The Health Literacy Environment in Community-Based Dental Clinics: Barriers or Facilitators to Health Outcomes

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Colleagues

• Dental Directors & Managers of the 26 clinics
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• Sarah D. Radice
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• Min Qi Wang
• Maryam Qayumi & Chad Dammling (now 2nd year dental students)
Health Literacy is inextricably linked to improving oral health... especially among low income groups.
Take Away Message

• Efforts to improve quality, reduce costs and reduce oral health disparities cannot succeed without simultaneous improvements in the health literacy of the public, health care providers and policy makers.
Why is Oral Health Literacy Important?

- All too often
Oral Health is not considered an integral part of health
Yet......

• Oral diseases are a neglected epidemic
A Low Level of Oral Health Literacy is Associated with:

- Low level of knowledge about oral health
- Fewer dental visits
- Increased severity of dental caries
- Higher rates of failed appointments
- Lower oral-health-related quality of life

Health Literacy Scans of Community-Based Dental Clinics

Based on work by:

• Rudd and Anderson: *The Health Literacy Environment of Hospitals and Health Centers*

• The Agency for Health Care Research and Quality: *Health Literacy Universal Precautions Toolkit.*
Overall Purpose

• To determine the ‘user friendliness’ of the clinics.
  – Accessibility, signage, facility navigation, educational materials and patient forms

• Conducted a feasibility study using health literacy environmental scans (HLES) in Maryland in 2012.
  – 26/32 community-based dental clinics participated.
  – Participation was completely voluntary on the part of the dental directors.
Methods

• Developed instruments for data collection
• Interviewed directors
• Assessed technology including use of EHR
• Assessed print materials
  – educational materials and forms used
• Conducted patient interviews
• Conducted mail survey of dentists and dental hygienists regarding their use of communication techniques.
This HLES is part of a state-wide model of our oral health literacy assessment that focuses on prevention and early detection of dental caries [tooth decay].
Oral Health Literacy Environmental Scan

Pre-Visit Assessment

**Website**
- Clinic & Services Information
- Navigation
- Layout
- Plain Language

**Phone**
- Answered by Person
- Callback Received

**Dental Director Interview**
- Hours of Operation
- Eligibility Criteria
- Services Provided
- Interpretation Services
- Electronic Health Records
- Patient Demographics (Age, Insurance, Income, Race/ethnicity)
- Transportation
- Evaluate Clinic Services
- Outreach Services

On-Site Assessment

**Building Exterior**
- Exterior Signage
- Parking
- Walk to Clinic from Parking Lot

**Building Interior**
- Lobby
  - Security
  - Signage for Dental Clinic
- Dental Reception
  - Signage
  - Reception Staff Assistance
  - Video Equipment
- Walk-through lobby, hallway & operatories
  - Note Educational Materials on Walls
  - Get Copy of Educational Materials

Post-Site Assessment

**Print Materials**
- Pamphlets
  - SAM
  - SMOG
- Forms (Health History, Consent)
  - SMOG
  - Re-Write in Plain Language

**Patient Interviews**
- Analyze Data

**Provider Survey**
- Administer Mail Survey
- Collect Responses
- Analyze Data

**Reports**
- Synthesize Findings into Report for Dental Director
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Results

• Considerable variation among clinic facilities, operations & educational materials
• Less variation in types of insurance, no show rates & methods of communicating with patients
• DDS’s more likely than DH to have taken a communications skills course
Results

• Technology assessment included website, phone system and use of EHR and educational DVDs/video.

• 18 of the 26 clinics use EHR.
  – But only 3 systems are integrated with medical records.
  – Only 6 sites included oral health education on their website
Results

• Printed forms [consent, health history, post-op instructions] were assessed using SMOG readability formula to determine readability.

• Collectively, the forms were rated between 9th and 16th grade reading level.

• Forms tended to use complex dental and legal terminology instead of common words.
Limitations
• We did not record communications between provider/patients or office staff/patients.
• Community-based clinics only;
• Convenience sample.
Conclusions

• This study confirmed the feasibility of conducting a HLES in community-based dental clinics.
• Could be used in private practices/clinics and dental/dental hygiene schools.
• Provides guidance for extending the Rudd and AHRQ guidelines into the dental environment.
Thank you!

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