



Innovation with Impact: Eight Years of Seal Indiana

THE GOOD NEWS Seal Indiana has

- ◆ Made more than 1,100 visits to Title I schools (lowest income), Head Start and youth programs, community health centers, and shelters
- ◆ Served more than 22,000 children from low-income families
- ◆ Provided more than 32,000 sealants
- ◆ Applied fluoride varnish for more than 17,000 children

THE BAD NEWS Of the children examined by Seal Indiana

- ◆ 50% had untreated dental decay, and of these
- ◆ 16% had urgent need for dental care, often with pain and/or infection
- ◆ 34% had dental decay requiring non-urgent routine care

At Indiana University-Purdue University-Indianapolis (IUPUI), we strive to have an impact every day. When Seal Indiana began traveling the state eight years ago, taking preventive services to children from low-income families was an innovative idea. Children whose parents did not take them to a dentist simply did not receive examinations, sealants, or other dental services.

The program has clearly had an impact on the lives of many children and also on the education of Indiana University School of Dentistry (IUSD) students who serve a required three-day rotation with Seal Indiana, providing dental services and learning about the complexities of issues related to access to care. Now, 22,000 children later, it is time to reflect on the program, its goals, the dental students' experiences, and the children served.

It all began in 2002 when the state obtained tobacco settlement money and chose to invest it in public health programs. IUSD has traditionally worked closely with the Indiana State Department of Health (ISDH) so a likely partnership was forged by initiating a state-wide, school-based mobile dental sealant program, with its home base at IUSD, Department of Preventive and Community Dentistry. IUPUI matched the ISDH funds to cover start-up costs. The Indiana Dental Association (IDA) endorsed the innovation.

ISDH wanted to improve Indiana's response to the U.S. government's Healthy People 2000 goal of at least 50% of children having one or more dental sealants; available data reported only 10% of children from Indiana low-income schools had a sealant. Work needed to be done!

Seal Indiana has enabled thousands of Indiana school children to avoid dental pain and to have better health and self esteem. These factors foster future Indiana citizens who will be better prepared to compete in the workforce and in life.

But celebrating this work is not enough. Seal Indiana falls far short of reaching all of the underserved children in Indiana who need preventive services, and it does not adequately address the needs of those who should have follow-up care by a dentist, ideally in a dental home where the child will continue to receive comprehensive, caring, culturally competent, and affordable services.

We have a long way to go before these goals are accomplished, but new ideas are surfacing. Through the modified, year-round Give Kids a Smile program, IDA is recruiting member dentists who will agree to provide continuing care for children identified by Seal Indiana as in need of follow-up. IUSD is launching a program that will utilize the Sealmobile, our mobile dental clinic, to provide restorative services for underserved populations, beginning with Head Start children in rural counties. This will be another partial solution to the oral health needs in Indiana. Although we are pleased with the progress, we are not satisfied with the big picture and will continue to work toward reducing barriers to dental care.

At IUPUI and IUSD, we are committed to making an impact every day. We are grateful to have had this opportunity for eight years, and we look forward to future innovation and partnerships.

Karen M. Yoder, PhD, Director, Seal Indiana



Seal Indiana Serves Indiana Children: 2010 in Review

During 2010, Seal Indiana served 2,111 children at 106 different locations throughout the state.

“Many of our students are from families who do not qualify for Hoosier Healthwise but are unable to afford dental care. With grant assistance, the children receive the care offered by Seal Indiana. It is such a wonderful service!”

Indiana School Nurse

An additional 216 children and adults were served at Indiana Special Olympics, at an Indianapolis screening program for people who are homeless but not in shelters, and at an Indianapolis *Santa Comes to Town* event that targets low-income Hispanic families.

Approximately 52% of the children with permanent molars received 3,345 sealants. Others had sealants placed in previous years, and some had restorations or extensive

dental decay in all of their molars, making it impossible to place sealants.

Most of the children (90%), including those enrolled in Head Start programs, received fluoride varnish. Following their examination, each child received a dental report to take home to parents or guardians, explaining the care received and, when indicated, the need for follow-up with a dentist.

Of the children served by Seal Indiana, 66% were enrolled in Medicaid/Hoosier Healthwise; 15% were treated at no charge through grants,

and 19% were covered by sliding fees paid by their families or agencies.

Funding

Seal Indiana is sustained through the financial support of the Indiana State Department of Health, the U.S. Department of Health and Human Services, and corporate sponsors.

State and federal support has been essential to maintaining the work of Seal Indiana for the past eight years by providing funds for staff and faculty salaries and operational expenses annually.

Delta Dental Foundation has assisted Seal Indiana the last four years, with grants specifically for clinical services for children without insurance whose families could not otherwise provide dental care for them.

A major grant from the Anthem Foundation early in the program helped to get the mobile dental clinic on the road.

The Binational/Cross-Cultural Health Enhancement Center (BiCCHC) provided funding in 2010 to cover fees for Hispanic/Latino children who do not receive public assistance. BiCCHC operates at IUPUI under grants to teach Hispanic families about all aspects of health and help them access services.

IUSD DEAN JOHN Williams (left) joined Dr. Karen Yoder, Seal Indiana program director, and Delta Dental of Indiana’s Cheryl McCracken, professional relations representative, and Dr. Jed Jacobson, chief science officer and senior vice president, for presentation of a major gift to Seal Indiana last fall. Delta’s mascot, Marshall Molar, holds the check that is helping Seal Indiana provide care to those in need in 2010-11.

“The grant was a godsend for our students who otherwise would not have received dental care. We are so appreciative!”

Indiana School Nurse



Service Learning Assistants (SLAs)

Seal Indiana is fortunate to receive assistance from the IUPUI Center for Service and Learning, which provides a stipend for one or two dental students annually.

During 2010-11, Richelle Alcantara and Susie Shim received tuition reimbursement to serve as SLAs. Their primary function is organizing the homeless shelter events. SLAs are also required to participate in professional development activities. In the fall, Richelle and Susie discussed the benefits of sealants with school nurses attending a state convention and then prepared a poster presentation about Seal Indiana for the 2011 IUSD Research Day.



DURING VISITS to shelters in Marion and surrounding counties, dental students teach children brushing and flossing techniques and often have the opportunity to talk with parents about how to help assure better oral health for their children.

Seal Indiana also benefited from the assistance of two college interns in 2010. Malory McQuinn from DePauw University spent January with Seal Indiana, and Cassandra Riley from Indiana University participated in the spring.

Shelter Service

A significant aspect of Seal Indiana is service to area shelters for the homeless and victims of domestic violence that house children.

Seal Indiana visits six Indianapolis-area shelters regularly: Coburn Place, Dayspring, Holy Family, the Julian Center, Wellspring, and WINGS. In 2010, over 100 volunteer faculty and students provided comprehensive examinations for 163 infants and children; 315 sealants for 63 children with permanent molars, and 153 fluoride varnish treatments. Services are provided at no charge to the families and shelters.

Most shelter sealant events are after-school evening programs that offer all dental students, staff, and faculty the opportunity to engage in community service.

Head Start

Seal Indiana provides comprehensive examinations and fluoride varnish for children enrolled in Head Start to assist them in meeting federal performance standards.

During summer 2010, Seal Indiana served Head Start in Greenfield, as well as programs that operate for children of seasonal migrant farm workers in Elwood, Geneva, Indianapolis, Kokomo, Lafayette, Lakeville, Syracuse, and Vincennes. In the fall, the program served Head Start in Warsaw, Linton, Washington, and Vincennes.

Enhancing Seal Indiana

A commitment to excellent care and service is an integral part of our mission.

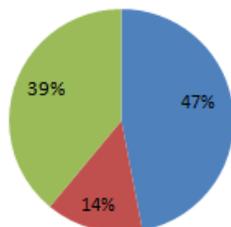
To help assure staff and students are meeting or exceeding expectations, a report is sent to each site, summarizing services and requesting an evaluation. Key personnel are asked to rate the quality of communication with staff, their professionalism, and kindness and concern for the children. Of the 29 sites responding last year,

26 rated the Seal Indiana program "excellent" and 3 "good" in all categories.

While the program aims to add new locations annually, it also returns to sites where solid relationships are established and an unmet need still exists. During 2010, Seal Indiana returned to 56 schools in 17 counties: Bartholomew, Blackford, Brown, Clay, Daviess, Delaware, Fountain, Greene, Jay, Johnson, Madison, Marion, Marshall, Montgomery, Monroe, Noble, and Wayne.

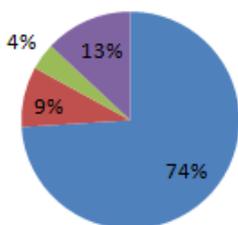
Among new locations were the Indianapolis Public Schools of Brookside (IPS 54), Ralph Waldo Emerson (IPS 58), and Webster (IPS 46) that participate in *Bridges to Success*, an IPS-United Way of Central Indiana partnership created to decrease barriers to children's learning. Other new sites were Stephens and Harris elementary schools in Greenfield; the Indianapolis Project School; Northeast Elementary School and Esperanza Ministries in Greenwood; Bridges Community Center in Muncie; Girls, Inc., Seymour, and the Greater Indianapolis Urban Mission YMCA.

2010 INCOME



- ISDH Grants
- Delta Dental Foundation
- Medicaid and Sliding Fee

2010 EXPENDITURES



- Personnel
- Clinical Supplies
- Administration
- Operations

Moi University Sealant Program Models Seal Indiana

Kenya's first school-based dental sealant program, modeled after Seal Indiana, was launched in June 2010 in cooperation with faculty, staff, and students of Moi University School of Dentistry in Eldoret, Western Kenya.

Indiana's seven-member faculty and student team, together with Moi University personnel, took portable equipment and clinical supplies to five sites involving 451 children from four differing population groups: children living independently on the streets, children who were incarcerated, children who were developmentally

disabled, and typical elementary school children.

The program is a pilot to explore Moi's potential for providing community-based services. Although 25% of the children examined in Western Kenya had untreated dental decay, not a single child had

a filled tooth. With only 700 dentists in a country of 35 million people, dental care is a luxury available to few. Therefore, the protection afforded by dental sealants applied in a school-based setting is especially important.



KENYAN SCHOOL children are prepared for dental examinations and sealants in Kenya's first school-based dental sealant program, initiated through a partnership of Moi University School of Dentistry and Indiana University School of Dentistry.

Seal Indiana Engages in Oral Health Research

One of Seal Indiana's goals is to engage in research that will promote optimal oral health and more equitable access to care.

IUSD faculty members and students have used Seal Indiana data as a basis for research related to epidemiology, sealant effectiveness, and access to care.

Eleven poster or oral presentations associated with Seal Indiana projects have been shared at national and international meetings, and three articles have been published in refereed dental journals.

In cooperation with northern Indiana's Amish community, Seal Indiana participated in a National



SEAL INDIANA'S 40-foot mobile dental clinic, called the Sealmobile, is parked outside an Amish school in northern Indiana, where Indiana University School of Dentistry researchers provided preventive dental care for children and studied outcomes of the use of sealants.

Institutes of Health-funded study that looked at outcomes of the use of sealants. Another research project resulted in an article under review by a dental journal, reporting the differences of isolating techniques used while applying sealants and the techniques' effects on sealant retention. Additional articles are in progress that

will evaluate Seal Indiana performance and report on Medicaid use.

Research is underway to document Seal Indiana's effectiveness in improving the oral health of children, as are analyses of dental students' pre- and post-rotation surveys, assignments, and reflective writing. These components are being examined for their value

as measurements of educational achievements, outcomes of service-learning pedagogy, and potential for health policy impact.

Seal Indiana Educates the Future Dental Workforce

Annually, 100 fourth-year dental students, who are close to launching their new careers, participate in Seal Indiana.

Each student is assigned a three-day rotation that typically occurs in two or three different sites in low-income neighborhoods or rural areas of Indiana.

Most dental students have not experienced being enrolled in Head Start or having Medicaid/Hoosier Healthwise as their source of health and dental insurance, nor have they spent nights in a homeless shelter. Being placed in these environments, witnessing the impact of the broad determinants of health, and seeing the effects of lack of dental care is a dynamic experience for many.

Seal Indiana requires classroom and web-based preparation about the communities and agencies to be served and guided reflection on the experiences. The students' reflective writing is a testimony to their surprise when they examine a child who has never been to a dentist or who has extensive untreated dental disease.

Seal Indiana offers an important learning experience for dental students by introducing them to the complexities of issues related to access to dental care. A principal goal of the program is that the students, who are the future dental workforce, will carry these lessons into their practices and be part of the solution in their communities.



ALL IUSD FOURTH-YEAR dental students serve a three-day rotation, traveling with Seal Indiana faculty and staff to provide preventive dental care for children from low-income families. Dr. Armando Soto (left), Seal Indiana associate director, provides guidance to Mark Newman during a visit to Blackford County. Students also attend an all-day Oral Health Policy Forum, hosted at the Indiana Dental Association, to help heighten their awareness of the political process and the impact they can have on legislation. Dr. Burton Edelstein (left), founding director of the Children's Dental Health Project based in Washington, D.C., teaches dental students how to influence the health policy process.

We're on the web:
www.sealindiana.org

Seal Indiana Program Goals

Seal Indiana is a state-wide mobile dental program of Indiana University School of Dentistry that works in cooperation with Indiana dentists to:

- ◆ Locate Indiana children who are not receiving dental care
- ◆ Provide oral examination, with parental consent, and when indicated, apply sealants and fluoride varnish for prevention of dental caries
- ◆ Help to find local dental homes to insure restorative services and continuity of care
- ◆ Provide service-learning experiences for dental and dental hygiene students to foster greater understanding of issues related to community oral health and access to dental care
- ◆ Engage in research that will promote optimal oral health and more equitable access to care

"On my rotation, I met a 6-year-old who had high caries activity and very inflamed gingiva. When I asked how many times he brushes every day, he responded that he does not have a toothbrush or toothpaste. He quickly replied that it would not be a problem anymore because he now has both (given to him by us before he sat down). This event showed me that even in 2011, there are children who do not have the basic means to prevent oral health issues. It will affect my future actions, as I will never assume a child is being negligent or lazy. I truly did not think a child in this time did not own a brush or toothpaste."

IUSD Fourth-Year Dental Student

KEY PERSONNEL

- Dr. John N. Williams**
Dean, IU School of Dentistry
- Dr. Domenick T. Zero**
Associate Dean for Research
- Dr. George P. Willis**
Associate Dean for Clinics
- Dr. Karen M. Yoder**
Seal Indiana Director
- Dr. Armando E. Soto-Rojas**
Seal Indiana Associate Director
- Dr. Cheryl A. Krushinski**
Supervising Faculty Dentist
- Ms. Jan Miller**
Program Manager
- Ms. Cassandra M. Riley**
Dental Assistant/Site Coordinator
- Dr. James R. Miller**
State Oral Health Director, ISDH
- Ms. Deborah J. Ferguson**
and **Ms. Jude Wilkinson**
Financial Management
- Ms. Nadine C. Florek**
and **Mr. John P. Justice**
Website Management
- Ms. Susan M. Crum**
Publications Director

Seal Indiana extends gratitude to those who helped build the program:

- Dr. Roger L. Isaacs**
- Dr. Donald W. Johnson**
- Dr. Charles E. Smith**
- Ms. B. J. Hoge**
- Mr. Ed Childress**
- and to **Ms. Sharon E. Gwinn**
for her expertise in mobile clinic management

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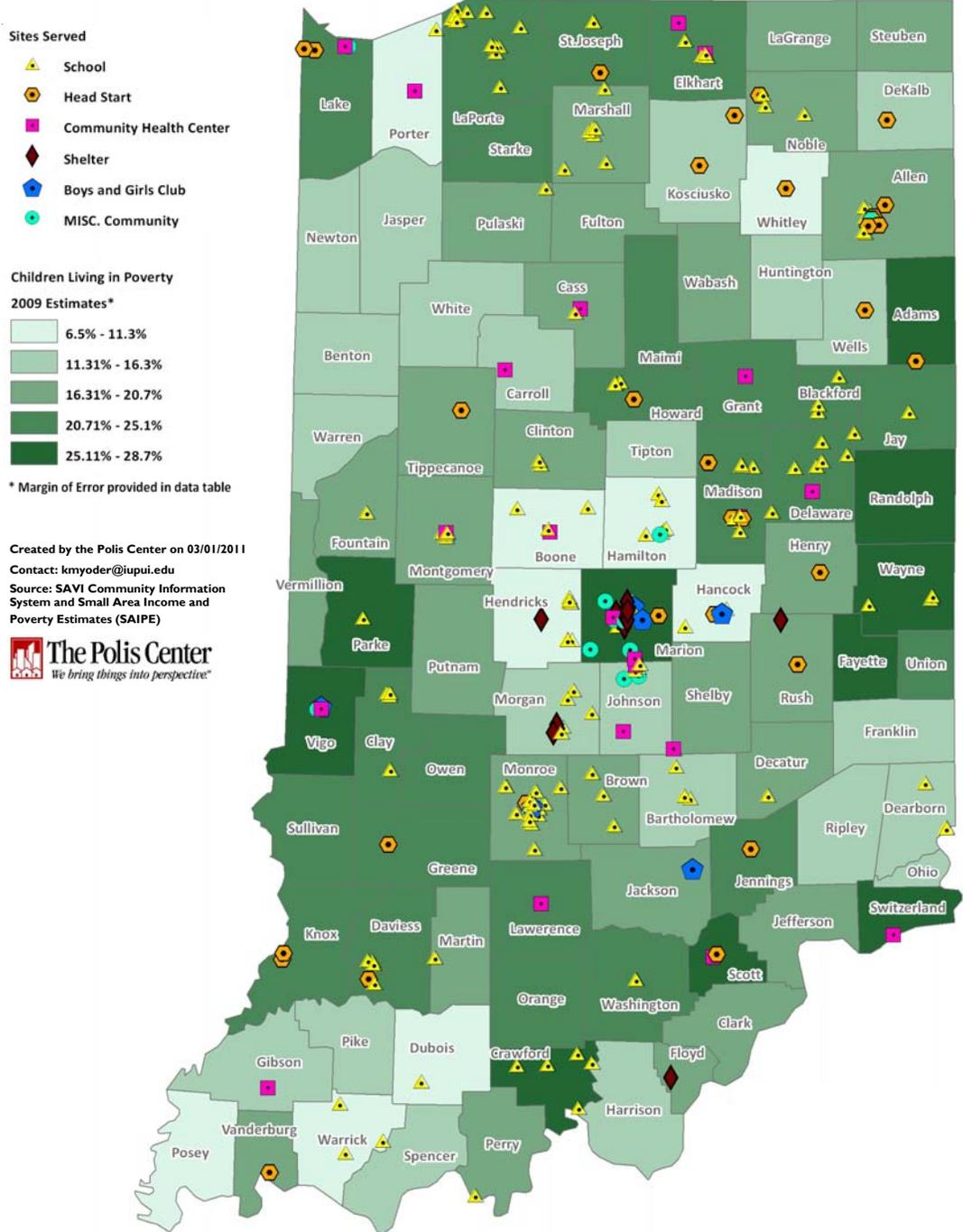
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To contribute to Seal Indiana, contact plovejoy@iupui.edu at the IU Foundation.

Sites Served by Seal Indiana



- Sites Served**
- School
 - Head Start
 - Community Health Center
 - Shelter
 - Boys and Girls Club
 - MISC. Community
- Children Living in Poverty**
2009 Estimates*
- 6.5% - 11.3%
 - 11.31% - 16.3%
 - 16.31% - 20.7%
 - 20.71% - 25.1%
 - 25.11% - 28.7%

* Margin of Error provided in data table
Created by the Polis Center on 03/01/2011
Contact: kmyoder@iupui.edu
Source: SAVI Community Information System and Small Area Income and Poverty Estimates (SAIPE)

