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Better Teeth, Better Health: Identifying Challenges with Dental Care in Lewiston, ME

Mary B. Ledoux

University of Vermont College of Medicine

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BETTER TEETH, BETTER HEALTH:

IDENTIFYING CHALLENGES WITH DENTAL CARE IN LEWISTON, ME

Mary Ledoux, University of Vermont College of Medicine, MSIII
Family Medicine Rotation
November 2015

Project Mentors:

Dr. Bethany Picker, MD

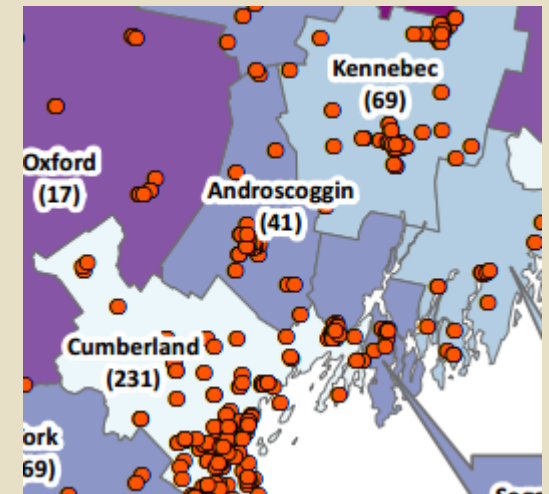
Medical Director at CMMC Family Medicine Residency

Kathy Gregory

Manager of Patient Services and Community Programs at Community Dental

Problem Identification and Description of Need

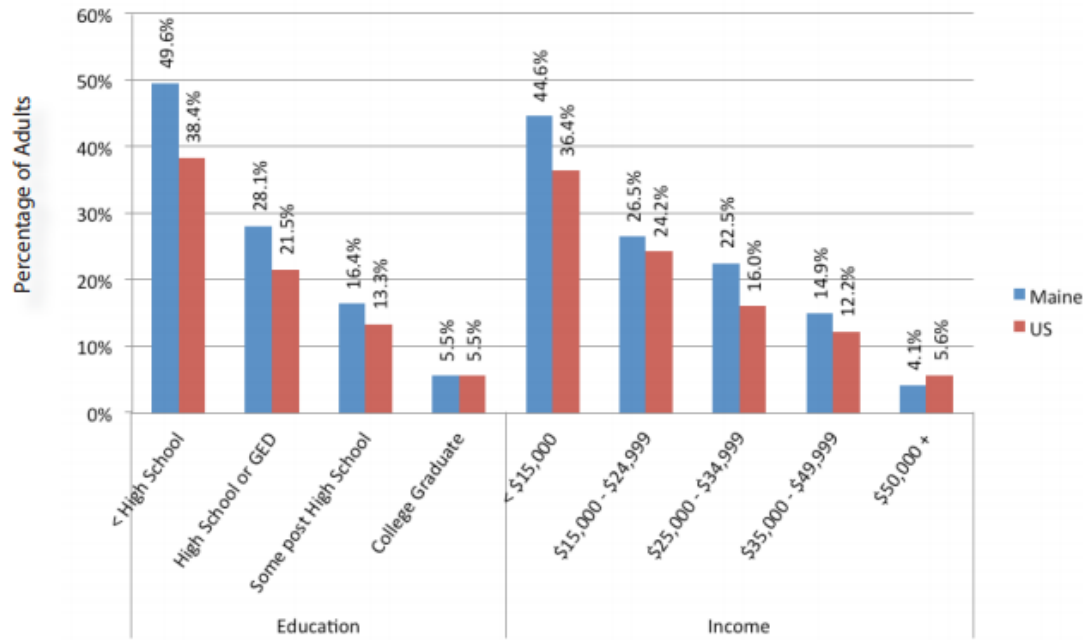
- Maine has statistically worse oral health outcomes compared to the US average, which is even more pronounced in low income populations.
- This is especially true for ages 65+, and Androscoggin County has the oldest population in the state.
- A 2011 Report conducted by CMMC identified oral health as one of the health needs of utmost importance to the Lewiston community. Furthermore, the report found that Lewiston has a higher rate of “has not seen the dentist in 2 years” compared to the state average. (27% vs. 24%)
- Dental pain is one of the most frequently cited reasons for emergency room visits in the state of Maine.
- In 2007, The Maine Center for Disease Control and Prevention generated data regarding dental care for all sixteen counties in the state. Androscoggin county was found to have an average of 1 dentist per 2,178-2,923 people.



Maine Center for Disease Control and Prevention. Androscoggin County has 41 active dentists. This map represents number of active dentists to population density.

Problem Identification and Description of Need

Figure 6. Adults 65 Years and Older Who Had Lost All Their Permanent Teeth by Selected Demographic Characteristics, Maine 2010



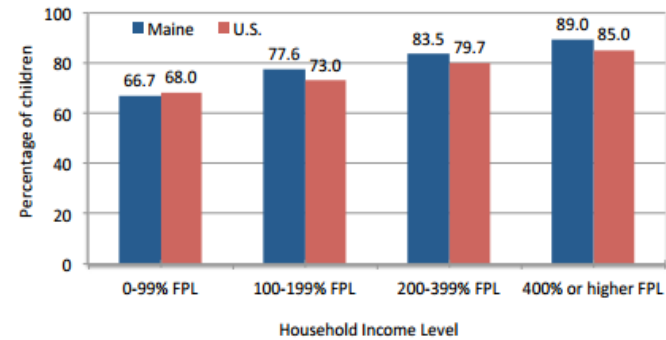
Source: 2010 Maine Behavioral Risk Factor Surveillance System

Figure 6. Maine has a higher proportion of seniors with loss of permanent teeth compared to US average. Androscoggin county has oldest population in the state.

Figure 7. Maine has higher incidence of oral cavity and pharyngeal cancer than the United States. This holds true for mortality rates, as well. Both diseases are prevented and treated with regular dentist visits.

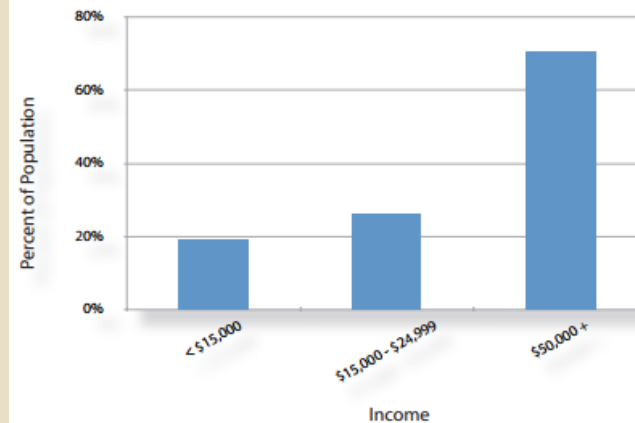
Figure 16. CMMC Family Residency Clinic serves a population that primarily lives below the federal poverty line. Most patients do not have dental insurance, which is consistent with data generated by Maine Behavioral Risk Factor Surveillance System

Figure 11. The Percentage of Children, aged 1-17 years, Who Had at Least One Preventive Dental Care Visit During the Past Year, Maine and United States 2011/12



Data Source: 2011/12 National Survey of Children's Health (NSCH).

Figure 16. Percent of Adults with Dental Insurance by Income, Maine 2008



Source: 2008 Maine Behavioral Risk Factor Surveillance System

What is the Public Health Cost?

- Oral health care expenditures in Maine generated by a 2013 report by Maine Center for Disease Control and Prevention:
 - Based on 2009 health expenditure data from the Centers for Medicare and Medicaid Services analyzed by the Kaiser Family Foundation, 3.8% of Maine's health expenditures, or \$431 million, were for dental services.
 - In 2011, approximately half (48.6%) of dental expenditures in the U.S. was by private insurance, 41.6% was out-of-pocket, and 6.7% was by Medicaid. (Maine spending was found to be similar to national spending.)
 - The average cost of services per dental client was \$357.
- Avoidable Emergency Department visits:
 - Outpatient databases show that in Maine during 2007, there were 32,969 ED visits due to preventable dental conditions. (Maine Center for Disease Control and Prevention)



Community Perspectives

- “Community Dental is committed to providing comprehensive and affordable oral health care services to the people of Lewiston and Maine. We welcome patients of all ages and recommend children have a dental exam every year, beginning at age one. We accept all dental insurances, including Mainecare, and have an income based sliding fee for patients without insurance...Basic oral care is the most important thing for all patients and periodontal disease is still the number one reason for tooth loss in adults in Maine.”

-Kathy Gregory, Community Dental Services of Maine

- “The CMMC family medicine residency clinic serves a largely underserved population. Our visits are about 85% Medicaid/Medicare, roughly 10% uninsured, and the remainder with typical insurance. Many of our patients have significant comorbidities and struggle with mental health and substance abuse issues.”

-Dr. Bethany Picker, Medical Director of CMMC Family Medicine Residency

Intervention and Methodology

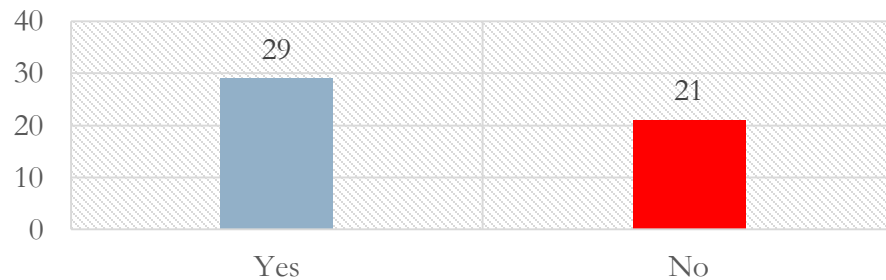
- A 10 question survey was generated with use of:
 - a) Healthy People 2020 initiatives
 - b) Identified oral health barriers of patients using the CMMC Family Medicine Clinic per Resident and Attending input. (What would be of utmost use to the clinic for future oral health interventions)
 - c) Information provided by Community Dental of Lewiston
 - d) Questions not addressed on the Maine Center for Disease Control and Prevention's 2011 Oral Health in Maine project.
- Surveys were distributed over two days at the Central Maine Medical Center Family Medicine Clinic. Surveys were handed out to patients checking in for their appointments and then collected at the end of the visit.
- Data was collected and analyzed via Microsoft Excel. Results were provided to both Community Dental Lewiston, to help direct their care to best serve Lewiston patients, and to CMMC. CMMC hopes to use the data to be able to provide patients with more direct and structured oral health recommendations and offer resources to aid in identifying affordable dental care options.



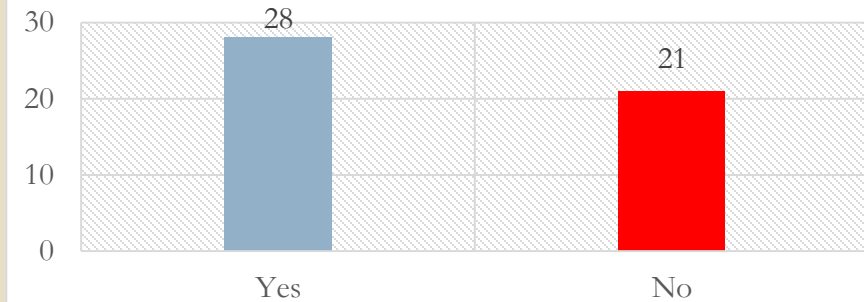
Results

- 51 surveys (n=51) were completed with a 100% completion rate.
- Question 2: Have you seen a dentist for your current oral health problem? Was thrown out due to unclear directions in question stem. “If applicable” did not preface the question.

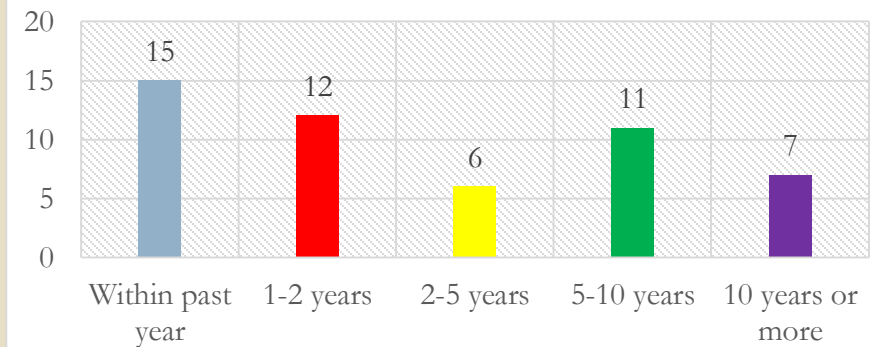
Do you know what to do in the event of a dental emergency?



Do you currently have problem with your teeth, mouth, or gums?

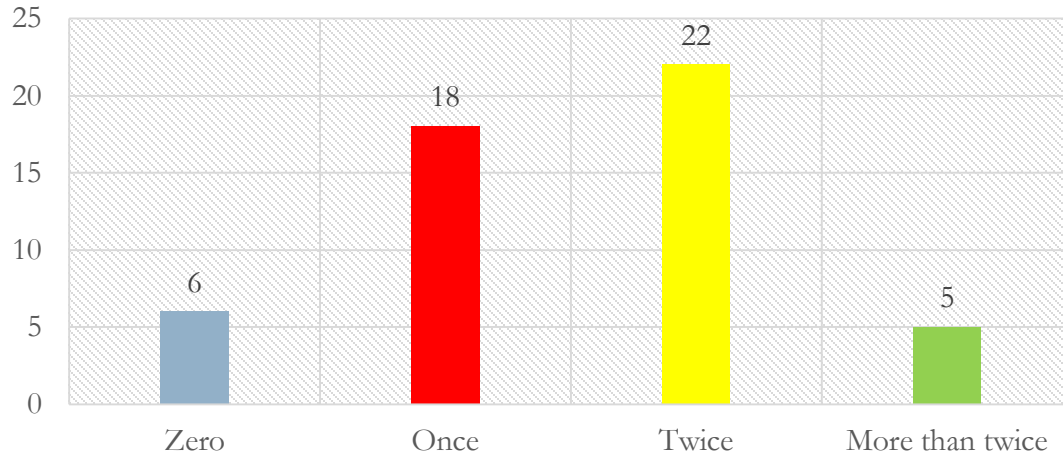


When was the last time you saw a dentist?

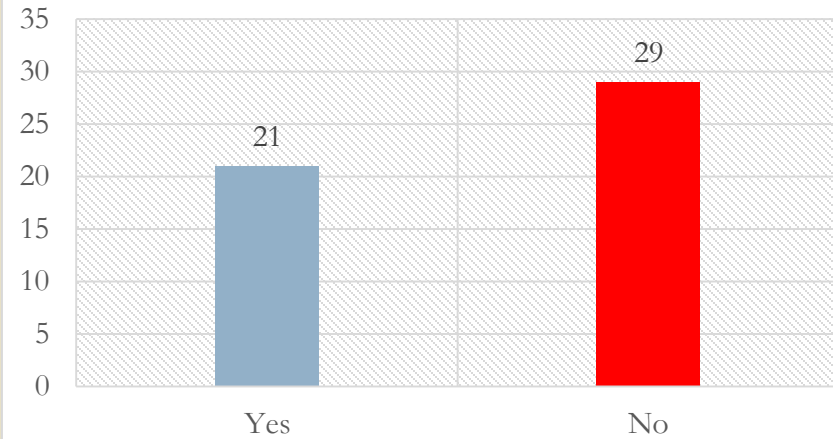


Results (Cont.)

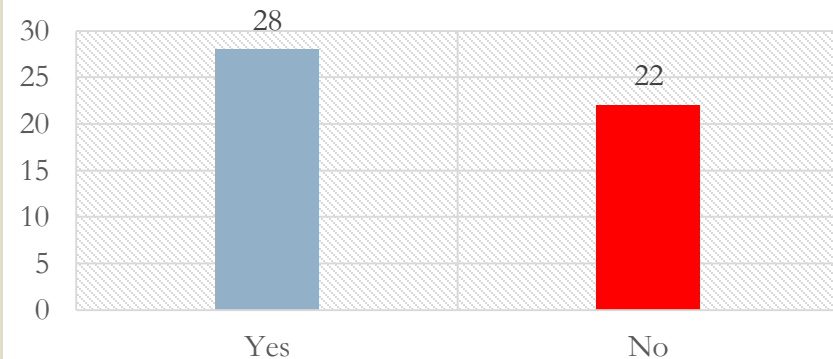
How many times a day do you brush your teeth?



Do you floss daily?



Do you regularly use mouthwash?



The **AMERICAN DENTAL ASSOCIATION**® (ADA) recommends:

In addition, the ADA recognizes the benefits of:

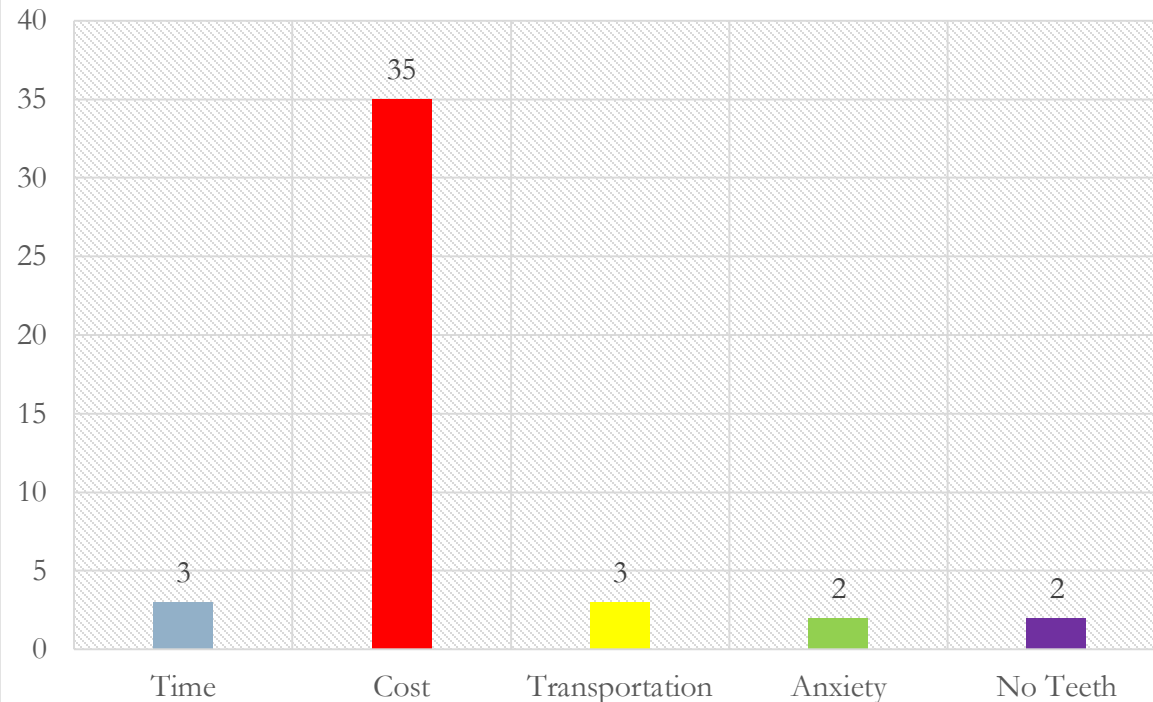


The ADA says "The sequence in which you brush, floss, and rinse makes no difference, as long as you do a thorough job and use quality products."

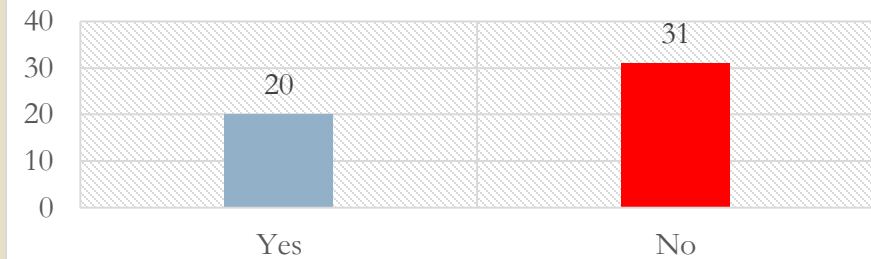
www.ada.org

Results (Cont.)

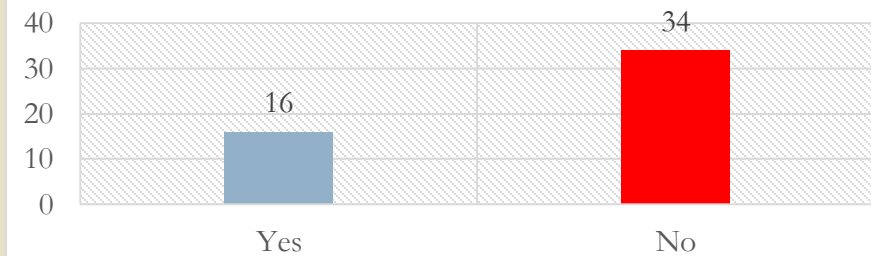
What prevents you from seeking dental care?



Do you have individuals within your household who currently have dental...



Are you aware of programs in your community that provide affordable dental...



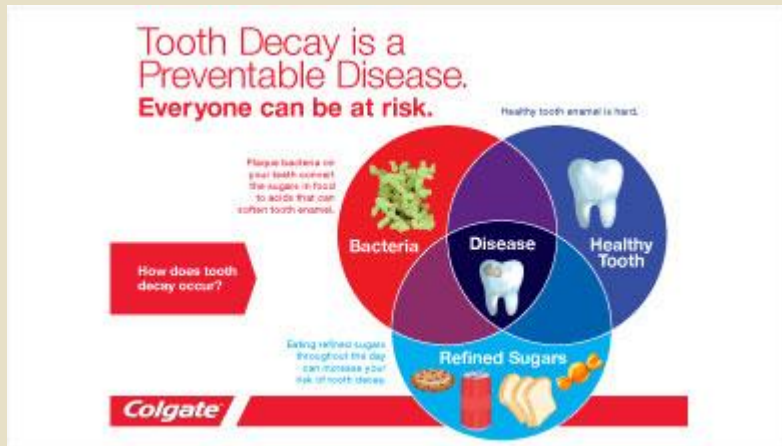
Evaluation

- Effectiveness:
 - 80% of patients given survey willingly completed and turned it in at end of visit. Many patients expressed the importance of the survey and the dire need for more affordable dental health care.
 - Survey results reiterated the need for more public education on affordable dental health options, but also, the lack of knowledge about daily dental care practices.
 - More than half of participants were experiencing dental problems. As anticipated, cost is a major barrier to care and over a third hadn't seen a dentist in over five years.
- Limitations:
 - Small subset of population: both of the clientele that uses the clinic, but also, responses not representative of the entire city of Lewiston.
 - Survey could have been strengthened by including a "free text" section; encouraging personal recommendations and concerns empowers patients to have their own voice and feel heard by their healthcare providers.
 - Confounding factors affecting survey validity include embarrassment and shame about oral health problems, time limitations during primary care health appointment, and education level of patients.

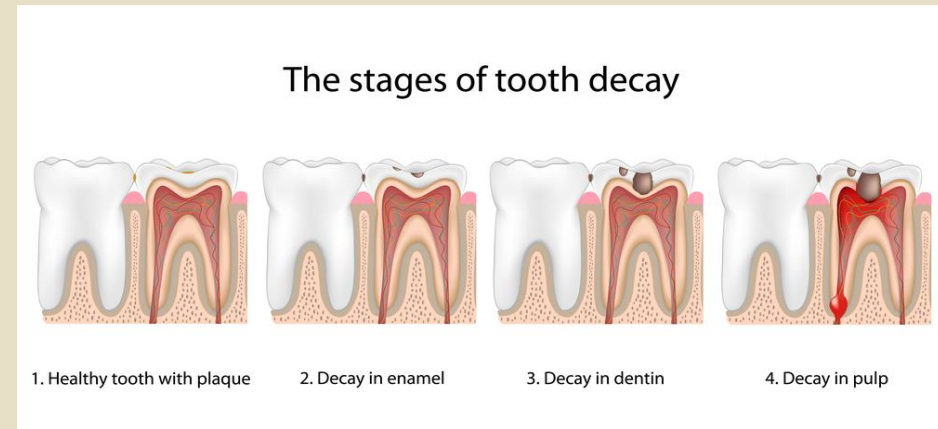


Recommendations

- Distribute surveys to more patients, creating larger sample size and stronger data. In the future, these results (if similar) could be used to spearhead projects and/or grants aimed at providing more affordable and comprehensive oral care to the Lewiston community.
- Based on results, CMMC Family Practice patients would benefit from:
 - a) Education about daily oral health care practices and encouragement that preventative care can reduce dental emergencies and expenses.
 - b) Resources about local organizations that provide affordable health care.
 - c) Information about common dental problems and corresponding interventions, concerning signs and symptoms, and when it is appropriate to go to the emergency department.
 - d) Emphasize importance of yearly teeth cleaning for dental and overall health and wellbeing. Important to reiterate that a patient does not need to be in pain, or struggling with a oral health issue, to see their dentist annually.



www.colgatehealthadvisor.com



<http://redapplepediatricdentalteam.com/>

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 - www.ada.org
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 - <http://www.maine.gov/dhhs/mecdc/population-health/odh/documents/oral-health-in-Maine-2013.pdf>