

2018 National Oral Health Conference

April 16-18, Louisville, Kentucky

Oral Presentation Abstracts

Oral Presentation Session #1 - 10:00 am -11:30 am

Environmental Scan of Medical-Dental Integration in Public Health Settings: Targeting Cardiovascular Disease

Presenting Author: Susan McKernan, DMD, MS, PhD Assistant Professor University of Iowa; Co-Authors: Julie Reynolds, DDS, MS, Visiting Assistant Professor, University of Iowa; Raymond Kuthy, DDS, MPH, Professor, University of Iowa; Laurel Tuggle, MPH, Research Assistant, University of Iowa; Dina Garcia, PhD, Postdoctoral Research Fellow, University of Iowa

Objectives: A U.S. based environmental scan was conducted to close gaps in knowledge regarding public health approaches to foster medical-dental integration. This presentation will describe study findings related to public health activities targeting cardiovascular disease within the dental setting.

Methods: The scan included primary data collection via literature review (peer-reviewed research, state oral health plans, grey literature), stakeholder surveys (state oral health programs, chronic disease programs, community oral health programs), and key informant interviews.

Results: Literature review identified 13 interventions in dental settings targeting cardiovascular disease: 10 healthcare system interventions, 2 environmental approaches, and 1 community-clinical linkage. The most common intervention components were provision of information(n=10) and clinical activities(n=8), focused on blood pressure screenings and referrals. Among community oral health program survey respondents(n=30), a majority reported that they implement active referrals of high risk patients to primary care, via medical consults, warm hand-offs, and scheduling assistance.

Conclusions: Comprehensive integration interventions typically include formal patient management protocols, standardized training of dental providers, active referrals, and use of EHR to facilitate and track outcomes. Results of this scan will be available for stakeholders to inform development of future initiatives.

Source of Funding: Environmental scan funded by a CDC Special Interest Project Grant through the University of Iowa Prevention Research Center (3U48DP005017). NIH CTSA grant #U54TR001356 supported use of REDCap (Research Electronic Data Capture) to collect and manage data.

Using Traditional Practice Management and Billing Software to Collect Quality Assurance and Program Evaluation Data for Clinical Public Health Dentistry Programs

Presenting Author: Pierre Cartier, DMD, MPH

Objective: Public health dental clinics rely on data to support grant applications, quality assurance activities, and long-term planning. However, such data are challenging to collect using practice management software traditionally designed to facilitate insurance billing.

Methods: This presentation will discuss strategies for using existing practice management data to monitor population health trends and conduct quality assurance activities. The development of "dummy codes" to monitor oral healthcare urgency, disease burden, and other epidemiological metrics will be discussed. Further, attendees will learn how to identify, develop, and implement metrics that will enable them to monitor the quality of care given. Such metrics include those that monitor changes in dental treatment urgency, patterns of long-term dental home utilization, use of preventive care, and the coordination of inter-professional care for diabetes and other chronic diseases.

Results: In a case study, a new non-profit dental program identified and implemented population health indicators. These data enabled it to monitor changes in dental treatment urgency status for a pool 1,000 patients, identify barriers to long-term comprehensive oral healthcare utilization, and implement an interdisciplinary diabetes treatment program.

Conclusions: The use of "dummy codes" is a strategy for collecting epidemiological data from practice management software. These data can be used to monitor the health of a dental clinic's population, including disease prevalence, treatment urgency, and use of long-lasting protective interventions. Such data support quality assessment and longitudinal planning activities for operations ranging from community outreach programs to brick-and-mortar clinics.

Source of Funding: None

Trends in Dental Care Utilization Among US Children and Adolescents, 2001–2013. Have Racial/Ethnic Disparities Narrowed? Findings from the Medical Expenditure Panel Survey

Presenting Author: Valerie Robison, DDS MPH PhD Dental Officer Division of Oral Health, CDC; Co-Authors: Liang Wei, MS MPH, Statistician, DB Consulting; Jason Hsia, PhD, Mathematical Statistician, Office on Smoking and Health, CDC

Objectives: To describe changes in racial/ethnic disparities in dental utilization in children and adolescents from 2001-2013 and factors associated with these changes.

Methods: We analyzed data on 2 to 17 year old children and adolescents (hereafter referred to as children) from the Medical Expenditure Panel Survey (MEPS). We measured racial/ethnic disparities as differences in utilization relative to non-Hispanic whites (NHW). We pooled data into three cycles (2001-2004, 2005-2008, and 2009-2013) and calculated prevalence ratios (PR) to determine factors associated with changes in disparities over time, controlling for other covariates.

Results: From 2001-2013, disparities decreased significantly for non-Hispanic blacks (NHB), Hispanics and Asians relative to NHW. In multivariate analysis, a statistically significant increase in utilization (14%) was found only in low-income children. Among low-income children, disparities were eliminated between Hispanics and NHW. The association between utilization and public insurance compared to no insurance varied by income; [low-income PR=2.19, 95% CI (1.95-2.46); middle income PR=1.51, 95% CI (1.35-1.69) and high income PR=1.13, 95% CI (0.98-1.31)]. Results were similar for children with private insurance.

Conclusions: A modest increase in children's dental utilization from 2001-2013 and a narrowing of disparities occurred primarily among low-income children. Public and private insurance were associated with a doubling of utilization in this group. A decrease in insurance coverage for dental care may affect future reduction in disparities among racial/ethnic groups observed in this study.

Source of Funding: None

Integrating Oral Health and Wellness by Comprehensive Geriatric Assessment and Community Based Care

Presenting Author: Padideh Asgari, MPH, CPH Senior Research Analyst West Health Institute; Co-Authors: Joseph Gavin, MS, Serving Seniors; Marissa Mackiewicz, RN, CNS, Serving Seniors; Melinda Forstey, MBA, Serving Seniors; Paul Downey, BA, Serving Seniors; Ian Pierce, MS, West Health Institute; William Scanlon, PhD, West Health Institute; Zia Agha, MD, MS, West Health Institute; Karen Becerra, MPH, DDS, Gary and Mary West Senior Dental Center; Eliah Aronoff-Spencer, MD, PhD, West Health Institute and Gary and Mary West Foundation

Objectives: To develop a whole-person care-model integrating oral-health and wellness services at a community based organization (CBO) for low-income seniors. Using a newly developed digital comprehensive geriatric assessment (CGA), we sought methods for real-time metrics based referral and we examined the relationship of social determinates, mood and quality of life on oral and overall health.

Methods: Senior needs were determined by a CGA focused on psychosocial, functional, nutrition, oral and general health. Frequency and correlation analysis were used to determine the relationship of dimensions and predictors of need in this population.

Results: CGAs (n=920) were administered with 92% referred to dental care. 23% received concomitant care coordination, mental health or case management services. The majority (75%) had one or more chronic conditions and more than 1 medical symptom (77%). Half had difficulty chewing (50%) and almost half needed new or replaced dentures (45%). Cost was the primary barrier to prior care access (51%). Dental symptoms were negatively correlated with quality of life (QoL) ($r=-.29$, $p=.001$) and general health ($r=-.31$, $p=.001$), and associated with higher rates of depression ($r=0.28$, $p=.001$). Dental pain was significantly correlated with food limitation ($r=0.22$, $p=.001$), difficulty chewing and depression and negatively correlated with health and QoL.

Conclusions: Comprehensive assessments integrating dental disease with psychosocial context and medical needs are gateways to holistic care and efficient and appropriate triage for vulnerable seniors. We propose that such an approach, whereby the type and order of services are established early can lead to more effective care for seniors.

Source of Funding: Gary and Mary West Foundation and Gary and Mary West Health Institute

Oral Presentation Session #2 - 2:30 pm - 4:00 pm

An Assessment of Mobile and Portable Dentistry Programs to Improve Population Oral Health

Presenting Author: Margaret Langelier, MSHSA Deputy Director Oral Health Workforce Research Center

Objectives: Mobile and portable oral health services are useful in geographic areas and for population groups where the penetration of dental practices or dental participation in Medicaid is low. This qualitative research aimed to describe structural configurations of mobile programs, populations served, and regulatory variation by state in program governance.

Methods: Project staff conducted case studies of seven organizations providing oral health services in mobile or portable formats to mixed patient populations in Missouri, North Carolina, New York, New Hampshire, Nevada, South Carolina, and Texas in 2017. Site visits included interviews with multiple stakeholders using a protocol of questions to guide informants to the major topics of interest.

Results: Mobile and portable programs are equipped to supply an array of oral health services including preventive, diagnostic, and dental treatment services in nursing homes, schools, primary medical clinics, day habilitation programs, and other community settings. Patient populations ranged from 100 elders to 23,000 children annually. Programs grew organically based on local need in a population group or geographic area. Mobile and portable programs were proving an effective means of integrating dental services into primary health care environments as part of an integrated and extended dental home. Funding for these programs varied affecting program sustainability.

Conclusions: The mobile/portable programs were successful in reaching vulnerable populations, especially children, elders, and the developmentally disabled. Mobile programs worked in partnership with local health care delivery systems. Several programs were one part of a wholly constituted dental home that included fixed general and specialty dental clinics.

Source of Funding: US Health Resources and Services Administration, National Bureau for Health Workforce Analysis

Sealants in The Last Frontier

Presenting Author: Samantha Sparks, Dental Health Aide Therapist Student Alaska Dental Therapy Educational Program; Co-Authors: Marissa Gardner, Dental Health Aide Therapist Student, Alaska Dental Therapy Educational Program; Allison Wasuli, Dental Health Aide Therapist Student, Alaska Dental Therapy Educational Program; Jason Mecum, AS, Dental Health Aide Therapist Student, Alaska Dental Therapy Educational Program; Janette Ulak, AAS, Dental Health Aide Therapist Student, Alaska Dental Therapy Educational Program; Sarah Shoffstall-Cone, DDS, MPH, Clinical Site Director, Alaska Native Tribal Health Consortium; Suzanne Eberling, DMD, PhD, Clinical Instructor, Alaska Dental Therapy Educational Program

Problem: A high percentage of children in Alaska's underserved communities have dental caries experience: according to the 2012 IHS survey, 94% of AI/AN school children in the Alaska Area had dental caries experience in their permanent or primary dentition. We will present our approach on involving the community in establishing and maintaining a sealant program in an underserved, rural Alaskan community.

Objective: To establish an effective community preventive program with involvement and support of the community. We presented oral health issues relating to children in the community, and gave the community several options to choose from along with evidence supporting and expected benefits of each option. The community chose a sealant program. Our health outcome goal was to reduce the mean DMFT of successive cohorts of children in grades 2-7 by 30% over two years.

Methods: A school linked sealant program was implemented; the school declined to participate in succeeding years, and the program became community based.

Results: We reduced the mean DMFT of successive cohorts of children in grades 2-7 over the course of two years. The baseline mean DMFT was 3.8, and the outcome mean DMFT was 1.7 after two years. Participation rates ranged from 90-96%. The program was continued; in the third year we had a reduction in the next cohort of children to a mean DMFT of 1.5, with a participation rate of 87%.

Conclusion: We successfully implemented a community sealant program while overcoming obstacles from the school and exceeded our health outcome goals.

Source of Funding: None

Implementation of Silver Diamine Fluoride in Safety Net Clinics

Presenting Author: B. Alex White, DDS, DrPH Associate Professor UNC_CH Gillings School of Global Public Health; Co-Authors: Jacqueline Burgette, DMD, PhD, Assistant Professor, University of Pittsburgh; Sarah Birken, PhD, Assistant Professor, Department of Health Policy and Management, The Gillings School of Global Public Health, The University of North Carolina at Chapel Hill; Teresa Lewis, MA, CHES, Project Manager, UNC_CH Gillings School of Global Public Health; Jane Weintraub, DDS, MPH, Diplomate ABDPH, Alumni Distinguished Professor, University of North Carolina at Chapel Hill School of Dentistry

Silver diamine fluoride (SDF) arrests caries. North Carolina (NC) dentists can receive Medicaid reimbursement for applying SDF in children to age five.

Objective: To describe the process of implementing and improving a SDF protocol for safety net dental clinics (SNDC).

Methods: An expert panel reviewed existing SDF protocols and made modifications for SNDC. Using the modified protocol, a pediatric dentist provided SDF training to three SNDC in separate NC counties over two visits: 1) on-site didactic training with videos and 2) clinical observation and feedback with patients. Three months post-training, dentists and staff took part in focus groups to obtain feedback on the SDF implementation process, which was analyzed using rapid qualitative method.

Results: All SNDC incorporated SDF and provided positive feedback about implementing SDF. Dentists and staff suggested changes to the SDF protocol to overcome challenges and facilitate implementation, such as including pictures in the consent form, obtaining signatures with a digital pad, translating SDF documents to Spanish and laminating SDF information in each operatory to remind providers of this procedure option. Fear of staining outside the carious lesion was alleviated by staff applying SDF to their wrist and tracking the stain. Templates for electronic health records were developed to aid entering SDF progress notes and billing procedures.

Conclusion: Protocol improvements were identified to facilitate incorporation of SDF into SNDCs. Feedback indicated that SNDC dentists and staff created ownership of the SDF implementation process. This training and feedback process can be disseminated to other SNDC interested in implementing SDF.

Source of Funding: Blue Cross and Blue Shield of North Carolina Foundation

New York City School-Based Dental Consent Benchmark Rewards Program

Presenting Author: Ramneet Kalra, MPH, MBA, Program Manager, Oral Health Program, New York City Department of Health and Mental Hygiene; Co-Authors: Andrew Lo, MPH Data Manager, Oral Health Program New York City Department of Health and Mental Hygiene; David Tepel, DMD, Supervising Dentist, Oral Health Program, New York City Department of Health and Mental Hygiene; Priyanka, Ganesh, BDS, MPH, Dental Volunteer, Oral Health Program, New York City Department of Health and Mental Hygiene

Objectives: Low parental consent return rates often contribute to underutilization of school-based dental services. New York City (NYC) Health Department's Oral Health Program (OHP) piloted a rewards program with its largest school-based dental provider to increase consent rates.

Methods: 12 schools with a combined baseline consent rate of 23% (n=1903) in 2015-2016 School Year (SY) were selected to participate. OHP offered a \$1600 financial incentive to each school that increased consent rates by at least 15% during the 2016-17 SY. To meet the benchmarks, the school staff implemented several approaches including: reminder announcements, stickers, automated calls, oral health-focused assemblies, targeted mailings, provider joining school gatherings, and prizes.

Results: All 12 schools met or exceeded targets. Overall consent rates increased from 23% to 35%; reaching 966 additional children. The program strengthened school engagement and family involvement. Improvements varied among schools due to barriers including: increased school-based dental provider effort; decreased number of returned consents over time.

Conclusions: A marked consent rate increase resulted from the monetary incentive. Subsequently, three other NYC dental providers requested to participate in the program. In 2017-18 SY, the program will be scaled to 45 additional schools through four school-based dental providers. Tiered incentives of \$800 for a 10% increase and \$1600 for 15% will be offered to strengthen feasibility to receive an incentive and reduce provider involvement. Impacts are significant as consents in NYC are valid for the child's enrollment time at the school. The rewards create precedents for the schools to follow in future years.

Source of Funding: Employer: New York City Department of Health and Mental Hygiene

Patient Satisfaction in a Dental School-Based Veteran Dental Clinic

Presenting Author: Tamanna Tiwari, MPH, MS, BDS, Assistant Professor, University of Colorado; Co-Authors: Heidi Tyrrell, RDH BA Assistant Director Heroes Clinic, Veterans Outreach Coordinator University of Colorado; Kallista Hammer, Bs Student, University of Colorado; Nayanjot Rai, MPH, BDS, Research Associate, University of Colorado; Douglas Wilson, DMD, MS, Associate Professor, Director, Heroes Clinics, University of Colorado; Denise Kassebaum, DDS, MS, Dean, School of Dental Medicine, University of Colorado

Objective: The Heroes Clinic is a unique dental clinic housed at the University of Colorado School of Dental Medicine that offers veterans dental care at no or minimal cost. The aim of this study is to collect patient feedback on the quality of care and empathy of dental providers visiting the Heroes Clinic.

Methods: A cross-sectional study design was used to gather patient feedback using SERVQUAL and DSQ frameworks. Mean scores were calculated to determine the average of positive or negative responses. Bivariate analyses were conducted with positive answers to whether the Heroes Clinic can relieve or cure most problems serving as the outcome. The associations between independent variables and outcome were modeled using a stepwise forward selection logistic regression.

Results: 177 veterans responded to the survey with a response rate of 35%. Over 50% patients were between the ages of 20-35 years. The mean scores for all variables demonstrated significant levels ($p < 0.0001$) of general satisfaction, quality of care, empathy, responsiveness, and pain management. Bivariate analysis demonstrated a significant positive correlation between general satisfaction (0.23; CI-0.56-0.62; $p < 0.001$), five scales of quality of care ($p < 0.001$), four scales of empathy ($p = 0.005$), three scales of pain management ($p = 0.012$), responsiveness (2.96; CI-1.25-7.02; $p = 0.014$) and prevention (0.19; CI-0.08-0.47; $p < 0.001$), and the outcome. In the regression analysis, prevention (OR-0.15; CI-0.05-0.50; $p = 0.002$) and responsiveness (OR-6.39; CI-1.82 - 22.43; $p = 0.004$) remained positively associated with the outcome.

Conclusion: Heroes clinic has provided empathic and quality dental care to veterans as attested by the patients.

Source of Funding: Funding for this provided by Delta Dental Foundation

Oral Presentation Session #3 - 2:30 pm - 4:00 pm

Behavioral Risk Factors of Human Papillomavirus related Oropharyngeal Squamous Cell Carcinoma

Presenting Author: Tayyaba Ahmed Tayyaba, BDS, MPH, Community Dentistry, Case Western Reserve School of Dental Medicine; Co-Author: Sena Narendran, BDS, MPH, PhD, Director, Residency program Dental Public Health, Case Western Reserve University School of Dental Medicine

Objectives: Human Papillomavirus (HPV) was recently linked to the pathogenesis of oropharyngeal squamous cell carcinoma (OPSCC). The objective of this study was to assess the risk factors for HPV related OPSCC.

Methods: The study sample for this secondary data analysis of 2011-12 National Health and Nutrition Examination Survey was 4565 adults; aged 30-69 years. Data were available on sociodemographic characteristics, dental visits, oral cancer screening, smoking, alcohol habits, and multiple sex partners. In addition to descriptive tests, we performed bivariate (ORs and 95% CI), multivariate logistic regression as well as modified Poisson analyses.

Results: The mean age of the study sample was 54.31 (± 15.03). The prevalence of HPV-OPSCC was significantly higher among females than males ($p = 0.04$). Those who were 60 years or older had the highest prevalence ($p = 0.005$). Race was not a significant risk factor of HPV-OPSCC. Household income and education showed significant negative association with HPV related oral cancer ($p = 0.000$). Cigarette smoking was positively associated with OPSCC ($p = 0.026$), and so was the number of alcohol drinks consumed per year ($p = 0.000$). Those who received oral cancer screening within the previous two years are twice as likely to be diagnosed with HPV-OPSCC as their counterparts with infrequent screening. The c-statistic in logistic model showed that there was a chance for association between HPV-OPSCC and multiple sex partners, along with certain behavioral risk factors.

Conclusions: Low household income and education; cigarette smoking and alcohol consumption are important risk factors of HPV-OPSCC.

Source of Funding: None

Interprofessional Pediatric Dentistry Curriculum & Infant Oral Care Program Address Disparities in Oral Health

Presenting Author: Hamida Askaryar, MPH, RDH, Program Manager, UCLA School of Dentistry; Co-Author: Francisco Ramos-Gomez, DDS, Professor UCLA School of Dentistry

Introduction: Interprofessional education is increasingly crucial to improve the oral health of vulnerable populations. This innovative interprofessional curriculum augments the dental residency program to more effectively prepare dentists and primary care providers to meet the growing oral health needs of children from underserved/vulnerable pediatric populations.

Objectives: The curriculum has three goals: A) to establish an integrated interprofessional training program for Pediatric Dentistry, General Dentistry, Pediatric Medicine, and Nurse Practitioner Programs; B) to enhance training in dental public health and population health management for pediatric and general dentistry residents through a partnership with the UCLA School of Public Health, and C) to develop and implement a comprehensive evaluation logic model to assess success of the curriculum.

Methods: The evaluation team has designed a comprehensive five-year evaluation logic model, which clearly aligns goals and objectives with program activities, desired outcomes, and measurable indicators.

Results: Preliminary data (n=60) demonstrates that nearly all respondents agreed/strongly agreed that they know more about the abilities/contributions of other health professionals working together for improved patient health and all agreed/strongly agreed that an interprofessional approach enhances patient care.

Conclusions: We wish to disseminate our curriculum, present our logic model and our findings to other health professional training programs. The hope is to show how interprofessional training can work and contribute to creating a culturally competent health professional workforce that will be responsive to and empathetic to the oral health needs of all children, especially underserved and special needs population. Efforts linking nursing and medicine with dentistry must expand.

Source of Funding: This five-year project (2015-2020) is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number (DHHS-HRSA D88HP201290500).

Analysis of the Health Professions Data Series: Massachusetts Dentists are Interested in Education about Caring for Patients with Disabilities

Presenting Author: Jane Steffensen, MPH, MCHES, Associate Professor and Director External Relations, Department of Public Health and Community Service, Tufts University School of Dental Medicine; Co-Authors: Kate Festa, MPH, Epidemiologist Office of Oral Health, Massachusetts Department of Public Health; Ta-wei Lin, MPH, Epidemiologist, Office of Oral Health, Massachusetts Department of Public Health

Background: Reports show that individuals with disabilities often have increased risks for oral diseases/conditions and lack access to dental care. In addition, studies suggest that participation in education programs by dental professionals may play a role in addressing the needs of patients with disabilities.

Objectives: This study analyzed data related to dentists' interest in disability topics from the Massachusetts Health Professions Data Series (MA-HPDS), which evaluates workforce characteristics of licensed dentists in Massachusetts.

Methods: The MA-HPDS was distributed electronically to all licensed dentists in Massachusetts during license renewal in 2014. One survey question pertained to interest in education related to disability topics. Descriptive data analysis was conducted and dentist demographics (gender, age, race/ethnicity), dental practice characteristics, and disability topic interest were correlated in the analysis.

Results: Over half (54%) of the 2,421 dentists practicing in Massachusetts expressed interest in additional education about disability topics. The dentists had greatest interest in autism spectrum disorder (53%) and intellectual/developmental disabilities (39%). General dentists (57%) and dentists working in community health centers (78%) were more likely to report interest in education about disabilities compared to dental specialists (34%-54%) and other practices settings (32%-55%).

Conclusions: Massachusetts dentists are interested in more education about caring for patients with disabilities - especially general dentists and dentists working in community health centers. These educational interests of dentists should be considered by individuals working to improve oral health for individuals with disabilities as they build effective service programs and develop education opportunities in school curricula and continuing professional education.

Source of Funding: None

Using Virtual Dental Homes to Enable Value Based Incentive Methodologies

*Presenting Author: Chaula Patel, BDS, MS Program Manager University of the Pacific School of Dentistry;
Co-Author: Paul Glassman, DDS, MA, MBA, Professor, University of the Pacific School of Dentistry*

The U.S. healthcare system has entered the “Era of Accountability.” There is increasing use of performance measures and systems designed to move payment models from “Volume to Value.” Value-Based Incentives (VBI) are essential to focus providers on those activities most likely to improve the oral health of underserved populations. In parallel with the development and implementation of an innovative Virtual Dental Home system of care the Pacific Center for Special Care at University of Pacific School of Dentistry is currently working on development of methodologies to implement VBI. These methodologies include developing measures of health outcomes, establishing data collection and analysis systems, and providing training on using evidence-based approaches to improve the health of populations being served. This work will provide valuable information for the oral health industry about the ability to improve and measure improvement of health outcomes and will ultimately incentivize payers and providers to adopt these new payment and regulatory systems.

The implications of creating an “accountable” and “outcomes- and value-based” payment plan on oral health industry are significant. It will increase the deployment of allied personnel in community sites emphasizing preventive oral health activities for populations most at risk for dental disease, increase access to oral health services, and as a result improve the oral health status of critically underserved populations.

Source of Funding: Multiple grants including HRSA/California State Oral Health Workforce grant

Oral Presentation Session #4 - 4:30 pm - 6:00 pm

Teeth for Two: Oral Health in Pregnancy and Early Childhood

Presenting Author: Erin Hartnett, DNP, APRN-BC, CPNP Program Director, Oral Health Nursing Education and Practice (OHNEP) & Teaching Oral-Systemic Health (TOSH) NYU Rory Meyers College of Nursing:

Co-Author: April Hille, RN, MSN, DNP, Nurse Supervisor, Nurse-Family Partnership Alliance Miami-Dade Health Choice Network

Objectives: Aims of The Teeth for Two pilot program are to: 1) develop an evidence-based, standardized oral health curriculum for Nurse Family Partnership (NFP) nurses to integrate oral health in home visits to high-risk first time pregnant women and their children and, 2) promote oral health in this population.

Methods: NYU College of Nursing Oral Health Education and Practice Program (OHNEP trained NFP nurse home visitors about the importance of oral health during pregnancy and early childhood as an education demonstration pilot program. NFP nurses used the Cavity Free Kids (CFK) Toolkit during home visits with high-risk first time pregnant women and mothers of children aged 0-2. Nurses (= 4) and subjects (n= 37) were assessed on surveys at baseline, 30, and 90 days to measure changes in knowledge and oral health practices. Data analysis included descriptive statistics and t-tests.

Results: Nurses showed a statistically significant increase in knowledge and inclusion of oral health content in home visits from baseline to 30 and 90 days. Subjects reported a statistically significant increase in oral health knowledge and practice behaviors.

Conclusions: Pilot data support including oral health in the NFP curriculum. It may be an approach to positively influencing oral health practices of high risk pregnant women and children. Nurse home visitors meet with each first time mother up to 64 times until the child reaches age 2; they are well positioned to promote the mother's oral hygiene and prevent early childhood caries, the most common chronic condition of childhood.

Source of Funding: The DentaQuest Foundation

Patient Navigation-To Ensure Continuum of Care

Presenting Author: Shailee Gupta, DDS, MPH Chief Dental Officer St. David's Foundation; Co-Author: Ankit Sanghavi, BDS, MPH, Executive Director, Texas Health Institute

Objective: In 2016, St. David's Foundation, a Central Texas regional health funder, engaged the Texas Health Institute to develop a strategic plan for their mobile dental program to move beyond tracking oral health outputs, to demonstrating progress on oral health outcomes within their 5-county region. To achieve sustainable impact on oral health outcomes, the strategic plan identified the need to develop a patient navigation model to ensure continuum of care for their students and community.

Methods: We started with a review of existing scientific literature on different models of patient navigation, case management, and coordination. Our review focused on accepted definitions, workforce models, and community impact. This was followed up with a series of internal and external stakeholder meetings such as providers, payers, insurance companies, and other community based organizations. Lastly, we collected and analyzed the last two years of community and program data for program planning and feasibility.

Results: A pilot patient navigation program was developed and launched in October 2017 to identify and link 5th graders that have graduated from the program to a dental home. We aim to utilize the data and feedback from this pilot program to improve our process, design, and goals as we prepare for the full program launch in Fall 2018.

Conclusion: An evidence-based, community informed framework to develop and scale-up patient navigation component for a school based mobile dental program that can be replicated to increase the long-term impact of school and community based dental programs.

Source of Funding: St. David's Healthcare System

Trends in the Provision of Oral Health Services by Federally Qualified Health Centers

Presenting Author: Simona Surdu, MD, PhD Senior Research Associate Oral Health Workforce Research Center, Center for Health Workforce Studies, School of Public Health, University at Albany, SUNY; Co-Author: Margaret Langelier, MSHSA Oral Health Workforce Research Center

Objectives: The objective of this study was to evaluate the trends in oral health service capacity in Federally Qualified Health Centers (FQHCs) and factors influencing their decisions to provide direct general and/or specialty oral health services to patients.

Methods: The study is based on Health Center Grantee Data in HRSA's Uniform Data System (UDS) from 2011 to 2014, as well as primary data from a survey of FQHCs conducted in 2016 and state-level secondary data. The time trends and regional differences were analyzed using SAS v9.4.

Results: Nationwide, there was a slight reduction in the proportion of FQHCs providing direct oral health services from 78.3% in 2011 to 76.1% in 2014. The proportion of FQHCs in the Midwest (+1.6% change), Northeast (+6.6% change), and West (+3.7% change) providing direct dental services increased, yet there was a noticeable decline in the proportion of FQHCs providing direct dental services in the South (-14.8% change). Nationwide, the proportion of FQHC patients receiving preventive dental services increased (+3.3% change), while the proportion receiving emergency dental services decreased (-11.7% change). Provision of direct oral health services was positively and significantly associated with oral health staffing ratios and capacity in FQHCs, dental hygiene scope of practice, and quality of state Medicaid dental coverage for adults.

Conclusions: The study findings show that FQHC patients in the Midwest, Northeast, and West are increasingly accessing oral health services. In contrast, there was an overall decline in ability to provide oral health services to patients by FQHCs in the South.

Source of Funding: US Health Resources and Services Administration, National Bureau for Health Workforce Analysis

Characteristics Associated with Successful Dental Treatment in Children with Autism Spectrum Disorder

Presenting Author: Romer Ocanto, DDS, MS, MEd Chair of the Department of Pediatric Dentistry Nova Southeastern University; Co-Authors: Jennifer Chung, LMFT, MS, Program Manager II, Nova Southeastern University; Maria Levi-Minzi, MA, Senior Research Associate, Nova Southeastern University; Oscar Padilla, DDS, Associate Professor of Clinical Dentistry, Nova Southeastern University; Stephanie Perez, AA, Program Coordinator, Nova Southeastern University; Noah Turk, DMD, MS, Nova Southeastern University

Children with Autism Spectrum Disorder (ASD) are at increased risk for oral diseases; however, socio-behavioral problems have been identified by dental professionals as a major barrier to receiving dental care.

Objective: Children seen at the clinic utilize a task strip (visual representation of steps) to successfully complete a comprehensive oral examination and prophylactic cleaning. The purpose of the study is to examine potential associations between patient demographics, diagnoses, and other health and behavioral characteristics and the number of office visits needed to fully complete the task strip.

Methods: This study was approved by our university IRB. Retrospective data were gathered from patient charts and new patient intake forms. Descriptive statistics were calculated to describe the sample. T-tests were used to examine mean differences in task strip completion. Logistic regression models were used to predict task strip completion by demographics, and health, behavioral, and dental visit characteristics.

Results: The majority (N=155) were male (86%) and over half were Caucasian (61%). Most completed the task strip (92%). The mean number of visits to complete the task strip was 2.65 (SD=2.17). Speech was the most commonly endorsed service received (65%); the most common co-occurring disorder was speech delay (32%). Less than half utilized verbal communication (37%). Verbal children were over two times more likely to complete the task strip in fewer visits than non-verbal counterparts (OR 2.22; [95% CI 0.99, 5.01]; P=0.05).

Conclusions: Findings indicate the importance of assessing children with ASD for co-occurring conditions as well as communication methods before providing treatment.

Source of Funding: This research was supported by HRSA Grant Number D85HP30826. The content is solely the responsibility of the authors and does not necessarily represent the official views of the HRSA. There are no conflicts to report.