Bracing for The Future:
Opening Up Pathways to the Bachelor’s Degree for Dental Hygienists

A brief by ADEA and the Institute for Higher Education Policy
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Introduction

Community colleges in the United States play an important role in educating many allied health professionals. Recently, President Barack Obama highlighted the important role these institutions play in meeting the needs of the country. At the White House Summit on Community Colleges, held in October 2010, education experts and leaders met to discuss surging enrollments and development of strategies to improve retention. President Obama has set a goal of 5 million degree holders from the nation’s 1,200 community colleges by 2020. Much of the focus of the summit was on beneficial public-private partnerships, which would align curriculum demands with needs of local companies and eliminate obstacles to student success and retention. One challenge facing community colleges is that the emphasis on improving transfer to four-year institutions sometimes conflicts with a focus on development of employable skills. Summit attendees hope to bring forth examples of how community colleges can successfully focus on both areas without conflict or confusion for students.

One program area where it is important to find ways to successfully emphasize both transfer options and employable skills is the allied health professions. The health professions in the United States are on the cusp of change. As the nation’s health care needs increase and our health system expands, allied health professionals have a growing part to play in ensuring that all Americans have access to high quality health care. Many states have begun to recognize that allied health providers, particularly dental hygienists, nurses, and physician assistants, can take a larger and expanded role in caring for America’s health. They must have the proper education and training to do this, and so access to the bachelor’s degree for members of these professions is increasingly important.

This may be particularly true for dental hygiene, as entirely new oral health professional workforce models are being developed. Some of these changes require that dental hygiene education shift its focus to a pathway to bachelor’s degree attainment. Doing this without sacrificing the flexibility that is a hallmark of the current allied dental education practice is a challenge. One way to expand educational opportunities is to create clear, strong pathways from the associate’s degree in dental hygiene into the bachelor’s degree, such as is being done now for nursing education. Making pathways and transfer of educational credits clearer will enable more students to complete their bachelor’s degrees—ensuring a high level of professional skill and advancing career trajectories, raising the profile and professionalism of the dental hygiene profession, and helping to meet the health needs of the 21st century United States.

To this end, this report explores the reasons for expanding the pathways for dental hygiene education, and provides an overview of transfer and articulation policies. The report then examines these policies as they relate to dental hygiene, and compares transfer via such policies to the more common bachelor’s degree completion approach. After giving some real-life examples of states that have dental hygiene articulation policies, the paper concludes with suggestions for states and programs seeking to expand their educational pathways. Though this report focuses on dental hygiene, many of the findings can be applied to other allied health professions as well.

Paths to the Bachelor’s Degree

At present, individuals seeking to become dental hygienists have a range of educational options to choose from. Students can work toward a two-year or a four-year degree. They can attend public community colleges, private for-profit schools, or public or private four-year
academic institutions. If they so choose, they can later enhance their education and skills by completing a bachelor’s, master’s, or doctoral degree. Students can tailor their dental hygiene education to their individual circumstances, making it an attractive career choice.

Yet while so much choice is available, an associate’s degree in dental hygiene is still the most prevalent entry point. Of the 301 Commission on Dental Accreditation (CODA)-accredited dental hygiene programs in 2008-09, 86% (243) granted associate’s degrees. Moreover, accreditation standards for dental hygiene education leading to an entry-level position (a minimum requirement defined as two academic years) have not changed in nearly six decades, which may explain the fairly small numbers of students who directly enroll in a bachelor’s degree program. However, the academic, intellectual, and technical skills required by the profession are expanding.1 In addition, the labor market for dental hygienists has changed. As the economic returns to higher education have increased, so have the professional opportunities for people holding bachelor’s or higher degrees.

One pathway to the bachelor’s degree in dental hygiene exists in the form of bachelor’s degree completion programs—meaning that any dental hygienist who wants to earn a bachelor’s degree can already do so. According to the American Dental Hygienists’ Association (ADHA) website (www.adha.org), there are 55 such programs in 32 states. Bachelor’s degree completion programs appear to be ideally suited for providing access to a bachelor’s degree, as they are almost always targeted at working dental hygienists, with flexible course schedules and transfer of credits (see Figure 1). Of the 55 programs, 38 have

some or all coursework conducted online. The majority of degree completion programs lead to a B.S.D.H. degree.

Bachelor’s degree completion programs certainly do meet a need and provide access to the bachelor’s degree for some dental hygienists. But they are often quite small in enrollment and can meet only some of the increasing demand for higher degrees. They are also an ad hoc way of encouraging bachelor’s degree attainment, not an organized system. Bachelor’s degree completion programs are run by individual institutions, so each has its own set of requirements and can choose which credits from an associate’s degree will transfer. This means that students who want to earn a bachelor’s degree do not necessarily know what they will get credit for or how long it will take to earn the degree. Both might differ from program to program. This type of variation can be confusing or frustrating and can discourage some dental hygienists (especially recent associate’s degree program graduates) from continuing their education.

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As discussed, bachelor’s degree completion programs serve an important purpose and meet the educational needs of some dental hygienists. They do not, however, provide a comprehensive pathway to the bachelor’s degree. And as dental hygiene practice advances, such a pathway will likely be increasingly necessary. Students who have attained an associate’s degree may be deterred by the additional financial cost of attaining a bachelor’s degree. This would be exacerbated if they encounter poorly defined mechanisms for moving to the higher-level degree. An educational pathway—a clear, well-defined, and easily identified series of steps to completing the bachelor’s degree after attaining the associate’s degree—will make it easier for more dental hygienists to earn a four-year degree. It will help remove barriers—in terms of both access and affordability—that make attainment of the bachelor’s degree something that only the most persistent and determined individuals are now able to achieve.

Creating a clear pathway to a bachelor’s degree in dental hygiene will improve individual upward career mobility by making it easier for dental hygienists to earn a bachelor’s degree. It will improve the oral health of the country by increasing the number of qualified dental hygienists available to serve as educators and leaders. It will enhance the status of the dental hygiene profession by increasing the educational attainment of its members.

Expanding the Profession

The trend across the states has been to expand the scope of practice (see Figure 2) and decrease supervision requirements for dental hygienists. As a result, many states now permit dental hygienists to perform many procedures without the direct supervision of dentists. Most states have increased the scope of practice for dental hygienists with the aim of improving access to oral health care for underserved populations. States are particularly concerned about the oral health of children, older adults, residents of rural areas, low-income individuals, and those lacking insurance coverage.

As of April 2011, 34 states permit dental hygienists direct access to patients (see Figure 3 and Appendix 2). This has come mostly through the expansion of dental hygiene practice in limited public-health settings. Alaska and New Mexico permit highly skilled, advanced dental hygienists to work in collaborative practice with dentists. As many as 15 states may be considering, or have implemented or piloted, new oral health workforce models (see Figure 4 and Appendix 2). The ADHA, the American Dental Association (ADA), and the federal government (via the Indian Health Service) have all supported new forms of oral health professional workforce models, though the details of these proposed new roles vary.

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Figure 3: Direct Access to Dental Hygienists*

*See Appendix 2 for explanation.
Figure 4: States Considering New Oral Health Workforce Models*

*See Appendix 2 for explanation.
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Figure 5: Common Terms and Definitions

- **Transfer**: The process by which students move from one college to another, ideally carrying previously earned credit with them
- **Articulation**: The process of aligning programs at two colleges so that students can transfer easily
- **Sending institution**: The college at which a student earned the credit s/he is trying to transfer
- **Receiving institution**: The college to which a student is transferring, and at which s/he hopes to be granted credit for classes already taken
- **Articulation agreement**: Formal written agreement defining which courses will be accepted toward a degree at a receiving institution
- **Common course numbering**: Statewide system of course numbers ensuring that courses and course content are the same across institutions, thereby allowing for easier transfer
- **Common core**: A set of general education courses that is common across every college in the state, so that students who complete general education courses in one college have completed the requirements for all colleges
- **Block transfer**: A series of courses that transfer together as a group, so that students who have completed the block at one college have completed the requirements for that block (such as general education or a specific major) at another college, even if the course requirements are not identical
- **Pathway**: A clear sequence of courses leading to a degree

With the passage of new health care legislation in 2010, the federal government has approved as many as 15 demonstration models to explore new oral health professional workforce models. Included among them is advanced practice for dental hygienists.

As the advanced practice for dental hygiene emerges, it is imperative that the educational qualifications of dental hygienists are sufficient to enable them to safely provide the scope of services and care encompassed in these new expanded roles and for them to be educationally prepared to attain higher degrees. Specifically, for any masters level advanced practitioner, an initial requirement typically would be the bachelors degree.

The current questions, therefore, are how best to expand access to the bachelor’s degree in dental hygiene, and what is needed to make the steps toward earning this degree clear to all.

What Are Transfer and Articulation Policies?

Creating policies that promote transfer from an associate’s degree in dental hygiene to the bachelor’s degree in dental hygiene can make it easier for dental hygienists to earn advanced degrees. Unlike bachelor’s degree completion programs, which are specific to individual colleges, transfer and articulation policies happen at the state level. This means that they apply to every single public college in a given state (and sometimes even to private colleges). State policies help create consistent, clear paths between different colleges and degree programs, so that students can move from one to another easily and efficiently.

Transfer and articulation agreements can be accomplished via state policies to guarantee that students’ credits transfer and programs are completed in a timely manner.\(^5\) Figure 5

\(^5\)It should be noted that articulation agreements can be created at the program level as well. In these cases, individual programs work together to ensure that all credits earned as part of the
provides some definitions that are useful in this discussion. But essentially, policies are laws, rules, or regulations set at the state level (either by the state legislature or by the state office of higher education) and applying to all public colleges in a state. These rules specify the types of courses that automatically transfer from college to college. This means that students know, before they even apply to a college, which of the classes they have already taken will count toward a new degree.

According to the Education Commission of the States (www.ecs.org), at least 43 states have some type of transfer or articulation policy and other states are in the process of developing them. There are many reasons for states to invest in these types of policies. Just as dental hygiene is seeking to increase the educational level of its members, states want to increase the overall educational attainment of their residents. Just as individuals with a bachelor’s degree earn more money, states with well-educated residents have more robust economies. It therefore makes sense for states to develop policies that help people easily earn four-year degrees. While many students who begin their college education in a community college want to transfer and earn a four-year degree, most will not do so. According to the U.S. Department of Education, only about one-half of students who start in a community college with the goal of earning a bachelor’s degree will actually attain a

four-year credential. There are many reasons for this, and not all of them have to do with transfer policies. But the fact that students often receive poor or even incorrect guidance around which classes to take if they want to transfer (resulting in wasted time, money, and effort), added to confusing transfer rules and inconsistencies across institutions, most likely plays a large part.6

Over 60% of students—regardless of whether they start at a two-year or a four-year institution—will attend more than one college on their way to earning degrees.7 So it is important to make sure that the credits they take count toward a degree at the institution that is their final destination. State transfer and articulation policies do this. These policies outline which courses will transfer and which will not, helping students plan their curricula. They demonstrate for colleges that students have learned what they need to know, even if they took a course on a different campus. They can “entice” students to transfer by rewarding them for doing so, perhaps by giving them advanced standing for completing a certain set of courses.

The result of good transfer policies should be an increase in the number of students who successfully move from institution to institution and ultimately earn four-year degrees. If done well, students should have less confusion and frustration when it comes time to transfer, and institutions should be more willing to accept transfer students. Students and their families should save money and time because classes that do not count toward a bachelor’s degree are


A well-articulated transfer policy should ultimately lead to a better-educated workforce.

What Do Transfer and Articulation Policies Look Like?

Transfer and articulation policies vary by state. Some states have a simple listing of institution-by-institution articulation agreements, for example. Other states have state-sponsored websites that list all of the courses that transfer from one institution to another. Students attending one college can enter their courses into the website and receive information about whether the credits will transfer to another college. Other states’ systems are more complex. There may be a statewide course numbering system, so that every course with the same title and number contains the same content and automatically transfers. A similar system without standard numbers may exist—one that looks across syllabi and creates course equivalencies, outlining which courses at two-year colleges are considered the same as courses at four-year colleges. And some states go even farther, creating entire “blocks” of courses that transfer together, giving students automatic junior status or exemption from additional general education requirements.

One thing important to note is that most of these transfer systems focus on liberal arts degrees. Most block transfers, for example, are for majors within the liberal arts, not technical or professional fields. Some states do include specific career areas in their transfer systems, but as we will see in the next section, this is not common.

Barriers to Overcome

Although most states have some sort of statewide transfer policy, there remain a number of barriers to creating and implementing the policies, particularly more comprehensive approaches such as common course numbering or block transfers (see Table 1). The most basic are logistical issues, such as getting all institutions in the state on the same calendar and with the same number of hours of seat time. In many states, it is not clear which higher education sector is or should be in charge of the policy creation.

Table 1: Moving from the Associate’s to the Bachelor’s Degree

<table>
<thead>
<tr>
<th>Bachelor’s degree completion programs</th>
<th>Transfer and articulation policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The “standard” way to increase a students’ credentials</td>
<td>• Build upon state efforts to increase overall bachelor’s degree attainment</td>
</tr>
<tr>
<td>• Sponsored by individual institutions</td>
<td>• Not usually specific to dental hygiene, but part of a larger effort to ease transfer for everyone</td>
</tr>
<tr>
<td>• Often online and part-time; targeted toward working dental hygienists</td>
<td>• May include various components such as common course numbering, a general education common core, or a specified occupational transfer pathway</td>
</tr>
<tr>
<td>• Requirements vary from program to program</td>
<td>• Create consistency for transfers at all public institutions in the state</td>
</tr>
<tr>
<td>• Individual bachelor’s degree completion programs may work with individual two-year programs to develop articulation agreements that guarantee admissions or transfer of credits</td>
<td>• Clearly defines which courses and/or degrees will transfer</td>
</tr>
<tr>
<td>• Can be burdensome and inefficient because every program is different</td>
<td>• Codified in state rule or legislation</td>
</tr>
<tr>
<td>• Not a clear pipeline for newer dental hygienists; may also have limited capacity to grow in enrollment</td>
<td>• More efficient and user-friendly than institution-specific agreements</td>
</tr>
</tbody>
</table>

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process.\textsuperscript{8} Once a coordinating body or intersegmental leader is identified, finding time for institutional representatives to meet in order to discuss transfer policies can be challenging.

Other barriers come from a long higher-education tradition of institutional control around issues of curriculum.\textsuperscript{9} A college wants to determine what educational preparation qualifies for a degree from the institution, and therefore may resist any state attempt to control content, such as a standardized general education core. Faculty want to control what is taught in their courses, and so may resist attempts to standardize course content. Four-year colleges are often skeptical of the quality and rigor of two-year colleges, and thus resist being required to accept community college coursework for transfer without their own internal reviews.

A final barrier to creating transfer systems lies in the long-standing split between liberal arts and professional coursework. As already noted, many transfer systems focus solely on general education coursework and liberal arts majors, omitting professional coursework and degrees. Thus, associate’s degrees in applied fields (such as the A.A.S.) are not included in transfer policies. Moreover, many states have—or had at one time—separate community colleges for transfer degrees and technical colleges for professional degrees. Technical colleges are almost always excluded from statewide transfer systems.

Historically, professional and technical degrees were intended to provide a direct path to employment, not a path to the bachelor’s degree. Although many technical fields today do require a four-year degree, applied associate’s degrees are often considered “terminal” degrees not counting toward transfer. As a result, they usually include fewer general education courses, and students earning these degrees do not complete enough of these credits to qualify for block transfer or guaranteed junior standing. Also, the specific nature of professional coursework means that many states do not have the time or resources to determine course equivalencies in each field. As a result, the split between technical and liberal arts courses of study remains intact within most state transfer systems.

Where Does Dental Hygiene Fit into This Picture?

States want to encourage bachelor’s degree attainment for their residents, and have created statewide transfer policies to encourage this. But professional fields are frequently excluded from such policies. Where does this leave dental hygienists who seek to transfer from an associate’s degree program into a bachelor’s degree program? To ease the transfer of associate’s degree-holding dental hygienists into bachelor’s degree programs, dental hygiene should be included in state transfer policies. To see if this is the case, an analysis of the 50 states’ transfer and articulation policies was undertaken. States are considered to have dental hygiene transfer policies or agreements if:

- they have agreements or transfer rules explicitly addressing dental hygiene programs
- they include dental hygiene programs or courses in the state’s common course numbering system
- they include dental hygiene in statewide common general-education transfer rules
- they have a college-specific transfer agreement that effectively serves the entire state because of its easy access and status as the sole...
bachelor’s degree program in the state

It is important to remember that statewide policies only address dental hygiene programs in public institutions; students who earn their associate’s degree from or want to transfer to a private college will not necessarily be covered. Policies are also only relevant in states where there are both associate’s and bachelor’s dental hygiene degree programs. If a student transfers from a college in one state to a program in a different state, statewide policies do not apply, even if both states have them.

Only eight states have any sort of transfer or articulation policy for dental hygiene. In 12 states and Washington, DC, there is only one dental hygiene degree program offered through a public institution, so transfer policies are not applicable. Thirty-one states do not have dental hygiene transfer policies, despite the presence of public two- and four-year programs in the state.

Why are state transfer policies for dental hygiene so unusual? First, there may be a lack of demand. In a survey of dental hygiene program directors, 56% indicated that “no demand” was the most frequent reason for not pursuing articulation agreements.1 Interviews with a sample of dental hygiene educators indicate that many dental hygienists and dental hygiene educators feel that bachelor’s degree completion programs are sufficient. This leads to a lack of focus on creating transfer policies—a situation that may be fine for now but is likely to become problematic as demand for health care workers with bachelor’s degrees increases.

A second reason comes from state priorities. Most state transfer systems are rooted in a belief that transfer is for liberal arts degrees, not professional or occupational programs. As described earlier, states usually focus their transfer efforts on traditional liberal arts majors and general education courses, leaving out technical fields like dental hygiene (and, it should be noted, most other allied health fields).

Third, the fact that approximately 55% of two-year dental hygiene programs grant associate’s in applied science (A.A.S.) degrees, rather than associate’s in science (A.S.) degrees, is a major impediment. A.S. degrees are usually considered transfer-oriented degrees with a strong general-education core curriculum. Many states allow for block transfer of A.S. degrees or their general education credits, regardless of the student’s major. In these states, dental hygiene students can easily transfer to a bachelor’s degree program knowing that all of their general education coursework is complete and they may even receive automatic upper-division (i.e., junior) standing.

But in these same states, the A.A.S. degree is excluded from these policies and students in A.A.S. programs do not receive advanced standing. Though some A.A.S. credits may transfer on a course-by-course basis, policies do not cover the majority of credits earned in an A.A.S. in dental hygiene program. In short, in almost any state in which the A.A.S. degree is the primary two-year program for dental hygienists, dental hygiene is excluded from statewide transfer policies by definition.

Finally, the lack of bachelor’s degree programs in public institutions in some states makes the demand for institutional transfer irrelevant. If there is nowhere for students to transfer to, there is no reason to create an in-state dental hygiene degree program transfer system.

It should be noted that, in its lack of inclusion in statewide transfer policies, dental hygiene is not alone. Most states exclude the allied health professions from their state policies, for the reasons cited above. Nursing is an exception, but many other allied health professions (such as
respiratory therapy, radiological technology, physician assistants, and exercise science) are not usually included in statewide transfer policies. In fact, they are excluded even more frequently than dental hygiene, because many of these occupations do not have well-established bachelor’s degree programs to which students might transfer. Some states have created a bachelor’s in allied health or health science degree to improve bachelor’s degree attainment for allied health professionals, but even this approach is quite rare. In general, the allied health fields are seen as outside of the traditional transfer system.

What do Statewide Dental Hygiene Transfer Policies Look Like?

Some states have developed ways to smooth dental hygienists’ movement into the bachelor’s degree. As discussed earlier, state transfer policies can vary widely, depending on state needs and priorities. Dental hygiene fits into these policies in various ways. Below are examples from three states, showing how a range of policies can work to ease transfer between associate’s and bachelor’s degrees in dental hygiene.

Kentucky: Statewide articulation into a single institution

Kentucky has a state general-education core curriculum as well as policies that allow students to transfer general education courses as a block. Within the state, there are three associate’s degree programs in dental hygiene—all granting the A.A.S. There are also two bachelor’s degree programs (one of which is a bachelor’s degree completion program). After several years of discussions and negotiations, Kentucky created a statewide policy for dental hygiene transfer in 2010. Using the longstanding bachelor’s degree completion program at Western Kentucky University (WKU) as a model, the state created a guaranteed block transfer for students completing the A.A.S. degree at any Kentucky Community and Technical College System (KCTCS) institution. A.A.S. recipients who have a 2.5 grade point average and are accepted into WKU’s bachelor of dental hygiene program are guaranteed:

- A block transfer of 75 credits—42 credits of dental hygiene coursework and 33 credits of general education
- 16 additional credits of upper division coursework

Students must complete additional general education coursework to meet WKU requirements, but these may be completed at either the university or a community college. Students must also complete 26 additional credits of upper-division dental hygiene coursework. Students who have graduated from a KCTCS institution do not have to have their credits evaluated individually for transfer; they receive credit automatically.

The goal of this agreement is to streamline bachelor’s degree completion within the state. Though the agreement applies to only one of the two bachelor’s degree programs, it allows all A.A.S. recipients to have a clear pathway to the bachelor’s degree. Though the statewide agreement is new, it is assumed that transfer students will complete their four-year degree in a similar timeframe as students who previously participated in WKU’s bachelor’s degree completion program (personal interview). This varies somewhat, but is usually around two years.

Maryland: General education block transfer

Maryland state policy specifies that the A.A. and A.S. degrees are intended for transfer to a bachelor’s degree program, and the A.A.S. degree is for immediate employment. Community college dental hygiene programs in Maryland offer the A.A.S degree. Despite this, Maryland state policy allows for a simplified transfer process for associates’ degree holders. The University System of Maryland maintains an
articulation system (ARTSYS) database, indicating which Maryland community college courses are transferable to the state university system and, if they are, the course number and general education area to which they apply. The general education and basic science courses offered through Maryland dental hygiene A.A.S. programs are listed as transferable in ARTSYS.

The University of Maryland Baltimore College of Dental Surgery (UMB) offers a bachelor’s degree completion program, which accepts up to 90 transfer credits, including up to 45 credits of dental hygiene-specific coursework completed at a U.S. community college or university dental hygiene program accredited by the Commission on Dental Accreditation (CODA).

Because Maryland dental hygiene A.A.S. course requirements are listed in ARTSYS, transfers into the bachelor’s degree completion program need not retake their general education courses. The work they completed as part of their Maryland A.A.S. degree will transfer into the bachelor of science degree completion dental hygiene program at the University of Maryland-Baltimore as long as the credit hours and grade achieved meet the educational standards of the receiving institution. A grade of C or higher is a passing grade acceptable for transfer to UMB’s degree completion program. While on the surface this is no different from any other bachelor’s degree completion program, it is important to note that these transfer guidelines are rooted in the state’s policy of listing basic science courses as part of the ARTSYS system, meaning that they exist as part of a system of eased transfer, rather than an institutional decision.

**Florida: Bachelor of applied science and a statewide course numbering system**

The state of Florida has a well-developed transfer and articulation policy. The A.A. is considered the state transfer degree, and recipients are guaranteed acceptance to a four-year institution and transfer of 60 credits. The state also has a statewide course numbering system and has developed a number of transfer pathways and degrees for professional fields of study. These include the bachelor of applied science (B.A.S.) degree, which are occupation-specific bachelor’s degrees designed to provide degree completion options for individuals holding A.S. degrees or the equivalent. B.A.S. degrees have the same general education requirements as other bachelor’s degrees in the state, but are structured to allow more flexibility for professional degree holders.

Florida has both A.A.S. and A.S. programs in dental hygiene. Many dental hygiene courses are included in the statewide course numbering system, and thus easily transfer from school to school. There is only one four-year program in the state, a B.A.S. at St. Petersburg College. Because of the state’s strong transfer system, A.S. degree holders seeking a bachelor’s degree can easily transfer their credits into St. Petersburg College’s program. Students earn 38 transfer credits automatically upon entry to the program. They must then take 30 credits of upper-level dental hygiene courses; 10 additional credits are earned by credentials and the active dental hygienist license. Students must also complete 36 credits of general education.

**Developing Strong Bachelor’s Degree Completion and Transfer Systems: Six Recommendations for Institutions, Associations, and States**

There is immense variation in state policies and transfer contexts. No one approach to moving dental hygienists, or other allied health professionals, to the bachelor’s degree will fit all states.

There are, however, a number of things that programs, institutions, associations, and states can do to help create clear, easily accessible pathways to the bachelor’s
degree for large numbers of associate’s-degree-holding dental hygienists.

As we have seen, creating policies at the state level appears to be the most efficient way to encourage such pathways; institution-to-institution articulation is less useful. Therefore, we focus our recommendations on policy solutions. In many cases, however, leadership from program-level staff (including program directors) can have an outsized influence in moving policy forward. Small changes in individual programs can have a big effect on state-level perceptions, initiatives, and decisions.

1. Continue to allow bachelor’s degree completion work to be done online or on part-time, nontraditional, or accelerated schedules

Many dental hygienists want or need to work once they have earned their associate’s degree. A big advantage of traditional bachelor’s degree completion programs is their focus on making the bachelor’s degree accessible through part-time study, online courses, and accelerated schedules. Program directors should continue to implement such approaches—not only in bachelor’s degree completion programs but in “regular” bachelor’s degree programs as well. This will ensure that all dental hygienists can take advantage of educational opportunities even after they enter the workforce.

2. Add public B.S. degree programs, particularly in states that don’t have them

Ideally, dental hygiene will use existing state transfer policies to encourage bachelor’s degree attainment. However, this only works in states that have public bachelor’s degree programs. Without such programs, state policies are irrelevant. Thus, one strategy for increasing access to the bachelor’s degree is to work with public colleges and universities to expand the number of states with a bachelor’s degree in dental hygiene program. This ensures that there is “room at the inn” for all those who seek to obtain a four-year degree. Such an approach also has the added advantage of increasing the overall capacity of the dental hygiene education system, thereby ensuring that a large pipeline of dental hygienists is available to care for the nation’s population. Development of a public bachelor’s degree program should include an articulation strategy as well.

3. Move programs from the A.A.S. to the A.S. degree

A key barrier preventing dental hygiene from taking advantage of state policies is the granting of the A.A.S. degree by many states and institutions. Most states consider the A.A.S. a terminal degree and exclude it from transfer systems. Though there are strong historical reasons for offering the A.A.S., doing so limits the educational growth of dental hygienists holding this degree by preventing them from easily transferring into a bachelor’s degree program. Shifting toward the A.S. would automatically increase the ease with which graduates enter four-year programs. It would also send a clear message that there is an educational pathway for dental hygienists to follow—that the associate’s degree is the beginning of an individual’s educational and professional journey, not the end, and that a bachelor’s degree is important for dental hygiene practice in today’s society.

Program directors can take the lead here by pushing their institutions to consider changing their degree offerings and educating stakeholders as to the importance of this shift.

4. Include general education core requirements in dental hygiene programs

Including general education core requirements, which vary by institution and by state, in the associate’s degree is
another approach to ensure ease of transfer. While many of these courses are often already part of the dental hygiene curriculum (English, psychology, social and biological sciences), inclusion of other core requirements could facilitate transfer. In states with common course numbering systems or general education block transfer policies, these credits are guaranteed to count towards a bachelor’s degree.

By selecting new courses that will transfer, or replacing non-transferable with transferable courses, students will ensure they are not taking “dead end” courses while they are in the associate’s degree track. In addition, by including the general education core in the associate’s degree, students will automatically be exempt from many general education requirements once they transfer to a four-year program. In places where it is not possible to shift to the A.S. degree entirely, adding general education requirements to the A.A.S. may serve a similar purpose by increasing the number of transferable credits that A.A.S. graduates earn.

There are likely financial benefits to the student who takes as many transferable credits as possible while in the associate’s program, since classes taken at a community college are typically less expensive than those taken at a four-year institution. However, the already robust nature of many dental hygiene curricula may preclude inclusion of additional general education courses in the associate’s program. Again, as the on-the-ground leaders, dental hygiene program directors have a strong role in determining the best strategies to link general education core requirements with dental hygiene-specific courses and non-dental hygiene-specific courses in an associate’s degree program.

5. Accept the A.S. in dental hygiene as equivalent to the first two years of a bachelor’s degree by creating block transfer agreements

By making program requirements identical to the first two years of a bachelor’s degree, A.S. programs can ensure that their students will easily transition into a four-year program without losing time or credits. Four-year programs can help by guaranteeing block transfer or junior standing to those holding A.S. degrees. In short, programs can work together to ensure that everyone enters the junior year of a bachelor of science in dental hygiene (B.S.D.H.) program with the same experiences and credentials, regardless of whether they completed the first two years at a two-year or a four-year institution.

6. Work with policymakers to include professional and occupational fields in transfer agreements or state-sponsored pathways

Creating state policies to support associate’s degree dental hygienists seeking bachelor’s degrees is a critical component of a strong transfer system. Although many states have transfer policies, few include dental hygiene or other professional fields. A key area for future work is to increase the states’ focus on transfer for everyone, not just liberal arts students. By demonstrating to policymakers that dental hygiene is a rapidly growing field with a strong need for bachelor’s-degree-educated professionals, programs can encourage the long-term growth of a clear, consistent educational pathway.

Appendix 1: Methodology

The research discussed in this report involved conducting a scan of major policy websites to identify literature describing state transfer policies, their purpose and development, and barriers to their implementation. Organizations used in this search included Education Commission of the States (ECS), The National Articulation and Transfer Network, and the Western Interstate Commission on Higher Education (WICHE). At each site, at least one (usually more) documents were identified, read, and
analyzed, in addition to the information posted on the websites. At the same time, background research on allied health education (relying on information from the American Dental Education Association, additional research at the ADHA and ADA websites, and a literature search on nursing education) was conducted.

The focal point of the research was a state scan (see Appendix 3: State-by-State Policy Scan) examining the transfer policies related to dental hygiene for each state. To this end, public dental hygiene programs granting degrees (A.A., A.A.S., B.S., etc.) in each state were identified using the website of the state’s boards of dental hygiene/dentistry, higher education, or both. The requirements for becoming an RDH were also identified using the state’s dental board website. Then, a series of web searches to identify transfer policies in the states was conducted. The American Association of Collegiate Registrars and Admissions Officers and WICHE’s State Policy Inventory Database Online database was used to identify the state offices responsible for transfer policies and procedures. In many cases, state transfer guides and policy documents were reviewed. Also, in states with no evidence of transfer policies, multiple state websites were visited to ascertain whether a transfer policy was truly absent.

After identifying each state’s policies, the relevance of those policies to dental hygiene was ascertained. Specifically, the policies were examined for the following:

- references to dental hygiene
- inclusion of A.A.S. degrees, if offered in the state
- inclusion in state course catalogs (if available) of dental hygiene courses, prerequisites, or both
- inclusion of dental hygiene in professional or major transfer blocks

In most states, the websites of bachelor’s degree completion programs were reviewed to determine if they served as a de facto statewide transfer process, and to understand the relationship between state transfer policies and traditional B.S. degree completion programs. Special attention was paid to whether institutional agreements were present in the state.

All information was documented on a five-state, color-coded transfer matrix. The matrix highlights which states had dental hygiene policies, which lacked policies, and which had no B.S. degree programs and therefore no need for such policies.

To confirm the research findings, individuals in six states were contacted via email and phone. To ensure the accuracy of the three states highlighted in the final report, individuals were contacted via email so that their state summary could be approved.

In addition to dental hygiene, attention to transfer policies in other allied health professions was examined. The identification of transfer pathways for such professions was determined using the professional association websites for various occupations (nursing, physical therapy, respiratory therapy, medical assisting, etc.), as well as the association newsletter for the American Association of Colleges of Nursing. As noted in the report, there were few such policies. Physical therapy, for example, clearly stated that their two-year degrees are not intended to articulate into four-year degrees. Lastly, in an effort to triangulate the policy environment, transfer websites of every state with professional-oriented transfer policies were scanned for evidence that these policies included allied health. With the exception of nursing, they rarely did so.
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Figure 3: Direct Access to Dental Hygienists

Direct Access: ADEA consider this term to mean that a dental hygienist may perform dental hygiene services without the presence of a dentist or may maintain a provider-patient relationship with the patient either independently or working with the cooperation of a dentist. Most often direct access occurs through permits under which dental hygienists may provide services in settings where access is limited or in institutions that provide care to underserved populations. Generally these type of permits require additional training and a higher level of clinical experience.

Alaska—Under a "collaborative agreement" with a dentist, a hygienist may practice “without the presence of the licensed dentist” in “a setting other than the usual place of practice” of the dentist and “without the dentist's diagnosis and treatment plan” unless otherwise specified in the collaborative agreement. (Sec. 08.32.115)

Arizona—A dental hygienist “employed by or working under contract or as a volunteer” for a public health agency, institution, or school authority may “screen patients and apply topical fluoride” before an examination and “without entering into an affiliated practice relationship” with a dentist. Dental hygienists with an affiliated practice agreement can assess a patient but must “direct the patient to the affiliated dentist for treatment or planning that is outside” his or her scope of practice. Patients must be seen by a dentist within 12 months of the hygienist’s treatment. (Sec. 32-1289)

Arkansas—Under a “collaborative agreement” a dental hygienist “may provide prophylaxis, fluoride treatments, sealants, dental hygiene instruction, assessment” and “if delegated by the consulting dentist, other services” to children, senior citizens, and persons with developmental disabilities “in a public setting without the supervision and presence of a dentist and without prior examination of the persons by a dentist.” (Sec. 17.82.701)

California—A “registered dental hygienist in alternative practice” (RDHAP) may perform preventive and therapeutic functions in “residences of homebound individuals, schools, residential facilities and other institutions, and in dental health professional shortage areas.” The RDHAP does not need “written verification that the patient has been examined by a dentist or physician and surgeon.” RDHAPs can operate as “an employee of a dentist or another RDHAP, as an independent contractor, as a sole proprietor of an alternative dental hygiene practice, or as an employee of a primary care clinic or specialty clinic…and a clinic owned or operated by a public hospital or health system.” (Sec. 1775)

Colorado—Allows for the “unsupervised” practice of dental hygiene that can be performed “by licensed dental hygienists without the supervision of a dentist.” In the state, a dental hygienist “may be the proprietor of a place where supervised or unsupervised dental hygiene is performed and may purchase, own, or lease equipment necessary to perform supervised or unsupervised dental hygiene services.” The dental hygienists must state in writing with the patient’s signature that “any diagnosis or assessment is for the purpose of determining necessary dental hygiene services…” (Sec. 12-35-124)

Connecticut—Allows for the practice of dental hygiene “in public health facilities” under “general supervision” of a dentist. The “dental hygiene procedures to be performed” must be authorized by and “with the knowledge of” the supervising dentist “whether or not the dentist is on the premises when such procedures are being performed.” Requires the dental hygienist to
“refer for treatment any patient with needs outside” his or her scope of practice and refer patients “for treatment to dentists.” This implies that a dentist does not have to examine a patient beforehand. (Chapter 379a, Sec. 20-126l)

**Idaho**—The states “extended access oral health care program” allows dental hygiene services to be provided under “general supervision” to patients in public health or nonprofit settings that “provide free or reduced fee” services to “persons who, due to age, infirmity, indigence, or disability, are unable to receive regular dental and dental hygiene treatment in a private office.” The supervisory dentist “is employed or retained by a program or is a volunteer,” determines “the treatment to be provided,” and authorizes a dental hygienist with an extended access permit to provide the “prescribed treatment.” (Idaho Statutes 54.903.9)

**Iowa**—A dental hygienist in a public health setting may provide hygiene services “without the patient first being examined” by a dentist as long as the dentist “authorizes and delegates” these services. “The dentist is not required to provide future dental treatment to patients served by public health supervision.” (I.A.C. 650-10.5[153])

**Kansas**—A dental hygienist with an Extended Care Permit (ECP) is sponsored by a dentist licensed in the state of Kansas, including a signed agreement stating that the dentist shall monitor the dental hygienist’s activities under general supervision (not required to be on the premises). An ECP hygienist may provide an assessment and dental hygiene services for specified populations and in designated locations. The dental hygienist advises the patient and legal guardian that the services are preventive in nature and do not constitute a comprehensive dental diagnosis and care. The ECP hygienist provides a copy of the findings and the report of treatment to the sponsoring dentist. The sponsoring dentist is not required to examine or provide dental services to any patient that the ECP provider has treated (not stated in the statutes, but implied through exclusion). (Sec. 65-1456, f-g)

**Kentucky**—A volunteer dental hygienist may provide dental hygiene services including the application of fluoride and sealants “without the supervision of a dentist.” A dental hygienist can provide dental hygiene services “for not more than 15 consecutive full business days” to a patient “when the supervising dentist is not physically present.” The dental hygienist may “not examine or provide dental health services to a patient who has not been examined by the supervising dentist within the previous seven months.” “The supervising dentist is required to provide a written order for treatment in the patient’s file.” (Sec. 313.040)

**Maine**—An “independent practice dental hygienist” may practice “without supervision by a dentist” certain procedures, “may be the proprietor of a place where independent dental hygiene is performed,” and “may purchase, own, or lease equipment necessary for the performance of independent practice dental hygiene.” Such hygienists must obtain “written acknowledgement” that he or she is “not a dentist and that the services to be rendered do not constitute restorative care or treatment.” (Title 32, Chapter 16 Section 1094-I)

**Massachusetts**—A “public health dental hygienist” may perform any procedure or service that is within his or her scope of practice in a public health setting “without the supervision or direction of a dentist.” Any procedure that “has been authorized and adopted by the [state dental] board as a delegable procedure for dental hygienists in private practice under general supervision” may be performed without supervision in a public health setting through a “collaborative agreement with a local or state government agency, institution, or with a licensed
dentist” who will provide the “appropriate level of communication and consultation with the dental hygienist to ensure patient health and safety.” Public Health Hygienists must “make a written referral to a dentist and an assessment of further dental needs,” and “provide a consent form signed by the patient or legal guardian” that “explains that the services are not a substitute for a dental examination by a dentist” and informs the patient to “obtain a dental examination within 90 days.” (Chapter 152 Sec. 51)

**Michigan**— Allows a **dental hygienist to perform “predetermined procedures and drug protocols”** that are provided by a licensed dentist in a program “for underserved populations” if “conducted by a local, state, or federal grantee health agency for patients not assigned to a dentist.” Under the program, the licensed dentist must be available “on a regularly scheduled basis to review the practice of the supervised individual, to provide consultation to the supervised individual, to review records, and to further the education of the supervised individual in the performance of the individual’s functions.” (Sec. 333.16625)

**Minnesota**— A **dental hygienist “employed by a health care facility, program, or nonprofit organization”** (serving the elderly, disabled, or juveniles) or in a local, state, or federal public health facility can provide dental hygiene services “without the patient first being examined” by a dentist through “a collaborative agreement” with a dentist. The agreement must designate “authorization for services provided by the dental hygienist” and be signed and reviewed annually by the dentist and dental hygienist. A dental hygienist must provide a patient with “a statement advising the patient that the dental hygiene services provided are not a substitute for a dental examination.” The collaborating dentist “authorizes and accepts responsibility for the services performed by the dental hygienist.” The services may be performed “without the presence” of a dentist and may be performed “at a location other than the usual place of practice of the dentist or dental hygienist, and without the dentist’s diagnosis and treatment plan, unless specified in the collaborative agreement.” (150A.10 Subd. 1)

**Missouri**— A dental hygienist who is **“practicing in a public health setting”** may provide fluoride treatments, teeth cleaning, and sealants, if appropriate, to children who are eligible for medical assistance...without the supervision of a dentist.” (Chap. 332 Sec. 332.311.2)

**Montana**— A dental hygienist practicing under a “**limited access permit**” may provide limited dental hygiene preventive services “without the prior authorization or presence of a licensed dentist” in a public health facility. A hygienist operating under such a permit must refer “any patient needing treatment outside the scope of practice” to a dentist. The provision of care under the permit is “limited to patients or residents of facilities or programs who, due to age, infirmity, disability, or financial constraints, are unable to receive regular dental care.” (MCA Sec. 37-4-405)

**Nebraska**— A dental hygienist “in the conduct of public health-related services in a public health setting or in a health care or related facility” when “authorized by and under the general supervision” of a dentist who is responsible for “directing the authorized activities,” can provide dental hygiene services without “the physical presence of a dentist.” (Sec. 38-1130)

**New Hampshire**— A dental hygienist under “**public health supervision**” can provide services “which are to be carried out by a dental hygienist...practicing in a school, hospital, or institution,” or “providing care to a homebound person...without the dentist having to be present.” The dentist must review the records once in a 12-month period. (Sec. 302.02)

**New Mexico**— The “**collaborative practice of dental hygiene**” allows a dental...
hygienist to enter into “a cooperative working relationship with a consulting dentist but without general supervision.” An “acting consulting dentist” is the patient's dentist of record “in collaboration and consultation” with a dental hygienist. Dental hygienists in collaborative practice treat patients using “standard collaborative practice protocols.” The consulting dentist must be “within a reasonable referral distance” from the collaborative dental hygiene practice. The dentist must provide “verbal or written prescriptions” for procedures “requiring a diagnosis.” The dentist must also provide written order when it “is appropriate to provide exception to the standardized protocols.” Each patient must be referred for a dental examination every 12 months. Collaborative practice dental hygienists may own and manage a dental hygiene practice or enter into a contractual arrangement anywhere in the state. (Sec. 16.5.17.7 and Sec. 16.5.17.9-14)

**Nevada**—A dental hygienist with special endorsement as a “public health dental hygiene” can perform services at a health facility, a school, or other place approved by the [Nevada State Dental] board “without supervision” and “without authorization” from a dentist using a board-approved “treatment protocol.” Patients must be referred to a dentist for follow-up care, diagnostic services, and other services outside the dental hygienist’s scope of practice. The dental hygienist must have “authorization” from the dentist of the patient on whom the services are to be performed. A patient must have been examined by a dentist within 18 months of when “services are to be performed.” Dental hygienist must “refer the patient to the authorizing dentist for follow-up care or any necessary additional procedures.” (NRS 631.210 and 632.287)

**New York**—Under “general supervision” the “supervising dentist is available for consultation, diagnosis, and evaluation, and has authorized the dental hygienist to perform the services and exercises that degree of supervision appropriate to the circumstances.” (Sec. 69.1)

**Ohio**—Under the “Oral Health Access Supervision Program” a dental hygienist must “comply with written protocols” and “standing orders” established by an authorizing dentist in a variety of public and underserved settings. Under the arrangement, “the patient’s medical and dental history” must be “made available to the authorizing dentist” who “reviews and evaluates the history and determines that the patient may safely receive dental hygiene services.” Services under the permit must be provided within 30 days of the dentist’s review of the patient’s medical and dental records. Following an examination, the hygienist must “direct the patient to the authorizing dentist for a clinical evaluation, schedule, or cause to be scheduled an appointment with the authorizing dentist.” If the patient’s medical condition changes “the authorizing dentist may complete the subsequent review and evaluation of the patient’s medical and dental history by telephone.” (ORC Chap. 4715.36)

**Oklahoma**—A dental hygienist under “general supervision” can perform “advanced procedures” on a “patient of record” at the level of supervision determined by the authorizing dentist. General supervision is limited to “a maximum of thirteen (13) months following an examination by the supervisory dentist of the patient of record.” In treatment centers, “a dentist may authorize procedures to be performed by dental hygienist without requiring the thirteen month maximum if the authorization to perform the procedures is in writing and signed by the dentist” and “the procedures are performed during an initial visit to a treatment facility.” However, the person in the treatment center must be examined by a dentist before he or she can receive further treatment from a hygienist. (Sec. 59-324)
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Oregon—Allows dental hygienists and dental assistants to perform “oral health screenings” under “written training and screening protocols” adopted by the Oregon Board of Dentistry. Under the law, a dental hygienist may “render all services within the scope of practice of dental hygiene...without the supervision of a dentist.” Once each calendar year, the dental hygienist must “refer each patient or resident to a dentist who is available to treat the patient or resident.” (ORS 680.150, 680.200 and 680.205)

Pennsylvania—A “public health dental hygiene practitioner” certified by the state dental board may practice “educational, preventive, therapeutic, and intraoral procedures” “without the authorization, assignment, or examination of a dentist” in schools, older adult daily living centers, FQHCs, and other public health and underserved settings. Patients must be referred to a dentist; however, “failure to see a dentist does not prevent the patient from continuing to receive dental hygiene services.” (Section 11.9)

Rhode Island—Dental hygienists “may engage in the practice of dental hygiene outside” a dentist’s office “in order to render [care] to residents of nursing facilities...without the on-site direct supervision of a dentist.” General supervision is defined as “the dentist has authorized the procedure or duty in accordance with his or her diagnosis and treatment plan” and “the dentist does not have to be physically present in the dental office when such treatment is being performed.” (Sec. 5-31.1-6.1)

South Dakota—On March 7, 2011 Governor Dennis Daugaard signed legislation authorizing a dental hygienist to “provide preventive and therapeutic services under collaborative supervision of a dentist.” This requires “[a] written collaborative agreement between a supervising dentist and dental hygienist.” Under the arrangement, a dental hygienist may perform “educational, diagnostic, therapeutic, or preventive” services “authorized by the Board of Dentistry.” These dental hygiene services may not be performed “more than thirteen months” without a “complete evaluation” of the patient “by a supervising dentist.” (The law amends Sec. 36-6A-26; rules have yet to be issued by the South Dakota Dental Board.)

Texas—Dental hygienists may practice in the state under the “general supervision” of a dentist. According to the law, general supervision means “where a dentist may or may not be present on the premises when the dental hygienist performs the dental hygiene procedures.” The law allows dental hygienists “practicing in certain facilities” which include nursing facilities, a school-based health center, or a community health center to perform dental hygiene services “for patients whom the dentist has not seen within the past twelve months” under certain conditions. Dental hygienists must make a written referral of patients to a dentist and may not perform dental services after six months “unless the patient has been seen” by a dentist. (Chap. 115.1 and 115.5)

Vermont—The law provides for two different definitions of “general supervision.”
One definition **applies to services provided in “a public or private school or public or private institution.”** Under the definition, “when providing general supervision” the dentist “must be available for consultation” but “is not required to be physically present at the site where dental hygiene services are provided.” A “general supervision agreement” is necessary “signed by” the dental hygienist and the dentist. The law provides for “variable terms of the [supervision] agreement” to be “modified at any time in writing.” If modifications are approved by both parties, a dentist must review patient records at least every six months. The dental hygienist must “advise or refer the patient to obtain dental or other care” beyond his or her scope of practice. (Rule 1.11(n) and 10.1-7 26 V.S.A. Sec. 854)

**Virginia**—Under Virginia law, “**general supervision**” means that “a dentist has evaluated the patient and prescribed or authorized services to be provided by a dental hygienist; however the dentist need not be present in the facility while the authorized services are being provided.” A pilot project in three underserved districts enable a dental hygienist to practice under an “expanded capacity” protocol providing “education, assessment, prevention, and clinical services” under the “**remote supervision** of a VDH [Virginia Department of Health] dentist.” “Remote supervision” means the dentist “has regular periodic communications” with the hygienist regarding “patient treatment” but the dentist “has not done an initial examination of the patients who are to been seen and treated.” The dentist is “not necessarily onsite” when the services are provided. Under the protocol, “a dental hygienist may use and supervise assistants.” (Chapter 27 of Title 54.1-2722 Subsection (E))

**Washington**—Dental hygienists may be “employed, retained, or contracted by health care facilities and senior centers to perform authorized dental hygiene operations and services without dental supervision under a **lease agreement with a health care facility.**” Services are limited to “patients, students, and residents” of “health care facilities,” “senior centers,” and other public and private nonprofit facilities that provide care to underserved populations. The dental hygienist must “enter into a written practice arrangement plan” with a dentist. The plan ensures the dentist will “provide off site supervision of the dental services,” but does not “create an obligation for the dentist to accept referrals of patients receiving services under the program.” The dental hygienist is required to “obtain information from the patient’s primary health provider” about “any health conditions” that “would be relevant” to the patient’s dental care. Dental hygienists can get this information through either “direct contact” or “through a written document from the provider” presented by the patient. Patients must be referred to dentists for “dental planning and dental treatment.” (RCW 18.29.056) Dental hygienist “may assess for and apply sealants and apply fluoride varnishes” and provide other dental hygiene services in “community based sealant programs” in schools. (RCW 18.29.220)

**West Virginia**—A dental hygienist “may engage in **public health practice**” rendering all services allowed under “general supervision” in settings that care for underserved populations. Under “a general supervision permit” a dental hygienist may provide “for not more than fifteen (15) consecutive days or three (3) consecutive weeks” of preventive dental hygiene services to patients without a dentist “physically present at the location.” The dentist must examine the patient within the “twelve months prior to” the time the dental hygiene services are provided. A patient cannot be treated “two consecutive times” without a dentist examination. Dental hygienists must “comply with written protocols or written standing orders” from the “supervising dentist” and the patient must be informed of treatment under general supervision. If “significant” changes occur in a patient’s medical history the
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dental hygienists must consult with “the supervising dentist or an attending physician” before providing dental hygiene services. Dental hygienists may provide educational services, nutritional counseling, “generalized” oral screening “with subsequent referral to a dentist,” as well as apply fluoride “with no supervision of a licensed dentist.” (Sec. 5-1.8.5) (Sec. 5-1.8.4 and 5-1.8.7)

Wisconsin—Allows a hygienist to “practice dental hygiene or preform remediable procedures only as an employee or as an independent contractor” for “a school board or governing body of a private school or of a tribal school,” or in specific settings for underserved populations “if a dentist” is not present in the facility. However, treatment must be provided with a “written or oral prescription.” The “dentist who” prescribed the procedures must have “examined the patient at least once during the twelve month period immediately preceding” the date upon which the procedures are performed and “informed consent” must be acquired from the patient or legal guardian. (Sec. 447.06[2])

Figure 4: States Considering New Oral Health Workforce Models

Alaska—Alaska Native Tribal Health Consortium created the first Dental Health Aid Therapist initiative in the United States. In partnership with the University of Washington, the DENTEX program trains dental therapists to provide routine restorative care and promote oral health prevention in Native Alaskan communities.

Arizona—The state hosted a Community Dental Health Coordinator (CDHC) intern at the Hopi Health Care Center in Polacca, Arizona, who completed didactic training at the University of California, Los Angeles. The Arizona School of Dentistry and Oral Health (ASDOH) has an agreement to open a CDHC program in Mesa, Arizona. The program will host three students who are training to work in American Indian communities.

California—Registered Dental Assistant in Expanded Functions (RDAEF): California’s state workforce grant for 2010 aims to “assist safety-net providers” in use of “new classifications of mid-level dental providers for cost-effective service delivery.” Goals of the project are to “provide an affordable training program for mid-level dental personnel for the new California oral health license category.”
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**Connecticut**—Legislation (HB 5616) has been introduced in 2011 for an *Advanced Dental Hygiene Practitioner* who would perform “diagnostic, educational, palliative, therapeutic, prescriptive, and minimally invasive restorative oral health services.” It has been reported favorably from the Joint Committee on Human Resources and its fiscal implications are being analyzed.

**Kansas**—Legislation (SB 132) has been introduced in 2011 for an *Extended Care Permit III* or expanded dental hygiene practice that authorizes a dental hygienist “sponsored by a dentist” to practice that includes “but is not limited to emergency dental care techniques, the preparation and placement of temporary restorations, and the adjustment of prostheses, and appropriate pharmacology.”

**Maine**—Legislation (HB 219) has been introduced in 2011 that would create a new *Oral Health Practitioner* who would be able to practice “without the supervision of a dentist.” The OHP could “perform assessments and treatments, preparations, and restorations,” and perform “preparation and placement” of stainless steel crowns as well as management of dental trauma that includes “minor surgical care and suturing.”

**Minnesota**—Minnesota created the first *Advanced Dental Therapist (ADT) and Dental Therapist (DT)* professional. The ADT can provide “atraumatic restorative therapy,” “place temporary restorations,” perform “tooth reimplantation,” and perform “nonsurgical extractions of periodontically diseased permanent teeth” as authorized by a dentist. The state has issued provisional approval of the educational programs for dental therapy in the state (one at the University of Minnesota and the other at Metropolitan State University) and students in both have completed their first year of training.

The state also hosts interns from the *Community Dental Health Coordinator* program who were trained at the University of California, Los Angeles at White Earth Indian Health Services in Ojibwa, Minnesota, and Cass Lake Indian Health Services in Cass Lake, Minnesota.

**New Mexico**—Legislation (HB 187) was introduced in 2011. This bill defines the “Community Dental Health Coordinator” as a “dental assistant, dental hygienist, dental therapist, or other trained personnel” certified by the Board of Dentistry to “provide educational, preventive, and limited palliative care and assessment services” working collaboratively with a dentist. The bill defines palliative care as “nonsurgical, reversible procedures to alleviate pain and stabilize acute or emergent problems.”

**Ohio**—Ohio is one of five states (Kansas, New Mexico, Vermont, and Washington) that was selected by the W.K. Kellogg Foundation to promote community led efforts to enact a two-year “dental therapist” training program to increase access to oral health care. According to the Kellogg spokesperson, “it is time now for more states and tribal nations to seriously consider new and proven approaches—such as the dental therapist model—as a way to bring critically needed oral health care services to vulnerable children and families.”

**Oklahoma**—This state also hosted interns from the *Community Dental Health Coordinator* program that were trained at the University of Oklahoma. The internships were at federally qualified health centers at Fairfax Medical Center, Fairfax, Oklahoma; Stigler Health and Wellness Center, Stigler, Oklahoma; Pushmataha Family Medical Clinic, Clayton, Oklahoma; Family Health Center of Southern Oklahoma; and Kiamichi Family Medical Center, Battiest, Oklahoma.

**Oregon**—Legislation (SB 738) was introduced in 2011 that directs the Oregon Health Authority to approve “one or more five-year pilot projects designed to expand the roles of dental professionals, teach new skills to dental professionals, and develop...
new categories of dental professionals.” The bill creates a new “community health dental hygienist” who may provide dental risk assessment and referral, perform temporary restorations, and prescribe drugs.

**Pennsylvania**—The Maurice H. Kornberg School of Dentistry, Temple University is the host of an urban Community Dental Health Coordinator training site. The training for urban-based CDHCs will also occur in Federal Qualified Health Centers and in urban, inner city locations around Philadelphia, Pennsylvania.

**Vermont**—Legislation (HB 398) was introduced in 2011 to create a “dental therapist” who provides “evaluation and assessment, education, palliative therapy, and restoration.”

**Washington**—Legislation (HB 1310) was introduced in 2011 to create an “advanced dental therapist” and “dental therapist” who could perform “restoration of primary and permanent teeth,” “pulpotomies on primary teeth,” and “placement of temporary crowns.”

**Wisconsin**—One of the placement sites for the Community Dental Health Coordinator program students trained at the University of California, Los Angeles was at the Oneida Community Health Center in Green Bay, Wisconsin.
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<th>State-level articulation agreements</th>
<th>Dental hygiene agreements</th>
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<td>Alabama</td>
<td>Registered Dental Hygienists must be graduates of a Commission on Dental Accreditation (CODA)-approved program or the Alabama Dental Hygiene Program. Community colleges award A.A.S. degrees to Dental Hygienists.</td>
<td>A computerized advisement system allows for guaranteed credit transfer. All community college courses are awarded general education credit.</td>
<td>There is no evidence of a dental hygiene-specific articulation agreement. Wallace State Community College, however, has an institutional agreement with University of Alabama at Birmingham and Athens State University.</td>
<td><a href="http://stars.troy.edu/stars/stars.htm">http://stars.troy.edu/stars/stars.htm</a></td>
</tr>
<tr>
<td>Alaska</td>
<td>The Alaska Department of Labor states that a dental hygienist must have graduated from an accredited school and passed jurisprudence, national, and regional exams.</td>
<td>There exists a common general education core for transfer students.</td>
<td>There does not appear to be a public bachelor’s degree program for dental hygiene. Associate’s degree programs are available at University of Alaska Fairbanks and University of Alaska Anchorage.</td>
<td><a href="http://www.healthcareersinalaska.info">www.healthcareersinalaska.info</a></td>
</tr>
<tr>
<td>Arizona</td>
<td>The State Board of Dental Hygiene states that a Registered Dental Hygienist must graduate from a &quot;recognized&quot; school.</td>
<td>State transfer policy has a general education core (AGEC) in three pathways – liberal arts, business, and math-intensive.</td>
<td>Arizona had identified a transfer pathway from dental hygiene into Northern Arizona University (NAU). Dental hygienists with an associate’s degree in dental hygiene who are licensed in a state or province may complete the B.S.D.H. degree with as few as 30 semester credits at NAU.</td>
<td><a href="https://www.aztransfer.com/cgi-bin/WebObjects/ATASS.woa/wa/DegreePathwayAZ">https://www.aztransfer.com/cgi-bin/WebObjects/ATASS.woa/wa/DegreePathwayAZ</a></td>
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<td>Arkansas</td>
<td>The state board states that a dental hygienist must be a graduate of an American Dental Association (ADA)-approved school; the Dental Hygiene Act states that the school must be CODA-accredited.</td>
<td>The Arkansas Course Transfer System (ACTS) contains information about the transferability of courses within Arkansas public colleges and universities. Students are guaranteed the transfer for applicable credits within ACTS. Course transferability is not guaranteed for courses listed in ACTS as “No Comparable Courses.”</td>
<td>There is no evidence of a dental hygiene-specific articulation agreement. The University of Arizona for Medical Sciences (UAMS) offers both the A.S. and the B.S.; it is unclear if there is a continuation or a guaranteed transfer policy within the program. UAMS is also not part of the state transfer system.</td>
<td><a href="http://acts.adhe.edu/studenttransfer.aspx">http://acts.adhe.edu/studenttransfer.aspx</a></td>
</tr>
<tr>
<td>California</td>
<td>State regulations simply state that a dental hygienist must have an associate’s degree or higher.</td>
<td>State policies exist on transfer of courses with common course numbers.</td>
<td>There does not appear to be a public bachelor’s degree program in dental hygiene. The state dental hygiene association’s website lists four programs that offer the B.S., but none of them are private. The University of the Pacific Arthur A. Dugoni School of Dentistry has articulation agreements with almost all community colleges in the state, but these only cover general education courses.</td>
<td><a href="http://www.pacific.edu/admission/academics/accel_programs/dental_hygiene/transfer_colleges">www.pacific.edu/admission/academics/accel_programs/dental_hygiene/transfer_colleges</a></td>
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## Appendix 3: State-by-State Policy Scan

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<th>State</th>
<th>State Board rule 3.C.1.a states that an RDH must be a graduate of a CODA-accredited program that lasts at least two years.</th>
<th>Colorado community colleges have a common course numbering system. State policy guarantees junior standing in any arts and sciences program at a public four-year institution to a student completing an A.A. or A.A.S. who has completed guaranteed general education courses with a C or better.</th>
<th>There are no public B.S. programs in the state for Dental Hygiene, although the state allows for articulation agreements in professional programs.</th>
<th><a href="http://www.colorado.edu/ArtsSciences/prospective/transfer_current.html">www.colorado.edu/ArtsSciences/prospective/transfer_current.html</a></th>
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<tr>
<td>Colorado</td>
<td>State regulations require that dental hygienists be graduates of a dental hygiene program with at least two years of academic instruction, and that the program be CODA approved.</td>
<td>State policy establishes an advisory council on articulation charged with developing articulation plans in key areas, including allied health.</td>
<td>There is no evidence of a dental hygiene-specific articulation agreement. Tunxis Community College is the only public institution to offer an A.A.S. in Dental Hygiene. It allows its graduates to roll into the B.S. program and has B.S. completion programs for other RDHs.</td>
<td><a href="http://www.ct.gov/dph/lib/dph/practitioner_licensing_and_investigations/plis/dentalhygiene/dh_stats.pdf">www.ct.gov/dph/lib/dph/practitioner_licensing_and_investigations/plis/dentalhygiene/dh_stats.pdf</a></td>
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<td>Connecticut</td>
<td>Delaware regulations require that dental hygienists be graduates of a board-approved dental hygiene program.</td>
<td>The state has developed a Transfer of Credit Matrix.</td>
<td>There is no evidence of a dental hygiene-specific articulation agreement. Dental hygiene is not explicitly listed in the Transfer of Credit Matrix, although it is possible that general education requirements for the ADH transfer easily.</td>
<td><a href="http://dpr.delaware.gov/boards/dental/hygienist_license.shtml">http://dpr.delaware.gov/boards/dental/hygienist_license.shtml</a></td>
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<tr>
<td>Delaware</td>
<td>Regulations state that a dental hygienist be a graduate of a CODA-approved program lasting at least two years.</td>
<td>There do not appear to be any DH programs in the district.</td>
<td>Dental hygiene courses are included in the statewide course numbering system, and most courses are guaranteed transfer to institutions offering the same course. Additionally, Palm Beach Community College has an articulation agreement with St. Petersburg College.</td>
<td><a href="http://scns.fldoe.org/scns/public/pb_index.jsp">http://scns.fldoe.org/scns/public/pb_index.jsp</a></td>
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<tr>
<td>District of Columbia</td>
<td>The state dental board requires dental hygienists to be graduates of a CODA-accredited school or college. Both A.S. and A.A.S. are listed on the website.</td>
<td>The associate’s degree is considered the transfer degree and transfers as a block, with guaranteed acceptance of 60 credits and admission to a four-year institution.</td>
<td>Dental hygiene courses are included in the statewide course numbering system, and most courses are guaranteed transfer to institutions offering the same course. Additionally, Palm Beach Community College has an articulation agreement with St. Petersburg College.</td>
<td><a href="http://scns.fldoe.org/scns/public/pb_index.jsp">http://scns.fldoe.org/scns/public/pb_index.jsp</a></td>
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</table>
| Georgia | Licensure in Georgia requires a minimum of an associate’s degree from a CODA-accredited institution; A.S. and A.A.S. degrees are both listed on the Georgia Dental Association website. | There is a common general education core for the university system, which includes some two-year institutions but not all. Rules allow for some flexibility within the core, but guarantee that all core courses transfer. | Within the Dental Hygiene major, there is a common course numbering system, but that applies only to general education courses (e.g., biology, chemistry, mathematics). Technical two-year colleges do not have similar arrangements with four-year institutions. | www.gadental.org  
www.sos.ga.gov/plb/dentistry |
<p>| Hawaii | Per the Hawaii Dental Hygiene application form, a dental hygienist must be a graduate of a CODA-accredited dental hygiene school. | There is a transfer system in place for core general education courses, as well as for certain courses and programs. | There does not appear to be a dental hygiene-specific articulation agreement. The University of Hawaii at Manoa offers the only dental hygiene program in the state at the B.S. level; Maui Community College provides a dental assisting program. | <a href="http://www.hawaii.edu/offices/app/aa/articulation/articulation.html">www.hawaii.edu/offices/app/aa/articulation/articulation.html</a> |
| Idaho  | Per the State Board of Dentistry website, a dental hygienist must be a graduate of a CODA-accredited school. | Articulation agreements exist both within public colleges and universities in Idaho, as well as with select institutions in neighboring states. | The Idaho State University website states that the Department of Dental Hygiene has formal articulation agreements with every public institution in Ohio. Articulation agreements also exist with most schools in Utah. However, these agreements seem to include prerequisite courses and general education requirements, not dental classes. There appears to be no statewide dental hygiene articulation agreement outside the institutional level. | <a href="http://www.isu.edu/dentalhy">www.isu.edu/dentalhy</a> |
| Illinois| Licensure requires the completion of a CODA-accredited and state-approved program lasting at least two years. | The Illinois Articulation Initiative aims to ease the transfer of students among public associate and bachelor’s granting institutions. At 100 participating institutions, there is a general-education core curriculum that transfers seamlessly. | The Illinois Board of Higher Education lists only two B.S. programs for the state and no A.S. programs; the Community College Board lists 12 A.A.S. programs. There is no evidence of a dental hygiene-specific agreement, but core general education courses generally transfer as a block. | <a href="http://www.itransfer.org/iai/container.aspx?file=iai">www.itransfer.org/iai/container.aspx?file=iai</a> |
| Indiana| Both A.S. and B.S. programs are offered by state institutions. | Transfer policies vary from institution to institution and program to program. There does not appear to be a state-level articulation system. | There is no evidence of a dental-hygiene specific articulation agreement. | <a href="http://www.transferin.net">www.transferin.net</a> |</p>
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<td>Iowa</td>
<td>Dental hygienists must be graduates of an accredited dental hygiene institution.</td>
<td>Articulation agreements exist between the 15 community colleges and three regents universities, where students who have completed all requirements are granted junior standing. The agreement applies generally to liberal arts colleges only.</td>
<td>There do not appear to be any B.S.D.H. programs in Iowa, so there are no dental hygiene articulation agreements. <a href="http://www.state.ia.us/dentalboard/da.html">www.state.ia.us/dentalboard/da.html</a></td>
</tr>
<tr>
<td>Kansas</td>
<td>Dental hygienists must be graduates of a board-approved institution; the licensing form says the institution must be ADA-approved.</td>
<td>State Policy Inventory Database Online (SPIDO) states that community colleges are required by state statutes to enter into articulation agreements with universities. Articulation agreements vary on a program-by-program basis.</td>
<td>There do not appear to be any dental hygiene-specific articulation agreements. <a href="http://www.wiche.edu/spido">www.wiche.edu/spido</a></td>
</tr>
<tr>
<td>Kentucky</td>
<td>Dental hygienists must be graduates of an ADA-approved institution.</td>
<td>There is a statewide general education core with guaranteed transfer as a block. Transferring in the general education core does not eliminate the need to take major-specific general education courses.</td>
<td>There does not appear to be a state-level dental hygiene-specific articulation agreement. Western Kentucky University has an articulation with the entire Kentucky Community and Technical College System (KCCTS) system. <a href="http://www.wku.edu/chhs/cms/index.php/dental-hygiene">www.wku.edu/chhs/cms/index.php/dental-hygiene</a></td>
</tr>
<tr>
<td>Louisiana</td>
<td>According to the Dental Practice Act, dental hygienists must be graduates of a Louisiana State Board of Dentistry-approved program.</td>
<td>Louisiana coordinates a master articulation matrix that lists courses that have been institutionally vetted for transfer. Receiving institutions maintain prerogative over what to accept or how it will count.</td>
<td>There is no evidence of a dental hygiene-specific agreement; courses in the ADH major that transfer are general education and science core courses. <a href="http://www.regents.la.gov">www.regents.la.gov</a></td>
</tr>
<tr>
<td>Maine</td>
<td>According to the Dental Practice Act, dental hygienists must have received at least an associate’s degree from a CODA-approved program.</td>
<td>There does not appear to be a systemic articulation agreement between community colleges and four-year institutions.</td>
<td>There is no evidence of a dental hygiene-specific agreement, but there are no community college programs in the state. The only A.S. degree in dental hygiene is already linked to the B.S. program. <a href="http://www.uma.edu/dentalhygiene.html">www.uma.edu/dentalhygiene.html</a></td>
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<tr>
<td>Maryland</td>
<td>Dental hygienists in Maryland must have passed the North East Regional Board examination.</td>
<td>Students who have received an associate’s degree are guaranteed transfer into four-year institutions. Specifically, general education credits transfer even without a course-to-course match.</td>
<td>ARTSYS lists a general-education transfer core that is transferable to the B.S. at University of Maryland-Baltimore for all three two-year ADH programs in the state; only general education courses are guaranteed transfers. <a href="http://artweb.usmd.edu">http://artweb.usmd.edu</a></td>
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<td>Massachusetts</td>
<td>According to the MA ADHA, a dental hygienist must graduate with a certificate, associate’s degree, or bachelor’s degree from a CODA-accredited program.</td>
<td>There does not appear to be a state-level, systemic articulation agreement between community colleges and four-year institutions.</td>
<td>There is no public B.S. program in the state, and consequently there are no dental hygiene-specific agreements.</td>
<td><a href="http://www.adha.org/careerinfo/entry/ma.htm">www.adha.org/careerinfo/entry/ma.htm</a></td>
</tr>
<tr>
<td>Michigan</td>
<td>According to the state dental board, a dental hygienist must graduate from a CODA-accredited program.</td>
<td>General education core courses transfer via the MACRAO agreement, but not all institutions participate.</td>
<td>There is no evidence of a hygiene-specific articulation agreement.</td>
<td><a href="http://www.macrao.org/Publications/MACRAOAgreement.asp">www.macrao.org/Publications/MACRAOAgreement.asp</a></td>
</tr>
<tr>
<td>Minnesota</td>
<td>According to the state dental board, a dental hygienist must graduate from a CODA-accredited program.</td>
<td>The Minnesota transfer curriculum defines an approved block of general education courses that are guaranteed to transfer. The state website specifies that A.S. and A.A. degrees are designed for transfer, and students completing them have completed either the transfer curriculum (A.A.) or the 30 credits of transfer general education (A.S.). A.A.S. degrees do not transfer without institution-specific articulation agreements.</td>
<td>Most ADH degrees in Minnesota appear to be A.A.S., so they do not fall under the transfer guidelines. There is no evidence of a dental hygiene-specific articulation agreement.</td>
<td><a href="http://www.mnscu.edu/students/admissions/transfer.html">www.mnscu.edu/students/admissions/transfer.html</a></td>
</tr>
<tr>
<td>Mississippi</td>
<td>According to the state dental hygienists’ association, a dental hygienist must graduate from a CODA-accredited program.</td>
<td>There is a statewide articulation agreement listing courses a senior college will accept for transfer without loss of credit. This does not replace institution or program-specific articulation agreements.</td>
<td>Dental hygiene is listed under the statewide articulation agreement. The University of Mississippi Medical Center is the only B.S. program in the state, and the statewide articulation agreement lists the courses that will transfer into the B.S. program in dental hygiene. However, this does not seem to be targeted at ADH holders; rather, it seems to be targeted at students who have completed two years of general education and want to transfer into the B.S. program.</td>
<td><a href="http://www.ihl.state.ms.us/cjc/articulation_agreement.html">www.ihl.state.ms.us/cjc/articulation_agreement.html</a></td>
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<td>Missouri</td>
<td>According to the state dental board, a dental hygienist must graduate from a CODA-accredited program.</td>
<td>Transfer and articulation is by institution, and can be done program by program or course by course. The COTA principles suggest that all institutions should develop a general education curriculum that should be fully transferable. A.A.S. degrees are not designed for transfer, but are transferrable on a program-to-program basis.</td>
<td>There is no evidence of a dental hygiene-specific articulation agreement.</td>
<td><a href="http://www.dhe.mo.gov/files/policies/credittransfer.pdf">www.dhe.mo.gov/files/policies/credittransfer.pdf</a></td>
</tr>
<tr>
<td>Montana</td>
<td>According to the state dental board, a dental hygienist must graduate from a CODA-accredited program.</td>
<td>The state is in the process of developing a common course numbering system and a systemic transfer process. There exists a general education core, but an A.A.S. does not fulfill these requirements. A.A.S. holders will have their coursework analyzed on a class-by-class basis.</td>
<td>There is no bachelor’s degree program in dental hygiene in Montana, and there is no evidence of a dental hygiene-specific articulation agreement.</td>
<td><a href="http://mus.edu/transfer/TwoYearPrograms.asp">http://mus.edu/transfer/TwoYearPrograms.asp</a></td>
</tr>
<tr>
<td>Nebraska</td>
<td>According to the state dental board, a dental hygienist must graduate from at least a two-year CODA-accredited program.</td>
<td>There is a state transfer initiative for A.A. degrees only.</td>
<td>There is no evidence of a dental hygiene-specific articulation agreement.</td>
<td><a href="http://www.nedha.org">www.nedha.org</a></td>
</tr>
<tr>
<td>Nevada</td>
<td>According to the state dental board, a dental hygienist must graduate from at least a two-year CODA-accredited program.</td>
<td>State regulations require that A.S. and A.A. holders are considered to have completed general education requirements in select B.S. programs. There exist some institution-specific agreements as well. The state has a common course numbering system.</td>
<td>Some dental hygiene courses are listed within the common course numbering system, although some are listed as non-transferable. NDHA lists only two schools in the state – Truckee Meadows Community College (A.S.) and College of Southern Nevada (A.S. and B.S. Completion). Truckee Meadows has transfer agreements with some four-year institutions.</td>
<td><a href="http://www.nvdha.org">www.nvdha.org</a></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>According to the state dental board, a dental hygienist must graduate from at least a two-year CODA-accredited program.</td>
<td>The state has a transfer website that indicates which courses transfer to other universities. The NHTI website also states that the acceptance of transferred credits is ultimately the decision of the receiving institution.</td>
<td>There does not appear to be a public B.S. program in dental hygiene in the state, so dental hygiene courses transfer as electives into four-year institutions.</td>
<td><a href="http://www.nhtransfer.org">www.nhtransfer.org</a></td>
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<tr>
<td>New Jersey</td>
<td>According to the state dental board, a dental hygienist must graduate from at least a two-year CODA-accredited program.</td>
<td>The state has a comprehensive statewide transfer agreement. The agreement addresses A.A. and A.S. degrees – graduates are guaranteed 60-64 credits, junior credit, and completion of general education core upon transfer.</td>
<td>There does not appear to be a public B.S. program in dental hygiene in the state. The NJDHA shows five A.A.S. programs: four community colleges and the University of Medicine and Dentistry of New Jersey (UMDNJ).</td>
<td><a href="http://shrp.umdnj.edu/dept/alliedental/dh/index.html">http://shrp.umdnj.edu/dept/alliedental/dh/index.html</a></td>
</tr>
<tr>
<td>New Mexico</td>
<td>According to the state dental board, a dental hygienist must graduate from at least a two-year accredited program.</td>
<td>The state requires that designated core general education courses transfer among New Mexico institutions. The state has transfer modules for six occupation/major fields that guarantee 64 credits of transfer, including general education. Dental hygiene is NOT one of these.</td>
<td>There is no evidence of a dental hygiene-specific agreement. The NMDHA website lists three programs: University of New Mexico (B.S., B.S. completion) and two community college A.A.S. programs.</td>
<td><a href="http://www.nmdha.org">www.nmdha.org</a></td>
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<td>New York</td>
<td>According to the state dental board, a dental hygienist must graduate from at least a New York- or CODA-accredited program.</td>
<td>There is no legally mandated transfer policy in the state.</td>
<td>There is no evidence of a dental hygiene-specific agreement. The State University of New York (SUNY) Farmingdale B.S. completion program implies that A.S. holders have completed all general education courses, while A.A.S. holders need additional general education credits. SUNY Canton has a Bachelor’s Degree in Technology (2+2 completion) in dental hygiene, which serves as a de facto transfer agreement.</td>
<td><a href="http://www.canton.edu/sci_health/dhyg/faqs.html">www.canton.edu/sci_health/dhyg/faqs.html</a></td>
</tr>
<tr>
<td>North Carolina</td>
<td>According to the state dental board, a dental hygienist must graduate from a dental board-accredited program.</td>
<td>There is a comprehensive articulation agreement that addresses A.S. and A.A. degrees – graduates are guaranteed 64 credits and junior status. There also exists a 44-credit “portable” general education core.</td>
<td>There is no evidence of a dental hygiene-specific agreement, although most A.A.S. programs transfer general education courses into the B.S. UNC has course transfer equivalents for many general education classes, but articulation is done on an institution-by-institution basis.</td>
<td><a href="http://www.dent.unc.edu/academic/programs/dh/bsdh/completion/stepthree.cfm">www.dent.unc.edu/academic/programs/dh/bsdh/completion/stepthree.cfm</a> <a href="http://www.admissions.unc.edu/pdf/nccc_course_equivalency_list.pdf">www.admissions.unc.edu/pdf/nccc_course_equivalency_list.pdf</a></td>
</tr>
<tr>
<td>North Dakota</td>
<td>According to the state dental examiners’ website, a dental hygienist must graduate from an ADA-accredited institution.</td>
<td>There is a common course numbering system for academic disciplines, as well as a common general education core that transfers between community colleges and four-year institutions.</td>
<td>There is no evidence of a dental hygiene-specific agreement, but some dental hygiene courses transfer via the statewide articulation agreements. According to the North Dakota Board of Dentistry, the only CODA-accredited school in the state is the North Dakota State College of Science.</td>
<td><a href="http://www.ndus.edu/students/transfer-within-to-campuses">www.ndus.edu/students/transfer-within-to-campuses</a></td>
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<td>Oklahoma</td>
<td>Dental hygienists must graduate from a CODA-approved program lasting at least two years.</td>
<td>Yes</td>
<td>The University of Oklahoma offers an RDH-B.S. program. It accepts transfer credit of up to 30 hours through various validation methods, leaving 30 semester hours for completion of the degree. Validation is by exam. There is no evidence of a dental hygiene-specific agreement.</td>
<td><a href="http://www.okhighered.org/transfer-students/course-transfer.shtml">www.okhighered.org/transfer-students/course-transfer.shtml</a></td>
</tr>
<tr>
<td>Oregon</td>
<td>Dental hygienists must graduate with an associate’s degree or a B.S. from a CODA-approved program.</td>
<td>Yes</td>
<td>There is no evidence of a dental hygiene-specific agreement or a systemic dental hygiene transfer system. Certain institutions have individual articulation agreements – Lane Community College, Mt. Hood Community College, and Rogue Community College with Pacific University or the Oregon Institute of Technology.</td>
<td><a href="http://oregonstate.edu/admissions/transfer/otm.html">http://oregonstate.edu/admissions/transfer/otm.html</a></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Dental hygienists must graduate from a CODA-approved program.</td>
<td>No</td>
<td>There is no evidence of a dental hygiene-specific agreement. Dental hygiene is not listed in the matrix of articulation agreements.</td>
<td><a href="http://www.patrac.org">www.patrac.org</a></td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Dental hygienists must graduate from a CODA-approved program.</td>
<td>Yes</td>
<td>There does not appear to be a public B.S. program in dental hygiene in Rhode Island. Associate's degrees in dental hygiene transfer to either the B.S. in Community Health or the B.G.S. in Health Services Administration.</td>
<td><a href="http://www.ribghe.org/ritransfers.htm">www.ribghe.org/ritransfers.htm</a></td>
</tr>
<tr>
<td>South Carolina</td>
<td>Dental hygienists must graduate from an ADA-accredited program.</td>
<td>No</td>
<td>There is no B.S. program in dental hygiene listed on the state website for transfer; the only A.A.S. programs are at technical colleges.</td>
<td><a href="http://www.scotrasc.org">www.scotrasc.org</a></td>
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<tr>
<td>State</td>
<td>Information</td>
<td>Website</td>
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<tr>
<td>South Dakota</td>
<td>According to the state board, dental hygienists must graduate from a CODA-accredited program.</td>
<td><a href="http://www.sdboardofdentistry.com">www.sdboardofdentistry.com</a></td>
<td></td>
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<tr>
<td>Tennessee</td>
<td>According to the state board, dental hygienists must graduate from a CODA-accredited program.</td>
<td><a href="http://www.tndha.org">www.tndha.org</a></td>
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<tr>
<td>Texas</td>
<td>According to the state board, dental hygienists must graduate from an ADA-accredited DH program.</td>
<td><a href="http://www.baylor.edu/admissions/index.php?id=56762">www.baylor.edu/admissions/index.php?id=56762</a></td>
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<tr>
<td>Utah</td>
<td>According to the state board, dental hygienists must graduate from a CODA-accredited dental hygiene program.</td>
<td><a href="http://www.higheredutah.org">www.higheredutah.org</a></td>
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</tr>
<tr>
<td>Vermont</td>
<td>According to the state statutes, dental hygienists must graduate from a CODA-accredited program.</td>
<td><a href="http://www.vtc.edu/interior.php/pid/4/sid/26/tid/559">www.vtc.edu/interior.php/pid/4/sid/26/tid/559</a></td>
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<tr>
<td>Virginia</td>
<td>According to the state statutes, dental hygienists must graduate from a CODA-accredited program.</td>
<td><a href="http://www.adha.org/careerinfo/entry/va.htm">www.adha.org/careerinfo/entry/va.htm</a></td>
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<tr>
<td>State</td>
<td>According to the state statutes, dental hygienists must graduate from a state-approved program.</td>
<td>There is a statewide system of articulation and alignment. College-level courses transfer “DTA Transfer Associate Degrees” (basically A.A. and A.S. degrees), which also satisfy general education requirements and lead to junior standing. There is an A.S.-T degree for rigorous math and science majors. Each university has its own transfer and equivalency website.</td>
<td>There is no evidence of a dental hygiene-specific agreement. Eastern Washington University is listed as the only entry-level B.S. program in the state. Its transfer guides don’t seem to include dental hygiene courses; rather, they focus on prerequisites and general education requirements. There is no evidence of a dental hygiene-specific agreement. Eastern Washington University is listed as the only entry-level B.S. program in the state. Its transfer guides don’t seem to include dental hygiene courses; rather, they focus on prerequisites and general education requirements.</td>
<td><a href="http://access.ewu.edu/Undergraduate-Studies/Curriculum-and-Policies/Transfer-Guide.xml">http://access.ewu.edu/Undergraduate-Studies/Curriculum-and-Policies/Transfer-Guide.xml</a></td>
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<td>Washington</td>
<td>According to the state statutes, dental hygienists must graduate from a state-approved program.</td>
<td>Transfer policies and articulation agreements vary on an institutional and program basis; there does not appear to be a systemic statewide transfer policy.</td>
<td>There is no evidence of a dental hygiene-specific agreement. Each institution lists its own requirements for admission and transfer.</td>
<td><a href="http://wvdha.org">http://wvdha.org</a></td>
</tr>
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<td>West Virginia</td>
<td>According to the state licensing board, dental hygienists must graduate from a CODA-approved program.</td>
<td>The state has a transfer guide and a transfer website that lists transferable courses. The state also has transfer agreements, but dental hygiene is not listed in any of these.</td>
<td>There are no public B.S. programs in dental hygiene in Wisconsin.</td>
<td><a href="http://www.wi-dha.com/Wisconsin_Dental_Hygienists_Association/Welcome.html">www.wi-dha.com/Wisconsin_Dental_Hygienists_Association/Welcome.html</a></td>
</tr>
<tr>
<td>Wisconsin</td>
<td>According to the state dental board, dental hygienists must graduate from a CODA-approved program.</td>
<td>There exists a Wyoming state course catalog that lists 100- and 200-level courses that are guaranteed to transfer from community colleges to the University of Wyoming.</td>
<td>The University of Wyoming offers a joint B.S.D.H. with Sheridan Community College, which when completed results in two degrees (A.A.S. and B.S.). Although there is no official dental hygiene agreement, the Sheridan/University of Wyoming degree effectively serves as one.</td>
<td><a href="http://uwadmweb.uwyo.edu/registrar/bulletin/6hsdhyg.html">http://uwadmweb.uwyo.edu/registrar/bulletin/6hsdhyg.html</a></td>
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</table>

Note: In Appendix 3, the fourth column, “Dental hygiene agreements,” is intended to reflect the presence of statewide dental hygiene articulation agreements. Language stating that there are no agreements in a state is not meant to imply that there are no institutional agreements, only that there are no articulation or transfer policies applying to the state as a whole. In the same column, any institutional agreements mentioned are there as examples. This column is not intended to be either a comprehensive or exhaustive list of all institutional agreements in the state.