ORAL HEALTH AND DIABETES IN PATIENTS EXPERIENCING HOMELESSNESS

National Network for Oral Health Access
National Health Care for the Homeless Council
November 27, 2018
OBJECTIVES

• Describe the relationship between periodontal disease and diabetes

• Identify barriers experienced by patients experiencing homelessness to access health care services.

• Learn from health centers about their work in treating patients who experience homelessness for oral health and diabetes care.
Population we serve

Table 1. Percent Homeless Served by HCH Grantees Compared to All Grantees

<table>
<thead>
<tr>
<th>Patient Characteristics</th>
<th>All Grantees</th>
<th>HCH Grantees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patients Served</td>
<td>25,860,296</td>
<td>934,174</td>
</tr>
<tr>
<td>Total Homeless Served</td>
<td>1,262,961 (4.9%)</td>
<td>886,576 (94.9%)</td>
</tr>
</tbody>
</table>

Housing Type

- Shelter: 254,906 (28.8%)
- Doubling Up: 253,949 (28.6%)
- Transitional: 108,283 (12.2%)
- Street: 76,782 (8.7%)
- Other: 121,398 (13.7%)
- Unknown: 71,258 (8%)

Federal Poverty Level: HCH Grantees (295)

- 100 and below 85%: 9%
- 101-150: 9%
- 151-200: 3%
- Above 200: 3%

Payer Mix: HCH Grantees

- Total Medicaid: 51%
- Medicare: 8%
- Private: 5%
- Uninsured: 36%

Steady Increase in Patients seen with Diabetes 2012-2017

Total Pts Seen with DM Diagnoses (330h)

Avg = nearly 4 visits per pt
Frequency of Visits by Dental Service (Health Care for the Homeless)
Oral Health Impact: Quality of Life

- Physical: Pain & bleeding gums, tooth loss, abscesses, infections
- Functional Restrictions: Chewing, talking
- Social: Job/employment opportunity
- Emotional: social discomfort, isolation
High Prevalence of Periodontal Disease

- Sensitive Teeth: 50.0%
- Painful Chewing: 30.0%
- Sore or Bleeding Gums: 20.0%
- Loose Teeth: 10.0%

PEH (14-28) in Seattle, WA with PD indicators
Factors Impacting Oral Health Outcomes

- Aging
- Medical Comorbidities
- Systemic Barriers to Care
- Individual Barriers
- Health Behavior

Oral Health Outcomes

Barriers to Maintain Oral Hygiene

- Limited access to clean water
- No place to brush regularly
- Do not always have toothbrush
- Lack of time to brush

Poor Access to Care ➔ Poor Outcomes

- Healthcare system barriers
- Missed opportunities for early detection
- Lack of direct dental services in most HCH programs\textsuperscript{11}
- Lack of insurance and inability to afford care\textsuperscript{10,12}
- Limited Medicare coverage service requirements for adults and limited providers under coverage\textsuperscript{10}
Novel examples from the Field

• “Our facility operates on a unique premise: clients are required to perform community service rather than offer monetary co-pay for services that are provided. This system gives clients an opportunity to express their gratitude by ‘paying it forward’ into the community.” – Brent Crane, Executive Director, Food & Care Coalition, Provo, Utah

Novel examples from the Field

- All clients, regardless of insurance status, are offered free dental care with no copays, including clients who need dentures. NYU Lutheran has five dental clinics and one of the largest dental residency training programs in the country. All HCH clients are referred to one site, where designated contact staff members are familiar with Community Medicine and the needs of homeless clients. - NYU Lutheran Department of Community Medicine

Focus points to consider

1. Educate patients about programs that provide dental coverage
2. Develop local resources by identifying dentists who will accept your patients
3. Prevention! Don’t let your patients ignore their dental problem until it becomes an emergency
Sources


Sources


Periodontal Disease Prevalence for PEH

- NHANES 2009-2014 data on periodontal disease in US adults
  - 60.4% of adults under <100% FPL experienced periodontal disease
  - Prevalence of periodontal disease increases with increased poverty levels
  - Over 59% with diabetes has periodontal disease
What’s the Evidence?

• Healthy People 2020 recognizes the impact of oral health to general health

• 2000 Surgeon General’s Report: Oral Health in America: “The control of existing oral infections is clearly of intrinsic importance and a necessary precaution to prevent systemic complications.”

• 2003 US Health and Human Services National Call to Action to Promote Oral Health discusses the burden of oral diseases on social, emotional, and physical health.
Inflammatory Response

- Biofilm
  - LPS
  - FMLP
- Localized Inflammation
- Production of inflammatory mediators
  - IL-8
  - PGE-2
  - MMP
  - TNF-α
  - IL-1
- Initiation of connective tissue breakdown
- Systemic exposure to inflammatory burden
- Attachment loss
- Systemic inflammation

Inflammatory signal is amplified

What We Know...

• Association between diabetes and periodontal disease
• Persons with diabetes have higher prevalence of periodontal disease, more severe disease
• Periodontitis can adversely affect glycemic control in diabetics
• Periodontal treatment had short-term effect on lowering A1c (baseline A1c 7-9)
• Health Services studies show cost savings
Association is NOT Causation!

- Studies suggest association between chronic diseases and periodontal disease

- Diseases, including periodontal disease is multi-factorial

- By addressing risk factors for one chronic disease, may likely reduce effects of another
Oral Manifestations of Diabetes

- Periodontal disease
- Xerostomia
- Dental caries
- Tooth loss
- Oral Candidiasis
- Oral Lichen Planus
- Burning mouth syndrome
- Alterations in taste
Accessing Patients with Diabetes

- Expanding dental access through expansion and/or contracting
- Academic partnerships with dental hygiene programs

- Commitment by health center administration and board to prioritize populations for dental care
- QI metrics for % patients with diabetes that receive dental care
HRSA Integration of Oral Health and Primary Care Practice (IOHPCP)


Core Clinical Competency Domains

1. Risk assessment → Ask

2. Oral health evaluation → Look

3. Preventive interventions → Do

4. Communication & education → Talk

5. Interprofessional collaborative practice → Refer
Referral: Interprofessional Collaboration

• Health Center dental services onsite or through contracting

• Challenges
  • State Medicaid programs may not cover adult dental care or may not cover periodontal treatment
  • Patients with diabetes may not qualify for state Medicaid benefits
  • Capacity of health center dental programs is 26% of primary care capacity
Resources


Oral Health and Diabetes for Patients Experiencing Homelessness

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Acknowledgments

This project is supported by Grant 5 NU58DP001009 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the presenters and do not necessarily represent the official views of CDC.

With contribution from Colorado Community Health Network and Colorado Department of Public Health and Environment.
DIABETES ORAL HEALTH INTEGRATION PROJECT
April 2017-present
Patients presenting for Comprehensive Oral Exam, Periodic Oral Exam, or Periodontal Evaluation are seated and Health History is reviewed.

If patient has been previously diagnosed with diabetes, they are asked what their last A1c was and when it was taken. If it has been over three months they are referred to their primary care suite using the trackable referral workflow. If they have a PC provider at some other location, a letter is generated to give to the patient for the PC provider.

Point of Care A1c or blood glucose test is administered. If either is over our pre set limit the patient is referred to medical, sometimes immediately.
Dental to Medical Workflow
• Verbal Risk assessment is provided
• If score indicates need for POC A1c test, it is administered and score documented. If over 5.7, trackable referral process is instituted through Electronic Dental/Health Record using the Azara template “Health Promotions Plan”.
• If patient receives services at a different location, a letter is generated through the EHR, given to patient and HPP is sent for Navigator follow up.

Patient with no previous diagnosis of Diabetes or pre Diabetes
Digital Diabetes Risk Assessment Questionnaire

Are you at risk for type 2 diabetes?

1. How old are you? .................................................. 2
   - Less than 40 years (3 points)
   - 40-49 year (1 point)
   - 50-59 years (2 points)
   - 60 years or older (3 points)

2. Are you a man or a woman? .......................................... 0
   - Man
   - Woman

3. If you are a woman, have you ever been diagnosed with gestational diabetes?.. 1
   - Yes
   - No

4. Do you have a mother, father, sister or brother with diabetes? ................................. 1
   - Yes
   - No

5. Have you ever been diagnosed with high blood pressure? .................................. 1
   - Yes
   - No

6. Are you physically active? ........................................................................ 1
   - Yes
   - No

7. What is your weight category? ................................................................. 2

A1c
- Patient agrees to do A1c screening
- A1c Score: 6.50
- Patient declined A1c screening

Data collection and reporting

- Ability to create and modify reports
- Monthly data collection
- Refining metrics
- Data:
  - Diabetic risk assessment questionnaire
  - Point-of-care A1c tests administered
  - Point-of-care A1c test results
  - Medical to dental referrals
  - Dental to medical referrals

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires Given</td>
<td>544</td>
</tr>
<tr>
<td>POC A1c Administered</td>
<td>114</td>
</tr>
<tr>
<td>A1c &lt; 5.7</td>
<td>93</td>
</tr>
<tr>
<td>A1c 5.7</td>
<td>21</td>
</tr>
</tbody>
</table>
Oral Health Patient Navigator

- Follow up on Diabetes referrals to Medical or outside sources.
- Provides direct transportation or taxi voucher or bus pass to appointment.
- Assists patients in getting diabetes education.
- Brings down the barriers caused by social determinants of health.
Colorado Context

- Same day billing for medical, dental, and behavioral health - FQHCs can bill three encounters on one day
- Registered dental hygienists are billable providers and have an extensive scope of practice
- Adult Medicaid dental benefit - $1,000 annual cap
- Diabetes point-of-care HbA1c testing in the dental clinic is reimbursable by Medicaid (D0411)
Albuquerque Health Care for the Homeless

Oral Health and Diabetes Webinar
Kendra Saiz, Dental Assistant
Anita Córdova, Chief Advancement Officer
AHCH is a freestanding Health Care for the Homeless, providing integrated primary medical and dental, behavioral health and social services through extensive outreach and at its central services campus.

Albuquerque Health Care for the Homeless, Inc.
Leading with and Anchored by Our Vision & Mission

**Mission:** Provide caring and comprehensive health and integrated supportive services, linking people experiencing homelessness to individual and collective solutions

and

Be a leader in implementing innovative service models and a catalyst for solutions to homelessness

and

Uphold a commitment to diversity and equity

**Vision:** To live in a world that is just and without homelessness.
AHCH Hallmarks

- Outreach, two-pronged
- Comprehensiveness
- Integration
- Access
- Person-centered care
- No wrong door
- Harm reduction

Albuquerque Health Care for the Homeless, Inc.
Integrated Oral Health Services

Albuquerque Health Care for the Homeless, Inc.
Integrated Traditional + Non-Traditional Services

Low-Demand Entry Thresholds

Outreach takes services to the field

Resource Center links to additional services

Housing and engagement specialists

ArtStreet

Extensive collaboration

Albuquerque Health Care for the Homeless, Inc.
It’s a condition that occurs when the body can't use glucose normally. Which then also affects many organs of the human body.
Periodontal disease is bacteria caused from plaque that builds up between gums and teeth. When left untreated, bacteria continues to grow & causes gums to become inflamed. Which then leads to other dental complications.
The Link Between Periodontal Disease and Diabetes

- Diabetic Control
- Blood Vessel Change
- Bacteria
- Smoking
- Thrush
- Dry Mouth

Albuquerque Health Care for the Homeless, Inc.
Integrated Oral Health & Diabetes Measures

• 40% of patients with diabetes who had a medical or dental visit will have a dental exam within 12 months
• 35% of all of AHCH’s clients will be seen in the dental program.
• 50% of the chosen high risk population will develop self-management goals related to oral health.
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COMING SOON!

Oral Health and Diabetes for Patients Experiencing Homelessness
Fact Sheet
January 2019

• Resources for patients and providers
• Diabetes and periodontal disease statistics
• Medical and dental integration resources

National Network for Oral Health Access
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This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $500,000 under grant number U30SC29051 with 0% percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $1,625,741 under grant number U30CS09746 with 0% percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.