoption and integration of oral health services by non-dental providers and programs Descriptive statistics quantifying change in knowledge after oral health trainings	Primary: Center for Oral Health Secondary: Program partners

	home within a year from service # of county public health and social services programs with an oral health component (assessment, education, referrals etc.) # of individuals receiving oral health education and/ or referrals from WIC clinics # of pregnant women receiving oral health education and/ or referrals at CPSP provider sites # of CHDP providers implementing oral health protocols for assessment, education and FV application during well-child visits # of other primary care providers implementing oral health protocols during well-child visits	Electronic Health Records collected quarterly Medi-Cal/ DHCS and Managed Care (CalOptima etc.) data requests collected annually			

	# of non-dental providers and staff trained on basics of oral health and best practices for integration				
2. Has oral health knowledge increased and translated into an increase in utilization of preventive dental services?	# of individuals who received standard oral health education/ messages # Types and quality of oral health educational tools, resources and materials being used in the community by LOHP and its partners # Change in knowledge as it relates to specific oral health messages # Participant assessment of quality of oral health information shared # and rate of utilization of any dental service by Medi-Cal eligibles # and rate of utilization of any preventive dental services by	Program logs, records and sign-in sheets Pre and post intervention evaluation questionnaires Satisfaction surveys and evaluations Structures interviews and focus groups Inventory of oral health education tool and resources used by LOHP and its partners Medi-Cal Open Data Portal and PRA data requests from DHCS for granular data as needed	Quantitative secondary data available open-source or collected through data requests Quantitative primary data collected through surveys Qualitative data collected through document reviews, structured interviews and focus groups	Descriptive analysis quantifying number and types of services and programs; utilization of dental services and change over time Mixed methods analysis of adoption of standardized oral health messages and educational tools Descriptive statistics quantifying change in knowledge after oral health education sessions	Primary: Center for Oral Health and LOHP

	Medi-Cal eligibles # and rate of utilization of sealants by Medi-Cal eligible children ages 6-14 years				
To what extent are policy and program decisions (by LOHP and its partners) being made based on 'current' (no more than 2 years old), actionable and representative data? Is there a sound oral health surveillance system in place to support oral health in Orange County?	Documentation of data-driven discussions at workgroup and other relevant partner/ stakeholder meetings Documentation of data reports and publications with sound and current data Documentation of surveillance and evaluation plan implementation Stakeholder reviews of availability and quality of oral health data for planning and decision-making	Meeting agendas, minutes and sign-in sheets Annual review and updates to the oral health surveillance plan Annual review and updates to the evaluation plan Mid-term review of the oral health strategic plan Annual review of new and old publications and updates to performance measures Dissemination (electronic and print) of data reports to relevant	Qualitative data collected through document reviews, structured interviews and focus groups	Analysis of rate, efficiency and accuracy of implementation of plans and processes Quantitative analytics of views, downloads and citations of published data and reports Qualitative analysis of stakeholder review of surveillance infrastructure and change attributable to the LOHP	Primary: Center for Oral Health

		audiences Structured interviews of stakeholders and users of published data/ materials			
What is strength, diversity and extent of the 'network' of partners who collaborate with each other and the LOHP to achieve objectives of the oral health strategic plan?	Documentation of meetings, convenings and other partner engagement activities Stakeholder assessment of quality, quantity and strength of networks	Meeting agendas, minutes and sign-in sheets Structured interviews, semi-qualitative surveys and document reviews	Network mapping and analysis	Network mapping and analysis Qualitative analysis of stakeholder input	Primary: Center for Oral Health
Has there been a change in oral health service utilization and outcomes in Orange County? If yes, to what extent?	Percentage of Kindergarten and 3rd grade children who have experienced tooth decay Percentage of Kindergarten and 3rd grade children with untreated tooth decay Percentage of 3rd graders (7–8 year old children) who have a dental sealant on at least one permanent molar	Basic Screening Survey Medi-Cal Open Data and PRA data requests Maternal Infant Health Assessment Data American Dental Association, California Health Interview Survey and California Dental Board data	Quantitative primary data (survey and assessment) collected by LOHP and its partners Quantitative secondary survey and claims data	Probabilistic survey data analysis Descriptive statistics of quantitative survey and claims data	Primary: Center for Oral Health

	Percentage of pregnant women who had at least one dental visit during pregnancy Percentage of active dentists who accept Medi-Cal Distribution (Medi-Cal eligible population to active Medi-Cal dentist ratio) of dentists by geographic area, rurality and city # of active (Medi-Cal and other) dentists serving 0-3 year old children, pregnant women, individuals with intellectual and developmental disabilities	Countywide dental provider surveys			

JUSTIFYING CONCLUSIONS:

Analysis

Statistical analysis of quantitative data will be conducted to generate descriptive and comparative statistics as needed. When data is available, analysis of trends over time and comparison to an established baseline will be conducted. Qualitative data will also be analyzed systematically by developing codebooks in relation to data collection guides and identifying themes and patterns. A mixed methods approach will be used to answer the overarching evaluation questions.

Interpretation

Data will primarily be interpreted by the evaluation team, one dataset at a time and in combination/ context with other related datasets. Interpretations will be presented to the AC and the surveillance and evaluation workgroup for critique and development of recommendations.

ENSURING USE AND SHARING LESSONS LEARNED

Findings from the evaluation will be disseminated to stakeholders, OCHCA leadership, the OC Health Improvement Partnership and the Office of Oral Health in the form of an annual report. On a quarterly basis, a status update will be shared with the evaluation users and stakeholders. In collaboration with the evaluation team and evaluation stakeholders, evaluation findings will be used to develop recommendations and make program changes/ improvements.

APPENDIX A: STRATEGIC PLAN SUMMARY (FOCUS AREAS, GOALS AND STRATEGIES)

Access to and utilization of dental services

GOAL: Increase the availability, accessibility and utilization of oral health services, particularly for underserved populations

STRATEGIES:

- Implement an expanded, countywide telephonic dental referral line system to serve individuals of all ages and populations.
- Increase access to oral health education and preventive services in schools and other community settings. Coordinate efforts to link children and high-risk populations to a dental home.
- Support innovative approaches for delivering dental services to increase access and utilization (e.g. service integration, mobile dental units, Tele-dentistry).

Oral Health Education and Public Awareness

GOAL: Increase the community's knowledge of recommended preventive oral health practices and awareness of available dental insurance benefits.

STRATEGIES:

- Develop and implement a community-wide oral health public awareness campaign.
- Develop and implement targeted oral health messages to underserved populations.
- Partner with community organizations to increase awareness about Denti-Cal and other individual dental benefits for all eligible consumer populations to increase utilization of dental services.
- Support opportunities to engage and train community members to be oral health educators and advocates.

Integration of Dental and Medical care

GOAL: Promote integration of dental and medical care.

STRATEGIES:

- Organize a stakeholder workgroup focused on integrating medical and dental care/services.
- Encourage incorporation of dental services within the medical safety net (e.g. FQHCs, FQHC look-alikes, free clinics).

- Inform and support medical providers, through provider networks such as CHDP, to incorporate oral health preventive services into well-child visits, including reimbursement opportunities.

- Explore opportunities with medical provider networks to integrate oral health education into primary care.

- Explore stakeholder partnerships to pilot innovative approaches to promote the integration of medical and dental services (e.g. electronic health records and data sharing).

- Encourage and enable dental providers to counsel patients about tobacco cessation, HPV vaccinations, and other protective oral health behaviors.

Dental Workforce

GOAL: Increase the capacity of the dental workforce to serve the diverse needs of Orange County residents.

STRATEGIES:

- Expand training of oral health providers on topics related to providing care to specific underserved populations.

- Develop and share resources with new and potential Denti-Cal providers regarding billing, logistics, and program updates.

- Explore potential of expanded capacity through allied/alternative models of workforce (RDAs, RDHs, RDHAPs, care coordinators, etc.).

- Support health profession pipeline programs (e.g. Pathways programs) to increase diversity of the county's dental workforce.

Data and Evaluation

GOAL: Develop and implement a County oral health assessment and evaluation plan.

STRATEGIES:

- Conduct and periodically update a countywide oral health needs assessment.

- Conduct ongoing evaluation to assess progress and inform program improvements.

- Formulate and implement a plan for ongoing data collection and evaluation.

Coordination of Countywide Efforts

GOAL: Develop County infrastructure to support the implementation of this plan

STRATEGIES:

- Formalize the infrastructure and leadership of the oral health collaborative as a planning body and convener to support the implementation and progress of this plan.
- Develop and implement a communication plan to disseminate information regarding high priority oral health needs and the countywide strategic plan.
- Identify and promote new and existing oral health best practices and resources across Orange County.
- Work with stakeholders to inform and educate decision makers about oral health needs and innovative solutions and policies (e.g. factsheets, briefings).

APPENDIX B: STRATEGIC PLAN PERFORMANCE MEASURES

1. By 2022, reduce the prevalence of untreated tooth decay by 3% among children 0-11 years of age residing in Orange County.

2. By 2022, increase the rate of utilization of annual preventive dental services by 5% among children 0-20 years of age residing in Orange County.

3. By 2022, increase the rate of utilization of dental services by 5% among children, adults and older adults residing in Orange County.

APPENDIX C: POTENTIAL SURVEILLANCE PLAN INDICATORS

The following indicators have been identified based on indicators identified by the Healthy People 2020 initiative, California Office of Oral Health Surveillance Plan, Orange County Oral Health Strategic Plan 2018-2022 and the National Oral Health Surveillance System. These potential indicators will be further fine-tuned for feasibility, utility and sustainability to yield a final list of indicators for the Orange County Oral Health Surveillance System. Many of these indicators will address indicators for evaluating the LOHP according to this evaluation plan.

Indicator	Population	Data Source	Primary or Secondary
ORAL HEALTH OUTCOME			
Caries Experience (with race/ ethnicity stratification)	Head Start	Prospective	
	Kindergarten	Basic Screening Survey	Primary
	Third Grade	Basic Screening Survey	Primary
	Newly arrived refugees	Prospective	
Untreated Dental Caries (with race/ ethnicity stratification)	Head Start	Prospective	
	Kindergarten	Basic Screening Survey	Primary
	Third Grade	Basic Screening Survey	Primary
	Children/Adolescents (<18 years), with I/DDs	Prospective	
	Adults, ≥65 years, in long-term care facilities, at congregate meal sites	Prospective	
Urgent Dental Treatment Needed	Head Start	Prospective	
	Kindergarten	Basic Screening Survey	Primary
	Third Grade	Basic Screening Survey	Primary
Permanent tooth extraction and permanent tooth loss	Adults, 18-64 years	Prospective	
	Adults, ≥65 years	Prospective	
Complete tooth loss	Adults, ≥65 years (non-institutionalized)	Prospective	
	Adults, ≥65 years, in long-term care facilities	Prospective	
	Adults, ≥65 years who are community-dwelling	Prospective	
Oral and pharyngeal cancer - incidence, stage at diagnosis, type, survival, mortality	All ages	CA Cancer Registry	Secondary

Indicator	Population	Data Source	Primary or Secondary
Overall condition of teeth	Adolescents/Adults (≥12 years)	California Health Interview Survey	Secondary
UTILIZATION			
Dental Visit (Annual visits and/or Evaluation)	Children/Adolescents (<18 years)	California Health Interview Survey Youth Risk Behavioral Surveillance System	Secondary
	Children/Adolescents (<18 years), with special needs	Prospective	Secondary
	Adults (≥18 years)	California Health Interview Survey Behavioral Risk Factor Surveillance System	Secondary
	All ages, enrolled in Medi-Cal	Department of Health Care Services	Secondary
	Pregnant women	Maternal Infant Health Assessment	Secondary
	All ages with diabetes	California Health Interview Survey Behavioral Risk Factor Surveillance System	Secondary
	Children in Head Start	Public Information Report & Prospective	Secondary
	Adults, ≥18 years, with disabilities	Prospective	
	Homeless, all ages	Prospective	
General anesthesia utilization	Children, under 6 years	Prospective	
Oral health services by a non-dentist provider	Children, under 6 years enrolled in Medi-Cal	Department of Health Care Services	Secondary

Indicator	Population	Data Source	Primary or Secondary
Patients receiving dental services			
• At FQHCs	All ages	Health Resources and Services Administration (UDS)	Secondary
• At CHCs	All ages	Prospective	
• Dental treatment (any)	All ages, enrolled in Medi-Cal	Department of Health Care Services	Secondary
Emergency room visits for non-traumatic dental conditions	All ages	Office of Statewide Health Planning and Development	Secondary
School and District participation in Kindergarten Oral Health Assessments	Kindergarten	KOHA Data System	Secondary
PREVENTION			
Preventive Dental Visit	Children/Adolescents (<18 years), with special needs	Prospective	
	Adults, ≥18 years, with disabilities	Prospective	
	Homeless, all ages	Prospective	
	Children enrolled in Medi-Cal (≤20 years)	Department of Health Care Services	Secondary
Dental Sealants	Kindergarten	Basic Screening Survey	
	Third Grade	Basic Screening Survey	
	Children, 6-9, at FQHCs	Health Resources and Services Administration (UDS)	
	Children, 6-14, enrolled in Medi-Cal	Department of Health Care Services	Secondary
Tobacco Cessation counseling in dental offices	Dental Clinics and Providers	Prospective	
Oral cancer screening in dental offices	Dental Clinics and Providers	Prospective	

Indicator	Population	Data Source	Primary or Secondary
ACCESS			
Dental coverage/insurance	All ages	California Health Interview Survey	Secondary
	All ages with diabetes	California Health Interview Survey	Secondary
Continuity of dental care for ≥2 years	All ages, enrolled in Medi-Cal	Department of Health Care Services	Secondary
School-based health centers with an oral health component	Schools	Prospective	
School-based health centers providing dental sealants	Schools	Prospective	
School-based health centers providing topical fluoride	Schools	Prospective	
Schools with an oral health program	Schools	Prospective	
FQHCs providing dental services	Dental Clinics and Providers	Office of Statewide Health Planning and Development	Secondary
CHCs providing dental services	Dental Clinics and Providers	Office of Statewide Health Planning and Development	Secondary
INFRASTRUCTURE			
Community Health Worker and Home Visiting Programs that provide oral health counseling and care coordination	TBD	Prospective	
Community Water Fluoridation - % population served by fluoridated water	Policies	California Water Resources Control Board	Secondary
Number of school-based sealant programs	Children 6 years and older	Prospective	

Number of practicing dentists (by specialty and Medi-Cal acceptance)*	Dental Clinics and Providers	American Dental Association & California Dental Board	Secondary
Indicator	**Population**	**Data Source**	**Primary or Secondary**
Number of practicing dental hygienists	Dental Clinics and Providers	Office of Statewide Health Planning and Development	Secondary
Number of practicing dental assistants	Dental Clinics and Providers	Office of Statewide Health Planning and Development	Secondary