



## Dental Public Health Project Descriptive Report Form

Please provide a description of your organization’s successful dental public health project by completing this form. Add extra lines to the form as needed but stay within **word limits**.

Please return the completed form to Lori Cofano: [lcofano@astdd.org](mailto:lcofano@astdd.org)

Name of Project						
<b>Jicarilla Service Unit Dental Outreach Prevention Program</b>						
Executive Summary (250-word limit)						
<p>Early Childhood Caries (ECC), also known as early childhood tooth decay, is an infectious disease that can start as soon as an infant’s teeth erupt. ECC can progress rapidly and may have a lasting detrimental impact on a child’s health and well-being. ECC is a serious health problem. ECC is defined as any caries or tooth decay experience in a child under six years of age. The 1999 Oral Health Survey of American Indian and Alaska Native (AI/AN) dental patients found that 79% of these children between the ages of two and five had experienced dental caries, and 68% of this age group had untreated decay at the time of the dental examination.</p> <p>Two-to-five-year-old AI/AN children in the Jicarilla Service Unit patient population experience a caries rate approximately four times the national average. This Indian Health Service (IHS) sponsored Dental Outreach Prevention Project provided preventive services to AI/AN children ages 2-5 enrolled in the community’s Head Start Program and elementary school. Service unit data from the Resource and Patient Management System (RPMS) and Dentrix electronic dental record revealed a 45% decay rate in our 2–5-year-old dental user population. Placement of resin or glass ionomer dental sealants on non-carious permanent 1<sup>st</sup> molars and/or primary 1<sup>st</sup> and 2<sup>nd</sup> molars in this age cohort is a proactive caries prevention modality routinely utilized to reduce the future development of pit &amp; fissure caries.</p>						
Name of Program or Organization Submitting Project						
Indian Health Service (IHS) - Jicarilla Service Unit Dental Program						
<p><b><i>Essential Public Health Services to Promote Health and Oral Health in the United States</i></b></p> <p>Place an “X” in the box next to the Core Public Health Function(s) that apply to the project.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 50px;"><b>X</b></td> <td>Assessment</td> </tr> <tr> <td style="text-align: center;"> </td> <td>Policy development</td> </tr> <tr> <td style="text-align: center;"><b>X</b></td> <td>Assurance</td> </tr> </table> <p><a href="http://www.astdd.org/state-guidelines/">http://www.astdd.org/state-guidelines/</a></p>	<b>X</b>	Assessment		Policy development	<b>X</b>	Assurance
<b>X</b>	Assessment					
	Policy development					
<b>X</b>	Assurance					

Project submissions will be categorized by the Core Public Health Functions on the ASTDD website.

### Healthy People 2030 Objectives

#### **List Healthy People 2030 objectives related to the project.**

Reduce the proportion of children and adolescents with lifetime tooth decay — OH-01

Reduce the proportion of children and adolescents with active and untreated tooth decay — OH-02

Increase the proportion of low-income youth who have a preventive dental visit — OH-09

Increase the proportion of children and adolescents who have dental sealants on 1 or more molars — OH-10

This information will be used as a data resource for ASTDD purposes.

#### **Keywords for sorting the project by topic.**

Provide **three to five** keywords (e.g., access to care, children, coalitions, dental sealants, fluoride, policy, Medicaid, older adults, pregnant women, etc.) that describe the project. Keywords are used to categorize submissions.

Access to care: Childrens Services, Prevention: Sealant, Prevention: Fluoride, Prevention: Early Childhood Tooth Decay

## Detailed Project Description

### **Project Overview**

(750-word limit)

#### **1. What problem does the project address? How was the problem identified?**

Disproportionate early childhood caries experience (~45%) in the 2–5-year-old dental user population, as identified by in the Jicarilla Service Unit, had a disproportionate Early Childhood Caries (ECC) experience (~45%). This was identified through reports generated from the Resource and Patient Management System (RPMS) and Dentrix electronic dental record.

#### **2. Who is the target population?**

2–5-year-old American Indian/Alaska Native (AI/AN) patients enrolled in the Jicarilla Apache Early Head Start/Head Start Program and Dulce, NM Elementary School.

#### **3. Provide relevant background information.**

Early Childhood Caries (ECC) is an infectious disease that can progress rapidly and start as soon as an infant's teeth erupt. It is a serious health problem and may have a lasting detrimental impact on a child's health and well-being. ECC is defined as any caries experience in a child under 6 years of age. The 1999 Oral Health Survey of American Indian and Alaska Native Dental Patients found that 79% of children between the ages of 2-5 years had experienced dental caries, and 68% of this age group had untreated decay at the time of the dental examination.

The Indian Health Service (IHS) Division of Oral Health, through its ECC Collaborative, has encouraged its dental programs to increase access to oral health care and evidence-based prevention efforts through collaboration with medical providers, Community Health Representatives, Head Start Programs, and Women, Infant, & Children (WIC) programs. This multi-faceted approach is designed to enhance knowledge about ECC prevention and early intervention not only among dental providers, but also healthcare providers and the community.

#### 4. Describe the project goals.

##### **Goals:**

- 1) Provide increased access to preventive dental services in a high-risk caries group.
- 2) Enhance patient/dental provider rapport using a non-clinical setting with the long-term goal of increased behavioral compliance

##### **Objective 1:**

Increase the number of 2–5-year-old Early Head Start/Head Start and Kindergarten students receiving dental sealants by 10% over the previous Government Performance and Results Act (GPRA) year.

##### **Objective 2:**

Increase the number of 2–5-year-old Early Head Start/Head Start and Kindergarten students receiving three fluoride varnish applications per academic year by 25% over the previous GPRA year.

##### **Objective 3:**

Improve 2–5-year-olds' understanding of dental sealants and how a sealant benefits oral health by conducting age appropriate, interactive classroom educational sessions prior to clinical prevention efforts.

#### **Resources, Data, Impact, and Outcomes**

(750-word limit)

1. What resources were/are necessary to support the project (e.g., staffing, volunteers, funding, partnerships, and collaborations with other agencies or organizations)?
  - Clinical services time of one dentist and one dental hygienist to carry out the grant project.
  - Appropriate operating space at Early Head Start/Head Start Program and elementary school to provide onsite preventive services.
  - Office and infection control supplies.
  - Staff and student personal protective equipment supplies.
  - Small equipment (e.g. triturator, portable clinical chair and stool, dental capsule applicator, dental headlight, etc.)
- (a) What process measure data are being collected (e.g., sealants placed, people hired, etc.)?
  - Number of patients treated access to care (IH Code 0000 = 1<sup>st</sup> visit during GPRA year)
  - Number of sealants placed
  - Number of fluoride applications
- (b) What outcome measure data are being collected (e.g., improvement in health)?
  - Sealant retention
  - Caries reduction in age cohort
- (c) How frequently are data collected?
  - End of project period and annually for a minimum of 3 years.

(d) How are the results shared?

A final project report was drafted and submitted to the IHS Division of Oral Health, Health Promotion and Disease Prevention (HPDP) Coordinator.

### **Budget and Sustainability**

(500-word limit)

Note: Charts and tables may be used.

The year one budget for this school-based prevention program was \$6,600. Large equipment (e.g. portable dental delivery system, air compressor, and curing light) expenditures consumed the majority of the one-time national grant funding. Dental materials (e.g. sealant materials, mirrors, fluoride varnish, dry angles, saliva ejectors, etc.), infection control supplies (e.g. device barriers, disinfection solutions, etc.), oral hygiene supplies, and patient rewards (e.g. stickers and toys) cost approximately \$1,600.

1. How is the project funded (e.g., federal, national, state, local, private funding)?

One-time national funding of \$5,000.00 through the IHS Division of Oral Health Promotion Disease Prevention (HPDP) grant. Funding requirements exceeding the year one grant monies were contributed by the Jicarilla Service Unit Dental Program via third party billing revenue. Complete program funding for subsequent years has been supported by JSU Dental Program third party revenue.

2. What is the sustainability plan for the project?

The primary equipment expenditures consumed the majority of the one-time national HPDP grant funding. For long-term program sustainability, annual expenses (~\$1,500.00 – 2,000.00) for dental materials, infection control supplies, oral hygiene supplies, and patient rewards will be provided by the JSU Dental Program.

### **Lessons Learned**

(750-word limit)

(a) What lessons were learned that would be useful for others seeking to implement a similar project?

- School-based prevention programs have improved rapport development between the JSU dental providers and child patients.
- In the Dulce, NM community, school-based outreach programs have significantly improved dental access for 2–5-year-old patients.
- Portable dental equipment is not as effective as permanent equipment in the clinical setting. Glass ionomer (GIC) sealants are hydrophilic and can be placed on a moist surface. Therefore, it works better in a wet field, making it easier for clinicians to handle in school-based settings. GIC also has the unique ability to adhere to moist enamel and dentin without necessitating an intermediate agent.
- Glass ionomer sealants release and recharge with fluoride, resulting in a caries prevention effect that is not entirely retention dependent.

(b) Any unanticipated outcomes?

None

(c) Is there anything you would have done differently?

Ensure program consent documents are included in the student registration packet; this would likely increase the return rate of completed consent forms.

## Resources

List resources developed by this project that may be useful to others (e.g., guidelines, infographics, policies, educational materials). Include links if available.  
None.

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To Be Completed By ASTDD	
Descriptive report number:	34009
Associated BPAR:	Early Childhood Caries Prevention and Management
Submitted by:	Indian Health Service (IHS) - Jicarilla Service Unit Dental Program
Submission file name:	DES34009NM-jsu-outreach-prev-prog-2023
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