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Dental Care Access in Athens-Clarke County



Athens Wellbeing Project 3.0
White Paper Series

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Abstract

In the US, almost 1 in 10 citizens lacks health care access. Individuals who lack sufficient dental care are at a higher risk for endocarditis, cardiovascular disease, and even death. People without insurance may not be able to pay for the necessary medical care and prescriptions, and they are less likely to have a primary care physician. Dental Care is one of the first medical services that have many delays due to insufficient insurance coverage (Health Care Access and Quality).

Athens Clarke County healthcare access poses a threat to many individuals. It is essential to practice preventive care. People who have lifetime access to oral health care receive the necessary dental cleanings to maintain strong teeth and gums. Uninsured people in Athens Clarke County wait up to two to three months before being seen by a dentist (Athens Nurses Clinic).

The purpose of this paper is to investigate those who have difficulty accessing dental care and how we might increase the availability of dental care for people with limited means. The Athens Wellbeing Project survey is the primary source of our data. Most of the resources offer data for Athens-Clarke County. Based on the 2021 and 2022 data inspected, we have curated recommendations for the Athens-Clarke County community to enhance the general accessibility of dental care. If we could make just one suggestion, it would be to concentrate on using grants and subsidies to extend the currently offered free services that exist within the community.

Introduction

Healthcare access is an issue many individuals within Athens are facing. The ability to find physicians that can take on new patients in Clarke County is getting smaller while the population continues to get bigger. Access to primary, mental, and dental care has become a severe issue for many citizens. Athens Clarke County residents should be able to call a doctor's office and set up an appointment to get checked out.

However, far too many of these individuals are being turned away due to a lack of available appointments (Athens Nurses Clinic). A person's ability to be seen and checked out by a doctor has a drastic ripple effect that strains our healthcare system. For example, if a primary doctor cannot see a person for a condition in its beginning stages, that condition will worsen over time due to it not being treated. The lack of treatment then strains our emergency rooms because when that condition becomes too much to bear, that individual will go to the emergency room.

When a minor condition goes untreated, it becomes costly for the patient and the healthcare system as it requires more resources to treat than in the early stages.

Lack of access to oral health can have significant repercussions, including developing dental disease, expensive hospital stays, and missed days of work or school. Preventive care is essential because those who receive regular dental cleanings and practice keeping their teeth and gums healthy typically have better oral health throughout their lifetime.

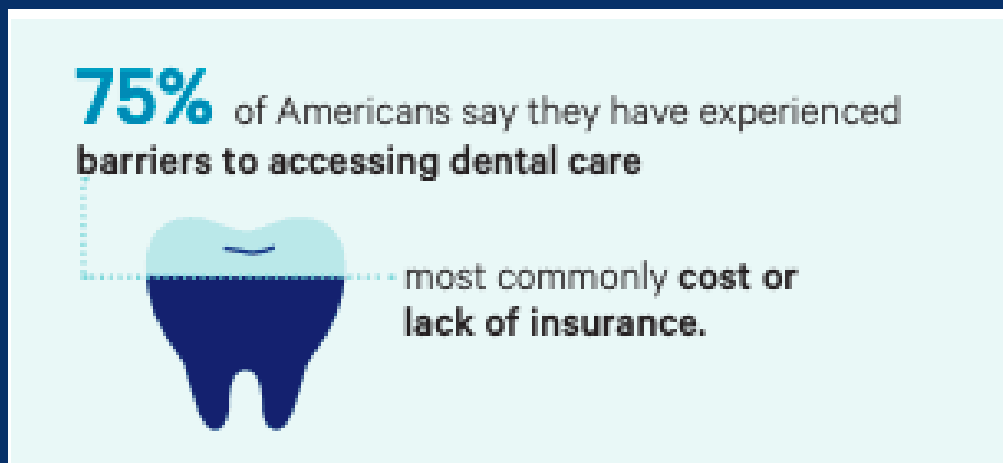
Oral diseases left untreated, and the absence of preventative care have long-term effects. Teeth and gums that are significantly infected over time may cause pain, require expensive treatment, and diminish one's overall body health. In addition, individuals must drive on average 10 or more miles longer to visit a dental provider than those with private insurance or the financial means to cover out-of-pocket costs, considering common access barriers.

Research Question

Using data from the Athens Wellbeing Project's household survey, we chose to investigate the following questions:

1. What are the demographics of people in the county struggling to receive dental care?
2. How do we improve the supply of dental care for low-income/indigent individuals?

The goal of this paper is to research who is struggling to gain access to dental care and how we can improve the supply of dental care for low-income individuals.



Source: DentaQuest

The Policy Problem

A workforce shortage issue exists because there are not enough physicians to service entire communities of people seeking care. In addition, the demand for services exceeds available appointments causing patients to spend weeks or months on waitlists. In rural communities, accessing transportation to their doctor's office also poses a challenge. People often struggle getting time off work or school to see their healthcare provider. These barriers cost the healthcare system millions of dollars each year as worsening conditions are more expensive to treat. Moreover, people suffer while waiting to receive primary, mental, and dental care. Lack of access to dental care is a systematic problem based on multiple government and market failures placing the burden on individuals.

This paper focuses on dental care access in the Athens Clarke County area. Athens's healthcare system is overwhelmed because the county serves not only the people and college students in ACC, but also the surrounding rural counties (Rural Health Information Hub, 2022). Oral health is crucial as it affects school and work performance, self-confidence, and poor nutrition.

Maintaining good dentition affects how one eats, smiles, speaks and shows emotions (CDC, 2021). The Centers for Disease Control and Prevention also recommend regular preventative dental visits at least once a year. However, accessing a dentist in rural counties proves to be increasingly difficult (Rural Health Information Hub, 2022). Individuals from low-income homes are 50% more likely than those from higher-income families to have untreated tooth decay. There are disparities in oral health care between individuals with access to public insurance and those whose families can pay for care through other methods. In Athens Clarke County, uninsured individuals spend up to 2-3 months on waitlists before a dentist can see them. At this point, untreated oral disease can cause intense pain and impact an individual's quality of life.



Literature Review

Importance of dental care

Often overlooked, improper dental care can lead to deficient physical, mental, and social health. Oral diseases such as periodontitis, commonly known in the initial stages as gingivitis, have been associated with poor health outcomes. The presence of one single tooth puts the person at risk for decay and periodontal disease, along with the colonization of bacteria that can contribute to other diseases and conditions. Bacteria from periodontal disease are associated with an increased risk of heart disease, stroke, and respiratory infections. A growing proportion of older Americans are retaining their teeth into old age, putting them at higher risk for oral disease and causing other poor health outcomes (Haumschild et al., 2009).

Left untreated, dental diseases can lead to tooth loss. Additionally, periodontitis during pregnancy can cause birth outcomes, including preterm birth and low birth weight, which is why pregnant women are especially advised to have their regular six-month cleaning (Steinberg et al., 2013). Oral health has been linked to mental health disparities as well. When an individual's oral health is suffering, it can decrease the quality of one's life or exacerbate mental health issues through pain when eating or speaking. In comparison to the general population, people with severe mental illness are 2.7 times more likely to lose all their teeth (Kisely, 2016).

Literature Review

Shortages of providers

There is a massive labor force issue surrounding the ACC community. Although Clarke County has the most dentists compared to surrounding counties, patients seeking dental care from surrounding counties, including Madison, Oglethorpe, Jackson, and Barrow, must come to Athens for free/reduced dental care. All the surrounding counties except Jackson County are considered dental care shortage areas. Clarke County also has the highest number of specialty dentists, including Orthodontics & Dentofacial Orthopedics, Pediatric Dentistry, Oral and Maxillofacial Surgery, Periodontics, Endodontics, and Prosthodontics. Specialty dentists are needed when preventative care has been neglected. Athens is the only county in the surrounding area that has free/reduced dental treatment. Mercy Health Center, Athens Nurses Clinic, and Athens Technical College offer these free services using volunteer dentists a couple of days a month. Athens Tech offers essential preventive dental services, including but not limited to exams, cleanings, x-rays, and dental sealants. This work is performed by students and at a low cost. However, there are not enough appointment times to satisfy the number of people seeking dental care.

Disparities

Untreated oral disease has a significant impact on quality of life and productivity. Forty percent of low-income and non-Hispanic Black adults have untreated tooth decay (CDC, 2021). Demographics show that 24.7 percent of people in Clarke County are black, and 32 percent of the black population in Clarke County do not receive dental care. Further, 58% of people in Clarke County are white, while 52 percent of the white population in Clarke County do not receive dental care. Smokers over 18 make up 20.20 percent of people in Clarke County, exceeding the surrounding counties. Thirty-two percent of smokers in Clarke County do not receive dental care. Smoking increases one's chances of developing oral diseases, so it is even more essential to receive dental care.

Literature Review

Education also plays a role in the likelihood of receiving dental care and 12.1 percent of people in Clarke County do not have a High School degree. Fifty-two percent of these people do not receive dental care. In Clarke County, 34 percent of uninsured people do not receive dental care. This pertains to Medicare and Medicaid benefits. Many adults lose their dental benefits upon retirement because Medicare does not cover restorative, preventative, or emergency treatment. In addition, Medicaid programs do not require dental benefits for adults, so the coverage varies from state to state. In Georgia, however, Medicaid provides adults with emergency coverage. *Emergency coverage* is defined as “potentially life-threatening and requiring immediate treatment to stop ongoing tissue bleeding [or to] alleviate severe pain or infection” (Solana, 2020). For any services that do not fit this description, patients must cover themselves in Georgia.



Data & Analysis

We used the Athens Wellbeing Project and the Georgia Board of Health Care Workforce for this white paper. The observation period for our data set is from 2016-2022. From the Athens Wellbeing Project, we used the data that showed us the uninsurance rate and the proportion of households with no healthcare access. Our findings included the demographics of those not receiving dental care, the total number of dentists in surrounding counties, and the total population in surrounding counties.

From the Georgia Board of Health Care Workforce, we used the data that showed the total number of dentists and the total population of each county. The ideal ratio of 2,000 people to 1 dentist means there is a shortage of dentists in certain counties. Our findings include the county demographics and the ratio of providers to patients.

DATA SOURCE	OBSERVATION TIME PERIOD	VARIABLES
Athens Wellbeing Project	2016-2022	Uninsurance rate, proportion of households with no healthcare access
Georgia Board of Health Care Workforce	2020-2021	Our total dentist graph and population graph show us that the ideal ratio of 2,000 people to 1 dentist means there is a shortage of dentists in certain counties.

Data and Analysis

Our primary data comes from the Athens Wellbeing Project survey. Most of the resources provide data at the Athens-Clarke County Level. Data is based on the years 2021 and 2022. With this data, we quantified how Athens-Clarke County suffers from a lack of access to dental care. The demographics and characteristics of this population not receiving care indicate who is most vulnerable. In addition, the surrounding counties we looked at were Barrow, Jackson, Madison, Oconee, and Oglethorpe. This data comes from the Georgia Board of Health Care Workforce. These counties' dentist supply is lower than the ideal mark of 50 percent. Only one of the six was above the mark.



Findings

Figure 1. Demographics of those not receiving care.

Source: Athens Wellbeing Project

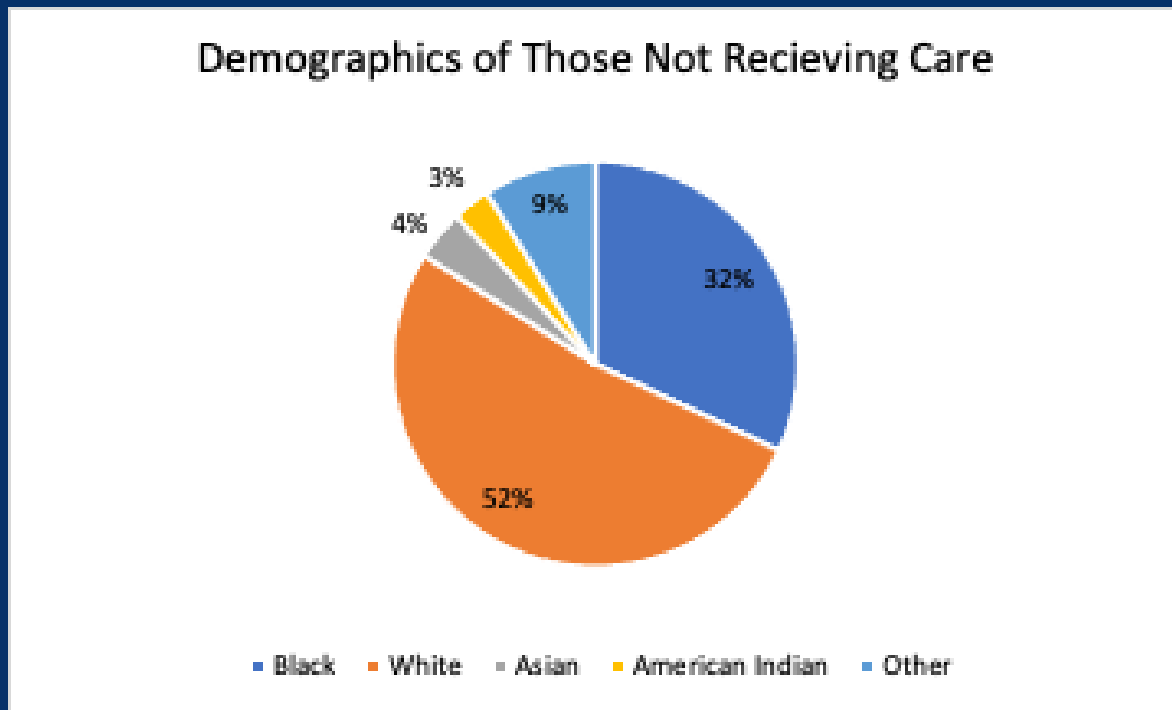
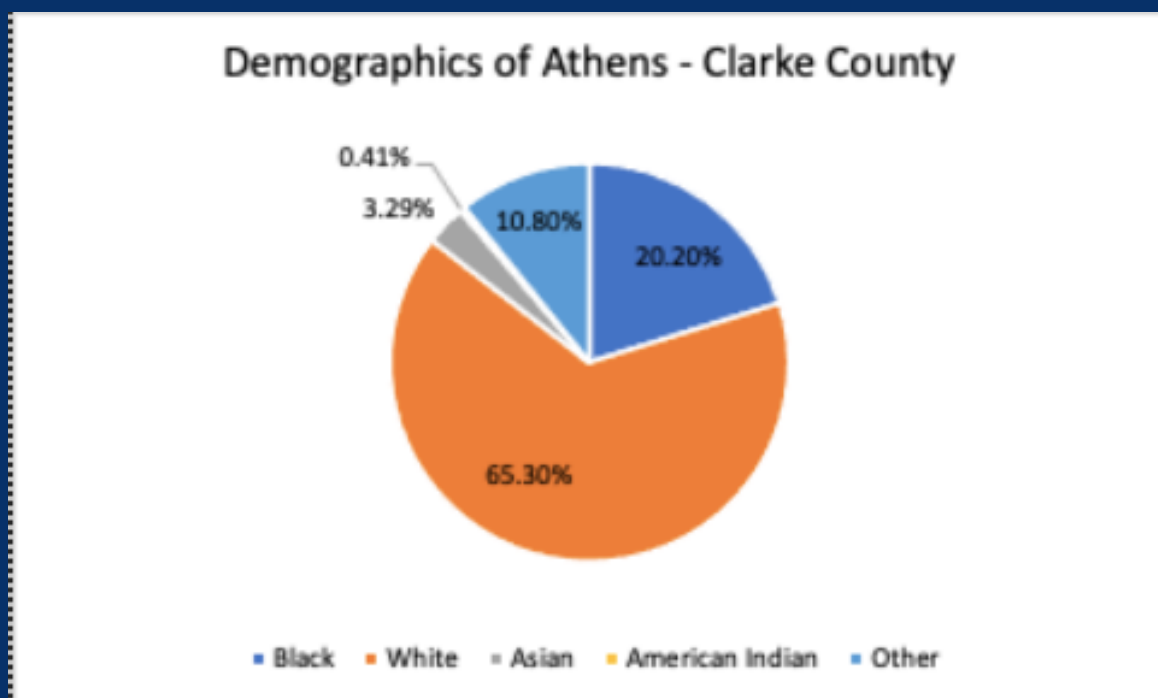


Figure 2. Demographics of Athens-Clarke County

Source: Athens Wellbeing Project



Findings

Table 1. County Demographics and Ratio of Providers to Patients
Source: Georgia Board of Healthcare Workforce, 2021

County	Population	General dentists	General dentists' rate per 100,000	Total dentists	Total dentists' rate per 100,000	Other practice type
Clarke	128,671	52	40.4	66	51.3	14
Madison	30,120	1	3.3	3	10.0	2
Oglethorpe	14,825	0	0	0	0	0
Oconee	41,799	25	59.8	33	78.9	8
Barrow	83,505	21	25.1	23	27.5	2
Jackson	75,907	31	40.8	37	48.7	6
State Of Georgia	10,711,908	3,894	36.4	5,212	48.7	1,318

Findings

Figure 3. Total Dentists in Surrounding Counties

Source: Athens Wellbeing Project

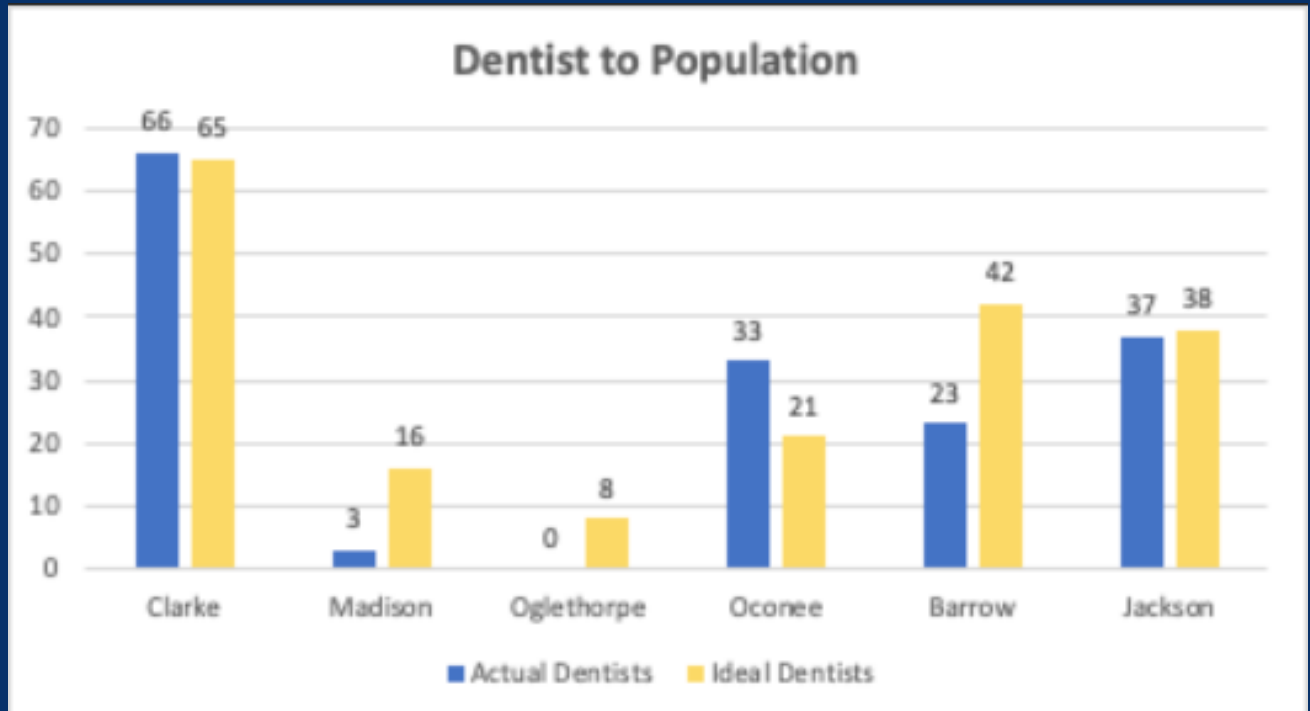
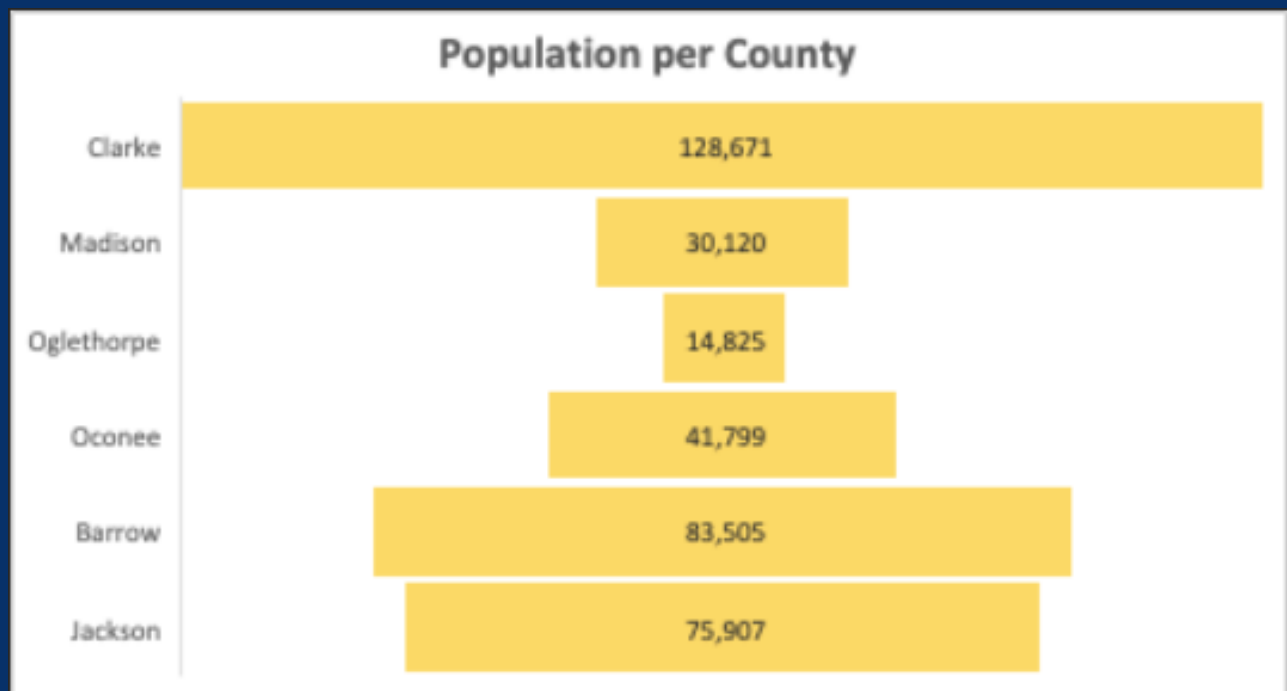


Figure 4. Total Population in Surrounding Counties

Source: Athens Wellbeing Project



Findings

Figure 5. Lack of Access to Dental Care

Source: Athens Wellbeing Project

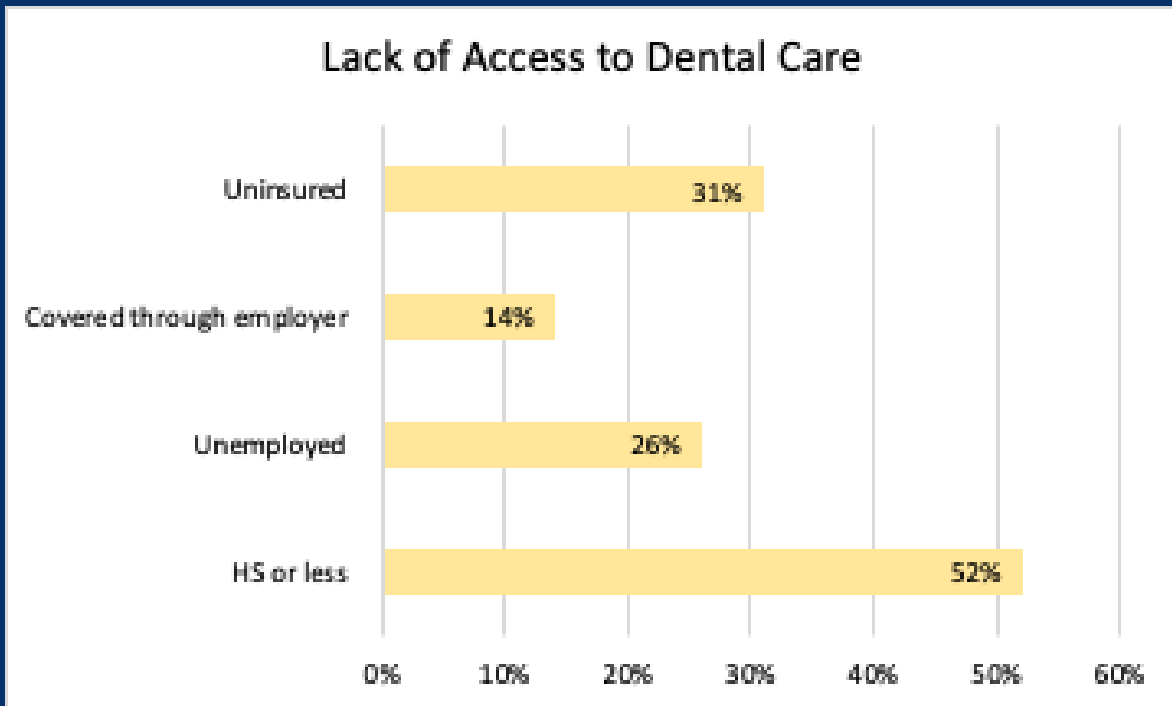
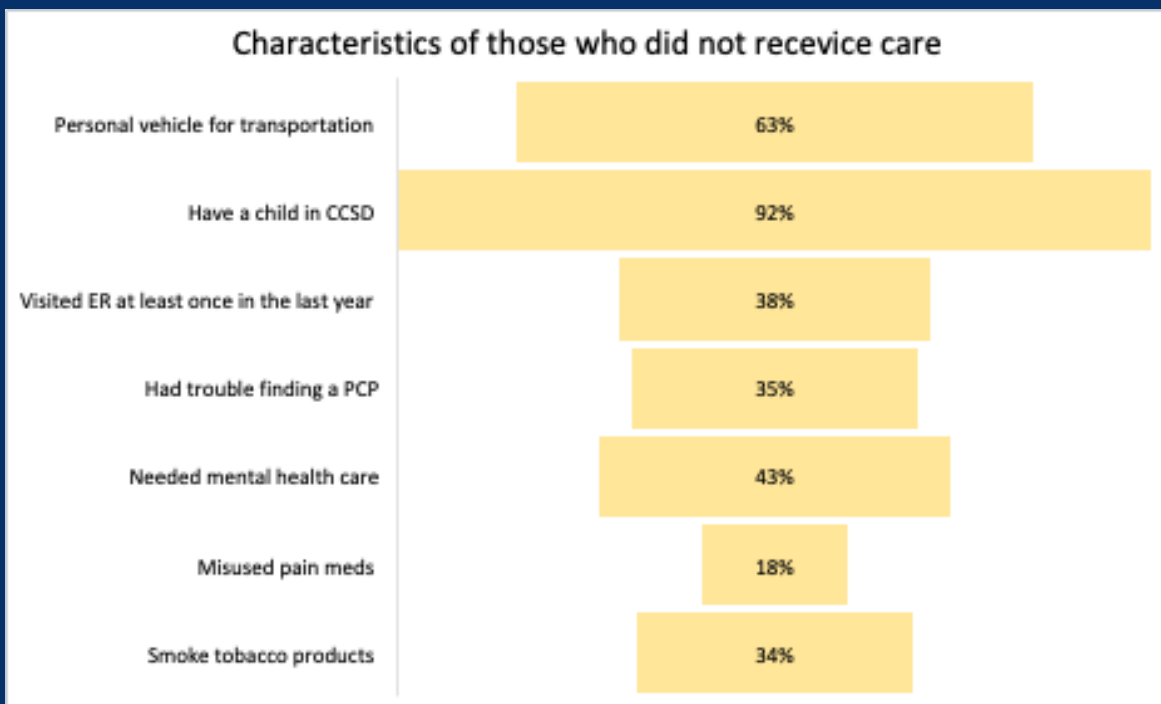


Figure 6. Characteristics of Those Who Did Not Receive Care

Source: Athens Wellbeing Project



Findings

As mentioned, one of the main issues in accessing dental care in Athens is the lack of providers. According to our research, however, Athens-Clarke County (ACC) has the second-highest percentage of dentists per 100,000 people among its surrounding counties. Athens Clarke county has a better ratio of dentists per person than the state of Georgia by over 2%. The concern then is not which county has more dentists to supply per person, but how many of the counties immediately surrounding Athens-Clarke County are critically lacking dental providers.

Based on our data, an ideal mark in the county dentist supply would be 50%, and Oconee County is the only county meeting this mark besides ACC. Madison, Jackson, Barrow, and Oglethorpe are all critically lacking dentists. Because these counties do not have a high enough supply of dentists per their population, the desperate people seeking dental care travel to ACC or Oconee County to receive oral care. Difficulty accessing dental care plagues marginalized groups even worse. Based on our data, 52 percent of people who lack dental care are people with a high school education or less.

Twenty-six percent of unemployed people struggle to access dental care, and 31 percent of people needing dental care are uninsured. Sixty-three percent of people searching for dental care stated they did not have a personal vehicle for transportation. This indicates that they would need to find alternate means to get to and from their dentist's office, making it more difficult to receive dental care. Our overall dentist and population graph show us the total number of dentists in Clarke County and surrounding counties. Jackson county and Clarke County are the only counties not in a shortage. The general dentist rate per 100,000 people in Clarke is 40.4, which is a higher rate compared to the state of Georgia. Oconee County has 59.8, but this data is not as high as it seems because Oconee County does not have 100,000 people living in the county. Clarke County has the highest number of dentists, including other practice types. Fourteen specialty dentists are in Clarke County, which plays a factor in surrounding counties using Clarke County's providers to receive dental care.

Recommendations

After evaluating our findings, we developed recommendations for the Athens-Clarke County community to improve overall dental care access. Our first recommendation is to expand existing free services at Athens Nurses Clinic and Mercy Health Clinic with grants and government subsidies. Implementing this recommendation would provide the most significant benefit as it would require no additional infrastructure due to these clinics already being in place. This recommendation would require a capital influx to bring in more dental care professionals on additional weekdays to provide oral care services and reduce patient wait times. More patients would be able to be seen at earlier stages of their oral disease, allowing for better outcomes. We believe this recommendation could easily be implemented within a one-year time frame.

The second recommendation suggests expanding care access from the University of Georgia's clinical services. The total capacity of the dental services from the University seems to be greater than the student and community usage. In the UGA Health Center's 2022 annual report, only 3,300 visits were recorded compared to their student body of approximately 50,000 (UGA Health Center Annual Report, 2022). Because of this underutilization, the county could form a partnership to open that capacity to those in need. Suppose the county were to form this partnership and configure a way for reimbursement. This solution could be operational within 2-3 years based on the time needed to configure guidelines and staffing. This, again, would rely on infrastructure already in place and allow a less complicated solution to the workforce shortage issue.

The third recommendation would be for Athens-Clarke County to formulate incentives to bring in dental students to provide discounted or free care. We understand that the gratuity clause would prevent direct financial incentives to bring in dental students. However, a viable solution would be to provide grants to a non-profit such as Mercy Health Clinic and have them organize a student loan reimbursement program. This is an excellent opportunity to provide students with a way to give back and receive financial benefits while utilizing trained individuals to help solve the shortage.

Recommendations

To accomplish this, the county would have to form partnerships with nearby universities like the Dental College of Georgia at Augusta University. This would likely take time as an academic or financial incentive would need to be coordinated. Once the details of the program were put into place, it can be expected that the program would be effective within the next two years.

As mentioned throughout our research, the supply of dental providers issue exists due to other counties needing to utilize Athens-Clarke County's infrastructure. One way to combat the overburdening of ACC's services is to assist these counties in getting access to dental resources. For our final recommendation we suggest a partnership with other counties be formed to direct resources to needed areas. With the other recommendations in place, dental students or UGA's clinic services can be utilized to target and assist certain high need areas to lighten the load on the county's resources. Through collective action, the financial burden of these resources can be spread across the counties using them while also maintaining efficiency in the resources used.

Next Steps

If we were to propose only one recommendation, it would be to focus on expanding the existing free services with grants and subsidies. By grants, we are talking about funds the city gets and uses towards this dental access problem. We would use the grants to help pay for either dental students' tuition or payment for dental professionals' help. As mentioned in the recommendations section, this solution would be the easiest to implement due to the existing infrastructure and programs already in place. By increasing the available capital, these outreach programs could afford to hire more dental professionals, expanding operations from often one day of the week to multiple days a week. One of the biggest challenges for these clinics historically has been finding dental professionals who can volunteer. With additional capital available, financial incentives can be provided which would increase their willingness to participate. With more involvement, the free or discounted programs would both have constant operation and would be able to expand to serve more people.

Next Steps

Another outcome of this solution could be mobile operations for discounted or free dental care. If these clinics were provided with enough capital, a mobile clinic could be formed. This would expand the impact of these services as it would allow them to travel to these in-needed counties which would otherwise have to travel to Athens-Clarke County or simply not receive care due to lack of transportation. The chain effect of lack of care would mean health would eventually worsen, leading to infection and being admitted to the Athens hospital systems for major infections. Given that these individuals could not afford care in the first place, this cost would fall into provisions for bad debt and eventually would outpace the cost of providing discounted or free dental care in the first place. These mobile clinics would be a key intervention for preventing this as they can target the highest-need areas and service the counties currently using Athens-Clarke County resources.

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To accomplish this solution, the county would first have to set aside funds to provide for these organizations. There would likely be certain Federal and State funds that could apply to a program with this mission. After those funds were secured, the county government would designate what the clinics would receive based on their capacity for outreach and their need for funds. By being selective in this process, they can ensure that the money is being used as effectively as possible. Following this, these clinics could immediately bring in more dental professionals with financial incentives and increase clinic operation days. With all of this in mind, it could be accomplished in about one year.

By expanding free care and working to overcome access issues, Athens-Clarke County can decrease the significant gap in dental care access. While all the recommendations together would provide the largest impact, expansion of free and discounted care with an emphasis providing care to those who need it most is the solution that we feel would both be the easiest to implement and would be most effective at in increasing access to dental care providers.

About AWP and the White Papers

Athens Wellbeing Project

The Athens Wellbeing Project (AWP) is an unprecedented collaboration between institutional stakeholders and community partners with the mission is to empower the Athens community with meaningful data that will lead to more informed decision-making, improvements in service delivery, and greater quality of life for our citizens. The purpose of the Athens Wellbeing Project is to assist our community leaders and institutions by providing a comprehensive snapshot of our community's unique needs and assets in Athens-Clarke County. AWP uses a Social Determinants of Health framework to guide all data collection and reporting, providing information across five domains: civic vitality, community safety, health, housing, and lifelong learning.

The White Paper Series

The Fall 2022 White Paper Series was produced as part of the academic requirements of the Fall 2022 Health Policy Analysis course (HPAM 7400) in the Department of Health Policy & Management, College of Public Health, University of Georgia. The course was taught by Dr. Grace Bagwell Adams with Rebecca Baskam serving as the teaching assistant. The student team drafted the white paper and conducted the analysis and recommendations seen here.



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