

December 5, 2022

Dear Members of the Washington State Legislature,

Washington's community and technical colleges are deeply committed to the mission of workforce education. As the state's key provider of industry-responsive, technically-trained workers, community and technical colleges embrace this mission by valuing diversity, employing highly qualified staff, offering education via multiple modalities, and sustaining high-quality pathways from short-term certificates to applied baccalaureate degrees. These values are at the core of how colleges deliver dental education across our state.

The 2022 Supplemental Operating Budget includes a proviso directing the State Board for Community and Technical Colleges (SBCTC) to work in collaboration with the dental industry to report on strategies to support and transform the education and training of the dental hygiene and dental assistant professions. This report includes recommendations on examining options to enhance workforce diversity, reducing barriers to entry, and proposing changes for education program sustainability.

The SBCTC contracted with a research organization, Catalyze Evaluation, to work with dental industry stakeholders, including our colleges, to develop recommendations on strategies to support and transform the education and training of the dental hygiene and dental assisting professions, per the proviso. The attached report provides the final comprehensive findings and recommendations of Catalyze Evaluation.

Given the time constraints of the proviso, there was limited opportunity for in-depth engagement of stakeholders and selection of representative focus groups. These and other limitations are outlined in the attached report. Other areas to note in consideration of this report include:

Diversity: Not highlighted in the report are the impactful equity, diversity, and inclusion efforts administered on each campus throughout the community and technical college system. The colleges' ongoing, mission-driven work to advance equity, diversity, and inclusion was strengthened by your actions in 2021 with the passage of Senate Bills 5194 and 5227. The SBCTC's 2023-25 Operating Budget proposal includes a request that will further the system's commitment to close equity gaps, improve employment, earnings, and advance the economic mobility of our students, including those in dental programs.

Faculty Expertise/Instructional Modalities: Community and technical college instructors are highly qualified in their technical fields and as educators. They incorporate various educational modalities to ensure mastery of skills and concepts, design programs to meet stringent accreditation standards, adapt learning environments to be culturally responsive and supportive of students' needs, and engage with industry through active college advisory committees to align training with the skills required in the workplace. As subject matter experts, dental education faculty are uniquely qualified to determine the level of educational rigor, preserve high standards of care, and ensure commitment to patient health and safety.

High-Cost Programs: Dental programs are among the highest cost programs administered within the college system. On an annual basis, community and technical colleges produce dental professionals to the maximum allowed by accreditation and program capacity. Additional resources dedicated to competitive dental education faculty salaries, laboratory supplies, and program equipment are essential to meet industry demand and grow program capacity.

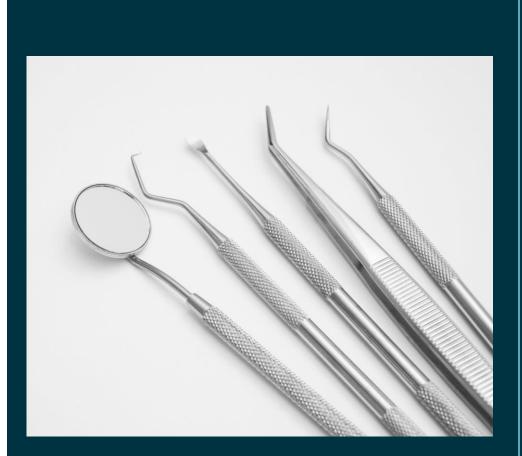
The report's recommendations reflect the need for additional deep stakeholder engagement before specific action is taken or before a system recommendation can be identified. The SBCTC submits this report, acknowledging that need and seeking support for maintaining current standards, curriculum, and degree requirements for dental education.

We look forward to engaging in further work to support the needs of the students and communities in our state, in partnership with you and other state leaders, the dental industry, and our colleges.

Sincerely,

Paul Francis

Paul Francis Executive Director Washington State Board for Community and Technical Colleges



Study to Support the Dental Hygiene and Dental Assisting Workforce

December 1st, 2022



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Executive Summary

CONTEXT OF THIS REPORT

This report, commissioned by the State Board of Community and Technical Colleges (SBCTC) and written by Catalyze Evaluation (Catalyze), presents data meant to inform recommendations for the education and training of the dental hygiene and dental assisting professions in the state of Washington. It documents learning generated by the evaluation plan developed in collaboration with SBCTC and based on the proviso for 2022 Supplemental.

PROVISO FOR 2022 SUPPLEMENTAL:

\$75,000 of the general fund-state appropriation for fiscal year 2023 is provided solely for the state board in collaboration with the dental industry to report on strategies to support and transform the education and training of the dental hygiene and dental assistant professions. (b) The report shall include, but is not limited to, recommendations on the following topics: (i) Examining options to enhance workforce diversity; (ii) *Reducing barriers to entry; and (iii) Proposing changes for* education program sustainability. (c) The state board must solicit input and collaborate on the report with a representative from a dental association, a representative from a hygienist association, an expert in dental hygiene education, a representative from the dental assistant profession, and a representative from the dental benefits industry. (d) The report must be submitted to the legislature pursuant to 35 RCW 43.01.036 by December 1, 2022.

KEY FINDINGS

- Diversity in dental hygiene and dental assisting is being overshadowed by the immediate need for any staff.
- Dental hygiene programs are highly competitive to enter, rigorous, and consistently receive more applicants than they can accept. As a result, the community college system is producing as many dental hygienists as it has space for each year. Dental assisting programs, however, are open enrollment and must compete with non-accredited education programs that are quicker and cheaper to access.
- Program costs are high both for schools and for students. Equipment, space, and staffing are expensive for schools to maintain, and prohibitive to expansion. Students incur high start-up costs that tuition does not cover, such as textbooks, scrubs, and laboratory equipment.
- There are workforce trends likely contributing to shortages of full-time employees and low staff retention: 1) Most dental hygienists and dental assistants are women and due to numerous societal factors, are more likely to want part-time work, and 2) the participation of millennials is increasing in the labor force, shifting workplace values and culture.
- Insurance reimbursement is creating downward pressure on dental practice owners.
 The push to bill by insurance codes creates burnout not only for dentists but also for

dental hygienists and dental assistants, where they are pressured to turn around as many patients in a day as possible. Burnout contributes to low staff retention.

• Employee retention, and more widely, keeping dental hygienists and dental assistants in the field is a large issue that needs to be addressed.

RECOMMENDATIONS

- Develop collaboration and collaborative processes across stakeholders. Much more conversation is needed.
- Address the downward pressure generated from the reimbursement process.
- Develop career pathways to make a student's investment meaningful.
 - Investigate the viability of apprenticeship models as an option to address professional development after entry into the workforce.
- Brainstorm creative solutions to improve hiring teaching staff of color.
- Acknowledge the tension around and have collaborative conversations about the level of rigor desired in dental hygiene programs.
- Acknowledge the tension around and have collaborative conversations about regulating dental assisting program education.
- Brainstorm creative solutions to dental hygiene and dental assisting staff retention.
- Create a workgroup to:
 - Engage CODA¹ in conversation about how accreditation may be barrier to innovation.
 - Research and develop innovative practices in dental hygiene and dental assisting.
- Discuss solutions to financial viability of dental hygiene and dental assisting education programs.
- Fully fund existing pathways, including providing competitive salaries for Dental Education faculty and addressing program equipment needs.
- Work to reduce non-tuition related costs (both financial and time) to support students in both budgeting and program implementation.

¹ Commission on Dental Accreditation (CODA)

Evaluation Overview

Evaluation questions were developed to examine program participation, student barriers and opportunities regarding enrollment in and completion of programs, the impact of college location, barriers and opportunities regarding entrance into the dental hygiene and dental assisting workforce, and possible actions stakeholders might take in improving workforce diversity. Because the workforce issue was well documented and acknowledged across stakeholders, a qualitative approach was taken. This focused the evaluation on answering why questions rather than what. As such, the findings in this report move beyond the initial research questions to include the exploration of emergent themes.

Four key methods were used to gather learning in answering these questions:





to explore barriers to and opportunities for increasing workforce diversity



with a representative sample of stakeholders to discuss and prioritize recommendations arising from data collection making with a representative sample of stakeholders to discuss and prioritize recommendations arising from data collection.



To contextualize findings

Engagement

Below are the project activities that engaged stakeholders:

- Project kickoff meeting (August 1st, 2022): 32 stakeholders representing the dental hygiene and dental assisting education, the benefits industry, Washington Dental Hygienists Association, Washington State Dental Association, the Workforce Training and Education Coordinating Board, and SBCTC. In this kickoff meeting, feedback was received from stakeholders about who to engage in answering specific evaluation questions.
- Data collection:
 - 2 discussion groups with project directors
 - I discussion group with dental practice owners
 - 1 discussion group with community college advising staff

- 6 interviews with current and former dental hygiene and dental assisting students
- 1 sense-making session with 17 individuals representing industry, education, the benefits industry, and workforce development
- 1 ad hoc meeting with Washington Association for Community Health
- 1 ad hoc meeting with an education institution outside of the community college system

Limitations

There were several items that impacted the implementation of the evaluation:

- The four and half month timeline made it difficult to engage with stakeholders that may be impacted by future decisions shaped by this evaluation project.
- The timeline compressed data collection activities to produce recommendations by December 1st, 2022. This reduced the number of participants Catalyze was able to include in data collection and compressed the space to engage system stakeholders in reflecting on and interpreting data. Both support the production of useful and actionable learning.
- It was not possible to receive statistical Community College system data early enough to inform the development of specific questions for discussion group or interview participants.
- This research did not have access to statistical workforce data (or any data on diversity in the workforce) to provide context for the evaluation or inform the development of specific questions for discussion group or interview participants.
- The lack of statistical workforce data also prevents this evaluation from providing a high-level statistical picture to help quantify the need for dental assistants and dental hygienists.
- The timing of the evaluation (beginning in mid-July 2022) was particularly challenging for education stakeholders, as it matched with their summer break and subsequently the start of the fall quarter in the community college system. This made it challenging for project directors to engage in discussion groups, to connect the Catalyze Evaluation team to college advisors, and to provide the Catalyze Evaluation team with students for interviews. Timing created similar challenges in engaging community college advisors, students, and Skill Center

staff². Because of these challenges, it was not possible to include the Skill Center perspective.

 More generally, the approach in developing the original proviso caused many stakeholders to approach the evaluation with skepticism and fear rather than collaboration.

Framing the Issue

Nationally, vacancies in dental assisting and dental hygiene have reduced dental practice capacity by an estimated 10%, and on average 4 out of 10 dental practices are looking to hire dental assistants or dental hygienists¹. In 2020, 80% of dentists polled by the American Dental Association declared that recruiting dental hygienists and dental assistants was "extremely or very challenging." This fact is supported by dental practice owner discussion group participants in Washington: all struggled to fill positions in the last year, and several had active job openings that they had yet to fill. A few dental practice owners described that these positions have remained open for months with little response. A factor likely to contribute to this challenge is that about one third of dental hygienists and dental assistants currently in the workforce report that they will retire within 5 years.

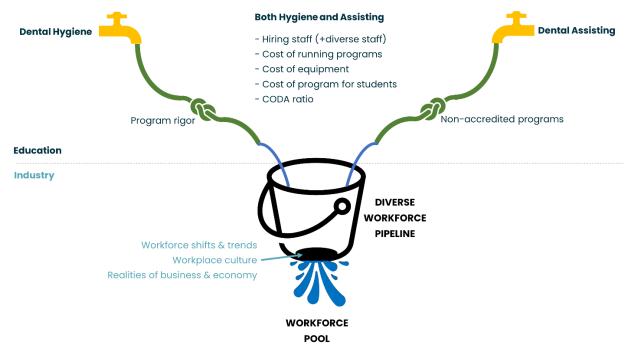


FIGURE 1. Visualization of the Dental Hygiene and Dental Assisting workforce issue

² Skill Centers are regional secondary schools that serve high school students from multiple school districts. In Washington, they run a dental assisting program.



Figure 1 provides a high-level breakdown of this workforce issue. On the education side (in dark blue text), there are several challenges that colleges contend with in running their dental hygiene and dental assisting programs, represented by kinks in a hose. These are also challenges to program expansion. On the industry side (in light blue text), there are several factors that contribute to reducing available workforce and lowering employee retention, represented by a hole in the workforce bucket. This report first investigates these major challenges and factors in greater detail by presenting data collected in interviews, discussion groups, and literature to contextualize the issue. Second, discussion is provided to explore how these challenges and factors interact. Third, initial recommendations are presented based on the findings and from a sensemaking session with system stakeholders.

Building the Context for Dental Hygiene and Dental Assisting Education

There are certainly challenges to run dental hygiene and dental assisting programs in Washington. Despite these challenges, programs are producing graduates. While addressing these challenges may strengthen programs' ability to run, there are also overlaying structural dynamics at play. This section presents what was learned about dental hygiene and dental assisting education.

DENTAL HYGIENE PROGRAMS ARE ALWAYS FULL, DENTAL ASSISTING PROGRAMS STRUGGLE TO KEEP STUDENTS

There are significant differences in enrollment for dental hygiene and dental assisting programs. Table 1 breaks down some features of each. Dental hygiene programs are two and four-year degree programs

WHO ARE THE STUDENTS WHO PARTICIPATED IN THIS STUDY?

- Six students, both current and former
 - Between the ages of 25 and 48; 3 with children
 - 4 from dental hygiene programs, 2 from dental assisting
 - From 4 colleges, all in the western part of the state

Student participants have various reasons for choosing the dental hygiene and dental assisting professions. Half expressed that interest began when they were young, and some had introductions to the field from family members or time spent in dental offices. Some students come to these professions from a desire to be in patient care, and to have a positive impact: "I had very bad teeth growing up, and I knew I wanted to help people feel more confident in their smiles." It is interesting to note that all participants representing dental hygiene programs worked as dental assistants first. It is also noteworthy that 4 out of the 6 participants attended Skill School before they reached college age.

Although some participants applied to more than one school, in general, location was the primary reason for choosing the college they attended—those that are closest to where they live. One student chose their school for the diversity of the student body.



that have selective enrollment (they select the best candidates), high demand, and are competitive. They are always full, and it is rare that a student will choose to not finish the program. Data from Program Directors confirms that some dental hygiene programs consistently have double or triple the number of applicants to the number of students that are accepted. However, it is also true that prospective students are encouraged to and do apply to more than one college, so it is not possible to know the number of unique dental hygiene applicants in any given year with any degree of precision. Students who do not get accepted may reapply the following year. This means that **the community college system is producing as many dental hygienists as it has the space for each year**.

These folks [dental hygiene students] aren't dropping out unless it is a life changing circumstance because ... they had to go through a lot to get it.

- Community College Advisor

Dental Hygiene	Dental Assisting
2- and 4-year programs	Certificate and 2-year programs
Always Full	Not Always Full
Selective Enrollment	Open Enrollment
Up to 2-3x the number of applicants to the number of students that are accepted	Some programs have closed or adapted to stay open

TABLE 1. [Features of dental hygiene and dental assisting programs according to program directors]

Dental assisting programs have certificate and 2-year degree options with open enrollment (students who apply are generally accepted). Open enrollment (a low investment entry point) combined with the availability of non-accredited dental assisting programs outside the community college system means that demand for dental assisting programs is low. Indeed, these programs make it possible to "walk in off the street and become a dental assistant" (a program director). This has created a situation where dental assisting programs in the community college system have struggled to fill their seats over time, putting pressure on financial feasibility. Some colleges have discontinued their dental assisting programs altogether, while others have programs were affected by COVID-19, dental assisting program enrollment is not bouncing back like dental hygiene. Along with the number of accredited dental assisting programs in operation, this could be part of a long-term downward trend ⁱ.

Over time, there have been program expansions, shrinkages, and closures. However, in discussion with program directors it seems that the net number of graduating dental hygiene and dental assisting students has not changed much over time.

THE COST OF DENTAL HYGIENE AND DENTAL ASSISTING PROGRAMS IS HIGH FOR EVERYONE

CODA ratio standards impact the cost of running programs. They determine both the number of staff and the amount of equipment needed relative to the number of students. Programs must abide by these standards to keep their accreditation, so accreditation itself is expensive.

Financial viability of dental hygiene and dental assisting programs is a challenging landscape for program directors and for college administrators to navigate. Programs have high operating costs due to the expensive equipment needed to run them, and to the teacher to student ratio they must have in place to maintain accreditation standards. One operatory unit, for instance, costs about \$500,000, which will accommodate five students in a cohort based on CODA's five to one ratio. Program directors must also budget for enough teaching staff to accommodate the ratio, staff to maintain the equipment, and several other required items needed to effectively run their programs. In addition to more staff and equipment, programs that add seats need more physical space (classroom space, space for clinical teaching and practice, lockers for students in clinic).

Some programs run dental clinics that earn money for their college, and dental programs can bring in students who pay to take pre-requisite courses before applying for a program. However, in general, dental hygiene and dental assisting programs do not

make any money, and due to their high cost of operating, are a financial burden for colleges. This makes program expansion a difficult proposition for college administrators. This reality is not lost on dental practice owners, who understand well the difficulties of managing cost. Even when programs have operating clinics that bring in money, profit earned is likely to go toward the overall budget of the college rather than stay

"Community colleges would probably love to do hygiene schools, if they didn't all work at a deficit, you're gonna lose a lot of money when you open up hygiene school, you know, so you got to have a lot of good in your heart to do something like that. That's a problem."

- Dental Practice Owner

within these programs. These pressures have made project directors creative; they

describe seeking new operating models and purchasing equipment piecemeal to lower the financial lift on their programs and burden on their colleges.

There are also significant costs of time and energy when considering expanding programs inside a state system. Program directors must first seek the necessary approval (from college administration, from SBCTC), at which point plans can be developed and then implemented. To be sure, the process of expanding programs is lengthy and difficult. As one project director described, *"For us, it took 10 years to get the funding. So by the time you actually get the approval and the funding, your dollar is worth so much less, and you were approved for the amount that you thought you needed, and then with inflation the way it's been... so the state system is also pretty difficult when it comes to figuring out how to move forward. It's a long process."*

Students wishing to enter dental hygiene and dental assisting programs also bear a high financial cost. Program directors estimate that the total cost for a dental hygiene student is \$35,000-\$45,000, and for a dental assisting student it is \$15,000-\$20,000. Adding two years of pre-requisite classes for dental hygiene programs, the total cost might be closer to \$75,000. Although dental assisting programs are less expensive, program directors also noted that dental assistants will earn much less than dental hygienists upon completion of their program. Program directors also describe that financial aid may cover the cost of tuition, but it does not cover the cost of starting a program. They cite that students need books, scrubs, a background check, CPR certification, hand tools and immunizations (to name a few) to start their first quarter, things that are not covered by financial aid. Current students confirmed this, offering that materials and supplies are expensive and come out-of-pocket.

One dental hygiene student explained they had to take out personal loans and use a credit card to pay for out-of-pocket costs between \$6,000 and \$8,000

Moreover, project directors explain that the financial aid platform is confusing and slow Transition to ctcLink (a centralized system of online functions for all state's CTCs) caused delays in some colleges' ability to issue financial aid, at times taking up to 16 weeks. That means that occasionally some students do not have the means to pay for tuition, childcare, food, rent, and equipment when their program starts. Program directors express real concern for their students in the face of these challenges. As a contrast, most students reported that the financial aid process was easy and that it covered their costs for the program. Several students who did not cite any difficulty with extra costs also expressed that they had help from sources outside traditional financial aid—family, government programs, and the ability to work a part time job while being a full-time student. This suggests that privilege is a factor in students' ability to address the barrier of cost to make entering programs a reality, a privilege that not all students have.

An important piece to consider in understanding financial costs to students and their participation in the workforce is that their investment in both education and the field does not end up leading anywhere. As will be discussed later in the report, the lack of development opportunity is a significant issue for both professions.

^{CC} Unlike corporate America, where there's a benefit to having worked in the field, you get nothing. So, I don't know. I mean, that would be a hard thing to push past regulators. But that's another obstacle in dentistry. It's not exactly a ladder, it's a moving target.

- Dental Practice Owner

DENTAL HYGIENE PROGRAMS ARE RIGOROUS

Dental hygiene programs require a full-time commitment from students: 5 days a week, 8:00-5:00. Project directors understand and empathize that this is a lot to ask from students. In discussion groups, they shared stories of students struggling to overcome the obstacles of time, providing and caring for their families, and working through mental health challenges. One student shared that they developed a heart condition due to stress, and another described having to work through test anxiety.

There is a sentiment from project directors that despite the rigor, it is necessary to produce competent graduates. They describe that what is considered basic scientific

knowledge has "exploded" over time such that students today must know much more than they were required to in the past. Project directors recognize the difficulties this creates for students in keeping up with the packed curriculum if there is a disruption in their learning. As one student offers, "You will still be deducted even if you are sick." Without the rigor, project directors would

"It's difficult and takes up a lot of time. It can be really tiring, and there's not much time for family."

- Dental Hygiene Student

be put in the difficult position of deciding which vital parts of the curriculum to omit in making coursework manageable for students.

Not all project directors agree on the need for such rigor. They describe that other states have a lot fewer requirements for dental hygienists to become licensed. And although

CODA may determine the budget needed to run a program, they do not make the decision about what curriculum a program uses—that is a decision left to individual colleges.

DENTAL ASSISTING PROGRAMS COMPETE WITH OUTSIDE NON-ACCREDITED PROGRAMS

In the state of Washington, there are "pop-up" programs which are unaccredited and far shorter than dental assisting programs at community colleges, making them more affordable and therefore attractive to prospective students. Because there is such a demand for dental assistants, dentists are willing to train them on the job if they are willing to start working sooner. Although they take longer, accredited programs produce the most qualified candidates, according to program directors. This is supported by

data: When asked what specifically has been challenging about recruiting staff, nationally 42.5% of dentists report that for dental assistants it is that applicants are not qualified or are of poor qualityⁱ. Dental practice owners also touched upon the quality issue in discussion.

"Our challenge has been even the applicants. Most of them actually have no experience, they're not even coming from school, so if you're going to hire from scratch you teach them everything."

Regardless, because there is no regulation of training requirements for dental assistants in Washington,

- Dental Practice Owner

these pop-up programs undermine the ability of community college programs to maintain full cohorts of dental assistants, and therefore to maximize their contribution to the workforce.

DENTAL HYGIENE AND DENTAL ASSISTING PROGRAMS STRUGGLE TO HIRE DIVERSE STAFF

Program directors struggle to find new instructors regardless of their location. They report getting few applicants for jobs that offer competitive compensation. This phenomenon, however, is not confined to dental hygiene and dental assisting, but exists across the community college system. This suggests a more structural issue: compensation at community colleges is relatively low and the cost of living in Washington is very high, a fact that community college advisors verify.

Program directors are also aware of the fact that dental hygiene and dental assisting instructors are not diverse. Generally, staff are above 50 years old, White, and female. This is not a surprise, as dental hygiene and dental assisting have historically been dominated by White women. Contributing to the lack of diversity are the tenured staff former dental hygienists and assistants who are also White women—who have yet to retire. However, diversity as an issue is being overshadowed by the immediate need for **any** staff.

PRIVILEGE SHAPES ACCESS TO PROGRAMS AND PROGRAM COMPLETION

Privilege remains a major factor in a prospective student's trajectory through a dental hygiene or dental assisting program.

Students who have financial and family support are more likely to be able to cover high out-of-pocket program costs, not work or care for children while they are in school, and manage the debt incurred from school while the cost of living continues to increase. This means that they are far more likely to obtain the grades necessary to get through prerequisite coursework. College advisors affirm that many prospective dental hygiene students do not pass this barrier. Additionally, they declare that students with these privileged supports are also more likely to obtain the excellent grades necessary to be competitive and get accepted into programs. This same privilege increases the likelihood that a student will be able to finish the program, as the disruptions that occur in life can be absorbed by their network of support.

Because privilege is a factor in who can access and complete dental hygiene and dental assisting programs, it also shapes the racial/ethnic diversity of the student body. In a quick look at community college system data for the last 2 years, the degree most completed by Black/African American students is the dental assisting certificate, and the degree most completed by students who identify as mixed race is the dental assisting AAS. Hispanic and Asian students fluctuate between dental assisting and dental hygiene in general, and White students complete dental hygiene programs most often³. This suggests that Black students, and some Hispanic and Asian students, tend to access lower levels of education, while White students access the higher levels of education somewhat consistently. It is not necessarily new information that a continuum of access to education based on race/ethnicity exists. However, in this way, dental hygiene and dental assisting programs have space to move towards equity.

³ SBCTC system data, pulled September 2022

Building the Context for the Dental Hygiene and Dental Assisting Industry

Dental practice owners struggle to find the help they need to provide healthcare to their communities. Not only are employees hard to find, but they are not staying in the field. Like dental hygiene and dental assisting education, structural factors contribute to these workforce challenges. Building awareness of these factors will help the dental industry respond thoughtfully in generating solutions to this shared problem. This section presents what was learned about the dental hygiene and dental assisting workforce to help contextualize recommendations.

IT IS CHALLENGING TO FIND LONG-TERM, FULL-TIME EMPLOYEES

Dental practice owners unanimously report that they experience great challenges in hiring dental hygiene and dental assisting staff. This fact is well established in literature and is an issue that exists nationallyi aboveⁱ. The diversity of the workforce was not as pressing an issue for dental practice owners, who are more concerned with simply having enough staff to run their businesses. As one dentist put it, *"I would take someone if they could breathe."*

Dental practice owners understandably prefer full-time employees because it makes scheduling easier. However, they describe that many applicants are looking for part-time work, and even when they are hired at full-time some employees switch to part-time during their employment. Dental practice owners also report that their employees do not stick around for very long. The impression is that once they graduate from their local community college, students do not stay to work in the community. Other dentists offer that there are not enough schools close to their community to generate enough graduates to enter the workforce. Either way, their experience is that seats in dental hygiene and dental assisting programs do not translate to positions in the workforce. This phenomenon of qualified people staying out of the field is not only for recent graduates. One dentist operating a business in a rural part of the state reported that they personally knew 12 registered dental hygienists in their area, but only four were practicing. Dental practice owners agree that it seems as though most employees work for a few years and then leave.

WOMEN DOMINATE THE DENTAL HYGIENE AND DENTAL ASSISTING PROFESSIONS, AND THAT IS IMPORTANT

Dental hygiene and dental assisting have historically been considered "pink collar" jobs--professions predominately held by womenⁱⁱ. Of note, research shows that in 2019, both dental hygiene (96%) and dental assisting (95%) were in the top 6 occupations with the highest percentage of womenⁱⁱⁱ. Program directors and dental practice owners both agree that in terms of diversity, there are very few men in the field.

This finding is significant because women's participation in the labor force has changed over time. Baby-boomers have recently begun to retire in large numbers, which puts downward pressure on the labor force participation rate. Additionally, over the last 50 years, women began pursuing higher levels of education: the proportion of women ages 25 to 64 in the labor force who held a college degree quadrupled, while the proportion of men doubled. One possible contributing factor to the workforce shortage is that White women began to pursue professions that were previously inaccessible to them. Additionally, women with children have entered the workforce in far larger numbers than ever before.

In March 2019, women with children under 18 years of age participated 20% less in the labor force than men with children. This trend increases when children are younger: the participation rate for mothers with children under 6 was 66.4%, and the rate for mothers with children under 3 was 63.8%. Regardless of the age of their children, the participation rate for fathers was consistently around 93%. This suggests that, while women want to work, their ability to do so is subject to their expected role of caregiver. Statistically, the share of women working part time has not changed much the last 50 years, and in 2019, 23% of employed women worked part-time, as compared to 12% of men. Together, this may help explain why dentists are encountering so many employees desiring part-time work.

We currently have nine hygienists in my practice. But they're all part time with the exception of one, and that's been the big issue. But typically, once they have children, then they want to go to two fewer days a week, which I understand. But that seems to be ... the driving force is they don't want to work full time.

- Dental Practice Owner

A CULTURAL SHIFT HAS OCCURRED IN THE LABOR FORCE: MILLENNIALS

The dental hygiene and dental assisting workforce started to decline in 2015ⁱ, well before the COVID-19^{iv} pandemic had such a profoundly negative impact on the dental field. As baby boomers continued to retire in larger numbers, generational workforce participation began to shift. In 2016, for the first time in history, the millennial generation made up the largest percentage of the workforce (35%)^v and it continues to rise. It is estimated that by 2025, millennials will make up 75% of the workforce^{vi}. This will continue to have a tremendous impact on the dental industry through a major cultural shift. (See the box for more information)

FROM THE LITERATURE, MILLENNIALS:

- Are the most racially and ethnically diverse generation in U.S. history.
- Earn substantially less than all other generations and are the most likely generation to fall under the federal poverty line.
- Are highly educated, but also carry far more student loan debt compared with older generations.
- Have the second-highest level of full-time employment (54%) behind Gen Xers (63%), but also the highest rates of both unemployment and underemployment.
- Are the least engaged generation in the workplace. Only 29% of employed millennials are engaged at work, and 55% are not engaged.
- Change jobs more often than older generations. 60% say they are currently looking for new employment opportunities. Additionally, they are more willing to act on better opportunities.
 36% report they will look for a job with a different organization in the next 12 months if the job market improves. In both categories, millennials are 15% higher than non-millennial workers.
- Look for opportunities to learn and grow at work when seeking out new jobs or deciding to stay in current ones. 59% of millennials say these opportunities are extremely important for them in applying for a job.
- Look for advancement opportunities. 50% find advancement opportunities to be extremely important to them when applying for a new job.
- Desire "professional or career growth and development opportunities." 87% of millennials declare it is important to have in a job.
- 70% of millennials are engaged at work when their manager focuses on their strengths.
- Most of the millennial workforce (55%) feels unattached to their existing role and company

Dental practice owners are certainly experiencing this cultural shift, as evidenced by the feelings and perspectives that emerged from discussion. Here is what they are saying:

"We currently have nine hygienists in my practice. But they're all part time with the exception of one, and that's been the big issue. Typically, once they have children, then they want to go to two fewer days a week, which I understand. But that seems to be ... the driving force is, they don't want to work full time."

"I've been fortunate with the ones that have retained, they love it. But what they want is more growth."

"They only did it for about four to five years. So turnover ... is incredibly high." *"But the desire for people to come and work and stay working has been a big problem. People would rather be temps than be committed to a practice where they have to show up on a regular schedule."*

"I found that hygienists are really interested in exactly the perfect situation, in terms of environment of the office and pay and benefits and just the structure of their work environment. And so the slightest little hiccup or anything, there's just not a lot of staying power. They want to find another place where they can be satisfied. And that's happened over and over in my experience in a variety of settings."

"But there are limitations on that growth, right? That dental assistant can only go so far... so I have a lot of people who leave the clinic because they want to continue as being a hygienist from a dental assistant, like I get a lot of people [trying to] climb up the ladder. [But] that's the ladder they have."

"Applicants want part-time, or they come in at fulltime and then switch to part-time. So things are hard to cover. But we don't know what applicants want from their perspective."

"It's just, I feel like there's just a lot of indecision about what it is they see their role is doing or what they're looking for in employment."

"... we're paying big wages that you would think could keep them in and it's still not keeping them in." "Either folks are getting in there (especially it seems like in assisting), they might be applying, going through school, getting a job in nine months, applying for full time and then realizing, 'Oh, I don't really even want to be here.' And so either pulling out all together, or going to part time." In a comprehensive study of the millennial generation as employees, Gallup offers some analysis of this cultural shift by outlining what millennials want in their employment^{vii}. Below highlights shifts and how they relate to dental hygiene and dental assisting.

- **Purpose, not pay**: As an idealistic group, millennials want to work with organizations that have a mission and a purpose. They want to engage in work that has meaning and that contributes to their sense of purpose. Dentists note they are paying high wages to their dental hygienists, and that as a result they expect a lot from them. Although pay is important, it is not the main focus for millennial employees as it was for previous generations.
- Their life, not their job: Millennials want a good job, one where their strengths and contribution are valued and where they can contribute what they do best every day. Dental practice owners experience this shift as a lack of commitment or an unwillingness to work full time. However, it may be because their millennial workforce does not feel valued, and because the workplace culture does not support their job also being their life.
- **Development**: Millennials pursue development. But development is challenging in the dental hygiene and dental assisting professions, where there are no pathways for employees to grow. Both dental practice owners and program directors discuss the fact that there is no benefit to working in the field, and that as a result dental hygiene and dental assisting are "dead end" jobs. This is true both from an education and an industry standpoint--dental assistants who want to become hygienists and hygienists who want to become dentists must pursue certification by starting at the beginning of new programs. As well, working in private dental practices does not leave much room for development on the job.
- Strengths-based coaching: Millennials want employers who value them as people and employees, who help them pursue their development through understanding and building their strengths. Millennials want to develop their strengths and want guidance to do so. This contrasts with the traditional idea of a boss known by previous generations. Relatedly, dental practice owners talk about burnout—something experienced by everyone at private practices. Experiencing burnout leaves little room for mentoring and the kind of time required to invest in the development of employees, let alone ensuring employees feel valued. Beyond a coach, 62% of millennials who feel they can talk to their manager about non-work-related issues plan to be at their current job in a year. However, only 29% feel very comfortable talking about life outside of work with them. It would be advantageous for dental practice owners to reflect on what kinds of interactions

they have with their dental hygiene and dental assisting staff, and how they feel about the workplace in general.

This cultural shift may help provide important context for the workforce challenges in dental hygiene and dental assisting. If an employee's values are not fulfilled, then it makes sense that they would seek other opportunities to use their qualifications and increase their income. From an income standpoint, they have the highest student debt and the lowest wages of any generation^{vii}, so there is incentive to always be looking for something better, especially if their current job lacks the things for which they are looking. Millennials are highly connected, so they have instant access to research jobs and organizations that they feel more aligned with. They are less attached to institutions relative to older generations, giving them the opportunity to investigate other work options that would further fulfill their desires. They are more educated and diverse, push for change, and are less willing to accept status quo than previous generations. This supports the notion that they view certain institutions differently than their predecessors and are more willing to make choices about which institutions and companies they engage with.

INSURANCE REIMBURSEMENT CREATES DOWNWARD PRESSURE ON DENTAL PRACTICE OWNERS

The change in our reimbursement rates that we experienced, you know, over 12 years ago now, and have yet recovered from have had such a tremendous ripple effect

- Dental Practice Owner

An unexpected theme emerging from the dental practice owner discussion group was "nobody likes dentistry anymore." Dentists hear from other dentists that they do not enjoy what they are doing, and both dental practice owners and program directors postulate how this might contribute to retaining dental hygienists and dental assistants.

Central to this sentiment is how the business of dentistry is done. Dental practice owners explained that about a decade ago, the reimbursement process and rates changed, which altered the way practices are paid for their services. The result: dentists feel pushed into doing procedures that they believe can come at the cost of patient care, and what dentists, dental hygienists, and dental assistants like about their job—to be with and care for patients.

Dental practices get paid for services that have billing codes, but not for any of the other things they might do with a patient. If there is no code, they do not get reimbursed. Dentists want to customize care and provide great health care for their patients, but they must constantly negotiate what can be covered and billed in the shortest amount of time possible. This focus on speed to support the need to bill also affects dental hygienists and dental assistants. For dental assistants, it is all about turning rooms over to get more patients in quickly, and for dental hygienists it is performing the same hygiene service for as many patients as possible.

Another result of these reimbursement changes is that dental practice owners find it very difficult to offer some benefits, in particular health benefits. In a national study of dental hygiene and dental assisting workforce shortages, the percentages of

"As a dentist, I get why there's competition because obviously, the reimbursement is so hard, what we can do is to kind of push hygienists, like push, push, push [them] into doing procedures. But truly, I think what makes people enjoy dentistry or in any job is that relationship and that time to talk. And sometimes we eliminate that because we might not have time to talk, like, we're just rushing it so fast. And I do think there's something wrong with that. Like I said, something needs to change. I don't know what it is. But if we can have an environment where it's like, no, we can take time with our patients, we can really customize it, it's not pushing for codes and anything within that hour. Some people push it within half an hour ... this is something I'm observing and I'm *trying to understand as well." –* Dentist

employees receiving health insurance, paid sick time, and paid leave were low compared to other benefits like dental benefits, paid holidays, and paid vacationⁱ. Benefits were also found to be correlated with higher levels of workplace satisfaction—dental hygienists and dental assistants reporting lower levels of satisfaction receive fewer benefits across the board. These benefits more common in DSOs and group practices than in private solo practices, and available to the majority of dental hygienists working in public healthⁱ.

Dental practice owners are also responsible for the development of their teams, the satisfaction of their employees, and the running of their business. All this points to burnout among dental practice owners, as corroborated in the discussion group. Naturally, this burnout trickles down to dental hygienists and dental assistants and impacts workplace culture (a sentiment dental practice owners acknowledge).

Dental hygienists might experience burnout as expectation from their employers to work long hours, a situation created by the need to bill, and the high salaries dental practice owners believe they are paying. This expectation can get in the way of employees being able to take time off or to have a flexible enough schedule for them to engage with their families and the lives of their children. This is something dental practice owners acknowledge, while also reporting that they cannot afford the time or flexibility for hygienists to do these things. Education and industry stakeholders agree that dental hygiene is a difficult job. The most prevalent challenge cited was that dental hygiene is extremely repetitiousthey are performing the same work with every patient without much variance, leading to boredom and feeling unchallenged. A few stakeholders reference that the physical demands of the job can be enough for people to want to leave the field or seek other opportunities outside of clinical practice.

DENTAL PRACTICE OWNER THOUGHTS ON BURNOUT

"It's hard because as a practice owner, we have so much that we're taking care of, but also taking care of our patients and our team and development as well. And for us, it's like we're pulled by so many other things."

"We talk about burnout, because I think it's a universal thing right now in dentistry, and it comes from the top down, right, from the dentist down through to support staff."

"It's definitely there. And I think we're probably not attracting the right people. If we're all like, 'we're all gonna die!', how can we be advocates for our profession or industry and attract the right type of talents?"

"In talking to people who are in hygiene right now, whether they know it or not, [they are] probably suffering from a bit of a selffulfilling prophecy. If dentists are going to pay a lot of money for a hygienist, they're going to expect a lot of work out of that hygienist. You can't make it work any other way, at least in my circumstance."— Dentist

Furthermore, dental practice owners

anecdotally note that only a small percentage of dental hygienists in Washington engage in restorative care (care outside of preventative care). However, there is a difference between the role of hygienists in private and public practice. In public practice (Federally Qualified Health Centers, or FQHCs), dental hygienists spend half their time providing preventative care and half performing restorative care. Dental practice owners reported that in the FQHC model, dental hygienists have higher job satisfaction.

^{cc} It's much easier on their hands. It provides a lot of a lot of variety. And as [name] was mentioning, it provides a lot of time to spend with patients in a different context too.

- Dentist, on the FQHC model

Dental assistants might experience burnout as the addition of extra responsibilities in running the office, and flipping rooms to get new patients in. Pay may also contribute to burnout, as assistants are paid much less than hygienists but are integral to the running of a dental office. In the immediate need for dental assisting staff, it is possible that dentists overlook the difference between a dental assistant who received training from an accredited program and one who was hired with no experience. The result of this may be that a dental assistant feels undervalued.

The fast-paced and likely understaffed dental office environment can also create burnout for both dental hygienists and dental assistants in the form of not being able to take care of themselves. Program directors relay stories from former students in which they have gone entire shifts without being able to use the bathroom, eat, or have a break. Some of these new employees express feeling disillusioned when they experience the field this way, after having invested their time, energy, and money in a profession where they are overworked and uncomfortable. "... [dental hygiene] is a difficult job, nobody wants to do it. That sucks. Nobody will want to do that. It's got to be better." – Dentist

"I'm not going to get a trained assistant ever. I rarely will get one. I have to make my assistants." – Dentist

We used to be able to offer full benefits for our employees, we used to cover their health insurance. Well, it's just no longer feasible at all. And that's, as a private practice. And that's really disheartening as a practice owner, because, for most of us, you feel you work with the same group of people every day, you have a very strong connection and want to be able to be a good employer and provide these things. And, you know, when I started my career, and I've been a dentist, almost 30 years now, we could do so much. And now it is just not feasible at all, and that's a hard pill to swallow. **!!**

-Dental Practice Owner

^{cc} The other thing that I've had people leave my office for other positions, usually in maybe bigger organizations, for benefits, they want a part time position with full benefits.

-Dental Practice Owner

One direction for future study might be to try and understand more robustly how dental assistants and dental hygienists experience workplace culture, and how burnout plays a role in creating it.

As sometimes occurs in capitalist enterprise, what this downward pressure created by billing erodes in the practice of dentistry is the human element. This erosion occurs at every level: in the relationships between dental staff and patient, between employer and employee, and between business owners. However, dental practice owners express feeling disconnected with their patients because of this need to move fast. The relationship between employers and their employees is molded by the pressure put on employees to move fast, and the absence of time to develop supportive relationships. As well, this erosion of human relationships is apparent in the perceptions of dental practice owners about their field in general, who feel that their relationships with other dentists are now defined by competition rather than friendship. They agreed that dentistry used to be a career, and now it is a job.

A community of colleagues, to a community of competitors. We are competing for patients, we are competing for staff, we're competing on every level. We're not our friends anymore. We used to be. The only people that know what we're going through are us, and we don't talk anymore. We're all on islands. That's why people are burning out—we got to get away from being competitors. We got to be that person ... who builds each other up.

-Dental Practice Owner

In the dental industry there is another structural piece that helps frame the challenges and burnout at private practices: consolidation. Consolidated dental practices will have several advantages over single location private practices. Larger systems have more purchasing power for supplies and will be able to offer more security to new staff. This means that small private practices will struggle to be competitive in attracting the limited number of candidates for dental hygiene and dental assisting positions. As well, median income for dentists has decreased \$11,000 since 2005^{viii} because of overhead, something that consolidation helps to alleviate. This structural shift is also likely contributing to the experience of dental practice owners who run private practices.

Tensions and Discussion

There are several possible tensions that this research highlights:

- Dental Hygiene program rigor: Here, "rigor" is defined as the intense time commitment and packed curriculum of dental hygiene programs. On one hand, lessening rigor would decrease the time students spend in school and get graduates into the field sooner. And since generally dental hygienists in Washington are not performing restorative care, it might fit education to services provided. On the other hand, maintaining the rigor would allow for dental hygienists to engage in more varied work activities to increase job satisfaction. This is especially important for the millennial workforce. Certainly, increasing job satisfaction and the value employees attach to work is an important consideration for addressing retention.
- Regulating Dental Assisting education: Continuing without regulation may help alleviate the immediate staffing challenge for dental assistants. However, quality of dental assisting employee candidates might continue to be an issue. Developing regulation would strengthen colleges' ability to maintain dental assisting programs, and work towards running programs with full enrollment. This would in effect lessen the financial liability for colleges to run dental assisting programs.
- Addressing diversity: Although this study sought to investigate ways to enhance workforce diversity, diversity as a theme was overshadowed by the immediate need to hire anyone (on the education side, teaching staff, and on the industry side, dental assisting and dental hygiene employees). The tension here is when to address diversity. Diversity as a theme was not prevalent in stakeholder discussion groups, which suggests that it may feel of secondary concern to the significant workforce issue. One important opportunity and question for stakeholders is to reflect on what might be gained if diversity were made the primary concern: Is there truth to the statement that focusing on diversity now helps to address the overall issue? For education, this would mean brainstorming how to address the impact of privilege on access to programs, and for industry it would mean addressing the predominantly white and female workforce. This tension is particularly important in reminding ourselves the reason for diversity in the dental field in the first place—to achieve more equity in dental care. It is well established that teachers of color promote dental education to students of color, and that the students of color that become employees provide more comfortable

experiences for patients, and thus support the creation of more equitable spaces for dental health in Washington communities.

• The need for ongoing and intentional conversation: Although many stakeholders have tried to create action around workforce shortages in the past, the impression is that this work has not been collaborative. It is clear that tensions exist. There are many stakeholders who would stand to benefit or lose based on any decisions made in addressing these workforce challenges. As such, it is vital that any solutions are developed collaboratively, creatively, and transparently. Solutions created in isolation or without inclusion are not sustainable, as they lack true buy-in. Worse is that solutions lack the context needed to make them truly meaningful—an effect of making system-level decisions without acknowledging what impact they may have on system actors. Sustainable and meaningful systems change can only be achieved through ongoing and intentional conversation where solutions are negotiated and built. How might stakeholders pursue a different way of working together towards their shared goal of creating meaningful change?

Recommendations

Based on evaluative learning and a sense-making discussion with selected stakeholders, the following recommendations were developed:

- Develop collaboration and collaborative processes across stakeholders. Much more conversation is needed.
- Address the downward pressure generated from the reimbursement process.
- Develop career pathways to make a student's investment meaningful.
 - Investigate the viability of apprenticeship models as an option to address professional development after entry into the workforce.
- Brainstorm creative solutions to improve hiring teaching staff of color.
- Acknowledge the tension around and have collaborative conversations about the level of rigor desired in dental hygiene programs.
- Acknowledge the tension around and have collaborative conversations about regulating dental assisting program education.
- Brainstorm creative solutions to dental hygiene and dental assisting staff retention.
- Create a workgroup to:
 - Engage CODA in conversation about how accreditation may be barrier to innovation.
 - Research and develop innovative practices in dental hygiene and dental assisting.

- Discuss solutions to financial viability of dental hygiene and dental assisting education programs.
- Fully fund existing pathways, including providing competitive salaries for Dental Education faculty and addressing program equipment needs.
- Work to reduce non-tuition related costs (both financial and time) to support students in both budgeting and program implementation.

Conclusion

This report presents learning about workforce shortages in the dental hygiene and dental assisting professions. As such, it has attempted to provide a holistic picture of the issue by outlining the challenges of running and expanding dental hygiene and dental assisting programs and identifying factors that contribute to reducing available workforce and lowering employee retention. These workforce challenges are complex and multi-layered and will not be solved quickly or without great effort. The data provided in this report can be leveraged collaboratively by stakeholders to engage in conversations and used as a basis for learning more. This will ensure that the good people of Washington will have access to quality, equitable dental care for years to come.

References

¹ADA Health Policy Institute in collaboration with American Dental Assistants Association, American Dental Hygienists' Association, Dental Assisting National Board, and IgniteDA. Dental workforce shortages: Data to navigate today's labor market. October 2022. Available from: https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/dental_workforce_shortages_labor_market.pdf

ⁱⁱ Louise Kapp Howe. 1977. Pink Collar Workers : Inside the World of Women's Work. New York: Putnam, C.

^{III} Wood, Meredith. 2020. "How Pink Collar Jobs Have Changed since 1940." International Women in Mining (IWiM). February 10, 2020. <u>https://internationalwim.org/how-pink-collar-jobs-have-changed-since-1940/</u>.

^{iv}In late 2020, more than one-quarter (28%) of dental hygienists experienced symptoms of anxiety, and 17% reported symptoms of depression Eldridge LA, Estrich CG, Gurenlian JR, et al. US dental health care workers' mental health during the COVID-19 pandemic. JADA. 2022; 153(8):740-749.

^vFry, Richard. 2018. "Millennials Are the Largest Generation in the U.S. Labor Force." Pew Research Center. April 11, 2018. <u>https://www.pewresearch.org/fact-tank/2018/04/11/millennials-largest-generation-us-labor-force/</u>.

^{vi}Dentist Entrepreneur Organization. 2021. "Trends: Future Trends in Group Dentistry." DEO Magazine. February 11, 2021. <u>https://www.dentalgrouppractice.com/trends-future-trends-in-group-dentistry.html</u>.

^{vii}Gallup. 2016. "How Millennials Want to Work and Live." Gallup. October 6, 2022. <u>https://www.gallup.com/workplace/238073/millennials-work-live.aspx</u>,

^{viii} Dental Care Alliance. 2015. "How Dentists Can Earn More and Stress Less [Infographic]." n.d. Dental Care Alliance. October 6, 2022. https://www.dentalcarealliance.net/dental-practice-news/how-dentists-can-earn-more-andstress-less-infographic/.