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Dental Health Education Outreach in Central New York

A Capstone Project Submitted in Partial Fulfillment of the Requirements of the Renée Crown University Honors Program at Syracuse University

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Honors Capstone Project in Public F	lealth
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Abstract

Oral health is a commonly neglected area of healthcare across the world. Especially amongst underserved populations, many people do not prioritize dental health care, do not have access to dental health care, and do not realize the importance of dental health care. This project aims to educate the population on the importance of dental health care. The participants in the project include those enrolled in different parenting programs at a local non-profit organization in Central New York. Pre and post surveys were administered to evaluate an increase in knowledge on dental health.

Demographic-specific educational materials such as brochures, pamphlets, games, quizzes, activities, and classes were designed for the education sessions. Results found that there is a high percentage of people who lack dental care. Results also showed that there is little knowledge on need for dental care.

Executive Summary

This document summarizes the results of a project entitled *Dental Health Education Outreach Project*. Through a local non-profit organization in Central New York, this project has influenced almost 200 people living in Onondaga County. Attention to oral healthcare can be significantly inadequate, not just in underserved and third world countries, but right here in the United States. Though many other healthcare issues can be more life-threatening and severe, the importance of dental care is underrated and demands more attention. Former U.S Surgeon General C. Everett Koop said, "You're not healthy without good oral health" (Allukian, 2008). Through this dental outreach project, a highly underserved population in Central New York was provided with oral health education.

Information on oral health was presented in participants' homes, at monthly socialization meetings held at the non-profit organization, in clinics, and in the hospital following child birth. A posttest was created to assess increased knowledge on how to properly care for one's teeth and hums, how to care for a child's teeth and gums, how to find an appropriate dentist, when to visit the dentist, and how to utilize particular insurance plans. Due to the format of the programs, it was not possible to collect post-survey results.

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Introduction

Tooth decay is one of the most common chronic conditions of childhood in the United States (Centers for Disease Control and Prevention, 2014). Tooth decay is caused by a breakdown of the tooth enamel, which is a result of bacteria on the teeth (Centers for Disease Control and Prevention, 2014). The bacteria are normally found in the oral cavity. The bacteria can be passed from person to person. It is the most common chronic disease of early childhood; five times more common than asthma. One in every four children in the U.S has had tooth decay by the age of five and more than 50% of children ages 6-8 have experienced tooth decay (Dental Health Project, 2016). In addition, some children will experience severe disease or untreated caries can progress into infections and abscesses (Kenney, Kogan, & Crall, 2008, Szilagyi, 2009). Oral diseases can lead to physical and psychological disabilities in children, along with critical issues later in adulthood (Kenney, Kogan, & Crall, 2008). Untreated tooth decay can cause pain and infections that may lead to problems with eating, speaking, playing, learning and listening (Centers for Disease Control and Prevention, 2014). Rates for children of color, minorities, and low socio-economic status are even higher (Dental Health Project, 2016). Research from the Institute of Medicine and Agency for Healthcare Research and Quality both show that racial and ethnic minorities and persons of lower socioeconomic status often face more barriers to care, and receive poorer quality of care (2013 Health Care, 2013). The percentage of children and adolescents ages 5-19 with untreated tooth decay is twice as high (25%) for those from low-income families compared to children from higher-income households (11%) (Centers for Disease Control and Prevention, 2014). Children from poor and minority families develop cavities at three times the rate of

children from white, high income families. This is partially because poor and minority children access dental care at lower rates than high-income or White children (Szilagyi, 2009). This statistic is very significant to my capstone project as many of the families in target geographical region are of lower-income and/or non-White backgrounds.

Children with cavities in their baby teeth are three times more likely to develop cavities in their permanent teeth. If a child has cavities, the teeth are more likely to fall out early, which can make it harder for permanent teeth to grow in properly (Dental Health Project, 2016). It is also important to note the dental health of parents, is linked to the overall dental health of their children. Forty percent of pregnant women have tooth decay or gum disease, which puts their children at higher risk for poor oral care (Dental Health Project, 2016).

The cost of dental care is a significant barrier for families without insurance. It is therefore important for parents to understand preventive oral health care procedures so that they do not have to pay excessive dental care costs if caries or serious disease develops. As of 2015, about 108 million people in the United States did not have dental insurance. Even those who have insurance through Medicaid, Medicare, or another provider, may not know how or where to get dental health care and have trouble getting care. People without dental insurance were about two-thirds less likely than people with private insurance to have had a dental visit within the last year (U.S Department of Health and Human Services, 2010). In addition, 49 million people reside in Dental Health Professional Shortage Areas (as cited by Health Resources and Services Administration, 2015). My goal is to educate both children and parents on how to care for their teeth and

gums in order to prevent cavities, gum diseases, etc., and to educate parents on how severe some oral health problems can become.

Literature Review

The research conducted throughout this dental outreach project has consisted of research on the population of the Syracuse City as well as the state of New York. The majority of research involved articles and works based on early childhood caries, barriers to dental care, insurance, laws, and methods to promote good dental health.

Early childhood caries. Dental caries, or cavities, are "a bacteria-dependent plaque-induced process of acid demineralization of tooth structure, mediated by saliva" (Centers for Medicare & Medicaid Services, 2013). A child is considered to have early childhood caries (ECC) when there is one or more decayed, missing, or filled tooth surface in any primary tooth before the child reaches the age of six. The bacteria that leads to dental caries are transmissible between individuals. Risk for dental caries is also diet-dependent. If caries are not treated in a timely manner, they can result in tooth decay and become permanent.

The Centers for Medicare and Medicaid Services launched its Oral Health Initiative in 2010. The rates of children with Medicaid insurance with ECC are as follows: one in ten children at age two, one in five children at age three, one in three children at age four, and one in two children at age five. Children who are at the highest risk for ECC include children who are socially disadvantaged, of affected parents and siblings, are exposed to destructive feeding and eating, and children who do not benefit from fluorides (Norris et. al., 2015).

Dental caries are largely preventable and treatable. It is about ten times more expensive to provide dental care for caries-related conditions than to provide preventive care (Centers for Medicare & Medicaid Services, 2013).

Many parents are unaware of how important it is to take their child to the dentist early and often. A child should visit the dentist for the first time within six months of the eruption of his or her first tooth and no later than age one. After the first visit, a child should see the dentist at least every six months (American Academy of Pediatric Dentistry, 2016). A dentist will begin to apply topical fluoride treatment after the child reaches age one. The dentist will need to apply the fluoride every three to six months. Professional cleaning of teeth should begin at age two. Sealants for pits and fissures on caries-susceptible primary molars, permanent molars and premolars are recommended when the first teeth erupt (Centers for Medicare & Medicaid Services, 2013).

Barriers to oral health care. There are many barriers for children and parents that impede on their ability to receive proper dental care. In 2008, the Center for Medicare and Medicaid Services carried out reviews and came up with a number of reasons as to why children are not receiving adequate dental care in the United States. The barriers include: limited availability of dental providers, including areas qualified as Dental Health Professional Shortage Areas; low reimbursement rates for dental providers, which results in fewer dentists willing to serve Medicaid beneficiaries; administrative burdens for providers; lack of clear information for beneficiaries about dental benefits; transportation; cultural and language competency; and need for consumer education about the benefits of dental care (Ku, Bruen, Sharac, Thomas, & Norris, 2013).

The Oral Health Strategy consists of five components aimed at reducing barriers to oral health care. The components include: working with states to develop pediatric oral health actions plans; strengthening technical assistance to states and facilitating state/tribal peer-to-peer learning; bringing outreach to providers; providing outreach to

beneficiaries; and partnering with other HHS agencies (Ku, Bruen, Sharac, Thomas, & Norris, 2013).

Medicaid. Medicaid and the Children's Health Insurance Program (CHIP) provide health coverage to over 43 million children, including half of all low-income children in the United States (Centers for Medicare & Medicaid Services, 2016). In 2012, Medicaid care plans in New York provided health insurance coverage to over four million people with a total of 2,000,744 children enrolled in Medicaid (State at a Glance, 2010).

For 35% of the quality measures in a report from the New York State Department of Health, the care received by Blacks scored lower than for Whites, even after adjusting for other factors. In the same report Asians and Hispanics received better care than Whites in 50% of the quality measures, also after adjustments for other factors were made (2013 Health Care, 2013).

The federal government sets minimum guidelines for Medicaid eligibility. In addition, individual states are able to expand coverage beyond the minimum threshold. The average CHIP income eligibility level for children is 241% of the Federal Poverty Level. As of 2011, children in families with incomes up to \$44,700 per year, for a family of four, are likely to be eligible for Medicaid or CHIP coverage. All children from birth to age six years old, with family incomes of up to 133% and children ages six to eighteen, with family incomes up to 100%, are eligible for Medicaid coverage (2013 Health Care, 2013). Currently, for a family of four, an annual income of \$24,250 qualifies to be below the Federal Poverty Level (U.S. Centers for Medicare & Medicaid Services, 2015). Other eligible children include infants born to women covered by Medicaid, certain children in foster care or an adoption assistance program, and certain children with disabilities

(Centers for Medicare & Medicaid Services, 2016). Currently in New York, there is no monthly premium for families whose income is less than 1.6 times the poverty level (New York State Department of Health, 2016).

All children who are registered for Medicaid are given the right to certain healthcare services. Medicaid has titled the set of services as "Early, Periodic Screening, Diagnosis, and Treatment" (EPSDT). Medicaid states that "states are required to provide comprehensive services and furnish all Medicaid coverable, appropriate, and medically necessary services needed to correct and ameliorate health conditions, based on certain federal guidelines" (Centers for Medicare & Medicaid Services, 2016). Screening services cover vision, dental, hearing, and any other category necessary. Dental services for children are required to at least include relief of pain and infections, restoration of teeth, necessary orthodontic services and the maintenance of dental health. Each state is required to develop a dental periodicity schedule in consultation with recognized dental organizations involved in child health care (Centers for Medicare & Medicaid Services, 2016).

Children covered by Medicaid as their primary health insurance have better dental care usage rates than uninsured children. Medicaid has helped to increase the usage of dental care, especially for children. The percentage of Medicaid-enrolled children, ages one year and older, who receive dental care continues to increase. In 2007, 37% of children received dental care and in 2011, 47% received dental care. Medicaid is the most common payer among children visiting the emergency room for a dental issue (Centers for Medicare & Medicaid Services, 2013).

Dental care of children and adolescents is subject to the same "medical necessity" criteria as is other health care for children in Medicaid. A periodicity schedule specific to dental services is mandatory. Dental and oral health services should take place in intervals that coordinate with acceptable standards of dental practice (Centers for Medicare & Medicaid Services, 2013). Medicaid is aware that there is not one simple solution to improving dental care access and quality. They are, within reason, willing to alter and adjust treatments and payments according to each patient.

Affordable Care Act. The Affordable Care Act (ACA) affects all health practitioners, including dentists. On March 23, 2010, President Obama signed the Patient Protection and ACA. The objective of the law is to reduce the cost of health care and increase coverage across the U.S. As of the 2013 provisions made to the ACA, there has been increased funding for public health infrastructure. This includes the CDC, oral health programs, and national oral health surveillance programs. In addition, increased funding was issued for school-based health center facilities and for grant opportunities for dentists. The CDC also worked with oral health organizations to create a five-year public health education campaign, which focuses on oral health prevention and education (American Student Dental Association, 2015).

As a result of the ACA, there is a virtual marketplace, which helps individuals and businesses buy private coverage. All qualified health plans are required to offer an "essential health benefit" packaged, which includes pediatric dental coverage. Standalone dental plans must offer the pediatric oral essentials health benefit without annual and lifetime limits. The government estimated that by 2018, three million children will gain dental benefits through the health insurance exchanges. The American Dental

Association was very influential on the policy making of the ADA with regards to dental care. They stated that children should be covered by a dental benefit that is "necessary to prevent disease and promote oral health, restore oral structures to health and function, and treat emergency conditions" and necessary to address a health condition where both medical and dental care is clinically required (Potential Effects, 2013).

Health Resource and Service Administration. The Health Resources and Services Administration (HRSA) is a safety net, which runs under the U.S Department of Health and Human Services. The HRSA provides health care for millions of Americans of do not have access to primary care. HRSA also provides funding to health centers and other entities to train, recruit and maintain health professionals in order to help increase access to oral health care. In 2010, HRSA worked with the National Academy of Sciences to create benchmarks on the nation's oral health status and oral health care. The reports were published in 2011 (as cited by HRSA, 2015). The main recommendation from the reports was to "improve access to oral health care, reduce oral health disparities, and improve oral health" (Institute of Medicine and National Research Council, 2011). In response to the reports, HRSA created and altered many programs that focus on the recommendation. HRSA constructed a set of oral health core clinical competencies from non-dental providers, with the intention of improving access for early detection and preventive interventions leading to improved health. They also created the "Perinatal and Infant Oral Health Quality Improvement" initiative. This initiative was started to target pregnant women and infants at high risk for dental diseases. HRSA uses communitybased approaches for integrating oral health care into health care systems. HRSA has

worked on a number of other projects and programs based around the recommendations from the reports (as cited by HRSA, 2015).

In 2012, HRSA developed the "Integrating Oral Health and Primary Care Practice" (IOHPCP) initiative to broaden the oral health clinical competency of primary care clinicians. There are three main components of the initiative. The first is to develop oral health domains and associated core clinical competencies. The second is to employ a systems approach to identify and prioritize the elements that impact the adoption of oral health competencies by primary care clinicians. The third component is to characterize the foundation for successful implementation strategies that translate into primary care practice. The IOHPCP report gives recommendations and guiding principles for the design of a competency-based, inter professional practice model to integrate oral health and primary care (as cited by HRSA, 2015).

National Quality Strategy. The National Quality Strategy (NQS) is led by the Agency for Healthcare Research and Quality on behalf of the U.S Department of Health and Human Services (HHS). The NQS has three main goals, which are used in all of their efforts and decisions. The three aims are better care, healthy people and communities, and affordable care. In addition, the NQS has six main priorities. These include reducing harm caused in delivery of care, engaging each person/family in their care, promoting effective communication and coordination of care, promoting most effective prevention and treatment practices for the leading causes of mortality, working with communities to promote wise use of practices to enable healthy living, and making quality care more affordable by developing and spreading new health care delivery models. The next version of the NQS will include both short and long-term goals. Goal number five of the

revised NQS is "supporting better health in communities." This goal includes illustrative measures focused on "percentage of children and adults who use the oral health care system each year" (Department of Health and Human Services, 2016). The Oral Health Initiative supports the NQS.

Population

My population were the children and parents enrolled in parenting classes of an urban non-profit organization in Central New York. About 150 parents and 20 children participated. This project reached a population that often lacks this type of education and support. Many of the clients of the non-profit organization are individuals who are not college graduates, are refugees, are living in government housing, are single parents, and/or do not have jobs.

Many of the families that use the non-profit organization as a resource have children in a particular city school district. As of 2012, 53% of students in the district were Black, 28% White, 12% Hispanic, 6% Asian, and 1% Native American. Of the entire school district, 84% receive free or reduced-cost lunches (Swift, Contreras, & Ahern, 2012). Because many families in the city area are of low-income, there is a high demand for Medicaid Insurance.

As of November, 2015, the unemployment rate in the United States was 5.0%. New York State has an unemployment rate of 4.8%, just slightly above the national average (United States Department of Labor, 2016). The median annual household income in New York is \$54,310. A total of 40.3% of children in New York come from families with income below 200% of the federal poverty line (State at a Glance, 2010).

As of 2012, 8.1% of children in New York State did not have health insurance and 24.3% had inadequate health care coverage (State at a Glance, 2010). Among all New York Medicaid managed care enrollees, 12% were Asian, 21% were Black, 26% were White, 32% were Hispanic and 8% were members of other races (2013 Health Care, 2013). Disparities in care have been identified by geographic region of the state, with

worse performance particularly in the Western and Central regions of the state (2013 Health Care, 2013).

In 2013, 60% of female and 58% of male children and adolescents ages 2-18 years had at least one dental visit (2013 Health Care, 2013). This number is relatively high compared to national statistics and exceedingly high compared to global data. However, only 37% of children ages 2-3 years of age had at least one dental visit within 2013 and only 62% of children ages 4-6 years of age had at least one visit (2013 Health Care, 2013).

The ages of parents ranged from 18 to 50. A few grandparents attend the parenting classes as well. The children were between six months and five years of age. The families were racially diverse, including Caucasian, African American, Hispanic, and Asian. Refugee and immigrant families also participated. The majority of families from Asian countries were from Vietnam, Burma, China, and Thailand. The majority of African families were from Somalia, Kenya, Ghana, and Uganda. Families from Middle Eastern Countries were from Pakistan, Afghanistan, Iran, Turkey, and Syria.

Methods

Dental Health Education.

Over the span of four months, programs were delivered across multiple settings. The first setting involved in-home visits by the educator. There are currently nine families that receive weekly visits from an educator through the non-profit organization. The second setting involved parents in public locations such as clinics and schools. The third setting involved parents and children coming into the office of the organization. The final group received information in a local hospital. The last group was specifically first-time mothers with newborns. The mothers received information and beside newborn classes. During these information sessions brochures, flyers, activities, and lessons were administered to both parents and children.

Lessons during sessions covered topics including: when/how often to visit a dentist, how to properly brush teeth, how to avoid baby bottle tooth decay, how to practice good oral health habits, etc. Activities for children included coloring pages (Fig. 28 & 30), matching healthy foods (Fig. 29), and reading books on dental care such as *Clark the Shark: Tooth Trouble*. Children were asked questions such as: where are your teeth, when do you brush your teeth, how many teeth do you have, why do we need teeth, and which foods are good for your teeth. After giving children the opportunity to answer questions, proper answers were reviewed and explained. Activities for parents included fact or fiction activities (Fig. 13 & 14). This activity was designed to quiz parents on their knowledge on dental health for their children, to act as a pre-survey, and to stimulate thoughts and open the floor for question and answer sessions. Q&A sessions were conducted at the end of each parent information session. Parents were given materials

which included brief information on how to get Medicaid and the benefits covered through CHIP/Medicaid (Fig. 7-10). Brochures were given to parents, based on the age of their child, covering information information such as: easy ways to prevent cavities, how smoking and tobacco affect oral health, how often to brush teeth, how to utilize mouthguards, how to prevent baby bottle tooth decay, thumb and finger sucking, teething, etc. (Fig. 20 & 21). Many of the information papers were also available in different languages catering to the population (Fig. 10, 24, 25).

The goal of this capstone project was to educate both children and parents on how to care for their teeth and gums in order to prevent cavities, gum diseases, etc., and to educate parents on how severe some oral health problems can become. A second goal was to create a positive outlook on going to the dentist for children in order to encourage children and parents to visit the dentist early and often.

Evaluation Plan.

An evaluation plan for this project was created prior to going into the community. Because of this, only pre surveys were capable of being administered. Clients of the non-profit organization are enrolled through independent programs and organizations, causing follow-up with participants to become unattainable. Pre surveys, as stated earlier, were conducted through the "Fact or Fiction" quizzes. Post-surveys were designed to contain the same questions and analyze the difference in scores amongst participants.

Discussion

The thesis that there is a lack of dental education in underserved populations, people do not prioritize dental health care, do not have access to dental health care, and/or do not realize the importance of dental health care, seems to be true. The issue derives from multiple different factors and barriers. Based on information concluded from research and information sessions with participants of programs through the local non-profit organization, it is evident that there is a need for increased education on oral health care, particularly for children.

Responses from participants pertaining to questions involving knowledge on oral health care and insurance for children confirmed the need for further dissemination of information and greater access to dental care. Parents were particularly unaware of how to prevent cavities in children, how to get affordable dental insurance for children, and where to find an appropriate dentist for their insurance plan. All of these results work together to show the inadequacy of partnership between health care providers, public health providers, and patients.

This project only touches the tip of the iceberg of the issue. Compared to explored dental health outreach education projects, initiatives and research this is a relatively limited project. Nevertheless, it illustrates a critical problem and need for advancement. These government-funded programs need to put more focus on the importance of dental health care for children in all classes and races. There is a great need for programs that educate the public and provide both understandable and specific explanations of the importance of proper dental health care and how to access this care. A focus needs to be

on the benefits of affordable insurance plans such as CHIP/Medicaid. Without dental health educational outreach programs and efforts from providers in the health and insurance fields, our populations will continue to show poor rates of oral health care.

Limitations.

The greatest limitation of this study was the lack of follow-up and survey-based analyses. Pre-surveys lacked consistency, which were necessary to support research that shows the shortage of dental health care information amongst populations. The survey data lacked precise end results, which were needed to demonstrate an increase in knowledge of dental health care throughout the capstone project. A cause of this was that participants in parent education classes had a high drop-out rate and proved it to be difficult to track. Although there was no follow-up, other research studies and projects prove that there is a lack of public health programs of this type in the United States. Further research on dental health education outreach programs and lack of dental health care might provide more complete assessments of demographics and information learned by participants.

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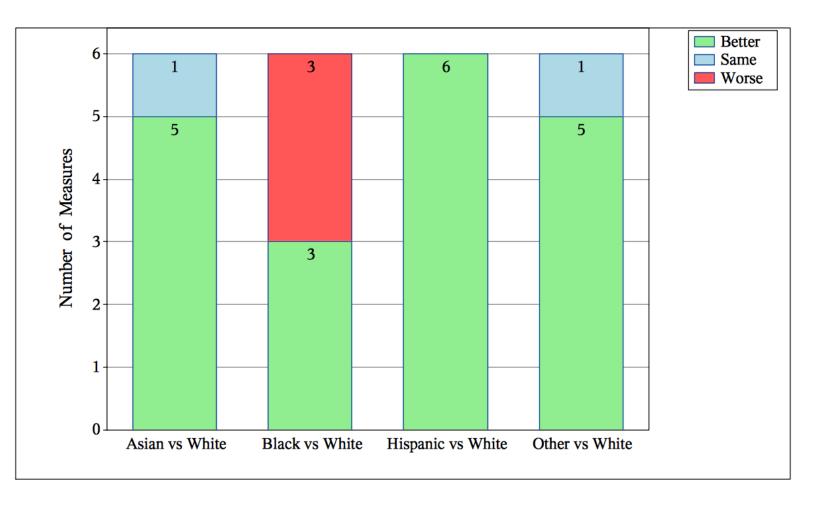


Figure 1. Difference of Overall Performance in the Domain by Race and Ethnicity (Adjusted for Sex, Age, Medicaid Aid Category, Cash Assistance, Mental Health Condition, and Geographic Location) (New York State Department of Health, 2013).

Demographics		Adult BMI Assessment	Annual Dental Visit (Ages 19-21)
Sex			
	Female	81	49
	Male	75	39
Age			
	18-44	77	44
	45-64	81	NA
	65+	78	NA
Race			
	Asian	80	42
	Black	77	39
	Hispanic	82	46
	Other	80	42
	White	76	47
Aid Category			
	Family Health Plus	79	44
	Safety Net	78	43
	SSI	80	34
	TANF	78	45
Cash Assistance Status			
	Cash Assistance	80	38
	No Cash Assistance	78	45
SMI Status			
	SMI	82	47
	Non-SMI	78	44
Region			
	Central	73	36
	Hudson Valley	80	49
	Long Island	73	45
	New York City	79	44
	Northeast	88	45
	Western	82	40
Statewide		79	44

Figure 2. NY State Annual Adult Dental Visits (New York State Department of Health, 2013).

Demographics		Well Child Visits(3rd-6th)	Adolescent Well-Care Visits	Annual Dental Visit
Sex				
	Female	82	63	60
	Male	82	58	58
Age				
	2-3	84	NA	37
	4-6	81	NA	62
	7-11	NA	NA	67
	12-14	NA	68	62
	15-18	NA	62	55
	19-21	NA	44	NA
Race				
	Asian	85	68	61
	Black	79	56	48
	Hispanic	84	62	63
	Other	81	62	59
	White	80	58	59
Aid Category				
	Family Health Plus	NA	44	NA
	Safety Net	NA	43	NA
	SSI	81	55	47
	TANF	82	62	59
Cash Assistance Status				
	Cash Assistance	79	57	48
	No Cash Assistance	83	61	61
Region				
	Central	77	55	53
	Hudson Valley	81	58	64
	Long Island	81	61	62
	New York City	83	62	57
	Northeast	80	59	64
	Western	78	59	66
Statewide		82	60	59

Figure 3. NY State Annual Child Dental Visits (New York State Department of Health, 2013).

Syracuse, NY

Data Series	Back Data	Sept 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016
Labor Force Data					·		
Civilian Labor Force (1)	W	312.7	314.2	313.8	(<u>P)</u> 316.5	(P) 313.1	
Employment (1)	w	296.7	299.4	298.7	(<u>P)</u> 301.2	(P) 295.7	
Unemployment (1)	w	16.1	14.8	15.1	(<u>P)</u> 15.3	(<u>P</u>) 17.4	
Unemployment Rate (2)	W	5.1	4.7	4.8	<u>(P)</u> 4.8	(<u>P)</u> 5.6	
Nonfarm Wage and Salary Employment							
Total Nonfarm (3)	W	318.2	321.8	322.5	322.0	311.1	(P) 314.1
12-month % change	W	0.0	-0.1	0.0	0.1	0.5	(P) 0.1
Mining, Logging, and Construction (3)	w	13.0	12.7	12.3	11.5	10.1	(<u>P)</u> 9.8
12-month % change	W	-3.0	-3.8	-3.1	-2.5	-3.8	<u>(P)</u> -3.9
Manufacturing (3)	W	24.7	24.9	24.9	24.8	24.9	<u>(P)</u> 24.7
12-month % change	W	0.4	1.6	1.6	1.2	2.9	<u>(P)</u> 2.1
Trade, Transportation, and Utilities (3)	W	64.6	65.5	66.9	67.9	66.4	(<u>P)</u> 65.2
12-month % change	W	1.3	1.7	2.0	2.3	3.9	<u>(P)</u> 3.5
Information (3)	W	4.3	4.4	4.4	4.4	4.4	<u>(P)</u> 4.4
12-month % change	W	-2.3	2.3	0.0	0.0	2.3	<u>(P)</u> 2.3
Financial Activities (3)	W	15.6	15.5	15.4	15.3	15.8	(<u>P)</u> 15.6
12-month % change	W	-1.9	-1.9	-2.5	-3.8	0.6	<u>(P)</u> -0.6
Professional and Business Services (3)	W	32.8	32.6	31.7	31.7	30.0	(<u>P)</u> 30.1
12-month % change	W	-3.8	-4.4	-6.2	-5.7	-8.3	(<u>P)</u> -8.2
Education and Health Services (3)	W	64.4	64.7	65.2	65.0	62.4	<u>(P)</u> 64.5
12-month % change	W	0.2	-2.3	-2.2	-2.3	-1.4	(<u>P)</u> -2.1
Leisure and Hospitality (3)	W	30.8	31.7	31.4	31.3	29.1	(<u>P)</u> 30.3
12-month % change	W	2.0	5.7	7.5	7.6	5.4	<u>(P)</u> 7.1
Other Services (3)	W	12.2	12.3	12.3	12.3	12.1	(<u>P)</u> 12.2
12-month % change	W	-0.8	-1.6	-1.6	-0.8	-0.8	(<u>P)</u> -0.8
Government (3)	W	55.8	57.5	58.0	57.8	55.9	<u>(P)</u> 57.3
12-month % change	W	0.9	0.9	1.4	1.0	1.1	<u>(P)</u> 0.4

Footnotes

Figure 4. Syracuse, New York Economy at a Glance (United States Department of Labor, 2016)

 $^{(\}underline{1})$ Number of persons, in thousands, not seasonally adjusted.

⁽²⁾ In percent, not seasonally adjusted.
(3) Number of jobs, in thousands, not seasonally adjusted. See About the data.

⁽P) Preliminary

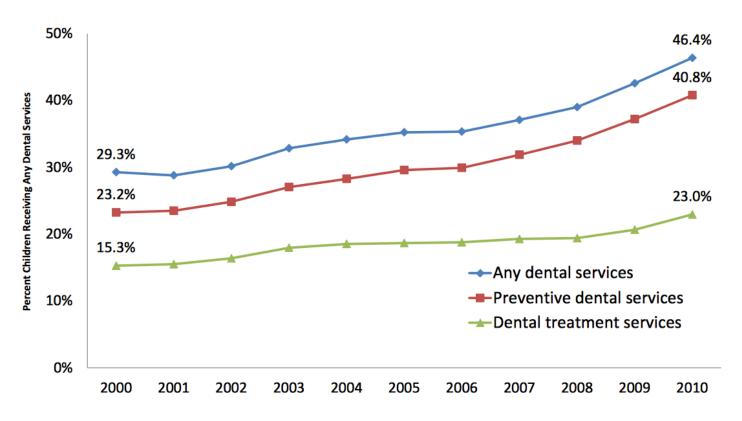


Figure 5. Percentage of Children Ages 1–20 Covered by Medicaid Who Received Any Dental Services, Preventive Dental Services, or Dental Treatment Services FFY 2000–FFY 2010 (Ku, Bruen, Sharac, Thomas, & Norris, 2013).



Figure 6. Proportion of Children with Untreated Early Childhood Caries (Norris et. al., 2015)



Figure 7. CHIP Flyer (Health and Human Service Commission, 2013).



Figure 8. CHIP Flyer Spanish (Health and Human Service Commission, 2013).

Both CHIP and Children's Medicaid include dental coverage for your children's teeth.

Services include:

- Fillings
- X-rays
- Checkups
- Cleanings
- Sealants (to prevent tooth decay)
- Extractions (tooth removal)
- Crowns (caps)
- Root canals
- And more

\$50 or less covers all your children for one year. Most families pay little or nothing at all.

www.CHIPmedicaid.org | 1-877-KIDS-NOW



Figure 9. CHIP & Children's Medicaid Flyer (Health and Human Service Commission, 2013).

CHIP y Children's Medicaid incluyen cobertura dental para sus hijos.

Los servicios incluyen:

- Tapaduras
- Radiografías
- Revisiones
- Limpiezas
- Selladores (para evitar caries)
- Extracciones (sacar dientes)
- Coronas
- Endodoncías
- Y más

Con \$50 o menos asegura a todos sus hijos todo el año. La mayoría de las familias pagan muy poco o nada.

www.CHIPmedicaid.org | 1-877-543-7669



Figure 10. CHIP & Children's Medicaid Flyer Spanish (Health and Human Service Commission, 2013).

From 6 months of age, your child can start to drink from a cup





Babies can start to learn to drink from a cup around 6 months of age. After 12 months, children do not need bottles.

Clean your child's teeth and gums as soon as the first tooth appears

Children might not like having their teeth brushed at first.



Use a wet cloth to wipe the teeth.



Clean morning and night with a small soft toothbrush. Do not use toothpaste under 18 months of age.

Offer healthy foods every day and limit sweet foods





Figure 11. Child Teeth Tips and Guidelines (Dental Health Services Victoria, 2013).

Baby teeth are important!

Tooth Tips for families

Baby teeth are important for eating, talking and smiling. Baby teeth also keep space for adult teeth and guide them into place. Tooth decay can cause pain, sleep problems and eating problems.

Don't put baby to sleep with a bottle





a bottle can cause tooth decay.

Don't give babies fruit juice and other sweet drinks



Breastmilk, formula or cool boiled tap water is best for babies.



tooth decay.



(03) 9341 1000 dhsv.org.au

Figure 12. Caring for Baby Teeth Tips for Families (Dental Health Services Victoria, 2013).

Fact or Fiction 1. Energy drinks don't cause cavities Fact Fiction 2. Smokeless tobacco isn't bad for you Fact Fiction 3. You should wear a mouthguard when playing contact sports. Fact Fiction 4. Mouth and lip piercings don't affect your teeth.

ANSWERS:

Fiction

- Fiction. If you do drink something sweet, try and rinse your mouth with water afterward.
 Brush your teeth two times a day with a fluoride toothpaste.
- Fiction. All tobacco products are bad for your health, including smokeless tobacco. The best thing you can do is to never start smoking or using any tobacco products. If you use tobacco products, talk to a health professional to find out how to quit.
- Fact. You should wear a mouthguard during all sports, but most importantly contact
 sports like baseball, football, hockey, basketball, lacrosse, soccer, and wrestling.
 Mouthguards are the best thing you can do to protect your teeth from getting broken or
 knocked out.
- 4. Fiction. Wearing mouth piercings can cause deformities to gums and could lead to tooth loss. Piercings can cause receding gums, chipped or broken teeth, nerve damage or inflammation, and periodontitis (when the gum and bone pull away from the teeth and the teeth fall out).



Figure 13. Fact or Fiction Sheet for Parents about Teen's Oral Health

Fact or Fiction





- 1. **Fiction**. It is not normal for babies to get a fever, diarrhea, or rashes. Call you doctor if this happens.
- 2. Fact. Baby teeth hold places in the mouth for adult teeth. If a baby tooth is lost too soon it can cause problems when adult teeth come in.
- 3. Fiction. If not treated early, a bad bite can make it hard to keep teeth and gums clean where teeth are crooked, increasing the risk for cavities and gum disease.
- 4. Fiction. Don't give your child too many sugary drinks like juices. If they do drink juice, make sure to wash out their mouth with water right after.
- 5. Fiction. Sealing a tooth is fast and easy and protects your child's teeth from decay.



Figure 14. Fact or Fiction Sheet for Parents about Children's Oral Health



Figure 15. How to Keep Your Teeth Healthy (NSW Government Health, 2012).

Babies' Teeth

- Breast milk is best for babies and is the only food and drink they need until they are about 6 months old.
- · Do not put your baby to bed with a bottle.
- · Only put milk or water in bottles.
- Start using a cup at 6 months and stop using a bottle by 12 months old.





Children's Teeth

- Children's first teeth are important and need to be looked after carefully.
- You should help brush your child's teeth until they are about 8 years old.
- Take your child to a dental clinic for their first checkup before they turn 2.
- There are public dental clinic that will not cost any money.

Between visits to a dental clinic, check your child's teeth yourself.



Healthy children's teeth.



Make a dental appointment now.



Make a dental appointment now.



Get urgent dental treatment NOW.

Figure 16. Baby and Children's Teeth Facts (NSW Government Health, 2012).

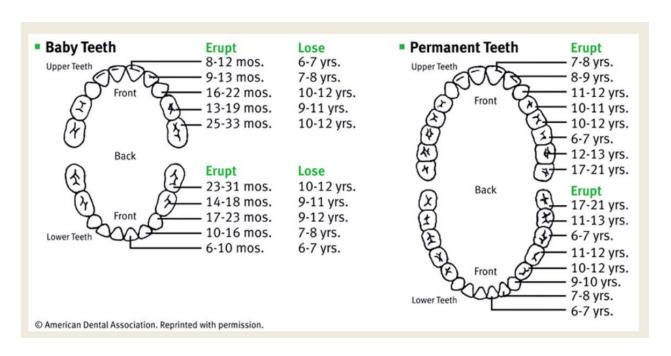
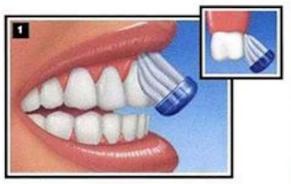


Figure 17. Mouth Chart (American Dental Association, 2012).

Oral Health	US					
Percentage of children receiving preventive dental care in the past year	77.2%					
Source: National Survey of Children's Health (2011–2012)						
Percentage of CSHCN receiving preventive dental care in the past year	83.1%					
Source: National Survey of Children's Health (2011–2012)						
Percentage of children with teeth in excellent or very good condition						
Source: National Survey of Children's Health (2011–2012)						
Percentage of CSHCN with teeth in excellent or very good condition	64.9%					

Figure 18. State Coverage and Financing Charts (as cited by the Catalyst Center, 2016).

BRUSH YOUR TEETH



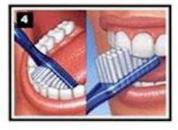
Place bristles along the gumline at a 45° angle. Bristles should contact both the tooth surface and the gumline.



Gently brush the outer tooth surfaces of 2-3 teeth using a vibrating back, forth & rolling motion. Move brush to the next group of 2-3 teeth and repeat.



Maintain a 45° angle with bristles contacting the tooth surface and gumline. Gently brush using back, forth & rolling motion along all of the inner tooth surfaces.



Tilt brush vertically behind the front teeth. Make several up & down strokes using the front half of the brush.



Place the brush against the biting surface of the teeth & use a gentle back & forth scrubbing motion. Brush the tongue from back to front to remove odor-producing bacteria.

Figure 19. How to Brush Your Teeth (Schmorr, 2014).







Figure 20. Dental Care for You and Your Teen Brochure (Page 1)

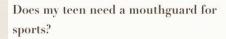
How can I help my child get through the teen years cavity-free?

- Help your teen understand that bad oral hygiene can lead to stains, bad breath, missing teeth and other dental problems and diseases
- Set a good example. If you take good care of your teeth, your teenager will see that good oral



- Have plenty of oral health-care supplies on hand.
- Don't buy junk food. Keep lots of fruits and vegetables in the house for snacking

 \blacksquare



If you play a sport or are active in things like skateboarding or snowboarding, it's a good idea to wear a mouthguard.

Mouthguards protect your teeth from getting broken or knocked out.



Mouthguards cushion blows that would otherwise cause injuries to the lips and face.

There are different kinds of mouthguards. Ask your dentist which one is right for you or your child.

 \blacksquare

When should my child first see a dentist?

Your child should visit a dentist when the first tooth comes in, usually between 6 and 12 months of age.



Why so early?

Dental problems can begin early. A big concern is early childhood caries (cavities). Once a child's diet includes anything besides breast-milk, teeth are at risk for decay. The earlier the dental visit, the better the chance of preventing dental problems. Children with healthy teeth chew food easily and smile with confidence.



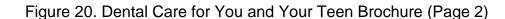




Figure 21. Dental Care for Your Baby Brochure (Page 1)



Figure 21. Dental Care for Your Baby Brochure (Page 2)

Brush Up on Healthy Teeth

A Quiz for Parents About Simple Steps for Kids' Smiles

Learn more about keeping your child's teeth healthy with this true or false quiz.

- All children older than 6 months should receive a fluoride supplement every day.
 - Parents should start cleaning their child's teeth as soon as the first tooth appears.
 - 3. ____ Parents should start brushing their child's teeth with toothpaste that contains fluoride at age 3.
 - Children younger than 6 years should use enough toothpaste with fluoride to cover the toothbrush.
 - 5. ____ Parents should brush their child's teeth twice a day until the child can handle the toothbrush alone.
 - 6. ____ Young children should always use fluoride mouth rinses after brushing.

ANSWERS

- False. Check with your child's doctor or dentist about your child's specific fluoride needs.
 Parents of a child older than 6 months should discuss the need for a fluoride supplement with the doctor or dentist if drinking water does not have enough fluoride to help prevent cavities.
- True. Start cleaning as soon as the first tooth appears. Wipe teeth every day with a clean, damp cloth. Switch to a small, soft toothbrush as more teeth come in.
- 3. False. Parents should start using toothpaste with fluoride to brush their child's teeth at age 2. Toothpaste with fluoride may be used earlier if the child's doctor or dentist recommends it.
- 4. False. Young children should use only a pea-sized amount of fluoride toothpaste. Fluoride is important for fighting cavities, but if children younger than 6 years swallow too much fluoride, their permanent teeth may have white spots. Using no more than a pea-sized amount of toothpaste with fluoride can help keep this from happening.
- True. Children usually do not have the skill to brush their teeth well until around age 4 or 5.
 Parents should brush their young child's teeth thoroughly twice a day until the child can handle the porthbrush alone.

6. False. Fluoride mouth rinses have a high concentration of fluoride. Children younger than 6 years should not use fluoride mouth rinses unless the child's doctor or dentist recommends it. Young children tend to swallow rather than spit, and swallowing too much fluoride before age 6 may cause the permanent teeth to have white spots.





Figure 22. Brush Up on Healthy Teeth (Centers for Disease Control and Prevention, 2013).



Children's Consortium

- 8.1% of children in New York did not have health insurance in
 2012
- In 2012, Medicaid care plans in New York provided health insurance coverage to over 4 million people
- 40.3% of children in New York live in a household with income below 200% (\$44,863 for family of 4) of the federal poverty level
- 24.3% of children in New York had inadequate health care coverage in 2012
- * In 2012, 2,000,744 children were enrolled in Medicaid



http://www.hdwg.org/catalyst/online-chartbook/bystate

Figure 23. Child Health Fact Sheet

သင့်သွားများ ကျန်းမာရေးအတွက် နည်းလမ်းများ

(How to keep your teeth healthy)

















Figure 24. How to Keep Your Teeth Healthy in Burmese (NSW Government Health, 2012).

PERSIAN (FARSI) فونه دندانهایتان (How to keep your teeth healthy)















Figure 25. How to Keep Your Teeth Healthy in Farsi (NSW Government Health, 2012).



BABY BOTTLE TOOTH DECAY

What is Baby Bottle Tooth Decay?

Baby bottle tooth decay is caused by frequent and long-term exposure of a child's teeth to liquids containing sugar. Sugars in liquids such as milk, formula, juice, sodas, and other drinks stay on the infant's teeth and gums, creating plaque. The condition is also associated with breast-fed infants who have prolonged feeding habits or with children whose pacifiers are frequently dipped in honey, sugar or syrup. The sweet fluids left in the mouth while the infant is sleeping increase the chances of cavities.



How to Prevent Baby Bottle Tooth Decay

Never allow a child to fall asleep with a bottle containing milk, formula, juice or other sweetened liquids.

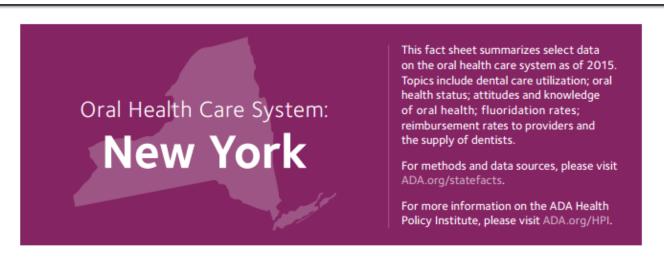
Clean and massage the baby's gums to help establish healthy teeth and to aid in teething.

Wrap a moistened gauze square or washcloth around the finger and gently massage the gums and gingival tissues.

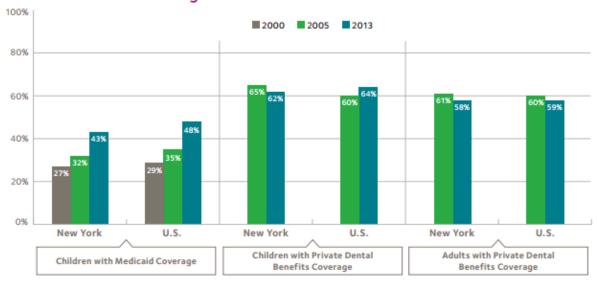
Brush your child's teeth with a soft toothbrush and a smear of toothpaste. Begin using fluoride toothpaste around age 2.

Bring your child to the dentist when he or she is between 6 and 12 months old.

Figure 26. Baby Bottle Tooth Decay Information Sheet



Percentage with a Dental Visit in the Past 12 Months



Percentage of Medicaid Children Who Received a Sealant on a Permanent Molar in 2013



Figure 27. Oral Health Care System: New York (American Dental Association, 2015).



Figure 28. Dental Floss Coloring Page (Coloring Pages for Kids, n.d).

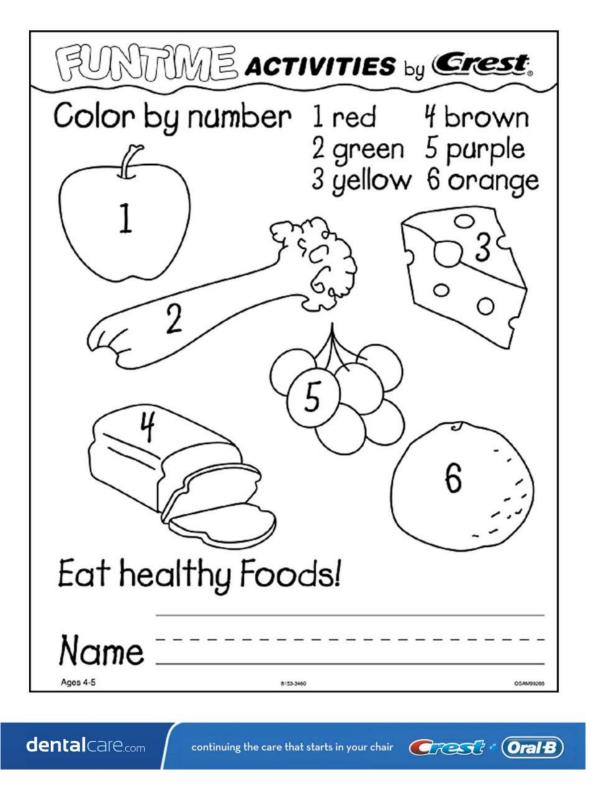
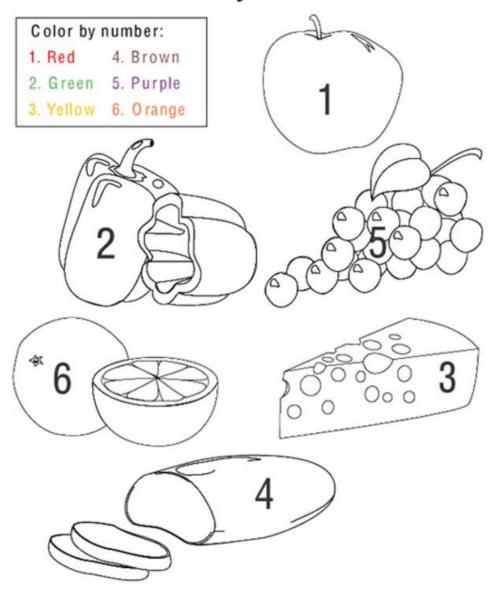


Figure 29. Health Foods Activity (Crest, n.d).

Healthy Foods For Healthy Smiles



dentalcare.com



Figure 30. Healthy Foods for a Healthy Smile (Crest, n.d).

State	State Medicaid & CHIP Enrollment			National		
	Total Medicaid & CHIP Enrollment (February 2016) (Preliminary)	Comparison of February 2016 data to July-September 2013 Average Enrollment		Total Medicaid & CHIP Enrollment, all States (February 2016) (Preliminary)	Comparison of February 2016 data to July-September 2013 Average Enrollment	
		Net Change	% Change		Net Change	% Change
New	6,397,831	719,414	12.67%	72,441,849	15,010,433	26.62%
York						

Figure 31. State Medicaid and CHIP Program Enrollment (Centers for Medicare & Medicaid Services, 2016).