

Kent County Oral Health Exam

An examination of the oral health of Kent County citizens and the issues that limit access to care for vulnerable children and adults.

Produced by:



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Executive Summary

Oral disease is almost entirely preventable, yet it is a common ailment that affects thousands of children and adults in Kent County every year. In 2000, the U.S. Surgeon General called oral disease a “silent epidemic.” The problem persists today, with consequences that extend far beyond pain or the loss of a tooth. Children miss more than 51 million hours of school each year nationwide due to dental-related illness, most of which could be prevented. Untreated oral disease may be associated with systemic infection, adverse outcomes in pregnant women such as premature births and low birth-weight deliveries, and potentially deadly medical conditions such as diabetes and cardiovascular disease.

Basic oral health care – proper nutrition, oral hygiene, routine cleanings, dental sealants, and early treatment of cavities and gum disease – is critical to our overall health and well-being. However, thousands of children and adults in Kent County go without that basic level of care.

This report examines the burden of oral disease and the oral health care assets available in Kent County today. It also highlights disparities in access to oral health care, which significantly increase the risk of decay, disease, and tooth loss for vulnerable populations: those who are low income, racial or ethnic minorities, those with special needs, pregnant women, older adults, and refugees. This report represents the most current research available and makes comparisons to national and state data, wherever possible.

Summary of Key Findings

Burden of Oral Disease

- Tooth decay is the most common chronic childhood disease in the United States—five times more common than asthma—and is considered by many to be the largest unmet health need among the nation’s low-income children. (United State Department of Health and Human Services, 2000)
- One in four third graders in Michigan has untreated tooth decay. (Michigan Department of Community Health, 2010)
- Dental examinations of young children in Kent County’s Head Start program, a federally funded preschool program for children living in poverty, revealed that half of the children had untreated cavities and one-third had five cavities or more. (Head Start for Kent County, 2012)
- Research has shown that oral infections during pregnancy may increase the risk for pre-term or low-birth weight deliveries. A 2009 Aetna report on 29,000 women found that 6.4 percent of women receiving dental care before pregnancy or in early pregnancy had preterm deliveries, versus 11 percent for women without dental care. In a 2006 survey

of pregnant participants in Kent County's Strong Beginnings program, thirty-four percent had not seen a dentist in five or more years.

- One in five Michigan adults between the ages of 65-74 has lost all of his or her natural teeth. (MDCH, 2010)
- Untreated dental disease increases health care costs through the added burdens of patients seeking care in hospital emergency departments, patients in need of costly hospital-based operating room care, and diminished medical outcomes resulting from dental infection's impact on systemic conditions.

Access to Dental Health Care in Kent County

- Twenty-six percent of adults in Kent County have not seen the dentist in the past year, including 48 percent of those without dental insurance (Behavioral Risk Factors Survey, 2008).
- Sixty-five percent of Kent County children who have Medicaid insurance do not have a dental provider – that is 22,300 children ages 10 and younger
- Twenty-six percent of respondents in a Kent County Oral Health Coalition survey of older adults reported they currently have untreated oral health issues.
- The current supply of dentists serving low-income patients in Kent County is only 29 percent of what is needed; in the city of Grand Rapids, it is 55 percent of what is needed (Kent County Health Department, 2011).
- The emergency department is often a last resort for people who do not receive preventive oral health care. In 2011, there were 7,667 visits to emergency departments in Kent County, and 46 residents were admitted to the hospital from the emergency department for preventable disorders of the teeth and jaw – a far more costly response than routine dental care that likely could have prevented the problems (MOHC, 2013).

Oral Health Knowledge and Behaviors in Kent County

- The American Dental Association, American Academy of Pediatric Dentistry, and American Academy of Pediatrics recommend that infants have an oral health screening within six months of getting their first tooth or by their first birthday, whichever comes sooner.
- In a recent survey of Kent County parents conducted for the Coalition, only 24 percent of respondents said children should visit the dentist by age one; 40 percent replied not until age three or later.
- Replying to a recent survey for the Coalition, 49 percent of local dentists recommend a first dental visit by the first birthday. Nearly the same number said they do not recommend a visit until age two or three.
- In the Coalition's survey of older adults in Kent County, 77 percent of respondents recognize the importance of routine dental visits even if there is no oral health emergency, 95 percent say daily brushing of teeth or dentures is important, and 94 percent say the condition of their teeth is important to their overall health.

Kent County Oral Health Coalition

Grand Rapids made history in 1945 when it became the first community to add fluoride to its municipal water system to the level effective for preventing tooth decay. Nearly 70 years later, the Kent County Oral Health Coalition is continuing the tradition of addressing the significant oral health concerns in our community. The mission of the Coalition is to improve the oral health of Kent County citizens, particularly those who have limited access to care.

This is the first report produced by the Coalition; it is a needs assessment that examines the burden of oral disease and documents the current status of oral health and oral health care in Kent County. This report represents the most current research available and makes comparisons to national and state data, wherever possible. The information will provide a baseline by which to measure improvements in oral health and access to care. This report is intended to increase community understanding of the significant gaps that exist currently and the consequences of ignoring those issues. The Coalition is developing strategies to address the unmet needs and, in early 2014 will release a 3-year community plan to better prevent and treat oral disease among Kent County residents.

The information presented here comes from a number of sources, including: a review of national and state reports, Michigan Medicaid data, Kent County reports such as the Community Health Needs Assessment, interviews with local dental care providers, and three surveys initiated by the Coalition. Every effort has been made to be as inclusive and comprehensive as possible.

The Kent County Oral Health Coalition was convened in 2011 by First Steps—a non-profit organization working to strengthen and coordinate services that improve the health and school readiness of young children in Kent County. First Steps' role with the Coalition is to serve as a neutral convener that coordinates and advances the work. The Coalition is a partnership of a diverse, cross-sector group of individuals and organizations, including Area Agency on Aging of Western Michigan, Baxter Holistic Clinic, Cherry Street Health Services, Grand Rapids Community College, Family Futures, First Steps, Head Start for Kent County, Helen DeVos Children's Hospital, Health Intervention Services, Kent County Health Department, Kent County Department of Human Services, Mel Trotter Ministries, Michigan Community Dental Clinics, Spectrum Health, the West Michigan District Dental Society, and numerous other local professionals, dental health and primary care clinicians, managed care organizations, hospitals, nonprofit organizations, and businesses.

Community Demographics

Kent County is the fourth largest county in the state of Michigan, with a population of more than 608,000 people (U.S. Census Bureau, 2011). Kent County’s population increased by 35 percent between 1980 and 2010 (West Michigan Regional Planning Commission, 2011). According to the West Michigan Regional Planning Commission, “Kent County grew at a much greater rate than Michigan as a whole, which increased by 6.7 percent between 1980 and 2010” (WMRPC, 2010). Kent County’s population is projected to continue to grow to more than 730,000 people by 2030 (WMRPC, 2011).

Table 1. Demographics				
	Grand Rapids	Kent County	Michigan	United States
Population	189,815	608,453	9,883,360	313,914,040
Race	59.0% White (non Hispanic) 20.9% Black 15.6% Hispanic 1.9% Asian	75.7% White (non Hispanic) 10.3% Black 9.9% Hispanic 2.5% Asian	76.6% White (non Hispanic) 14.3% Black 4.5% Hispanic 2.5% Asian	63.4% White (non Hispanic) 13.1% Black 16.7% Hispanic 5.0% Asian
Michigan County Health Outcomes Rank		16th of 83		
Median household income	\$38,371	\$50,801	\$48,669	\$52,762
High school graduate or higher	82.7%	88.6%	88.4%	85.4%
Bachelor’s degree or higher	30.3%	30.3%	25.3%	28.2%
Residents living in poverty 2007-2011	48,403 (25.5%)	90,051 (14.8%)	1,551,687 (15.7%)	44,889,707 (14.3%)

(Michigan Oral Health Coalition, 2012; U.S. Census Bureau, 2011; WMRPC, 2011)

The “Silent Epidemic”

Oral disease was labeled a “silent epidemic” by the U.S. Surgeon General in 2000 (United States Department of Health and Human Services, 2000), and the problem persists today with severe consequences both for children and adults. The most recent National Health and Nutrition Examination Survey found that 21.5 percent of the population has untreated tooth decay (NHANES, 2008). Tooth decay – also known as ‘dental caries’ – is considered a preventable disease, but if not addressed, it can result in infection, severe pain, and an inability to perform daily activities. Moreover, evidence shows that oral health complications impact overall health and may be associated with adverse pregnancy outcomes, respiratory disease, cardiovascular disease, and diabetes (Institute of Medicine, 2011).

Significant inequalities exist in access to dental care and, consequently, oral health. Citizens who are economically disadvantaged, those with disabilities, and some racial and ethnic groups have considerably higher rates of untreated decay and lower levels of care than the general population (U.S. Senate, 2012). According to the Institute of Medicine, “Poor oral health can be attributed to a number of factors, including uneven and limited access to oral health care and dental coverage, lack of appropriate quality measures in oral health care, inadequate health literacy among the U.S. populace, and lack of attention to oral health among primary care providers” (IOM, 2011).

Total	21.5%
Ages 5-19 years	16.6%
Ages 20-64 years	23.7%
Ages 65+ years	19.0%

(NHANES 2005-2008)

Low-income Children

Oral disease is the most common chronic childhood disease—five times more common than asthma. It is considered by many to be the largest unmet health need among low-income children. Tooth decay affects more than one-fourth of U.S. children aged 2-5 years and half of those aged 12-15 years (Centers for Disease Control and Prevention, 2011). Twenty-five percent

of third graders in Michigan have untreated tooth decay, in most cases a cavity that is visible but has not been filled (Michigan Department of Community Health, 2010 and Pew Center on the State, 2010).

Over the last decade, tooth decay in preschool children has emerged as a public health issue (USDHHS, 2012), a trend seen locally at Head Start for Kent County. Head Start—a federally funded preschool program for children in poverty—partners with Cherry Street Health Services—Dental to provide basic cleanings and visual oral exams for children aged 3-5 years. Last year, half of the preschool children examined were found to have cavities, and more than one third had five or more cavities (Head Start for Kent County, 2012). The federal government requires that a dentist see those children within 90 days for follow-up care, but local Head Start representatives say they often have difficulty finding a dentist who will treat them within that time frame.

Racial and Ethnic Groups

According to the Centers for Disease Control and Prevention, blacks, Hispanics, American Indians and Alaska Natives have the poorest oral health of any racial and ethnic groups in the nation (CDC, 2009). Adults who are black or Mexican American are nearly twice as likely to experience untreated tooth decay as white adults. In 2008, an estimated 14 percent of Michigan adults had six or more teeth missing due to tooth decay or gum disease. A higher proportion of blacks had six or more missing teeth than whites (20% vs. 13%) (MDCH, 2008). There also are significant racial and ethnic disparities among children. The Pew Center on the States found that children of color have much higher rates of untreated tooth decay than white children.

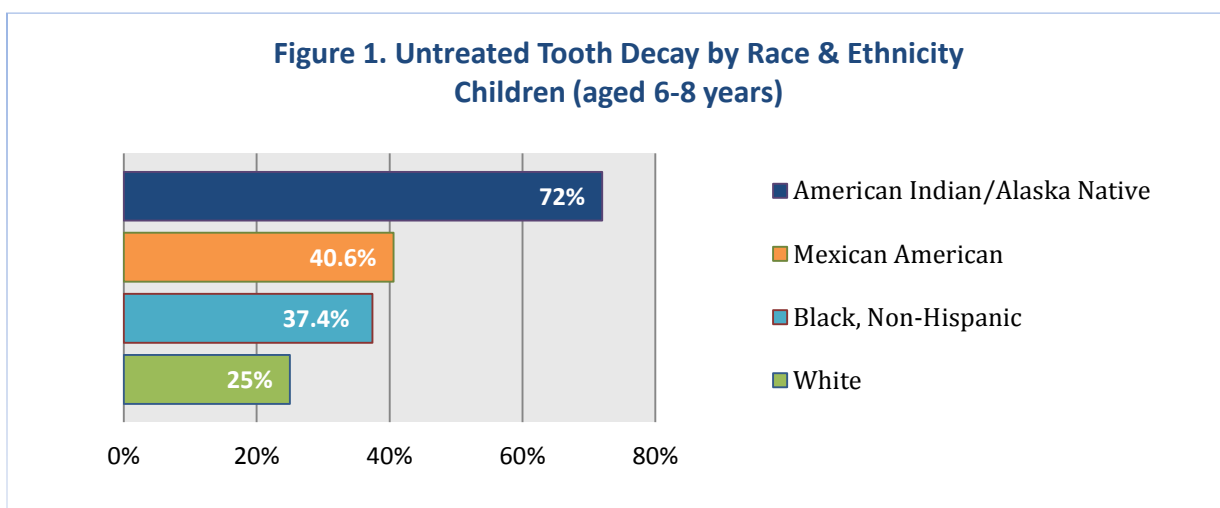


Figure 1. Percent of 6- to 8-year-olds with untreated decay in their permanent or primary teeth. (Pew Center on the States, 2012)

Locally, the Nottawaseppi Huron Band of the Potawatomi – which provides dental exams for Kent County’s federally recognized tribal members and their descendants – anecdotally reports extensive dental decay among the local American Indian population.

People with Disabilities

People with disabilities suffer from oral disease at higher rates than non-disabled people. In fact, the most prevalent unmet need for children with special health care needs is dental care (Pew Center on the States, 2012). According to Pew Center on the States, “The root of this crisis is threefold: Mental and physical impairments often prohibit individuals from caring for their mouths; disabilities and sensitivities create difficult experiences during dental visits; and families struggle to find dentists who are able to cater to patients’ special needs” (Pew Center on the States, 2012).

Significant barriers to care are reported by staff at the Lincoln Developmental Center, a school operated by the Grand Rapids Public Schools that serves 105 children and young adults who are medically fragile, cognitively impaired, and/or behaviorally challenged. Many of the school’s students are uninsured or underinsured. Additionally, many do not have handicap accessible transportation, making it difficult for those who are wheelchair bound to access oral health care. Moreover, the majority of students present with oral/tactile defensiveness which increases the difficulty of seeking routine oral health care.

Older Adults

Older adults are susceptible to poor dental health; one-fourth of all Americans aged 65 and older have lost all of their teeth (CDC, 2011). The Area Agency on Aging of West Michigan estimates that more than 1,000 seniors in Kent County are in need of affordable dental care. Senior Neighbors Client Services Director Tom Oosterbaan estimated that at least 1,000 of the 4,000 seniors served annually are in poor oral health and in need of a dental home.

A total of 206 senior citizens at four local senior centers completed a survey developed by the Kent County Oral Health Coalition. Approximately one-third of respondents said they had not visited a dentist in the last year; 26 percent say they have current untreated oral health issues.

Local dental practitioners report that many older adults appear to be staying healthier and keeping their teeth longer, compared to the previous generation of senior citizens. Dentists are treating significantly fewer patients with dentures now than they did in the 1970’s.

Refugees

Those settling in the United States with refugee status often have a difficult time accessing dental services. Many refugees never received dental care in their native country and come to the United States with significant oral health problems. In Kent County, care for refugees is primarily limited to public and private clinics, which do not have the capacity to meet the demand. Local health officials say it is particularly difficult to find care for adult refugees. Treatment often is available only for the most urgent needs, and restorative care options are typically limited.

Pregnant Women

According to a national consensus statement released in 2012 as a joint effort of the Health Resources and Services Administration (HRSA), the American Dental Association (ADA), the American Congress of Obstetricians and Gynecologists (ACOG) and the Oral Health Resource Center, regular oral health care is of particular importance during pregnancy, when both the woman's own oral health as well as the health of her unborn child can be affected (Oral Health Care During Pregnancy Expert Workgroup, 2012). Pregnant women are at a higher risk of periodontal (gum) disease due to increased hormone levels. Research has shown that oral infections during pregnancy may increase the risk for pre-term or low-birth weight deliveries. A 2009 Aetna report on 29,000 women found that 6.4 percent of women receiving dental care before pregnancy or in early pregnancy had preterm deliveries, versus 11 percent for women without dental care. In the spring of 2006, a survey was given to pregnant participants in Kent County's Strong Beginnings program. Of the 68 respondents, 61 percent did not have coverage for dental care prior to their pregnancy; although 66 percent had dental coverage during pregnancy, only 22 percent actually had a dental care provider. Thirty-four percent had not seen a dentist in five or more years.

The Access Problem

“I haven’t been in eight years, to a dentist, since I’ve had kids... I have fillings that have fallen out and stuff, but it’s just too expensive.”
(Kent County Resident, 2011)

Regular dental care includes preventive dental services, such as teeth cleanings, oral exams, and topical fluoride and sealant application, as well as early diagnosis and treatment of tooth decay and periodontal (gum) disease. Measuring access to and utilization of dental services is one way of assessing whether the oral health needs of Kent County residents are being met. Access is defined as “People who need the service know about it, know where it is, can afford it, and can get to it; it’s available at convenient times; it’s provided in a way that is sensitive to different cultures and languages; the people who need it actually use it; and there is enough capacity to meet the community need” (Great Start Collaborative, 2011).

Lack of access to dental care regularly emerges as a community health concern. It was one of the top five concerns identified by the Kent County Community Health Needs Assessment (Kent County Health Department, 2012). It also appeared as an issue to be addressed in the Community Plan for Early Childhood Services (GSC, 2011).

Access to oral health care is most limited for those who are low income, people of color, those with disabilities, and older adults. As research for this report, the Coalition surveyed parents of children in the Head Start program. One mother told the interviewer, “I have a tooth that has a temporary cap. One root broken, inflammation and bacteria around the root. I have 3 broken, very painful teeth in the back. I have been to [an emergency dental clinic] and waited for a week and a half outside with no luck. I can’t get up at 3 a.m. in the morning four times and wait in line when I still haven’t seen a doctor, so I gave up.”

“I have been to an [emergency dental clinic] and waited for a week and a half outside with no luck. I can’t get up at 3 a.m. in the morning four times and wait in line when I still haven’t seen a doctor, so I gave up.”
(Kent County Female, 2012)

In 2008, 21 percent of Kent County residents had not visited a dental provider in the past year—slightly lower than the state average of one in four (Behavioral Risk Factor Survey, 2008). The share was more than twice that among residents with less than a high school education (44%) and those with a household income of \$20,000 a year or less (45%) (BRFS, 2008). There also were significant racial disparities: 19 percent of whites had not seen a dentist, compared to 32 percent of blacks.

As a result of limited access to routine prevention, tooth decay has become a serious threat to lower income residents. It has been estimated that low-income adults are three times more likely to have at least one untreated decayed tooth than are higher income adults (BRFS, 2008).

Table 3. Proportion of adults who have had no dental visit within the past year			
	United States (%) (CDC, 2008)	Michigan (%) (MDCH, 2008)	Kent County (%) (KCHD, 2008)
Total	29.7	25.2	21
Age			
18-24	29.9	25.9	21.9
25-34	32.4	30.1	20.2
35-44	27.5	25.0	22.5
45-54	27.2	23.8	17.9
55-64	25.5	20.3	21.0
65-74	32.3 (65+)	24.9	22.7 (65+)
Gender			
Male	31.1	27.4	20.7
Female	27.1	23.2	21.4
Race/Ethnicity			
White	26.5	22.6	19.0
Black	37.9	36.7	31.8
Hispanic	29.5	34.9	22.5
Other (non-Hispanic)	38.9	26.0	21.0
Education			
Less than high school	50.8	48.0	43.8
High school graduate	35.6	32.1	24.0
Some college	29.2	24.7	22.6
College graduate	18	14.4	12.4
Income			
Less than \$20,000		46.9	44.8
\$20,000-\$34,999		34.7	30.6
\$35,000-\$49,999		24.9	16.1
\$50,000-\$74,999		19.4	11.0
\$75,000+		12.3	8.1

(Centers for Disease Control, 2008; Kent County Health Department, 2008; Michigan Department of Community Health, 2008)

The emergency department often becomes a last resort for treatment of oral health issues that could have been prevented with routine dental care. Pew Center on the States reports that there were more than 830,000 visits to the nation’s emergency departments for preventable dental conditions in 2009—a 16 percent increase since 2006 (Pew Center on the States, 2012). In Kent County, there were an estimated 7,667 visits to the emergency department for preventable dental conditions in 2011 (Healthcare Cost and Utilization Project, AHRQ, 2011). Forty-six patients in Kent County were admitted to the hospital from the emergency department in 2011 with preventable disorders of the teeth and jaw (Michigan Oral Health Coalition, 2013). (That number does not include emergency department dental patients who were admitted for trauma or accidents). The total cost for those hospital stays was \$889,594—significantly more than routine care that likely could have prevented the problems (MOHC, 2013). Once oral disease escalates to that level, options for patients often are limited, in part because most hospitals do not have dental residency training programs or other staffing with expertise specific to oral health care. A report of the U.S. Senate Subcommittee on Primary Health and Aging says “often people are faced with the difficult decision to remove their teeth because extractions are considerably cheaper than the cost of treatments to save them, regardless of the negative impacts of missing teeth” (U.S. Senate, 2012).

Table 4. Access to Dental Care			
	United States	Michigan	Kent County
Hospitalizations & Emergency Department Visits (2009)	830,000 visits to the emergency department occurred in the U.S. for preventable dental conditions in 2009, which was a 16% increase since 2006.	1,000 Michigan residents were hospitalized due to preventable dental conditions.	In 2011, there were 7,667 visits to the emergency department and 46 Kent County residents were hospitalized due to preventable dental conditions.

(U.S. Senate, 2012; MOHC, 2013)

For low-income children, lack of access to dental care increases the risk of preventable tooth decay and other oral diseases that threaten not only their oral health but also their overall health. In 2010, more than half of American children ages two and older had not been to the dentist in the past 12 months (MDCH, 2010). Michigan fared much better in that study, with all but 19 percent of children visiting the dentist within the last year (MDCH, 2010). However, there are significant disparities based on the type of insurance that children have—public or

private. Kent County’s Community Health Needs Assessment revealed that an estimated 65 percent of Medicaid-enrolled children in the county are not receiving regular dental care.

Table 5. Children Dental Health Status			
	United States (%) (MDCH, 2010)	Michigan (%)	Kent County (%)
Proportion of children (aged 2-18 years) who have had no dental visit within the past 12 months.	55	19	
Preventive dental care in the past 12 months, low-income children and adolescents, age 0-18	20		
Dental caries experience for Children ages 6	53		
Untreated caries for children ages 6-8	29		
Share of Medicaid-enrolled children getting no dental care (aged 1-18 years) (Pew, 2012)	61.9	63.2	65 (KCHD, 2011)

(MDCH, 2010, Pew Center on the States, 2011)

Young children enrolled in an early learning program are more likely to get routine oral health care than those who are not (Early Childhood Investment Corporation, 2012). In Michigan, more than 36,000 children are enrolled in Head Start programs, which require children to receive oral health screenings (ECIC, 2012). In a recent survey of Kent County Head Start parents, 87 percent reported that their child aged 0-5 years had had a dental checkup. This highlights the importance of early childhood education in promoting oral health and wellbeing.

Access to Dental Coverage/Funding

Access to oral health care is influenced heavily by whether an individual has dental insurance and what type of insurance he or she has. Twenty-six percent of adults in Kent County have not seen the dentist in the past year; that increases to 48 percent for adults without dental insurance (Behavioral Risk Factors Survey, 2008). Even for those with insurance, dental benefits often have limited coverage or require significant out-of-pocket contributions, which make care unaffordable for many low- and middle-income families.

Additional structural barriers limit access to oral health care for adults and children with public insurance. Medicaid is the largest public health insurance program in Michigan, providing access to medical care for those who are low-income, the elderly, and people with special

needs. It is administered at the state level and jointly funded by the state and federal governments. There were more than 120,000 Kent County residents enrolled in Medicaid in 2011—approximately 20 percent of the total population. Children account for more than half (53%) of the community’s Medicaid enrollees (Robert Wood Johnson Foundation, 2012).

Table 6. Medicaid/Uninsured Population			
	United States	Michigan	Kent County
Total residents enrolled in Medicaid	62,782,808 (20%)	1,976,672 (20%)	120,551 (20%)
Children (under 19 years) enrolled in Medicaid	31,391,404 (50%)	1,027,869 (52%)	63,855 (53%)
Adults (19 years and over) enrolled in Medicaid	31,391,404 (50%)	948,803 (48%)	56,696 (47%)
Residents uninsured	50,226,246 (16%)	1,284,836 (13%)	65,830 (11%)

(Kaiser Family Foundation, 2012; MOHC, 2012; RWJF, 2012)

In July 2009, Michigan Medicaid stopped providing coverage for routine dental care for adults; adult dental coverage was reinstated in October 2010. States have discretion as to whether they provide coverage for adults, while the federal government mandates that children enrolled in Michigan receive dental benefits. However, it is up to the states to set reimbursement rates for providers who treat Medicaid enrollees. In Michigan, dentists in private practice are reimbursed for about 41 percent of their usual fees, far short of the national average of 60.5 percent (Pew Center on the States, 2012; Public Sector Consultants, 2010). The national average is approximately the rate of reimbursement that is necessary for dentists to cover the cost of providing services, so Michigan dentists who treat Medicaid enrollees do so at a financial loss. Many patients with Medicaid or those who are uninsured receive dental care through a system of community health clinics; the funding mechanism for these providers differs from the fee-for-service model, and provides additional resources for serving a high needs population. However, the capacity of this safety net system still does not meet the demand for services.

Most dentists in Michigan do not accept Medicaid insurance. According to Public Sector Consultants, “In a survey of dentists in Michigan, 95 percent of respondents said they would not participate in Medicaid with a reimbursement level lower than 50 percent of the market rate” (PSC, 2012). That sentiment was supported by a survey of Kent County dentists conducted by the Kent County Oral Health Coalition; only 13 percent of those who responded said they accept patients with Medicaid. Other surveys show that the share of local dentists who participate with Medicaid is slightly higher than that. The Coalition reviewed several sources and, while the

exact numbers vary, they all point to the same conclusion: there are not enough dental providers who accept Medicaid patients to adequately meet the demand in Kent County.

At the same time, many Michigan dentists take it upon themselves to donate care for disadvantaged people, either out of a sense of professional service to the community, because they feel Medicaid funding is inadequate, a desire to avoid having to deal with the State bureaucracy surrounding Medicaid billing, or a combination of all three. According to a 2012 survey released by the Michigan Dental Association, 88 percent of the 990 dentists who were surveyed report that they donate an average of \$45,000 in care annually to uninsured and underinsured adults and children. An additional \$17,000 in care is donated by staff members at their practices.

To improve access to dental care for families in underserved areas, the state of Michigan introduced Healthy Kids Dental in 2000. The program, which is administered by Delta Dental, provides dentists with higher reimbursement rates and reduced administrative burdens. Healthy Kids Dental provides benefits for approximately 350,000 Medicaid-eligible children in 75 of Michigan's 83 counties. However, that covers only one-third of children on Medicaid statewide because the state's most populous counties are not included: Kent, as well as Wayne, Oakland, and Macomb in the Detroit metro area (ECIC, 2012; MOHC, 2012; PSC, 2010). Governor Rick Snyder has called for the expansion of Healthy Kids Dental to all Michigan counties, including Kent, by 2016. It remains to be seen if the funding for that will be appropriated by the Michigan Legislature. Children have significantly improved access to oral health care if they are covered by Healthy Kids Dental rather than the state's traditional Medicaid program (ECIC, 2012). The 2012 survey conducted on behalf of the Michigan Dental Association found that 81 percent of dentists participate in Healthy Kids Dental – a much higher share than participate in Medicaid.

For senior citizens, the basic Medicare plan provided to all persons age 65 and older does not include dental coverage. Rather, older adults have the option to purchase additional services, including dental, in a package known as Medicare Part C or the Medicare Advantage Plan.

There will be some changes in access to dental coverage as the Affordable Care Act (ACA) is implemented fully by 2014, although exactly how that will play out is unknown at this point. The American Dental Association has expressed concern that the ACA “falls short in lowering dental care costs, increasing access to care, and improving health outcomes.” Only pediatric dental care – not dental coverage for adults – is required at the federal level. The ADA estimates that 8.7 million children are expected to gain some form of dental benefits because of the ACA, which would reduce the number of uninsured children nationwide by 55 percent. However, the ADA predicts that the number of adults who lack dental benefits will drop only five percent. States do have the option to extend dental benefits to adults with Medicaid, even though it is not federally mandated. However, as of the publication date of this report, Michigan's Medicaid

expansion plan does not specify whether the adult dental benefit will be extended to the newly eligible Medicaid population.

Access to Dental Providers

It is difficult to ascertain data on the number of new dental providers needed to meet the current oral health needs of the population, in part because there is no research-based ideal for a provider to patient ratio. The reasons for not visiting a dentist cannot simply be boiled down to too few dentists. In addition to a Medicaid safety net that is not adequately funded to meet the need, financially disadvantaged people in Kent County face a number of barriers to care, from lack of education about the importance of oral care to lack of transportation to get to a dentist’s office. The fact that this is a complex, multi-factorial issue is underscored by the fact that the American Dental Association indicates that the adult utilization rate among those with dental insurance is 50 to 60 percent, and has been declining since 2000. (American Dental Association, 2012).

However, the sources that are available say that 9,500 new dentists are needed nationally (Health Resources and Services Administration, 2012). Locally, available research suggests the supply of dentists serving low-income patients countywide is only 29 percent of what is needed; in the city of Grand Rapids, it meets 55 percent of the current demand (Community Health Needs Assessment, 2011). In fact, Kent County is considered a Dental Health Professional Shortage Area (HPSA), which means that the entire population or subpopulations (such as those with low incomes or those enrolled in Medicaid) do not have sufficient access to dental care (Michigan Dental Association, 2011).

A recent survey conducted by Cherry Street Health Services found that Kent County needs an additional 77 dentists to serve low-income residents (Cherry Street Health Services, 2012). Cherry Street surveys primary care dentists throughout the county once every 3 years to identify the number of hours of effort in Full Time Employment (FTE) that was devoted to those with Medicaid or for free or discounted care. If one FTE dentist is able to see 2,000 patients per year, Kent County has close to 155,000 low income residents who are unable to seek care.

Table 7. Kent County Underserved Dental Population				
Area	Total population (2010)	Total low income population (<200% Federal Poverty Level, 2010)	Total DDS (in FTEs) available to low-income uninsured	DDS needed for low income (target population per 2,000 FTEs)
Tyrone/Sparta/Alpine/Algoma	29,895	8,575	0.00	4.3

Cedar/Rockford/Oakfield/Spencer	41,937	10,350	0.00	5.2
Plainfield/Cannon	40,171	7,668	0.46	3.4
Forrest Hill/Cascade/Caledonia/Kentwood to Gaines	136,896	32,411	0.34	15.9
Vergennes/Lowell/ Bowne	17,005	3,788	0.00	1.9
Alpine/Comstock/Walker	50,874	14,112	0.25	6.8
Wyoming/Byron	90,827	35,059	0.25	17.3
GR area 1 – East Side	115,354	40,679	7.01	13.3
GR downtown & South	36,881	30,417	10.48	4.7
GR – West Side	39,166	16,823	3.72	4.7
Totals	599,006	199,881	22.51	77.5

(Cherry Street Health Services, 2012)

Sixty-five percent of Kent County children ages 10 and younger who have Medicaid insurance—22,300 children—do not have a dental provider. A member of a 2011 Kent County community focus group said: “Finding a dentist who accepts Michigan Medicaid for kids is very difficult and [the] wait is very long to get into [the] office. Insurance can be very overwhelming.” (CHNA, 2011).

The Kent County Department of Human Services is required by law to ensure that a child receives an oral health check-up within 90 days of being taken into the foster care system. According to program administrators, however, this requirement is met only 50 percent of the time due to Medicaid administrative burdens and the limited number of dental care providers accepting Medicaid. Moreover, they say that after foster care children have had an initial dental appointment, it often is difficult to access follow-up care.

There is a general shortage of dentists who focus on pediatric care. Only 83 of the 4,600 dentists (1.8%) in Michigan specialize in children (ECIC, 2012). In Kent County, nine of the 352 dentists (2.5%) are pediatric dentists (MOHC, 2012). Additionally, many general dentists do not serve children younger than age three. In the Kent County Oral Health Coalition’s survey of local dentists, only half of those who responded said they recommend the first dental visit by the age of one, which is the recommendation of the American Academy of Pediatric Dentistry, American Dental Association, and American Academy of Pediatrics.

Very young children with extensive dental needs, or patients with special medical conditions and/or disabilities may require hospital-based dental care; access to this care is limited in Kent County. A majority of pediatric dentists in Kent County do not have hospital operating room privileges. Oral surgeons as well as general dentists who have completed a General Practice Residency, who obtained hospital privileges and provide hospital-based services, are also limited. Patients are then referred to Muskegon, Lansing, or most often to C.S. Mott Children’s Hospital in Ann Arbor for needed dental care. Grand Rapids is one of the only metropolitan areas of its size without a hospital-based dental residency program. Hospitals often are reluctant to promote hospital-based care because of cost and other issues associated with provider services such as anesthesiology, which generally is not reimbursed by Medicaid.

Table 8. Kent County Oral Health Care	Kent County
HRSA Dental Health Professional Shortage Area	Yes
General Dentists	352
Pediatric Dentists	9
Specialty Dentists	79
Medicaid Dentists	79
Healthy Kids Dental Dentists	0
Registered Dental Hygienists	640
Registered Dental Assistants	156
Collaborative Practice/Public Act 161	2
Medicaid Dental Coverage	Fee-for-service for children and adults

(Michigan Oral Health Coalition, 2012)

Oral Health Care Settings

Safety Net Provider Programs

Kent County has several safety net provider programs, which typically are community health centers (federally and privately funded) and limited state programs that enhance primary care services for Medicaid enrollees, the underinsured, and the uninsured. Federally qualified health

centers are mandated to provide care to anyone who comes to them for services, regardless of their ability to pay. Michigan has 30 federally qualified health centers (FQHCs), with a total of 157 service delivery sites, serving as safety net providers (RWJF, 2012). One FQHC, with multiple clinics, serves Kent County along with several private clinics that also serve all clients. An additional FQHC that will focus primarily on the dental needs of developmentally disabled adults is expected to open in 2014 as a partnership between Metro Health, Saint Mary's Health Care, and Hope Network. Although safety net provider programs are a primary source of care for the publically insured and the uninsured, an access gap remains due to funding limitations (according to the ADA, federal grant funding accounts for only 22 percent of the overall operational cost of an FQHC), a shortage of providers dedicated primarily to serving the economically disadvantaged, scheduling inefficiencies, cultural barriers, and lack of transportation, among other issues.

A recent report put out by the Michigan Access to Oral Health Care Work Group entitled, *A United Voice for Oral Health*, discusses the various health care resources available to Michigan residents (PSC, 2010).

Private Practices

More than nine out of 10 licensed dentists practicing in Michigan are working in private practice. Approximately 66 percent work in a private solo practice, and 28 percent work primarily in a group practice (PSC, January 2010a). Nearly nine out of 10 (89 percent) private practice dentists in Michigan do report providing some level of unpaid care. About half (49 percent) report providing up to 20 hours of unreimbursed or unpaid care in a year (PSC, January 2010a). Another 40 percent say they provide 21 or more hours of volunteer care in a year. Nationally, it is estimated that the average dentist provides more than \$34,000 in charity or reduced fee care annually (Gehshan, November 2009).

Local Health Departments

Michigan currently has 45 local health departments that provide public health services to all 83 counties. In 2006, Michigan Community Dental Clinics (MCDC), a nonprofit management services corporation, expanded its Dental Clinics North model statewide to help local health departments create sustainable dental clinics. MCDC helps manage 22 clinics statewide on behalf of local health departments.

Schools

School-based and school-linked Child and Adolescent Health Centers, which are funded through state education and community health appropriations, operate 59 clinical health centers across the state (MDCH, May 2010). These centers provide access to health care services for many children who are uninsured or covered by Medicaid. All clinical health centers include oral health assessment and referral among the services they provide; 11 of the 59 clinical health centers offer dental services on site (MDCH, May 2010). Unfortunately, when care is not provided on site, it can be difficult to ensure that children who are referred to a dentist actually obtain the needed care.

Oral Health Care Providers

Even though the community currently does not have adequate resources to meet the oral health care needs of its citizens, there are a number of services available for vulnerable populations. The Kent County Oral Health Coalition contracted with an independent consultant to survey and conduct interviews with a sampling of safety net provider programs between November 2012 and January 2013. Some of the key information gathered in those interviews is presented in the table below. It is important to note that this is not an all-inclusive list.

Table 9. Kent County Oral Health Care Settings		
Program/ Organization	Description of Oral Health Services/Resources	Population Served
Safety Net Provider Programs		
Adult Dental Services Program	The Adult Dental Services Program has been in existence for more than 30 years, providing restorative care to low-income working adults. Patient fees are on a sliding scale basis. The program is a collaborative effort between the West Michigan District Dental Society, the West Michigan Dental Foundation, and Cherry Street Health Services. Cherry Street provides case management and administrative fees. Lab bills currently are paid by a grant received by the West Michigan Dental Foundation.	The Adult Dental Services Program provides restorative care for the working adult poor in Kent County.
Baxter Dental Clinic	Baxter is a faith-based health/dental clinic that provides preventive and restorative services with an emphasis on oral health education. Baxter’s Brush Up For Baby program focuses on perinatal dental care and education to improve the health of pregnant women and their families. The clinic is staffed by 26 volunteer dentists, and is open two days per week.	Dental care is provided for low-income families in the inner city who do not have dental insurance.
Cherry Street Health Services (CSHS)	CSHS is a federally qualified health center (FQHC). Services include restorative care by appointment and emergency walk-in care. There are 12 sites in or near Grand Rapids, with four sites that provide emergency walk-in services. Patient fees are on a sliding scale.	CSHS provides more than 80 percent of the oral health care for low income, Medicaid-eligible residents in Kent County.
Cherry Street Traveling School Dental Services	CSHS runs a school-linked dental program in 75 schools and several Head Start sites throughout Kent County. The program	The program serves the uninsured using a sliding fee scale, and children enrolled in

	provides preventive care with restorative and emergency follow-up care offered at CSHC sites and through private practice dentists.	Medicaid.
Grand Rapids Community College	Services include cleanings, x-rays, fluoride treatments, dental health instruction, and sealants for children. Students in the dental hygiene/dental assisting programs provide care under supervision of instructors.	The program offers preventive services to the general public at reduced rates.
Health Intervention Services (HIS)	HIS is a faith-based health clinic that provides restorative services (fillings, dentures, partials, root canals; no crown/bridge or cosmetics) and urgent care. HIS is 85% volunteer supported.	HIS serves the working poor (<100% FPL) who do not have insurance and do not qualify for Medicaid or Medicare.
Mel Trotter Ministries (MTM)	Mel Trotter Ministries operates a free clinic that provides dental care to those who reside at its shelters. The clinic performs mostly extractions.	The clinic serves residents of the MTM program and takes patient referrals from Heartside Clinic. Most clients are adults, but the clinic recently began serving the children of residents of its women's shelter. Most clients are homeless and do not have dental insurance.
Nottawaseppi Huron Band of the Potawatomi	The tribe operates two dental clinics: one on the Fulton Reservation in Kalamazoo County and a second that opened in Grand Rapids in February 2013. Services provided are primarily emergency treatments, such as fillings, root canals on the front teeth only, and extractions on the back teeth. Transportation is provided to NHBP tribe members only.	Dental services are limited to federally-recognized tribal members and their descendants. The clinic will accept Medicaid and Medicare and provide services on a sliding scale/reduced fee.
Private Dental Clinics (Medicaid/Uninsured)		
Destiny Dental	DA Blodgett currently uses Destiny Dental for treatment of foster children. DAB sends a list of foster children who are due for a check-up; Destiny works with the foster parent(s) to schedule.	Dental services are provided for both children and adults. Destiny Dental accepts most dental insurances as well as Medicaid.
Grand Valley Dental Care	There are two locations that serve Kent County residents, in Grand Rapids and Jenison.	Grand Valley Dental is one of the only private practices that accepts a significant number of Medicaid patients.
Regional/Statewide Dental Programs		
Michigan Community Dental	MCDC is a non-profit organization established in 2006 for the delivery of	Community dental services are provided for those who are

<p>Clinics</p>	<p>dental services for the underserved. MCDC coordinates 22 clinics in partnership with local health departments and eight regional hospitals. A new dental clinic is planned to open in 2014 in Kentwood as a partnership with the Kent County Health Department.</p>	<p>Medicaid-eligible and low-income uninsured.</p>
<p>Donated Dental Services</p>	<p>Donated Dental Services provides one-time only comprehensive, free dental care. The program does not cover routine check-ups or provide ongoing treatment. If Medicaid covers any portion of treatment, dentists are asked to exhaust those resources before utilizing DDS.</p>	<p>The program is for people who are permanently disabled or mentally ill.</p>

Power of Prevention

Building public awareness of the importance of early dental care is essential to improving health outcomes for Kent County residents. It is important that healthcare providers identify consistent, relevant messages for individuals and families about the causes of disease and decay of the teeth and gum tissue, the importance of proper nutrition, oral hygiene, use of sealant and fluoride products, and the significance of regular check-ups with a dentist. However, education alone will not fix the poor dental health outcomes and limited access to care among many disadvantaged children and adults. Broader systematic changes also are important: early preventive oral health screenings and evidence-based community based solutions, such as water fluoridation and school-centered sealant programs (U.S. Senate, 2012).

Knowledge and Behaviors

Early Childhood Prevention

Although tooth decay can be prevented, it affects more children in the United States than any other chronic infectious disease. Good dental hygiene should begin at home, with parents teaching their children about the importance of regular brushing and flossing and eating a healthy diet. Failure to do so can adversely affect children's oral health, which points to the importance of educating families about oral hygiene.

The Kent County Oral Health Coalition recently looked at the oral health knowledge, attitudes, and behaviors of parents who are participating in two early childhood programs: Head Start for Kent County and the Family Futures-Connections program. An 18-question online survey (via SurveyMonkey.com) was developed and emailed to 1,054 Family Futures-Connections program participants on December 3, 2012. Two-hundred-forty-seven families responded (23.4% response rate). A similar paper-based survey in English and Spanish was given to 1,630 Head Start parents on December 10, 2012 (Appendix A) and yielded 466 responses (28.6% response rate).

The demographics of those surveyed from the two programs were quite different: Family Futures-Connections respondents were 95% white, 82% college graduates, and 47% have a household income of more than \$75,000 per year. By contrast, the majority of Head Start parents were black (34%) or Hispanic (32%), were high school graduates (32%) or had attended some college (32%), and made less than \$20,000 per year (72%). The parents were asked to provide dental care information with respect to their youngest child (aged 0-5 years old). The

majority of Family Futures-Connections children were between the ages of 0-2 years old (73%), whereas Head Start children were between the ages of 3-5 years old (84%).

Dental Health Behaviors in Early Childhood

Regular cleaning should begin during infancy by wiping the gums daily. When children’s teeth start to appear, parents should brush them twice a day with a soft bristle, child-size toothbrush and water with a small “smear” of fluoride toothpaste. For children age two and older, parents should place one pea-sized amount of fluoride toothpaste on the toothbrush at each brushing. Young children should be supervised while brushing and taught to spit out, rather than swallow, the toothpaste. (The American Academy of Pediatric Dentistry, 2012). It is recommended that parents brush their child’s teeth after feedings and at bedtime to prevent bacteria that causes tooth decay. The Family Futures-Connections parents more frequently clean/brush a child’s gums/teeth once a day (36%), whereas the Head Start parents clean/brush twice a day (64%).

Tooth decay in baby teeth often is caused by inappropriate use of bottles and “sippy” cups, frequent snacking and poor oral hygiene (ECIC, 2012). Children should be weaned off of a baby bottle after age one. Drinking from a bottle for too long or putting an infant to bed with a bottle exposes children to early tooth decay, called baby bottle tooth decay, which is the most common cause of tooth decay for infants and toddlers (AAPD, 2012; ECIC, 2012). Sippy cups should be used only temporarily to help children transition to a cup. Parents of the Family Futures and Head Start programs more often give their child a bottle/cup whenever their child wants (50.6% and 45%, respectively) versus only at meals (41% and 39.6%, respectively).

Fruit juices, milk and formula all contain sugars that contribute to tooth decay; therefore between meals children should be limited to water (ECIC, 2012). Although parents say they most frequently give their children milk or water in a bottle/cup, 72% of Head Start parents and 34% of Connections parents report that they regularly give their child juice, while 14% of Head Start parents say their children often are given soda.

Table 11. Dental Health Behaviors			
		Family Futures	Head Start
Frequency of cleaning/brushing child’s teeth/gums	Never	15%	<1%
	2-3 times a week	15%	8%
	Once a day	36%	25%
	Twice a day	25%	64%
	Other	9%	2%
Child’s daily bottle/cup use	Only at meals	40%	41%
	Whenever they want	51%	45%
	Almost always at	9%	6%

	naps/night		
Child's typical bottle/cup contents	Juice	34%	72%
	Milk	66%	82%
	Soda	<1%	14%
	Water	72%	80%

Dental Health Knowledge of Parents

The American Academy of Pediatric Dentistry (AAPD) and the American Dental Association (ADA) recommend that infants have an oral health screening by the appearance of their first tooth or before they turn one year old to establish good preventive practices (AAPD, 2012; ECIC, 2012). The age-one dental visit is an opportunity for the dentist to look for potential problems and to teach parents of the causes and prevention of tooth decay (ECIC, 2012). A recent survey conducted by University of Michigan found that three-quarters (74%) of Michigan general dentists surveyed said that they are aware of the national recommendations for early routine dental care, yet only one out of three (36%) follow this recommendation (ECIC, 2012). Dentists say the primary reason that they don't follow the recommendation is because they do not feel comfortable seeing infants and toddlers (ECIC, 2012).

To obtain a baseline understanding of the practices of local dentists, the Kent County Oral Health Coalition emailed a survey to 507 dentists and received responses from 84 of them, a 17 percent response rate. Forty-nine percent of respondents recommend a first dental visit by the time a child turns one, while an almost equal (48%) share recommend that parents wait until age two or three. Of those who do not recommend a visit by the first birthday, 43 percent say they do not feel it is necessary, while another 19 percent do not feel comfortable treating infants. Additionally, 52 percent of those who do not recommend a visit by age one say they would not consider implementing that practice even if they had additional information or resources available to them.

Table 12. Dental Visits for Young Children		
		Response of Dentists
When recommend first visit	Birth	1%
	Between appearance of first tooth and age 1	49%
	Age 2	14%
	Age 3	33%
	Other	2%
Why don't recommend visit by age 1	Do not feel it is necessary	43%
	Not comfortable treating	19%

	infants	
	Patients/third parties will not pay for it	7%
	Other	40%
Consider implementing age 1 visit with additional support?	Yes	48%
	No	52%

A recent survey of Michigan parents concluded that fewer than 25 percent of children begin routine dental care by age one, and only 30 percent of parents know that this is the recommendation (ECIC, 2012). In Kent County, the largest share of parents in both the Head Start and Family Futures-Connections programs believes that children should have their first dental visit at age three years or older (39% and 42%, respectively). Only 29 percent of Head Start parents and 14 percent of Connections parents indicated that a child should have their first dental visit at the appearance of their first tooth, or age one.

It is important that parents know that sharing food, drinks, forks, spoons, or toothbrushes with their baby can spread germs and bacteria. The significant majority of parents surveyed recognize that bacteria and germs cause cavities (87% Family Futures and 90% Head Start), that it is not okay to clean a pacifier with your mouth (97% and 93%, respectively), and that you should not share food with your child (56% and 64%, respectively). However, many parents indicated that adults with cavities do not pass tooth decay germs to their children (41% and 39%, respectively).

Early childhood caries (tooth decay) can be prevented by performing a caries risk assessment (a visual assessment as well as a discussion with the parent(s) about oral health care behaviors), providing education about oral health care, and applying fluoride varnish as soon as the primary teeth erupt (MOHC, 2010). The overwhelming share of Family Futures and Head Start parents recognizes that fluoride helps prevent tooth decay (93% and 87%, respectively), with smaller majorities recognizing that it can be used to coat and protect the teeth of infants and children (65% and 75%).

Table 13. Dental Health Knowledge of Parents			
		Family Futures	Head Start
At what age should children have their first dental visit?	B/n appearance of first tooth and Age 1	14%	29%
	Two years	37%	29%
	Three years or older	42%	39%
Children should stop using a bottle by their first birthday	True	74%	91%
	False	16%	7%
	Don't know	9%	3%
Bacteria and germs with food on the teeth cause cavities	True	87%	90%
	False	8%	5%
	Don't know	5%	5%
Putting a child to bed with a bottle with milk or juice can cause cavities	True	92%	89%
	False	4%	8%
	Don't know	4%	3%
It's okay to clean a pacifier with our mouth	True	3%	3%
	False	97%	93%
	Don't know	<1%	4%
It's okay to put sweeteners (honey, sugar, juice) on a pacifier	True	0%	2%
	False	100%	95%
	Don't Know	0%	3%
It's okay to share food and drink with your child	True	37%	27%
	False	56%	64%
	Don't know	7%	9%
Adults can pass tooth decay germs to their children	True	38%	33%
	False	41%	39%
	Don't know	21%	28%
Fluoride helps prevent tooth decay	True	93%	84%
	False	3%	3%
	Don't know	4%	13%
Fluoride can be used to protect the teeth of infants and children	True	65%	73%
	False	19%	11%
	Don't know	4%	16%

Older Adults

Oral health prevention continues to be important throughout a person’s life, even into older adulthood. The survey of older adults conducted by the Kent County Oral Health Coalition found that most respondents are knowledgeable about the importance of routine care both at home and from a professional. Ninety-four percent say they recognize that the condition of their teeth is an important part of their overall health, and 95 percent say that it is important to brush or clean teeth and/or dentures at least once a day. A smaller majority, 77 percent recognizes that routine dental visits are important even for those without teeth or dentures. The survey results also highlight two misperceptions common among older adults. Forty-four percent say that tooth loss is a natural part of aging; additionally, 36 percent either strongly agree or agree that dental care causes pain.

Table 14. Oral Health Attitudes of Older Adults		
		Older Adults
The condition of my teeth is an important part of my overall health	Strongly agree	63%
	Agree	31%
	Disagree or strongly disagree	3%
It is important to brush or clean your teeth and/or dentures at least once a day	Strongly agree	72%
	Agree	23%
	Disagree or strongly disagree	2%
Routine dental visits are important even for those without teeth or dentures	Strongly agree	36%
	Agree	41%
	Disagree or strongly disagree	15%
Tooth loss is an expected part of getting older	Strongly agree	13%
	Agree	31%
	Disagree or strongly disagree	51%
Dental visits cause pain	Strongly agree	12%
	Agree	24%
	Disagree or strongly agree	56%

Fluoridated Water

For more than 65 years, community water fluoridation has remained the primary source of evidence-based caries prevention (MDCH, 2010). In 1945, Grand Rapids made history as it became the birthplace of community water fluoridation (MDCH, 2010). Today, nearly 90 percent of Michigan's residents are on fluoridated public water systems (MOHC, 2012). In the United States, 74 percent of the population receives fluoridated water. Every U.S. Surgeon General of the last half century had endorsed fluoridation of public water supplies as a safe and effective way to prevent tooth decay. However, there still are children in Kent County, particularly in rural areas, who have well water that is not fluoridated. In addition, many families drink bottled water, which does not have fluoride, rather than tap water. It is important that children who do not regularly drink fluoridated water receive supplemental fluoride treatments. Income or ability to receive routine dental care is not a barrier to receiving the health benefits of fluoridated water.

Community water fluoridation is "one of the most effective choices communities can make to prevent health problems while actually improving the oral health of their citizens."

Regina Benjamin, M.D.
U.S. Surgeon General, 2012

Prevention Programs

There are many dental health prevention programs in Kent County, ranging from those that serve expectant mothers to those focused on improving the oral health of older adults. Prenatally, the Maternal Infant Health Program is a statewide Medicaid-reimbursable program for pregnant women and those with newborns; it has a dental health component. Additionally, the Baxter Dental Clinic and Strong Beginnings have partnered to create Brush Up for Baby, which provides dental care and education to at-risk pregnant African-American women. In early childhood, Head Start provides dental education and connections to dental services for participating children and their families. The Department of Human Services Foster Care Program is required to ensure that children entering foster care have an oral health check-up and, if needed, follow-up services. For older adults, the Area Agency on Aging of Western Michigan works with volunteer dental professionals and students to provide exams for those who otherwise could not afford them. There are many others, as well, that provide services to those with limited access to dental care. However, most of these programs serve a limited population and do not have the resources to meet the extensive needs of the community.

Next Steps

Based on the information contained in this report, the Coalition has identified the following goals and objectives to be achieved by December 31, 2015:

- Ensure Kent County community members have access to high-quality, affordable oral health care.
 - Increase by 5 percent the proportion of adults who report having visited a dentist in the past twelve months.
 - Reduce by 10 percent the disparity between adults with less than a high school education and all adults who have reported having visited a dentist in the past twelve months.
 - Increase by 10 percent the number of publicly insured children under ten years of age who have seen a dental provider in the last 12 months.
 - Increase by 33 percent the number of providers in the community that accept Medicaid or uninsured patients who are unable to pay. (A 33 percent increase would represent fewer than 10 practitioners).
- Ensure Kent County community members possess oral health literacy and knowledge of basic oral health information and services.
 - Increase by 20 percent the share of parents of children ages 0-5 who report a positive change in the following family oral health knowledge/behaviors:
 - Increase frequency of brushing, and
 - Decrease in sugared beverages in cup/bottle, and
 - Knowledge of the fact that oral health bacteria can be passed from adults to children.
 - Increase by 10 percent the share of senior citizens who report a positive change in the following family oral health knowledge/behaviors:
 - Understanding that tooth loss is not an expected part of getting older, and
 - Understanding that dental visits should not be painful, and
 - Importance of brushing teeth/dentures twice per day.
 - Increase by 25 percent the number of general dental providers who routinely conduct one-year-old visits. (A 25 percent increase represents approximately 10 dentists).
 - Increase by 20 percent the number of pediatric primary medical care practices that score seven or above on the Pediatric Oral Health Care Practice Profile, which would indicate that the practice is engaged in promoting good oral health and refers patients for dental care and treatment.

In the coming months, we will release a comprehensive Community Plan to address the needs identified in this report, provide detailed strategies that align with the goals and objectives

above, and, ultimately, create solutions to improve the prevention and treatment of oral disease in Kent County. We recognize that achieving the changes that we seek will be a long-term process that requires a public-private partnership. However, we believe that there are solutions that can be implemented to effectively improve the oral health of our community's residents. We invite you to join us in this work. For more information, please contact us at KCOHCInfo@gmail.com.

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