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Where oral health lives

# Dental Public Health Project/Activity Descriptive Report Form

Please provide a detailed description of your **successful dental public health project/activity** by fully completing this form. Expand the submission form as needed but within any limitations noted.

**NOTE: Please use Verdana 9 font.**

| **CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS** |
| --- |
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| **PROVIDE CONTACT INFORMATION FOR ONE ADDITIONAL PERSON WHO COULD ANSWER QUESTIONS REGARDING THIS PROGRAM** |
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## SECTION I: ACTIVITY OVERVIEW

**Title of the dental public health activity:**

**Partnerships and Cultural Relevancy: Changing Perceptions of Oral Health within a Native American Tribe**

**Public Health Functions*:** Check one or more categories related to the activity.

| "X" | Assessment |
|---|---|
| | 1. Assess oral health status and implement an oral health surveillance system. |
| | 2. Analyze determinants of oral health and respond to health hazards in the community |
| | 3. Assess public perceptions about oral health issues and educate/empower them to achieve and maintain optimal oral health |
| | **Policy Development** |
| X | 4. Mobilize community partners to leverage resources and advocate for/act on oral health issues |
| X | 5. Develop and implement policies and systematic plans that support state and community oral health efforts |
| | **Assurance** |
| | 6. Review, educate about and enforce laws and regulations that promote oral health and ensure safe oral health practices |
| X | 7. Reduce barriers to care and assure utilization of personal and population-based oral health services |
| | 8. Assure an adequate and competent public and private oral health workforce |
| X | 9. Evaluate effectiveness, accessibility and quality of personal and population-based oral health promotion activities and oral health services |
| | 10. Conduct and review research for new insights and innovative solutions to oral health problems |

***ASTDD Guidelines for State and Territorial Oral Health Programs that includes 10 Essential Public Health Services to Promote Oral Health**

**Healthy People 2020 Objectives:** Check one or more key objectives related to the activity. If appropriate, add other national or state HP 2020 Objectives, such as tobacco use or injury.

| "X" | Healthy People 2020 Oral Health Objectives | |
|---|---|---|
| X | OH-1 | Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth |
| X | OH-2 | Reduce the proportion of children and adolescents with untreated dental decay |
| X | OH-3 | Reduce the proportion of adults with untreated dental decay |
| X | OH-4 | Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease |
| | OH-5 | Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis |
| | OH-6 | Increase the proportion of oral and pharyngeal cancers detected at the earliest stage |
| X | OH-7 | Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year |
| X | OH-8 | Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year |
| | OH-9 | Increase the proportion of school-based health centers with an oral health component |
| | OH-10 | Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health component |
| | OH-11 | Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year |

| | | |
|---|---|---|
| X | OH-12 | Increase the proportion of children and adolescents who have received dental sealants on their molar teeth |
| | OH-13 | Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water |
| X | OH-14 | Increase the proportion of adults who receive preventive interventions in dental offices |
| | OH-15 | Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips and cleft palates to craniofacial anomaly rehabilitative teams |
| | OH-16 | Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system |
| X | OH-17 | Increase health agencies that have a dental public health program directed by a dental professional with public health training |

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| | | |

**Provide 3-5 Key Words (e.g. fluoride, sealants, access to care, coalitions, policy, Medicaid, etc.) These will assist those looking for information on this topic:**

oral health system integration, sustainability, cultural change, partnerships, policies to access care, children services, early childhood tooth decay, prevention, fluoride varnish, WIC, Head Start


**Executive Summary:** **Complete after Section II: Detailed Activity Description. Please limit to 300 words in one or two paragraphs.**

Provide a brief description of the dental public health activity. Include information on: (1) what is being done; (2) who is doing it and why; (3) associated costs; (4) outcomes achieved (5) lessons learned, both positive and negative.

Native American children have some of the highest dental caries rates in the United States; estimated to be four times higher than the national average. Project Zero—Women & Infants (PZWI), a Perinatal Infant Oral Health Quality Improvement (PIOHQI) grant embarked on a partnership with a Native American Tribe located in northern Arizona to address this preventable disease.

The Tribal Department of Health and Human Services, Women Infants and Children (WIC), Community Health Representatives (CHR), Head Start, judicial system; local Indian Health Services (IHS) Dental and Nutrition Departments; Northern Arizona University, Department of Dental Hygiene and Arizona American Indian Oral Health Coalition supported by PZWI set-out to improve oral health on their Reservation. Initially, PZWI's goal was to assist the Tribe in making a systemic change as they integrated oral health into their primary care.

Though regular facilitated discussions centered on the oral health needs of the population, this project matured organically leading to 1) Continuous Quality Improvement (QI) training, 2) fluoride varnish application training, 3) culturally relevant oral health education and awareness campaign, 4) warm hand-off referral to the IHS Dental Department and 5) judicial system changes.

**The inclusion of the Tribal judicial system and the broad awareness and educational campaign caused us to recognize that the Tribe was engaged in making a cultural shift in how their people viewed oral health**. PZWI was instrumental in this shift by facilitating in-person and web communication between agencies and offices; organizing and facilitating meetings; providing training and presentations; and developing culturally relevant educational materials. PZWI is a PIOHQI project funded by the U.S. Department of Health, Health Resources and Services Administration Grant #H47MC2918.

## SECTION II: DETAILED ACTIVITY DESCRIPTION

Provide detailed narrative about the dental public health activity using the headings provided and answering the questions. Include specifics to help readers understand what you are doing and how it's being done. References and links to information may be included.

**Complete using **Verdana 9 font**.

**Rationale and History of the Activity:**

What were the key issues that led to the initiation of this activity?

The Project Zero—Women & Infants (PZWI) program manager asked our team to explore the possibility of partnering with a Native American Tribe to assist them in integrating oral health into their primary care. Through a casual conversation with the Tribal Director of Health and Human Services, our program manager learned that the Tribal Women Infants and Children (WIC) and Community Health Representatives (CHR) were interested in including more oral health in their contact with clients. The Director, being a dental hygienist by training, is keenly aware of the oral health issues of her Tribe and the positive impact that oral health can have on a population's somatic and physical health. Thus, she was eager to find assistance for the WIC and CHR programs oral health initiatives.

1. What rationale/evidence (may be anecdotal) did you use to support the implementation of this activity?

   In Arizona, 52% of kindergarten children have a history of dental caries, which is significantly higher than the national average of 36% (Arizona Department of Health Services, 2015). Further, the oral disease rate in Native American children is estimated to be as much as four times higher than the national average. Tribal and local Indian Health Service (IHS) leaders wanted to reduce the high prevalence of oral disease to improve the health of the population they serve.

2. What month and year did the activity begin and what milestones have occurred along the way? (May include a timeline.)

   This project started in August of 2017 when the PZWI project manager asked if our team could investigate the possibilities of working with a Tribe. She began an early conversation with the Tribal Director of Health and Human Services. After a positive response, we went to our Advisory Board to gather input on partnering with a Tribe because it was outside of our scope. Our original proposal was to partner with one large (27 locations), and several smaller FQHCs. **Many of the systemic barriers in our state that prevented progress with FQHCs do not exist in sovereign nations, so a Tribe would potentially offer opportunities to expand our work.** For, example, Arizona does not have a pregnant women's oral health benefit through the State Medicaid system. Similarly, reimbursement to FQHCs for pregnant women's services are bundled, which includes an oral exam. Thus, adding an oral health component to primary care would not increase revenue but would increase workload on staff that already feel overburdened. Additionally, only dentists, dental hygienists, physicians, nurse practitioners and pharmacists are legally able to place fluoride varnish in Arizona. Such issues do not exist in the sovereign nations. As a result of the perception about the relative fewer barriers in the sovereign nations, board members agreed and we were invited to the Reservation by the Director of Health and Human Services to meet with the directors and staff of the WIC, CHR, and IHS Dental Department to gain a better understanding of their needs.

   Because this project was designed to make a systemic change it was dynamic and multi-faceted with numerous milestones; seven to be exact. Each of these milestones indicated to our team that the Tribe believed that oral health integration was the best way to provide care for their population. The first milestone was the invitation to meet with tribal leaders interested in improving oral health. Although outside organizations often work with Tribes, being invited to their home was an honor and showed they are genuinely invested in a project.

   Shortly after our initial meeting, a second milestone occurred when we were asked to offer Continuous Quality Improvement (QI) training to the WIC, CHR and Head Start staff. The PZWI evaluation expert holds a green belt in Lean Six Sigma, a nationally recognized QI management and strategy system and uses QI on a daily basis. Leaders were so pleased with the initial session

that they planned a follow-up session and invited us back to assist.

The third milestone for this project was when we delivered a hands-on fluoride varnish training for the WIC and CHR staff. Fluoride varnish application is not within the scope of practice for CHR or WIC in Arizona, however, because the CHR are practicing in a sovereign nation they are allowed to use it on their clients. Our delivery of an easy to use, culturally relevant oral health curriculum that PZWI developed for WIC and CHR clients represented our fourth milestone.

A fifth milestone occurred when we were invited to present at the Tribal Annual Health Conference and be on the local Tribal radio station. This Conference consisted of three presentations about oral health to Tribal members. The radio station has a regular spot on health once a week; our topic was on oral health for pregnant women and infants.

The sixth milestone was when the Tribal judicial system agreed to include in their instructions to foster parents that they had the authority and obligations to facilitate access to oral health care for foster children. Foster parents are required to take the child to an oral health professional for an exam/screening. The requirement is followed-up by a social worker within 30 days.

The seventh milestone was when WIC launched their warm-hand off referral system to the IHS Dental Department for pregnant women and moms. This aspect of the project came out of several long conversations facilitated by PZWI.

The sections below follow a logic model format. For more information on logic models go to: W.K. Kellogg Foundation: Logic Model Development Guide

| **INPUTS** | PROGRAM ACTIVITIES | OUTPUTS | OUTCOMES |
|---|---|---|---|

1. What resources were needed to carry out the activity? (e.g., staffing, volunteers, funding, partnerships, collaborations with various organizations, etc.)

   Over 42 staff and leaders participated in discussions and activities including the PZWI evaluator, program manager, principal investigator/oral health consultant, and advisory board. Additionally, leadership and staff from Tribal WIC, CHR, Head Start; IHS Dental and Nutrition Departments dedicated countless hours. The Tribal Director of Health and Human Services, judges, Oral Health Prevention and Education (OPE) community coordinator; IHS physicians, Medical Director; the Arizona American Indian Oral Health Initiative (AAIOHI) and two Northern Arizona University (NAU) dental hygiene students were engaged in different aspects of the project.

   Other PZWI resources used to develop the curriculum, handouts, and educational materials were printing, paper, laminating supplies and key rings. Posters were printed by a professional printing service. The hands-on fluoride varnish training required the use of NAU Dental Hygiene Department portable dental chairs, PZWI purchased mouth mirrors, bibs, gauze, fluoride varnish, gloves, and masks. The QI-in-A-Box and the Dropbox access were hosted on the NAU server and maintained by the PZWI staff. Depending on the technology and connectivity of some rooms, PZWI laptops with personal hot spots were used for meetings. The CDC website where state oral health plans are located was used as a part of this project.

| INPUTS | **PROGRAM ACTIVITIES** | OUTPUTS | OUTCOMES |
|---|---|---|---|

2. Please provide a detailed description the key aspects of the activity, including the following aspects: administration, operations, and services.

   PZWI accepted the invitation to meet with the directors and staff from IHS, WIC, and CHR to begin our relationship with the Tribe. We were embraced by the warm graciousness for which this Tribe is known. Tribal leaders and members discussed their vision for a new Oral Health Plan. They described the focus and goals of WIC and CHR to help us better understand the population they serve and how we might be able to assist them. They also identified barriers and challenges, including the lack of sustainability and limited space to provide oral health services for their clients. PZWI was able to assist with brainstorming solutions, such as getting support and engagement from local IHS leadership to play an active role as they provide services to the same population. Early in our relationship, it became apparent that a leader from the IHS Dental Department should be taking an active role in the planning.

A core team included the following: the Tribal WIC director; CHR director; and the IHS Dental Department director, dentist(s), and dietitian. Being supportive of oral health integration that they agreed to meet monthly with PZWI at 5:00 p.m. Head Start was involved in the initial meetings to work on the Tribal oral health plan but was asked by their leadership to step out to focus on changes in leadership.

**The project was organic with offshoots occurring as the team sought to address barriers to Tribal members achieving optimal oral health.** At this point, we partnered with the Tribe to begin to increase oral health awareness, including QI training, fluoride varnish training, a culturally relevant oral health education campaign, a warm hand-off referral system, judicial foster parent's instructions and a Tribal Oral Health Plan.

In early meetings, the IHS Dental Department director expressed his concern about the high incidence of dental caries in Native American populations. He expressed that they needed assistance specifically in providing oral health education for parents, guardians and prenatal women. This initiated a conversation on how the IHS, WIC and CHRs could work together to incorporate a system of patient referrals to receive the education and oral health screenings. This was the first conversation the three departments had in several years although they were treating the same client/patient population. This was due to administrative barriers as the Dental Department is governed by IHS while the other programs are overseen by Tribal government. The team discussed a systematic approach between the WIC, CHR and the IHS Dental Department after the completion of fluoride varnish training. The idea changed from a soft hand-off to a more meaningful warm hand-off between departments as they are co-located in the IHS facility.

**Continuous Quality Improvement**

Early in our discussion, WIC, CHR and Head Start staff requested QI training, as they believed that it would be an integral part of the development and sustainability of their projects. PZWI held a four-hour QI training for 12 Tribal WIC, CHR, and Head Start staff. Each group focused on a project of their choice. The PZWI QI-in-A-Box was shared with the staff and put in a Dropbox folder so they could access the tools at a later date. Thirty days after the training, the PZWI team followed-up on the progress of their goals at which time the CHR staff requested a second working session to continue what they had started. Our QI trainer was invited to facilitate the goal-setting section. Team members were hopeful that this training would result in better and more consistent communication between the IHS Health Center and WIC staff to support a systematic approach for referrals. These sessions laid the groundwork for oral health integration activities.

**Fluoride Varnish Training**

The WIC, CHR and Head Start staff were enthusiastic about receiving fluoride varnish training. Prior to providing the training, the core team wanted to resolve three questions to avoid duplication of efforts. PZWI facilitated a meeting with the core team to discuss the following: 1) which providers on the Reservation would be responsible for placing fluoride varnish, 2) how would the caregivers track when children receive fluoride varnish, and 3) how would providers track the children who receive varnish. Staff thought that putting a plan in place might help the Tribe use precious resources wisely and not duplicate services. PZWI was able to assist the team in addressing these issues. The final agreement was that the need for fluoride varnish was so great that it was unlikely that the children would get too many fluoride varnish treatments so resources would not be wasted.

Shortly after the team members' concerns were addressed, PZWI, along with the two NAU dental hygiene students, provided 12 WIC and CHR staff oral health training based on the Smiles for Life Curriculum followed by a hands-on fluoride varnish application. Upon completion, the staff were given a certificate of completion and they were then able to place fluoride varnish during home visits and outreach events. PZWI created a culturally relevant curriculum for the WIC staff to support their client education. Topics included in the curriculum were the following: *Oral Health During Pregnancy, Nutrition & Oral Health, Brushing Checklist, Digital Downloads, and Brushing is Fun*. In addition, a flip book was created specifically for their population that the providers could use to educate patients. The curriculum was introduced to them during the training and is supported by a Dropbox folder to offer access to the materials when additional copies are needed.

**Culturally Relevant Oral Health Education and Awareness Campaign**

It was determined, through discussions that the core team wanted a culturally relevant, standard and consistent oral health message through all departments and throughout the Tribe. The WIC

Program asked for assistance with incorporating more oral health materials into their client education. PZWI created handouts that were tailored to the Tribal population with symbols that have meaning and significance to the culture, especially for pregnant moms and children. Materials had information about foods such as Piccadillys, which are particularly cariogenic, that are not normally found outside of the reservations. We also developed materials to support the oral care of disabled individuals. These materials and messages were used in a variety of settings and outreach strategies. The goal was to ultimately instill oral health changes and improvements as people would become more aware of the programs and resources available. In hindsight, we now understand the Tribe wanted to create a cultural change in how oral health was viewed throughout their community.

As part of the Tribal oral health integration efforts, the PZWI team was interviewed on the Tribal radio show about oral health. This radio station has an audience of 1500 members. The interview was centered on the importance of oral health and having regular dental visits, especially for pregnant moms and infants. To show respect for Tribal elders and to be culturally relevant, one of the PZWI members used traditional language to describe oral structures. In this Tribe, as with many others, elders are responsible for their grandchildren and their great-grandchildren. Hence, showing respect was necessary if we were to reach those who cared for children and help them provide daily oral hygiene.

The Tribe recognized the PZWI team as experts in oral health and invited us to present at the Tribal Annual Health Conference. A consistent message of the importance of oral health, along with demystifying oral care and dispelling myths, was delivered during three concurrent sessions. Participants were engaged in the activities and discussed what they had learned at the close of the session. For example, one of the core team members who attended a session said that she did not know that she was supposed to brush her teeth for two minutes twice a day.

To further consistent messaging, the PZWI team developed culturally relevant oral health educational posters, which were hung at social service agencies, postal offices, community centers, elementary schools, the police department, radio station, restaurants, youth centers, convenience stores, and Laundromats across the Reservation. The poster incorporated the consistent message of the importance of oral health for pregnant women and infants having a first dental visit before the age of one.

We partnered with the New Mexico PIOHIQI to deliver a presentation entitled, "Improving the Oral Health of Pregnant Women and Young Children." The PZWI team assisted with the patient education. We provided educational support with our PZWI WIC and disabilities curriculums.

**Warm Hand Off Referral**

A need for a warm hand-off, instead of a soft hand-off, between CHR, WIC, IHS Nutrition Department, and the Dental Department was recognized through the regular discussions with the core team. Prior to initiating the warm hand-off, the IHS Dental Department agreed to increase capacity specifically for patients that were referred from either WIC or CHR. They opened two dental appointments a day specifically for these patients. In preparation for the warm hand-off, the existing referral systems were mapped using process mapping tools to develop a picture of how the referral system was currently working. The initial map revealed a need for more information and more team members to provide the missing information. Members were added, and discussions continued to refine the process and complete a final process map. Through the process mapping, the team found that dental patients were required to go to the central facility to check in, a process that caused as long as a two-hour wait, which created an additional barrier to access oral health services. Ultimately, it was decided that when WIC had a client that was interested in a dental visit the staff would call the Dental Department. A dental staff member would come to the WIC area with a basket filled with educational information, toothbrush, floss, and toothpaste to complete a fluoride varnish application and provide additional education if needed. To support the process PZWI created a flow chart for WIC staff to follow. At this point, WIC is testing the warm hand-off one day a week.

**Judicial System Changes**

During a regular meeting, one of the IHS dentists mentioned that he had noticed an extremely high caries rates in foster children and wondered what could be done. Our team suggested working with the judicial system to address this problem. We contacted one of the Tribal judges who quickly agreed that if the PZWI and IHS Dental Department leadership would draft a statement to foster parents, he would see to it that all the Tribal judges use the statement. PZWI and the IHS

Dental Department leadership crafted several iterations. The final agreed-upon statement is as follows: *"Oral health is an important part of overall health. All children should see a dentist for their initial examination visit BEFORE the first tooth comes in at around six months of age. Additionally, access to a healthy, nutritional diet will benefit the general health and the dental health of the child. Do not hesitate to call and obtain further information from your service unit-Dental Department."* As soon as the statement was completed, it was implemented into the foster parenting process. As part of this process, social services will make a follow-up call to the judicial system to ensure the child was seen by a dentist. **It was at this point that we realized the Tribe was moving beyond systemic change; instead, they were on a path of cultural change to better the oral health of their people.** This led to the recent unprecedented request by the Director of Tribal Social Services that she become a part of the central team to explore developing a referral system for all Social Services clients to the IHS Dental Clinic. She was at our most recent meeting. **This along with the changes in the judicial system were major breakthroughs in working with the Tribe and, while this doesn't indicate a permanent attitudinal change, it did demonstrate a major shift in the Tribe's cultural perception of the importance of oral health.**

**Oral Health Plan**

PZWI was invited to attend an OPE meeting to discuss the Tribal Oral Health Plan because it was felt that we could assist. The PZWI principal investigator was instrumental in drafting the Arizona State Oral Health Plan. In attendance was the WIC director, CHR director, OPE family/community support specialist, AAIOHI project coordinator, Tribal Head Start, and PZWI. The goal was to create a Tribal Oral Health Plan by June 2018. After our initial meeting, the PZWI team sent copies of oral health plans from other states as well as a link to the CDC website where other plans are located to be used as examples. A Dropbox folder was created where example oral health plans were uploaded. PZWI suggested that OPE meet on a regular basis to get the plan started. Unfortunately, these meetings were canceled because the Director of Health and Human Services didn't feel the team was ready to bring the PZWI team on board.

| INPUTS | PROGRAM ACTIVITIES | **OUTPUTS** | OUTCOMES |
|---|---|---|---|

3. What outputs or direct products resulted from program activities? (e.g., number of clients served, number of services units delivered, products developed, accomplishments, etc.)

The PZWI team in partnership with the Tribe created several products including a culturally relevant curriculum and culturally relevant educational materials for the CHR and WIC staff and a poster for the awareness campaign. Two quality improvement training sessions for 29 staff and two fluoride varnish training sessions for 12 staff were held and supporting educational materials including the QI-in-A-Box tools were provided and placed in a Dropbox folder for later access. Three presentations on oral health were held at the Tribal Annual Health Conference and one radio show. Additionally, the judicial system statement, the WIC flowchart, and the warm handoff referral system were produced as a part of this project.

| INPUTS | PROGRAM ACTIVITIES | OUTPUTS | **OUTCOMES** |
|---|---|---|---|

4. What outcomes did the program achieve? (e.g., health statuses, knowledge, behavior, care delivery system, impact on target population, etc.) Please include the following aspects:
   a. How outcomes are measured

A central outcome resulting from this project was the beginning of a culturally relevant and understandable behavioral and systemic change toward instituting and integrating oral health into primary care within the Tribe. This was demonstrated through the breath and the level of leadership of the partners involved. Tribal leaders from several areas and the local IHS leadership supported and engaged in project activities and charged their staff to participate. The commitment and participation in meetings and activities were remarkable.

The success of the project was also measured by the completion of the posters, curriculum, fluoride varnish training, presentations, and patient referrals provided. It was also measured by the number of posters hung; and the curriculum, educational materials, and tools used by the partners. During the fluoride varnish training, we conducted a pre/post knowledge test with the participants to measure their knowledge of oral health. The tests included items related to oral health concepts; a hands-on exercise was conducted as well for correct fluoride varnish application technique using the knee-to-knee method. Participant's oral health knowledge and skills increased and they reported feeling more comfortable with

placing fluoride varnish on their clients' teeth. The pretest average score was 87%, the posttest average score was 100%.

The WIC team started tracking patients who might be referred to the IHS Dental Department so they could provide an estimate on the number of potential patients and workflow could be adjusted accordingly. Through this tracking the Dental Department decided that there were adequate numbers to reserve two seats a day for patients from WIC.

Finally, and perhaps the most important outcome was creation of an enduring partnership with the Tribe. The PZWI staff was honored and grateful to be a part of the transformation that the Tribe embarked upon.

**Budgetary Information:**
NOTE: Charts and tables may be used to provide clarity.

1. What is the annual budget for this activity?

| | |
|---|---|
| *Salary and Benefits | $24,651 |
| Travel | $864 |
| Printing | $250 |
| Fluoride Varnish Training Supplies | $250 |
| **TOTAL** | **$26,015** |

The PZWI budget for this entire project, not the first year, is estimated at $26,015. This estimate does not include the in-kind cost of all of the Tribal partners' time or that of the three PZWI student interns or dental hygiene students. Because there were so many Tribal and IHS partners contributing in-kind services it's not possible to estimate their contributions in terms of cost.

*Salary and benefits were based on an average, estimate of the number of hours for all three PZWI staff who worked on this project. The salary for the QI expert is significantly lower than most individuals with similar training.

2. What are the costs associated with the activity? (Including staffing, materials, equipment, etc.)

Our team dedicated approximately 171 hours at an average hourly rate of $237 per hour plus benefits. The estimated cost included the following: a continuous quality improvement specialist trained in Lean Six Sigma, an oral health professional and a program manager travel, printing and fluoride varnish training supplies. The Tribe is located approximately 120 miles from the PZWI home-base. At least one PZWI staff member was present in-person at most of the meetings.

3. How is the activity funded?

Project Zero—Women & Infants is a Perinatal and Infant Oral Health Quality Improvement (PIOHQI) project funded by the U.S. Department of Health, Health Resources and Services Administration Grant *#H47MC2918.*

4. What is the plan for sustainability?

When this project was launched the core team's goal was to create a sustainable change, thus, initial activities focused on QI training. Oral health is a priority to Tribal leaders including the Director of Health and Human Services, the judges, and IHS Medical Director. The tribe is committed to continue financial support for oral health projects. This commitment has led to a cultural shift in how oral health is viewed throughout the Tribal leadership.

**Lessons Learned and/or Plans for Addressing Challenges:**

1. What important lessons were learned that would be useful for others looking to implement a similar activity? Was there anything you would do differently?

Clearly, the most significant lesson learned is to respect Tribal wisdom and not assert

traditional Western culture into their way of life. We have seen many failed projects on this and other reservations due to the lack of respect and understanding of the culture. This required that we knew the Tribe and the culture well prior to our first visit and regularly consult with a Tribal member on thoughts, ideas, and activities. For example, prior to the Annual Health Conference, the presenter inquired about what might be appropriate and what might be offensive. PZWI was fortunate to have a well-respected and connected Tribal member as part of our team. She assisted with understanding and navigating the culture, teaching us about their holistic view of health and helping us embrace their way of seeing health and wellness. The success of this project is due largely to the fact that she is a trusted Tribal member who focused on what was best for the health of her people.

Similarly, the PZWI team learned the importance of a commitment from Tribal leaders and staff early on in the process. Had we not had a connection to and commitment from the Tribal Director of Health and Human Services it is likely that we would have struggled to make progress and would not have been able to engage the Tribe in a cultural change.

Also related was the relationship the principal investigator had with the Tribe and the IHS Dental Department prior to this project. In 2002, the principal investigator initiated a grant-funded dental hygiene clinical rotation to the IHS Dental Department in which all NAU dental hygiene students stay on the reservation for a given period of time to provide oral health services. This existing relationship added to the veracity of PZWI’s work.

2. What challenges did the activity encounter and how were those addressed?

We encountered two main challenges in supporting the oral health integration on this Reservation. The first was the geographic distance between our home-base and the Reservation. As previously mentioned, the in-person meeting necessitated 240 miles of travel. At first, we felt it was important to meet in person because we wanted to get to know the team and we were unsure of the technological capabilities of the facilities. After we got to know the team and the technology in the rooms, we would send one team member to attend meetings in-person and the others would join via video conference.

Another challenge was finding a time when everyone on the Tribal team was available to meet. Many of the members were clinicians with full patient loads. This was overcome when the team agreed that they would meet once a month at 5:00 pm after normal working hours. Although this solved the problem it required that our team make sure that the meetings were well planned and made good use of their time.

**Reference:**


Arizona Department of Health Services (2015). Healthy smiles healthy bodies survey: The oral health of Arizona’s kindergarten and third grade children. Https://www.azdhs.gov/documents/prevention/womens-childerns-health/reports-facts-sheets/oral-health/healthy-smiles-healthy-bodies-data-bried-2015.pdf


**Available Information Resources:**

Share any models, tools, and/or guidelines developed by the program specifically for this activity that may be useful to others seeking additional information. Hyperlink resources if possible.

PZWI QI-in-A-Box: https://in.nau.edu/project-zero/oral-health-resources/
WIC and CHR Curriculum: https://in.nau.edu/project-zero/oral-health-resources/
Handouts: https://in.nau.edu/project-zero/oral-health-resources/
Educational Poster: https://in.nau.edu/project-zero/oral-health-resources/
Flow Chart: https://in.nau.edu/project-zero/oral-health-resources/

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