HFS Subcommittee on Quality

A Brief Overview on Illinois Oral Health Disease Burden & Utilization
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Foundational Concepts for better oral health for all ages

- Disease causative organisms are spread through kissing, sharing contaminated utensils such as a spoon or a glass.
- To decrease transmission, causative organism needs to be controlled/eliminated through prevention and treatment modalities.
- Good habits and practices that limit causative bacterial load need to be sustained life-long.
- Limiting inflammation in oral tissues decreases potential systemic impact.
Disease Burden

Dental caries and periodontal disease are common oral infections yet, are almost completely preventable

- 2011-2012 National Health and Nutrition Examination Survey report that 27% of adults 20 to 64 have untreated dental caries.
- 2012 Centers for Disease Control and Prevention report that 47.2% of adults aged 30 and over have active periodontal disease and
- 70% of people 65 and older have untreated periodontal disease
Role of Inflammation and Systemic Disease

Inflammatory cascade and the potential systemic spread of pro-inflammatory mediators such as fatty acids, interleukin 1, and TNFα are being studied to explain the observed link between oral disease and a wide range of systemic diseases.

There is strong evidence for a causal link between periodontal disease and diabetes and emerging evidence for:

- Obesity
- Coronary artery disease
- Metabolic syndrome
- Oral health after menopause
- Helicobacter Pylori
- Adverse pregnancy outcomes

Oral Health Surveillance System

National Oral Health Surveillance System (NOHSS)
Joint effort between CDC, Association of State and Territorial Dental Directors (ASTDD) & Council of State and Territorial Epidemiologists (CSTE)
- monitor the burden of oral disease
- measure progress toward meeting HP 2010 objectives
- monitor status of community water fluoridation on both a state and national level.

Illinois Oral Health Surveillance System (IOHSS)
- Feed data into NOHSS
- Emergency Department Use, 2010-2015 - limited data presented here
- Oral Health Workforce
- Craniofacial Anomaly
- Safety Net Dental Clinics
- Other Secondary Data
The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit provides comprehensive and preventive health care services for children under age 21 who are enrolled in Medicaid. EPSDT is key to ensuring that children and adolescents receive appropriate preventive, dental, mental health, and developmental, and specialty services.

- **Early**: Assessing and identifying problems early
- **Periodic**: Checking children's health at periodic, age-appropriate intervals
- **Screening**: Providing physical, mental, developmental, dental, hearing, vision, and other screening tests to detect potential problems
- **Diagnostic**: Performing diagnostic tests to follow up when a risk is identified, and
- **Treatment**: Control, correct or reduce health problems found.
The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based program that gathers information on risk factors among Illinois adults 18 years of age and older through monthly telephone surveys. Established in 1984 as a collaboration between the U.S. Centers for Disease Control and Prevention (CDC) and state health departments, the BRFSS has grown to be the primary source of information on behaviors and conditions related to the leading causes of death for adults in the general population.

http://www.idph.state.il.us/brfss/statedata.asp?selTopic=oralhealth&area=il&yr=2014&form=strata&show=frac
I know it was important to care for my teeth and gums during my pregnancy.

A dental or other health care worker talked to me about how to care for my teeth and gums.

I had my teeth cleaned by a dentist or dental hygienist.

I had insurance to cover dental care during my pregnancy.

I needed to see a dentist for a problem.

I went to a dentist or dental clinic about a problem.
Use of Emergency Departments Associated with Delayed/Untreated Disease

- Illinois Department of Public Health Division of Patient Safety and Quality provided Emergency Department (ED) discharge summary data for ICD9 and ICD10 for non-traumatic oral health concern
- Data analyses were conducted on visits where the dental issue was one or more of the first three diagnoses
Overall rates of ED visits for oral health reasons are increasing over the six year period. They have increased by 17% between 2010 and 2015.

Source: Illinois Department of Public Health, Hospital Discharge Dataset, 2010-2015; Analysis by IDPH Office of Health Promotion
Age-Adjusted Rate of Oral Health ED Visits, 2010-2015

1. Larger increases in ED rates for adults and older adults compared to youth (5% increase). Young adults (18-24) declined by 8.8%.
   a. 25-34 age group: 15.9%
   b. 35-49 age group: 21%
   c. 50-64 age group: 61%
   d. 65+ age group: 101.2%

2. Adult age groups: 25-34 and 35-49 have the highest rates of ED visits.

3. Rates doubled for adults over 65, even though they have lower rates overall.

Source: Illinois Department of Public Health, Hospital Discharge Dataset, 2010-2015; Analysis by IDPH Office of Health Promotion
2013 saw an increase in ED visits among Medicaid and decline among self-pay. Medicare visits also increased. Recall 7/2012-6/2014 SMART Act limitations for dental care were in effect; ACA expansion was initiated in January of 2014.

Source: Illinois Department of Public Health, Hospital Discharge Dataset, 2010-2015; Analysis by IDPH Office of Health Promotion
What data are missing?

To better inform oral health program goals: is health status improved, timely & quality care delivered in an appropriate setting that is cost effective? A better understanding of the below is needed:

Children
• Annual Dental Visit
• Children who received at least one fluoride treatment
• Children (6-9 and 10-14) who receive at least one dental sealant

Adults
• General adult access/utilization of any dental service in a dental setting (not EDs) including that of special populations such as diabetics
• Preventive and periodontal access/utilization during pregnancy
• Number of ED visits that had a follow-up visit with a dentist within 30 days.

Satisfaction
If you or your child sought dental care, did you receive services when you needed them?