

OH-I-CAN: Oral Health in Communities and Neighborhoods



Cohort:
2016-2019

Team Members:
Charles Moore, MD
Hope Bussenius, DNP, APRN, FNP-BC
David Reznik, DDS

Location:
Atlanta, Georgia

Focus Areas:
IT/Technology
Oral Health
School-based Health Care

Background

Poor oral health in low income communities is a wicked problem that causes many burdens on children and adults alike. There is a wide disparity in untreated tooth decay and school absenteeism. The CDC reports that one in three children ages 2 through 5 who had family incomes below \$10,000, experienced at least one decayed tooth that had not been treated. In contrast, only one in ten preschool children whose family incomes were \$35,000 or higher had untreated caries.

The CDC shows this disparity rate is true for teenagers and adults as well. Oral health is important because untreated caries can lead to problems with eating, speaking, and attending to learning in children and work attendance in adults. In addition, untreated caries and gum disease will lead to tooth loss. CDC survey data shows that low-income adults suffer more severe tooth loss than their wealthier counterparts. For example, adults in families earning less than \$15,000 per year were more than 2-

1/2 times as likely to have lost six or more teeth from decay or gum disease as adults in families earning \$35,000 or more.

Frequently cited barriers to improving the dental health disparities and achieving these target outcomes include cost, unwillingness of dentists to participate in Medicaid, low Medicaid reimbursement rates, oral health literacy concerns, and a lack of transportation. These barriers contribute to a lack of access for dental care in low income neighborhoods. Beyond the public health consequences of poor oral health are outcomes that affect families and communities in the financial, educational and workforce sectors. These outcomes can prevent families from improving their low-income status.

Wicked Problem Description

Poor oral health afflicts many low-income and other vulnerable populations. Poor oral health can lead to unnecessary tooth decay, periodontal disease, plaque buildup, pain and even the quiet and deadly advancement of oral cancer. It also leads to unnecessary and expensive visits to the Emergency Department to treat pain of tooth decay and periodontal disease but not the causal conditions. Finding ways to improve oral health in low-income communities is essential to good health and helping individuals move from poverty to middle class status. It requires a collaborative effort of a diverse array of health care workers.

Project Strategies

To address the vast oral health disparities that exist for low income and minority families, the dental/healthcare neighborhood program seeks to create a community wide comprehensive oral health network in a low income and minority neighborhood to increase access to oral health education and services. The oral health program performed community needs assessments which informed the team's work. Other goals of the project are to:

- Increase the number of healthcare professionals in low resource areas trained to provide basic oral health care/cancer screening
- Train primary care registered nurses, nurse practitioners, and nurse practitioner students to provide basic oral examinations, cancer screenings and how to administer fluoride varnish
- Improving community knowledge about preventive oral care
- Increase the dental workforce by allowing dental hygienists to perform preventive dental care via indirect supervision
- Increase capacity and improve quality of low-cost oral healthcare

Outcomes

- Developing Protocols for NP/Nurses
- Assisting in the development of protocols for general supervision of dental hygienists
- Further enhancement of OH-I-CAN website and APP with registry development
- Developing oral health protocols for primary care
- Oral cavity cancer screening training for providers
- Rural Setting Community Needs Assessment

Completed Outcomes:

Needs Assessments

- Completion of OH-I-CAN Smartphone application with connected metadata repository
- Establishment of the [OH-I-CAN website](#)
- Both OH-I-CAN app and website launched in local and global, back to school programs in Georgia and mobile clinics in Haiti
- Dental Community Needs Assessment Performed by Rollins School of Public Health
- Develop OH-I-CAN app with registry for patient needs assessment
- Dental Provider Needs Assessment Performed
- Established Advisory Committee
- Completed OH-I-CAN informational brochure
- Advocacy
- Dental Hygiene Bill Passed – Increased Access for under-resourced children and adults
- Working with Georgia Dental Hygiene Association, Georgia Dental Association and Dr. Chay from the Grady Health System Advance Education in General Dentistry Residency (AEGD) program, an implementation tool kit was created to assist dentists and dental hygienists implement the new law in both the public and private sectors.
- Two lectures were given to well over 250 dental hygienists to inform them of the new law and to discuss best practices.

Dental Access

- Launch of OH-I-CAN smartphone application local to global
- OH-I-CAN website used to bridge oral health to clinical practice, research, education and training, and health policy.
- OH-I-CAN education and training completed by BSN, ABSN, MSN and AMSN students (n=300).
- Oral health education provided to interprofessional group of medical providers and support staff (n=65).

- Establishing another clinic (Neighborhood Union) to provide oral health services.
- Establishing another school-based health clinic with oral health services.
- Working with NYU-Langone, HEALing Community Center, Good Samaritan Atlanta, and the Whitefoord Clinic to at least double the number of AEGD dental residents in the Atlanta metropolitan area.

Partnerships

- HEALing Community Center
- CDC
- Rural FQHC – Ellenton Farmworker Clinic
- Global Dialogues
- Emory Rollins School of Public Health
- Morehouse Public Health Program
- Emory School of Nursing
- Georgia Dental Association
- Georgia Dental Hygiene Association
- NYU/Lutheran Atlanta-based AEGD residency program
- Eternal Hope In Haiti

Evaluation Strategies

- Initiated monitoring and evaluation plan for OH-I-CAN
- Conducted pre and post intervention surveys at community events and elementary schools