ORAL HEALTH & THE SOCIAL DETERMINANTS

DentaQuest Partnership Continuing Education Webinar
May 30, 2019
Learning Objectives

By the end of this webinar, participants will be able to:

1. Describe social determinants of health as they relate to oral health.
2. Describe how providers, community based organizations, and other local, state, and national partners can use a social determinants of health lens to address health disparities.
3. Identify potential strategies that can be implemented to address social determinants of health on the national, state, and local levels.
Presenters:

Parrish Ravelli
The DentaQuest Partnership for Oral Health Advancement

Dr. Cherry Houston
Critical Learning Systems, Inc.

Dr. Alejandra Valencia
The Oral Health Forum

Jennifer Dangremond
Native American Connections
Housekeeping

• All lines will remain muted to avoid background noise.
• A copy of the slides and a link to the recording will be shared after the webinar concludes.
• In order to receive CE credit you must fill out the webinar evaluation, which will be shared at the end of the presentation. The evaluation must be completed by **EOD Wednesday, June 5** to receive CE credit.

The DentaQuest Partnership is an ADA CERP Recognized Provider. This presentation has been planned and implemented in accordance with the standards of the ADA CERP.
Q&A Logistics

After the presentations we hope to have some time for Q&A.

Two ways to engage:

- Use the raise hand feature and we will unmute you.
- Type your question in the chat box.
Audience Poll

Is your organization engaging in any strategies that address the social determinants of health?

• Yes, definitely
• Somewhat, but I know we could be doing more
• Not yet, and I’m anxious to get started
Impact of Different Factors on Risk of Premature Death

- Health Care: 10%
- Genetics: 30%
- Social and Environmental Factors: 20%
- Individual Behavior: 40%

Definition:

The social determinants of health are the conditions in which people are born, grow, live, work and age that shape health.

- Kaiser Family Foundation
Definition (cont):

“…it is the understanding that when available, access to resources and technical assistance is often socially determined.”

Social Determinants of the Health of Urban Populations: Methodologic Considerations (NCBI)

Structural barriers impact access to oral health care and impact access to health.
# Social Determinants of Health

<table>
<thead>
<tr>
<th>Economic Stability</th>
<th>Neighborhood and Physical Environment</th>
<th>Education</th>
<th>Food</th>
<th>Community and Social Context</th>
<th>Health Care System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Housing</td>
<td>Literacy</td>
<td>Hunger</td>
<td>Social integration</td>
<td>Health coverage</td>
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<tr>
<td>Income</td>
<td>Transportation</td>
<td>Language</td>
<td>Access to healthy options</td>
<td>Support systems</td>
<td>Provider availability</td>
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<tr>
<td>Expenses</td>
<td>Safety</td>
<td>Early childhood education</td>
<td></td>
<td>Community engagement</td>
<td>Provider linguistic and cultural competency</td>
</tr>
<tr>
<td>Debt</td>
<td>Parks</td>
<td>Vocational training</td>
<td></td>
<td>Discrimination</td>
<td>Quality of care</td>
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<tr>
<td>Medical bills</td>
<td>Playgrounds</td>
<td>Higher education</td>
<td></td>
<td>Stress</td>
<td></td>
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<tr>
<td>Support</td>
<td>Walkability</td>
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<td></td>
<td>Zip code / geography</td>
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</tbody>
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## Health Outcomes
- Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations
What can SDOH “look” like?

Source: U.S. Census Bureau, 2009-2013 American Community Survey, BRA Research Division Analysis Sample: Boston resident civilian labor force participants, ages 16+, not currently enrolled in school “Other” includes Native Americans, 2 or more races, and self-reported other.
What can SDOH “look” like?

In 2017, in Massachusetts, more than 180,000 children lived in poverty

60% of Massachusetts’s children in poverty were living in a household that spends more than 1/3 of its income on housing costs

Leaving little left over for other essentials like...

Healthy Food
Transportation
Medical Care
What can SDOH “look” like?
Social Determinants & Oral Health

Social Determinants of Oral Health
(structural & systemic barriers to oral health and oral health care)

Overall Health & Well-Being
(Poor health outcomes)

Oral Health as a Social Determinant
(poor oral health outcomes)
Addressing the Social Determinants

Figure 3
Strategies Medicaid MCOs Use to Connect Members to Social Services

Share of Plans Responding that Used Any of the Following Strategies to Connect Members to Social Services:

- 93% Link members to social services
- 91% Assess social needs
- 81% Maintain social services database
- 67% Use community health workers
- 66% Use interdisciplinary care teams
- 52% Offer application assistance or counseling referrals
- 20% Assist justice-involved with community integration

NOTES: Plans were asked: “In the Past 12 months, has your Medicaid MCO used any of the following strategies to connect members with social services?” “Other” responses (4% of plans) not shown.
Addressing the Social Determinants

• Providers are starting to screen for SDOH (PRAPARE, etc.)

• States are using Medicaid waivers to pay for food, housing, and employment services

• Oral Health Progress and Equity Network (OPEN)
National Perspective on SDOH
Importance of SDOH Data and
Overview of the Oral Health Needs Index

Presenter:
Cherry Houston, PhD, MPH, RN
Critical Learning Systems Inc.

Building Partnerships/Collaborations for Health, Education & Technology
Healthy People 2020

5 Key Areas of SDOH:

Economic Stability
Education
Social and Community Context
Health and Health Care
Neighborhood and Built Environment

Each of these five determinant areas reflects a number of key issues that make up the underlying factors in the arena of SDOH.....

Economic Stability
➢ Employment
➢ Food Insecurity
➢ Housing Instability
➢ Poverty

Education
➢ Early Childhood Education and Development
➢ Enrollment in Higher Education
➢ High School Graduation
➢ Language and Literacy

Social and Community Context
➢ Civic Participation
➢ Discrimination
➢ Incarceration
➢ Social Cohesion

Health and Health Care
➢ Access to Health Care
➢ Access to Primary Care
➢ Health Literacy

Neighborhood and Built Environment
➢ Access to Foods that Support Healthy Eating Patterns
➢ Crime and Violence
➢ Environmental Conditions
➢ Quality of Housing
Oral Health is essential to overall health and well-being. SDOH Data Collection

**Housing Data**

**Housing is Health!**

- Homelessness exacerbates health conditions leading to frequent ER use
- I.E. Cook County - Nearly 50% of ER frequent users are homeless
- When points of service are not aligned appropriately, cost are higher
- When people turn up in the emergency department, it’s often very late in an episode.
- Longer length of hospital-stay when admitted
- Higher readmission rates

**Opioids and Homelessness Data**

Other factors play into health equity for data collection:

- Access to healthy foods,
- Access to quality healthcare,
- Jobs, community support and social determinants of health, among others.

The opioid and homelessness epidemics are complex challenges many communities are facing, and often overlap with the same populations and feed off each other, amplifying each underlying problem.
The effective use of data can lead to a better understanding of health outcomes, both for individual patients as well as populations. Data tells powerful stories. It is an essential tool for evaluating the success of disease management.

**Socio-Economic-Status Data**

- Lack of access to preventive resources leads to greater rates of oral diseases, adding substantial economic & social costs.
- In general, people with lower levels of education and income, and people from specific racial/ethnic groups, have higher rates of disease.
- This is further complicated by lack of available data and effective *visualization methods to understand and address the needs from a systems-thinking perspective*.

**Diabetes Data**

- Oral diseases are related to selected risk factors and plausible associations between oral and systemic diseases.
- Diabetes is a risk factor for:
  - Periodontal disease occurrence and progression.
  - Other chronic diseases
  - Other oral diseases such as periodontal disease and vascular disease
  - Chronic alcoholism, as a common risk factor for oral cancer and alcoholic cirrhosis.
Oral Health Needs Index

What:
The Oral Health Needs Index (OHNI) is designed to be an easy to access, place-based analytic tool with resources that link environmental and social determinants of health, health behaviors, and healthcare access to oral health outcomes.

Why:
The guiding principle of the OHNI is that unmet oral health is not only an important dental public health issue but also a social justice issue. Populations with unmet oral health needs also face unmet needs across the spectrum of social determinants of health. By creating an interactive mapping tool, the OHNI tool will help community stakeholders, funders, advocates, and OH2020 network members to identify and describe interconnected linkages and build community based efforts to address these disparities.

How:
OHNI uses GIS mapping tools to identify and visualize these interconnections across different geographic levels. The following images are quick snapshots of the OHNI Home page, Partner page, Maps page, and Resource page. Please visit [http://oralhealthindex.org/](http://oralhealthindex.org/) to access the full website and explore how you can use the mapping technology to overlay oral health indicators over social determinants of health at the state and community level.
Community Mapping is a tool that uses Geographic Information Systems (GIS). OHNI was created to provide concerned persons with easy access to maps which can help to:

- Generate maps to tell a story about what is happening in our communities
- Visualize health disparities experienced by racial/ethnic minority groups and other medically underserved populations
- Better understand the relationships between environmental exposures and health disparities
- Provide access to maps, data and tools which can be used to promote community-level interventions
## Maps

### Interactive Maps

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic/Demographic</td>
</tr>
<tr>
<td>Clinical Care</td>
</tr>
<tr>
<td>Behaviors and Risk Factors</td>
</tr>
<tr>
<td>Physical Environment</td>
</tr>
<tr>
<td>Alabama State Dental Resource Directory</td>
</tr>
<tr>
<td>Florida Emergency Room Visit (Dental)</td>
</tr>
<tr>
<td>Georgia State Dental Resource Directory</td>
</tr>
<tr>
<td>Kentucky State Dental Resource Directory</td>
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<tr>
<td>Mississippi State Dental Resource Directory</td>
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<tr>
<td>North Carolina State Dental Resource Directory</td>
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<tr>
<td>South Carolina State Dental Resource Directory</td>
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<tr>
<td>Tennessee State Dental Resource Directory</td>
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</tbody>
</table>

*Data Sources for Maps*

For equitable oral health outcomes to be possible, a data-driven, evidence-based ecosystem for oral health care policies and programs is essential. The OHNI contributes to this ecosystem by creating and disseminating an easy-to-access, oral health focused, outline Geographic Information System (GIS) based tool that allows users to turn complex data sets into maps and other easy-to-use visualizations. Maps provide visualization of health disparities experienced by underserved communities and allow for a better understanding of ways to combat these disparities.
The following maps represent:

- Data for Socio-Economic Demographics, Clinical Care, Behaviors & Physical Environment demographics
- Florida Clinical Care Data
- Linguistic Isolation data at the local level (MA)
- Proportion of population over 65 (MA)
The Oral Health Needs Index is designed to be an easy to access, place-based analytic tool with resources that link environmental and social determinants of health, health behaviors, and healthcare access to oral health outcomes.

OHNI is a partnership between Texas Health Institute, Critical Learning Systems, Inc., and National Community Mapping Institute at Meharry Medical College.
Massachusetts Dentist Directory
Oral Health Needs Index

Map and List view

Map settings:
- Density map settings
  - Select all
  - Dentist (10,004)

Layers:
- Proportion of Single Parent Households (Tract)
- Proportion of Housing with No Vehicle Available (Tract)
- Proportion of Population that is Unemployed (Tract)
- Proportion of Population Under 18 (Tract)
- Proportion of Population That Speaks English Poorly (Tract)
- Proportion of Population in Poverty (Tract)
- Proportion of Population over 65 (Tract)
- Proportion of Non-White Population (Tract)
- Proportion of Mobile

Menu:
- Map
- Satellite

Density Map:
- Search within the map range
- Gradient 1
- Gradient 2
- Radius range: 100 / 100
- Opacity range: 50 / 100

Apply
Clear Filters

Name: BARTEL, PETER
Address: 106 BRIGGS ST, TAUNTON, MA 02780
More...
Community Mapping for Health Equity Overview

Welcome to the communitymappingforhealthequity.org website. This website is maintained by the National Community Mapping Institute (NCMI): a unit of the Health Disparities Research Center of Excellence (HDRCOE) at Meharry Medical College. Community Mapping is a tool that uses Geographic Information Systems (GIS) to generate maps to tell a story about what is happening in our communities. The communitymappingforhealthequity.org website was created to provide concerned persons with easy access to maps which can help:

- visualize health disparities experienced by racial/ethnic minority groups and other medically underserved populations
- better understand the relationships between environmental exposures and health disparities
- provide access to maps, data and tools which can be used to promote community-level interventions

The National Community Mapping Institute (NCMI) is housed within the Health Disparities Research Center of Excellence at Meharry. The goal of the NCMI is to promote the use of community mapping, data visualization, and citizen science to address health disparities. As part of the HDRCOE at Meharry, we seek to provide community partners with the tools to better understand the relationship between environmental risk factors, spatial and temporal aspects of exposure, and risk for poor health outcomes and population-based disparities. Mapping is an integral part of the research toolkit we use at the HDRCOE to engage communities in the discussion of the causes and solutions to health disparities. On this site, we will provide downloadable maps of health disparities in the United States for easy use by community partners, including a “Map of the Day.” We hope these maps are useful to you!

NCMI Projects
In closing,

- Geography is helping organizations and communities everywhere better understand and improve human health.
- From examining environments to mapping resident data, GIS technology is being used to face today’s changing world and advance health and human services across the country.

http://oralhealthindex.org
Leading Chicago Children to Oral Health Improvement

Alejandra Valencia  DDS, MPH, MS
Director, Oral Health Forum
Community-centered initiative leading systems change in Chicago to improve access to equitable oral health services for ALL area residents through:

✓ collaboration
✓ research
✓ advocacy
✓ innovative project design and implementation
Public-Private Collaboration

- Chicago Public Schools (CPS)
  - 3rd largest school district in the nation
  - Serving approximately 360,000 students in 644 schools
  - Economically Disadvantaged Students 77%
  - Latinos 47%, African American/Black 37%, White 10%

- Chicago Department of Public Health (CDPH)
  - School-Based Oral Health Program (SBOH)
    - Largest SBOH program in the nation
    - Serving an average of 100,000 children per year
Identified Problem

- Schools in specific Chicago zip codes with the highest concentration of children with urgent dental needs (5+ cavities, pain or infection)
- Initially 2 zip codes – 39 schools
- Expanded to 4 zip codes – 78 schools
Intervention

Healthy Oral Health Cycle

1. Oral Health Education
   Every year, CHF Oral Health (OH) Educators visit CPS classrooms to provide OH education and send written information and screening consent forms home to parents/caregivers (~24,000 students)

2. Screening & Prevention
   All CPS students with a signed consent form receive OH services (fluoride, dental cleaning, sealants, screening) at school and are given an OH score:
   1. Good oral health
   2. 1-3 diseases, not urgent
   3. Urgent & severe conditions

3. Case Management Pilot
   For all students with an OH score of 2 or 3, a case manager will:
   - Identify & address families’ needs for additional information & resources
   - Help families overcome barriers to accessing needed OH treatment
   - Work with community dental providers to ensure that children receive timely treatment (~5,000 students)

4. Inform Parents/Caregivers
   Parents/caregivers receive a letter confirming the OH screening and informing them of the results.
Environmental Scan of Community Resources

- Community based organizations
  - Building partnerships
- Identify community needs
- Social services
- Community dental clinics
- Private dental offices
  - Availability to take Medicaid patients
Care Coordination

- Trained care coordinators:
  - Motivational Interviewing
  - Trauma-Informed Care
  - Harm Reduction
  - Cultural Competency

- Building trust

- Becoming a source for community residents

- Identification of emerging issues
  - Data and stories
Determinants of Health Affecting Our Communities

- Housing instability
- Community violence
- Immigration status (family stress)
- Provider availability
- Language barriers
Anti-immigrant policies are hurting children’s oral health

May 4, 2018
By the CDHP team

This piece was coauthored by Dr. Alejandra Valencia and Alberto A. González.

Dr. Alejandra Valencia is Director of the Oral Health Forum, a program that works to create more equitable solutions to improve access to quality oral health services for ALL Chicago residents. Alberto A. González is a Senior State Advocacy Manager at Community Catalyst, a national consumer health advocacy organization elevating the voice of consumers in health care decisions.

We should all be able to care for our children’s oral health regardless of our immigration status. But today, U.S. immigration policies are blocking many immigrant families from getting their children needed dental care. This is the reality facing Jazmin, a 26-year-old mom of four living on the south side of Chicago. Coming from Mexico with her parents when she was 11 years old (as undocumented immigrants),
Intervention Impact

- Formal evaluation
  - University of Illinois at Chicago Research Team
- Preliminary data shows a 12% decreased in number of children with urgent needs
Ramirez Family

- Juan and Pedro received oral health education in the classroom
- The parent was contacted after the SBOH program visit
  - Both children needed follow-up care
  - The mother’s work schedule limited her ability to take children to the dentist
- Both children received full treatment at the School Dental Van event
- Ms. Ramirez received Spanish oral health education at “Parent Breakfast”
  - By offering Spanish presentations, the use of terms the audience can understand was incredibly beneficial to grasping and retaining the concepts presumed. She expressed how thankful she was for the services provided to her family by OHF.
- Both children remain healthy

*Names changed to protect confidentiality*
Health Equity Approach

Equality doesn’t mean Equity
Thanks!

Alejandra Valencia

Avalencia@heartlandalliance.org

Cell: 773.491.2632
Native American Connections

Jennifer Dangremond
Grants Manager
How NAC approaches our work...

What comprises a healthy community?

Where and when can we advocate for improvement across the array of elements?

Are we working from a whole person approach or are we working within silos, maybe those that are created by our funding?

Have we included community members in the planning?

Who else is doing SDOH work; can we partner?

Source: www.buildhealthyplaces.org
Mission: “Improving the lives of Native American people through culturally appropriate behavioral health, affordable housing, and community development services” since 1972
Supporting homeless individuals, working families and people in recovery.
Also supporting elders and youth.
Phoenix Indian School Visitor Center
Active in advocacy and civic engagement to support SDOH including improved oral health policy

<table>
<thead>
<tr>
<th>Year</th>
<th>Initiative</th>
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<tbody>
<tr>
<td>2018</td>
<td>GOTV Campaign – community based</td>
</tr>
<tr>
<td>2018</td>
<td>Dental Therapy</td>
</tr>
<tr>
<td>2019</td>
<td>Dental benefit for pregnant women</td>
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<tr>
<td></td>
<td>Nonprofit property tax assessment</td>
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<tr>
<td></td>
<td>Funding homeless youth &amp; families</td>
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<tr>
<td></td>
<td>Increase Housing Trust Fund</td>
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<tr>
<td></td>
<td>Establish NA Health Education Center</td>
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<td></td>
<td>Increase FMAP for tribal adult dental</td>
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<td></td>
<td>Protect KidsCare</td>
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<tr>
<td>2020</td>
<td>U S Census - #NativeCount</td>
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<td>Foster Active Citizens through Get Out the Vote Campaign, Request to Speak and Restoration of Rights</td>
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Diana Yazzie Devine (NAC President/CEO, Oral Health Team, and Maricopa County Recorder Representative)
Administrative Advocacy

• Changing Medicaid policy to include payment for children of parents in residential treatment; support family health

• Implementation of Dental Therapy; tribal emphasis to improve oral health and support “grow your own”

• Tax assessment for nonprofit housing providers; low income rents can’t support market rate assessments. Income is returned to program/future housing development.
Support community driven efforts – establishment of committee to study Missing & Murdered Indigenous Women #MMIW
Thank you!

Jennifer Dangremond
Native American Connections
j.dangremond@nativeconnections.org
602-254-3247
In closing

- This work requires having a broad lens
- Data and intersectionality make for complex, but important stories
- Having a community voice is critical to success
Additional Resources:

A Community Framework for Addressing Social Determinants of Oral Health for Low-Income Populations
Center for Health Care Strategies, 2017

Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity
Henry J. Kaiser Family Foundation, 2018

Social Determinants of Equity & Social Determinants of Health
CDC/DHHS, Dr. Camara Jones

How to Apply a Health Equity and Social Justice Lens: Accountability Guidance for the Oral Health 2020 Network
Socious: www.oralhealth.network
Thank you!

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Q&A/DISCUSSION
Webinar Evaluation

https://www.surveymonkey.com/r/May30DQPWebinar

*Must complete by EOD Wednesday, June 5 in order to receive CE credit*
Next Webinar

Oral Health & Value
Presenter: Dr. Sean Boynes, Executive Director of Person-Centered Care
Thursday, June 27 1-2 p.m. ET
Click here to register
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