THE FLORIDA ORAL HEALTH EQUITY AND PROGRESS NETWORK

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The Florida Oral Health Report: A Perspective of Florida's Oral Health Safety Net

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What is Oral Health?

Health is generally defined as an overall state of well-being that allows individuals to participate in daily and community life. Oral health is a subset of health and a key indicator of any person's overall health. Any disorder of the mouth or teeth that limits a person's ability to bite, chew, speak, or smile or that interferes with psychosocial well-being is classified as an oral health problem [1]. Factors that affect oral health include personal influences of oral hygiene and diet and detrimental exposure to tobacco or other substances. Environmental considerations of community water fluoridation, social supports, and community health literacy influence populations' oral health. Access to oral health preventive care and episodic interventional care complement the personal and community factors to promote overall good oral health for individuals and communities [2].

The oral health care system is divided into two segments. One segment is a system of mostly detached private providers that serves about two-thirds of Americans. The other is an uneven network of safety net providers to care for underserved, low-income people, people from minority racial/ethnic groups, people with disabilities or different special needs, and rural and immigrant populations [3]. Despite the attempt from this safety net arrangement, many people from underserved communities continue to experience barriers to accessing oral health care.

Populations with Disparities or Oral Health Care and Outcomes

Improvements in oral health preventive and restorative care have been profound over the past century. But all segments of the U.S. population do not benefit from these gains inequitable ways. Oral health conditions like dental caries and periodontal diseases are some of the most frequent and preventable health problems that burden underserved communities [4]. U.S. public health experts declare that these disparities are "unnecessary and avoidable and also considered unfair and unjust" [3].

Children

Children in low-income families are among the most at risk of missing oral health care. Children from low-income families who enroll in Florida Medicaid or the State Children's Health Insurance Plan (SCHIP) should benefit from the early periodic screening and diagnostic treatments (EPSDT) requirements, including preventive dental care. But Florida's children chronically rank at or near the bottom of national standings for the use of these services. Between 2008 and 2016, Florida demonstrated considerable improvements from being the lowest-ranked state in the nation, with fewer than 21% of children receiving at least one service, to the 4th lowest state in 2016, with about 38% of children obtaining a service. However, that improvement stagnated up to the most current numbers available in 2018. Still, only 38% of Florida's eligible children in Florida received any oral health benefit in 2018, leaving nearly two-thirds of Florida's most vulnerable children without this vital service [5]. Missing out on these benefits detracts from Florida's children's well-being by triggering malnutrition, developmental delays, failure-to-thrive, and academic losses [3].

Low-Income Adults (18 to 64 years)

Between 2010 and 2020, we saw a national decline in dental care use among most working-age adults. The decrease was mostly attributable to unaffordability across all income levels. Conversely, access to care improved among extremely low-income adults in states with Medicaid expansion [3]. However, because Florida remains one of 12 states that has not expanded Medicaid eligibility under the ACA, Floridians do not have this advantage of improved access [2]. Florida's low-income working adults are frequently without health care coverage, including oral health care coverage.

Florida Medicaid benefits are limited to extremely low-income parents and people with disabilities, and the plan does not guarantee preventive oral health services to enrollees. In early 2019, the Florida Agency for Health Care Administration (AHCA) transferred all Medicaid enrollees to dental managed care plans in alignment with the national trend. The contracts stipulate the delivery of *some* dental benefits to adults in the Medicaid program [2]. According to AHCA, people 21 years and older *may* be eligible for limited preventive oral health services through these dental managed care plans. Still, the benefit is not assured. The Florida Medicaid Dental Services Policy states, "Florida Medicaid covers emergency dental services for recipients age 21 years and older to alleviate pain, infection, or both, and procedures essential to prepare the mouth for dentures" [6]. These emergency services are available only to clients who are categorically eligible for Medicaid benefits. There is no clarity about what, if any, non-emergency dental benefits are provided through Florida Medicaid Dental Managed Care.

The vast majority of low-income working adults in Florida do not meet the categorical eligibility criteria for Medicaid. The requirements stipulate benefits only to parents of dependent children who earn less than 27% of the federal poverty level ($486 per month for a family of three). Non-disabled adults without dependent children or parents who make more than the meager amount allowed by Florida Medicaid do not qualify for any health benefits. Critically important dental care coverage is mostly out of reach for low-income adults if not provided by their employers. Evidence points to reductions in mortality for working-age adults with oral health problems who have dental coverage versus adults without dental insurance [7].

People 65-years and Older

Individuals 65-years and older have specific oral health concerns that compromise their overall health and quality of life. Older people are more likely to experience tooth loss leading to detrimental effects of chewing and nutrition. They more frequently take medications that include dry mouth and other side effects that contribute to tooth decay, mouth ulcers, or altered tastes [8]. Despite these higher risks, as people age, they become less likely to receive regular oral health care, perhaps because Medicare excludes coverage for most dental services [2]. However, people 65-years and older may opt to enroll in Medicare Advantage (M.A.) plans that provide additional benefits to beneficiaries through managed care arrangements. In Florida, 74% of M.A. plans provide some dental benefits, though they

have similar limits and caps on services as commercial dental insurance plans [8]. M.A.'s penetration in Florida varies by region, with much greater uptake in urban versus rural areas. For instance, 67% of Miami-Dade Medicare beneficiaries use an M.A. plan. In comparison, only 11% of Monroe county ones do [9].

Additionally, Medicare beneficiaries who are also members of underserved communities have lower rates of oral health services. Hispanic and Black people over 65-years visit oral health providers much less frequently than their White counterparts. Older people living in rural areas have significantly fewer dental visits than those in urban regions. Additionally, older people with low-incomes are less likely to have made a dental visit in the prior year than those with middle or high incomes [8]. People older than 65-years with low-incomes in Florida who are also eligible for Medicaid benefits (dual eligible) under the Florida Long-term Care (LTC) program do not receive any additional dental benefits beyond what is offered through the standard Florida Medicaid Managed Care program. Typical coverage includes problem-focused visits, extractions, pain management, and some dentures, but not preventive services [8].

Addressing the Florida Oral Health Situation

The Florida Oral Health Equity and Progress Network (OPEN Florida) held five virtual regional roundtable discussions throughout 2020 with Florida's oral health stakeholders. The participants work with a wide variety of underserved populations, including children from low-income families, Floridians older than 65-years, rural populations, communities with low-English proficiency, people earning near or below the federal poverty level people with other special needs. The stakeholders represented the Florida oral health safety net providers: dental professionals, administrators, and advocates from academia, federally qualified health centers (FQHCs), and free and charitable clinics (F&CCs). They shared insights from personal experiences and stories told to them by other direct care workers and clients.

Throughout the five regional discussions, we aimed to learn what the stakeholders considered to be the overall general state of oral health and dental care in Florida, what are the long-standing barriers to their populations of service obtaining regular oral and dental health care, and the strategies and processes they have used to help mitigate the barriers. Because the sessions took place in the setting of the COVID-19 pandemic, we also explored what specific effects the pandemic has had on oral health and access. We also asked what lessons learned from adapting to the pandemic could be applied in the longer-term future to improve oral health for all Floridians. Finally, we asked the participants to share their plans and aspirations for increasing their institution's ability to deliver optimal oral health care to their communities of focus.

Funding for Oral Care for Underserved Populations

Understandably, funding for oral health services, regardless of the provider or organization type, was a topic that spontaneously arose at all five discussions. As delivering oral health care to underserved populations requires financing, the system's economics determine when and whether people have access to services [2]. The funding streams for the provider agencies

do not flow uninterrupted and with predictability. Participants described funding sources from government spending through Medicaid/Medicare reimbursement, through federal programs like Ryan White funding for people living with HIV/AIDS and federal Health Resources and Services Administration (HRSA) grants. Some programs received local funding through county health department allocations, other reported state grants to deliver their services. Nearly all reported some type of private foundation grant funding. Many of the provider agencies rely solely on unpaid volunteer professionals to deliver the services to their clients. One of these agencies identified this arrangement as having specific limitations: "*We do everything we possibly can within our means and scopes of our volunteer capacity…we are limited by the resources of our volunteers*." Historical data show that about 60% of Florida dentists contributed volunteer hours to provide access to underserved populations during 2017 and 2018. However, only 5.5% of them volunteered for at least 60 hours over two years, limiting the safety net system's overall ability to rely on volunteer hours [10]. Many volunteer providers participate in single-day, large scale events that provide temporary and piecemeal relief. These events help low-income Floridians but do not address the underlying issues contributing to insecure oral health access [2, 11].

None of the participants reported significant funding to their agencies through billing private commercial insurers. Some of the participants also discussed the difficulties associated with billing commercial insurers describing "*how burdening it's become to even bill for anything*." They discussed the low rate of reimbursement compared to the resources spent on submitting a bill and how that function distracts from their overall mission "*there's so much more that goes on with the other insurance companies. And the hoops we have to jump through to get paid…. if we get paid 50%, 25%, or not paid at all …we can see another one or two or three uninsured patients*." They compared that process for billing the Florida Medicaid Managed Care providers by explaining "*there's a mechanism in place to make us whole for that, which is great, right? And so, if we don't get paid from Medicaid provider, then the state makes us whole on whatever it is you're not paying us on*."

Perspectives of Oral Health

A common theme regarding the overall view of oral health was a consistent acceptance of a holistic connection between oral health and general health [2]. One health advocacy participant made the connection explicit by stating "*everything about your health begins in your mouth*." The effects of poor oral health were clarified by pointing out that "*poor dental hygiene affects so many organs of our of the body, from the heart to the kidneys, to the liver*."

The linkages of oral health to other aspects of well-being were directly correlated to the populations various participants served. Dental providers and care system coordinators agreed that dental problems adversely impact children's school learning and overall school performance.

One participant who cares for communities older than 65-years speaking about their clients' co-morbid health conditions explained that "*from observation, we can see a decline in our patients, as they're less frequent to our clinic*." This perspective is supported by research that

shows routine oral health care and retention of natural teeth correlate to an overall better quality of life as people age [12].

One of the professional providers participating in the discussion provided a scientific explanation for many of the deleterious effects of long-term oral health neglect, "*the reason there is that oral-systemic link is because gum disease is an inflammatory disease, and it's caused by bacteria. So, it's a bacterial infection that creates an inflammatory response. And that's why it's connected systemically with so many other inflammatory diseases*."

Episodic versus Preventive Oral Health Care

Consistent with the holistic perspective was understanding that delayed or absent oral health care results in worsening health and well- being. As one participant provider described: "*And the downside of that when dentistry when you put it off, it doesn't go away. Dental disease is not static. Nothing is linear in our business; you know that it just gets worse. And when you see this patient a few months later, half a year later. They come back a year later and now the treatments more radical they are they have to have a root canal therapy; they have to have an extraction.*"

A representative of one FQHC clarified that many of their clients come for first visits "*in an advanced state of decay*" because they had "*no access to care; they're presenting with more deterioration and deeper problems*." Participants representing an acute care hospital and coordinators of multi-agency services provided insights that delayed or absent care causes expensive emergency department visits when "*severe cases need to come in for IV antibiotics*" resulting in "*a lot of unnecessary hospitalizations due to what could have been primary dental care*." Evidence from studies in other states have confirmed the widespread phenomenon that individuals who accessed preventive dental service use in the preceding year decreased the likelihood of emergency department visits for oral health conditions by nearly 40% [13].

In addition to the consequence of worsening dental disease stemming from delayed care, providers who deliver care in schools reported problems of poorer nutrition and delayed learning for the children who did not receive recommended treatments. The reports the providers heard have also been clarified in the research literature that describes advanced caries in children as leading to severe nutritional deficits. The resultant tooth pain causes children to miss more than 51 million school hours annually [3].

Participants identified preventive care as one of their priority services offered to their vulnerable populations. Notably children are a priority target for preventive services through several school-based outreach programs where dental hygienists screen school children, apply sealants and execute innovative strategies to prevent decay. School-based partnerships between FQHCs and schools are reported as a strong strategy that requires long-term funding commitments to remain viable. Providing sealant is notably a low-cost action that provides a high return on investments for Medicaid programs by reducing caries [2, 14].

Some clinics that provide services to uninsured or underinsured have long waiting lists and the waits are longer for preventive care than for interventions like extractions or restorations. One clinic representative explained scheduling constraints in this way: "*if it's just a routine cleaning, that could take several weeks. If it's some extractions that could take a little bit as long as there's no pain involved… we try to triage the best that we can, but it's not perfect.*" Some clinic providers described plans to expand their preventive services. Others who have already expanded explained that engaging with dental and dental hygiene students has facilitated some greater access to preventive care: "*you know, and so it's really been our partners with [university], you know, that it really helped us try to get ahead of that curve, and put in more preventative care into our practice here.*" Throughout Florida and the country, academic institutions are a significant source of safety net providers [11].

Several providers and clinic representatives reported that their clients focus on episodic rather than preventive care; hence they tailor their services to the clients' presentations. One of the administrators explained that they "*see the people when there's an urgent need. I wish we could tell them that it's important to, you know, have that prophylactic experience. But that's not usually what happens…but I wish we could do more prophylactic care. But that's not a priority amongst most of our patients.*"

Other clinics acknowledge the limitations of their resources, especially for adult services, reporting that "*unfortunately, we try to focus on urgent care patients, so people who are already in pain*" in recognition that their resources will not stretch to deliver the much-needed preventive services to adults.

Barriers to Oral Health Care

The participants dedicated the largest proportion of the discussions (35%) to explaining what factors inhibit their client communities from access to routine and necessary oral health care. Analysis of this important part of the discussions revealed six themes that describe the barriers to oral health care access for Florida's vulnerable populations. These themes are 1) unaffordability, 2) lack of provider capacity, 3) consumer difficulty in navigating the safety-net system, 4) lack of consumer awareness (including dental phobia), 5) cultural or linguistic incongruity, and 6) consumer logistic factors (time and distance).

Unaffordable Costs of Oral Health and Dental Services

The cost of care was an undercurrent throughout the conversations. The participants frequently alluded that prohibitive costs were such an obvious barrier to coverage that mentioning it was unnecessary. One participant explicitly described the high costs: "*the affordability for dental care in our community is just; it's prohibitive.*" The issue of non-affordability for dental services was not limited to people without insurance. Providers of services to children report that families with dental coverage have difficulty paying their portion of preventive dental sealants, leaving some children without key services. Insured clients also forgo urgent dental care when the copayments are too expensive. One clinic administrator described the situation "*…people have dental insurance, but they can't afford the payment that's associated with some of these major procedures, especially those*

especially those oral surgeries.... they can't afford their $800, $400, or $500 extraction." The perception that dental costs are high and increasing is confirmed through large scale studies [2] as out-of-pocket expenses for people with private insurance for dental care increased 25% over the past decade. People with public coverage (Medicaid) saw out-of-pocket expenses increase greater than 2.5 times over the same period [15]. Comprehensive dental benefits typically require subscribers to pay 20% of the cost on basic restorative services like fillings but pay 50% of the bill for complex high-cost services (ex: crowns or root canals). Even with these high out-of-pocket expenses, coverage plans generally cap annual and lifetime benefits [2].

It is not only extremely high costs that place barriers to access for the communities that the participants' agencies serve. As one representative stated, even charging very low-income working people reduced-cost fees tied to their income levels may also block their access: "*And so even on a sliding scale, you know, sometimes they have to pay out of pocket for certain treatment, and they just can't afford it. And, you know, that, you know, when they when it comes to money aspect, it stops people in their tracks sometimes*."

The participants reported that the high costs of dental services pose barriers for the agencies when referring clients with advanced care needs. A representative from one F&CC described it in this way: "*we have children that just need advanced care, in order for us to treat them … we can negotiate a rate of like $5,000. But [the agency] doesn't have that, the patients sure don't have that. The hospital agreed to give us a reduced rate. But again, it's prohibitive.…we have to be very clear who we sacrifice when it comes to access to care. And it is devastating the impact that has on our community*."

Closely tied to the concept of cost is the difficulty individuals encounter when seeking oral health care without dental care benefits or health insurance of any type. The problem of access for people without any dental health coverage was explained as "*people just not having access if they don't have the dental insurance, they can't afford it and cannot see a dentist, but they have dental issues*." One group participant pointed out that this includes a large segment of low-income working adults in Florida "*there's a whole group of people who don't even have a source of payment, because they're very poor, and they're not the target of the Medicaid population*." The participants' impressions that lack of insurance results in low oral health care utilization rates across underserved populations have been confirmed in the literature as a firm impediment through multiple studies [16-19]. Indeed, unaffordability is a barrier that prevents access to oral care more frequently than it prevents medical care, vision care, prescription coverages, or mental health care [3].

Oral Health Care System Lack of Capacity

The participants in our discussions represented the oral health providers from various Florida regions that aim to provide a safety net for underserved populations. These providers are an unstructured network striving to deliver oral health services in vulnerable communities with few other access points for care. As is true of most safety-net health care setups [20], demand from their clients routinely outpaces their ability to serve. Based on the emphasis placed on

these limitations during the discussion, participants viewed this lack of system capacity as the driving force behind inadequate dental care access. The safety net is comprised of the not-for-profit agencies that operate F&CCs and FQHCs, the academic teaching clinics, and private providers that participate in the Florida Medicaid Managed Care dental networks. None of the discussions included any providers in private practice who participate in the Florida Medicaid program and the participants frequently commented that the number of Medicaid participating dentists is inadequate, "*we only have two pediatric, I think it's two pediatric dentists that actually accept Medicaid.*" and "*that's not an uncommon story with people who have Medicaid. They can't find providers in their area that will accept the type of Medicaid that they have*." The providers on the calls recognized some of the underlying causes for scanty Medicaid participation as related to "*meager Medicaid reimbursement rates*," and a provider participant said, "*I don't blame dentists. I mean, we have one of the worst Medicaid reimbursement rates in the United States*." The participants' impressions regarding the low rates of participation of Florida dentists are reflected in different studies. Among other factors, low Medicaid reimbursement has stymied dentists' willingness to participate in Medicaid [10, 21, 22]. Economic analysis has shown that increased Medicaid reimbursement rates to dentists would lead to greater rates of children receiving Medicaid dental services [23].

The provider agencies represented in our discussions each have a limited focus of populations served and services provided. Some of the F&CCs limit their populations served to people without any insurance. Others limit to only adults who are 18 to 64 years and may only provide episodic care rather than preventive services. One county health department and some FQHCs offer services only to children; some of the services are limited to strictly preventive care. Some of the providers expressed dismay that they did not have resources to provide comprehensive care to their clients: "…l*eaves me feeling so frustrated about these kids … we don't have the providers to provide the care*." There was general understanding that this mishmash of services leaves wide gaps in the safety net. Participants referred to *community residents who "fall through the cracks when it comes to being able to access safety nets that are in place for the poor, working in our community*." The participants were well-founded in their perceptions that there are few places to refer their clients. In Florida, only 30% of dental providers saw even one Medicaid enrollee in 2018. Only 13% of the providers reported seeing more than 100 Medicaid enrollees over the year; these dentists representing the safety net provider network [10].

The concept of a "waiting list" for accessing care was repeated throughout the conversations and applied consistently across the populations served, including children. One participant quantified their current list as 300 clients and growing. The waiting list postponed services for many clients. Depending on the service type, participants reported delays of weeks to months. One agency representative described using a triage system to allocate their services to the clients on a waiting list. The most acute needs came first, postponing preventive maintenance care: "*our dental coordinator triages the patients beforehand...So if it's something that's excruciating pain, or for example, we had a gentleman call, or he wrote on*

Facebook that he just had this impacted wisdom tooth and he was not functional, and he didn't know what to do. So she was able to work him in."

Despite the overwhelmed systems of safety net care exemplified by "*sporty waiting lists,*" and "*lines that are getting longer*," some participants allowed that having a functional wait list at least placed underserved clients in a queue for care. Clients who would otherwise be left to go without any service until emergencies occur "*The number of kids on waiting lists are tragic, except the non-tragic part is, at least there is a program to which they can be on a waiting list*."

Navigating the Health Care Safety Net

As described in the prior section, the oral health care safety net is not a coordinated system, rather a collection of independent agencies and institutions that seek public and private funding to deliver their essential services. The funding is largely episodic and frequently imposes various conditions and restrictions on the population's grantees can serve and the services they can provide. This, coupled with the complex system to qualify for public coverages, leaves underserved communities with the formidable task of navigating the ever-changing network of oral health services without a road map. A participant effectively described the need to better integrate services: "*…you know, maybe even organized a little bit better that you know, not everybody is treating pediatric patients, somebody has to treat older patients, and you know, organization and a little bit collaboration is important, especially nowadays*." One region represented in our discussions has an integrated network that combines the public coverage application processes with referrals to appropriate safety net providers. The representative described how "*we help handhold each parent or guardian and get them Medicaid or connected with a Health Navigator through our primary care access network and get them on the health care marketplace for dental insurance*." Even within the context of a coordinated approach as described, the representative also explained that the vulnerable and underservice clientele has specific needs that make it challenging for them to stay connected to the services. "*They have all these needs. And it's not only that health care or dental care, you know, they don't have a place to live, they don't have a job, they don't have transportation, they don't have any money. And so, accessing the care is taking longer, and there's some gaps*."

Across the state, participants expressed difficulty in making their target populations aware of the services offered. One shared that "*it's a big concern, the awareness, and education of the community, how they access these resources*." The need for community education was especially predominant for participants serving rural residents and communities with low-English proficiency. One participant described the lack of "*awareness of rural clinics or low-income clinics that are FQHC that are here." Noting that "not enough people know about …that they can take advantage of the low prices that we have, and actually receive care for their kids*." Research examining access to oral health care among Florida's migrant workers and their families show that awareness of the available services were highly predictive of who obtained preventive dental care [24].

Awareness and Understanding of Oral and Dental Health Services

Participants lamented that many of their clients do not prioritize their oral health needs. They attributed this phenomenon to a lack of understanding of the importance of oral health in relation to overall health and a long-standing dental phobia – adults fearing to see a dentist, which one participant described as being "*passed down by generations*." The generational legacy of aversion to dental care has been quantified in research and is linked to adults who grew up in lower-income homes retaining their dental care aversions and poorer dental outcomes, perpetuating oral health disparities [25]. The exasperation for this barrier was particularly well-articulated as "*an ongoing frustration, people don't recognize or realize the importance of dental care, preventive dental care, many of our immigrant communities, you know, will not come to the health center unless there's a dire need, or they're in excruciating pain*." One recent study corroborated this concept when determining that Florida migrant farm workers who recognized value of routine oral self-care also availed themselves and their families of more frequent preventive dental services [24].

The perspective that places oral health lower on the health hierarchy was not limited to being a barrier for adult preventive care. The providers that deliver school-based services reported that gaining access to the schools and being considered essential service providers is sometimes an uphill battle: "*people aren't viewing us as essential…we really had to push the issue with the school board to basically say no*." The participants viewed this barrier as part of a longer evolutionary paradigm change. They compared the historical shift from an emphasis on episodic medical care to focus on preventive services. The participants expressed optimism that oral health can soon follow the trend, helped by community outreach and education. A representative from an FQHC explained: "*we've come a long way in preventative medicine, … years ago, there was the same type of mindset… how terrible it is, when you have a comorbidity, it's not okay to be diabetic, it's not okay to be obese, we have to work on these things…we need to catch up on preventative dental care as well, in terms of getting that message out*."

Linguistic and Cultural Mismatch of Providers and Consumers

The communities that the safety net agency representatives describe as their populations of interest are culturally diverse. Many do not speak English as a primary language (low-English proficient [LEP]). Sometimes, the cultural differences may lead to mistrust of health care providers who do not share the consumers' cultural perspective. This lack of cultural connection may have contributed to one provider not grasping a parents' fear and mistrust of signing their children up for dental services, even when a Spanish speaking provider was present. When we probed the participant for their understanding of the perceived mistrust they replied, "*I don't know what it is*." Then the participant went on to explain that when the known and culturally congruent school translators tell the parents that "*these individuals at the school with the dental programs, make sure you sign their forms, because you can trust that …we know that with them communicating to the families…they sign up for the services*." Concerning cultural congruence and trust, another provider in one discussion pointed out,

" [*when*] *we have people from their cultural group, helping them to get the message, there is more trust there implicitly*."

Evidence is strong that clients desire culturally congruent care yet, the national workforce still does not represent the populations they serve [26]. The picture in Florida is mixed. The most current report on the racial and ethnic composition of Florida dentists show a growing proportion of dentists who are Hispanic, from 18% in 2009 to 24% in 2018, closely matching the proportion of the Florida population that self-reports as Hispanic (26%), while the proportion of Florida's Black dentists has increased from 3% to 3.7% over the same time period, falling significantly short of representing the 17% of Floridians who identify as Black [10, 27]. Participants from some of the school-based resources suspected some resistance to participation might be arising from the immigration status of children's family members and fear for disclosure of information to immigration authorities. *One participant explained that some families are "not openly willing to give their information because they don't know what are the consequences going*." This phenomenon has been documented for other services and the "deportability state of mind" has specifically has been noted as a barrier to eligible children receiving oral health services [2].

Overcoming language barriers often makes it easier to overcome obstacles created by deeply held cultural beliefs. Effective use of oral interpreters during visits and translated consent and instructions documents are helpful tools. In Florida communities, these language strategies are effective for many clients who speak Spanish and Creole, but as one representative pointed out "*there's like 94 languages spoken in the Central Florida community at home." They continued, " …it will be almost impossible to have forms in all these different languages, but we do the top five…and we try to have interpreters either over the phone, or in person with our volunteer providers. But I think there's always room of improvement*." The duty of interpretation and translation looms large for providers as one described "*probably 90% - 80% at least - of our of our patients needed translator in the room*."

Logistic Impediments to Oral Health Care

The discussion participants explained that even when all other barriers are surmounted, additional logistical factors frequently halt or delay their delivery of services. These factors are primarily attributed to time and place. For some of the agencies' clients' transportation to a health care facility requires up to 80 miles of travel. For clinics in rural areas, the availability of transportation over such distances does not exist. One rural clinic representative pronounced some clients as "*lucky enough to be in a rural community that's close to an FQHC with dental…having a good shot of regular ongoing primary care*." They went on to explain, "*but across 11,000 square miles that I serve, we have so many pockets of people who aren't proximal to places where they can access services*." Multi-state analyses have established that clients living in rural areas who must traverse longer distances have had less preventive dental services [28]. Clinics in urban settings face similar barriers when reaching out to their rural clientele. The barriers also exist for urban clients who rely on public transportation that is time-consuming and costly proportional to their income. One clinic representative reported relying on referring hospitals who issue "*bus passes*" to clients after being seen for dental

problems in a hospital emergency department. In national reviews, lack of transportation for urban and rural settings is a major barrier for low-income people receiving oral health care. This is true despite the federal regulation requiring Medicaid to cover transportation for services [2].

The hours of operation for available dental services are liable to conflict with the low-income workers' hours of employment leading to the second most common logistical barrier. The clinic representatives acknowledged this conflict when one voiced the dilemma "*with our population, they don't get paid time off to go the doctors'…if they want to come to the dentist…they just don't get paid. So it's just a situation where it's not as easy to access the healthcare when you have a supervisor that says either show up or you lose your job*." The participants' impressions about availability of services only during traditional work hours being impediment to access have long been reported through research and policy analyses [11]. Generally, FHQCs are required to offer their services at times and places convenient to the populations they serve [2].

Interactions of Barriers to Oral Health Care

The participants' barriers to underserved communities receiving oral health care are not isolated from one another. Instead, they see them as intertwined. The participants infer that the logistic obstacles to accessing services likely contribute to their clientele's priority attention on episodic rather than preventive oral health care and that the lack of safety net capacity contributes to the logistic time and distance limitations: "*I fear they use it episodically because we don't have enough providers throughout the region, where they can go to on a regular basis we have to ship them to [distant county] for this massive episodic treatment*." The inadequate capacity of the safety net system leads to the difficulty of navigating services. The overarching high costs associated with oral health care underscore the safety net capacity as low Medicaid reimbursement inhibits providers from participating in the safety net. Additionally, the logistic time and transportation barriers that the underserved populations confront contribute to missed appointments and cancellations. The missed appointments diminish dental providers' potential to bill Medicaid and disincentive their safety net participation [2].

Strategies to Surmount Access Barriers

Provider participants offered some strategies they have implemented to increase access to oral health services within their communities. Many of the strategies they reported using have also been reported as strong techniques to improve oral health care access by national policy experts and through demonstration projects. They include collaborating with academic institutions to engage dental and dental hygiene students in the delivery of care, taking the care directly to the communities through mobile clinics and to schools, capitalizing on the community connections their agencies have built to engage their target populations, offering treatment hours beyond traditional work hours, and insuring their services are located with proximity to the communities of need. Some providers expressed they had

learned new strategies out of the necessity of adapting to the COVID-19 pandemic that they hope to continue to build access to care.

Collaborating with Academic Institutions

Statewide, participants reported engaging dental practitioners-in-training to deliver care to their clients. This was done through referrals to academic clinic settings and some participants became official teaching sites. Indeed, by design of HRSA, despite the academic clinics operating primarily as teaching laboratories for students, due to the secondary benefit of care delivery to underserved populations, students are considered part of the safety net delivery system for underserved populations [2, 11]. The participants described their attempt to maximize services through the academic clinics, "*So we leverage we leverage that, and that's been a fantastic relationship. And we just try to get as many people in as we can to be seen when they're running*." Having dental students has allowed some clinics to expand the types of services they provide "*it really helped us try to get ahead of that curve and put in more preventative care into our practice here. So now we have a really nice, well-rounded care delivery*." Overall the participants see the academic partnerships as a net positive. Still, they do acknowledge some limitations that using trainees impart "*I'm having students, and in a learning environment the students are clearly not as fast as a seasoned dentist who has a [you know] how to practice for 20-30 years, but at the same time, it helps us keep our costs low so we can achieve our mission*." One participant expressed a hope that working in the clinic the students would "*get a heart for our community. And hopefully, we'll come back and volunteer someday*." The reason for HRSA's inclusion of students in the safety net is to motivate new providers to setup practices that serve communities of need by working in FQHCs, CHC, or accepting Medicaid in private practice [2, 11].

Strategic Location

Meeting their clients where they could most easily access services was the most frequent strategy that the participants described. They discussed locating their clinics to neighborhoods more closely located to the clients, "*So when we first started the clinic, we were in a small remote location, we didn't have the dental capacity. But we had a building built and we added in our dental services*." Besides building a clinic close to their communities, two additional location strategies were discussed, mobile clinics and co-location with medical care.

Mobile clinics

To get services to children, several FQHC representatives reported taking mobile clinics to schools, one even to the exclusion of having a permanent location. *One provider offered that they "did have a brick and mortar building, but it was not built in a very convenient location for the needy. So, we shut that down. So, we're going to take it to the schools*." Locating health services, including dental care, within schools has shown substantial benefits to reaching children with preventive services. The strategy avoids the barriers to care of parental time off work and transportation. Leveraging the school-based resources into a mobile unit with the capability of delivering care to many schools can ameliorate the deficit of oral health

focus present in many school-based health centers [11]. Another strategy described for the mobile clinic was to travel to neighborhoods and see clients near their homes "*we take our mobile unit out to the locations where patients [are], instead of them coming into us, we can go see them.*" This is also a well-founded strategy with solid evidence of maximizing the care to communities of need by reducing travel and increasing visibility [11].

Novel co-location with medical care

One representative discussed co-locating dental services with medical services *(MDI, medical-dental integration) at an FQHC. She described the setup as " a hygienist embedded into our medical facilities so that every time a child comes in for a well-care visit, or a pregnant mom or a patient with diabetes comes in, our hygienist sees them on the medical side. And they do education for the adults in a screening.*" This novel approach approximates some national policy recommendations to leverage nurses and physicians as oral health screeners and providers, though this MDI program may prove more valuable as most non-dental health professionals lack sufficient training to be effective for oral health care [2, 11]. There are wide varieties of MDI practices in the small numbers of settings where it currently exists. Still, interest is growing nationally to expand these innovations to bring oral health care to more disadvantaged populations [3, 29, 30]. Current national recommendations call for embedding oral health providers within various delivery systems to maximize efficiency and reach and improve the integration of oral health with overall health [2].

Building on Existing Community Connections

Representatives from direct care and support coordination agencies acknowledged their essential ties to each other and other important community entities for funding, education, and trust-building. Partnering with other agencies that share common goals to improve communities' health and welfare is a long-standing strategy that has been applied nationally to oral health initiatives [11]. Participants described relying on school staff to communicate with parents, community outreach coordinators to engage communities and provide interpretation services, and on community foundations, hospitals, and councils to help effectively integrate services and disseminate information.

Non-traditional Hours

During the conversation about barriers to care, many participants acknowledged that limited hours of service limit care access. However, only one of the service providers from all the conversations reported that their agency had established non-traditional hours of service. "*So that's why we do a lot of evening and weekend clinics. Like we're open till 10 o'clock at night, and then we're open on Saturdays*."

Silver Linings from Pandemic

Some of the strategies the participants reported were new or enhanced during the changes to ordinary practice that the COVID-19 pandemic triggered. Some of these practices were new strategies implemented out of necessity because seeing children in school was not possible while the schools were closed. One participant described that they were "*were*

lucky enough to make a connection with persons at the … the public housing properties here, and we went door to door and we got kids signed up for this program, and we set up in the community center at the public housing locations, and we saw one family at a time, … we were able to provide those children with free dental exams, all of the usual preventive treatments as well as these SMART treatments for those that did have active untreated cavities on their primary teeth. And the great thing was that their parents were there with them, too. So they were able to get that educational component of it as well." This participant hopes to continue this strong connection even after the pandemic subsides.

Other practices were scaled up because diminished use of traditional services has waned during the months of limited physical contact and social distancing. Other participants reported that referrals to community dentists have actually gotten easier during the pandemic because their own offices have seen a slowdown of clients coming for services "*as long as our patients are willing to take their child or go get their services done, my volunteers are more than happy to, to keep the lights on and, and utilize that downtime. So, it's been a blessing in disguise*." Of course, it remains to be seen if the pattern of accepting more clients from the CHC will sustain as the pandemic abates.

Limited use of tele-dentistry to see manage some conditions without a physical appointment has increased during the pandemic. "*[T]o see that you can do a lot of things remotely, we thought that it was going to be impossible…. but it is possible, and it has proven to be successful. I think that's what we're looking into the future of doing a lot of post-op appointments through tele-dentistry if a patient has come into our facility and had something done, and they just need a simple post-op appointment, then we're going to handle it through the tele-dentistry platform*." However, mostly, tele-dentistry is a goal for future implementation for these Florida oral health safety net providers.

The COVID-19 Pandemic and Oral Health in Florida

The global COVID-19 pandemic touched every aspect of life for Floridians, including oral health care access. The pandemic had a variety of effects on the dental safety net care functioning through interruption service delivery during the "shutdown," increased costs to providers through enhanced infection prevention requirements, diminished the professional volunteer workforce availability, exacerbated clients' fears of dental visits, and contributed to a larger pool of uninsured and unemployed clients in need of their services.

Service Interruption during the Shutdown

All the discussions included acknowledging the interruptions to preventive and non-urgent episodic care during the spring of 2020 due to the mandatory closure of non-essential services. One explained that the dental clinic was "*the first one to shut down. And the last one open*." Other clinics could remain open for emergency services but "*stopped doing the prophylactic preventive care in March, April, and then we started doing it again in May*." Closure and reduction of services rendered resulted in a large gap of care for clients. A setback for communities that will take a long time to recover. One representative from the clinics described: "*we canceled hundreds of people every month. So we're going on*

thousands of people now, and thousands of visits that they're not getting as well." For the providers who see children in a school-based setting, the interruption has been more drastic and ongoing: "*we're school-based, once school shut down, then there went access to care for our kids*." Even with Florida schools being back to face-to-face learning, some of the providers reported that the school administrations do not consider oral health providers as essential. They had not yet been allowed to return to schools to deliver care as of late September 2020. "*We don't know when we're going to be able to do our varnish program in the elementary schools at this point*." The months-long gaps in preventive services for children and adults will likely take years to recover, especially without added resources to backfill the needs.

Enhanced Infection Prevention and PPE Requirements

The need to add physical distance, extra environmental hygiene, and enhanced personal protective equipment (PPE) increased the costs to providers and, in some cases, reduced their service capacities. Dental providers were not part of the initial targeting of PPE distribution that occurred early in the pandemic. Indeed, some dental practices contributed to their PPE supply to hospitals or long-term care facilities experiencing significant shortages [31]. Clinic representatives reported they are implementing all recommendations to prevent COVID-19 transmission in their facilities out of concern for their staff and clients' safety. However, preparing for enhanced cleaning, installation of hygienic barriers, and procurement of PPE slowed their opening to patients and, in some cases, prompted reliance on community grants to fund "*PPE and that sort of thing.*" "*I think medical got a little priority over dental, we had a hard time in the beginning getting N95 mask and the appropriate shields and the HEPA filters and things like that, that we needed. So, it did cause us to close down for one month while we retrofitted to be able to see people safely*."

A F&CC representative was very concerned about the long-term sustainability of managing the PPE requirements, "*we can't afford the PPE requirements to safely protect all of our providers and our staff in the dental clinic for long. I don't know how sustainable that is for us*." The distancing requirements of infection prevention are placing new capacity limits on providers: "*we have a hygiene room that has two chairs, but we can only use one at a time anymore, because otherwise there would be too much aerosol issues*." Uncertainty about the pandemic's duration and intensity prompted participants to express concern regarding new shutdowns or more scaling back of services.

Reduction of Volunteer Provider Workforce

The F&CC representatives consistently described reliance on volunteer professional dentists and dental hygienists to provide the services they offer in their clinics [11]. Many of the volunteers were described as older and retired. The reliance on this demographic who are also most at risk for complications of COVID-19 infection has impeded the ability of the F&CCs to maintain their usual level of service delivery. "*Our providers are volunteers, and many of them are retired. So, they're not coming, you know, and they're at high risk*." The impact of reduced availability is not limited to advanced dental services, as clinic managers

reported "*we've lost quite a few of our dental hygienists, our assistants and our dentists just because of the fear of COVID itself*." Some clinics are operating at reduced capacity due to a lack of providers as of the discussions in September 2020. They acknowledge they do not know how long rebuilding capacity will take.

Client Reluctance for Care during Pandemic

Concomitant with the reluctance of at-risk providers to volunteer to provide dental care during the pandemic, the participants also recognized that some clients are avoiding dental services out of fear of COVID-19. A representative from a clinic with an older clientele focus reported that despite public health recommendations for continued preventive and needed health care, many of the older clients "*have concerns in our advice not to postpone the treatment … we all know what happens when you postpone small things, that they turn into large things. So there's a lot of delayed care that we're seeing on our end for many different reasons associated with COVID. Specifically related to health concerns and our large elder population*." It is not only the population older than 65-years who exhibit fears of dental care during COVID-19. Some participants felt that the situation is exacerbating the deep-seated dental phobia that posed long-term barriers to access: "*There's a lot of information out there that the public, the general public that are already phobic are trying to gather that information and say, see we shouldn't be going to our dental appointments because we can't wear a mask and the PPE is not efficient. So, there has been a general overall public phobia or fear that getting dental services during COVID is not safe*." Some participants described their activities to counter this trend to reach their clients: "*We are definitely trying to get out into the community because of the fear of people coming into our locations right now. So, we're getting our mobile units out there and trying to meet them where they are. And again, that kind of relates to our transportation as well as the fear of coming in*."

Increased Needs of Uninsured and Unemployed People

The economic impacts of COVID-19 have not gone unnoticed by the discussion participants. They pointed out examples of widespread job losses in their tourist-based communities: "*one of our local hotels structure that terminated almost 800 employees,*" rendering previously employed and insured clients without insurance or income. The participants have *"seen a vast increase of new patients that are coming to us after losing their jobs and losing their insurance due to the whole economic downturn*." The increase in demand, coupled with diminished delivery resources, "*is causing a backup, we used to see people within 48 hours, and now it's about two weeks because of the number, the volume*." One participant noted a particular trend in the population of new clients to their clinic as being "*people who have their own businesses*" who have been devastated by the economic impacts of COVID-19. The perceptions of increased need and less availability of oral health services during the pandemic have already been identified by early evidence and statistical modeling [32].

Aspirations for Improving Oral Health Access

Finally, we asked the participants what strategies they hope to implement to improve oral health access. Some clinics hope to add physical capacity, hire additional workforce, expand

their hours of operation, reach out to new populations of interest, and add the ability to bill Medicaid for services. Among the novel approaches discussed, the most frequently cited strategy was tele-dentistry. There were also robust discussions and some desires to implement community education programs to overcome fear and misunderstandings about oral health. There was also great interest and acceptance that state licensure for dental therapists, with a specific scope of service, could enhance access to care for underservice populations.

Tele-dentistry

The U.S. Department of Health and Human Services (HHS) defines telehealth application of "electronic information and communications technologies to support and promote long-distance clinical health care" [33]. Telehealth services may be provided, for example, through audio, text messaging, or video communication technology, including video conferencing software. Telehealth has become a key component of delivering health care to hard-to-reach and underserved populations [34]. Indeed, a representative from an FQHC remarked, "*Our medical component has used it very successfully. And we just haven't gotten to that level …that'll be very instrumental*." Expanding the telehealth model to tele-dentistry takes some creativity and is not without expense. Participants in our sessions discussed both tele-dentistry models (direct to client and satellite service links), commenting on their advantages and drawbacks within their context of care.

Direct to Client

The participants acknowledge key limitations to delivering tele-dentistry directly to clients, "*we have to see them at some point or get them in front of a dentist at some point, to see what we can do to help them*." But they recognized there are some advantages to reaching out to clients directly in their homes to reduce barriers and burdens of access. The concept of a "*virtual appointment with a dentist …[to] determine 'Do I need antibiotics in the meantime until I get to my appointment for my extraction,' … that's even better than not even having that before. It's a great, great addition the way that we provide services*." A participant described using similar strategies for post-extraction care, "*if a patient has come into our facility and had something done, and they just need a simple post op appointment, then we're going to handle it through the tele-dentistry platform*." One of the key barriers that participants described needing to overcome to implement this type of tele-dentistry fully is the electronic dental health record limitations. Many of the providers expressed great reliance on language interpretation to deliver care to their clients. Some electronic records do not make allowances for this additional service or for other services their providers need. "*Our electronic health record only allowed for the patient and the provider in the room virtual room, and our patients need a translator… plus, many of our doctors need a scribe*." Participants were also skeptical about the technological capacity of their clients to participate directly in virtual visits, "*So it's I see it as a where they are technologically challenged and not having devices. So, based on that premise, I think telehealth is gonna...lag behind for us a little bit*."

Concerns about compliance with federal privacy laws [i] also bubbled to the surface, "*On a private computer, you're gonna have to deal with some HIPAA issues to make sure everybody's protected there*."

Satellite Service Links

Plans to use tele-dentistry to expand services in existing outreach programs promise more efficient service delivery for clinics and their clients. One school-based outreach provider described their goals as "*incorporating tele-dentistry into our school-based program …we're certainly going to utilize that. It'll save a trip for a parent that has trouble with transportation trying to get to a center, so we have a child right there at the school*." One dental hygienist offered strategies to use tele-dentistry within a clinic setting to maximize the clinic efficiency: "*there are mechanisms in place that you could utilize some telehealth for your hygiene exams … take an intraoral camera, the doctor doesn't have to come back into the room with the patient if you're with a DA [dental assistant] or a hygienist, to be able to lower your costs*." An operator of a mobile dental clinic proposed using "*the tele-dentistry platform in our mobile unit out to the locations where patients are … And they know that they're getting the same access that they would through tele-dentistry, but basically seeing a hygienist while they're there*." Some participants were wary that adding compatible intraoral cameras and software to facilitate high-tech tele-dentistry would require financial and time commitments. The investment may not offer sufficient return if clients still need to come to the clinic and see a dentist. However, evidence shows that tele-dentistry in remote nursing homes, schools, and residential homes for people with disabilities has overcome barriers and delivered high-quality service [11].

Community Education Outreach

The sessions' participants recognized that unawareness of the holistic impact of oral health and the services available contribute to underserved populations' non-use or low use of oral health services. Considering this significant barrier, some participants expressed the desire to educate their communities about their services and ways to avail them. For most, this was articulated as an abstract aspiration without a specific plan to get the message out, "*we are trying to spread the word about our clinic that we are able to see these different groups of populations as well because there's a there is a huge need*." Understandably, specific messaging is elusive to local and national public health communities. There remains a national call to increase the research to determine what messaging strategies can effectively improve people's ability to make appropriate oral health decisions [2]. One provider had a more focused plan in mind to target a specific population, "*We're trying to get the word out to college students that are already here on campus and that have a dentist back home. A lot of younger college students just don't know that our clinic is here; the services available to*

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[i] The federal health privacy law, Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), details standard for health providers' use of clients' health information to protect personally identifiable health information and ensure flow of information to promote high quality care. The standards apply to in-person care and to telehealth services. HHS authorized discretion for flexibility during the COVID-19 pandemic. Retrieved from: https://www.hhs.gov/hipaa/for-professionals/faq/health-information-technology/index.html

them." One representative from the academic arena reported having a grant-funded project to encourage dental and medical providers to teach behaviors focused on enhancing oral health and preventing obesity. Some methods discussed to reach populations included engaging social media and especially for the rural areas, to work with radio broadcasters for messaging. Other approaches included engaging faith communities as trusted partners to amplify health behavior messages.

Dental Therapists

The participants affirmed that the supply of dental providers who deliver services to the underserved populations is inadequate. One of the strategies repeatedly brought up by advocates was expanding the dental workforce through the Florida legislature authorizing a new cadre of dental providers called dental therapists. This designation of licensure has been implemented in many countries and 12 U.S. states and tribal nations [36]. Dental therapists have a scope of practice that includes non-complex evaluative, preventive, restorative, and minor surgical, dental care under the indirect supervision of a dentist [2]. Because dental therapists would complete their training in three years at low-cost state (community) colleges, building the workforce with these providers has the potential to deliver rapid solutions. Dental hygienists could fill the gap when they see school children who require services beyond their scope but whose parents do not have means of taking them to a dentist. One participant shared that, "*dental therapists in Florida will help tremendously because the kids that I see that need services, they won't need to see a dentist, they need a simple instruction or restorative care that a dental therapist can do*."

The FQHC clinic representatives viewed the possibility of adding another type of dental provider as a definite asset for maximizing their resources and delivery of care: *"In FQHC clinics if I have this other level of provider, that's not going to cost as much, then I can outfit in this clinic here and in an outpost, we can start talking about getting more dental care out there primary dental care in the community*."

Interactions of New Strategies Holds Promise

Combining some strategies to enhance the use of oral health care may provide the best effects. Ensuring that communities of need are fully aware of the resources available coupled with a network of multiple provider types who interact through tele-dentistry could sizably improve oral health access for the communities the participants serve. One advocate reported that where dental therapists practice "*in Alaska and Minnesota they see clients "remotely away from the main clinic where the dentist is and if they need a consultation, they can get it immediately through tele-dentistry*." One participant clinic administrator concurred a similar arrangement would be effective in their clinic as an "*avenue for telehealth where dental therapists could actually go in remote areas and be able to provide those services working in collaboration with their dentist that they work with*." The education pathway for dental therapists may also address the fact that dental providers do not generally reflect the community's racial diversity. Graduates with dental degrees (DMD or DDS) typically spend at least eight years in post-secondary education. In 2019, dental program graduates emerged

with an average of $292,169 in student debt [37]. Historical data clearly shows that graduates with this level of student debt seldom build a practice to serve low-income and vulnerable clients [11]. In contrast, dental therapists would train for three years at a low-cost state college where the average in-state tuition and fees are about $3,200 per year 38. This pathway would improve the odds that graduates will practice in underserved communities while maintaining high-quality care [11].

Call to Action

There are two separate and unequal oral health delivery systems that highlight pervasive healthcare disparities in the U.S. The safety-net system is a patchwork of providers envisioned to deliver care to about one-third of Floridians lacking the resources to access the private oral health system. Public data and prevailing themes from our roundtables demonstrate that Florida's oral health safety-net does not reach all of our vulnerable communities.

The barriers the participants expressed mirror the obstacles to oral health care access that have been reported in the national public health literature. Some of the barriers are more profound in Florida, as reflected by nearly two-thirds of children with Medicaid and SCHIP not receiving any oral health services in the past year. Florida is at the bottom for this metric nationally [5]. Florida's children's status contrasts with the state metrics for the oral health of people 65-years and older. Florida ranks slightly better than the national average for adults who report not having any natural teeth at 12.5% (national average 13.5%). Also, 72% of the states' Medicare Advantage enrollees receiving benefits for some dental services [8]. However, this improvement does not extend to Medicare beneficiaries with low-incomes, those residing in rural counties, and retirement-age people from ethnic minorities. These groups have similar low use of oral health services as working age adults who share their demographic traits [8].

Florida's oral health safety net has relied heavily on a volunteer professional workforce to fill gaps in their capacity to provide care. The COVID-19 pandemic has highlighted a key drawback of this strategy. A sporadic supply of volunteers is not an effective or sustainable solution to the problem [2, 11]. The need to improve Florida's dental care workforce is evident in the participants' descriptions of inadequate referral networks and their long waiting lists for care. Nationally, second only to affordability, difficulty finding a participating dentist is a significant barrier to oral health care [3]. The participants proposed multiple strategies supported by national evidence to improve access to oral health resources in underserved communities.

- Improvement of Medicaid reimbursement rates would increase dentists' willingness to participate in Florida Medicaid plans.
- Licensing dental therapists would enhance dental clinics' capacity to deliver care. Robust use of tele-dentistry, combined with dental therapists, would extend the clinics' reach into more satellite and mobile clinics.

- Enhanced messaging about oral health and the services available to underserved communities through strategic partnerships can help overcome the barriers of unawareness and distrust.

There is a lack of transparency from the Florida AHCA regarding dental coverage for adult Medicaid enrollees. Every Florida Medicaid enrollee is required to subscribe to a Medicaid dental plan, but the benefits provided by the plans are murky. AHCA documentation states enrollees aged 21-years and older "*may* be eligible" to receive limited preventive dental services. The dental services policy issued by the state clearly states that "Florida Medicaid covers emergency dental services for recipients age 21 years and older to alleviate pain, infection, or both, and procedures essential to prepare the mouth for dentures" and that one exam every three years is covered for determination of the need for dentures [6]. The Florida AHCA should clarify with certainty what oral health benefits are covered for adult Medicaid enrollees.

A longer-term solution to the lack of access to oral health care is coalescing our scattered networks into a single system that reaches all Floridians. A major step to achieving that goal would be expanding Florida Medicaid as allowed through the Affordable Care Act. Medicaid expansion would provide some level of sustainable dental benefits for all adult Medicaid enrollees.

Florida's health policymakers should consider each of these strategies to improve oral health care access for their constituents.

References

1. World Health Organization Oral health. Geneva, Switzerland: 2020. " https://www.who.int/health-topics/oral-health/#tab=tab_1.".

2. Edelstein BL, Perkins J, Vargas CM. (2020). *Oral health: The role of law and policy in increasing the use of oral health services* (Law and Health Policy). Services USDoHaH. https://www.healthypeople.gov/2020/law-and-health-policy/topic/oral-health

3. Northridge ME, Kumar A, Kaur R. Disparities in access to oral health care. Annual Review of Public Health 2020;41:513-35. https://doi.org/10.1146/annurev-publhealth-040119-094318

4. Fischer DJ, O'Hayre M, Kusiak JW, Somerman MJ, Hill CV. Oral Health Disparities: A Perspective From the National Institute of Dental and Craniofacial Research. Am J Public Health 2017;107(S1):S36-s38. https://doi.org/10.2105/ajph.2016.303622

5. Centers for Medicare & Medicaid Services. (2019). *Early and Periodic Screening, Diagnostic and Treatment (EPSDT).* https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html

6. Florida Agency for Health Care Administration. (2018). *Dental Services Coverage Policy*. https://ahca.myflorida.com/Medicaid/Review/Specific/59G-4.060_Dental_Coverage_Policy.pdf

7. Sadiq N, Probst JC, Merchant AT, et al. The role of dental Insurance in mitigating mortality among working-age U.S. adults with priodontitis. Journal of Clinical Periodontology 2020;n/a(n/a). https://doi.org/10.1111/jcpe.13366

8. Freed M, Neuman T, Jacobson G. (2019). *Drilling down on dental coverage and cost for Medicare beneficiaries* (Issue Brief). https://www.astdd.org/docs/kaiser-issue-brief-on-medicare-dental-3-11-19.pdf

9. Freed M, Damico A, Neuman T. (2020). *A dozen facts about Medicare Advantage in 2020* (Issue Brief). https://www.kff.org/medicare/issue-brief/a-dozen-facts-about-medicare-advantage-in-2020/#

10. Traul R. (2020). *2017-2018 Workforce Survey of Dentists*. http://www.floridahealth.gov/programs-and-services/community-health/dental-health/reports/_documents/FloridaWorkforceSurveyReportofDentists2017-2018FINAL.pdf

11. Committee on Oral Health Access to Services. Improving access to oral health care for vulnerable and underserved populations. Washington DC: The National Academies Press; 2011. https://www.hrsa.gov/sites/default/files/publichealth/clinical/oralhealth/improvingaccess.pdf

12. Åstrøm AN, Ekback G, Ordell S, Gulcan F. Changes in oral health-related quality of life (OHRQoL) related to long-term utilization of dental care among older people. Acta

Odontologica Scandinavica 2018;76(8):559-66. https://doi.org/10.1080/00016357.2018.1474249

13. Ranade A, Young GJ, Griffith J, et al. Determinants of emergency department utilization for non-traumatic dental conditions in Massachusetts. Journal of Public Health Dentistry 2019;79(1):71-78. https://doi.org/10.1111/jphd.12297

14. Mason M, Gargano L, Kumar A, Northridge ME. Implementing a patient-centered and cost-effectives school-based oral health program. Journal of School Health 2019;89(12):1024-27. https://doi.org/10.1111/josh.12842

15. Manski RJ, Rhohde F. (2017). *Dental services: Use, expenses, source of payment, coverage and procedure type, 1996-2015* (Research Findings No. 38). https://meps.ahrq.gov/data_files/publications/rf38/rf38.pdf

16. Chi DL, Leroux B. County-level determinants of dental utilization for Medicaid-enrolled children with chronic conditions: How does place affect use? Health Place 2012;18(6):1422-9. https://doi.org/10.1016/j.healthplace.2012.07.007

17. Parish CL, Feaster DJ, Pereyra MR, et al. Dental insurance, dental care utilization, and perceived unmet dental needs in women living with HIV: Results from the Women's Interagency HIV Study. Journal of Public Health Dentistry 2019;79(4):343-51. https://doi.org/10.1111/jphd.12336

18. Vujicic M, Buchmueller T, Rachel K. Dental care presents the highest level of financial barriers, compared to other types of health care services. Health Affairs 2016;35(12):2176-82. https://doi.org/10.1377/hlthaff.2016.0800

19. Lutfiyya MN, Gross AJ, Soffe B, Lipsky MS. Dental care utilization: examining the associations between health services deficits and not having a dental visit in past 12 months. BMC Public Health 2019;19(1):265. https://doi.org/10.1186/s12889-019-6590-y

20. Agency for Healthcare Research and Quality (AHRQ) Module 2. Working with safety net practices Rockville, MD: 2018. "https://www.ahrq.gov/ncepcr/tools/pf-handbook/mod2.html".

21. Blackwelder A, Shulman JD. Texas dentists' attitudes toward the dental Medicaid program. Pediatr Dent 2007;29(1):40-6.

22. Logan HL, Catalanotto F, Guo Y, Marks J, Dharamsi S. Barriers to Medicaid participation among Florida dentists. Journal of health care for the poor and underserved 2015;26(1):154-67. https://doi.org/10.1353/hpu.2015.0000

23. Buchmueller TC, Orzol S, Shore-Sheppard LD. The effect of Medicaid payment rates on access to dental care among children. American Journal of Health Economics 2015;1(2):194-223. https://doi.org/10.1162/AJHE_a_00012

24. Serna CA, Sanchez J, Arevalo O, et al. Self-reported factors associated with dental care utilization among Hispanic migrant farmworkers in South Florida. Journal of Public Health Dentistry 2020;80(3):186-93. https://doi.org/10.1111/jphd.12364

25. Broadbent JM, Zeng J, Foster Page LA, et al. Oral health–related beliefs, behaviors, and outcomes through the life course. Journal of Dental Research 2016;95(7):808-13. https://doi.org/10.1177/0022034516634663

26. Mertz EA, Wides CD, Kottek AM, Calvo JM, Gates PE. Underrepresented minority dentists: Quantifying their numbers and characterizing the communities they serve. Health Affairs 2016;35(12):2190-99. https://doi.org/10.1377/hlthaff.2016.1122

27. U.S. Census Bureau. (2019). *U.S. Census Bureau QuickFacts* https://www.census.gov/quickfacts

28. Geiger CK, Kranz AM, Dick AW, et al. Delivery of preventive oral health Services by rurality: A cross-sectional analysis. Journal of Rural Health 2019;35(1):3-11. https://doi.org/10.1111/jrh.12340

29. Atchison KA, Weintraub JA, Rozier RG. Bridging the dental-medical divide: Case studies integrating oral health care and primary health care. The Journal of the American Dental Association 2018;149(10):850-58. https://doi.org/https://doi.org/10.1016/j.adaj.2018.05.030

30. Gauger TL, Prosser LA, Fontana M, Polverini PJ. Integrative and collaborative care models between pediatric oral health and primary care providers: a scoping review of the literature. Journal of Public Health Dentistry 2018;78(3):246-56. https://doi.org/10.1111/jphd.12267

31. Miller D Dental clinics facing PPE shortages after donating to frontline medical workers. Tampa, FL: 2020. "https://wusfnews.wusf.usf.edu/health-news-florida/2020-05-26/dental-clinics-facing-ppe-shortages-after-donating-to-frontline-medical-workers". Accessed October 17, 2020.

32. Choi SE, Simon L, Riedy CA, Barrow JR. Modeling the impact of COVID-19 on dental insurance coverage and utilization. Journal of Dental Research 2020;0(0):0022034520954126. https://doi.org/10.1177/0022034520954126

33. U.S. Department of Health and Human Services What is telehealth? : 2020. "https://www.hhs.gov/hipaa/for-professionals/faq/3015/what-is-telehealth/index.html".

34. Yalowich R, Corso C. (2015). *Enhancing Oral Health Access Through Safety Net Partnerships: A Primer and Resource Guide for Medicaid Agencies*. https://www.nashp.org/wp-content/uploads/2015/08/Enhancing-Oral-Health-Primer-for-Medicaid-Agencies.pdf

35. Langelier M, Rodat C, Moore J. (2016). *Case Studies of 6 Teledentistry Programs: Strategies to Increase Access to General and Specialty Dental Services.* http://www.oralhealthworkforce.org/wp-content/uploads/2017/02/OHWRC_Case_Studies_of_6_Teledentistry_Programs_016.pdf

36. Grant J More states adopt laws to boost oral health care workforces. The PEW Charitable Trusts 2019. "https://www.pewtrusts.org/en/research-and-

analysis/articles/2019/08/09/more-states-adopt-laws-to-boost-oral-health-care-workforces". Accessed October 16 2020.

37. American Dental Education Association Educational debt. 2020. "https://www.adea.org/GoDental/Money_Matters/Educational_Debt.aspx".

38. Florida Department of Education. (2018). *Affordability in the Florida college system*. http://www.fldoe.org/core/fileparse.php/7724/urlt/FCS18-Affordability.pdf